Grant Jones

Newlands College

Principal's Sabbatical

August 6th to November 12th 2018

Some Approaches To NCEA That Might More Readily Engage Students

Acknowledgements.

After sixteen years of principal-ship I was delighted to have the opportunity to be able to step back from Newlands College so that I could reflect on the progress that we have made and to consider the way forward. In order to do this the support of a number of people was required and I wish to acknowledge them.

1. The Newlands College Board of Trustees and especially the chairperson, Mr Gavin Knight, for supporting my application.

2. Ms Deb King, deputy principal, for being acting principal in my absence and doing an exemplary job.

3. The rest of the senior leadership team at Newlands College – Deb Mills, David Pegram, and Susan MacDiarmid who stepped up so ably.

4. My colleagues at the schools I visited and others who I met through different forums. All were extremely open, welcoming and very generous with their time. My thanks to:
   Porirua College, Mana College, Heretaunga College, Hauraki Plains College, Ngatea High School, Wellington Girls College, Onslow College, Tawa College, Kapiti College, Mt Albert Grammar School, Wellington High School, Inglewood High School, Wellington East Girls College, Onehunga High School

5. The Ministry of Education for the funding of this sabbatical

Introduction

The National Certificate of Education Achievement (NCEA) was introduced at Level 1 in 2002 and the remaining two levels in subsequent years. Since then there has been the introduction of the new National Curriculum (2007), the standards alignment, re-introduction of scholarship, and in some cases schools opting out as much as possible and replacing NCEA with other examinations such as Cambridge Examinations and International Baccalaureate.

The state of NCEA is now under review along with many other aspects of the education system. Documentation such as “The Six Big Opportunities” have been put forward for discussion and consultation as possible ways forwards. The thinking in these documents suggest that more credits for Literacy and Numeracy, greater emphasis on pathways, and increased use of projects may play a bigger role in the future. At a meeting held in Wellington on Monday August 6th 2018 attended by 153 secondary principals and chaired by SPANZ the feedback from the day identified that

“There are some very clear messages from the day and widespread, but not unanimous, agreement on several key points:

- Don’t focus on the solutions posed in “The Six “Big Opportunities”. Focus on the intentions behind them
- Flexibility is critical
- Less assessment” (SPANZ President's Comment – 14 2018)

In terms of the existing situation it implies that the qualification lacks flexibility and overassessment is an issue. Flowing on from this is an anecdotal perception that the health and well-being of students has diminished with stress on the rise. A survey undertaken of 6000 students undertaken by Inspiration Education Limited found that 2 in 3 NCEA students were severely affected by anxiety or stress, (November 2017).

Health and Wellbeing is a research project in itself, however, Newlands College’s guidance statistics would suggest that this is an issue for us.

I originally planned this project in 2017 prior to the review being announced. My intention was to explore strategies and or structures that different schools used to place students at the centre of their learning and to engage with their learning. My intention was that these would be reasonably straight forward to implement and would not involve whole school curriculum reviews and redesigns. My hope was that such strategies would also reduce the levels of stress and poor health and wellbeing that some students were experiencing.

One of the things I expected to find, and did was that “one size does not fit all”. There are many variables in our schools such as geographic distribution, e.g. rural/urban, inland/coastal, some schools are large 2000-3000, some small 300-500,

some are integrated, and others single sexed, communities differ by economic development, ethnicity and so on. So some of the ideas will work extremely well under certain conditions but would not be successful in others. I have not attempted to rank or rate the innovations for these reasons but rather leave them for individual schools to consider how the might or might not work in their own environment.

Strategies for Consideration

1. Various Timetable Structures

1.1 Length of School Periods/Spells

There were a variety of permutations around the arrangement of the school day. The underlying principle, which could be derived from the PPTA Secondary Schools Collective Agreement which describes the school day as,

'5.5.1 For each school the length of the "school day" shall be determined according to the requirement that students are normally required to be in attendance for two half days, one before noon, the other after noon.'

Given the requirement that for teachers, is a workload is 25hours per week (minus non –contact time) variations to the length of school periods/ spells generally needs to be compliant with 5 hours per day, 5days per week.

The model of 5 hours per day 5 times per week I found to be reasonably common, sometimes to accommodate all the option lines periods/spells were stretched over six day or 10 day timetables in the same 5x5 configuration. Three period days were also becoming more common and some had opted for 4 periods. The sample I used also had a couple of schools using 7 x40 minute periods but would run double periods.

In terms of NCEA the rationale for lesser periods was that it gave students longer to focus on their learning per day without interruption (although comments in a boy's school was that the interruption and the moving about was a good thing for young men with short attention spans). The argument seems to hold well for practical

subjects, e.g. Technology, Art, Foods, and Health and PE, but in languages a common held view was, “a little often is essential”.

Where there seems to be a lot of merit is schools that organise a day off timetable and use it for things such as Trade Academy courses, Polytech courses, a field trip day, or working off timetable on projects. This block of time prevented interruptions to other teacher’s classes.

1.2 Variation to Study Lines

Most schools particularly for Year 13 provide a study line usually 4 hours per week. Normally this would consist of an option line when a student chose not to take a subject. There are some variations on this which are designed to support students with their learning and well-being. One school timetables all the study hours on the same day which means the students only attend for 4 days a week. This allows the students to manage their time and organise their work accordingly off-site. What the school found was that a number of informal study groups emerged where the students met at a pupil’s house and they were able to support each other with their learning. This school was semi-rural with a small Year 13 and were a visible group so they were well monitored.

Another school gives Year 13 the first hour off so that they can sleep in or make the most of a late start. The decision was supported by research such as the Sleep Foundation that found that,

“*Biological sleep patterns shift toward later times for both sleeping and waking during adolescence -- meaning it is natural to not be able to fall asleep before 11:00 pm.”*

By starting later this enables the school’s daily structure to fit the biorhythms of its students.

An extremely large urban school (nearly 3000 students) on a busy road scheduled all its Year 13s to finish after lunch so they could leave the site. There was not a lot of pedagogical reasons for this decision, rather it was designed to get part of the school population out of the school before the end of the school day when hundreds of

students would be emptying out on to the main road at the same time. The main consideration was health and safety.

1.3 Tutorial Time

Sometimes called Ako or Wa Ako tutorial times are designed for students to work with teachers or mentors on a variety of planned programmes, such as C.V writing, career planning, how to study,or hearing guest speakers on a range of topics such as budgeting, or mentoring. Some schools use this time for students to identify specific learning needs and find support on how to address these. In terms of NCEA overload, most schools were very conscious to ensure that this was not a study period where students worked on assessments.

2. Project /Problem – Based Learning

The difference between problem-based learning and project-based learning is that students who complete problem-based learning often share the outcomes and jointly set the learning goals and outcomes with the teacher. On the other hand, project-based learning is an approach where the goals are set. It is also quite structured in the way that the teaching occurs.

Project-based learning is often multidisciplinary and longer in time, whereas problem based learning is more likely to be a single subject and shorter. Generally, project-based learning follows general steps while problem-based learning provides specific steps. Importantly, project-based learning often involves authentic tasks that solve real-world problems while problem-based learning uses scenarios and cases that are perhaps less related to real life (Larmer, 2014).

Often these projects/problem based learning are done outside of the curriculum, usually during a tutorial or Ako time and monitored by the teacher during the year. Such pieces of learning normally do not have credits attached to them, but the students are able to build up examples for their C.Vs. Many applications for Halls of Residence or funded Scholarships ask students about their leadership roles, their community service, or how they solve difficult problems. This type of learning fits well with these types of requests.

3. Contextualised Learning based on a Topic

This approach offers a single context to students on which the learning is based. Standards are taken from several domains and in the example below, the students are also able to gain UE literacy (which in this school meant that students did not have to take English as a subject).

An example was based on the local river. The standards allowed students to study the river from geographic, environmental, historical, and cultural perspectives. The course involved local field trips to the river, interviewing people such as those in the local council, as well as visiting the local marae for a cultural perspective on the significance of the river. The course was worth 18 credits and the students were able to gaining a deeper understanding of the interconnectedness and links found in their studies.

4. Learning Hubs

Learning Hubs might be considered the next step on from the contextualized learning described above. In this case a Social Science Learning hub was created. Students spent the first part of their course learning from a skills framework that gave them the tools to undertake their studies. Working with their teachers they were then able to choose a theme from several on offer. The students then co-constructed their course with their teacher(s) choosing standards that they felt they were interested in and would improve their knowledge. The domains they could choose from were: geography, history, classics, philosophy, psychology and religious studies. Virtually all courses chosen by the students were different. The main problem with this course was that some standards in geography and history took a similar time to complete, but the history standard was worth six credits and the geography 3 credits. Students tended towards the history standards, which makes sense from a work load perspective. Students found the courses engaging and the learning was sufficient to take single social science subjects for UE.

5. Graduation Certificates for the Junior School

While such certificates do not address specifically the stresses and strains of undertaking NCEA, some schools use graduation certificates in the junior school as a way to educate students to improve their understanding of the qualification. One

example is a school which uses a certificate in both Year 9 and 10. The certificate can be achieved, achieved with merit or excellence and is based on 80 credits. There are 96 credits available to the students and these are allocated across different curriculum areas e.g. Health 4, Physical Education 12, Integrated Learning 48, Arts Options 16, and Technology Options 16. The belief is that all students are capable of gaining the certificate and during the two years prior to NCEA they will be inculcated into the processes that they will meet in the senior school.

6. Semesters

The introduction of semesters for some or all courses is providing some schools greater flexibility with their curriculum offering. Often semesters have about 8-10 credits attached to them so the work load is reasonable. Semesters also allow students and their teachers the opportunity to study areas of a discipline that are less mainstream. Some examples at Level 2 might include: English with a focus on fantasy or science fiction, geography that focuses on a particular process e.g. volcanism that is based around a volcanic region or a science course with an astronomy focus. Some pitfalls have been identified, e.g. external standards offered at the start of the year will need some tutorial time at the end of the year, and will the courses meet pre-requisites for higher study especially when these are set by an outside provider, e.g. Physics requirements to get into engineering at Auckland University.

One principal who uses this model extensively did comment that,

"*The kids love it; it's like the start of the year all over again when everything is fresh and new*"

An interesting variation of this was a school where there might be two classes of the same subject e.g. French, would swap the teachers half year. The students were exposed to a different teaching style and listening to the languages from a different voice.

7. Optional Courses in Subjects

This approach took each subject and broke it down into courses. Students could choose the courses that that they wanted to take, although some in English and Maths were compulsory. In one school 21 courses in English were available, 7 in Arts, 11 in Social Sciences, 10 in Mathematics, and 15 in Science. These could be

taken at different levels. Students could chose a varying number of courses from each subject although a lot of guidance was needed to ensure that their courses gave sufficient grounding to undertake the next level.

8. Credentialing Co-Curricular Activity

Many of the co-curricular activities that our students do during the course of the year provide the opportunities for students to gain credits. Some examples would include: coaching a team, performing in the school production, being part of, or taking a lead in a Polyfest or Kapahaka performance, or providing leadership at a camp.

These activities are usually done in the student's own time because they get enjoyment or satisfaction from doing so. In some cases attaching credits to the activity takes away that enjoyment and places an unwelcomed stress on the student and this needs to be taken into consideration.

Some activities such as a dance performance requires it to be filmed for moderation purposes, and a marker needs to be found. This could be considered an extra work load issue for the teacher and this is not desirable either. One school however, is considering appointing an overseer of co-curricular activity that would manage the "paper work side of things" and would also be available to do the recording.

Another approach is to integrate co-curricular activity, where appropriate into the timetable and make it part of the students course of study. Semesters work well for this approach. An example is the school production which is performed mid-way through term 2. A course is offered for student technicians and they are timetabled to prepare the sound and light for the show. The teacher who is the technical director is timetabled to teach these students, and the outcome is that the production does not rely on goodwill to get the technical side of the production done. Students could gain 9 credits for something that they are passionate about.

9. Integrated/Thematic Studies

Integrated and Thematic studies have interested schools as a pedagogy that looks at building connections and interrelationships between disciplines so that students can establish the linkages that exist. While it seems to be a fairly recent phenomenon its

history can be traced back to the 1960s. Much of the work was done by the United Kingdom's Schools Council between 1968 -72. Working with Keele University fully integrated studies programmes were trialled in 36 schools with pupils aged eleven to fourteen from a variety of socio-economic backgrounds. The first introductory unit was titled, 'Exploration Man', and from this rose to sub units, 'Communicating with Others' and 'Living Together'. Much of the original work and evaluation was done by David Bolam (1972), and by the mid-1970s the project had fallen out of favour. It should be noted though that Summerhill which was founded in 1921 still continues today. From its website it states its vision (in part) as,

'Summerhill is a school of personal choice, where students must decide each day how they will use their time... they can play, they can involve themselves in a variety of constructive social situations, they can be by themselves to read or daydream, they can engage in self-directed group projects and activities, and they can choose to attend formal lessons'.

In New Zealand Penrose High School (now One Tree Hill College) built the first Whanau building in 1977. Its design could well have been the precursor to today's Modern Learning Environments. Based on vertical forms and a concept of 'extended family', integrated studies programmes were run under the overarching theme of the, 'The Community' and it was designed to tie together the then current national curriculum. For a variety of reasons e.g. falling roll, changes in leadership, philosophical disagreements and staffing issues, the original whanau had ceased to run by 1984.

The work done by Boyd and Hipkins 2012 is underpinned by the New Zealand Curriculum (NZC) (2007). The view is that,

- That students need to learn through addressing real-life issues that cross learning area boundaries.
- Schools are using a wide range of different approaches to inquiry and integrated-inquiry. One reason for this recent growth is a belief that these approaches are well aligned with NZC.
- Some approaches have more in common with traditional views of students as 'learners in preparation' than with views of students as active 'learners in action'.

- ‘Learners in action’ approaches are more aligned with the messages in NZC.

FIGURE 2. ONE VIEW OF THE INTERSECTION BETWEEN INTEGRATED AND INQUIRY APPROACHES

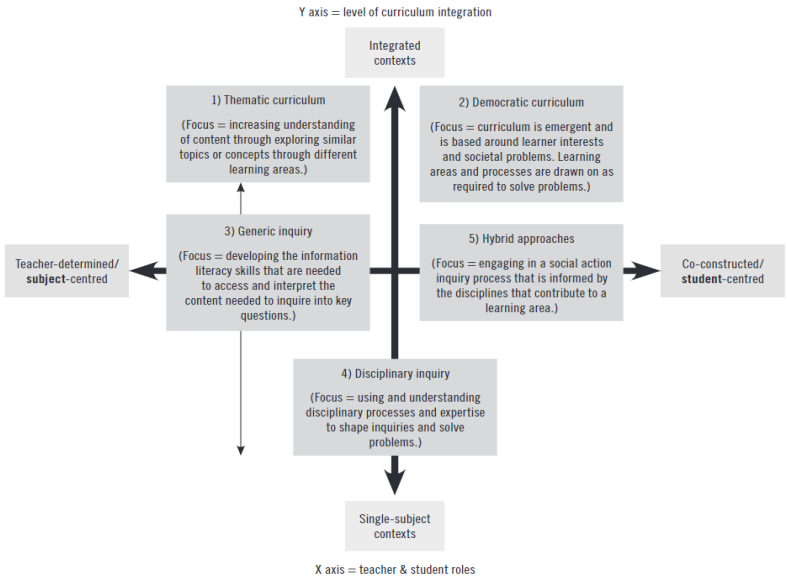

Figure 2 Boyd and Hipkins (2012) brings together the different approaches to self-inquiry for students and clearly shows the differences between thematic approaches which are often teacher generated and may lack student buy-in, and true integration which is student generated and co-constructed with the teacher. There are several variations to this model being used in schools. Jellyman (2015) identified the following:

Core subjected based integration

Paired Teachers

Multiple teachers/one programme

Integrated Curriculum as a subject

Project based

Combinations

Case Study 1.

The school is a low decile urban school with a high Pasifika roll. The programme involves one day per week for the last five weeks where the students go off

timetable. During this time students can select from a wide range of interest topics which they can pursue. This includes everything from learning to code, working in the community, or having community members coming into the school. Students use the inquiry method to investigate the particular areas of their chosen topics and work with their teachers to set up their investigations. The timing of the study is organised in the lead-up to the local Polynesian Festival. Students can use this time for rehearsals. This serves as a double purpose as it gets the students to come into the school, and it provides significant blocks of time for the tutors to work with the students.

Case Study 2.

This school is a state co-education low decile school in a smallish urban area surrounded by farms. The school has undertaken a re-visioning exercise with the local Intermediate school from which it draws 95% of its student intake. Given the school's low levels of literacy in Year 9 (90% are less than aSSTLe 2b for writing) the school has reorganised its junior school similar to a primary school e.g. homerooms, focus on literacy and numeracy, employing primary trained teachers etc. The schools are now able to find common reading and writing themes and differentiate the students across the four year levels. It also allows for greater fluidity if students wish to be taught in a Maori or Pasifika context. This gives them a better use of their resources, continuity as the student's progress chronological and better data collection.

Case Study 3.

A state, co-education mid decile school in a horticultural region. This school saw that historically learning was undertaken in a siloes. To break this down it looked to bring integration across the school. Teams of staff with different areas of expertise were assembled. This led to the breaking down of traditional departments or faculties. The first part of the year was spent with students working on the goals that they wanted to achieve throughout the year and how this might be possible. The students with their team leaders then established several contexts that could be used e.g. the environment to design programmes of learning that could be used to meet the goals. Learning plans with critical time paths were then established.

Comprehensive data tracking systems then put into place so that each student could be tracked and that milestones would be met. For subjects that aren't easily integrated e.g. languages, these were offered as modules of learning and students could incorporate these into their plans. Assessment and success was through peer review and inviting parents into the school so that the students could be share their learning and their successes were celebrated.

Conclusion

The thinking around this piece of research dates back to mid-2017. At that stage Newlands College had been reviewing its curriculum, strategic plan, day structures and vision. A considerable amount of work had been done and one of its aims was to engage students more with NCEA, while reducing their stress levels, the repetitive nature of the qualification, the provision of too many credits and trying to break the culture that students would not engage if there weren't credits on offer. The thinking also involved putting students at the centre of their learning, i.e. they would make active decisions about what they wanted to learn and how they would learn it.

In the meantime the Minister of Education, Chris Hipkin announced that several reviews would be untaken including one for NCEA. While the "Six Big Opportunities" might act as indicators for the future, the minister stated that consultation is on-going until towards the end of 2018. Despite this I still believe that there are existing good practices that can be incorporated into school's current programmes.

This research presents a series of programmes and approaches that different schools are trying or using. They are not all directly transferrable as each school has a different context, a different student body, and while most schools have a vision that they want the best outcomes for their students, the ways of achieving this vary from school to school.

The above might be thought of as some sort of toolbox that people might like to take an idea or more from and reshape it to fit their own context. If so then my hope is that it will be relatively easy to introduce and ultimately it engages students and improves outcomes for them.

REFERENCES

Bolam, David — *The Keele Integrated Studies Programme*, General Education 1972 Spring 14-18

Boyd, S and Hipkins R — *Student inquiry and curriculum integration Shared origins and points of difference (Part A)* SET 3 2012

DeLacey, Larry — The Future of the Whanau Philosophy Unpublished Manuscript, Penrose High School 1978

Inspiration Education Limited — *2 in 3 NCEA students severely affected by anxiety or stress* **(November 2017)** **(**http://www.scoop.co.nz/stories/ED1711/S00066/2-in-3-ncea-students-severely-affected-by-anxiety-or-stress.htm

Jellyman, Phillip — 'Models of Curriculum Integration in New Zealand Secondary Schools' Sabbatical Report Term 2, 2015

Larmer, J. — *Project-based learning vs. problem-based learning vs. X-BL.* Retrieved from http://www.edutopia.org/blog/pbl-vs-pbl-vs-xbl-john-larmer (2014)

National Sleep Foundation — https://sleepfoundation.org/sleep-topics/teens-and-sleep