

Analysis of Variance 2022

Equity Challenge: Our goal is to ensure that our students have the foundational literacy and numeracy skills complete the NCEA Literacy and Numeracy requirements, to access further learning in school and to be functionally literate and numerate in the workplace and in the wider world.

Target 1: By the end of Year 10, 95% of students will be functionally literate and numerate (Curriculum Level 4 / 5).

Context:

What were our concerns around student learning?

Benchmark Data

Our Achievement Challenge:

- Functional literacy refers to the knowledge and capabilities in reading and writing that enable learners to access further learning, develop important life skills, engage in employment and contribute within their communities. In Aotearoa New Zealand, these include understanding how to participate in our bicultural society.
- Foundational Numeracy is defined as the ability to access, use, interpret and communicate mathematical information and ideas, in order to engage in and manage the mathematical demands of various situations in one's adult years. To be numerate is to be able to confidently and effectively use mathematics to meet the everyday demands of life.
- Our concern is the number / proportion of students in our Year 9 entry data who are achieving below and well below the expected Curriculum Level in foundational literacy and numeracy. One Ministry advisor suggested that any students who enter college at Curriculum Levels 3 or lower will struggle to achieve functional literacy and numeracy by the end of Year 11.
- Foundational literacy and numeracy will from 2024 become a high stakes mandatory co-requisite for achieving NCEA qualifications. While literacy and numeracy is currently a required component of NCEA Level 1, from 2024 the standards will be externally assessed through an online exam.
- There are three critical components to ensuring our students are prepared for the 2024 change:
 - Students need to be functionally literate and numerate, preferably by the end of Year 11 or earlier although they can achieve the new co-requisites at any time during their schooling.
 - Students will need to develop strategies to competently approach an external online exam situation. Currently many of our students (particularly those with low literacy and numeracy levels and those in 'hands on' courses) achieve all their credits including current literacy and numeracy credits through internal assessments and are not used to sitting exams. As it has been signalled that the new co-requisite assessments will be an online assessment, available possibly twice during a given year, it is important that students are able to confidently navigate an online assessment environment.

Entry or Benchmark Data Year 9 students (entry 2022)

Note: that entry data was taken from HPC provided common assessments and Primary School information.

Curriculum Level	Literacy	Numeracy
Level 1	1%	3%
Level 2	12%	14%
Level 3	42%	49%
Level 4	43%	27%
Level 5	2%	7%
Level 6	0%	0%

Entry or Benchmark Data Year 10 students (entry 2022)

Note that benchmark data for Year 10 students was taken from the end of year assessment (2021).

Curriculum Level	Literacy	Numeracy
Level 2	4%	3%
Level 3	23%	21%
Level 4	67%	55%
Level 5	6%	21%
Level 6	0%	0%

Entry or Benchmark Data Year 11 students (entry 2022)

Note that benchmark data was taken from the end of year formal assessment (2021)

Curriculum Level	Literacy	Numeracy
Level 2	0%	0%
Level 3	7%	7%
Level 4	31%	19%
Level 5	62%	69%
Level 6	0%	5%

Taking Action:

What did we do to address this issue?

What shifts in practice did we work on?

What did we do to address this achievement challenge?

- We engaged a Ministry advisor to work with our staff throughout the year to develop our understanding of what the new co-requisites for literacy and numeracy might look like and how we could begin to prepare our students for these high stakes assessments. With the help of the advisor,
 - Teaching staff unpacked the Reading, Writing and Numeracy progressions
 - Teachers had a go at a trial functional literacy / numeracy assessment and reflected back on how they might contribute to students' development of literacy and numeracy through the Progression framework.
 - Each learning area chose one aspect of a progression to integrate into their programmes and moderated student work against the Progression framework eg Health and Physical Education taught paragraph writing; Science focused on tables and graphs; Technology on measurement.
- An intensive literacy / numeracy intensive programme was provided for students in classes with low literacy / numeracy
- All Years 9 and 10 students were given an experience of sitting a literacy (reading and writing combined) and numeracy exam in Term 4.

Student Outcomes

What happened as a result of our actions?

Did we make a difference?

Student Outcomes Year 9

Curriculum Level	Entry Literacy	End of Year Literacy		Entry Numeracy	End of Year Numeracy
Level 1	1%	8%		3%	0%
Level 2	12%	10%		14%	5%
Level 3	42%	26%		49%	13%
Level 4	43%	32%		27%	68%
Level 5	2%	22%		7%	14%
Level 6	0%	2%		0%	0%

Analysis:

- There is a significant upward shift from the percentage of students operating at Curriculum Levels 2 / 3 at the beginning of the year to the percentage operating at Curriculum Levels 4 / 5 at year's end (54% for Literacy and 82% for Numeracy).

- The learning outcomes are taken from Literacy and Numeracy exam results and for many of those students, it would have been their first experience sitting an assessment in exam type conditions. From Junior Certificate and Junior Diploma results, many of these students had been operating at higher levels through the year. This suggests that students will need practice at sitting online assessments of this nature.
- It is also to be noted that students in the Supported Learners classes had several changes of teachers throughout the year. While those teachers were experienced at working with learners with additional challenges, for those students, any change of teacher is often difficult for them to cope with. This situation contributed to the moved towards a Foundation Studies team (refer next section).

Student Outcomes Year 10

Curriculum Level	Entry Literacy	End of Year Literacy		Entry Numeracy	End of Year Numeracy
Level 1	0%	8%		0%	0%
Level 2	4%	5%		3%	1%
Level 3	23%	19%		21%	5%
Level 4	67%	32%		55%	82%
Level 5	6%	26%		21%	12%
Level 6	0%	10%		0%	0%

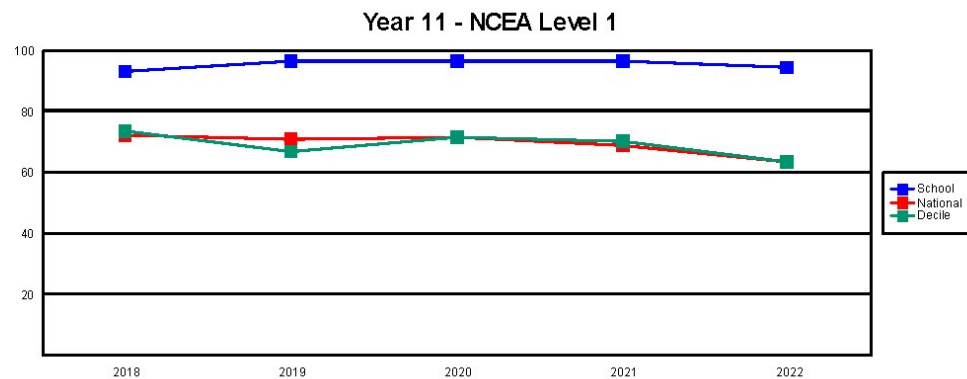
Analysis:

- Clearly we did not achieve our target of 95% of students achieving Curriculum Level 4 / 5 by the end of Year 10. We need to be mindful that these outcomes are from a one off exam where more factors come into play other than a student's ability to function on a day to day basis in terms of literacy and numeracy.
- Nevertheless, it is clear that we have some way to go in terms of meeting this target.
- As with any data of this nature, there are layers of complexity and our Junior Certificate (Yr 9) and Junior Diploma (Yr 10) results tell another story.

	Achieved	Not Achieved
Year 9 Junior Certificate	186 students	12 students
Year 10 Junior Diploma	174 Achieved	20 students

- The Junior Certificate and Junior Diploma framework is based on:
 - Assessments across all learning areas based on Curriculum Levels that students are working on ie set at a level in which students are able to be successful
 - Global or Generic Capabilities ie Character, Citizenship, Collaboration, Communication, Creativity, and Critical Thinking.
- The purpose of the Junior Certificate and Junior Diploma is to motivate students to do their best work and give them confidence that they can succeed in the classroom. It is an established part of the learning culture at HPC and up until the last two years, it was rare for a student to 'fail' ie The 32 students who did not achieve the Certificate or Diploma indicate a deeper problem of disengagement that needs further investigation and one that is reflected in lower attendance rates over the past two Covid disrupted years.

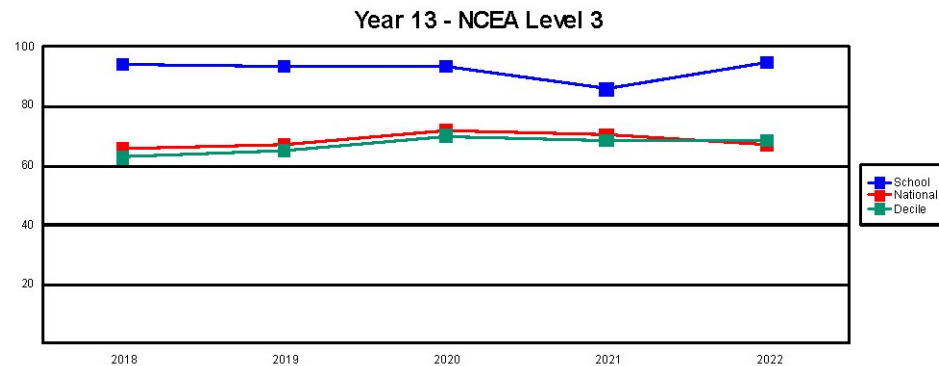
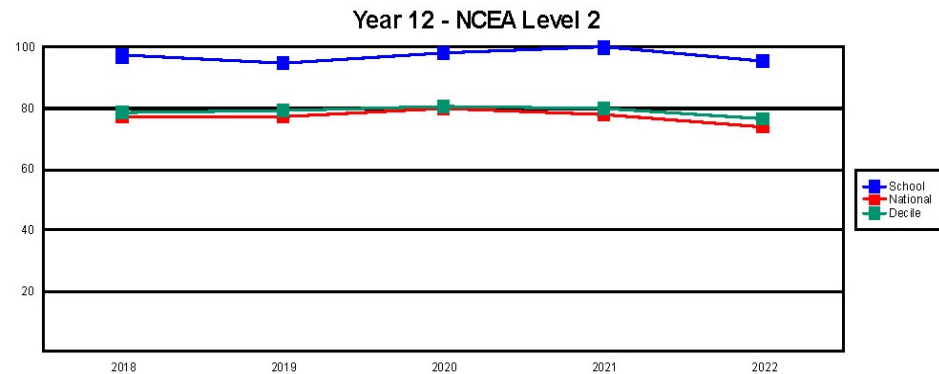
NCEA Level 1 Outcomes



Analysis:

- We were particular satisfied with these results. All students who had been identified as having low literacy / numeracy levels and / or poor engagement at Year 10 achieved NCEA Level 1. The typical profile of a student who did not achieve NCEA Level

1 has poor attendance as the major factor in their learning outcomes. Typically the student refused to come to school, stating anxiety or simply wanting to remain at home as they had during COVID. Two students left school immediately on turning 16 years of age and before completing Level 1 as they had suitable employment.



HPC students continue to do well compared with National Averages in NCEA Levels 1, 2 and 3 suggesting that many of our systems for monitoring and providing appropriate courses and support, ensure that students succeed, regardless of gender or ethnicity.

Next Steps

What further actions do we now need to take?

Thinking Ahead 2023

For 2023 a number of strategies are being implemented:

- The key strategy required is professional development for staff. A significant pedagogical shift is required if we are to collectively address the literacy / numeracy achievement challenges in a sustainable and purposeful way. While progress has been made in terms of understanding the elements of functional literacy and numeracy, the critical gap is knowing how to transfer this to what happens in the classroom. Other strategies include:
- The establishment of a Foundation Studies team. The Foundation Studies Team Leader will be responsible for ensuring that those students with 'well below' levels of Literacy and Numeracy at Years 9 and 10 will have a rich Literacy and Numeracy curriculum taught by teachers who have the pedagogical knowledge and skills to work effectively with these students. These students will take the usual spread of junior subjects ie English, Mathematics, Social Sciences, Science and Health & Physical Education but through a literacy / numeracy lens. Two classes at Year 9 have been established for this purpose and one class at Year 10. The following data from Year 9 (2023) entry testing shows how vital this need is:

Year 9 Cohort Benchmark Data (2023)

Curriculum Level	Number of Students
Level 1	4
Level 2	15
Level 3	50
Level 4	136
Level 5	5

- The appointment of a Literacy Coach to work with departments to integrate literacy into their learning areas and to assist with strategies of how literacy can be taught with intention within each learning area.
- The appointment of a Numeracy specialist who can work within the Maths department and across learning areas to develop whole staff understanding of the Numeracy requirements.
- Systems for data tracking need to be strengthened. While the Head of Mathematics took responsibility for the tracking of numeracy data, the same rigour was not applied to tracking literacy data for a number of reasons. One suggestion is that students take a literacy / numeracy assessment each term and this is used to track students rather than internally assessed

outcomes from individual learning areas. Ultimately it is envisaged that the tracking of literacy and numeracy across the school will fall under the Pathways Co-ordinator role.

- The role description for the Academic Dean position (now Pathways Co-ordinator) has been modified to include tracking, monitoring and mentoring all students including their progress in literacy and numeracy. The Pathways Co-ordinator will be responsible for ensuring that the data is rigorous and used to inform students, parents and teachers of progress.
- Raising student agency and parent / whanau support is a key to moving forward. One suggestion is that students keep a literacy / numeracy portfolio which documents their progress on the Learning Progressions from Year 9 to 11 which can be shared with parents / whanau at River conferencing.
- Our Year 9 literacy and entry data is a continuing concern as a downward trend continues. Along with poor literacy and numeracy levels for a high proportion of students, there is an upward trend in incoming Year 9 students with complex social, behavioural and health concerns. Without the ongoing and full collaborative efforts and support of the Kahui Ako, as the secondary school in this cluster, we will continue to play 'catch up' in Years 9, 10 and 11.
- In looking at individual students who are disengaging or not progressing in their learning, irregular attendance is a significant factor for individual students. For many of these, attending school each day has become optional, citing anxiety or 'school is not for them' as reasons for non attendance. A dedicated Attendance Co-ordinator has been appointed from 2023 to work with families / whanau to address chronic attendance cases.
- The Timetable structure is expected to be reviewed in 2023 given the multi-faceted Curriculum Refresh at both junior and senior levels. Currently the school works on a semester system, based on a Pathways approach, which allows for considerable flexibility in course design. To date it has served us well. Some questions to consider under a Timetable review:
 - What is the best structure given the revised NCEA standards to be rolled in from 2024?
 - How will the timetable reflect the importance of the literacy and numeracy co-requisites? Will these be compulsory at Years 9 to 11 with English / Mathematics regarded as separate courses?
- The outgoing principal is on sabbatical leave Term one with a focus on researching school wide literacy and numeracy approaches. It is to be hoped that the recommendations from the report will be considered by the new Principal / Board.

Achievement Target 2 2022

Excellence Challenge:

Our goal is to improve school leaver qualifications and readiness for further learning and employment

Achievement Target:

90% of Year 13 HPC school leavers will have completed the School Leavers Toolkit (ensuring they are learning ready, life ready, work ready, world ready)

Context:

What were our concerns around school leaver qualifications and readiness for further learning and employment?

Our Achievement Challenge:

- We believed that the educational experience needs to prepare students for more than achieving qualifications and that we want our students to be learning ready, life ready, work ready and world ready.
- Our Graduate Profile drew from a number of sources:
 - The Employability Skills (positive attitude, communication, self management, thinking skills, team work, willingness to learn, resilience (Refer Careers NZ)
 - The School Leavers Toolkit (<https://school-leavers-toolkit.education.govt.nz/>)
 - ERO's *Outcomes for Students* ie
 - Confident in their identity, language and culture as citizens of Aotearoa New Zealand
 - Socially and emotionally competent, resilient and optimistic about the future
 - A successful lifelong learner

- Participates and contributes confidently in a range of contexts - cultural, local, national and global
- Feedback from previous students and local employers.
- Careers Central as a central resource for student career pathways planning which is also available for parents / whanau

Taking Action

What did we do to address this issue?

What shifts in practice did we work on?

What did we do to address this achievement challenge?

* As in previous years, the 'River programme' continued as an established part of the HPC 'parallel' curriculum. Elements of the River programme include:

- Careers planning, applying for a job, Curriculum Vitae and covering letters, job interview skills, employability skills, rights and responsibilities of an employee, communication in the workplace
- Applying for courses, accommodation, StudyLink
- Real Me Verification, IRD numbers, bank accounts
- Financial management
- First Aid,
- Drivers Licence,
- Social media
- Community service (20 hours)
- Other life skills eg change a tyre, flatting skills, travelling tips for the 'big OE', cooking on a budget, doing one's mihi
- Personal wellbeing

Many of the elements previously included at Year 13 were brought down to Year 12 in recognition that each year approximately 30% of our students leave school for further education or employment before they reach Year 13. Particular topics that were introduced for the Year 12 programme included: Pathway decision making, CV writing, job interview skills, going into the workforce, financial literacy and scams.

Student Outcomes

Did we make a difference to student outcomes?

What happened as a result of our focused actions?

- 81% of all Year 13s completed the *School Leavers Toolkit*. Those who did not, left school for full time employment prior to Term 4; 85% of students completed most of the programme.
- All school leavers at both Years 12 and Year 13 left school with a clear pathway, either into further learning or full time employment. Prior to signing out, all school leavers must meet with the Career Co-ordinator or Careers Dean to ensure they are leaving with a specific destination in mind.
- At the time of writing this report, we are not aware of any Year 13s from 2022 who are not in either full time employment or in further learning.
- Year 12 students were introduced to a number of concepts which has previously been for Year 13s only eg financial literacy which included topics such as credit cards, kiwisaver, student loans, store finance, After Pay / Oxipay.
- While the materials in the River programme are presented to students, we do not assess how well students have taken the information on board, how useful the programme is for school leavers or if there are gaps in the programme from a parent / whanau, school leaver or employer perspective.
- One trend we have noticed is an increasing number of students (5 in 2023) who are taking a 'gap' year to either gather funds prior to entering a course, to have a break from study before starting university or to simply have more time to consider before committing to a particular pathway. What is important is that each student has the knowledge and skills to find their own pathway and the courage to pursue that. For example:
 - Student A considered a career in Engineering. He left school at the end of Year 13 to begin an Engineering apprenticeship in a local firm. Within 6 weeks, he not only realised that this wasn't right for him and at the same time, he had an opportunity to represent NZ at the World Clay Target Shooting Champs. He found alternative part time employment, won a place in the NZ team travelling to Croatia and is now enrolled to start a degree in Engineering at Auckland University.
 - Student B did a Gateway course with a small, local electrical firm. He loved the work and in order to complete NCEA Level 3, remained enrolled part time at school (0.6) with two days a week working at the firm. The intention was that at the end of Year 13, he would begin an apprenticeship with the firm. At the end of the year, he was informed that the firm did not have enough work for him to be employed full time. Student B personally approached other electrical businesses, with a letter of recommendation from his previous employer, and is now working full time in his chosen pathway with another electrical company.
 - Student C considered teaching as a career. She spent a week at a local Primary school and loved it. She has worked part time every weekend and every holiday to bank funds to cover expenses while she is training. She decided to go to Christchurch even though she could have gone to Waikato because she felt she needed to learn to be independent from her family and believed she had the necessary life skills to live independently.

Next Steps

What further actions do we now need to take, given these outcomes?

What will we do in 2023?

- The *Learning Ready, Life Ready, Work Ready, World Ready* culture is well imbedded into the HPC curriculum through the River programme.
- It may be that this target therefore is no longer needed. This point was raised in the 2021 Analysis of Variance, but the Board decided that by retaining it as a target, it ensured that it was an important part of the education that students receive at Hauraki Plains College.
- Regardless of whether it remains to be a formal target, some steps which could be taken to enhance this programme include:
 - Survey previous students and parents / whanau to ask what could be included in the programme
 - Survey current students and ask them what they would like to have in the programme eg some suggestions from informal feedback include voting in central and local elections