

ANALYSIS OF VARIANCE

2020

INTRODUCTION

The 2020 Annual Plan was a continuation of the previous year's plan, as we further developed the work undertaken through the Boards strategic review in 2018. The aim, from 2019, has been to focus on a small number of targeted objectives rather than a larger number which had been the case in previous years. This theme has continued with the 2021 Annual Plan.

There is no doubt that COVID presented challenges throughout 2020, with staff and student well-being, together with continuing to engage our students and maintain their academic programmes and progress a high priority. Online learning through Schoology, our Learning Management System, and BYOD, proved to be our saviour, but there will still a number of students, who for variety of reasons, did not effectively maintain their learning programmes through lockdown and even struggled with their learning when they returned to school.

Despite the effects of COVID, we were still keen on continuing with the planning for the implementation of the Hauora Programme, Matihiko, Integration with Science/Maths and English/Social Studies and introductory Tikanga in Social Studies in 2021. All these programmes have been introduced in 2021, although Integration is being trialled in term 2, 2021 rather than a full year programme.

One of the issues we continually face as a school is our ability to cater for an increasingly diverse student population. We are proud of our diversity and promote inclusiveness as a key feature of our school. However, we are seeing significant numbers of students who are entering our school below the required curriculum levels in literacy and numeracy as well as an increasing number of students with diagnosed conditions. Students in these categories, place increasing pressure on our ability to effectively cater for their needs.

Our NCEA results continue to show a disparity between Maaori/Pasifika and the rest of the school and between males and females (although our 2020 Level 2 NCEA results were the best ever and showed very little disparity). These will be areas of significant focus for the immediate future.

I have reported progress on the following objectives regularly during the year as part of the Board Self-Review and Annual Work Plan.

STRATEGIC GOAL 1: MEET THE NEEDS OF ALL LEARNERS

1.2 Ensure that teaching and learning is student-centred, recognise individual differences and extends all students, to ensure equity and excellence.

Specific Objectives

Create a process to effectively track junior school achievement.

A staff member was appointed to design a process to effectively track student achievement. A programme was designed using data from tick reports and being able to collate student scores and thereby identify those students at risk of not achieving and/or disengaged. The programme continues to be adapted for possible use in 2021.

All teachers will design and implement a learning programme that is student-centred.

The SLT met with HOF's in term 2 to review Faculty goals and discuss next steps (this was building on the work undertaken by external provider Jo Wilson from Leading Learning). HOF's continue to review their Programmes of Learning ensuring they are student centred. Trials in Integrated Learning took place in Maths/Science and English/Social Studies. Groups of teachers from these 4 faculties worked with an external facilitator (Steve Saville, Cognition Education) to plan student-centred Integrated Learning for 2021. This will take place in term 2 2021. Staff took part in a Depth and Complexity workshop on 27 July (Teacher Only Day), focusing on extending all students and ensuring equity and excellence. At the end of the year all Year 9 and 10 students participated in student-centred Project Based Learning. This being led by COL Leaders, Kath Langman and Ruth Hickman, in conjunction with their Professional Learning Group

Students are in a learning programme that enables them to experience success.

The essence of this objective was to track, monitor and support those students who were at risk of not achieving. Ryan Cox (HOF Social Sciences) was appointed Senior Student Achievement Co-ordinator at the start of the year and John Puka (Math's teacher), was appointed Junior Achievement Co-ordinator. Ryan developed a system to identify our Students at Risk of Not Achieving (SARONA) students for our Year 11 to 13 students. As it turned out, this became especially significant under COVID. John worked developing a similar system for the juniors. Using SARONA data we were able to track those students at risk of not achieving NCEA, and create alternative programmes and support for these students. This proved successful for a number of students who we were able to gain their NCEA before the end of the year. Under the Hauora programme introduced in 2021, we will be targeting and supporting our SARONA students with mentors (Kaiaarahi) allocated to at risk students in the senior school.

Summary of asTTle test results for Year 9 and 10 for the start of 2021

With the disrupted year we experienced in 2020, it was decided not to asTTle test the Year 9 and 10 students at the end of the year. We had continued with the specialist classes established in 2020 (Junior Numeracy – JNP, Junior Literacy – JEL, PATH programme – those students below JNP and JEP, but not receiving ORS funding, and ASC – Science literacy based programmes) and these are continuing in 2021. These programmes were explained in detail in the 2019 Analysis of Variance. The following is a summary of the asTTle testing undertaken at the beginning of 2021, which includes this year's Year 10's (last year's Year 9's).

The national mean beginning of year Curriculum Level for Year 9 numeracy, is 4P (the expected Curriculum Level is 4P), and the beginning of Year 10 national mean Curriculum Level is 4A, and the expected Curriculum Level is 5B. At Hillcrest High School our data shows that the median curriculum level for Year 9 is 4B, which is one sublevel lower than both the national expectation and the mean national level at the beginning of Year 9. Median curriculum levels for Maaori and Pasifika are one curriculum sublevel lower than for the cohort as a whole respectively. In regards to Year 10 the curriculum sublevel for the entire cohort is 4A, which is one curriculum sublevel below the 5B level expected at the beginning of Year 10. The female median curriculum sublevel matches that of the entire cohort while the male and Pasifika subcohorts are 2 curriculum sublevels lower. The Maaori subcohort is 3 curriculum sublevels (ie an entire curriculum level) below the expected level. In regards to literacy, in Year 9 the national average is 4P and the expected curriculum level is 4P, and in Year 10 the national average is 4A and the expected curriculum level is 5B. At Hillcrest High School the majority of Year 9 students in the 2021 cohort have asTTle results which sit

within the range of 3P - 5B, with most achieving a score of 4A or higher, which is higher than the national average. There are however, quite a few students who have a score lower than 3A and are still working at Levels 2 and 3 of the NZ Curriculum. Data show us that for the most part students who identify as Maaori tend to follow the same trend as the rest of the cohort, though there is an over representation of Maaori students at the lower end of the curriculum scores. The median score for Pasifika is 3P, which is lower than their peers. In regards to Year 10, the results show that the majority of students sit within the range of 3A - 5P with many achieving a score of 4A or higher. The curriculum expectation for Year 10 students at the start of the year is 5B, however the national average is 4A. It is the responsibility of the school to accelerate the learning of many of these students so they can achieve at Level 1 and 2 NCEA.

2020 NCEA results and comparisons with the previous 4 years (overall, Maaori, Pasifika, Male and Female)

		2020	2019	2018	2017	2016
Level 1	All	82.0	85.3	80.8	83.5	75.7
Level 2	All	87.1	82.0	83.1	84.6	78.4
Level 3	All	66.4	66.1	68.3	63.5	62.9
UE	All	54.4	54.7	52.5	55.7	50.0
Level 1	Maori	64.2	72.7	71.2	63.5	49.2
Level 2	Maori	84.4	73.5	70.0	69.4	64.7
Level 3	Maori	46.9	37.5	62.5	48.7	44.4
UE	Maori	34.7	22.5	40.6	38.5	20.0
Level 1	Pasifika	66.7	71.4	75.0	81.0	33.3
Level 2	Pasifika	64.3	73.7	76.2	65.0	66.7
Level 3	Pasifika	42.1	37.5	64.7	41.7	35.3
UE	Pasifika	31.6	31.3	17.6	33.3	17.6
Level 1	Male	72.9	85.1	71.2	77.8	67.6
Level 2	Male	85.8	75.2	76.6	78.1	69.2
Level 3	Male	53.4	58.0	58.1	48.0	50.7
UE	Male	40.6	44.2	41.1	37.6	39.3
Level 1	Female	88.7	85.5	88.1	89.2	82.4
Level 2	Female	88.2	86.6	88.9	89.8	86.1
Level 3	Female	76.4	72.5	75.9	74.2	72.5
UE	Female	64.9	62.9	60.9	68.1	58.4

Main features/summary of the 2020 NCEA results

- Nationally results better than previous year, particularly in Level 3.
- HHS Level 1 slightly down from 2019, but ahead of national
- HHS Level 2 above 2019, best results ever across the board. Very little disparity between Maori and rest of school and male vs female.
- Level 3 was very disappointing. Well below national. UE same as national
- Literacy and numeracy below 2019, but above national
- Endorsements still high, Excellence above national

- Male/Female - gap still exists. Huge gap at Level 1, 3 and UE, but closed considerably in Level 2 at 2.4%). This is similar to 2019 Level 1. Male better than national in Level 1 and 2, but down nationally at Level 3 and UE. Females higher than national in Level 1, 2, 3, and UE
- Maaori - Gap still exists between Maaori and everyone else except for Level 2. Maaori higher than national at Level 1, 2 (significantly) and UE (just). Big gap between Level 3 Maaori and national Maaori.
- Pasifika - Down at Level 1 and 2, but up in Level 3 and UE. Down in all levels nationally (small margin at UE)

NCEA results have been calculated by NZQA using roll based data for the last three years, prior to that they were participation based. A significant number of students are not eligible for NCEA or had left school during the year. The Deans of Year 11, 12 and 13 provided an analysis of their year level which I presented in my Board report on 9th February 2021, an analysis of Maaori and Pasifika achievement was also provided in the same report.

CAMBRIDGE RESULTS

English - 3 A's (80%plus), 6 B's (70 - 79), 2 C's (60 - 69), 5 D's (50 - 59) - All passed.
 Maths - 2 A's, 3 B's, 8 C's, 3 D's, 3 E's and 12 U (ungraded, under 40% or did not sit

Mixed results according to the teachers. They felt that some students lacked motivation when they returned from lockdown

SCHOLARSHIP RESULTS

Scholarship results are significantly down on previous years (which is what we predicted given the impact of COVID). 19 Scholarships in total, including two outstanding. Feedback from staff indicated that students didn't seem as motivated to achieve at the highest level when they returned from lockdown.

Harry Neil got an outstanding for Calculus and Emily Hollis for Technology.

Further detail

English. 3

Biology 1

Chinese 1

Earth and Space 2

Statistics 5

Calculus 2 + 1 outstanding

accounting 1

media Studies 1

Technology 1 outstanding.

TVET, STAR, Gateway and Secondary Tertiary Partnership Programmes

The Technical Vocational and Education Training (TVET) and Careers Centre caters for a significant number of students, mainly in the senior school, who are looking at trades based qualifications and alternative courses which can lead to a qualification, work experience, or employment. Below is a summary of the report presented for the Board of Trustees from HOD Scott Barry.

Secondary Tertiary Partnerships (STP)

103 students enrolled initially

A significant range of courses offered

Ethnicity

- Maori 15%
- NZ European 62%
- Pasifika 5%
- Other 18%

Gender

- Male 56%
- Female 42%
- Diverse 2%

NCEA (Trades Academy)

Year 11

- 52 students enrolled
- 90% (47) students gained NCEA Level 1
- 21% (11) students also gained NCEA Level 2

Year 12

- 43 students enrolled
- 91% (39) students gained NCEA Level 2 and above

Year 13

- 8 students enrolled
- 25% (2) students gained NCEA Level 3
- Destinations 2021 – 5 apprenticeships, 5 School Trades Academy L3, 1 School Gateway. 2 University

STAR

- 14 external providers used.
- 450 students on STAR outside provider courses including non-credit taster experiences
- Huge range of courses offered
- STAR supports 11 subjects offered at Hillcrest High School

Gateway

- 67 students on the Gateway programme (TEC contract 75 places but TEC reduced due to COVID)
- Achieved an average of 22 credits per student at Level 2 (TEC contract 20 credit average)

Outcomes

- 11 fulltime employment
- 26 parttime employment
- 5 Wintec
- 10 University
- 4 PTE
- 34 returned to school
- 3 transferred to another school

Gender

- Male 48%
- Female 52%

Ethnicity

- 13.5% Maaori
- 30% NZ European
- 6% Pasifika
- 50% other

NCEA

- 67 students on Gateway
- 85% (57) students gained Level; 1 and above
- 71.1% (48) gained Level 2 or above

- 24% (16) gained Level 3

15 Gateway programmes used across a range of providers

Apiculture (Pacific Coast Technical Institute)

- 10 students graduated with the NZ Certificate in Apiculture
- Completed 21 credits at Level 2

Science with Sustainability (Science Faculty and Pacific Coast Technical Institute)

- 15 students
- 15 credit average

TVET (Year 11)

- 72 students (Students counted once. Total class numbers are greater as some students had more than 1 line of TVET)
- 51% male, 49% female
- 25% Maori, 4% Pasifika, 53% NZ European, 18% Other
- NCEA results
 - 61% (44) gained L1
 - 7% (5) students gained L2
 - 50% (9/18) Maori no L1 (4 left school)
 - 38% (28) students did not gain NCEA
 - 1 NHS
 - 1 Early leaving exemption
 - 10 School-not yet reached full potential
 - 6 school /learning support
 - 1 school /ESOL
 - 5 Transferred to another school
 - 3 PTE courses full time
 - 1 Employment

TVET(Year 12)

- 63 students (Students counted once. Total class numbers are greater as some students had more than 1 line of TVET)
- 52% male, 48% female
- 21% Maori, 6% Pasifika, 57% NZ European, 16% Other
- NCEA results
 - 82.5% (52) students gained L2
 - Maori -12 students out of 13 achieved L2
 - 6 students gained L1
 - 1 students gained L3
 - 11 students did not get L2
 - 6 left school
 - 5 not yet reached full potential

TVET(Year 13)

- 32 students

Many students had more than 1 line of TVET and completed their own study from other subjects in this time. (Other reasons for TVET at level 3: Unistart, mental health, Guidance and Dean referral, special programmes of learning)
- 84% male, 16% female
- 15.5% Maori, 6% Pasifika, 50% NZ European, 15.5% Other
- NCEA results
 - 34% students gained L3
 - 84% students gained L2
 - 94% students gained L1
 - 66%(21) did not gain L3
 - 11 employment

- 6 Wintec
- 1 PAC
- 2 unknown
- Destinations
 - 13 Apprenticeship/employment
 - 1 School Gateway (year 14)
 - 4 University
 - 9 Wintec

Careers

Year 10-13 students have the option to register with Career Central. Career central is New Zealand's leading online platform for student career pathway management. Year 9 will complete a Careers unit on 'Self-awareness' in Health.

Career development at all senior levels is available to all students and ongoing.

Offer senior students the option of being assessed using the Bullseye and Myers-Briggs Type Indicator (MBTI) personality inventory to help in their career planning. This is implemented by MBIT certified staff members. Students receive a comprehensive report.

- 497 seniors took this opportunity.

Career Central trialled this year and will be purchased for 2020. Career central is New Zealand's leading online platform for student career pathway management.

Schoology will be the Learning Management System

When school went into lockdown, Schoology was the learning management system we used for online learning. Overall, this proved to be very successful. Staff realised the value of Schoology under lockdown. Schoology continues to be used as our learning management system. Staff are becoming confident and familiar using Schoology. Schoology now used across the school. First live reporting was sent out to parents in the second half of 2020. Live reporting continues to be developed in 2021.

1.3 Redesign the junior curriculum and timetable to reflect an innovative learning environment, which will enable collaborative learning, using technology, inquiry-based approaches and community-school partnerships.

Specific Objectives

Develop the junior curriculum plan for implementation in 2021.

Our original intentions were to implement integrated learning fully in 2021. This would involve Science working with Maths and English working with Social Studies. However, with COVID we were hampered by the amount of time we had to plan the programme for the year. Instead, we will be trailing integrated studies (as outlined above) in term 2 of 2021. We also planned for the introduction of the Hauora programme, Matihiko (Digital Technology as Year 9 and 10), and introductory Tikanga in Social Studies in 2021.

Plan for the implantation of Digital Technology curriculum.

Planning for the Digital technologies Curriculum took place throughout 2020. The programme, called Matihiko, was implemented in 2021 and involves Year 9 and 10 students undertaking compulsory computer literacy for one period per week.

Each faculty will explore models if innovative teaching and learning.

Teachers explored models of innovative learning in preparation for changes to the Junior Curriculum in 2021 and NCEA Review in 2023. Professional Learning Groups led by Kaahui Ako Leaders were established to explore different models. These include: Cross-Curricular Projects, Emerging Technologies, Integrated Learning Trials, Innovative Learning Environments and Practices and Project Based Learning. Trials of Project Based Learning took place in Science and Social Studies. Cross-curricular projects have taken place in Art and Science. An Art and Literacy Project took place with Hillcrest High School and Hillcrest Normal School as part of the Kaahui Ako. The Professional Learning Plan had innovative models of learning as a focus. For the Staff Only Day on 13 March we had Steve Saville from Cognition Education running a workshop on connected learning and integration. We also had Andrea Soanes, University of Waikato, running a session for Heads of Faculty on cross-curricular learning on 19 March. This focus will continued throughout the year.

STRATEGIC GOAL 2: ENHANCE EFFECTIVE TEACHING PRACTICES

2.1 Embed the Hillcrest High School Effective Teacher Profile

Specific Objectives

Enhance staff understanding of the Profile of the Effective Hillcrest High School Teacher

The Profile of the Effective Hillcrest High School Teacher was used as an observation tool as part of the appraisal process. This proved to be highly successful as staff gained greater confidence and understanding of the tool and it's significance in culturally responsive pedagogy. In 2021 the Profile of an Effective Hillcrest High School Teacher will be used for all classroom observations.

2.2 Staff will engage in regular and effective coherent school-wide professional development to strengthen equity and excellence.

Specific Objectives

Engage staff in effective, coherent professional development

Our Professional Learning programme was developed at the start of 2020 and focused on the Goals and Objectives of the Annual Plan. We continued the practice of allocating Thursday mornings from 8:30am to 10am as Professional Learning time. This time was committed to the following:

- Full staff Professional Learning
- Faculty Professional Learning
- Professional Learning groups led by Kaahui Ako Leaders

Our full staff Professional Learning included Project Based Learning, Hauora Programme, Culturally Responsive Pedagogy, Project Based Learning/Design Thinking Framework and Curriculum Planning.

Three teacher only days took place during the year

- 13 March – Steve Saville (Cognition) topic Connected Learning and PLD on Schoology
- 27 July – Anna Meuli (NZ Centre for Gifted Education) – depth and Complexity Workshop
- 25 Nov – NCEA planning (MOE allocated)

Despite being in lockdown for a number of weeks, we managed to navigate our Professional Learning Plan very successfully.

STRATEGIC GOAL 3: HAUORA: We will care for the well-being of all staff and students

Specific Objectives

Enhance staff, students and community understanding of the RAPID Values.

RAPID Values continue to be referred to and enhanced at school assemblies by the Principal and Senior Student Leaders. With no assemblies during lockdown and with a limited number under Level 2, meant that this was less effective. RAPID Values will be incorporated into our Hauora programme being introduced across the school in 2021.

Enhance the role of the form teacher.

We looked at the role of the Form Teacher when we designed our Hauora programme and this will continue to be refined and enhanced by Christine Williams (AP) working with the Deans.

3.2 Acknowledge and respond to the demands placed on staff and students.

Specific Objectives

To respond to the key points raised in the NZCER survey.

Since the staff feedback from the NZCER survey, there have been a number of instances where the SLT have shown examples of consultation with staff and the community.

- We sent out surveys to our parents, staff and students asking for feedback on how the school had dealt with lockdown, including our communication. We received overwhelmingly positive feedback.
- Sarah Collett (Assistant Principal) consulted widely with staff over the new timetable and junior curriculum for next year, which included numerous meetings, emails, and opportunities for staff to provide verbal and written feedback. We also consulted widely regarding the new Hauora programme planned for introduction in 2021.
- Jarred Williams (Deputy Principal) presented a Communication Plan to the staff and then emailed staff a copy and an opportunity to respond and comment.

Plan a Hauora programme of learning to be implemented in 2021.

Planning for the Hauora Programme was led by Natalie Parsons-Roberts (Assistant HOF PE and HOD Health) and her Professional Learning Group within her Kaahui Ako leadership role. Natalie and her group spent the entire year planning the programme gaining input from staff, students, the community as well as other schools. Although the programme has a focus on well-being, the programme is individualised for each year level. In 2021 the programme operates twice weekly on a Monday and Wednesday for 40 minutes each session. Full school (senior and junior as well as year level assemblies also take place during this time). The programme also includes student mentoring, with a focus on Kaiaarahi providing support for our SARONA students, future planning activities and lifeskills.

STRATEGIC GOAL 4: WHAKAWHANAUNGATANGA: Building culturally meaningful relationships with students, staff and the whaanau

4.1 Embed culturally responsive pedagogy and the school Te Tiriti o Waitangi policy

Specific Objectives

All faculty staff will participate in the school wide PLD programme.

See 2.2 above.

To enhance understanding of Te Tiriti o Waitangi, and implications for culturally responsive practices

Developed by Heemi Walker (HOD Te Reo and Within School Kaahui Ako Leader), the purpose of the plan was to develop and improve teacher practice of culturally responsive pedagogy through the use of the principles of Protection, Partnership and Participation, co-construction, PLD and teacher observations. The aim is to develop teacher practice of the Hillcrest High School Effective Teacher Profile in order to bridge disparity gaps in our learning environment. The programme has continued in 2021 and it is hoped more staff will be involved in the programme. A full report was presented to the Board of Trustees on September 8th 2020.

Analyse and respond to Kia Tu Rangatira Ai (Dr Belinda Webber) report

The report was presented to the staff and used to inform the decisions around our Junior Curriculum (eg integrated learning) and the Hauora programme.

Kelvin Whiting

Principal

May 2021