

ANALYSIS OF VARIANCE

Target 1

To improve achievement in Mathematics at Years 9 and 10, so that by the end of 2019 75% of our cohort will be achieving at the expected curriculum level (level 4 at Year 9 and level 5 at Year 10.)

Commentary

As part of the Ōtākaro Kahui Ako, we shared a specific target of raising our students' achievement in Mathematics so that 75% of our students were achieving at target by the end of the year (2019). To reach this goal we tracked students' progress over the year with 3 e-Asttle tests. From the beginning test priority students (those students under 4B for year 9 and under a 5B in year 10) were identified and categorised. Those students were then to be identified by teachers who were to be aware of who they were and to differentiate the curriculum and target learning appropriately to enable them to experience success. We then tracked their mid-year e-asttle results to see improvements and some students were removed from the list of target students as they had made progress. With teachers better knowing their priority students they were able to better differentiate lessons and know which students they needed to pay more attention of with regular check ins.

The goal was to have 75% of all students at level by the end of this year (2019).



Year 9

For the Year 9 students at the beginning of the year 51% of the students were at level and at the end of the year this had increased to 65%. While this shows progress as outlined below, it is still 10% below the achievement of our Kahui Ako and school target for the year. Of the students under achieving at the start of the year the biggest gains we achieved were in the NZ/European students.

When comparing the progress and attainment of different ethnicities, the percentage of NZE and 'Other' attaining the goal is similar, at 68% and 69% respectively.

For Māori and Pasifika learners the percentage of students of those ethnicities achieving the target is also similar at 56% and 57% respectively.

These results show that we still need to prioritise a focus on achievement in Mathematics; they also provide ample justification to adopt culturally responsive practices to help ensure that there is no gap in achievement for our Māori and Pasifika students compared to NZE students. Teachers have had PLD in DMIC problem-solving pedagogy to help further engage students to collaborate and be involved in their learning. This also needs to continue and strengthen.

End of Year 2019 students at level (4b or Above)

	Students at or above level 4B	%	Students Below Level 4B	%
All	155	65%	83	35%
Total	155		83	238

End of Year

	Students at or above level 4B	%	Students below level 4B	%	Total No. of Students
Māori	30	19%	23	28%	53
Pasifika	10	6%	8	10%	18
Other	19	12%	9	11%	28
NZ/EUR	96	62%	43	52%	139
Totals	155	100%	83	100%	238

Progress

75% Target

75% Target

	Required totals at BOY	Shift how many students	Total Required at EY	Shift how many students	Overall %
Māori	44	16	40	10	
Pasifika	13	5	14	4	
Other	23	9	21	2	
NZ/EUR	108	31	104	8	
Totals	188	61	179	24	75%

Year 10

Our year 10 students also did not reach the 75% at level target, 28% of the students were at level at the beginning of the year and this increased to 50% by the end of the year. It was probably quite predictable because their e-asttle results at the end of last year still showed only 53% of students were at level at the end of 2018 (year 9).

End of Year 2019 Year 10 students at level (5B or Above)

	Students at or above level 5B	%	Students Below Level 5B	%
All	104	50%	106	50%
Total	104		106	210

End of Year

	Students at or above level	%	Students below level	%	Total No. of Students
Māori	18	17%	34	32%	52
Pasifika	5	5%	10	9%	15
Other	17	16%	10	9%	27
NZ/EUR	64	62%	52	49%	116
Totals	104	100%	106	100%	210

Progress

75% Target

75% Target

	Required totals at BOY	Shift of how many students	Total After EY	Shift of how many students	Overall %
Māori	39	28	39	20	
Pasifika	13	10	11	6	
Other	20	10	20	3	
NZ/EUR	91	54	87	22	
Totals	163	102	158	52	75%



Target 2

To improve achievement in Writing at Years 9 and 10, so that by the end of 2019 76% of our cohort will be achieving at the expected curriculum level (level 4 at Year 9 and level 5 at Year 10.)

Year 9 Formal Writing Results

All Students - Beginning of Year			
Total Records	Incomplete	Complete	
253	37	216	
Number Below 4	76	Percentage Below 4	35
Number at 4	81	Percentage at 4	38
Number above 4	59	Percentage Above 4	27

Māori Students - Beginning of Year			
Total Records	Incomplete	Complete	
62	9	53	
Number Below 4	23	Percentage Below 4	43
Number at 4	19	Percentage at 4	36
Number above 4	11	Percentage Above 4	21

Pasifika Students - Beginning of Year			
Total Records	Incomplete	Complete	
17	2	15	
Number Below 4	5	Percentage Below 4	33
Number at 4	10	Percentage at 4	67
Number above 4	0	Percentage Above 4	0.00

All Students - End of Year			
Total Records	Incomplete	Complete	
253	5	230	
Number Below 4	64	Percentage Below 4	28
Number at 4	88	Percentage at 4	38
Number above 4	78	Percentage Above 4	34

Māori Students - End of Year			
Total Records	Incomplete	Complete	
52	0	52	
Number Below 4	16	Percentage Below 4	31
Number at 4	25	Percentage at 4	48
Number above 4	11	Percentage Above 4	21

Pasifika Students - End of Year			
Total Records	Incomplete	Complete	
16	0	16	
Number Below 4	7	Percentage Below 4	44
Number at 4	6	Percentage at 4	37
Number above 4	3	Percentage Above 4	19



Commentary on the shifts noted in Year 9 Writing data

- By the end of 2019 72% of the Year 9 cohort achieved at or above the target of level 4.
- Percentage of students below level 4 has reduced by 7.4 percentage points.
- Percentage of students above level 4 has increased by 6.6 percentage points.
- Māori students below level 4 decreased by 12.63 percentage points.
- Pasifika students below level 4 increased by 10.42 percentage points.
- Pasifika students above level 4 increased by 18.75 percentage points.

Overall this improvement in results is encouraging as we were only 4% away from reaching our target and it appears that students are trending in the right direction. Māori students made the biggest improvement, while the data for Pasifika students is a concern. Nevertheless, some caution must be taken when analysing the data for our Pasifika students, as the number of students is too small to draw significant conclusions.



Year 10 Writing Results

All Students - Beginning of Year			
Total Records	Incomplete	Complete	
215	35	180	
Number Below 5	83	Percentage Below 5	46
Number at 5	76	Percentage at 5	42
Number above 5	21	Percentage Above 5	12

Māori Students - Beginning of Year			
Total Records	Incomplete	Complete	
51	9	42	
Number Below 5	24	Percentage Below 5	57
Number at 5	15	Percentage at 5	36
Number above 5	3	Percentage Above 5	7

Pasifika Students - Beginning of Year			
Total Records	Incomplete	Complete	
18	4	14	
Number Below 5	8	Percentage Below 5	57
Number at 5	5	Percentage at 5	36
Number above 5	1	Percentage Above 5	7

All Students - End of Year			
Total Records	Incomplete	Complete	
218	62	156	
Number Below 5	55	Percentage Below 5	35
Number at 5	73	Percentage at 5	47
Number above 5	28	Percentage Above 5	18

Māori Students - End of Year			
Total Records	Incomplete	Complete	
52	20	32	
Number Below 5	15	Percentage Below 5	47
Number at 5	14	Percentage at 5	44
Number above 5	3	Percentage Above 5	9

Pasifika Students - End of Year			
Total Records	Incomplete	Complete	
17	9	8	
Number Below 5	2	Percentage Below 5	14
Number at 5	5	Percentage at 5	36



Commentary on the shifts noted for Y10 Writing data

- By the end of 2019, 64.7% of the Y10 cohort achieved at or above level 5 of the curriculum.
- Percentage of students below level 5 has decreased by 10.9 percentage points.
- Percentage of students above level 5 has increased by 6.3 percentage points.
- Percentage of Māori students who are at below level 5 decreased by 10.27%.
- Percentage of Pasifika students who are below level 5 decreased by 42.86%.

While the overall percentage increase is 12% below our target, there is evidence of improvement with student results trending upwards. Of particular note is the improvement in results for our Pasifika students with the biggest increase. Nevertheless, an element of caution needs to be taken when analysing this apparent success. Please note that the data for the Pasifika is skewed because 18 Pasifika students completed the writing task at the beginning of the year, while only 9 completed the end of year writing task. This raises the issue of timing of the assessment.

Steps taken:

- Professional development – Inquiry group formed, with a particular focus on improving practice around the explicit teaching of writing. This included teachers from across different curriculum areas.
- Common writing frameworks shared in central literacy folder for all staff to access.
- More culturally responsive texts and resources added to the English department.
- Use of Education Perfect programme to target vocabulary building across English and Social Science.
- Sharing of best practice within the English department.
- Writing workshops offered.

Next Steps:

- Widen professional learning opportunities for staff to improve literacy pedagogy in both reading and writing.
- Explore the use of the literacy learning progressions to moderate student writing.
- Review the type of assessment that is used.



Target 3

To improve achievement of NCEA Level 3 so that by the end of 2019, 79% of eligible Year 13 students will have achieved NCEA Level 3.

Our number of eligible* students in 2019 was 130.

(*enrolled at AGHS for the entire school year)

Ethnic breakdown:

	Total students	Achieved Level 3	Not Achieved Level 3	% Achieved
Asian	9	6	3	66.6%
European	83	72	11	86%
Maori	25	15	10	60%
MELAA	4	3	1	75%
Pasifika	9	4	5	44.4%
TOTALS:	130 students	100 students	30 students	
	Total % of eligible students who have achieved L3 = 77% (76.9)			



Steps taken in 2019:

Term 1 / 2

- Data analysis in early 2019 to identify who we felt were at High, Medium or Low risk of not achieving Level 3. We looked at: academic achievements in previous years, pastoral supports required, attendance statistics, medical issues, self management efforts made to date.
- Year 13 students were surveyed to ascertain: goals – short and long term, understanding of NCEA, their barriers to achievement (if any), enablers of achievement, outside commitments, part-time work, time spent on screens etc.
- Data was collated, each student was colour coded in spreadsheet form (green, orange, red).
- Data was distributed to Kaitiaki and Senior Leaders who had the oversight of a particular Pou or year level.
- Data was also shared with SENCO / Learning Support Co-ordinator.
- Data was discussed at level specific pastoral meetings.
- The inquiry team (made up of two Kaitiaki and one Deputy Principal) decided who would be the best fit to mentor each student in the Medium Risk category, and a majority of students in the High Risk category.
- In a few cases, our Maori Liaison and Pasifika Liaison staff members were the best fit to be mentors.
- Mentoring, using a somewhat standardised format, commenced part way through term 2.
- Data from mentoring sessions was made available to all teaching staff/Ako teachers.

Low Risk – likely to achieve	84 students	
Medium Risk – could pass with support	37 students	
High Risk - unlikely to pass	19 students	Some of these students are working at Level 2 and 3 and are not eligible to achieve Level 3.

TOTAL:	140 students
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Term 3

- 1:1 mentoring of students was well underway
- Predicted grades were entered and added to the existing data. This saw a slight shift in the High, Medium and Low risk groups.
- By now approximately 11 Year 13s had left school to engage in employment or further education.

Low Risk - likely to achieve	91 students	63.2%	Students predicted to gain >65* L3 credits *(leaving room for error/being cautious)
Medium Risk - could pass with support	17 students	11.8%*	Students predicted to gain 50-65 L3 Credits
High Risk - unlikely to pass	34 (23 current students + 11 leavers)	23%	Students predicted to gain <50 L3 credits (incl. International students)

TOTAL:	142 (131 current students + 11 leavers)	This includes new International students
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- Mentoring ramped up in term 3. Home contact was made – this proved a useful element in mentoring.
- A presentation was made to Year 13 assembly about Level 3 achievement – this seemed to spur many students into action.
- Heads of Learning areas distributed the latest data to subject teachers who were asked to work closely with those students at risk of not achieving.
- Continual tracking of achievement and updating of each grouping of at risk students occurred.
- Pastoral meetings to discuss those at risk took place.
- The Deputy Principal in the group, who had a particular role with our Pasifika students, worked closely with those at risk - looking for avenues of achievement.



Shifts noted:

- In term 3, looking at the current data and predictions made, only 91 students were likely to achieve.
- Shifts were made when 9 out of the 17 medium risk students who were deemed unlikely to achieve without support, went on to achieve Level 3.
- There was one student in the Low Risk 'green' category who did not achieve (by 3 credits). This was due to her withdrawing from internal assessments against our advice, relying solely on her externals to achieve L3.
- The official Level 3 achievement data (those enrolled on 1 March) saw an overall increase from 64.33% achievement in 2018 to 70.4% achievement in 2019.
- In 2018 we saw 25 students leave AGHS between 1 March and the end of the school year.
- In 2019 we saw 12 students leave AGHS between 1 March and the end of the school year. I would like to think that fewer students left because they felt supported to stay in education at AGHS and that we would continue to support them to achieve their personal best.

Next steps:

- Continue to regularly gather and sort data at each of the senior year levels to ensure that those in need are receiving the 1:1 help they need.
- We have seen the value of mentoring students in action. Sometimes through anecdotal evidence such as "Miss made me feel so good today, she believes I can do this" or through the 9 students who were predicted not to achieve, but actually did.
- We would like to continue with a consistent and strong mentoring/tracking programme. This will be done by Ako teachers who know their students well and the Kaitiaki of each Pou.
- Support will be given to Ako teachers so that the mentoring and tracking of students is timely and effective.
- Pastoral Teams have been developed for each Pou. Each team includes a representative from our Learning Support team. These groups meet weekly to discuss student achievement, attendance, behaviour concerns, career pathways and those particularly at risk.
- Junior data meetings will take place in 2020 to ensure effective planning by teachers to meet the needs of all students.



Target 4

To improve achievement of NCEA Level 1 so that at least 80% of our Year 11 cohort in 2019 achieve NCEA Level 1, and to focus on lifting the achievement of Māori and Pasifika students at NCEA Level 1.

(For 80% of Māori students to achieve NCEA Level 1, 28 out of 35 Maori students will need to be successful. For 80% of Pasifika students to achieve NCEA Level 1, 9 out of 11 Pasifika students will need to be successful.)

Commentary

This target has not been met.

NZQA data shows that in 2019 NCEA, 73.9% of our Year 11 cohort achieved NCEA Level 1, and not the 80% we aspired to.

In addition, of the 49 students identified as Māori in the Year 11 cohort, 30 achieved NCEA Level 1, representing a pass rate of 61%.

Of the 11 students identified as Pasifika in the Year 11 cohort, six achieved NCEA Level 1, representing a pass rate of 55%.

While we were disappointed not to achieve our target, the results of our mentoring and monitoring work suggested that 74% were likely to achieve NCEA Level 1, so we are pleased at least that our predictions and work within school to define how our learners are progressing, are far more accurate than in previous years.

We also note that while we did not achieve our target, unlike national and decile 4 – 7 school trends, our 2019 cohort of Year 11 students out-performed both national statistics and data of achievement of students in similar decile schools. Unlike both those other points of comparison, where achievement dipped 3% on the previous year's data, our 2019 cohort improved on the performance of the previous year's cohort by 4%.

Achievement of our Māori students in NCEA Level 1.

49 students identified as Māori in our 2019 Year 11 cohort.

39 out of 49 would need to achieve NCEA Level 1 for us to achieve our target of 80% achievement.

Results:

30 out of 49 students achieved NCEA Level 1. This represents a pass rate of 61%.

It is an improvement of 20% on the achievement rate for Māori students at Level 1 from the previous year.



Of the remaining 19 who did not achieve:

- Six Māori students left school within the course of the year, and thus removed themselves from being able to achieve NCEA. Two students were removed for continuous absence; a further four left school as they were over 16 and no longer wanted to engage with formal schooling.
- Two would have achieved NCEA but both failed to achieve the ten numeracy credits and so will receive the award when they achieve those credits.
- Of the remaining 11 students who did not achieve NCEA Level 1, one was not in school but attending Health School and achieved only 7 credits. She is now attending another school. Two further students who achieved very few credits (18 and 24) had poor attendance and engagement with learning. Attendance rates for the year were 65% and 49%. They are both back at school this year and are being supported on their learning pathway. Three more students achieved 51, 52 and 53 credits and are working on courses that will enable them to complete Level 1 and acquire credits towards Level 2.
Five students achieved between 70 and 79 credits and form part of a larger group of students, for whom the goal this year is to achieve both Level 1 and Level 2 NCEA.

Achievement of our Pasifika students in NCEA Level 1.

11 students identified as Pasifika in our 2019 Year 11 cohort.

9 out of 11 would need to achieve NCEA Level 1 for us to achieve our target of 80% achievement.

Results:

6 of the 11 students achieved NCEA Level 1. This represents a pass rate of 55%.

All students attended school for the year and are still enrolled at Avonside Girls' High School.

Two students achieved few credits (27 and 33) and achievement for them of Level 1 and 2 will be a process over three years.

Three students achieved 74 and 75 credits, and form part of a larger group of students, for whom the goal this year is to achieve both Level 1 and Level 2 NCEA.

Next Steps

This target has confirmed that we have good learning information about our students and that our predictions are reliable. We need to continue with our mentoring and monitoring processes and look at those students for whom NCEA is almost achievable, so that they are making good decisions about work completion, revision and attending assessments to maximise their chances of success.

