

# ANALYSIS OF VARIANCE

## 2019



**TAURANGA  
BOYS' COLLEGE**

*Best for Boys | Tama Tū Tama Ora*

# Reporting on Achievement

## Analysis of Variance 2019

- 1.1 *Student Learning - Academic Achievement of All Boys*
- 1.2 *Student Learning - Academic Achievement of Maori Boys*
- 1.3 *Student Learning - Academic Achievement of Pacific People*
- 1.4 *Student Learning - Academic Achievement of Priority Learners*
- 1.5 *Equity and Excellence*
- 1.6 *Student Learning - Academic Excellence*
- 1.7 *Student Learning - Attendance / Engagement*

**2019 TARGET 1.1: STUDENT LEARNING – Academic Achievement TARGET: To raise the level of achievement for boys in NCEA**

**1.1 Academic Achievement of All Boys**

**2019 Results**

Level 1	Target	Level 2	Target	Level 3	Target	UE	Target
76.9	> 80%	83.6	>85%	70.6	>70%	50.2	>60%
Level 1 Literacy		92	Target >90%				
Level 1 Numeracy		85.8	Target >90%				

**Baseline Data**

		2015	2016	2017	2018	2019
<b>LEVEL 1</b>	<b>All</b>	79.2	78.8	73.9	72.4	76.9
	<b>European</b>	88.7	85.3	80.1	80.4	81.7
	<b>Māori</b>	61.9	67.5	56.3	55.2	60
	<b>Pacific</b>	85	33.3	35.7	57.1	63
	<b>Literacy</b>	93.3	88.9	87	84.4	92
	<b>Numeracy</b>	89.7	87.1	87.2	83.2	85.8
<b>LEVEL 2</b>	<b>All</b>	83	80.5	88.9	82	83.6

	<b>European</b>	87.6	86.9	88.7	83.7	85.1
	<b>Māori</b>	69	68	91.2	78.2	87.5
	<b>Pacific</b>	53.3	76.2	80	50	84.2
<b>LEVEL 3</b>	<b>All</b>	63.9	79	64.9	66.7	70.6
	<b>European</b>	72.7	80.4	69.5	71.3	73.5
	<b>Māori</b>	42.4	70	55.9	54.1	63.5
	<b>Pacific</b>	42.1	71.4	42.1	44.4	37.5
<b>YR 13 UE</b>	<b>All</b>	50	59.9	43	43.2	50.2
	<b>European</b>	57.4	64.3	51.2	50.2	55.1
	<b>Māori</b>	34.8	42	25	24.3	28.8
	<b>Pacific</b>	26.3	42.9	21.1	11.1	12.5

## COMMENTS

Note: 2019 Comparative data not available at this time so we are not able to compare the academic achievement of students at Tauranga Boys' College with the following groups:

- NZ average
- NZ boys
- NZ boys in co-educational schools
- NZ boys in Boys' schools
- NZ boys - Decile 6

These comparisons will take place once this data is available.

Generally academic achievement shows a very pleasing improvement across all levels of NCEA including literacy and numeracy from results in 2018 with proximity to the targets set. Especially pleasing is the NCEA Level 3 result which is better than the target and the NCEA Level 2 result which is comparable. Level 1 literacy has also bettered the target set.

**2019 TARGET 1.2: STUDENT LEARNING – Academic Achievement of Maori**

**NB: results used are provisional enrolment based**

**1.2 Academic Achievement of Maori Boys**

**2019 Results - Maori**

Level 1	Target	Level 2	Target	Level 3	Target	UE	Target
60	>80%	87.5	>85%	63.5	>70%	28.8	>60%
Level 1 Literacy		83.2	Target >90%				
Level 1 Numeracy		70	Target >90%				

**Baseline Data - Maori**

	2015	2016	2017	2018	2019
LEVEL 1	61.9	67.5	56.3	55.2	60
LEVEL 2	69	68	91.2	78.2	87.5
LEVEL 3	42.4	70	55.9	54.1	63.5
UE	34.8	42	25	24.3	28.8

## COMMENTS

2019 Comparative data not available at this time so we are not able to compare academic achievement of Maori boys at Tauranga Boys' College with national comparisons limiting our degree of analysis.

Academic achievement of Maori boys at Tauranga Boys' College shows a considerable improvement over 2018 and over 2017 in a number of areas. Especially pleasing is the NCEA Level 2 results of 87.5% showing a high level of achievement for Maori in two out of the last 3 years. This improvement will be the result of a number of deliberate acts to raise achievement of Maori across a number of measures, in this case academic achievement. The result at Level 3 is also a significant increase over recent years. The UE result is disappointing and will need further investigation. A more accurate measure will be how many of these Maori boys at Level 3 had access to courses that would give them access to UE as well as investigating the number of who sought to achieve UE. The college has a number of programmes to grow knowledge and aspiration about striving to access University education. Not revealed in this data is the strong success of Maori boys who are part of Te Whanau a Aronui who outperform Maori boys in the mainstream.

These deliberate actions and strategies are outlined in the actions section of this report.

### 2019 TARGET 1.3: STUDENT LEARNING – Academic Achievement of Pacific People

**NB: results used are provisional enrolment based**

#### 1.3 Academic Achievement of Pacific People

##### 2019 Results - Pacific people

Level 1	Target	Level 2	Target	Level 3	Target	UE	Target
63	>80%	84.2	>85%	37.5	>70%	12.5	>60%
Level 1 Literacy		81.5	Target >90%				
Level 1 Numeracy		92.6	Target >90%				

## Baseline Data - Pacific People

	2015	2016	2017	2018	2019
LEVEL 1	85	33.3	35.7	57.1	63
LEVEL 2	53.3	76.2	80	50	84.2
LEVEL 3	42.1	71.5	42.1	44.4	37.5
UE	26.3	42.9	21.1	11.1	12.5

### COMMENTS

2019 comparative data is not available at this time so we are not able to compare academic achievement of Pacific boys at Tauranga Boys' College with national comparison limiting our degree of analysis.

It is important to note small numbers of Pacific people can lead to significant variation in results. Especially pleasing is the best ever result in NCEA Level 2 and the strongest result at Level 1 for a number of years. This is evidence of a number of deliberate acts to support Pacific boys at the college as outlined in the actions section of this target. Attention needs to be given to the low achievement of NCEA Level 3 and UE and targeted strategies put in place to improve these results.

## 2019 TARGET 1.5: STUDENT LEARNING – Equity and Excellence

### 1.5 Equity and Excellence

In 2019, Tauranga Boys College chose to set Equity Ratio targets for the first time, in an attempt to redress inequitable outcomes for Māori and Pacific students.

The intended actions to reach the targets were:

Identify and target Māori and Pacific students who are not achieving assessments in MAA1, VL1, MAA2, VL2.

Proactively support pathways to success for at-risk boys through:

- achievement support
- alternate programme(s)
- access to equipment / uniform / transport / BYOD / social support

Identify and target Māori and Pacific students who are not achieving assessments L3 and/ or have poor attendance

Proactively support pathways to success for at-risk boys through:

- academic support
- alternate training
- employment
- tertiary pathways

Tauranga Boys' College has a vision that students will be "better than before" in all domains. Better than before is the underlying principle which permeates all strategic objectives.

Therefore the Equity Ratio targets we set were to be "better than before" - ie: Greater than the 2018 Equity Ratio outcomes.

The method of calculating Equity Ratio is thus:

If Maori (or Pacific) students gained 75% on X and Other students gained 100% of X, then the equity ratio is calculated as:

$75 \text{ divided } 100\% = 75\% \text{ (of equity)}$

If Maori (or Pacific) students gained 55% on X and Other students gained 90% of X, then the equity ratio is calculated as:

$55 \text{ divided } 90\% = 61\% \text{ (of equity)}$

If Maori (or Pacific) students gained 90% on X and Other students gained 78% of X, then the equity ratio is calculated as:

$90 \text{ divided } 78\% = 115\% \text{ (of equity)}$

If Maori (or Pacific) students gained 82% on X and Other students gained 82% of X, then the equity ratio is calculated as:

$82 \text{ divided } 82\% = 100\% \text{ (of equity)}$

*Source: "How Equity is Calculated" - Nancy Macfarlane, Manager Education Bay of Plenty – Waiariki, Ministry of Education, 18 September 2018.*



**Baseline Data**

**2019 TARGETS**

**Māori Equity Ratio**

**Level 1**

**2019 - 73.4%**

**Target exceeded**

2018 - 73.0%

Greater than 73%

2017 - 68.3%

2016 - 78.5%

2015 - 71.4%

**Level 3**

**2019 - 86.4%**

**Target exceeded**

2018 - 76.8%

Greater than 76.8%

2017 - 78.1%

2016 - 85.8%

2015 - 58.2%

**Level 2**

**2019 - 102.8%**

**Target exceeded**

2018 - 86.4%

Greater than 86.4%

2017 - 102.4%

2016 - 77.6%

2015 - 80.7%

**U.E**

**2019 - 52.3%**

**Target exceeded**

2018 - 51.9%

Greater than 51.9%

2017 - 47.5%

2016 - 64.4%

2015 - 60.9%

**Baseline Data****2019 TARGETS****Pacific Equity Ratio****Level 1****2019 - 77.1%****Target exceeded**

2018 - 45.2%

Greater than 45.2%

2017 - 44.5%

2016 - 39.4

2015 - 100.1%

**Level 3****2019 - 51%****Target exceeded**

2018 - 47.9%

Greater than 47.9%

2017 - 60.6%

2016 - 89.3%

2015 - 57.8%

**Level 2****2019 - 98.9%****U.E****2019 - 22.7%****Target not met**

2018 - 86.4%

Greater than 86.4%

2018 - 23.3%

Greater than 23.3%

2017 - 93.0%

2017 - 41.2%

2016 - 87.2%

2016 - 67.0%

2015 - 61.2%

2015 - 46.1%

**COMMENT**

It is very pleasing to report that our targets were exceeded in all but one area - Pacific UE. In this case, it is worth noting that there were three Pacific Students who had a UE pathway course, of which one student attained UE.

Tauranga Boys' College is committed to reducing inequity in all academic outcomes. Twice in the past three years, NCEA Level 2 has exceeded 100% for our Māori students, and in nearly all other measures, inequity is reducing.

## 2019 TARGET 1.6: STUDENT LEARNING – Academic Excellence. Rise the level of Merit / Excellence Endorsements

### 1.6 Academic Excellence

#### 2019 Results

Excellence / Merit target to increase % in all NCEA Levels at or better than NZ average, Decile 4-7 boys.

		2015	2016	2017	2018	2019
LEVEL 1	Excellence	7.8	18.2	16.7	20.9	14.7
	Merit	31.8	32	34.3	35.9	30.1
LEVEL 2	Excellence	6.6	5.2	9.4	7.9	15.7
	Merit	26	19	23.1	26.1	26.7
LEVEL 3	Excellence	5.6	3.7	5.5	8.9	15.6
	Merit	22.9	22.3	22.7	19.3	22.2
NZ Scholarships		28	21	26	37	24

#### COMMENTS

2019 comparative data not available at this time. Certificate endorsement rates show a significant increase at both Level 2 and Level 3. Targeted support of at risk students at Level 1 will have reduced the overall endorsement rate at this level. This increase in endorsement at Level 2 and Level 3 will be due to reduced assessment leading to a focus on quality of achievement, rather than quantity of credits, improving the depth of learning and achievement. A change to the timetable will have also impacted on this success. With 42.3% of students passing NCEA Level 2 with endorsement and 37.8% of students at NCEA Level 3, the level of endorsement at both these levels is the best ever. NZ Scholarship results were pleasing and the highest of any secondary school in the Bay of Plenty.

## 2019 TARGET 1.7: STUDENT LEARNING – Attendance / Engagement

### 1.7 Attendance / Engagement

#### Baseline data and Annual Target

Rates %	2016	2017	2018	2019	2020 Targets
Attendance %	87.7%	83.5%	84.9%	84.0%	above 90%
Unjustified Absences %	6.6%	7.7%	7.5%	8.3%	below 5%

#### COMMENTS

The college's whole school attendance rates have declined by .9% since 2018, with all the main ethnic groups showing this trend. Areas to focus on will be on the 'unjustified absences' of our Maori, Samoan and Tonga students.