

Demographic and Statistical Analysis Unit

Senior Secondary Students' Achievement at Maori-Medium Schools 2004 – 2006 Fact Sheet

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Introduction

This fact sheet provides some key statistics of Years 11 - 13 students' achievement in NCEA¹ at Maori-medium schools over the time period of 2004 – 2006. Maori-medium schools include Maori immersion schools and bilingual schools². Except for participation, all data are based on candidates³.

Note that only a small number of Years 11 - 13 students are involved in Maorimedium education (460 - 540 Year 11 students, 280 - 340 Year 12 students and 150 - 250 Year 13 students in the last three years). In addition, schools classified as Maori immersion or bilingual schools vary from year to year. Caution should thus be taken when using the statistics. Note also that some of the reporting methodology in this paper differs from that used elsewhere (see the Statistics and Data Issues section for more information).

Key Findings

 Years 11 – 13 candidates at Maori-medium schools were more likely to gain a typical level⁴ or higher NCEA qualification than their Maori peers at Englishmedium schools.

 From 2005, candidates at Maori-medium schools were more likely to meet the University Entrance requirements by the end of Year 13 than their Maori peers at English-medium schools.

¹ Here, NCEA refers to all national certificates for senior secondary students (for example, National Certificate of Educational Achievement and other certificates on the National Qualifications Framework), but excludes international qualifications (for example, Cambridge International Examinations).

² A Maori immersion school is where all students at the school receive over 20 hours per week of their instruction in te reo Maori. A Maori bilingual school is where all students at the school receive at least 3 hours per week of their instruction in te reo Maori.

³ A candidate is a student who has gained at least one credit on NCEA.

⁴ The typical levels of NCEA qualifications are Level 1 for Year 11 students, Level 2 for Year 12 and Level 3 for Year 13.



 Candidates at Maori-medium schools were more likely to meet both the literacy and numeracy requirements for NCEA Level 1 by the end of Year 11 than their Maori counterparts at English-medium schools.

Participation

Participation in NCEA at Maori-medium schools varies considerably over time and in one case it is over 100% (Table 1). This could result from several reasons:

- The student enrolment numbers collected by the Ministry of Education are a snapshot in July, whereas the achievement data collected by the New Zealand Qualifications Authority spans a full year. Students can move or leave schools throughout the year. More importantly, since only a small group of Years 11 - 13 students are at Maori-medium schools, a small change in the number of students can result in a large variation in the participation rate.
- Students in some Maori-medium schools can have their assessment recorded against other schools; the latter could be English-medium schools.

Given these problems, particularly the poor match between candidates and roll counts for this small group, candidates are still used in this paper as the calculation basis when working out achievement rates.

Table 1: Participation* in NCEA assessment at Maori-medium schools, 2004 - 2006

		2004		2005		2006	
		Participation %	No. of students	Participation %	No. of students	Participation %	No. of students
Immersion schools	Year 11	89	191	62	229	75	238
	Year 12	74	117	68	121	78	142
	Year 13	88	58	67	67	73	89
Bilingual schools	Year 11	97	284	103	227	95	305
	Year 12	91	164	87	223	98	186
	Year 13	98	96	72	106	93	164
All Maori-medium schools	Year 11	94	475	82	456	86	543
	Year 12	84	281	80	344	89	328
	Year 13	94	154	70	173	86	253
Maori at English- medium schools	Year 11	83	10,556	85	11,388	92	11,394
	Year 12	84	6,842	89	6,867	97	7,118
	Year 13	90	3,836	91	4,010	94	4,115

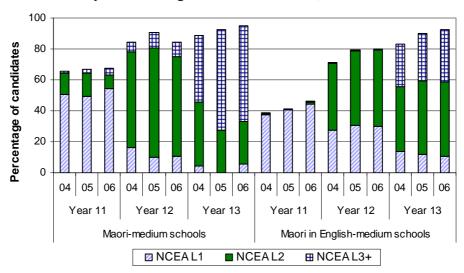
^{*} Participation is defined as number of candidates divided by number of students. All Maori-medium schools with Years 11-13 students on their roll are included regardless of whether the school has candidates or not.



Qualifications

 Overall, candidates at Maori-medium schools⁵ were more likely to gain NCEA qualifications at the typical level or above than their Maori peers at Englishmedium schools (Figure 1).

Figure 1: Highest NCEA qualifications⁶ gained by Years 11 - 13 candidates at Maorimedium schools and by Maori at English-medium schools, 2004 - 2006



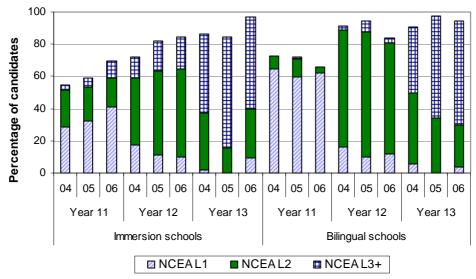
 At Maori-medium schools, a similar proportion of Year 11 candidates gained typical level or higher NCEA qualifications over the last three years. In contrast, the proportions of Year 12 and 13 candidates gaining typical level or above NCEA qualifications were higher in 2005 and 2006 than in 2004.

⁵ The small numbers of candidates at some year levels, particularly at immersion schools mean that results should be treated with caution. A small change in numbers can result in a large change in the statistics.

⁶ The highest qualifications reported here are those gained cumulatively by the end of a particular year level. See the Statistics and Data Issues section for more information.



Figure 2: Highest NCEA qualifications 6 gained by Years 11 - 13 candidates at Maori immersion schools and bilingual schools, 2004 - 2006



Note: Figure 2 splits the Maori-medium schools' results shown in Figure 1 into immersion schools and bilingual schools.

- As seen in Figure 2, Years 11 and 12 candidates at Maori immersion schools have shown improvement in gaining typical level or higher NCEA qualifications over the last three years. These trends, however, must be viewed with caution. The small number of candidates at Maori-medium schools means that a small change in the number can cause a large variation in the statistics.
- The proportion of Year 13 candidates gaining NCEA Level 3 or higher qualifications at both Maori immersion and bilingual schools were higher in 2005 and 2006 than in 2004.



University Entrance (UE)

As shown in Table 2, since 2005 the proportion of candidates meeting the UE requirements by the end of Year 13 has been higher at Maori-medium schools than that for their Maori peers at English-medium schools. Nevertheless, it should be borne in mind that the number of Year 13 candidates at Maori-medium schools is especially small. The large variability caused by these small numbers must be considered.

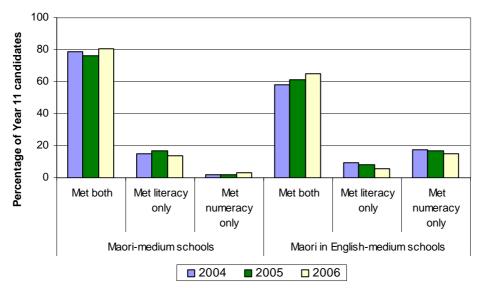
Table 2: Percentage of candidates to meet the UE requirements by the end of Year 13, 2004 - 2006

	2004	2005	2006
Immersion schools	21.6	55.6	36.9
Bilingual schools	35.1	51.3	54.2
All Maori-medium schools	30.3	52.9	49.1
Maori at English-medium schools	25.0	26.6	29.8

Literacy and Numeracy

- Candidates at Maori-medium schools were more likely to meet both the literacy and numeracy requirements by the end of Year 11 than their Maori peers at English-medium schools (Figure 3).
- The proportion of the candidates at Maori-medium schools meeting both the requirements by the end of Year 11 has remained relatively stable over the last three years (76% - 81%).

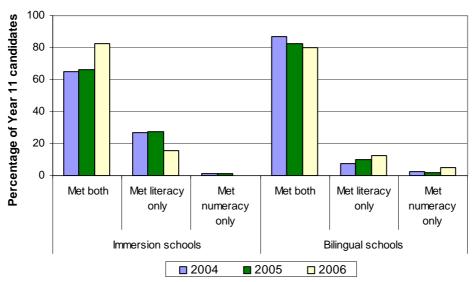
Figure 3: Candidates at Maori-medium schools and Maori at English-medium schools to meet the literacy and numeracy requirements for NCEA Level 1 by the end of Year 11, 2004 - 2006





- In contrast to Maori at English-medium schools, candidates at Maori-medium schools were more likely to meet the literacy requirement than the numeracy requirement.
- As seen in Figure 4, the proportion of candidates at Maori immersion schools to meet both the literacy and numeracy requirements by the end of Year 11 increased in 2006 to a similar level as that of bilingual schools.
- Although candidates at both immersion and bilingual schools were more likely to meet the literacy requirement than the numeracy requirement, the difference was larger for immersion schools.

Figure 4: Candidates at Maori immersion and bilingual schools to meet the literacy and numeracy requirements for NCEA Level 1 by the end of Year 11, 2004 - 2006



Note: Figure 4 splits the Maori-medium schools' results shown in Figure 3 into immersion schools and bilingual schools.



The Statistics and Data Issues

- The highest NCEA qualifications reported here are those gained cumulatively by the end of a specific year level. For example, a Year 13 student did not obtain a qualification in 2006; but did gain an NCEA Level 1 in 2004 and an NCEA Level 2 in 2005. The highest NCEA qualification gained by this student by the end of Year 13 was therefore an NCEA Level 2. This differs from our analyses reported elsewhere, in which only the qualifications gained in the studied year are considered.
- Attainment of all national certificates on the National Qualifications Framework by senior secondary students is reported here, previously only the National Certificate of Educational Achievement was focused on. By far the majority of senior secondary students gain the National Certificate of Educational Achievement. Additionally from 2005, qualifications gained by students who have not paid their NZQA exam fees are included (these students, however, are not able to be specified at all for 2004). They were specifically excluded from our previous analyses.
- Schools classified as Maori immersion or bilingual schools vary from year to year, which has a detrimental effect on the trends over time. More importantly, only a small group of Years 11 13 students are at Maori-medium schools. The number of year 13 candidates is especially small. A few high- or low-achievement students can skew the statistics for the small group. In contrast, the number of Maori Years 11 13 candidates at English-medium schools is significantly larger. Comparing the statistics between a small group and a much larger one can be problematic or even misleading. Caution must be taken when using the statistics.