

Demographic and Statistical Analysis Unit

Pasifika Achievement High Level Analysis

Claire Harkess, Siobhan Murray, Michael Parkin and Jacinta Dalgety
June 2005

Data source: National Qualification Framework data from New Zealand Qualifications Authority

Table of Contents

Purpose.....	5
Key Findings	5
Individual Pasifika ethnic groups	5
Pasifika and non-Pasifika	5
Background	5
Population	6
Qualifications attained.....	7
Gaining University Entrance.....	9
Meeting literacy and numeracy requirements for NCEA level 1	11
Number and level of credits attained.....	14
Year 11	14
Year 12	15
Year 13.....	16
Excellence in achievement.....	17
Future work	17
Appendix 1: NCEA and NQF Definitions.....	19
The National Qualifications Framework (NQF).....	19
Achievement standards	19
Unit standards	19
Credits	19
Requirements for NCEA qualifications	19
University Entrance	20
Non-NCEA qualifications available to secondary students.....	20
Appendix 2: Population	21
Why the measure of candidate is used	21
How ethnicity is assigned	21
Limitations of small populations.....	21
Year of schooling.....	22
Appendix 3: Other MoE information on Pasifika school achievement.....	23
Appendix 4: 2003 tables.....	24

List of Tables in Report

Table 1: Proportion of Pasifika and non-Pasifika candidates who gained an NCEA qualification in 2004	7
Table 2: Proportion of Pasifika Year 11 candidates who gained an NCEA qualification in 2004, by individual Pasifika ethnic groups	8
Table 3: Proportion of Pasifika Year 12 candidates who gained an NCEA qualification in 2004, by individual Pasifika ethnic groups	8
Table 4: Proportion of Pasifika Year 13 candidates who gained an NCEA qualification in 2004, by individual Pasifika ethnic groups	9
Table 5: Pasifika and non-Pasifika Year 13 candidates who gained UE in 2004.....	10
Table 6: Pasifika Year 13 candidates who gained UE in 2004	10
Table 7: Year 11 candidates who met both the literacy and numeracy requirements for NCEA level 1, 2004	11
Table 8: Year 11 Pasifika candidates who met both the literacy and numeracy requirements for NCEA level 1, 2004	11
Table 9: Pasifika & non-Pasifika Year 11 candidates by achievement in credits (at all levels), 2004.....	14
Table 10: Pasifika Year 11 candidates by achievement in credits (at all levels), 2004.	14
Table 11: Pasifika & non-Pasifika Year 12 candidates by achievement in credits (level 2 or higher), 2004.....	15
Table 12: Pasifika Year 12 candidates by achievement in credits (level 2 or higher), 2004.....	15
Table 13: Pasifika & non-Pasifika Year 13 candidates by achievement in credits (level 2 or higher), 2004.....	16
Table 14: Pasifika Year 13 candidates by achievement in credits (level 3 or higher), 2004.....	16
Table 15: Candidates who achieved an NCEA qualification typical for their year of schooling and received a with 'excellence' result for at least 25% of their credits at the level of their NCEA qualification, 2004.....	17

List of Figures

Figure 1: Proportion of Pasifika and non-Pasifika Year 11 candidates by whether they met the literacy and numeracy requirements for NCEA level 1 in 2004	13
--	----

List of Tables in Appendix 4 (2003 information)

Table 16: Proportion of Pasifika and non-Pasifika candidates who gained an NCEA qualification in 2003	24
Table 17: Proportion of Pasifika Year 11 candidates who gained an NCEA qualification in 2003, by individual Pasifika ethnic groups	24
Table 18: Proportion of Pasifika Year 12 candidates who gained an NCEA qualification in 2003, by individual Pasifika ethnic groups	24
Table 19: Candidates who met both the literacy and numeracy requirements for NCEA level 1, 2003.....	24
Table 20: Pasifika candidates who met both the literacy and numeracy requirements for NCEA level 1, 2003	25
Table 21: Pasifika & non-Pasifika Year 11 candidates by achievement in credits (at all levels), 2003.....	25
Table 22: Pasifika Year 11 candidates by achievement in credits (at all levels), 2003.	26
Table 23: Pasifika & non-Pasifika Year 12 candidates by achievement in credits (level 2 or higher), 2003.....	26
Table 24: Pasifika Year 12 candidates by achievement in credits (level 2 or higher), 2003.....	26
Table 25: Candidates who achieved an NCEA qualification and received a with 'excellence' result for at least 25% of their credits, 2003	26

Purpose

The purpose of this paper is to provide an overview of achievement by Pasifika candidates in New Zealand secondary schools. This paper focuses on 2004 data with some reference to 2002 and 2003 data.

The paper begins with key findings, some background information and a description of the population used in the analysis. The topics covered in the analysis include: attainment of National Certificate of Educational Achievement (NCEA) qualifications; the literacy and numeracy requirements of NCEA level 1; and achievement by quantity and level of credits.

This paper forms part of a wider analysis project looking at National Qualifications Framework (NQF) data. The main themes of the analysis project are achievement in Maori-medium education, Pasifika achievement and achievement in mathematics. This is the second paper to be published from the analysis project. The first paper, a report titled "*Maori achievement and achievement in Maori immersion and bilingual schools*", is publicly available.

Key Findings

Individual Pasifika ethnic groups

- Fijian candidates were generally more successful at gaining NCEA qualifications than other Pasifika groups.
- Year 11 Fijian candidates were most successful at meeting both the literacy and numeracy requirements for an NCEA level 1. About half of all other Pasifika ethnic groups met both requirements.
- The number of candidates within all but one Pasifika ethnic group has increased since 2002. The growth in these groups has been much larger than actual roll growth, indicating increased participation in gaining credits on the NQF.
- Tongan Year 12 candidates' achievement improved noticeably between 2003 and 2004.

Pasifika and non-Pasifika

- As a group, Pasifika candidates performed poorly compared to non-Pasifika candidates. They were less likely to gain an NCEA qualification, they were less likely to achieve the literacy and numeracy requirements for an NCEA level 1, and they tended to gain fewer credits than non-Pasifika candidates.

Background

The National Qualifications Framework (NQF) defines which standards-based qualifications can be awarded by New Zealand educational institutions. The main qualification on the NQF available to secondary school students is the National Certificate of Educational Achievement (NCEA). NCEA level 1 was first available in 2002. Similarly, NCEA level 2 was first available in 2003, and NCEA level 3 is widely available from 2004 onwards. Please refer to Appendix 1 for more information on the NQF and NCEA qualifications and terminology.

Population

This paper reports on results for candidates. A candidate is a student who has achieved at least one credit on the NQF.

Results for Year 11, Year 12 and Year 13 candidates are analysed in this paper. These years of schooling are the typical years at which students first participate in gaining NCEA level 1, level 2 and level 3 respectively.

Pasifika candidates are the focus of this paper. Candidates whose ethnicity is unknown are excluded from analysis on an ethnicity basis. This means that Pasifika and non-Pasifika candidates do not add to the total number of candidates. Ethnicity is determined by the current Ministry of Education coding system, which is detailed in Appendix 2.

The achievement of individual Pasifika groups has been compared in each section of this paper. However, the numbers of candidates in individual Pasifika groups is low. This limits the analysis possible. Tokelauan candidates have been excluded from breakdowns of individual Pasifika ethnicities due to the very low number of Tokelauan candidates.

For more information on population and the issues mentioned above please refer to Appendix 2.

Qualifications attained

Gaining qualifications is an important step at senior secondary school. School qualifications provide students with pathways to higher qualifications and to employment opportunities in adult life. Pasifika candidates overall were less successful in gaining NCEA qualifications than non-Pasifika candidates, as illustrated in Table 1.

At all years of schooling Pasifika candidates are less likely than non-Pasifika candidates to gain a qualification.

Table 1: Proportion of Pasifika and non-Pasifika candidates who gained an NCEA qualification in 2004

		Total number of candidates	Proportion of candidates achieving Level 3	Proportion of candidates achieving Level 2	Proportion of candidates achieving Level 1	Proportion of candidates achieving non-NCEA quals	Total proportion achieving an NCEA
Year 11	Pasifika	4,006			33		33
	Non-Pasifika	48,891		1	63		64
Year 12	Pasifika	3,154		37	19		56
	Non-Pasifika	40,225	1	65	9		76
Year 13	Pasifika	2,299	21	28	10	2	58
	Non-Pasifika	29,425	54	13	4	3	71

Note: Due to rounding, percentages in the table may not add to the total

While a higher proportion of Year 11 candidates gained an NCEA in 2003 than in 2002, the 2004 and 2003 results are very similar for Year 11 candidates (2003 results are detailed in Appendix 4).

Of the Year 12 candidates gaining qualifications, Pasifika were more likely to gain the lower qualification of NCEA level 1 than their non-Pasifika counterparts. Just under a fifth of Pasifika Year 12 candidates in 2004 gained an NCEA level 1. In comparison, a tenth of the non-Pasifika who gained a qualification were in this category.

The proportion of Year 12 candidates, both Pasifika and non-Pasifika, to gain an NCEA level 2 increased from 2003 to 2004. A similar increase was seen between 2002 and 2003 for Year 11 candidates gaining NCEA level 1. This may indicate that teachers and students have become more familiar with NCEA qualifications the year after they are first introduced.

Pasifika Year 13 candidates were much less likely to gain an NCEA level 3 than their non-Pasifika counterparts. Around a fifth of Pasifika Year 13 candidates gained an NCEA level 3, compared with over half of non-Pasifika Year 13 candidates.

A relatively high proportion of Pasifika Year 13 candidates gained an NCEA level 2 in 2004. Although this is a lower qualification than an NCEA level 3, in the current buoyant labour market it still provides candidates with choices once they leave school.

Variation between the Pasifika ethnicities is evident when the Pasifika group is divided into individual Pasifika ethnic groups (illustrated in Tables 2, 3 and 4). Overall, Fijian candidates were more successful at gaining NCEA qualifications in 2004 than other Pasifika groups¹. 2003 results were similar.

Table 2: Proportion of Pasifika Year 11 candidates who gained an NCEA qualification in 2004, by individual Pasifika ethnic groups

	Total number of candidates	Proportion of candidates achieving Level 3	Proportion of candidates achieving Level 2	Proportion of candidates achieving Level 1	Total proportion achieving an NCEA
Samoan	1,925			36	36
Tongan	756			28	28
Cook Islands Maori	642			27	27
Fijian	175	1	1	48	49
Niuean	218		1	30	31

Note: Due to rounding, percentages in the table may not add to the total

For Year 11 candidates, NCEA level 1 is the typical qualification. The proportion of Year 11 candidates gaining NCEA were similar in 2003 and in 2004 for all Pasifika ethnicities. Fijian Year 11 candidates were most successful of all Pasifika groups at gaining NCEA level 1. Samoan candidates were also relatively successful (36% gained a qualification), while all other groups were around the 30% mark.

Interestingly, the number of Fijian Year 11 and Year 12 candidates has decreased, while the number of candidates from all other Pasifika ethnic groups has increased since 2003. The most striking increase is in the number of Niuean Year 11 candidates, from 64 candidates in 2002 to 218 in 2004.

The decrease in Fijian candidates reflects a similar decrease in rolls between 2002 and 2004. For the other Pasifika ethnicities, however, the increase in candidates is far larger than roll growth over this period. This shows that Pasifika have a higher participation rate in the NQF than previously.

Table 3: Proportion of Pasifika Year 12 candidates who gained an NCEA qualification in 2004, by individual Pasifika ethnic groups

	Total number of candidates	Proportion of candidates achieving Level 2	Proportion of candidates achieving Level 1	Total proportion achieving an NCEA
Samoan	1,573	37	20	57
Tongan	565	32	21	53
Cook Islands Maori	417	32	19	51
Fijian	192	51	9	60
Niuean	183	34	20	54

Over half of all Pasifika Year 12 candidates gained an NCEA in 2004. However, many of these candidates gained the lower qualification of NCEA level 1.

¹ Fijian-Indian candidates make up a small proportion of the Fijian group. Both Fijian-Indian and other Fijian candidates are more successful at gaining qualifications than other Pasifika groups.

Fijian and Samoan Year 12 candidates had the highest rate of qualification achievement in 2004. Unlike candidates from other Pasifika groups, just over half of all Fijian Year 12 candidates gained an NCEA level 2.

The performance of Tongan Year 12 candidates is better in 2004 than in 2003, when just under half (48%) gained an NCEA. There was a marked increase in the number of Tongan candidates between 2003 and 2004. This increase was larger than the increase in Tongan rolls. So not only has the proportion gaining a qualification increased, participation has grown and the number of Tongan Year 12 candidates gaining a qualification is higher.

Table 4: Proportion of Pasifika Year 13 candidates who gained an NCEA qualification in 2004, by individual Pasifika ethnic groups

	Total number of candidates	Proportion of candidates achieving Level 3	Proportion of candidates achieving Level 2	Proportion of candidates achieving Level 1	Proportion of candidates achieving non-NCEA qualifications	Total proportion achieving an NCEA
Samoan	1,196	18	29	10	3	57
Tongan	375	16	32	14	3	61
Cook Islands Maori	257	19	24	11	2	54
Fijian	197	37	17	6	4	59
Niuean	100	28	30	12		70

Note: Due to rounding, percentages in the table may not add to the total

In 2004, NCEA level 3 replaced Bursary as the typical qualification for students in Year 13.

Overall, Niuean Year 13 candidates had the highest rate of qualification achievement at any level. However, Fijian Year 13 candidates had the highest rate of achieving an NCEA level 3.

For other Pasifika groups, NCEA level 2 was the most common qualification for Year 13 candidates. Just under a third of Tongan, Niuean and Samoan Year 13 candidates gained an NCEA level 2.

Gaining University Entrance

University Entrance (UE) is a qualification that is gained in conjunction with NCEA and non-NCEA qualifications. Although most candidates gaining UE also gain an NCEA level 3, some do not. Candidates can accumulate credits towards UE over a number of years.

University Entrance requires a minimum of 42 credits at level 3 or higher. At least 28 of these credits must come from two subjects on an approved subjects list. In addition to this, candidates must gain 14 numeracy credits at level 1 or above, and 8 literacy credits at level 2 or above.

The overall proportion of Pasifika Year 13 candidates gaining UE appears poor in comparison to the proportion for non-Pasifika. Under a fifth of all Pasifika Year 13 candidates gained UE, compared to over half of all non-Pasifika Year 13 candidates.

Table 5: Pasifika and non-Pasifika Year 13 candidates who gained UE in 2004

	Total Number of Candidates	Attained UE & NCEA level 3		Attained UE, but not NCEA level 3		Total proportion gained UE
		No.	%	No.	%	
Pasifika	2,299	376	16	70	3	19
Non-Pasifika	29,425	13,893	47	1244	4	51

When looking at individual Pasifika groups a somewhat different picture emerges. While most Pasifika groups hover around 17% of Year 13 gaining UE, just over a third of Fijian Year 13 candidates gained UE. This is still well below the figure for non-Pasifika.

Table 6: Pasifika Year 13 candidates who gained UE in 2004

	Total Number of Candidates	Attained UE	
		No.	%
Samoan	1,196	207	17
Tongan	375	56	15
Cook Islands Maori	257	43	17
Fijian	197	71	36
Niuean	100	19	19

Meeting literacy and numeracy requirements for NCEA level 1

A candidate gains an NCEA qualification by achieving a certain number of credits at specified levels. For NCEA level 1 there is also a literacy and numeracy requirement to the qualification. This section explores patterns of achievement for literacy and numeracy requirements for Year 11 candidates.

The literacy requirement for NCEA level 1 involves achieving 8 credits from specified literacy standards. Similarly, the numeracy requirement involves gaining 8 credits from specified numeracy standards. Achieving the literacy and numeracy requirements are important prerequisites in achieving an NCEA level 1 qualification.

Table 7: Year 11 candidates who met both the literacy and numeracy requirements for NCEA level 1, 2004

	Year 11 Candidates	Met both the literacy and numeracy requirements	
	Number	Number	%
Pasifika	4,006	2,121	53
Non-Pasifika	48,891	36,440	75

When compared to non-Pasifika, a disproportionate number of Pasifika Year 11 candidates did not meet the literacy and numeracy requirements for an NCEA level 1 (shown in Table 7). Just over half of Pasifika Year 11 candidates met both the literacy and numeracy requirements in 2004. This compares to three-quarters of non-Pasifika Year 11 candidates who met the requirements.

Table 8: Year 11 Pasifika candidates who met both the literacy and numeracy requirements for NCEA level 1, 2004

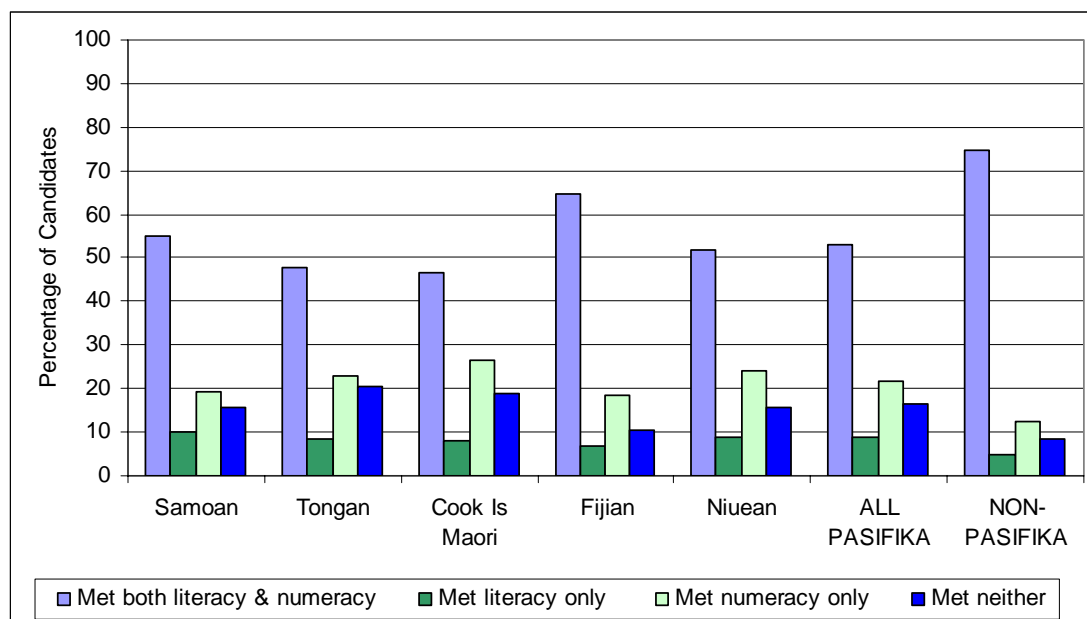
	Year 11 Candidates	Met both the literacy and numeracy requirements	
	Number	Number	%
Samoan	1,925	1,064	55
Tongan	756	364	48
Cook Islands Maori	642	299	47
Fijian	175	113	65
Niuean	218	113	52

Within Pasifika groups there was variation in the proportion of candidates gaining both literacy and numeracy (illustrated in Table 8). Fijian Year 11 candidates were the most successful at meeting the literacy and numeracy requirements, followed by Samoan candidates.

In addition to the candidates who met both the literacy and numeracy requirements, there were some candidates who met one of the requirements but not the other.

Figure 1 details the proportion of candidates who met both requirements, met one of the requirements, or neither the literacy nor numeracy requirement.

Figure 1: Proportion of Pasifika and non-Pasifika Year 11 candidates by whether they met the literacy and numeracy requirements for NCEA level 1 in 2004



All ethnic groups had greater success meeting the numeracy than the literacy requirements in 2004.

Around a fifth of Tongan and Cook Islands Maori Year 11 candidates gained neither the literacy nor the numeracy requirements, which is more than double the proportion of Year 11 non-Pasifika (9%) who met neither requirement.

The literacy and numeracy requirements are not by themselves a major barrier to attaining NCEA level 1. Most Year 11 candidates who did not gain an NCEA level 1 had greater difficulty attaining enough credits for the qualification, regardless of whether they met the literacy and numeracy requirements. Just over a quarter of Pasifika and non-Pasifika Year 11 candidates who did not gain an NCEA level 1 met both the literacy and numeracy requirements, but did not have sufficient credits for the qualification. Furthermore, only a very small proportion had sufficient credits for an NCEA level 1, but failed due to not meeting both the literacy and numeracy² requirements. Lack of credits is therefore a bigger issue at this stage than not meeting the literacy and numeracy requirements.

² 5% of the Pasifika Year 11 candidates and 8% of non-Pasifika Year 11 candidates who did not gain an NCEA level 1 had more than 80 credits, but had not gained both the literacy and numeracy requirements.

Number and level of credits attained

Year 11

To gain an NCEA level 1 qualification candidates need to achieve 80 or more credits at level 1 or above, including the literacy and numeracy requirements. Examination of quantities of credits gained can give insight into the progress candidates are making towards a qualification.

Table 9: Pasifika & non-Pasifika Year 11 candidates by achievement in credits (at all levels), 2004.

	Total Number of Candidates	Candidates who attained 120+ credits (all levels)		Candidates who attained 80-119 credits (all levels)		Candidates who attained 40-79 credits (all levels)		Candidates who attained 1-39 credits (all levels)	
		N	%	N	%	N	%	N	%
Pasifika	4,006	342	9	1,142	29	1,566	39	956	24
Non-Pasifika	48,891	15,268	31	17,367	36	10,419	21	5,837	12

Overall 38% of Year 11 Pasifika candidates gained 80 credits or more in 2004, as shown in Table 9.

As mentioned in the section above, lack of credits is more of a barrier to gaining NCEA level 1 than the literacy and numeracy requirements. Pasifika Year 11 candidates were significantly more likely than non-Pasifika Year 11 candidates to have low numbers of credits. 70% of the Year 11 Pasifika candidates who did not gain an NCEA level 1 in 2004 had a low number of credits³. This was larger than the proportion of non-Pasifika Year 11 candidates in the same category.

Table 10: Pasifika Year 11 candidates by achievement in credits (at all levels), 2004.

	Total Number of Candidates	Candidates who attained 120+ credits (all levels)		Candidates who attained 80-119 credits (all levels)		Candidates who attained 40-79 credits (all levels)		Candidates who attained 1-39 credits (all levels)	
		N	%	N	%	N	%	N	%
Samoan	1,925	183	10	577	30	758	39	407	21
Tongan	756	40	5	191	25	304	40	221	29
Cook Islands Maori	642	41	6	159	25	256	40	186	29
Fijian	175	34	19	55	31	55	31	31	18
Niuean	218	13	6	65	30	95	44	45	21

Within the individual groups the range of candidates to gain 80 credits or more spreads from 30% of Tongan candidates to 50% of Fijian candidates.

Those gaining 80 credits or more are split into two categories in Table 10. From Table 10 we see that Fijian candidates were the group most likely to gain high numbers (120+) of credits⁴. At least a quarter of each Pasifika group gained 80-119 credits in 2004, which is an improvement on the Year 11 2003 results for most

³ 64 credits or less is considered a low number of credits in this context. Candidates need to gain at least 64 credits on top to the 16 credits gained through literacy and numeracy requirements.

⁴ Fijian-Indian candidates make up a small proportion of the Fijian group. Both Fijian-Indian and other Fijian candidates are more successful at gaining higher quantities of credits than other Pasifika groups.

Pasifika groups. The proportion of Niuean Year 11 candidates gaining 80-119 credits has jumped from 20% in 2003 to 30% in 2004.

With the exception of Fijian Year 11 candidates, those gaining 40-79 credits made up the highest proportion of each Pasifika group. Between 49% and 69% of Pasifika, depending upon the Pasifika group they identify with, do not gain enough credits in one year to attain a qualification⁵.

Year 12

To gain an NCEA level 2 qualification, candidates need to achieve 60 or more credits at level 2 or above.

Table 11: Pasifika & non-Pasifika Year 12 candidates by achievement in credits (level 2 or higher), 2004.

	Total Number of Candidates	Candidates who attained 90+ credits at Level 2+		Candidates who attained 60-89 credits at Level 2+		Candidates who attained 30-59 credits at Level 2+		Candidates who attained 1-29 credits at Levels 2+	
		N	%	N	%	N	%	N	%
Pasifika	3,154	363	12	747	24	1,027	33	937	30
Non-Pasifika	40,225	15,239	38	10,455	26	7,810	19	6,033	15

In 2004, 36% of Pasifika candidates gained 60 credits or more at level 2 or above, as illustrated in Table 11. This is slightly higher than in 2003 when 33% of Pasifika candidates gained 60 or more credits at level 2 or above.

Table 12: Pasifika Year 12 candidates by achievement in credits (level 2 or higher), 2004.

	Total Number of Candidates	Candidates who attained 90+ credits at Level 2+		Candidates who attained 60-89 credits at Level 2+		Candidates who attained 30-59 credits at Level 2+		Candidates who attained 1-29 credits at Levels 2+	
		N	%	N	%	N	%	N	%
Samoan	1,573	171	11	384	24	546	35	444	28
Tongan	565	55	10	115	20	174	31	200	35
Cook Islands Maori	417	35	8	93	22	124	30	148	36
Fijian	192	35	18	60	31	53	28	38	20
Niuean	183	25	14	37	20	67	37	52	28

Within the individual Pasifika groups (shown in Table 12), candidates attaining 60 credits or more⁶ range from 30% of Tongan and Cook Islands Maori Year 12 candidates to just under 50% of Fijian Year 12 candidates.

Overall, the proportion of Fijian candidates gaining 60 or more credits at level 2 or above in 2004 was very similar to the 2003 proportion. However, the proportion of Fijian Year 12 candidates gaining 90 or more credits in 2004 was well below the 2003 proportion of 27%. This is unlikely to be of concern. The variation is likely to be due to a combination of the small numbers in this group and the credit bands used.

⁵ This statement is based on gaining 80 credits for a level 1 qualification and ignores the literacy and numeracy requirements, which are covered in another section.

⁶ Credits counted are those gained at level 2 or higher. Therefore any level 1 credits gained by Year 12 candidates are not included in this Table.

Year 13

To gain an NCEA level 3 qualification, candidates need to achieve 60 or more credits at level 3 or above.

Table 13: Pasifika & non-Pasifika Year 13 candidates by achievement in credits (level 2 or higher), 2004.

	Total Number of Candidates	Candidates who attained 90+ credits at Level 3+		Candidates who attained 60-89 credits at Level 3+		Candidates who attained 30-59 credits at Level 3+		Candidates who attained 1-29 credits at Levels 3+	
		N	%	N	%	N	%	N	%
Pasifika	2,299	135	6	318	14	533	23	931	41
Non-Pasifika	29,425	7,523	26	8,034	27	5,685	19	5,321	18

A fifth of Pasifika Year 13 candidates gained sufficient credits for an NCEA level 3, compared to over half of all non-Pasifika Year 13 candidates.

Table 14: Pasifika Year 13 candidates by achievement in credits (level 3 or higher), 2004.

	Total Number of Candidates	Candidates who attained 90+ credits at Level 3+		Candidates who attained 60-89 credits at Level 3+		Candidates who attained 30-59 credits at Level 3+		Candidates who attained 1-29 credits at Levels 3+	
		N	%	N	%	N	%	N	%
Samoan	1,196	54	5	160	13	279	23	487	41
Tongan	375	15	4	41	11	104	28	151	40
Cook Islands Maori	257	13	5	28	11	47	18	128	50
Fijian	197	28	14	41	21	42	21	64	33
Niuean	100	7	7	18	18	20	20	41	41

Among individual Pasifika groups, Fijian Year 13 candidates stand out because of the relatively high proportions gaining 60 or more credits at level 3 or above.

The majority of Pasifika candidates are gaining between 1 and 29 credits at level 3 or above. This suggests that a high proportion of Pasifika Year 13 candidates are participating at a lower level than the typical and are likely to be aiming for lower qualifications than NCEA level 3.

Excellence in achievement

Excellence can be measured in many ways under the qualification framework. One possible measure of excellence is performing above the level typical for a candidate's year of schooling. This is touched on earlier in the report. Candidates can also gain achievement standards with 'excellence'.

Another measure of excellence (illustrated in Table 15) is to count those who gained a qualification and who also gained at least a quarter of their credits at the level of the qualification with 'excellence'⁷. Using this measure, the proportion of Pasifika with 'excellence' is very small.

Table 15: Candidates who achieved an NCEA qualification typical for their year of schooling and received a with 'excellence' result for at least 25% of their credits at the level of their NCEA qualification, 2004

		Candidates who gained a typical-level NCEA with 25%+ of their credits with 'excellence'	
		Number	%
Year 11	Pasifika	45	1
	Non-Pasifika	3,974	8
Year 12	Pasifika	40	1
	Non-Pasifika	3,179	8
Year 13	Pasifika	32	1
	Non-Pasifika	2,426	8

Interestingly, the proportions gaining qualifications with 'excellence' was the same for Year 11, Year 12 and Year 13 in 2004.

Future work

Further analysis on Pasifika achievement is planned as part of the NQF analysis project. A number of topics are being investigated:

- Pathways of Year 11 candidates who did not attain an NCEA in 2002. This analysis will look into what progress this group made in 2004. Are candidates returning and completing qualifications, are they returning and gaining more credits, or are they not returning?
- The standards in which Pasifika candidates gain 'excellence'. Do Pasifika perform better in particular learning areas? Do they differ from non-Pasifika in the learning areas where they gain 'excellence'?
- The proportion of credits gained through unit standards. Also of interest are the implications of gaining most credits through unit standards.

⁷ Only achievement standards can be awarded with an excellence grade, but both achievement and unit standards count towards an NCEA qualification. The 25% is measured against the total number of credits regardless of whether they are from unit or achievement standards.

- Achievement tends to vary by gender. Is the gender effect greater or smaller for Pasifika than non-Pasifika?
- Achievement of non-NCEA qualifications.

Appendix 1: NCEA and NQF Definitions⁸

The National Qualifications Framework (NQF)

The NQF defines all standards-based qualifications that can be awarded in New Zealand. It is designed to provide nationally recognised, consistent standards and qualifications. NQF qualifications are quality assured and administered by the New Zealand Qualifications Authority.

Achievement standards

Achievement standards were introduced with NCEA level 1 in 2002. They were developed to cover subjects previously offered as part of School Certificate, Sixth Form Certificate and University Bursary. Achievement standards can be assessed internally within a school, or externally through an examination. Achievement standards can be awarded with an 'achieved', 'merit' and 'excellence' grade. The number of credits awarded for a particular standard is fixed and is not affected by the grade awarded.

Level 1 achievement standards were first available in 2002. Similarly, level 2 standards were first available in 2003, and level 3 achievement standards were not available until 2004.

Unit standards

Unit standards were first introduced in 1992 (but only at schools since circa 1996). They cover virtually every area of sub-degree education and training. They are available at many tertiary providers as well as at secondary schools. Unit standards are developed in conjunction with industry groups and relevant tertiary providers. There are some unit standards that were developed for school curriculum subjects, but these may differ from equivalent achievement standards because they reflect industry and tertiary providers' expectations as well as the curriculum.

Unit Standards, unlike achievement standards, only have an 'achieved' grade associated with them. Unit standards are awarded at levels 1-6, whereas achievement standards are awarded at levels 1-3.

Both unit and achievement standards count towards NCEA qualifications.

Credits

NCEA qualifications are awarded according to the number of credits students have. Each unit and achievement standard is worth a certain number of credits. The number of credits attached to a standard may vary according to which aspect of the curriculum it relates to.

Requirements for NCEA qualifications

NCEA qualifications are standards-based and are on the National Qualifications Framework (NQF).

⁸ The information in this appendix was sourced from the NZQA website (www.nzqa.govt.nz) and from NZQA staff.

NCEA level 1 is awarded to people who are credited with a minimum of 80 credits at level 1 or above and who have met the literacy and numeracy requirements. A minimum of 8 credits in the specified literacy subfields and a minimum of 8 credits in the specified numeracy subfields are required to meet the literacy and numeracy requirements.

NCEA level 2 requires a minimum of 80 credits. Between 0-20 credits from an NCEA level 1 can be cross-credited towards an NCEA level 2 qualification. 60 or more of the credits must be at level 2 or above. There is no literacy or numeracy requirement for NCEA level 2.

NCEA level 3 also requires a minimum of 80 credits. Between 0-20 credits from an NCEA level 2 can be cross-credited towards an NCEA level 3 qualification. 60 or more of the credits must be at level 3 or above. There is no literacy or numeracy requirement.

University Entrance

University Entrance may be completed as part of an NCEA level 3, though it is possible to gain UE without gaining an NCEA level 3. Credits for UE can be accumulated over more than one year.

UE requires a minimum of 42 credits at level 3 or higher. Within these credits there must be at least 14 credits at level 3 or higher in two separate subjects from a list of 'approved subjects'⁹.

There are also literacy and numeracy requirements. A student must gain at least 14 numeracy credits at level 1 or higher. Eight literacy credits at level 2 or higher, four in reading and four in writing, are also necessary for UE.

Non-NCEA qualifications available to secondary students

A broad range of National Certificates on the NQF are available to secondary students. Schools can choose which unit standards to offer and may have partnerships with tertiary providers who offer certain unit standards, so the types of National Certificates available to individual students varies from school to school.

New Zealand-based qualifications appear either on the NQF or the Register of Quality Assured Qualifications (the Register). Standards-based qualifications fall under the umbrella of the NQF, all other qualifications awarded in New Zealand, such as university degrees, are on the Register. The main qualification on the Register for secondary students is level 4 Scholarship, which is exam-based and was introduced in 2004.

⁹ The list of approved subjects and the lists of literacy and numeracy standards for UE are available on the NZQA website: www.nzqa.govt.nz/ncea/acrp/secondary/6/62.html

Appendix 2: Population

Why the measure of candidate is used

This paper reports on results for candidates. A candidate is a student who has achieved at least one credit on the NQF. The number of candidates is therefore smaller than the cohort of secondary students who could take part in gaining credits.

The measure of candidates is used because not all schools appear to have reported students who attempted but did not achieve internally assessed credits. Including these students would therefore make the analysis outcomes unreliable. Candidates is the standard measure used in Ministry of Education analysis of New Zealand Qualifications Authority (NZQA) senior secondary school data.

How ethnicity is assigned

In this report we refer to candidates whose ethnicity is Pasifika, according to the current Ministry of Education ethnicity coding. The Ministry of Education reports on a single ethnicity for each candidate. The single ethnicity is assigned on an hierarchical basis. As New Zealand Maori is first in the hierarchy, candidates who nominate Maori as one of their ethnicities are identified as Maori. Pasifika ethnicities are assigned after New Zealand Maori according to the size of their populations within New Zealand, from smallest to largest.

The consequence of assigning ethnicity on an hierarchical basis is that candidates with mixed ethnicities are identified under one group only. For example, candidates who are Samoan and Maori are counted under Maori, not under Pasifika. Thus a small group of candidates who identify with Pasifika are excluded from Pasifika analysis.

The Ministry of Education uses the following order of priority so that students are reported in one ethnic group only:

- NZ Maori
- Tokelauan
- Fijian
- Niuean
- Tongan
- Cook Islands Maori
- Samoan
- Other Pacific Islands
- South-East Asian
- Indian
- Chinese
- Other Asian
- Other
- Other European
- NZ European/Pakeha

Tokelauan and Other Pasifika candidates have been excluded from the breakdowns of individual Pasifika ethnicities due to small numbers.

Limitations of small populations

In this paper achievement for candidates identifying with particular Pasifika groups is reported upon. Pasifika groups are usually reported at a higher level (aggregated into

a single group called Pasifika) due to small numbers at the lower level. This aggregation can hide different patterns of achievement by particular groups.

We attempt to show the differing patterns in this report. However, the small numbers in each group remains a problem. Small numbers can limit the amount of analysis that can be carried out. For example, only a limited number of breakdowns are possible as numbers in each category quickly become too small to be useful.

Additionally comparison between groups is usually done on a 'proportion of' basis to enable comparison between groups of different size. This means that results for smaller sized groups can be much more variable as only one or two candidates need to change categories for an effect to be seen on proportions. Similarly one or two high- or low- performing candidates can skew results in small populations. Therefore findings drawing on small groups should be treated with caution.

Year of schooling

In this report, and other Ministry of Education reports, candidates are categorised according to year of schooling - as Year 11, Year 12 and Year 13 candidates. NZQA talks about candidates in terms of years at secondary. This means that a Year 11 candidate in an MOE report appears as a Year 3 candidate in an NZQA report. Similarly, NZQA refers to Year 12 candidates as Year 4, and Year 13 candidates as Year 5.

Appendix 3: Other MoE information on Pasifika school achievement

A number of other Ministry of Education publications report on achievement of Pasifika school students. These publications report at the aggregate level of ethnicity and do not contain breakdowns of individual Pasifika ethnic groups. In general terms, these reports confirm the sort of findings detailed in this paper.

The highest qualification of Pasifika school leavers is reported on every year by the Ministry of Education in the publications *Education Statistics of New Zealand* and the *School Sector Report*. Within the *School Sector Report* is a summary of school examination and qualification results for different ethnic groups, including Pasifika.

Another source of information on Pasifika achievement is the National Education Monitoring Project (NEMP). NEMP is a large-scale, ongoing project that assesses curriculum areas and skills of Year 4 (ages 8-9) and Year 8 (ages 12-13) students. NEMP publishes reports each year. Most of these reports cover Pasifika achievement.

A report on Pasifika reading, mathematical and scientific literacy as assessed by the Programme for International Student Assessment 2000 (PISA 2000) has been published by the Ministry of Education's Research Division. The report, titled *Focus on Pasifika achievement in reading literacy: Results from PISA 2000*, provides general results for Pasifika 15-year-olds and then focuses on reading literacy and the factors associated with high achievement for Pasifika.

Two other Ministry of Education reports may also be of interest. *Literature review on Pacific education issues* covers published and unpublished research since 1990 on Pasifika education issues in each of the education sectors. *Bilingual/Immersion Education: Indicators of good practice* explores effective approaches for bilingual education. While the focus is on Maori medium education, the indicators are highly relevant to Pasifika bilingual education practice.

Appendix 4: 2003 tables

Table 16: Proportion of Pasifika and non-Pasifika candidates who gained an NCEA qualification in 2003

		Total number of candidates	Proportion of candidates achieving Level 2 (%)	Proportion of candidates achieving Level 1 (%)	Total proportion achieving an NCEA (%)
Year 11	Pasifika	3,397		34	34
	Non-Pasifika	44,105	1	63	64
Year 12	Pasifika	2,641	34	23	57
	Non-Pasifika	34,595	61	11	72

Table 17: Proportion of Pasifika Year 11 candidates who gained an NCEA qualification in 2003, by individual Pasifika ethnic groups

	Total number of candidates	Proportion of candidates achieving Level 2 (%)	Proportion of candidates achieving Level 1 (%)	Total proportion achieving an NCEA (%)
Samoan	1,711		35	35
Tongan	564		30	30
Cook Islands Maori	493		28	28
Fijian	199	1	52	52
Niuean	176		28	28

Table 18: Proportion of Pasifika Year 12 candidates who gained an NCEA qualification in 2003, by individual Pasifika ethnic groups

	Total number of candidates	Proportion of candidates achieving Level 2 (%)	Proportion of candidates achieving Level 1 (%)	Total proportion achieving an NCEA (%)
Samoan	1,349	34	24	58
Tongan	427	25	23	48
Cook Islands Maori	342	30	24	54
Fijian	206	52	16	67
Niuean	109	39	21	61

Table 19: Candidates who met both the literacy and numeracy requirements for NCEA level 1, 2003

	Year 11 Candidates	Met both the literacy and numeracy requirements	
	Number	Number	% of Level 1 candidates
Pasifika	3,397	1,820	54%
Non-Pasifika	44,105	32,653	74%

Table 20: Pasifika candidates who met both the literacy and numeracy requirements for NCEA level 1, 2003

	Year 11 Candidates	Met both the literacy and numeracy requirements	
	Number	Number	% of Level 1 candidates
Samoaan	1,711	947	55%
Tongan	564	276	49%
Cook Islands Maori	493	237	48%
Fijian	199	128	64%
Niuean	176	85	48%

Figure 2: Proportion of Pasifika and non-Pasifika Year 11 candidates by whether they met the literacy and numeracy requirements for NCEA level 1 in 2003

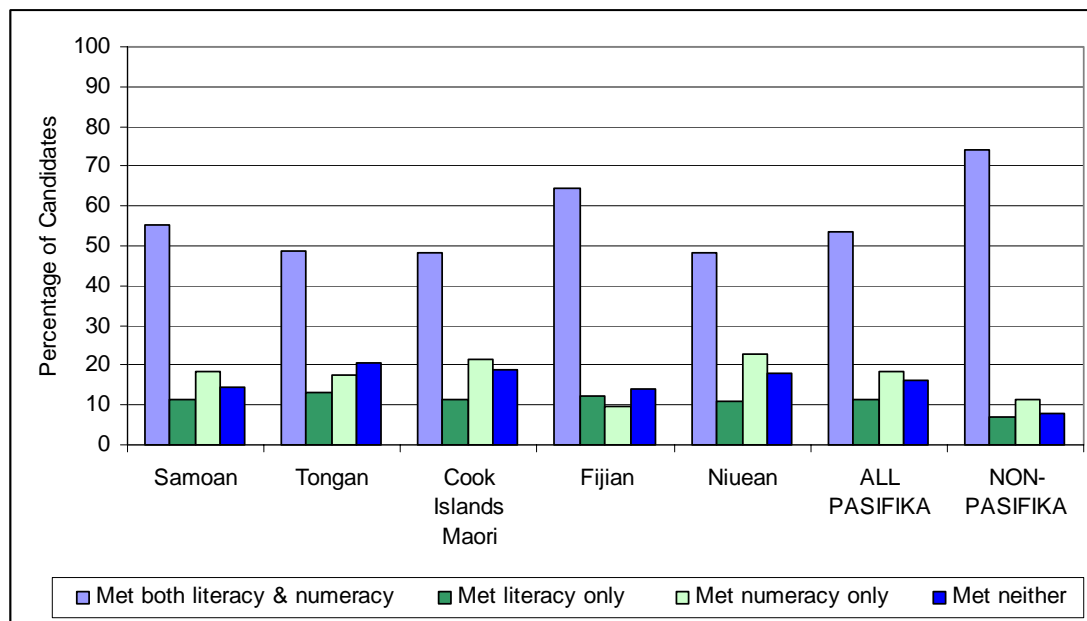


Table 21: Pasifika & non-Pasifika Year 11 candidates by achievement in credits (at all levels), 2003.

	TOTAL	Candidates who attained 120+ credits (all Levels)		Candidates who attained 80-119 credits (all Levels)		Candidates who attained 40-79 credits (all Levels)		Candidates who attained 1-39 credits (all Levels)	
		n	n	%	n	%	n	%	n
Pasifika	3,397	277	8%	934	28%	1,397	41%	789	23%
Non-Pasifika	44,105	13,332	30%	15,829	36%	10,100	23%	4,844	11%

Table 22: Pasifika Year 11 candidates by achievement in credits (at all levels), 2003.

	TOTAL	Candidates who attained 120+ credits (all Levels)		Candidates who attained 80-119 credits (all Levels)		Candidates who attained 40-79 credits (all Levels)		Candidates who attained 1-39 credits (all Levels)	
		n	n	%	n	%	n	%	n
Samoan	1,711	131	8%	502	29%	728	43%	350	21%
Tongan	564	37	7%	134	24%	227	40%	166	29%
Cook Islands Maori	493	33	7%	115	23%	200	41%	145	29%
Fijian	199	37	19%	67	34%	62	31%	33	17%
Niuean	176	15	9%	35	20%	82	47%	44	25%

Table 23: Pasifika & non-Pasifika Year 12 candidates by achievement in credits (level 2 or higher), 2003.

	TOTAL	Candidates who attained 90+ credits at Level 2+		Candidates who attained 60-89 credits at Level 2+		Candidates who attained 30-59 credits at Level 2+		Candidates who attained 1-29 credits at Levels 2+	
		n	n	%	n	%	N	%	n
Pasifika	2,641	309	12%	557	21%	877	33%	804	30%
Non-Pasifika	34,594	11,502	33%	8,670	25%	7,256	21%	6,357	18%

Table 24: Pasifika Year 12 candidates by achievement in credits (level 2 or higher), 2003.

	TOTAL	Candidates who attained 90+ credits at Level 2+		Candidates who attained 60-89 credits at Level 2+		Candidates who attained 30-59 credits at Level 2+		Candidates who attained 1-29 credits at Levels 2+	
		n	n	%	n	%	n	%	n
Samoan	1,349	137	10%	304	23%	467	35%	396	29%
Tongan	427	36	8%	72	17%	135	32%	161	38%
Cook Islands Maori	342	32	9%	61	18%	129	38%	103	30%
Fijian	206	56	27%	48	23%	55	27%	45	29%
Niuean	109	15	14%	25	23%	31	28%	35	32%

Table 25: Candidates who achieved an NCEA qualification and received a with 'excellence' result for at least 25% of their credits, 2003

		Number	Proportion of candidates
		Year 11	Pasifika
	Non-Pasifika	3,831	8.7%
Year 12	Pasifika	30	1.1%
	Non-Pasifika	2,662	7.7%