

Annual Report on NCEA \& New Zealand Scholarship Data \& Statistics (2009)

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## Introduction

New Zealand's national system of assessment and qualifications for secondary school students produces a great deal of information that can be used to monitor the performance of the school system itself, and of the diverse range of students who are engaged in senior secondary education. This document, the first Annual Report on NCEA and New Zealand Scholarship Data and Statistics, summarises the activity and achievement of New Zealand's secondary school students since the full implementation of the National Certificates of Educational Achievement (NCEAs) in 2004.

One of the benefits of New Zealand's standards-based NCEA system of qualifications is that it allows for an analysis of the performance of students over time. In most assessments under the previous (normative) system, a candidate's final grade for an assessment was determined by the performance of that candidate relative to other candidates. In other words, normative scaling was used to ensure that the distributions of results were very similar from year to year. This scaling effectively masked any overall changes in the performance of successive cohorts.

Under the NCEA system, students' performance is measured relative to standards, not relative to one another. For example, if all candidates for a standard were to meet the criteria for gaining Excellence in that standard, then all would receive that grade. This means that any genuine change in performance over time will appear as a change in the achievement rate; it will no longer be hidden by scaling.

In 2009, the NCEA system of school qualifications saw its sixth year of full implementation. The achievement data from these six years provide an opportunity to analyse ways in which qualifications achievement by secondary students has changed since implementation.

Section I of this report provides a series of graphs and tables showing comparisons of students' qualifications achievement over time. Also in the first section, a more detailed analysis of the performance of the cohort of students that commenced Year II in 2007 is presented. The data in this section allow for comparison of the performance of students grouped by gender, ethnicity and, as a proxy for their socio-economic level, the decile ratings of the schools they attend. Section 2 provides information on various aspects of internal and external assessment in schools. Also contained in this section are some administrative data; for example, on breaches of rules for external assessments.

On behalf of the New Zealand Qualifications Authority (NZQA), we are pleased to make this report available to all New Zealanders. We hope that it, and subsequent reports, will contribute to public understanding of trends in senior secondary certification, of the practices and outcomes of New Zealand's senior secondary qualifications system, and of differences in the achievement of students across gender, ethnic and socio-economic categories.


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## Section I

## Student achievement in NCEA and Scholarship

The focus of this report is on student attainment. Qualifications are therefore counted as attained provided that the requisite credit requirements have been met. This is true even if qualifications have not been formally awarded because the student has not fulfilled all administrative requirements; for example, payment of fees. The data presented in this report for 2009 also exclude any successful reviews and reconsiderations, because this process was incomplete when the report was prepared. For both of these reasons, data presented in the report may differ slightly from those presented on the NZQA website.

## Roll Data

Data and statistics pertaining to senior secondary school qualifications must be considered in relation to the particular cohorts of students engaged in attaining those qualifications. For instance, rising retention rates usually mean that more average and lower-achieving students have returned to school, which may lead to a false inference of static or declining achievement. In a standardsbased system, static achievement in an expanding cohort may actually signal an underlying improvement in achievement. This report begins with a review of trends in senior secondary rolls since the full implementation of the NCEA in 2004 to provide a context for the qualifications and achievement data that follow.

In the six-year period from 2004 to 2009, roll numbers in the senior secondary school (Years II-13) increased by some I I\%, from around 144,000 to nearly 160,000. In 2009, this figure included some 6,000 foreign fee-paying students. Figure I shows that the increase varied across the years of secondary schooling, being greatest at Year 13, and least at Year II I.


Figure I. Numbers of students in Years II to 13 on the school roll as of July I, from 2004 to 2009 . Foreign fee paying students are included.

## Student achievement in NCEA and Scholarship

The greatest contribution to this increase came from a $24 \%$ rise in Year 13 numbers over the period.
Year II and Year 12 numbers rose $4 \%$ and $9 \%$ respectively. Some of the increase at Year 13 is accounted for by a rise in the New Zealand age cohort working through the system, following relatively high birth numbers in the early 1990s; an effect that peaked in 2008. In addition, there has been an increase in retention from Year II to Year I 3, especially noticeable in the declining economic environment of 2009.

While the number of domestic New Zealand students retained to Year I 3 in 2006 was some $59 \%$ of the Year I I cohort in 2004, the retention of the 2007 Year II cohort to Year I 3 in 2009 had risen to $66 \%$.

Year 13 numbers have risen faster than Year II numbers, so that in 2009, Year 13 formed a larger proportion of the senior secondary school roll than it did in previous years, as shown in Table I.

|  | 2004 | 2007 | 2009 |
| :---: | ---: | ---: | ---: |
| Total Year II - I3 Roll | 136,969 | 148,569 | 153,844 |
| Year II | $43 \%$ | $41 \%$ | $40 \%$ |
| Year I2 | $34 \%$ | $34 \%$ | $34 \%$ |
| Year I3 | $23 \%$ | $25 \%$ | $26 \%$ |

Table I. Senior secondary (Years II-13) roll numbers, and Year II, Year I2 and Year 13 rolls as percentages of the total senior school roll: 2004-2009. These include domestic New Zealand students only; foreign fee-paying students are excluded.

Figure 2 shows trends in roll numbers from 2004 to 2009, partitioned by gender. Retention to Year 13 rose between 2004 and 2009 for both males and females. The number of Year 13 domestic New Zealand male students retained in 2006 from the Year II cohort of two years earlier was 56\%, compared to a retention figure of $63 \%$ for females.

In 2009, the retention of males rose to $62 \%$, compared to $70 \%$ for females. Since 2005, males have outnumbered females in Year II , but the reverse has long been the case at Year 13 because of the higher female retention rate.


[^0]
## Student achievement in NCEA and Scholarship

Figures 3 - 5 show trends in roll numbers by year level from 2004 to 2009, partitioned by ethnicity. Between 2004 and 2009, the number ofYear II New Zealand domestic students rose by some 17\% for New Zealand Māori, and 23\% for Pasifika, while New Zealand European numbers dropped slightly². At Year 13, the cohorts increased for all ethnicities: up 20\% for European, 47\% for Māori and

53\% for Pasifika. Year II to Year I3 retention rates rose between 2006 and 2009: from 59\% to 67\% for European, $40 \%$ to $47 \%$ for Māori, and $67 \%$ to $71 \%$ for Pasifika. Māori now comprise $18 \%$ of senior secondary school students, up from $16 \%$ in 2004, while the percentage of Pasifika rose from $8 \%$ to $9 \%$ of the senior secondary school student roll over the same period.



## Student achievement in NCEA and Scholarship



Figures 3 - 5. Numbers of New Zealand European, New Zealand Mäori, Pasifika, Asian and other-ethnicity domestic students in Years II to I3 on the school roll as at July I from 2004 to $2009^{3}$.

## Student achievement in NCEA and Scholarship

## Performance of the 2007 Year I I cohort in NCEA and University Entrance

The following graphs (Figures 6 - 13) compare the percentages of various demographic categories of students from the cohort of students commencing Year II at the beginning of 2007, attaining NCEA Levels I, 2 and 3. These are the students who, if they stayed at school, completed Year 13 at the end of 2009. The demographic categories of interest are gender, ethnicity, and school decile, which serves as a proxy for students' socioeconomic level. Comparisons between these groups of students are made for qualifications attained by the end of 2007 (Year I I), by the end of 2008 (Year I2), and by the end of 2009 (Year I3).

Calculating percentages of students attaining qualifications over the original Year I I cohort largely corrects for differences in retention between the demographic groups of interest. For example, in each year, a greater proportion of male students than female students have left school without NCEA Level I during Years II and I2. Comparing the percentages of male and female students who have attained NCEA Level I by the end of Year 12 with just those students who were still at school, therefore underestimates the Level I performance gap between male students and female students.

Using the original Year II numbers for all percentages avoids this problem because all students are counted in denominators for the percentages, whether or not they have left school. While a small number of students remain at school beyond Year I3, the percentage of the original Year II roll achieving a qualification by the end of Year 13 provides a close approximation to the proportion of school leavers with that qualification.

The figures tracking the 2007 Year II cohort as they gained NCEA qualifications during 2007, 2008 and 2009 compare the performance of male and female students (Figures 6-8), New Zealand European, Māori, Pasifika and Asian students (Figures 9-11) and students in low-decile (I-3), medium-decile (4-7) and high-decile (8-10) schools (Figures 12-14).

Many students in New Zealand secondary schools pursue qualifications in addition to, or in lieu of, NCEA qualifications. Some of these qualifications are registered on the National Qualifications Framework; for example, the National Certificate in Computing; whereas others are not. Thus the data presented in Figures 6-14 to some extent underestimate overall qualifications achievement rates in secondary schools because they include only NCEA qualifications. The data presented in Figures 6-14 include students resident in New Zealand only; they exclude a small number of students in the Cook Islands and Niue who attain NCEA qualifications.

## Student achievement in NCEA and Scholarship

## Analyses by student gender

Figures 6-8 compare attainment of NCEA Level I-3 across school Years I I - | 3 for male and female students, and show the approximate proportions of each gender leaving school with each level of NCEA. For all three levels, these proportions are higher for female students than for male students.

Figure 6 shows the percentages of male and female students commencing Year II in 2007, who had attained NCEA Level I by the end of 2007, 2008 and 2009. The majority of students who gained NCEA Level I did so in Year I I; approximately $57 \%$ of Year II male students
and $67 \%$ of Year II female students. An approximate further I $2 \%$ of the original male Year II cohort, and I $0 \%$ of the original female cohort had gained Level I by the end ofYear 12 , with only a further two percent of the male cohort and one percent of the female cohort gaining this qualification by the end of Year 13. The slightly higher attainment of Level I by male students in Years 12 and 13 diminished the difference in the cumulative attainment rate in favour of girls, from around 10 percentage points at the end of Year II, to around eight percentage points at the end ofYear 13.


Figure 6. Percentages of male and female students in Year II in 2007, achieving NCEA Level I by the end of 2007 (Year II), 2008 (Year I2) and 2009 (Year I3).
All standard errors are less than one percentage point.

## Student achievement in NCEA and Scholarship

Figure 7 shows the percentages of male and female students commencing Year II in 2007, who had attained NCEA Level 2 by the end of 2007, 2008 and 2009.
Only around one percent of male or female students attained NCEA Level 2 prior to Year 12, with $60 \%$ of female students and $48 \%$ of male students attaining this qualification by the end of Year 12 . This 12 percentage
point difference in favour of female students closed somewhat by the end of the following year, with a further eight and six percent of the original Year I I cohort of male and female students respectively attaining NCEA Level 2 during Year 13.


Figure 7. Percentages of male and female students in Year II in 2007, achieving NCEA Level 2 by the end of 2007 (Year II), 2008 (Year 12) and 2009 (Year 13). All standard errors are less than one percentage point.

## Student achievement in NCEA and Scholarship

Figure 8 shows the percentages of male and female students commencing Year II in 2007, who had attained NCEA Level 3 by the end of 2007, 2008 and 2009. A negligible proportion of students of either gender attained this qualification during Year II , and under one percent of male students and half a percent of female students attained it during Year I2. By the end of Year 13, $28 \%$ of the original Year II male cohort, and $41 \%$ of the female cohort had gained NCEA Level 3; a difference of 13 percentage points in favour of female students.


Figure 8. Percentages of male and female students in Year II in 2007, achieving NCEA Level 3 by the end of 2007 (Year II), 2008 (Year I2) and 2009 (Year I3).
All standard errors are less than one percentage point.

## Student achievement in NCEA and Scholarship

## Analyses by student ethnicity

Figures 9-1 | compare attainment of NCEA Levels I-3 across school Years II-I3 for students who self-identify as New Zealand European, New Zealand Māori, Pasifika or Asian, and show the approximate proportions of each ethnicity leaving school with each level of NCEA. Students not identifying with any of these ethnicities are omitted from these data. Foreign fee-paying students are also excluded because ethnicity data are unavailable for these students.

Figure 9 shows the percentages of New Zealand European, Māori, Pasifika and Asian students commencing Year II in 2007, who had attained NCEA Level I by the end of 2007, 2008 and 2009.

By the end ofYear II in 2007, $71 \%$ of European students, $69 \%$ of Asian students $44 \%$ of Māori students and $42 \%$ of Pasifika students had attained this qualification. Thus, considerably greater percentages of European and Asian than Māori or Pasifika students had attained NCEA Level I by the end ofYear II.

By the end of Year 12 the gaps, while still significant, had closed somewhat, with $58 \%$ of Māori, $64 \%$ of Pasifika, and around $80 \%$ of Asian and European students having attained Level I. Pasifika students, two percentage points behind Māori students after Year II, were six percentage points ahead after Year 12.

The Pasifika cohort continued to make gains in attaining NCEA Level I during Year I 3, with a further four percent of the original Year I I cohort gaining the qualification. In comparison, only two percent of the Asian and Māori cohorts, and one percent of the European cohort gained NCEA Level I during Year 13.

In summary, these data show that approximately $80 \%$ of Asian and European students, $68 \%$ of Pasifika students, and approximately $60 \%$ of Māori students leave school with at least NCEA Level I.


Figure 9. Percentages of New Zealand European, Mäori, Pasifika and Asian students in Year II in 2007, achieving NCEA Level I by the end of 2007 (Year II), 2008 (Year I2) and 2009 (Year 13).All standard errors are less than one percentage point.

## Student achievement in NCEA and Scholarship

Figure 10 shows the percentages of New Zealand European, Māori, Pasifika and Asian students commencing Year II in 2007, who had attained NCEA Level 2 by the end of 2007, 2008 and 2009.

No more than two percent of any ethnic cohort attained NCEA Level 2 prior to Year I2. By the end of Year I2, a large performance difference in favour of New Zealand European (62\%) and Asian (67\%) students relative to Māori (35\%) and Pasifika (39\%) students is evident. During Year 13 , this difference diminished, especially for Pasifika students with a further $16 \%$ of the original Year II Pasifika cohort gaining Level 2 during Year 13, compared with eight percent of the Māori cohort, seven percent of the Asian cohort, and five percent of the European cohort.

The NCEA Level I shown in Figure 9 and those for Level 2 in Figure 10 show different comparative attainment of these qualifications by European and Asian students.
Specifically, whereas equal proportions of European students and Asian students had attained NCEA Level I by the end of Year 13, for NCEA Level 2, the attainment rate by the end of Year 13 was some eight percentage points higher for Asian students than for European students.


Figure 10. Percentages of New Zealand European, Māori, Pasifika and Asian students in Year II in 2007, achieving NCEA Level 2 by the end of 2007 (Year II), 2008 (Year I2) and 2009 (Year I3).All standard errors are less than one percentage point.

## Student achievement in NCEA and Scholarship

Figure II shows the percentages of New Zealand European, Māori, Pasifika and Asian students commencing Year II in 2007, who had attained NCEA Level 3 by the end of 2007, 2008 and 2009. No more than one percent of any ethnic group attained NCEA Level 3 prior to Year 13.

By the end of Year 13, very substantial differences between the percentages of the various ethnic groups that have attained NCEA Level 3 are evident. The percentage of Asian students gaining Level 3 by this stage was $53 \%$, compared with $40 \%$ of European students, $16 \%$ of Māori students and 20\% of Pasifika students.


Figure II. Percentages of New Zealand European, Māori, Pasifika and Asian students in Year II in 2007 achieving NCEA Level 3 by the end of 2007 (Year II), 2008 (Year I2) and 2009 (Year 13).All standard errors are less than one percentage point.

## Student achievement in NCEA and Scholarship

Analyses by school decile
Figures 12-14 explore the effects of students' socioeconomic level, approximated using schools' decile ratings, on performance in NCEA. An important consideration in respect of comparisons across school deciles is that this variable is confounded with ethnicity; greater proportions of students at low-decile schools than at high-decile schools identify as Māori or Pasifika. Thus it is probable that the lower average socio-economic level of Māori and Pasifika students is a factor influencing the lower qualifications attainment rates for students of these ethnicities. Data for schools without decile ratings are excluded.

Figure 12 shows the percentages of students at low, medium- and high-decile schools, commencing Year II in 2007, who had attained NCEA Level I by the end of 2007, 2008 and 2009.

Decile-related achievement differences are evident across all year levels, with $48 \%$ of students at low-decile schools, $63 \%$ of students at medium-decile schools and $74 \%$ of students at high-decile schools having attained NCEA Level I by the end of Year II.The differences diminished by the end of Year 13, by which time the percentages were $66 \%, 77 \%$ and $83 \%$ respectively.


Figure 12. Percentages of students in Decile I-3, Decile 4-7 and Decile 8-10 schools, in Year II in 2007, achieving NCEA Level I by the end of 2007 (Year II), 2008 (Year I2) and 2009 (Year I3).All standard errors are less than one percentage point.

## Student achievement in NCEA and Scholarship

Figure 13 shows the percentages of students at low, medium- and high-decile schools, commencing Year II in 2007, who had attained NCEA Level 2 by the end of 2007, 2008 and 2009.

Just one percent of students at schools in each decile band attained NCEA Level 2 prior to Year 12.The decile-related differences in attainment of this qualification at the end of Years 12 and 13 are greater than for NCEA Level I.

At the end of Year 12, the percentage of students attaining NCEA Level 2 at high-decile schools (67\%) was close to 30 percentage points higher than the percentage at low-decile schools (39\%).The percentage for students at medium-decile schools was 54\%. The differences in the attainment rates across the decile bands was slightly reduced by the end of Year 13 , being 73\% for high-decile schools, $62 \%$ for medium-decile schools, and $49 \%$ for low-decile schools.


Figure 13. Percentages of students in Decile I-3, Decile 4-7 and Decile 8-10 schools, in Year II in 2007, achieving NCEA Level 2 by the end of 2007 (Year II), 2008 (Year I2) and 2009 (Year 13).All standard errors are less than one percentage point.

## Student achievement in NCEA and Scholarship

Figure 14 shows the percentages of students at low, medium- and high-decile schools, commencing Year II in 2007, who had attained NCEA Level 3 by the end of 2007, 2008 and 2009.

Less than one percent of students at schools in each decile band attained NCEA Level 3 prior to Year 13. By the end of Year 13, large differences in the rates of attainment of NCEA Level 3 were evident; at high-decile schools 46\% of the original Year I | cohort attained the qualification compared with $33 \%$ at medium-decile schools and 19\% at low-decile schools.


Figure 14. Percentages of students in Decile I-3, Decile 4-7 and Decile 8-10 schools, in Year II in 2007, achieving NCEA Level 3 by the end of 2007 (Year II), 2008 (Year 12) and 2009 (Year 13).All standard errors are less than one percentage point.

## Student achievement in NCEA and Scholarship

## Performance of participating cohorts in NCEA and University Entrance (2004-2009)

Table 2 below, and the following graphs (Figures 15 - 35) compare attainment rates over time, between genders, ethnicities and decile bands, of NCEA qualifications and University Entrance in the year most typical for gaining each; Year II for NCEA Level I,Year 12 for NCEA Level 2, and Year 13 for NCEA Level 3 and University Entrance. Attainment is measured in terms of the percentage of the participating cohort for each qualification that gained that qualification during the typical year for doing so.
A student is in the participating cohort for a given NCEA level in a given year if, on the basis of any credits they have already acquired and credits that they are entered for, it is possible for them to acquire that qualification by the end of that year. The NCEA Level 3 cohort is used as the University Entrance cohort as well. This analysis of University Entrance attainment is therefore somewhat flawed; not all students with sufficient entries to gain NCEA Level 3 have a configuration of credits that would allow them to attain University Entrance, and many students entered for sufficient credits to attain University Entrance are not entered for sufficient to gain NCEA Level 3.

The participating cohort for each qualification is a proxy for students intending to attain each, there being no formal entry process for NCEA qualifications or University Entrance. If a student is not entered for sufficient credits to attain a given qualification, it is assumed they have no intention of doing so in that year. Many students pursue qualifications other than NCEA, including others registered on the National Qualifications Framework (NQF) as well
as non-NQF qualifications. The percentages of students gaining a given qualification in the following figures can therefore be treated as an approximation to the proportion of students intending to gain that qualification, who did in fact attain it.

Table 2 shows the proportions of participating cohorts gaining NCEA Levels I-3 and University Entrance from 2004 to 2009. NCEA Levels I and 2 show a trend towards greater proportions of participating candidates gaining the qualification between 2004 and 2007.
From 2007 on, these proportions stabilised at around 71\% for Level I and 76\% for Level 2.The percentages of participating candidates gaining NCEA Level 3 and University Entrance similarly increased between 2004 and 2007. However, from 2007 on, a fall in these percentages is evident. This fall might reflect greater retention of students into Year 13 in 2008 and 2009 than in previous years.

A comparison between the Level 2 attainment rate in 2008 from Table 2 with the data in Figure 6, and of the Level 3 attainment rate in 2009 from Table 2 with the data in Figure 7, makes clear the limitations of using roll data to estimate NCEA attainment rates: the participating cohort for each NCEA level is considerably smaller than roll numbers in the typical year for attaining each level. An unsurprising corollary is that the proportion of the participating cohort gaining each level is commensurately higher than the proportion of the typical-year roll gaining each level.The attainment of qualifications other than NCEA, while beyond the scope of this report, is an important factor in explaining this discrepancy.

|  | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| NCEA Level I (Year I I) | 65.6 | 66.0 | 69.3 | 72.5 | 70.6 | 71.6 |
| NCEA Level $2($ Year I 2) | 72.7 | 72.8 | 74.9 | 76.9 | 75.5 | 75.7 |
| NCEA Level 3 (Year I 3) | 68.0 | 68.4 | 70.5 | 72.0 | 70.2 | 69.4 |
| University Entrance (Year I3) | 64.3 | 64.4 | 66.5 | 67.7 | 65.6 | 64.3 |

[^1] the participating cohort for University Entrance is defined to be the same as that for NCEA Level 3.All standard errors are less than one percentage point.

## Student achievement in NCEA and Scholarship

Certificate endorsement for NCEA Levels I, 2 and 3 was introduced in 2007 to increase the incentive for more able students to achieve to their maximum potential. The percentage of students gaining qualifications in 2009 at their typical level who received endorsements is shown in Table 3.

The percentages of NCEA qualifications at each level awarded with endorsements of Merit or Excellence have been constant within one percentage point over the three years since their introduction. However, there are some variations between genders, between ethnicities and between students attending schools with different socioeconomic decile ratings ${ }^{4}$.

|  | NCEA Level I <br> Year II students | NCEA Level 2 <br> Year I2 students | NCEA Level 3 <br> Year I3 students |
| :--- | :--- | :--- | :--- |
| No endorsement | $65 \%$ | $75 \%$ | $74 \%$ |
| Merit endorsement | $27 \%$ | $19 \%$ | $21 \%$ |
| Excellence endorsement | $8 \%$ | $6 \%$ | $5 \%$ |

Table 3. Percentages of Level I, 2 and 3 NCEA qualifications gained in the typical year for each with endorsements of Merit and Excellence in 2009.

## Student achievement in NCEA and Scholarship

## Analyses by Student Gender

Figures 15 - 18 compare the performance of male and female participating cohorts in attaining NCEA Levels I-3 and University Entrance in the typical year for doing so, in each year since the full implementation of the NCEA qualification in 2004.

Figure 15 compares the percentages of male and female participating candidates gaining NCEA Level I between 2004 and 2009. A difference of seven to ten percentage points in favour of female candidates is evident in each year.The increasing trend evident in the overall data shown in Table 2 is also evident here for both genders between 2004 and 2007. After 2007 the percentages stabilised at around $67 \%$ for males and $75 \%$ for females, although the data for male candidates have fluctuated somewhat over the last three years.


Figure I5. Percentages of participating Year II male and female students gaining NCEA Level I from 2004 to 2009. All standard errors are less than one percentage point.

## Student achievement in NCEA and Scholarship

Figure 16 compares the percentages of male and female participating candidates gaining NCEA Level 2 between 2004 and 2009. There is a very consistent difference in favour of female candidates of between nine and ten percentage points in each of these years. Again, the trend for both genders closely resembles that of the overall data shown in Table 2, with a gradual increase in
the proportions of candidates gaining the qualification between 2004 and 2007, and success rates stabilising at around $80 \%$ for female candidates and $70 \%$ for male candidates from 2007 on, although the rates for male candidates in 2008 and 2009 were around two percentage points lower than they were in 2007.


Figure 16. Percentages of participating Year 12 male and female students gaining NCEA Level 2 from 2004 to 2009.All standard errors are less than one percentage point.

## Student achievement in NCEA and Scholarship

Figure 17 compares the percentages of male and female participating candidates gaining NCEA Level 3 between 2004 and 2009. Differences in favour of female candidates range between eight and ten percentage points between 2004 and 2007, with some tendency towards increasing after 2007, predominantly because of a fall in the male attainment rate. During this period, like NCEA Levels I and 2 , an increasing attainment rate is evident for both genders between 2004 and 2007. Beyond 2007 however, a slight decline in the rate of success for female candidates is evident, with a more substantial decline for male candidates, resulting in a widening of the gender difference to 12 percentage points in 2009.

The decline is probably at least in part attributable to increased retention into Year I3.This increase was more pronounced for male students than for female students (see Figure 2), which might explain why the decline for males is greater than that for females.


Figure 17. Percentages of participating Year 13 male and female students gaining NCEA Level 3 from 2004 to 2009. All standard errors are less than one percentage point.

## Student achievement in NCEA and Scholarship

Figure 18 compares the percentages of Year 13 male and female participants in NCEA Level 3 who gained University Entrance, in each year from 2004 to 2009. The pattern of attainment rates over the time period represented by the graph is very similar to that for NCEA Level 3 , with differences in favour of female candidates of between six and ten percentage points. Like the data for NCEA Level 3, the success rate for University Entrance increased between 2004 and 2007, after which it declined somewhat for both genders and for male candidates especially. Again, the decline is likely to be influenced by increased retention into Year 13 (see Figure 2).

An issue of interest in regard to the relative success in qualifications achievement by male and female students, is whether there is any advantage to either gender, or both, from attending either co-educational or single-sex schools. A very important consideration here is the decile
of schools; single-sex schools are more highly represented amongst high-decile schools than are co-educational schools, and high-decile schools also tend to have stronger qualifications outcomes than low-decile schools. Thus, any comparison of single-sex and co-educational schools that did not take decile into account would show an advantage in qualifications achievement to single-sex schools on the basis of their higher socio-economic status alone.
Figures 19-2 1 compare the performance during 2009, of male and female participating candidates, in acquiring NCEA Levels I, 2 and 3, and University Entrance, respectively, during the typical secondary-school year for each. The data are also partitioned by school gender (co-educational or single-sex) and by decile band.
Data for students at schools without decile ratings are omitted from these comparisons.


Figure 18. Percentages of Year 13 male and female NCEA Level 3 participants gaining University Entrance from 2004 to 2009 .All standard errors are less than one percentage point.

## Student achievement in NCEA and Scholarship

Figure 19 shows the percentages of male and female participating Year I I candidates gaining NCEA Level I during 2009, at both single-sex and co-educational schools, for low, medium and high deciles respectively. In all decile bands, there is a difference in favour of female candidates, although in the low-decile band, boys at single-sex schools had a higher rate of success than girls at co-educational schools.

There is a difference in favour of single-sex schools for both genders in all decile bands. The effect is most pronounced in the low-decile bands, with differences of 15 and 17 percentage points for female and male candidates respectively. The differences between the rates of success in single-sex and co-educational schools are reasonably comparable between the genders for all decile bands.


Figure 19. Percentages of participating Year II male and female students in single-sex and co-educational schools gaining NCEA Level I in 2009 partitioned by decile band. Error bars denote the standard errors of the proportions.

## Student achievement in NCEA and Scholarship

Figure 20 shows the percentages of male and female participating Year 12 candidates gaining NCEA Level 2 during 2009, at low, medium- and high-decile single-sex and co-educational schools. The pattern of data is very similar to that pertaining to NCEA Level I presented in Figure 19 above.

Again, a difference in favour of female candidates is evident in all decile bands, although in the low-decile band only, boys at single-sex schools had a higher rate of success than girls at co-educational schools. Again also, a difference in favour of single-sex schools is evident for both genders in all decile bands, with the differences particularly pronounced in the low-decile band.


Figure 20. Percentages of participating Year 12 male and female students in single-sex and co-educational schools gaining NCEA Level 2 in 2009 partitioned by decile band. Error bars denote the standard errors of the proportions.

## Student achievement in NCEA and Scholarship

Figure $2 I$ shows the percentages of male and female participating candidates gaining NCEA Level 3 in Year 13 during 2009, at low-, medium- and high-decile single-sex and co-educational schools. Again, the pattern of data is very similar to the data pertaining to NCEA Levels I and 2 presented in Figures 19 and 20 above:

There is a difference in favour of female candidates in all decile bands, with the exception that, in the lowdecile band only, male candidates at single-sex schools had a higher rate of success than female candidates at co-educational schools. There is a difference in favour of single-sex schools for all decile bands, especially the low-decile band, and for both genders.


Figure 21. Percentages of participating Year 13 male and female students in single-sex and co-educational schools gaining NCEA Level 3 in 2009, partitioned by decile band. Error bars denote the standard errors of the proportions.

## Student achievement in NCEA and Scholarship

Figure 22 shows the percentages of male and female candidates participating in NCEA Level 3, and gaining University Entrance in Year 13 during 2009, at low-, medium- and high-decile single-sex and co-educational schools.

The pattern of data is similar to that for the NCEA data presented in Figures 19-21. There is a difference in favour of female candidates in all decile bands. The difference in the low-decile band in favour of male candidates at single-sex schools in comparison with female candidates at co-educational schools that was evident for all three levels of NCEA, is not statistically significant here. Again, however, there is a difference in favour of single-sex schools for all decile bands, especially the low-decile band, and for both genders.


Figure 22. Percentages of Year 13 male and female students participating in NCEA Level 3 in single-sex and co-educational schools gaining University Entrance in 2009 partitioned by decile band. Error bars denote the standard errors of the proportions.

## Student achievement in NCEA and Scholarship

Figures 23-25 compare the percentages of male and female candidates gaining each level of NCEA who attained those qualifications with endorsements of Merit and Excellence. Significant differences in favour of female candidates are evident for both Merit and Excellence endorsements at all three levels, with the exception of Level 3 Excellence (for which the difference
is not significant). A slight upward year-on-year trend in proportions gaining endorsements appears to be occurring in some cases; in particular, Excellence endorsements for both genders at all levels, and Merit endorsements for male candidates at Level 2 and 3; but continuation for a further year is needed before the significance, or otherwise, of the trend can be assessed.


## Student achievement in NCEA and Scholarship

## Analyses by ethnicity

Figures 26-29 compare the performance of Asian, New Zealand European, New Zealand Māori and Pasifika participating candidates; the four most numerous ethnic groups; in gaining NCEA Levels I - 3 and University Entrance, respectively. Students not identifying with any of these ethnicities are omitted from these data.

The data in these figures should be interpreted in conjunction with those shown in Figures $30-35$, which show similar comparisons across decile bands. This is because ethnic identity is correlated with socio-economic status, such that New Zealand Māori and Pasifika students are over-represented in low-decile schools. Therefore, at least some of what appears to be an ethnic effect is likely actually to be an effect of socio-economic level. Even so, a comparison of the two sets of data elucidates some effects that appear to be specifically ethnic. Specifically, the performance of both Māori and Pasifika students, especially the latter, appears to have improved between 2005 and 2007 considerably more than overall performance at lowdecile schools.

Figure 26 compares the percentages of participating candidates in Year I I , gaining NCEA Level I, across ethnic groups. New Zealand European and Asian candidates have substantially higher rates of success in gaining NCEA Level I during Year II than New Zealand Māori or Pasifika candidates; differences of 19-37 percentage points in
favour of the former two ethnicities is evident across the time period covered by the data.
There is a small difference of two to five percentage points in favour of European candidates relative to Asian candidates, and a larger difference of five to 12 percentage points in favour of Māori candidates relative to Pasifika candidates. A caveat on the latter difference is that these data are for Year I I candidates only, and Pasifika candidates show a high rate of attaining NCEA Level I in Years 12 and 13 , such that, by the end of Year 13 a higher proportion of the original Year II Pasifika cohort had acquired NCEA Level I in comparison with the original Year I I Māori cohort (see Figure 9).
There is some evidence that the large difference between New Zealand European and Asian candidates on one hand, and New Zealand Māori and Pasifika candidates on the other, has diminished over time. Between 2004 and 2007, rates of success for Year II candidates in gaining NCEA Level I improved for all ethnicities, but especially for Māori and Pasifika. From 2007 onward, the rates for all ethnicities largely stabilised. The diminution of the ethnically-based differences in attainment of NCEA Level I is therefore attributable to the sharper increase in attainment for Māori and Pasifika than for European and Asian candidates between 2005 and 2007.


Figure 26. Percentages of participating Year II Asian, New Zealand European, New Zealand Māori and Pasifika candidates gaining NCEA Level I from 2004 to 2009. All standard errors are less than one percentage point.

## Student achievement in NCEA and Scholarship

Figure 27 compares the percentages of participating Year 12 candidates gaining NCEA Level 2 across the four ethnic groups. New Zealand European and Asian candidates have substantially higher rates of success in gaining NCEA Level 2 during Year 12 than New Zealand Māori or Pasifika candidates; the differences are quite similar to those evident for NCEA Level I presented in Figure 26 above; approximately 13-34 percentage points in favour of the former two ethnicities.

Smaller differences in favour of New Zealand European candidates relative to Asian candidates, and to New Zealand Māori candidates relative to Pasifika candidates, are also evident. Although the latter difference appears to contradict Figure 9, which shows a slight difference in favour of Pasifika relative to Māori students in gaining NCEA Level 2 by the end of Year 12, the apparent reversal is explained by differences in participation rates. Specifically, Figure 9 shows that a higher proportion of the original Pasifika Year II cohort than of the original Year I। Māori cohort attained NCEA Level 2 by the end of Year 12. Figure 26 shows that a higher proportion of the Māori participating cohort than of the Pasifika participating cohort gained NCEA Level 2 during Year 12.

The participating cohort is a more restrictive grouping than the original Year I I roll, because it includes only those students with sufficient entries to attain Level 2 in a given year. The participation rate in NCEA Level 2 for Year 12 Pasifika students is higher than it is for Year 12 Māori students, such that a higher proportion of all Pasifika students attain Level 2, but the success rate for participating Year 12 Māori candidates is nonetheless higher than that of participating Pasifika candidates.
As is the case for NCEA Level I data shown in Figure 26, there is evidence that the large difference between New Zealand European and Asian candidates on one hand, and New Zealand Māori and Pasifika candidates on the other, diminished between 2005 and 2007. The rate of success for the former two groups has been quite stable over time whereas the success rate for the latter two increased markedly between 2005 and 2007, and has been relatively stable thereafter.


Figure 27. Percentages of participating Year 12 Asian, New Zealand European, New Zealand Māori and Pasifika candidates gaining NCEA Level 2 from 2004 to 2009. All standard errors are less than one percentage point.

## Student achievement in NCEA and Scholarship

Figure 28 compares the percentages of participating candidates in Year 13 gaining NCEA Level 3, across the four ethnic groups of interest. New Zealand European and Asian candidates have substantially higher rates of success in gaining NCEA Level 3 during Year 13 than New Zealand Māori or Pasifika candidates. There was a small difference in favour of European relative to Asian candidates in 2004, but in subsequent years the success rates for these groups were close to identical.

The difference in favour of Māori candidates relative to Pasifika candidates is consistent with the differences observed for NCEA Levels I and 2. As was the case for NCEA Level 2, there is an apparent discrepancy with Figure II, which shows a slightly higher proportion of the original Year II Pasifika cohort than of the Māori cohort gaining NCEA Level 3 by the end of Year 13. The explanation for this is the same as that for the apparent discrepancy in the Level 2 data: a higher proportion of all Pasifika than Māori students attain Level 3. The overall participation rate is higher for Pasifika candidates than it is for Māori candidates; however the success rate for participating Year 13 Māori candidates is higher than that of participating Year 13 Pasifika candidates.

The overall success rate of participating candidates increased between 2004 and 2007, and then fell away somewhat for all ethnicities except Pasifika, which fluctuated downwards in 2008 before rising again in 2009. As noted previously, the decline for the former three ethnic groups reflects increased retention into Year 13. The retention of Pasifika students has increased as well, so the underlying success rate for this group might have improved somewhat more than indicated by Figure 28.


Figure 28. Percentages of participating Year 13 Asian, New Zealand European, New Zealand Māori and Pasifika candidates gaining NCEA Level 3 from 2004 to 2009 All standard errors are less than one percentage point.

## Student achievement in NCEA and Scholarship

Figure 29 compares the percentages of Year 13 students participating in NCEA Level 3, who also gained University Entrance, across the four ethnic groups. Attainment of University Entrance attainment has been quite stable for European candidates, at around 70\% of Level 3 participants, although a peak in 2007 is evident, with a slight decrease in 2008 and 2009. The data for European
and Asian candidates are close to identical with the exception of 2004, in which Asian performance was somewhat lower than European performance. Māori or Pasifika candidates for NCEA Level 3 have fluctuated considerably in attainment of University Entrance, both peaking in 2007, and both with somewhat lower rates of attainment in 2009 than in 2004.


Figure 29. Percentages of Year 13 Asian, New Zealand European, New Zealand Māori and Pasifika students participants in NCEA Level 3 gaining University Entrance from 2004 to 2009. All standard errors are less than one percentage point.

## Student achievement in NCEA and Scholarship

Analyses by school decile

Figures 30-35 compare the rates of success for participating candidates at schools in low-, mediumand high-decile bands in attainment of NCEA Levels I-3 and University Entrance in the typical year for each. Data for schools without decile ratings are omitted from these analyses.

Figure 30 compares the percentages of participating Year II candidates gaining NCEA Level I, across low-, medium- and high-decile bands. Performance for all three decile bands increased between 2004 and 2007 and remained relatively stable thereafter, although there was a slight decrease for candidates at low-decile schools after 2007. There are quite consistent differences in favour of high-decile schools relative to medium-decile schools, of between 10 and 15 percentage points, and in favour of medium-decile schools relative to low decile schools of between 13 and 17 percentage points, across the period covered by the data.

NCEA Level I includes minimum requirements for both literacy and numeracy. Comparisons of the rates at which students at schools in the high-, medium- and low- decile bands attained each of these requirements, independent of whether they attained Level I itself, are presented in Figures 31 and 32. Note that these data are based on the Year II roll, rather than on the participating cohort for Level I because many students not in the participating cohort for Level I nonetheless meet the literacy and numeracy requirements.


Figure 30. Percentages of participating Year II students from schools in decile bands I-3, 47 and 8-10 gaining NCEA Level I from 2004 to 2009. All standard errors are less than one percentage point.

## Student achievement in NCEA and Scholarship

Figure 3 I compares the percentages of Year I I students attaining the NCEA Level I literacy requirement across low-, medium- and high-decile bands. The rate at which students at high-decile schools have met the literacy requirement remained quite stable between 2004 and 2009 , at just over $80 \%$. The rate for students in medium-decile schools has increased from just over 70\%
in 2004 to around $80 \%$ in 2009. The rate for students in low-decile schools has increased more markedly, from just under 60\% in 2004 to just over $70 \%$ in 2009. Thus, while socio-economically-based differences in the attainment of the Level I literacy requirement remain, they have diminished substantially since the implementation of the NCEA system of qualifications.


Figure 31. Percentages of Year II students from schools in decile bands 1-3,4 7 and 8-10 gaining the literacy requirement for NCEA Level I from 2004 to 2009. All standard errors are less than one percentage point.

## Student achievement in NCEA and Scholarship

Figure 32 compares the percentages of Year I I students attaining the NCEA Level I numeracy requirement, across low-, medium- and high-decile bands. These data show an increase for all three decile bands since 2004, with a larger increase for medium-decile schools than for highdecile schools, and an even larger increase for low-decile schools. The effect has been to reduce the differences
in favour of students at higher decile schools markedly, such that by 2009 the difference between high-and medium-decile schools was negligible, and the difference between medium- and low-decile schools reduced from close to ten percentage points in 2004 to around four percentage points in 2009.


Figure 32. Percentages of Year II students from schools in decile bands I-3, 47 and 8-10 gaining the numeracy requirement for NCEA Level I from 2004 to 2009. All standard errors are less than one percentage point.

## Student achievement in NCEA and Scholarship

Figure 33 compares the percentages of participating Year 12 candidates gaining NCEA Level 2, across low-, mediumand high-decile bands. Like the data for NCEA Level I shown in Figure 30, performance for all three decile bands increased between 2005 and 2007 and remained quite stable thereafter, although a slight decrease for mediumdecile schools is evident in the last two years. Again also,
the differences in favour of high-decile schools relative to medium-decile schools, and medium-decile schools relative to low-decile schools, are quite consistent over time, ranging between eight and II percentage points for the former, and between 12 and 15 percentage points for the latter.


Figure 33. Percentages of participating Year 12 students from schools in decile bands 1-3, 47 and 8-10 gaining NCEA Level 2 from 2004 to 2009. All standard errors are less than one percentage point.

## Student achievement in NCEA and Scholarship

Figure 34 compares the percentages of participating candidates in Year 13 gaining NCEA Level 3, across low-, medium- and high-decile bands. Like the data for the other NCEA levels shown in Figures 30 and 33, performance for all three decile bands increased between 2005 and 2007. However, success rates for Level 3 have declined somewhat for all decile bands since 2007, but, especially for low-decile schools. As previously noted, this might reflect increased retention into Year I 3.

Differences in favour of high-decile schools relative to medium-decile schools range between eight and ten percentage points, and differences in favour of mediumdecile schools in relation to low-decile schools range between II and 15 percentage points, over the period spanned by the data.


Figure 34. Percentages of participating Year 13 students from schools in decile bands 1-3,47 and 8-10 gaining NCEA Level 3 from 2004 to 2009. All standard errors are less than one percentage point.

## Student achievement in NCEA and Scholarship

Figure 35 compares the percentages of Year 13 participants in NCEA Level 3 gaining University Entrance across low-, medium- and high-decile bands. Success rates for students in high- and medium-decile schools increased between 2004 and 2007, and declined thereafter, such that success rates for medium-decile schools in 2004 and 2009 were very similar. For high-decile schools, 2009 success rates were slightly higher than they were in 2004, having been considerably higher in 2007. Success rates for
low-decile schools fluctuated somewhat between 2004 and 2007 before declining to a level in 2009 substantially below the 2004 level. While the small declines for highand medium-decile schools are probably explained by increased retention into Year 13, the decline for low-decile schools is more substantial than that observed for NCEA Level 3 on exactly the same participating cohort, and other factors are likely to be involved.


Figure 35. Percentages of Year 13 students from schools in decile bands 1-3, 4-7 and 8-10, participating in NCEA Level 3 and gaining University Entrance from 2004 to 2009. All standard errors are less than one percentage point.

## Student achievement in NCEA and Scholarship

## Participation data and results distributions for NQF standards

The NQF standards used in secondary schools - those contributing to NCEA and to other NQF qualifications fall into three major categories:

- Unit standards which typically carry only grades of Not Achieved and Achieved, although a very few also carry grades of Merit. All unit standards are internally assessed (i.e., assessed in schools or other education providers).
- Internally assessed achievement standards which carry grades of Not Achieved, Achieved, Merit and Excellence (also assessed in schools or other education providers).
- Externally assessed achievement standards which carry grades of Not Achieved, Achieved, Merit and Excellence. These are assessed by examination or portfolio in an annual examination round.
Tables 4 and 5, and Figures 36 and 37 show data on the relative use of, and results distributions for, the three types of standards.

Table 4 shows the number of results for each type of standard, and the overall results distributions for each in 2009. Collectively, the three types of standards generated more than five million results for secondary school students in 2009. These data exclude entries in internally assessed standards for which no result was reported by schools, and entries in externally assessed standards, for which students were absent from examinations, or submitted no work for assessment.

Results for unit standards accounted for the greatest volume; $39 \%$ of all standard results in 2009. A further $31 \%$ of results were accounted for by internally assessed achievement standards, giving a total of $70 \%$ of all results assessed internally. The remaining $30 \%$ of results were for externally assessed achievement standards.
Proportions of results gaining credit - results of Achieved or better - were greatest for internally assessed achievement standards, followed by unit standards. Rates of Merit and Excellence for internally assessed achievement standards were also greater than for externally assessed achievement standards ${ }^{5}$.

The higher achievement rates for internally assessed standards is attributable to the more flexible assessment conditions for these standards; teachers are able to tailor assessment tasks and timing of assessment to their teaching programmes, whereas most externally assessed standards are much less flexible, being assessed by written examination under time-limited conditions.

|  | Number of <br> Results | Percentage <br> Not Achieved | Percentage <br> Achieved | Percentage <br> Merit | Percentage <br> Excellence |
| :--- | :--- | :--- | :--- | :--- | :--- |
| Externally Assessed <br> Achievement Standard | $1,509,766$ | 30.4 | 41.6 | 20.3 | 7.6 |
| Internally Assessed <br> Achievement Standard | $1,570,209$ | 21.1 | 38.8 | 24.1 | 16.0 |
| Unit Standard | $1,933,230$ | 24.8 | 75.2 | 0.0 |  |

Table 4. Percentage distributions of results for secondary school students in unit standards, internally assessed achievement standards and externally assessed achievement standards in 2009.All standard errors are less than one percentage point.

[^2]
## Student achievement in NCEA and Scholarship

Table 5 shows the relative percentages of results for each type of standard at schools in low- , medium- and highdecile bands. Note that results for schools with no decile rating are omitted from this table.

Unit standards account for a far greater proportion of all results for low-decile schools than for medium-decile schools, which in turn have higher proportions of unit standard results than high-decile schools. Conversely, high- and medium-decile schools have higher proportions of their results accounted for by achievement standards than low-decile schools, with the greatest proportions of externally assessed achievement standards results evident for high-decile schools.

|  | Decile I-3 | Decile 4-7 |  |
| :--- | :---: | :---: | :---: |
| Externally Assessed |  |  | Decile 8-IO |
| Achievement Standard | 18.3 | 27.7 | 38.0 |
| Internally Assessed <br> Achievement Standard | 26.0 | 30.4 | 34.9 |
| Unit Standards | 55.7 | 41.9 | 27.1 |
| Total results | 772,474 | $2,165,748$ | $2,000,905$ |

Table 5. Percentages of and total numbers of assessment results at Decile 1-3, 4-7 and 8-10 schools by standard type; unit standards, internally assessed achievement standards and externally assessed achievement standards. All standard errors are less than one percentage point.

## Student achievement in NCEA and Scholarship

Figure 36 compares the results distributions for externally assessed achievement standards across decile bands. It is clear that students at schools in higher decile bands have a much greater rate of success than those at schools in lower decile bands, as well as considerably higher rates of Merit and Excellence.


Figure 36. Percentage distributions of assessed results for externally assessed achievement standards in 2009 by school decile band. All standard errors are less than one percentage point.

## Student achievement in NCEA and Scholarship

Figure 37 compares the results distributions for internally assessed achievement standards across decile bands. Students at higher decile schools gained greater proportions of their result with Merit and Excellence, and had a higher rate of gaining credit than did students at medium-decile schools. Students at medium-decile schools showed similarly greater success than students at low-decile schools. This pattern is quite similar to that for externally assessed achievement standards in

Figure 36, although the differences for internally assessed achievement standards are less marked.

Rates of success in unit standards were also higher for students at higher-decile schools, although to a lesser extent than for both externally and internally assessed achievement standards. In 2009, 73.6\% of assessments for unit standards at low-decile schools gained credit, compared with $74.2 \%$ and $77.4 \%$ at medium- and highdecile schools respectively.


Figure 37. Percentage distributions of assessed results for internally assessed achievement standards in 2009 by school decile band. All standard errors are less than one percentage point.

## Student achievement in NCEA and Scholarship

## New Zealand Scholarship

The New Zealand Scholarship awards were introduced in 2004 and the present system for marking the Scholarship examinations in 2006. Scholarship is intended to challenge New Zealand's most able secondary school students and therefore the examinations are very demanding, even for the top students in each subject. Scholarship students are expected to demonstrate high-level critical thinking and the ability to generalise, and to apply knowledge, skills and understanding to complex situations.
Scholarships are awarded to the top $3 \%$ of the national Level 3 cohort in each subject. The national cohort is defined to be the set of students who are entered for at least 14 credits in that subject at Level 3 . Many of the cohort for each subject do not enter for Scholarship in that subject, and a number of students not included in a subject cohort nonetheless enter Scholarship in that subject. The number of entries is therefore different from the size of the cohort.

Assessment for Scholarship is held at the end of each school year. For most subjects, assessment involves a threehour written examination. However, Music and Drama also involve assessment by recorded performance, and the five Visual Arts subjects, Technology and Graphics are assessed entirely through portfolios of work.

Generally, Scholarship assessments are undertaken by Year 13 students, most of whom are also studying towards NCEA Level 3. Each Scholarship assessment carries two passing grades - Scholarship (S) and Outstanding Scholarship (0).

## Scholarship Monetary Awards

There are five classes of monetary award for Scholarship, ranging in value from $\$ 500$ for Single Subject Awards to $\$ 10,000$ per annum for three years for Premier Awards. Table 6 lists the five classes of Scholarship award and their monetary values for 2010 .

| Award | Criteria | Monetary Value |
| :---: | :---: | :---: |
| Premier Award | Awarded to the very top 5 to 10 candidates. <br> The minimum requirement to be considered for this award is at least three Scholarships at Outstanding level.The number of recipients of this award is restricted and achieving the minimum criterion does not guarantee an award. | $\$ 10,000$ each year for up to three years as long as candidates maintain at least a ' $B$ ' grade average in tertiary study. |
| Outstanding Scholar Award | Awarded to the next 40-60 top candidates. <br> The minimum requirement for this award is three Scholarships with at least two at Outstanding level or more than three Scholarships with at least one at Outstanding.The number of recipients of this award is restricted and achieving the minimum criterion does not guarantee an award. | $\$ 5,000$ each year for three years, as long as candidates maintain a ' $B$ ' grade average in tertiary study. |
| Scholarship Award | Awarded to candidates who get Scholarship in three or more subjects. | $\$ 2,000$ each year for up to three years, as long as candidates maintain a ' $B$ ' grade average in tertiary study. |
| Top Subject Scholar Award | Awarded to the top candidate in each one of the 33 Scholarship subjects. | $\$ 2,000$ each year for up to three years, as long as candidates maintain a 'B' grade average in tertiary study. |
| Single Subject <br> Awards | Awarded to candidates who get Scholarship in one or two subjects. | A 'one-off' award of $\$ 500$ per subject (maximum payment $\$ 1000$ ). |

## Student achievement in NCEA and Scholarship

Scholarship Awards in 2009

In 2009 a total of 3,148 subject scholarships were awarded to 2,065 candidates, 370 at Outstanding Scholarship level and 2,778 at Scholarship level. By comparison, 2,95 I Scholarships were awarded in 2006 (338 Outstanding Scholarships and 2,613 Scholarships) - the first year of the new Scholarship award. The observed rise is consonant with an increase in Level 3 NCEA activity, from which the numbers of Scholarships to be awarded each year are calculated.
The total number of students entering for Scholarship examinations has risen since 2006, particularly over the last two years. There are now nearly 18,000 entries, compared to nearly 16,000 in 2006. This increase is slightly smaller in percentage terms, than the increase in the Year I3 roll over the same period. Of the roughly I8,000 entries for Scholarship examinations in 2009, about I7.5\% gained an award.

Females comprised about 5I\% of the Scholarship entries in 2009, a similar percentage to that of females present in Year I 3. Females outperform males at Scholarship level. In 2009 they gained I,436 Scholarships, while males gained I,342. However, at the Outstanding Scholarship level, there is no significant gender difference. The relative achievements of males and females are shown in Figure 39.

Figure 38 shows that between 2006 and 2009 the numbers of Outstanding Scholarships awarded annually to both males and females remained roughly stable, at just under 200, and that the number of Scholarships awarded annually to males also remained roughly stable, at around I,300 per year. However, the number of Scholarships awarded annually to females increased over that period.


Figure 38: Numbers of Outstanding Scholarship and Scholarship awards gained by males and females from 2006 to 2009.

## Student achievement in NCEA and Scholarship

Scholarship Awards in 2009 by Subject

Table 7 below gives a breakdown of Scholarship entries and results for 2009 across all 33 subjects.

The Year 13 cohort varied from 15 for Latin and 32 for Te Reo Rangitira, to 13,834 for Statistics and Modelling and 13,227 for English.

| Results | YI3 Cohort | Entries | \% of Level <br> 3 cohort <br> entering <br> scholarship | \% of entries absent or void | Number of valid results | N | S | $\bigcirc$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| All Subjects |  | 17890 |  | 24.8 | 13451 | 76.6 | 20.7 | 2.8 |
| Accounting | 3023 | 558 | 18 | 23.3 | 428 | 78 | 19.9 | 2.1 |
| Agricultural \& Horticultural Science | 342 | 29 | 8 | 13.8 | 25 | 84 | 16 | 0 |
| Art History | 1732 | 346 | 20 | 22.8 | 267 | 81.3 | 16.1 | 2.6 |
| Biology | 7798 | 1487 | 19 | 20.4 | 1184 | 82.1 | 15.7 | 2.2 |
| Chemistry | 6884 | 1543 | 22 | 18.7 | 1255 | 83.3 | 14.6 | 2.2 |
| Chinese | 230 | 104 | 43 | 12.5 | 91 | 88.5 | 10.3 | 1.1 |
| Classical Studies | 5154 | 756 | 15 | 22.6 | 585 | 74 | 22.7 | 3.2 |
| Design | 2729 | 555 | 20 | 55.9 | 245 | 66 | 29.9 | 4.1 |
| Drama | 1816 | 394 | 22 | 44.7 | 218 | 74.3 | 22.9 | 2.8 |
| Economics | 4414 | 794 | 18 | 22.8 | 613 | 77.3 | 19.7 | 2.9 |
| English | 13227 | 1696 | 13 | 24.2 | 1286 | 70.3 | 25.7 | 4 |
| French | 891 | 255 | 29 | 17.6 | 210 | 85.7 | 11.9 | 2.4 |
| Geography | 5925 | 887 | 15 | 12.4 | 777 | 78.7 | 19.7 | 1.5 |
| German | 352 | 108 | 31 | 11.1 | 96 | 88.5 | 10.4 | I |
| Graphics | 1393 | 302 | 22 | 6 | 284 | 84.9 | 13 | 2.1 |
| History | 5587 | 881 | 16 | 26.9 | 644 | 74.1 | 22.8 | 3.1 |
| Japanese | 660 | 154 | 23 | 20.1 | 123 | 83.7 | 13.8 | 2.4 |
| Latin | 15 | 25 | 167 | 8 | 23 | 78.3 | 17.4 | 4.3 |
| Mathematics with Calculus | 7469 | 1309 | 18 | 16.3 | 1095 | 79.5 | 17.9 | 2.6 |
| Media Studies | 2736 | 444 | 16 | 34.7 | 290 | 70.7 | 25.9 | 3.4 |
| Music Studies | 953 | 155 | 16 | 23.9 | 118 | 72.9 | 23.7 | 3.4 |
| Painting | 3011 | 506 | 17 | 49 | 259 | 73.7 | 22.9 | 4.7 |
| Photography | 2450 | 472 | 19 | 52.1 | 227 | 67.7 | 28.3 | 4 |
| Physical Education | 3831 | 526 | 14 | 31.9 | 358 | 74.3 | 23.7 | 2 |
| Physics | 6485 | 1238 | 19 | 19.3 | 999 | 81.6 | 16.4 | 2 |
| Printmaking | 263 | 59 | 22 | 33.9 | 39 | 79.5 | 17.9 | 2.6 |
| Science | 880 | 166 | 19 | 27.7 | 120 | 77.5 | 20 | 2.5 |
| Sculpture | 279 | 80 | 29 | 52.5 | 38 | 71.1 | 26.3 | 2.6 |
| Spanish | 289 | 82 | 28 | 8.5 | 75 | 88 | 10.7 | 1.3 |
| Statistics \& Modelling | 13834 | 1543 | 11 | 22.8 | 1191 | 64 | 32.5 | 3.5 |
| Te Reo Mãori | 480 | 157 | 33 | 19.1 | 127 | 89 | 8.7 | 2.4 |
| Te Reo Rangatira | 32 | 39 | 122 | 10.3 | 35 | 82.9 | 14.3 | 2.9 |
| Technology | 1288 | 250 | 19 | 45.2 | 137 | 76.6 | 19.7 | 3.6 |

## Student achievement in NCEA and Scholarship

The total number of Scholarship entries across all subjects was 17,890, varying from 25 for Latin, to I,695 for English. However, not all students who enter for a Scholarship assessment actually sit the examination, so that the final number of assessed results was 13,45I, varying from 23 in Latin to I,285 in English.
As noted previously, Scholarship cohorts include only students who have entered for at least I 4 credits in that subject at Level 3 . However, a number of students not counted in the cohort for a particular subject nonetheless sit Scholarship in that subject. Therefore, the calculated percentage of the Level 3 cohort entering Scholarship in a subject with a very small number of entries (such as Latin and Te Reo Rangitira) can be above $100 \%$.

In 2009 the total number of Scholarships, expressed as a percentage of the total number of entries (as opposed to the number of the Level 3 cohort), varied between $8.9 \%$ forTe Reo Māori to $27.8 \%$ for Statistics and Modelling. The percentage across all subjects was $17.6 \%$. The percentage of valid results gaining Outstanding Scholarship varied from zero for Agricultural and Horticultural Science to 4.7\% for Painting. The percentage across all subjects was $2.8 \%$.

## Premier Awards

The Premier Award is the most prestigious of all of the Scholarship awards and carries the greatest monetary award ( $\$ 10,000$ per annum for three years). Table 8 below gives the total numbers of Premier Award winners by gender from 2005 to 2009.

| Year | Females | Males |
| :---: | :---: | :---: |
| 2005 | 4 | 9 |
| 2006 | 3 | 7 |
| 2007 | 3 | 5 |
| 2008 | 3 | 7 |
| 2009 | 1 | 7 |

Table 8. Counts by gender of Premier Award Winners from 2005 to 2009.

Over the five year period from 2005 to 2009, a total of 49 Premier Awards were awarded, 35 (71\%) to males and I4 (29\%) to females.

The Premier Award is restricted to the top five to ten students across the country. In 2009, I 4 students met the minimum requirements and eight students received the Premier Award. The remaining six candidates were among 49 who received an Outstanding Scholar Award.
The Outstanding Scholars gained at least three Scholarships, including at least two at Outstanding level, or one Scholarship at Outstanding level and four other Scholarships.

Premier Award and Top Subject Winners for 2009
In 2009, the candidates receiving Premier Awards all gained at least four Scholarship subjects at Outstanding level, or a total of five Scholarships with three at Outstanding level, and were ranked in the top three nationally in at least two subjects. Four of the eight Premier Awardees were also Top Subject Scholars. The names of the Premier Awardees and Top Subject Scholars and their schools can be found at the following URL:
http://www.nzqa.govt.nz/news/releases/20 I0/| | 02 |0.html

## Section 2

## NCEA Administrative Process and Data

## External Assessment and the Examination Process

The term External Assessment refers to assessment activities, typically time-limited examinations run by NZQA at the end of each year, but also including portfolios of student work submitted for assessment or verification by a panel of experts appointed by NZQA.
The annual examination process involves thousands of staff administering and marking assessments for more than 140,000 candidates across all levels of NCEA and New Zealand Scholarship. The following is an overview of the process.
2009 Examination Round: facts and figures

- 141, 992 candidates, including 504 in the Cook Islands and 53 in Niue, sat a total of 1.84 million NCEA assessments.
- 68,143 candidates had examination entries at Level I, 55,937 at Level 2 and $36,37 \mathrm{I}$ at Level 3.
- 8,986 students entered for one or more of the 33 Scholarship examinations.
- The examinations with the largest numbers of candidates were for a Level I English standard $(47,425)$ and for a Level I Mathematics standard ( $44,52 \mathrm{I}$ ).
- The examination with the smallest number of candidates was Scholarship Latin (25).
- There were 404 examination centres in New Zealand, seven in the Cook Islands and one in Niue.
- A total of 2,054 markers assessed candidates' work.

The Role of NZQA in the Examination Process
Each year NZQA designs and produces examination papers for more than 300 individual standards and organises the examination timetable. NZQA also coordinates and administers marking and the attendant process for the review and reconsideration of results, and the return of all examination booklets to candidates - New Zealand being the only country in the world that does this.
Some 4,000 staff nationwide are employed in running the examination process. During the examination season, NZQA receives special reports relating to examination irregularities, ensuring that relevant reports are sent to markers and that potential breaches of examination rules are investigated.

NZQA accepts late entries until each examination is sat. In 2009 there were some 23,000 late entries from schools after the I September final entry date.

## Marking Panels

Markers, who are qualified teachers or other education professionals, are grouped into panels headed by Panel Leaders. Before the marking of each examination begins, the panel leader reviews the assessment schedule, which guides markers' determination of grades for each examination question. Panels meet to discuss each question and to establish grade boundaries. The first 100 scripts marked by each marker are check-marked for consistency.Three further samples are similarly checkmarked at intervals during the marking process.

## Preparing Examination Papers

Examination papers are written by subject experts contracted by NZQA, and are critiqued by other education professionals. The papers are then evaluated by independent experts, who work through each paper as if they were candidates. The content and questions are also checked by NZQA staff to ensure that they are valid to the standard; for example, that a question in a history standard assesses understanding of historical events, issues and principles, rather than primarily assessing essay-writing ability.
Each examination paper is then formatted by NZQA editors, so as to be as clear as possible to candidates. Comments by critiquers and independent checkers are taken into account by NZQA staff who revise papers as necessary. Papers are then submitted to editors for a final check before being approved for printing and distribution to the Examination Centres.
Examination papers for externally assessed achievement standards are published on the web within 24 hours of each examination, with all third-party copyright material removed. Examinations that contain copyright material are also released in full on the high-security part of the NZQA website, to provide teachers with access to complete examination documents.

## NCEA Administrative Process and Data

## Assessment Schedules and Judgement Statements

Assessment schedules describe the performance required by the standard at Achieved, Merit and Excellence levels for each question or item in a paper.They are published on the New Zealand Qualifications Authority website towards the end of March, when all applications for reviews and reconsiderations have been resolved.

Judgement statements define how the question-level information is to be aggregated to produce a final result for each candidate. The judgement statement documents appear on the NZQA website at the time the results are released in mid-January, to assist candidates in deciding whether they want to apply for any reviews or reconsiderations of their results.

Assessment schedules and judgement statements for each externally assessed standard can be found as part of the Reports and Schedules section of the NZQA website, or through the Subject Specific Resources pages at the following URL:
http://www.nzqa.govt.nz/ncea/resources/index.html

## Examination Centres and Managers

Examination Centres are the places at which candidates sit their examinations. They are typically, but not always schools. Each examination centre is presided over by an NZQA-appointed Examination Centre Manager (ECM). Each year, ECMs attend training to bring them up to date with any changes to examination processes, and to re-acquaint them with the examination cycle. Each ECM prepares a plan for the Examination Centre, detailing how the Examination Centre will operate, and identifying the number of supervisors that will be required for each examination.

ECMs are responsible for the organisation of examination papers for each candidate and of the supervisors who assist in supervising the examinations. They also monitor late entries and revise examination plans accordingly.

## Personalised Examination Papers

Examination papers are personalised to each student's entries and sorted automatically according to students' National Student Numbers (NSNs). Each personalised answer booklet contains a barcode with the student's NSN, which allows individual papers to be
automatically tracked. Answer booklets are arranged automatically into individualised packs for each student, containing booklets for all standards in each subject for which that student is entered. The collated packs are distributed to the Examination Centres.

Completed answer booklets are returned to a central location for sorting and distribution to markers. Results are entered on-line by markers, and the marked booklets are returned to candidates.

## Profiles of Expected Performance

Profiles of Expected Performance (PEPs) are monitoring tools. They are developed annually for each externally assessed standard with a cohort of more than 300 students. They are based on historical information, statistical analysis and the professional judgement of marking Panel Leaders and NZQA staff.

Panel leaders use PEPs to guide the benchmarking of assessment schedules and judgement statements. If, during marking, a schedule starts to produce results that are outside the expected bands, an explanation for the discrepancy is sought from the Panel Leader. If a valid reason is found, marking is allowed to continue. In other cases, the schedule might be altered in minor ways to bring results into line. In the most serious cases, a re-mark may be required. In 2008 there were re-marks in two standards (one in Economics and one in Geography). In 2009 there were re-marks in three standards (one in Chemistry and two in Science). In each case, in 2009, only one question in each paper was re-marked.

PEPs were originally developed to maintain consistency in results distributions from year to year. Nonetheless, they enable recognition of valid changes, for example in response to a professional development programme for teachers in a particular area. It is not considered essential for results to fall inside the PEP provided that there is a valid and satisfactory explanation for any deviation. The essential criterion for the acceptability of a distribution of results is that it reflects candidates' performance against the standard. PEPs are simply tools to assist marking panels to produce distributions that are consistent with standards.

## NCEA Administrative Process and Data

Table 9 shows the numbers of standards with final distributions of results falling outside the PEP bands in 2007, 2008 and 2009. The maximum deviation from a PEP is the greatest discrepancy between the actual distribution of results and the PEP at any grade boundary. For example, if a distribution was three points above the PEP band for Merit, and five points below the band for Achieved, with Not Achieved and Excellence results within PEP, the maximum deviation would be five percentage points.

More information on PEPs, including PEP ranges for specific standards can be found by entering a standard number into the search box at the following URL:
http://www.nzqa.govt.nz/ncea/index.html

| Maximum deviation from <br> PEP (percentage points) | 2007 | 2008 | 2009 |
| :---: | :---: | :---: | :---: |
| 0 | 120 | 110 | 114 |
| 1 | 28 | 44 | 34 |
| 2 | 19 | 28 | 40 |
| 3 | 18 | 18 | 18 |
| 4 | 17 | 23 | 13 |
| 5 | 9 | 12 | 12 |
| 6 | 29 | 15 | 19 |
| 7 or greater | 255 | 260 | 258 |
| Total |  |  | 8 |

Table 9. Maximum deviations from Profiles of Expected Performance of standards with 300 or more candidates in 2007, 2008 and 2009.

## Assessment Reports

Assessment reports provide an overview of the performance of examination candidates in each standard, as well as a summary of performance for all standards in a subject at each level. They contain comments from the examiners and markers to candidates, teachers and other interested parties.
The Assessment Reports for 2009 will be accessible from early May 2010 at the following URL:
http://www.nzqa.govt.nz/ncea/resources/index.html

## Reviews and Reconsiderations

All answer booklets for externally assessed standards are returned to candidates. To help candidates understand their results, the judgement statements used by markers are made available on the NZQA website. After students have reviewed their answer booklets they can apply for a review or reconsideration of their results.

If the candidate thinks that their answer booklet has not been assessed correctly they can apply for reconsideration. This involves reassessing the portfolio or all answers in the answer booklet using the original assessment schedule in other words re-marking it - and also checking mechanical processes such as the transfer of results.

It costs $\$ 20$ for each standard to be reconsidered. Candidates can apply for a reconsideration using the application form included with their results notice. The fee is refunded if the reconsideration results in a change to the candidate's grade.

If the candidate thinks there has been a processing error (such as one or more unmarked sections in an answer booklet or portfolio, or the incorrect transfer of grades), they can request a review. This involves checking that all sections of the booklet or portfolio have been assessed and the results have been correctly recorded and transferred. It does not involve re-marking the script. Candidates can access the form to accompany the papers they want reviewed from the NZQA website. The forms and papers for review must reach NZQA by a specified date. For the 2009 examination round this was Friday 19 February 2010 . There is no charge for a review.

## NCEA Administrative Process and Data

Table 10 shows the numbers of applications for reconsiderations of results from the 2006, 2007 and 2008 examination rounds. While both the number of applications and number of applications upheld has increased over this period, the percentage of successful
reconsiderations fell from 24\% in 2006 to 20\% in 2008. Conversely, the number of applications for review of Scholarship results has fallen over this period, but the percentage that were upheld has increased from II\% in 2006 to $15 \%$ in 2008.

|  | NCEA <br> Number |  |  | Number <br> successful | Percentage <br> successful | Number <br> of applications |
| :---: | :---: | :---: | ---: | ---: | ---: | ---: |
| Year | Number <br> successful | Percentage <br> successful |  |  |  |  |
| 2006 | 4,559 | 1,082 | 24 | 429 | 47 | 11 |
| 2007 | 5,010 | 1,183 | 24 | 443 | 50 | 11 |
| 2008 | 6,501 | 1,296 | 20 | 336 | 52 | 15 |

Table 10. Reconsiderations for NCEA and Scholarship:Total numbers and success rates for 2006-2008.

Table II shows the numbers of applications for reviews of results from the 2006, 2007 and 2008 examination rounds. Much higher proportions of applications for review are upheld than applications for reconsideration. Unlike reconsiderations, applications for review of NCEA results decreased markedly between 2006 and 2008, and the percentage upheld remained quite constant. The numbers of applications for review of Scholarship results are too small to indicate any reliable trends.

NZQA received 9, I 34 applications for reviews and reconsiderations of results arising from the 2009 examination round; 7,883 applications for NCEA reconsiderations, 800 for NCEA reviews, 442 for Scholarship reconsiderations and nine for Scholarship reviews. As of April 2010 , the 2009 reconsiderations and review process was incomplete.

More information about reviews and reconsiderations can be found at the following URL:
http://www.nzqa.govt.nz/ncea/results/reviews-
reconsiderations.html

| NCEA <br> Year |  |  |  |  |  |  |  | Number <br> of applications | Number <br> successful | Percentage <br> successful | Number <br> of applications | Number <br> successful | Percentage <br> successful |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 2006 | 1,276 | 1,033 | 81 | 11 | 9 | 82 |  |  |  |  |  |  |  |
| 2007 | 1,081 | 800 | 74 | 6 | 5 | 83 |  |  |  |  |  |  |  |
| 2008 | 755 | 609 | 81 | 13 | 3 | 23 |  |  |  |  |  |  |  |

Table I I. Reviews for NCEA and Scholarship:Total numbers and success rates for 2006-2008.

## NCEA Administrative Process and Data

Breaches of the Rules
NZQA investigates reports of possible breaches of the rules and procedures of external assessment. Conduct which is in breach of the rules includes:

- Failure to follow instructions
- Influencing, assisting, or hindering other candidates, or otherwise disrupting the conduct of the examination
- Dishonest practice, including altering external assessment materials prior to seeking a review or reconsideration
- Performance-based authenticity issues, including impersonation.
When NZQA initiates an investigation, a letter is sent to the candidate involved, accompanied by copies of any relevant information or reports outlining the conduct that may have been in breach of the rules. The candidate is invited to make written comment to NZQA about their conduct. Investigations may involve consultation with the school or other agencies, and/or a face-to-face meeting with the accused party.

Further detail on breaches of the rules can be found at the following URL:
http://www.nzqa.govt.nz/ncea/acrp/secondary/4/45 I.html

Table 12 summarises the breaches-of-examination rules data for 2009. A total of 403 situations in which a possible breach of examination rules were reported, of which 333 were reported by Examination Centre Managers, 66 by markers and four by others. As of I April 20 I0, 396 reports had been resolved with reports found to have been substantiated for 327 candidates, compared with 330 in 2008. In 27 cases, although a breach was known to have occurred, there was insufficient evidence to attribute the breach to any particular candidate. The remaining 41 reports were investigated and no actual breach of the rules was found to have occurred.
Most substantiated breaches were minor, and resulted in warning letters only. In 53 more serious cases, however, candidates' results were withheld.

| Number of candidates for whom a <br> breach was established | 327 |
| ---: | :---: |
| Number of breaches not attributed to <br> any candidate due lack of evidence | 27 |
| Number of reports for which no |  |
| breach occurred |  |
| Decisions pending |  |

Table 12. Status of 2009 breaches-of-rules procedures as of April 2010

## NCEA Administrative Process and Data

Table 13 provides information in regard to the nature of the substantiated breaches. Consistent with previous years, failure to follow instructions is the most common type of breach reported.

|  | Nature of Breach | Number of cases |
| :---: | :---: | :---: |
| Dishonest Practice (I03) | Cell phone use | 8 |
|  | Notes | 60 |
|  | Altering/access to answer booklet | 2 |
|  | Communicating with another candidate | 23 |
|  | Other | 10 |
| Following Instructions (189) | Cell phone in examination room | 58 |
|  | Inappropriate or offensive material/language | 59 |
|  | Unauthorised material | 30 |
|  | Unauthorised absence from examination session | 17 |
|  | Other | 25 |
| Authenticity or Impersonation (17) | Similar answers to another candidate | 4 |
|  | Authenticity | 12 |
|  | Multiple handwriting in an answer booklet | 1 |
| Influencing, Assisting or Hindering (18) | Disturbance | 5 |
|  | Communicating with another candidate | 6 |
|  | Other | 7 |
|  | Total | 327 |

Table 13. Numbers of candidates with substantiated breaches of examination rules in 2009 by type of breach.

## NCEA Administrative Process and Data

Table 14 shows the numbers of candidates for whom breaches of the examination rules in 2009 were substantiated, for each geographical region of New Zealand. For the most part, the numbers of reported breaches are relative to population volumes.

| Region | Number of reported breaches |
| :--- | :---: |
| Auckland | 156 |
| Bay of Plenty | 9 |
| Canterbury | 26 |
| Central North Island | 3 |
| Gisborne | 0 |
| Hawkes Bay | 12 |
| Manawatu | 8 |
| Nelson/Marlborough | 12 |
| Northland | 21 |
| Otago | 8 |
| Southland | 7 |
| Taranaki | 5 |
| Waikato | 17 |
| Wairarapa | 227 |
| Wanganui | 40 |
| Wetal | 27 |

Table 14. Numbers of candidates with substantiated breaches of examination rules in each geographical region.

## NCEA Administrative Process and Data

Table 15 shows the numbers of substantiated breaches of the examination rules in 2009 for each subject and NQF level, as well as each New Zealand Scholarship subject. For the most part, the volumes of reported breaches are relative to volumes of entries and results for each subject.

Note that, unlike Tables 12-14, the data here are numbers of breaches, rather than numbers of candidates.
Because one candidate was found to have breached the rules in three separate subjects, the total across this table is 329 rather than 327.

| Subject | Level I | Level 2 | Level 3 | Scholarship |
| :---: | :---: | :---: | :---: | :---: |
| Accounting | 4 | 2 | 3 |  |
| Agriculture - Horticulture |  | 2 |  |  |
| Art History |  |  | 2 |  |
| Biology | 2 | 6 | 4 | 2 |
| Calculus |  |  | 2 |  |
| Chemistry | I | 5 | 8 |  |
| Chinese | 1 |  |  |  |
| Classical Studies |  | I | 1 |  |
| Dance | 3 | 1 |  |  |
| Drama |  | 6 |  |  |
| Economics | 3 | 10 | 3 | 3 |
| English | 29 | 23 | 9 |  |
| French |  |  | 2 |  |
| Geography | 6 | 5 | 4 |  |
| German | 1 |  |  |  |
| Graphics \& Design | 0 |  |  |  |
| Health Studies | 6 | 2 | I |  |
| History | 5 | 5 | 3 |  |
| Home Economics |  | । | I |  |
| Information Management | 17 |  |  |  |
| Japanese | 4 |  | 2 |  |
| Mathematics | 28 | 29 | I |  |
| Media Studies |  | 5 | 9 |  |
| Music | 1 | 4 |  |  |
| Physics |  | 3 | 4 |  |
| Samoan | 1 | 2 | 2 |  |
| Science | 21 | I | 3 |  |
| Social Studies |  |  |  |  |
| Spanish | I |  |  |  |
| Statistics \& Modelling |  |  | I |  |
| Te Reo Mäori | 2 | 2 |  |  |
| Te Reo Rangatira |  |  |  |  |
| Technology | 5 |  |  |  |
| Visual Arts | I |  | 2 |  |
| Total | 142 | 115 | 67 | 5 |

## NCEA Administrative Process and Data

## Internal Assessment

Internal assessment refers to school-based assessment that potentially can result in credits that contribute to national qualifications. Schools carrying out internal assessment must be accredited by NZQA, or else report results through an accredited school. This is done to ensure that the systems used to manage the assessment are robust and that schools have in place reliable quality assurance systems.

A key component of quality assurance is an internal (school-based) moderation procedure. Schools are also expected to have effective and documented processes to ensure that results reported to NZQA from internal assessments are reliable. In addition, NZQA conducts formal reviews of schools' assessment procedures every three years, and conducts an annual round of external moderation.

External Moderation of Internal Assessment
External moderation of a standard involves NZQA moderators, who are assessment experts in each subject, reviewing both assessment materials (assessment tasks and activities) and assessment judgements (marking of student work). There are 34 full-time equivalent moderators, supported by 137 contract-for-service moderators who work on a part-time basis. Most NZQA moderators are current or recent teachers with expertise in standardsbased assessment.

NZQA has the objective of externally moderating I 0\% of assessor judgements for internally assessed standards; about 250,000 items of work each year. In both 2008 and 2009 the actual volume of student work moderated was actually slightly higher than $10 \%$.

The standards to be moderated at each school are selected by NZQA. The sample of work to be moderated for each standard is selected randomly by each school using a sampling process approved by NZQA. For each standard to be moderated, a moderator determines whether the assessment materials used by a teacher are suitable for assessing the standard, and whether each assessment judgement is accurate with respect to the standard.

A formal, external, moderation report is prepared by NZQA subject moderators for each standard selected for moderation at each school. Each moderation report indicates whether or not the assessment materials were suitable for assessing the standard, or whether modifications are required before those materials are used again. It also indicates how many of the teachers' assessment judgements were accurate with respect to the standard, and provides advice with respect to any that were not.

If a teacher disagrees with aspects of the moderation report, he or she can either ask for clarification, or appeal the decision. Formal appeals are reviewed by another NZQA moderator to establish whether the report was accurate, or whether any changes are required. The number of formal appeals is very low; in both 2008 and 2009, fewer than one in 1,000 moderator judgements resulted in successful appeals.

In addition to reviewing assessment materials and judgements, moderators facilitate best-practice workshops for internal assessment and are often invited to speak to subject associations or at national conferences. Moderators also develop resources that are hosted on the subject-specific web-pages of the NZQA website.
In 2009 some 93\% of the materials used to assess students were deemed to be suitable for assessing the relevant standard, either unmodified or with only minor modification. In 2008, this figure was $88 \%$. Any modification identified as necessary for assessment materials must be made before those materials are used again.

Data on the rates of agreement between teachers and moderators are considered in two ways. The first is agreement at the level of credit. Calculation of this agreement rate treats a moderation outcome as agreement provided that the teacher and moderator agreed on whether or not candidates' work was at the standard for gaining credit, even if they disagreed about the exact grade that ought to have been awarded.

## NCEA Administrative Process and Data

For example, if a teacher had given a result of Merit, and the moderator had judged the work to be at the Achieved level, this would be treated as agreement, because both Merit and Achieved grades result in credit. However, if the teacher had given a grade of Achieved, but the moderator had judged the work to be Not Achieved, this would be treated as disagreement because the teacher had awarded credit, whereas the moderator judged that credit ought not to have awarded. Table 16 shows the estimated agreement rates between assessor and moderator judgements for student work in each curriculum area at the level of credit.

In some curriculum areas the confidence intervals for unit standards have been omitted, because the sample sizes for these areas were too small to provide reliable data. Specifically, any estimate with a confidence range of more than six percentage points has been omitted.

| Curriculum area | Level I |  | Level 2 |  | Level 3 |  | All standards and levels |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Unit standards | Achievement standards | Unit standards | Achievement standards | Unit standards | Achievement standards |  |
| Arts |  | 92-93 |  | 91-93 |  | 89-91 | 90-91 |
| English | 75-79 | 92-93 | 66-70 | 88-90 |  | 86-89 | 84-85 |
| Health and Physical Education | 67-70 | 83-85 | 63-67 | 89-91 |  | 76-79 | 78-79 |
| Languages |  | 93-95 |  | 89-92 |  | 88-91 | 91-92 |
| Mathematics and Statistics | 85-87 | 87-89 | 68-73 | 77-81 | 78-83 | 77-81 | 81-82 |
| Science | 81-83 | 89-91 | $79-82$ | 89-91 | 81-86 | 86-88 | 86-87 |
| Social Sciences | 70-73 | 90-91 | 74-77 | 85-87 | 64-69 | 85-87 | 84-85 |
| Technology | 72-76 | 86-88 | 67-70 | 84-87 | 53-58 | 81-85 | 78-79 |
| Total | 78-79 | 89-90 | 71-73 | 88-89 | 67-69 | 85-86 | 83-84 |

Table 16.95\% confidence ranges for teacher-moderator agreement rates at the level of credit in 2009, by curriculum area, standard type and level. Note that data for Achievement standards in English and in Mathematics and Statistics are based on comparatively small numbers of standards.

## NCEA Administrative Process and Data

The second type of agreement considered here is agreement at the level of the grade. In this case, agreement comprises cases in which the teacher and the moderator agreed on the exact grade. Cases in which they did not are treated as disagreement. Table 17 shows the estimated agreement rates between assessor and moderator judgements for student work in each curriculum area at
the level of the grade. Note that, for unit standards, the two types of agreement are essentially the same because almost all unit standards have only Achieved (credit gained) and Not Achieved (no credit gained) as possible outcomes. For this reason, Table 19 shows data only for achievement standards.

| Curriculum area | Level I <br> Achievement standards | Level 2 <br> Achievement standards | Level 3 <br> Achievement standards | All standards and levels |
| :--- | :---: | :---: | :---: | :---: |
| Arts | $79-81$ | $79-81$ | $75-77$ | $78-79$ |
| English | $86-88$ | $80-83$ | $78-82$ | $79-81$ |
| Health and <br> Physical Education | $73-75$ | $80-82$ | $65-69$ | $71-72$ |
| Languages | $80-82$ | $78-81$ | $79-83$ | $80-82$ |
| Mathematics and | $74-78$ | $63-67$ | $61-65$ | $74-75$ |
| Statistics | $76-78$ | $77-79$ | $73-76$ | $78-79$ |
| Science | $74-76$ | $73-75$ | $72-74$ | $73-74$ |
| Social Sciences | $77-79$ | $78-78$ | $75-78$ | $72-76$ |

Table 17.95\% confidence ranges for teacher-moderator agreement rates at the level of the grade in 2009, by curriculum area, standard type and level. Note that data for English and in Mathematics and Statistics are based on comparatively small numbers of Achievement standards. Data for Unit Standards are omitted from this table because the agreement rates at the level of the grade for these standards are essentially identical to agreements rates at the level of credit, which are shown in Table 16 above.

## NCEA Administrative Process and Data

It is important to note that agreement rates are based on samples, not on all work. As is the case for any sample, the agreement rate for the sample is likely to vary from the actual agreement rate across all internally assessed work, with the extent of the probable variation being relative to the size of each sample. For this reason, the estimated agreement rates in Tables 16 and 17 are expressed as $95 \%$ confidence ranges; that is, the ranges within which we can be $95 \%$ confident that the actual agreement rates would be, if all work were moderated. Ranges are given separately for achievement and unit standards at levels I, 2 and 3.

In 2009 the overall moderator-to-teacher agreement rate for student work was $83 \%$ at the level of credit, and $76 \%$ at the level of the grade. The latter figure for 2008 was $72 \%$. However, direct year-on-year comparisons must be interpreted cautiously for a number of reasons:

- In the 2009 moderation round much of the work moderated was actually assessed in 2008. The moderation focus was on Levels I and 2, with particular emphasis on standards for which assessors were having the most difficulty in making assessment judgements, to ensure that teachers get the most valuable feedback to support their future assessment decisions. However, these data are therefore not based on a representative sample of standards.
- From July 2008 the student work submitted for moderation was selected randomly. Prior to this date however, the samples were selected by teachers, with an emphasis on work for which teachers were least confident of their judgements. In the 2009 round, therefore, a portion of the work submitted for moderation was from work assessed in 2008 and was therefore teacher-selected rather than randomly selected.

The sample of standards selected for the 2008 round is not the same as that selected for the 2009 round and, as noted above, neither sample is representative.

In 2009 NZQA implemented a series of initiatives designed to provide teachers with further guidance about school based assessment practice.
These initiatives included:

- 197 Best Practice workshops involving 2,497 teachers throughout the country
- Subject-specific web-pages hosting information and links to assessment resources at http://www.nzqa.govt. nz/ncea/resources/index.html
- Annotated student work exemplifying grade boundaries for internally-assessed standards requiring clarification
- Greater clarity and balanced feedback in moderation reports
- The opportunity for teachers to send in additional student evidence and ask moderators specific questions about their assessment judgements
- Regular, subject-specific newsletters for teachers
- Documents to guide teachers in their interpretation of standards.

These initiatives are all designed to provide an increased level of professional support for making assessment decisions, especially at grade boundaries. In addition, the national moderators produce an annual report for each subject to outline any issues that have come to light during the national external moderation cycle.

Many of the improvements will take time to impact on agreement rates. This is because moderation is a postassessment, quality-assurance exercise. There are significant lags between assessment events themselves and the time at which schools submit materials for external moderation, and between materials submission and the availability of moderation reports.
Moderators' annual reports can be found at the following URL:
http://www.nzqa.govt.nz/ncea/resources/index.html

## NCEA Administrative Process and Data

## Managing National Assessment Reports

Managing National Assessment reports provide summaries of checks on schools' assessment systems, including internal moderation processes and external moderation outcomes. NZQA also evaluates the strategies used by senior staff to address issues identified in previous reports. Reports also record the extent to which specific NZQA requirements, such as the procedures for recording and reporting Not Achieved results and for random selection of student work for external moderation, are being met.

Schools undergo a systems check approximately every three years; more often if significant issues are identified in their previous report or by external moderation. NZQA interviews staff about the assessment systems used in their department or school to ensure that assessment is valid, reliable, and consistent with national standards. Action plans are put in place to address any concerns identified. These are recorded in the report.

Copies of the final report are sent to the Principal and Chair of the Board of Trustees and published on the NZQA website:
http://www.nzqa.govt.nz/ncea/for-parents/schools.html

## Further Assessment Opportunities

In March 2009, NZQA reviewed national practice and consulted widely, with the intention of clarifying the reassessment process. This was done to address credibility issues, perceptions of unfairness, and the possible over-assessment of students, while encouraging teachers to exercise professional judgement in their assessment practice.

The outcome of the consultation was the development of new rules and procedures for further assessment opportunities (reassessment), including clarification as to what is meant by the term resubmission. These rules can be found at the following URLs:
http://www.nzqa.govt.nz/ncea/acrp/secondary/4/44।.html http://www.nzqa.govt.nz/ncea/acrp/secondary/4/442.html

## Appendix A - Glossary

## Achieved

A standard is achieved when a student has met all of the requirements of the standard. Students can receive Not Achieved, Merit and Excellence grades for achievement standards. They can receive either Not Achieved or Achieved grades for unit standards. Credit for a standard is awarded for a result of Achieved or higher.

## Achievement Standard

Standards derived from the New Zealand Curriculum.

## Assessment Reports

Summary reports provided by examiners on the work of candidates in externally- assessed standards.

## Breaches of the rules

Any behaviour in relation to assessment for externally assessed achievement standards prohibited by the NZQA rules governing these assessments.

## Endorsed Certificate (Certificate Endorsement)

An endorsement on a NCEA, certificate recognising that a student has gained sufficient credits at either Merit or Excellence.To qualify for an endorsement with Excellence, students require 50 credits at Excellence. An endorsement with Merit requires 50 credits at Merit (or Merit and Excellence).

## Excellence

The highest grade possible in an Achievement Standard.

## External Assessment

Assessment conducted by NZQA, including national examinations held at the end of the school year.

## Further assessment opportunities

An opportunity for students to be re-assessed in an internally assessed standard. National guidelines state that students may be offered a maximum of one further assessment opportunity for a given standard per year. It is not compulsory for any further assessment opportunities to be offered.

## Internal Assessment

Assessment conducted by schools during the school year

## Judgement Statements

Statements from Panel Leaders specifying how item or question-level information is to be aggregated across a paper to produce each available final grade.

## Merit

The medial grade gaining credit in achievement standards.

## MNA reports

Managing National Assessment reports are reports prepared by NZQA School Relationship Managers to evaluate a school's Quality Management Systems for managing all assessments that contribute towards national qualifications.

## Moderation

The NZQA process used to check the quality of internal assessment materials and teachers' assessment decisions.

## NCEA

National Certificate of Educational Achievement. This qualification can be gained at Level I, 2 or 3 .

## Not Achieved

Grade given to students who have not met the requirements of a standard.

## Participation data

Data on students' achievement of qualifications, based on the numbers participating, rather than on school rolls. A participant for a level of NCEA is student who, on the basis of entries in a given year, can gain that level in that year, taking any credits gained in previous years into account. Participation-based data represent more accurately achievement in schools in which many students do not pursue NCEA.

## PEPs

Profiles of Expected Performance. Tools used to assist in ensuring that externally-assessed standards are consistently applied from one year to the next.

## Appendix A - Glossary

## Reconsideration

Re-marking of a candidate's work for externally assessed standard where the candidate believes that his or her work may not have been assessed correctly. Reconsiderations are conducted in response to applications from candidates.

## Review

Checking for possible errors in processing of the results for an externally assessed standard.

## Scholarship

An external examination for the highest-performing secondary students, requiring students to demonstrate high-level critical thinking, and carrying monetary awards for successful candidates.

## Standard error

A measure of spread (or dispersion) of a data set. Generally, the larger the sample size, the smaller the standard error.

## Unit Standard

Standards that are not based on the
New Zealand Curriculum ${ }^{6}$.

## Appendix B - Numerical data presented in figures

|  | Year |  |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Secondary Year | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 |
| Year II | 60,378 | 62,324 | 63,726 | 62,832 | 62,394 | 62,832 |
| Year 12 | 49,679 | 49,750 | 50,567 | 52,911 | 52,675 | 54,257 |
| Year I3 | 34,682 | 35,811 | 36,620 | 38,303 | 40,367 | 42,899 |

Figure I. Numbers of students in Years II to 13 on the school roll as of July I, from 2004 to 2009. Foreign fee paying students are included.

| Secondary year and <br> student gender | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Year I I Male | 29,062 | 30,373 | 31,419 | 31,480 | 31,046 | 31,222 |
| Year I 2 Male | 22,195 | 22,620 | 23,315 | 24,678 | 24,752 | 25,681 |
| Year I3 Male | 14,934 | 15,619 | 16,177 | 16,986 | 18,116 | 19,630 |
| Year I I Female | 29,440 | 30,290 | 30,829 | 29,959 | 29,850 | 30,045 |
| Year I2 Female | 24,434 | 24,677 | 25,170 | 26,033 | 25,712 | 26,220 |
| Year I3 Female | 16,904 | 17,789 | 18,495 | 19,433 | 20,356 | 21,046 |

Figure 2. Numbers of domestic New Zealand male and female students in Years II to I3 on the school roll as at July I from 2004 to 2009.

| Student ethnicity | Year |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 |
| NZ European | 36,999 | 37,470 | 38,187 | 37,078 | 36,230 | 35,868 |
| NZ Māori | 11,029 | 11,842 | 11,931 | 12,574 | 12,669 | 12,910 |
| Pasifika | 4,462 | 4,928 | 5,248 | 5,242 | 5,410 | 5,477 |
| Asian | 4,873 | 5,085 | 5,380 | 5,152 | 5,293 | 5,552 |
| Other ethnicities | 1,139 | 1,338 | 1,502 | 1,393 | 1,294 | 1,460 |

Figure 3. Numbers of New Zealand European, New Zealand Mäori, Pasifika,Asian and other-ethnicity domestic students in Year II on the school roll as at July I from 2004 to 2009.

| Student ethnicity | Year |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 |
| NZ European | 30,523 | 30,277 | 30,729 | 31,731 | 31,140 | 31,572 |
| NZ Māori | 7.121 | 7,209 | 7,445 | 8,019 | 8,432 | 8,889 |
| Pasifika | 3,431 | 3,735 | 4,027 | 4,318 | 4,368 | 4,739 |
| Asian | 4,599 | 4,973 | 5,098 | 5,394 | 5,214 | 5,459 |
| Other ethnicities | 955 | 1,103 | 1,186 | 1,249 | 1,310 | 1,242 |

Figure 4. Numbers of New Zealand European, New Zealand Mäori, Pasifika, Asian and other-ethnicity domestic students in Year 12 on the school roll as at July I from 2004 to 2009.

## Appendix B - Numerical data presented in figures

|  |  | Year |  |  |  |  |
| :--- | ---: | :---: | :---: | :---: | :---: | :---: |
| Student ethnicity | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 |
| NZ European | 20,645 | 21,472 | 21,870 | 22,712 | 23,674 | 24,758 |
| NZ Mäori | 3,988 | 4,183 | 4,366 | 4,794 | 5,145 | 5,876 |
| Pasifika | 2,453 | 2,759 | 2,978 | 3,253 | 3,479 | 3,748 |
| Asian | 4,025 | 4,162 | 4,480 | 4,623 | 5,044 | 5,088 |
| Other ethnicities | 727 | 832 | 978 | 1,037 | 1,130 | 1,206 |

Figure 5. Numbers of New Zealand European, New Zealand Māori, Pasifika, Asian and other-ethnicity domestic students in Year 13 on the school roll as at July I from 2004 to 2009.

| Student Gender | Year II <br> 2007 | Year I2 <br> 2008 | Year I3 <br> 2009 |
| :--- | ---: | :---: | :---: |
| Male | 57 | 68 | 70 |
| Female | 67 | 77 | 78 |

Figure 6. Percentages of male and female students in Year II in 2007, achieving NCEA Level I by the end of 2007 (Year I I), 2008 (Year I2) and 2009 (Year I3).

| Student Gender | Year II <br> 2007 | Year I2 <br> 2008 | Year I3 <br> 2009 |
| :--- | :---: | :---: | :---: |
| Male | 0 | 1 | 28 |
| Female | 0 | 1 | 41 |

Figure 8. Percentages of male and female students in Year II in 2007, achieving NCEA Level 3 by the end of 2007 (Year II), 2008 (Year 12) and 2009 (Year 13).

| Ethnicity | Year II <br> 2007 | Year I2 <br> 2008 | Year I3 <br> 2009 |
| :--- | :---: | :---: | :---: |
| European | 1 | 62 | 67 |
| Mäori | 1 | 35 | 43 |
| Pasifika | 0 | 39 | 54 |
| Asian | 2 | 67 | 74 |

Figure IO. Percentages of New Zealand European, Mäori, Pasifika and Asian students in Year 11 in 2007, achieving NCEA Level 2 by the end of 2007 (Year II), 2008 (Year I2) and 2009 (Year I3).

| Student Gender | Year II <br> 2007 | Year I2 <br> 2008 | Year I3 <br> 2009 |
| :--- | :---: | :---: | :---: |
| Male | 1 | 48 | 56 |
| Female | I | 60 | 66 |

Figure 7. Percentages of male and female students in Year II in 2007, achieving NCEA Level 2 by the end of 2007 (Year II), 2008 (Year I2) and 2009 (Year 13).

| Ethnicity | Year II <br> 2007 | Year I2 <br> 2008 | Year I3 <br> 2009 |
| :--- | :---: | :---: | :---: |
| European | 71 | 79 | 80 |
| Māori | 44 | 58 | 60 |
| Pasifika | 42 | 64 | 68 |
| Asian | 69 | 80 | 81 |

Figure 9. Percentages of New Zealand European, Māori, Pasifika and Asian students in Year II in 2007, achieving NCEA Level I by the end of 2007 (Year II), 2008 (Year I2) and 2009 (Year I3).

| Ethnicity | Year I I <br> 2007 | Year I2 <br> 2008 | Year I3 <br> 2009 |
| :--- | :---: | :---: | :---: |
| European | 0 | 1 | 40 |
| Māori | 0 | 1 | 16 |
| Pasifika | 0 | 0 | 20 |
| Asian | 0 | 1 | 53 |

Figure II. Percentages of New Zealand European, Mäori, Pasifika and Asian students in Year II in 2007 achieving NCEA Level 3 by the end of 2007 (Year I I), 2008 (Year I2) and 2009 (Year I3).

## Appendix B - Numerical data presented in figures

|  | Year |  |  |
| :--- | ---: | ---: | ---: |
| School Decile | 2007 | 2008 | 2009 |
| Decile 1-3 | 48 | 63 | 65 |
| Decile 4-7 | 63 | 75 | 77 |
| Decile 8-10 | 74 | 82 | 83 |

Figure 12. Percentages of students in Decile I-3, Decile 4-7 and Decile 8-10 schools, in Year 1 I in 2007, achieving NCEA Level I by the end of 2007 (Year II), 2008 (Year 12) and 2009 (Year 13). All standard errors are less than one percentage point.

|  | Year |  |  |
| :--- | ---: | ---: | ---: |
| School Decile | 2007 | 2008 | 2009 |
| Decile 1-3 | 0 | । | 19 |
| Decile 4-7 | 0 | \| | 33 |
| Decile 8-10 | 0 | । | 46 |


|  | Year |  |  |
| :--- | ---: | ---: | ---: |
| School Decile | 2007 | $\mathbf{2 0 0 8}$ | 2009 |
| Decile 1-3 | I | 39 | 49 |
| Decile 4-7 | I | 54 | 62 |
| Decile 8-10 | I | 67 | 73 |

Figure 13. Percentages of students in Decile I-3, Decile 4-7 and Decile 8-10 schools, in Year 1 I in 2007, achieving NCEA Level 2 by the end of 2007 (Year I I), 2008 (Year 12) and 2009 (Year 13).

Figure 14. Percentages of students in Decile I-3, Decile 4-7 and Decile 8 - 10 schools, in Year 11 in 2007, achieving NCEA Level 3 by the end of 2007 (Year II), 2008 (Year 12) and 2009 (Year I3).

| Student Gender | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Male | 60 | 61 | 65 | 69 | 66 | 68 |
| Female | 71 | 70 | 73 | 76 | 75 | 76 |

Figure 15. Percentages of participating Year II male and female students gaining NCEA Level I from 2004 to 2009.

|  |  | Year |  |  |  |  |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Student Gender | 2004 | 2005 | 2006 | 2007 | 2008 | 70 |
| Male | 68 | 68 | 70 | 72 | 70 |  |
| Female | 77 | 77 | 79 | 81 | 80 | 80 |

Figure 16. Percentages of participating Year 12 male and female students gaining NCEA Level 2 from 2004 to 2009.

| Student Gender | Year |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 |
| Male | 63 | 64 | 66 | 67 | 64 | 63 |
| Female | 72 | 72 | 74 | 76 | 75 | 75 |

Figure 17. Percentages of participating Year 13 male and female students gaining NCEA Level 3 from 2004 to 2009.

| Student Gender | Year |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 |
| Male | 60 | 61 | 63 | 63 | 61 | 59 |
| Female | 68 | 67 | 69 | 71 | 70 | 69 |

Figure I8. Percentages of Year I3 male and female NCEA Level 3 participants gaining University Entrance from 2004 to 2009.

## Appendix B - Numerical data presented in figures

| School gender and <br> candidate gender | Decile I-3 | Decile 4-7 | Decile 8-10 |
| :--- | :---: | :---: | :---: |
| Single Sex Female | 71 | 78 | 91 |
| Co-ed Female | 58 | 72 | 82 |
| Single Sex Male | 70 | 68 | 80 |
| Co-ed Male | 51 | 65 | 75 |

Figure 19. Percentages of participating Year II male and female students in singlesex and co-educational schools gaining NCEA Level I in 2009 partitioned by decile band.

| School gender and <br> candidate gender | Decile I-3 | Decile 4-7 | Decile 8-10 |
| :--- | :---: | :---: | :---: |
| Single Sex Female | 70 | 75 | 88 |
| Co-ed Female | 55 | 70 | 81 |
| Single Sex Male | 65 | 63 | 71 |
| Co-ed Male | 43 | 59 | 68 |

Figure 21. Percentages of participating Year 13 male and female students in singlesex and co-educational schools gaining NCEA Level 3 in 2009, partitioned by decile band.

| School gender and <br> candidate gender | Decile I-3 | Decile 4-7 | Decile 8-I0 |
| :--- | :---: | :---: | :---: |
| Single Sex Female | 75 | 84 | 93 |
| Co-ed Female | 60 | 77 | 86 |
| Single Sex Male | 73 | 71 | 82 |
| Co-ed Male | 57 | 65 | 77 |

Figure 20. Percentages of participating Year 12 male and female students in singlesex and co-educational schools gaining NCEA Level 2 in 2009 partitioned by decile band.

| School gender and <br> candidate gender | Decile I-3 | Decile 4-7 | Decile 8-10 |
| :--- | :---: | :---: | :---: |
| Single Sex Female | 59 | 68 | 86 |
| Co-ed Female | 44 | 62 | 76 |
| Single Sex Male | 49 | 59 | 70 |
| Co-ed Male | 36 | 54 | 66 |

Figure 22. Percentages of Year 13 male and female students participating in NCEA Level 3 in single-sex and co-educational schools gaining University Entrance in 2009 partitioned by decile band.

| Endorsement type and candidate gender | 2007 | $\begin{aligned} & \text { Year } \\ & 2008 \end{aligned}$ | 2009 |
| :---: | :---: | :---: | :---: |
| Merit Endorsement Male | 24 | 23 | 22 |
| Merit Endorsement Female | 32 | 31 | 32 |
| Excellence Endorsement Male | 4 | 5 | 5 |
| Excellence Endorsement Female | 9 | 10 | 10 |

Figure 23. Percentages of Level I NCEA qualifications gained with Merit or Excellence endorsements by male and female candidates from 2007 to 2009 in Year II.

| Endorsement type and candidate gender | 2007 | $\begin{aligned} & \text { Year } \\ & 2008 \end{aligned}$ | 2009 |
| :---: | :---: | :---: | :---: |
| Merit Endorsement Male | 15 | 15 | 15 |
| Merit Endorsement Female | 23 | 22 | 23 |
| Excellence Endorsement Male | 3 | 3 | 4 |
| Excellence Endorsement Female | 6 | 6 | 7 |

[^3]
## Appendix B - Numerical data presented in figures

|  | Year |  |  |
| :--- | :---: | :---: | :---: |
| Endorsement type and candidate gender | 2007 | 2008 | 2009 |
| Merit Endorsement Male | 17 | 17 | 18 |
| Merit Endorsement Female | 23 | 23 | 24 |
| Excellence Endorsement Male | 4 | 4 | 5 |
| Excellence Endorsement Female | 5 | 5 | 6 |

Figure 25. Percentages of Level 3 NCEA qualifications gained with Merit or Excellence endorsements by male and female candidates from 2007 to 2009 in Year 13.

|  |  | Year |  |  |  |  |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
| Student ethnicity | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 |
| NZ European | 74 | 75 | 77 | 80 | 79 | 79 |
| NZ Mäori | 46 | 46 | 53 | 57 | 53 | 55 |
| Pasifika | 38 | 38 | 42 | 49 | 48 | 50 |
| Asian | 69 | 71 | 75 | 75 | 75 | 74 |

Figure 26. Percentages of participating Year II Asian, New Zealand European, New Zealand Māori and Pasifika candidates gaining NCEA Level I from 2004 to 2009.

| Student ethnicity | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| NZ European | 80 | 79 | 81 | 83 | 82 | 81 |
| NZ Māori | 57 | 57 | 61 | 64 | 63 | 62 |
| Pasifika | 48 | 45 | 50 | 55 | 54 | 55 |
| Asian | 70 | 77 | 77 | 78 | 77 | 78 |

Figure 27. Percentages of participating Year I2 Asian, New Zealand European, New Zealand Māori and Pasifika candidates gaining NCEA Level 2 from 2004 to 2009.

| Student ethnicity | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| NZ European | 74 | 74 | 75 | 76 | 75 | 74 |
| NZ Māori | 50 | 49 | 53 | 58 | 53 | 52 |
| Pasifika | 41 | 40 | 40 | 46 | 41 | 44 |
| Asian | 67 | 71 | 74 | 77 | 76 | 73 |

Figure 28. Percentages of participating Year 13 Asian, New Zealand European, New Zealand Mãori and Pasifika candidates gaining NCEA Level 3 from 2004 to 2009.

## Appendix B - Numerical data presented in figures

|  |  | Year |  |  |  |  |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
| Student ethnicity | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 |
| NZ European | 70 | 69 | 72 | 73 | 71 | 69 |
| NZ Māori | 46 | 44 | 47 | 50 | 46 | 42 |
| Pasifika | 38 | 35 | 34 | 39 | 32 | 35 |
| Asian | 64 | 69 | 71 | 73 | 73 | 70 |

Figure 29. Percentages of Year 13 Asian, New Zealand European, New Zealand Māori and Pasifika students participants in NCEA Level 3 gaining University Entrance from 2004 to 2009.

| School Decile | Year |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 |
| Decile 1-3 | 46 | 47 | 53 | 57 | 54 | 55 |
| Decile 4-7 | 63 | 63 | 66 | 71 | 69 | 69 |
| Decile 8-10 | 76 | 77 | 79 | 81 | 81 | 81 |

Figure 30. Percentages of participating Year II students from schools in decile bands I-3, 4-7 and 8-10 gaining NCEA Level I from 2004 to 2009.

| School Decile | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Decile 1-3 | 59 | 60 | 66 | 68 | 69 | 72 |
| Decile 4-7 | 72 | 74 | 76 | 78 | 78 | 80 |
| Decile 8-10 | 81 | 82 | 84 | 83 | 81 | 84 |

Figure 31. Percentages of Year II students from schools in decile bands I-3,4-7 and 8-I0 gaining the literacy requirement for NCEA Level I from 2004 to 2009.

|  |  | Year |  |  |  |  |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
| School Decile | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 |
| Decile 1-3 | 70 | 72 | 76 | 79 | 80 | 84 |
| Decile 4-7 | 78 | 79 | 83 | 85 | 85 | 89 |
| Decile 8-10 | 83 | 83 | 84 | 85 | 81 | 88 |

Figure 32. Percentages of Year II students from schools in decile bands I-3, 4-7 and 8-10 gaining the numeracy requirement for NCEA Level I from 2004 to 2009.

|  |  | Year |  |  |  |  |
| :--- | ---: | ---: | ---: | ---: | ---: | :---: |
| School Decile | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 |
| Decile 1-3 | 57 | 55 | 60 | 61 | 61 | 60 |
| Decile 4-7 | 70 | 70 | 72 | 75 | 73 | 73 |
| Decile 8-10 | 80 | 80 | 83 | 83 | 83 | 84 |

[^4]
## Appendix B - Numerical data presented in figures

|  |  | Year |  |  |  |  |
| :--- | ---: | ---: | ---: | ---: | ---: | :---: |
| School Decile | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 |
| Decile 1-3 | 53 | 51 | 54 | 57 | 53 | 52 |
| Decile 4-7 | 65 | 65 | 67 | 68 | 67 | 66 |
| Decile 8-10 | 73 | 74 | 77 | 78 | 78 | 76 |

Figure 34. Percentages of participating Year 13 students from schools in decile bands 1-3, 4-7 and 8-10 gaining NCEA Level 3 from 2004 to 2009.

| School Decile | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Decile 1-3 | 47 | 45 | 47 | 47 | 44 | 42 |
| Decile 4-7 | 61 | 61 | 62 | 64 | 62 | 59 |
| Decile 8-10 | 70 | 71 | 74 | 75 | 75 | 73 |

Figure 35. Percentages of Year 13 students from schools in decile bands I-3, 4-7 and 8-10, participating in NCEA Level 3 and gaining University Entrance from 2004 to 2009.

|  | Not Achieved | Achieved | Result | Merit |
| :--- | :---: | :---: | :---: | :---: |
| School Decile | 46 | 38 | 12 | Excellence |
| Decile 1-3 | 34 | 42 | 18 | 3 |
| Decile 4-7 | 25 | 42 | 24 | 6 |
| Decile 8-10 | 25 | 10 |  |  |

Figure 36. Percentage distributions of assessed results for externally assessed achievement standards in 2009 by school decile band.

|  | Not Achieved | Achieved | Result | Merit |
| :--- | :---: | :---: | :---: | :---: |
| School Decile | 29 | 43 | 18 | Excellence |
| Decile $1-3$ | 23 | 40 | 23 | 9 |
| Decile 4-7 | 17 | 36 | 27 | 14 |
| Decile $8-10$ | 17 | 20 |  |  |

Figure 37. Percentage distributions of assessed results for internally assessed achievement standards in 2009 by school decile band.

| Candidate gender and result type | 2006 | 2007 | 2008 | 2009 |
| :---: | :---: | :---: | :---: | :---: |
| Male Scholarship | 1338 | 1321 | 1322 | 1342 |
| Female Scholarship | 1275 | 1360 | 1424 | 1436 |
| Male Outstanding | 174 | 184 | 197 | 191 |
| Female Outstanding | 164 | 171 | 175 | 179 |

Figure 38: Numbers of Outstanding Scholarship and Scholarship awards gained by males and females from 2006 to 2009.


[^0]:    Figure 2. Numbers of domestic New Zealand male and female students in Years II to I3 on the school roll as at July I from 2004 to 2009.

[^1]:    Table 2. Percentages of participating cohorts gaining NCEA Level I in Year II, NCEA Level 2 in Year 12, and NCEA Level 3 and University Entrance in Year I3. Note that

[^2]:    ${ }^{5}$ Note that the zero percent rate of Merit for unit standards is a rounding feature; a small number of unit standard results fell into this category. However the percentage was less than $0.5 \%$ and was rounded down to zero.

[^3]:    Figure 24. Percentages of Level 2 NCEA qualifications gained with Merit or Excellence endorsements by male and female candidates from 2007 to 2009 in Year I2.

[^4]:    Figure 33. Percentages of participating Year 12 students from schools in decile bands 1-3,4-7 and 8-10 gaining NCEA Level 2 from 2004 to 2009.

