

NCEA | Taumata Mātauranga ā-Motu Kua Taea

NCEA Review 2018

Trends in NCEA

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NZQA requires each qualification registered on the New Zealand Qualifications Framework to be regularly reviewed so that the qualification remains useful and relevant and continues to meet the needs of the learners, industry and stakeholders for which it was developed. NCEA is scheduled to be reviewed by December 2018.

This paper outlines trends in the proportions of students achieving NCEA | Taumata Mātauranga ā-Motu Kua Taea¹ qualifications. Our education system provides pathways through secondary school/kura to further training, study and employment. Recognition of learners' achievements through meaningful qualifications is an essential part of these pathways.

Focusing question

What achievement patterns are emerging in NCEA?

Context

This paper looks at trends in the proportions of students gaining NCEA qualifications, using:

- roll-based data from 2004-2016
- gender, decile and ethnicity data
- school leaver attainment by curriculum learning areas in 2016

It also looks at trends in:

- the use of externally and internally assessed standards
- the proportion of Excellence grades awarded
- NCEA endorsements
- course endorsements.

Where appropriate, questions arising from these trends are raised as prompts for a wider discussion and consideration.

¹ Taumata Mātauranga ā-Motu Kua Taea is the Māori name for NCEA. "NCEA" is inclusive of both Māori and English medium.



Overall trends

Over the past 13 years, there has been a steady increase in the proportion of students gaining an NCEA at all three levels. Figure 1 (below) shows the trends.

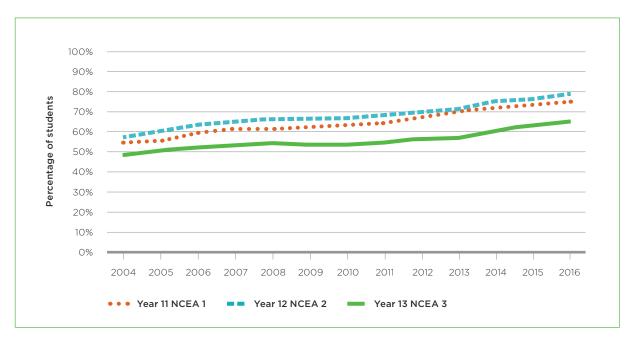


Figure 1: Roll-based trends in NCEA, 2004-2016

The proportion of all ethnicity groups gaining NCEA has also steadily increased over the past 13 years. The rate of increase has been greatest for Māori and Pasifika students and the gap between these groups and European students is closing. This is shown in Figure 2 (below).

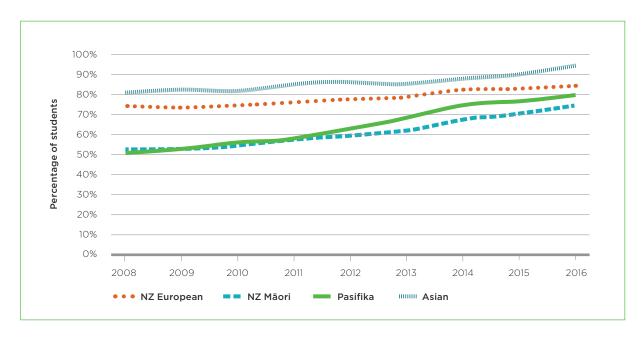


Figure 2: Year 12 students with NCEA level 2 from 2008-2016, by ethnicity



Figures from 2008 to 2016 (see Figure 3, below) show girls are attaining NCEA qualifications at higher rates than boys. However, the gap is closing. For example, among year 12 students gaining NCEA level 2, the gender gap reduced from 10.2 percentage points in 2008 to 6.7 percentage points in 2016.

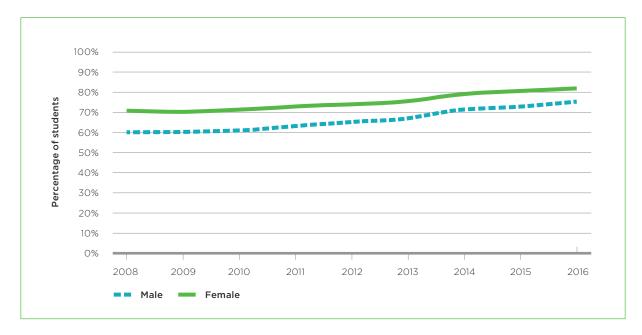


Figure 3: Year 12 students with NCEA level 2 from 2008-2016, by gender

There is a clear correlation between the socio-economic mix of the school/kura the student attended and the percentage of students attaining at least an NCEA level 2 or equivalent. Schools/kura in the lowest deciles (1, 2 and 3) draw their students from communities with the highest degree of socio-economic disadvantage.

Although the gap between attainment at low decile schools/kura and high decile schools/ kura is large, it has been reducing. For example, as seen in Figure 4 (see page 5), among year 12 students attaining NCEA level 2, the gap between low and high decile schools/kura reduced from 21.4 percentage points in 2008 to 18.9 percentage points in 2016.

There is, however, a lot of variation among schools/kura within each decile; some schools/ kura in the lowest deciles have a greater proportion of students achieving a level 2 qualification than some schools/kura in the highest deciles.



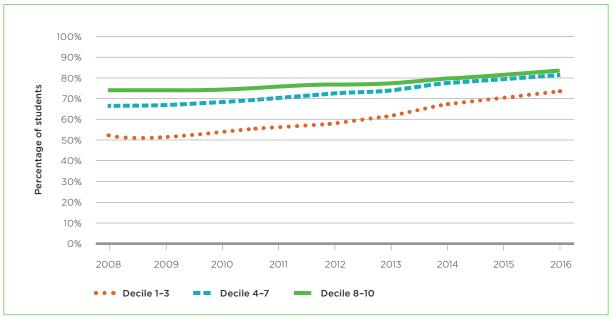


Figure 4: Year 12 students with NCEA level 2 from 2008-2016, by decile band

Attainment by subject group or learning area

Figure 5 (below) shows the attainment of 2016 school leavers in broad subject groups.²

- In all learning areas, as you would expect, more students attain at level 1 than levels 2 or 3. Students have broader curriculum coverage in their level 1 studies and become more specialised at higher levels.
- · English and communications skills has the highest percentage of school leavers attaining at level 1 or above, followed by mathematics and statistics and the sciences.

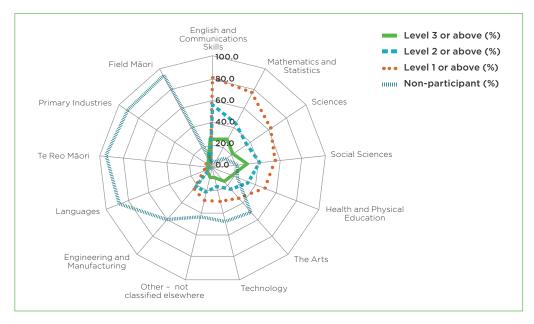


Figure 5: Percentage of attaining school leavers in 2016, by learning area

² Attainment in a learning area or broad group of subjects is defined as achieving 14 or more credits in that area.



Trends in the use of internal and external standards

Data from NCEA level 3 shows that in 2016:

- approximately 31% of achievement standard results (and 35% of credits) were from externally assessed standards
- · approximately 25% of all results (including unit standards) were from externally assessed standards (and 28% of credits).

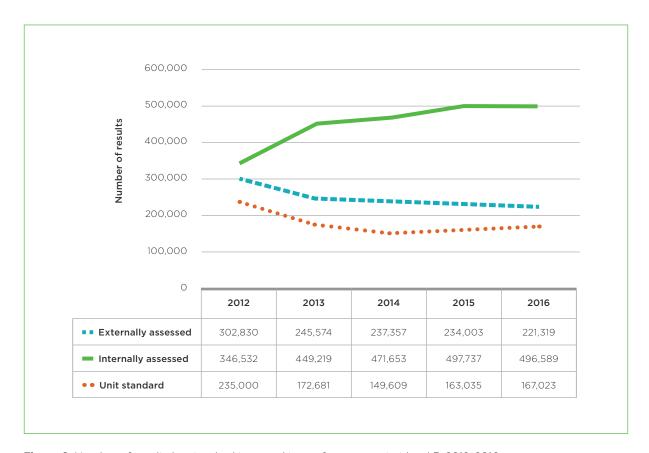


Figure 6: Number of results by standard type and type of assessment at level 3, 2012-2016

Figure 6 (above) shows that the distributions for reported level 3 results closely follow the distribution for the numbers of achievement standards that have been developed in terms of the type of assessment. It appears that the increasing trend of achievement standards assessed internally could be stabilising, but further results are needed to confirm this. However, the downward trend in the use of external assessment continues. We would expect students assessed through internal assessment to perform better and, therefore, overall achievement levels to be higher than external assessment. This is because the assessment conditions are more supportive of learners' needs, students are assessed closer to their learning (not at the end of the year as is the case with external examinations) and the assessment takes place in a less stressful environment.



There are higher proportions of Merit and Excellence grades awarded in internal assessment than in external assessment, which conveys the impression that internal assessment is easier. Along with the decreasing trend in external assessment for NCEA, this is a risk to NCEA's credibility and robustness. It also raises the following questions:

- Is there an optimum/desired ratio of internal to external assessment?
- · Is the consistency of the grade judgements in external and internal assessment arrived at by using the same criteria/process?
- Do some teachers/providers support students too much?
- Are the reassessment and resubmission opportunities being used appropriately?
- Is there pressure on teachers/providers to award credits?

Internal/external Excellence grade distribution of achievement standards results

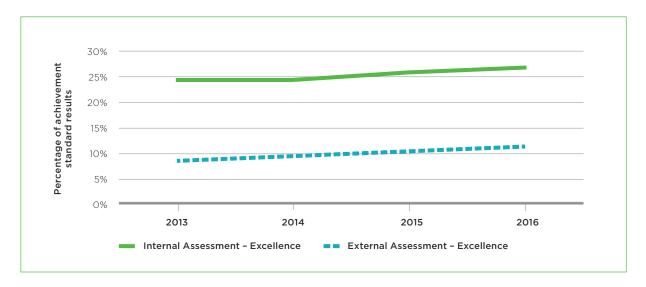


Figure 7: Level 3, year 13 Excellence grade percentages, 2013-2016

The trends in Figure 7 raise questions that impact on the credibility of NCEA, including:

- Are the higher proportions of Excellence grades in internal assessment justified?
- Is there an upper limit of acceptability in the proportions of Excellence grades?
- What constitutes Excellence?
- Does there need to be a minimum requirement for external assessment in an NCEA?
- Does this trend erode the validity and credibility of NCEA?
- What factors are influencing these trends?
- What are the issues and consequences (intended and unintended)?



NCEA certificate endorsement

Certificate endorsement, with Merit or Excellence for NCEA levels 1 to 3, was introduced in 2007 to motivate students towards higher achievement. The number of credits required to gain an endorsement may be accumulated over a number of years. This allows a candidate to add an endorsement to an NCEA certificate that was achieved in a prior year. The achievement rate of certificate endorsement is the percentage of candidates who achieved an NCEA certificate in the same year.



Figure 8: NCEA Merit endorsement

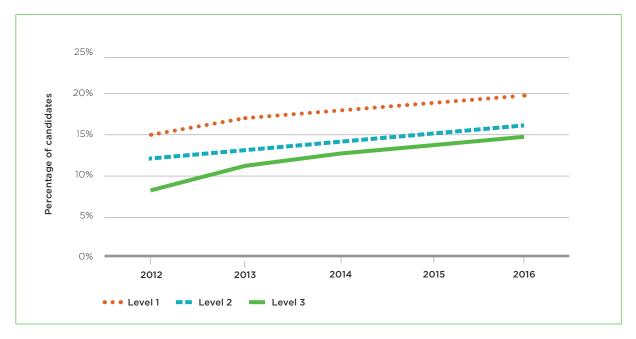


Figure 9: NCEA Excellence endorsement



As seen in figures 8 and 9 (see page 8), the proportions of endorsement with Merit appear to be relatively stable for NCEA levels 1 and 2, with some drop-off at level 3. However, the proportions of endorsement with Excellence are increasing at all levels with gains of 4 to 7% over the past four years.

This raises the question of the levels of credibility for an Excellence endorsement. Is an endorsement at level 1 "devalued" because almost 20% of candidates gain an Excellence? What if the trend continues and it reaches 25%? Is there a need to introduce a minimum of external credits similar to that for course endorsement?

Course endorsement

To receive a course endorsement, a student must gain 14 credits or more at Excellence or Merit in the standards linked to that course. For most courses, there is a further requirement that at least three of these credits must be gained from externally assessed standards and three credits from internally assessed standards. The achievement rate of course endorsement is the percentage of candidates with endorsable courses.

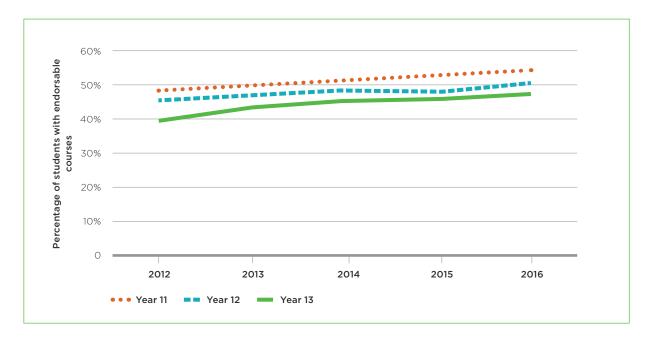


Figure 10: Percentage of students attaining one or more course endorsements

Percentage of Merit and Excellence course endorsements

Figures 11 and 12 (see page 10) show the number of Merit and Excellence endorsements expressed as a percentage of the total number of endorsable courses. Note that these percentages are based on the total count of endorsable courses and not the number of students. For example, if a student has five endorsable courses and attains a Merit for two courses and an Excellence for one course, then five is included in the total count of endorsable courses, two is included in the count of Merit endorsements and one is included in the count of Excellence endorsements.



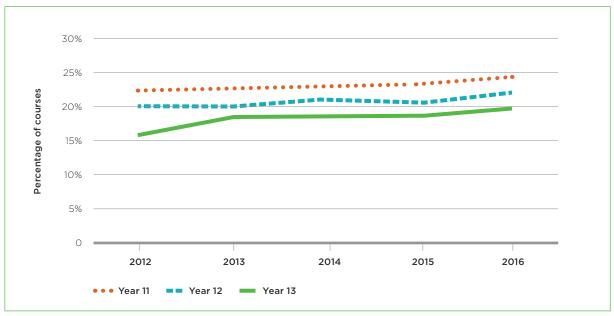


Figure 11: Percentage of endorsable courses awarded Merit

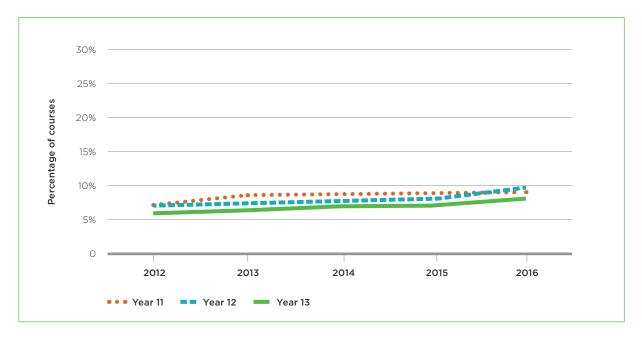


Figure 12: Percentage of endorsable courses awarded Excellence

Again there is an increasing trend in the proportions of endorsable courses that are awarded Merit and Excellence endorsements. Is the level of Merit endorsement, at 25% of all year 11 students, acceptable? Is there a desired level of endorsements? How could this be determined?