Purpose of Report

The purpose of this paper is for you to:

Note that this provides further findings from the Ministry and NZQA investigation into the possible reasons for the decrease in the provisional attainment results for 2018 Year 11 NCEA Level 1.

Note that NZQA have been consulted on this briefing.

Agree that this Briefing will not be proactively released until after the attainment statistics are finalised in April 2019.

Summary

1. Year 11 NCEA Level 1 provisional attainment statistics for 2018 show a national decrease of 4.4 percentage points compared to 2017 final figures. This decrease is more pronounced for lower decile schools (an 8.6 percentage point decrease).

2. Year 12 NCEA Level 2 provisional attainment statistics show a smaller national decrease of 1.9 percentage points compared to 2017 final figures and a 3.8 percentage point decrease for lower decile schools.

3. These results change as late results are submitted up to the end of February and we will not know the overall outcome until the results are finalised in April 2019. We will not know the ultimate outcomes for the 2018 cohort until we can follow them throughout 2019 (and beyond) to see how long they are retained in school and the qualifications they leave school with.
4. Based on patterns observed in previous years these provisional overall national attainment statistics are likely to increase by one to two percentage points by the time they are finalised in April 2019. In the final data we would expect 2018 Level 2 attainment statistics to be similar to the 2017 attainment statistics, although they may be down slightly for students attending decile 1-3 schools.

5. Our investigations into the Level 1 provisional statistics show that there has been a change in the pattern of assessment toward fewer credits being assessed in Level 1, as well as a decline in attainment of literacy and numeracy credits. These patterns may be interrelated.

6. Compared to 2017, fewer students have been assessed in enough credits to gain a qualification (84.2% in 2018 compared to 85.8% in 2017). This is consistent with a change in assessment practice at a school level. This is more pronounced in lower decile schools (1-3). Fewer students at these schools (76.8%) were assessed on enough credits to gain the qualification in 2018 compared to 2017 (79.9%) and 2016 (80.5%).

7. Fewer Year 11 students met Level 1 literacy and numeracy requirements in 2018, down 1.5 and 2.2 percentage points respectively. Some students will have come back to school at the start of 2019 to pick up these credits.

8. Schools with a significant drop in Level 1 attainment were contacted by NZQA School Relationship Managers. There was no single common factor underpinning the change, although about 20% of respondants reported changing their approach to Level 1 assessment (e.g. by offering a two-year Level 1 programme).

9. Nationally, student retention is steady and in decile 1-3 schools it is higher than the previous year. This means that more students have stayed enrolled in these schools early in 2019, which provides them with opportunities to gain NCEA Level 1 (and higher qualifications if they stay in school). We will monitor the retention and achievement rates for this cohort closely through 2019.

Cathryn Ashley-Jones
Group Manager
Evidence, Data and Knowledge
01/03/2019

Hon Chris Hipkins
Minister of Education
20/3/19
Background

1. On 19 January 2019 the Ministry and NZQA briefed you on the 2018 provisional NCEA and UE attainment results [NZQA report CR18480 refers]. Principals received their schools’ provisional attainment statistics and national decile comparator on Thursday 17 January 2019 and on 24 January 2019 they received the provisional results at a national level.

2. Nationally, 2018 attainment for Year 11 Level 1 showed a decrease of 4.4 percentage points compared to 2017 final figures. This decrease was more pronounced for lower decile schools (an 8.6 percentage point decrease), and for Māori and Pacific students (a 6.9 and a 7.5 percentage point decrease, respectively).

3. Based on patterns observed in previous years these provisional overall national attainment statistics are likely to increase by one to two percentage points by the time they are finalised in April 2019. This is because some internally assessed results are reported late by schools and some students apply for a re-mark of some of their examination results which can result in further qualifications being awarded. Provisional statistics for deciles 1 – 3 are likely to move up by a larger percentage than the national movement, based on the trend in previous years.

4. In our previous briefing we advised that factors affecting the decrease in Year 11 NCEA Level 1 attainment could be one or a combination of:
   a. Individual changes in school assessment practice, leading to a smaller proportion of Year 11 students being entered for sufficient credits to attain the NCEA Level 1 qualification in Year 11;
   b. A greater proportion of Year 11 students failing to achieve literacy and numeracy requirements for NCEA Level 1;
   c. A greater number of unreported results for NCEA Level 1 students from schools.

5. We expect the final Level 2, Level 3 and UE attainment statistics to be similar to 2017 levels, although Level 2 results may be slightly lower for decile 1-3 schools. Our investigation has focussed primarily on NCEA Level 1 results because this is where the largest declines have occurred.

6. You requested that the Ministry and NZQA investigate the possible reasons for this decrease in Level 1 attainment.

Further investigation

7. The Ministry has undertaken analysis that compares the NCEA Level 1 attainment among Year 11 students across 2016 - 2018 to better understand what has changed in the provisional results. Note however that the data for 2016 and 2017 are final results therefore comparisons need to be made judiciously. The 2018 data will look more like the 2016 and 2017 data when the results are finalised but we believe they have shifted more than in other years.

8. In addition NZQA School Relationship Managers contacted 91 schools between 30 January and 7 February 2019 to gain insights into what they consider to be the reasons for the decline in NCEA Level 1 attainment.
9. These 91 schools all had statistically significant declines in NCEA Level 1 in 2018, relative to 2017. To identify these schools we took into account the size of the school and the size of the change, which excluded a number of smaller schools whose results vary widely from one year to the next. The decile breakdown of these schools is as follows:

a. Deciles 1-3 (38)
b. Deciles 4-7 (37)
c. Deciles 8-10 (13)
d. Decile unstated (3)

10. The findings presented in this paper have also been considered by the Ministry officials preparing advice for you on options for strengthening NCEA. In particular, the findings have informed our recommendations relating to retention of the Level 1 qualification, student and teacher workload, and the possible impact of changes to credit count expectations on student attainment.

**Findings**

**Comparison of NCEA Level 1 assessment and attainment 2016-2018**

11. Compared to 2017 fewer Year 11 students in 2018 gained NCEA Level 1 (down 4.4 percentage points).

12. There was a similar but smaller drop in the proportion of Year 11 students in 2018 meeting NCEA Level 1 requirements for literacy (down 1.5 percentage points) and numeracy (down 2.2 percentage points).

13. Overall students in Year 11 in 2018 were assessed for, and attained, a smaller number of credits (see Figures 1 and 2), according to provisional data. In total 17,900 Year 11 students have not yet attained NCEA Level 1 (around 2,600 fewer Year 11 students compared to 2017). Of the total number of Year 11 students:

a. 8,400 were assessed on 80 or more credits, sufficient credits to complete NCEA Level 1 but did not attain the qualification (up 1,600 from 2017);

b. 9,500 were not assessed in sufficient credits (up 1,000 from 2017).

**Figure 1 Credits Assessed by All Year 11 students, 2016-2018**
14. Figure 1 shows that there has been a gradual decrease in the number of credits students have been assessed on since 2016. This might suggest that the system has been gradually responding to the public discussion around over-assessment at this level of schooling.

15. In 2018, Year 11 students were assessed on 107 credits on average (down 5 and 6 credits from 2017 and 2016, respectively) and attained an average of 92 credits (down 4 credits from 2017).

16. Students who attained 80-84 credits in 2018 were assessed on an average of 109 credits (down 2 and 4 credits from 2017 and 2016, respectively).

17. The composition of the standards assessed and attained did not change in 2018. Students achieved a similar proportion of unit standards, internal achievement standards and external achievement standards.

Figure 2 Credits Attained by All Year 11 students, 2016-2018

18. Figure 2 shows that a greater number of students in 2018 (44.5%) attained between 80-119 credits than in 2016 and 2017 (41.0% and 43.8%, respectively).

19. Fewer students in 2018 attained 120 credits or more (26.6%) than in 2017 and 2016 (31.3% and 34.3%, respectively). This is again consistent with a change in assessment approach at a school level.

20. In Figure 2 the spike at 80 credits in 2016 and 2017 indicates that schools invested effort in supporting students close to completing the qualification to get enough credits to attain Level 1. This spike is much less pronounced in 2018 (to date) with a greater number of students attaining 60-79 credits in 2018 (8.3%) than in 2017 and 2016, (6.3%) and (5.9%) respectively. We expect some movement from ‘just below’ to ‘at or just above’ the 80 credit mark when results are finalised in April.

21. This spike trend at 80 credits is particularly strong in decile 1-3 and decile 4-7 schools (see Figures A1-A6 in Annex A) however it is again important to note that the 2018 results are provisional and will change when results are finalised.
Student retention to 2019

22. Provided they stay in education and are supported to achieve, the 2018 Year 11 cohort will have the opportunity to gain NCEA Level 1 and Level 2 in Year 12. They would require 60 credits from Level 2 standards and completion of their NCEA Level 1 literacy and numeracy requirements to attain both qualifications.

23. Retention of students to the start of Year 12 has remained stable at the national level. As at 19 February 2019, 89.9% of the 2018 Year 11 cohort are enrolled at school. Retention at the start of Year 12 was 89.7% for the 2017 cohort and 90.0% for the 2016 cohort.

24. Of the all the students that did not attain Level 1, 73.7% have returned to school as at 19 February 2019.

25. For the 5,000 Year 11 students in 2018 who were close to attaining NCEA Level 1 (60-79 credits) the return rate is higher, with 88.7% of students having returned to school as at 19 February 2019.

26. Retention of the Year 11 cohort is higher in decile 1-3 schools this year, particularly for the students who did not gain NCEA Level 1 Year 11 (Annex A, Table 1), reflecting that these students who have been assessed on fewer credits are returning to school. In decile 1-3 schools:
   a. 86.8% of students who have been assessed on >80 credits but did not attain NCEA Level 1 in 2018 are still enrolled in school in 2019, up 5.0 percentage points from the 2017 cohort, and
   b. 50.4% of students who have been assessed on fewer than 80 credits in the 2018 cohort are still enrolled in school in 2019, up 8.8 percentage points from the 2017 cohort.

27. We will monitor these enrolment patterns closely because it can take schools some time to update enrolment records when students have stopped coming to school.

School conversations

28. To better understand the reasons behind the 2018 Year 11 provisional results, NZQA School Relationship Managers made contact with 91 schools that showed a statistically significant decrease in attainment. They were able to get responses from 70 of these schools.

29. Of the 70 schools:
   a. 44 (63%) reported noticing a change in their Year 11 Level 1 attainment.
   b. 27 (39%) did not offer a reason for the decrease in attainment (many of these schools had not yet reviewed their attainment statistics in detail at the time contact was made.)

30. Conversations with schools did not identify a common factor underpinning the change although about 20% of schools reported deliberately changing their approach to Level 1 (e.g. by no longer strongly focussing on Level 1, or by offering a two-year level 1 program).
Next Steps

31. You will be provided with a briefing on the final statistics on 8 April 2019.

32. Final 2018 NCEA, UE and Scholarship attainment statistics will be made publicly available on NZQA’s website on the 16th of April 2019.

33. We will work with your office on a communications plan ahead of the release.

Proactive Release

34. We recommend that this Briefing is not released until after the attainment statistics are finalised in April 2019.

Annexes

Annex 1: Students Achievement by school decile bands
1. Fewer students are being assessed on over 120 credits in all schools in 2017 and 2018. This trend is stronger in decile 1-3 schools. In 2018 students at decile 1-3 schools were more likely to be assessed on 100-119 credits, but at decile 4-7 and 8-10 schools students are still more likely to be assessed on 120-139 credits (see Figures A1 to A3).

**Figure A1 Credits Assessed by Year 11 Students in Decile 1-3 Schools, 2016-2018**

![Figure A1](image1)

**Figure A2 Credits Assessed by Year 11 Students in Decile 4-7 Schools, 2016-2018**

![Figure A2](image2)
2. All school groups show a spike in attainment at 80-99 credits in all years. This spike is much less pronounced in 2018 to date (see Figures A4 to A6), although we expect this to shift when 2018 data are finalised.

Figure A3 Credits Assessed by Year 11 Students in Decile 8-10 Schools, 2016-2018

Figure A4 Credits Attained by Year 11 Students in Decile 1-3 Schools, 2016-2018
Figure A5 Credits Attained by Year 11 Students in Decile 4-7 Schools, 2016-2018

Figure A6 Credits Attained by Year 11 Students in Decile 8-10 Schools, 2016-2018
3. Table A1 shows student retention is steady at the national level and, in fact, higher in for the 2018 Year 11 students from decile 1-3 schools. The higher retention rates for students in low decile schools suggests that there are good opportunities for students who are yet to attain NCEA Level 1 to gain the qualification (and higher qualifications) if they can continue to be engaged in schooling in 2019.

<table>
<thead>
<tr>
<th></th>
<th>Total Students</th>
<th>Percentage Retained</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Attained NCEA Level 1</td>
<td>Assessed on at least 80 Credits</td>
</tr>
<tr>
<td><strong>Deciles 1-3</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2018</td>
<td>6,144</td>
<td>2,543</td>
</tr>
<tr>
<td></td>
<td>18,795</td>
<td>4,023</td>
</tr>
<tr>
<td></td>
<td>16,801</td>
<td>1,789</td>
</tr>
<tr>
<td></td>
<td>41,882</td>
<td>8,409</td>
</tr>
<tr>
<td><strong>Deciles 4-7</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2018</td>
<td>7,186</td>
<td>1,950</td>
</tr>
<tr>
<td></td>
<td>19,863</td>
<td>3,181</td>
</tr>
<tr>
<td></td>
<td>16,972</td>
<td>1,567</td>
</tr>
<tr>
<td></td>
<td>44,200</td>
<td>6,733</td>
</tr>
<tr>
<td><strong>Deciles 8-10</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2018</td>
<td>7,487</td>
<td>2,031</td>
</tr>
<tr>
<td></td>
<td>20,667</td>
<td>3,134</td>
</tr>
<tr>
<td></td>
<td>17,543</td>
<td>1,193</td>
</tr>
<tr>
<td></td>
<td>45,881</td>
<td>6,406</td>
</tr>
</tbody>
</table>

1 In decile 8-10 schools around 1,500-1,800 students in this cohort are doing Cambridge International Examinations, International Baccalaureate or other international assessments so we cannot draw comparisons between retention between deciles for this group.