

Aide-Memoire: NCEA Online Digital Assessment 2018 Trials and Pilots – Psychometric report on the Levels 1 and 2 English Pilot examinations

To: Hon Chris Hipkins, Minister of Education

From: Dr Karen Poutasi, Chief Executive

Date: 31 May 2019

Reference: CR19231

Purpose

- 1. This aide-memoire is to notify you that NZQA intends to publish the psychometric report on the Levels 1 and 2 English Digital Pilot examinations offered in 2018.
- 2. NZQA proposes to proactively release this briefing as part of the next publication of documents.

Background

- 3. Continuing the analytical practice that was used following the completion of the 2016 and 2017 Digital Trial and Pilot examinations, NZQA has prepared a psychometric report on the 2018 Levels 1 and 2 English Pilots Psychometric and statistical analysis of the 2018 Pilot delivery of English Level 1 and 2 externally assessed achievement standards using digital medium.
- 4. Statistical analyses comparing the psychometric properties of externally assessed standards completed in digital and paper formats were performed to investigate the extent to which the two formats afforded students equivalent assessment opportunities. Such equivalence is important to establish as NZQA expands the range of NCEA examinations available digitally.
- 5. The analyses were restricted to Level 1 and 2 English, as these two examinations had a large enough number of participants to provide reliable comparisons of the two formats.
- 6. Digital and paper-format results from the same set of schools participating in the Digital Pilots were compared. Subsequent analysis compared the results after adjusting for student ability, by matching on students' internally assessed standards. As is our usual practice, the methodology and resulting findings were peer-reviewed by an external expert from the NZQA Technical Oversight Group Assessment.
- 7. Overall there was no conclusive evidence of a difference between the two formats of the assessment. For both examinations, while some analysis results indicated that the students found the digital format more difficult than the paper format, this finding was not consistent in all the external standards analysed.

Discussion

8. In terms of communications and media activity, because the results are consistent with previous years, we do not intend to undertake a proactive approach to their publication. We will post the report on the NZQA website, in line with our practice for the 2016 and 2017 Trials and Pilots.

Any public or media queries will be referred to the Executive Summary of the report.

In the event of a "So what does this tell us about the benefits of digital exams?" query, our proposed message would be along the lines:

- Digital learning is evolving and the uptake of digital is growing as we roll out online assessment in a staged way:
- This year's results show us, as they did last year, there is no conclusive evidence of a difference in achievement between students completing assessments online or on paper.
- Most significantly, students are overwhelmingly telling us it is their preference to undertake exams online rather than using pen and paper.
- This report is the latest in a series NZQA has produced since the 2016 Trials and Pilots stage of developing NCEA Online.
- These reports compare exam results in digital and paper formats, controlling for individual differences between the students who undertook their assessment in each format.
- The reports are intended to help make sure there is a 'level playing field' regardless of whether exams are completed online or on paper.

Next steps

9. The psychometric report will be posted on the NZQA website on Tuesday 11 June 2019.

Karen Poutasi (Dr)

Chief Executive, NZQA

31 May 2019

Hon Chris Hipkins
Minister of Education