



NEW ZEALAND QUALIFICATIONS AUTHORITY
MANA TOHU MĀTAURANGA O AOTEAROA

QUALIFY FOR THE FUTURE WORLD
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Aide-Memoire: NCEA Online – further details on planning to scale

To:	Hon Chris Hipkins, Minister of Education. Hon Jan Tinetti, Associate Minister of Education
From:	Dr Grant Klinkum, Chief Executive
Date:	6 July 2022
Reference:	CR24422

Purpose

1. This aide memoire is to respond to Minister Hipkins' request, arising from the NCEA Online Data Dashboard item in the Fortnightly Report to the Minister of Education of 25 May 2022 for a more detailed analysis of NCEA digital examinations with a particular focus on how NZQA will "scale". The Minister also noted a concern that the digital participation profile still skews towards the higher decile schools.
2. NZQA proposes to proactively release this briefing as part of the next publication of documents.

Background

NCEA Online reflects the digital, connected world students live in and allows students to sit examinations online. NZQA has worked with schools and students since 2014 to co-design external digital assessment, and NCEA examinations have been online since 2015 (through trials, pilots, practice and end-of-year exams). Student feedback has been consistently positive about their preference for online exams. A copy of the 2021 NCEA Online Student Experience summary is attached at the end of this briefing.

NCEA online participation

3. Despite the impact of Covid-19, participation in the end-of-year 2021 digital examinations did increase from 2020 to 2021, and satisfaction levels with the digital assessment experience remained high. Highlights for 2021 included:
 - 323 or 67% of eligible schools participated; a 17% year-on-year increase
 - 56 new schools participated in 2021, with 17 not participating that did in 2020
 - 25,814 unique students participated; a 14.5% year-on-year increase
 - 49,848 digital entries were marked; an 8% year-on-year increase
 - 24 subjects, and 151 standards were available digitally; a year-on-year increase of 15% and 15% respectively

- 19.6% of all external assessed results in digitally available standards in 2021 were digital results, up from 17.5% in 2020
 - Only 3% of students, who answered the survey, disagreed/disagreed strongly to the question “overall, I found doing this exam digitally was a positive experience”
4. The summary above generally indicates a healthy but not significant year-on-year increase in digital participation in 2021 compared with 2020. However, the results do not reflect the same rate of increase as for previous years. This can be largely attributed to the effect of Covid-19 and the subsequent necessary application of Unexpected Event Grades (UEGs) in Auckland, Northland and parts of the Waikato¹. This significantly reduced overall student participation in NCEA exams in those areas, and a consequential drop in digital participation. This negative ‘covid effect’ detracted from what should have been another year of significant increases in digital assessment participation.
 5. There was a relative improvement in participation from lower decile schools in 2021 with an 19% increase of decile 1-3 schools participating against an 11% increase in decile 8-10 schools. This increase was also reflected in digital results. However, overall digital participation in 2021 continued to mirror that of previous years with a significant skew towards digital participation in higher decile schools.
 6. This imbalance is exacerbated by proportionately larger size of the higher decile schools but is also indicative of a need to better support students/ākonga that attend relatively less resource-rich schools and kura.
 7. Also, to achieve an NCEA there is no requirement for students to enter for externally assessed standards and there are, overall, lower levels of participation in NCEA external examinations by lower decile kura and schools. Consequently, participation by low decile kura and schools in NCEA Online is lower in comparison to other kura and schools, as NCEA Online assesses external standards only.
 8. An increased focus for NZQA in 2022 is in identifying and providing more direct support for schools and kura that have limited experience of participating in digital examinations or are participating in digital assessments for the first time through being pilot schools for the NCEA Change Programme.
 9. It is encouraging to note that the decile split for NCEA Review Pilot schools/kura in 2022 indicates a slightly higher participation from Decile 1-3 schools (74) compared with Decile 8-10 schools (71).

Discussion

10. While NCEA Online has set progressive targets for digital uptake, NZQA’s approach has been to support kura and schools to ‘opt in’ to digital assessment, rather than to mandate the change.

¹ To reflect the COVID disruption in Term 4 2022, when students are normally preparing for examinations, NZQA invoked a regionally based Unexpected Event for Auckland, Waikato and Northland.

Each year, schools are required to provide standard specific, quality assured evidence of a student’s learning for each externally assessed Achievement Standard entry; the Unexpected Event Grade (UEG) sits as a robust alternative grade if the student is prevented from sitting an examination or their performance is impaired.

Our expectation was that students in regions in Alert Level 3 attend the examinations if possible and would then be awarded the best of either grade. However, students in these regions who could not attend an exam because of a specific COVID-19 disruption received their UEG.

11. In 2020, NZQA communicated to all kura and schools that we would like all kura / schools to have offered ākonga / students the opportunity to do at least one NCEA Online exam, by the end of 2022. A key element of the NCEA Online Programme, that supports the continuing growth of online assessment, is to provide the opportunity for schools to offer digital practice exams using NZQA's online exam platform. This is beneficial for schools that have never participated in digital exams as it enables teachers and students to experience digital exams in a less stressful context than NCEA end of year exams.

NCEA Change Programme Digital first approach

12. The NZQA NCEA Change Programme was established to ensure NZQA, working alongside the Ministry of Education, can successfully deliver on its commitment to support implementation of the Government's NCEA Review Change package. In particular, the Change Programme is focussed on the supporting the Ministry in its development, piloting and implementation of the new achievement standards, as part of the Review of Achievement Standards (RAS), the new Literacy and Numeracy unit standards, and associated assessment materials.
13. The NCEA Review pilots are "digital first", which means that an assessment is delivered, responded to by the student, and marked on a digital device (usually a computer). The expectation has been set by the Ministry that schools and kura participating are equipped and prepared to engage digitally during the pilots. Digital assessment for the pilots is delivered through the NCEA Online platform, Assessment Master, or via the upload of a digitally submitted artefact.
14. The distinction between the NCEA Online and NCEA Change programmes will narrow over the coming months with the Change Programme assuming the mantle as the driver of digital assessment growth and participation. Once the NCEA Online programme has been fully disestablished by June 2023, the NCEA Change programme can seamlessly continue the journey towards full digital examination availability and participation.
15. The NCEA Review settings require both internal and external standards to be attained for the qualification to be awarded. The impact of these settings will be to increase participation by all students in external assessment.
16. The NCEA Change Programme, in adopting a digital first approach to the delivery of assessments, is increasing digital uptake by default. Increased digital delivery of, and frequency of, assessment though the year means we can also accelerate the transition to digital and away from a paper-based underpinning business approach.
17. For example, 94% of assessments in the 2022 NCEA Review pilots² are digital and responses for remaining standards will be digitised and marked online. Moreover, by early June 2022, digital entries, including pilots, had increased by +114% (to 124,049 entries) compared to entries received by June 2021.
18. For 2022, the NCEA Online platform will be hosting a large set of new digital assessments for pilots. There will be up to 63 new standards assessed as either Common Assessment Activities, Pilot Examinations, or Literacy and Numeracy tests that will be available delivered via the NCEA Online platform and/or marked in the digital marking application. In addition, there are a further 31 assessments that are submitted online and marked digitally.
19. Adopting a digital first approach for the NCEA Change Programme is a critical decision in ensuring a successful transition to all NCEA assessments being digital. Increasingly, over the next 4 years of the NCEA Change Programme, new 'digital first' standards will enable digital assessments to be developed across all subject areas.
20. By the time RAS is completed in 2026, teachers will have been increasingly exposed to digital assessments each year for the last 10 years; there will be digital assessments being run throughout the year and not just year-end; and teachers will have had the opportunity to

² In 2022, all draft NZ Curriculum and Te Marautanga o Aotearoa Level 1 standards; Te Ao Haka Levels 1-3 standards; and Literacy and Numeracy | Te Reo Matatini me Te Pāngarau unit standards are being piloted.

continue to access Professional Learning and Development (PLD) for a further 4 years, with the Ministry retaining digital fluency as a high priority for teachers and leaders in all schools and kura.

Future focus

21. Based on experience to date and reflecting the anticipated impact of the NCEA Review Programme over the next 4 years, NZQA have set progressive targets for participation in digital assessments that culminate in the expectation that by 2026:
 - All NCEA external examination subjects are available in a digital format
 - All schools and kura adopt a digital first approach to all NCEA external assessments (paper by exception)
 - All assessed students participate in digital assessment and testing
 - All NCEA external assessments are marked digitally
 - At least 90% of NCEA external assessments are sat digitally.
22. Results from a recent survey of Principals' Nominees (PNs) has reinforced the continued need to focus on teacher and school support as a means of scaling digital participation. The main concerns raised by the survey were:
 - Teacher confidence in digital assessment
 - Stretched teacher resources
 - Support from NZQA
 - Device challenges
 - Accommodation challenges
 - Infrastructure challenges.
23. Initiatives to build teacher confidence and schools support in 2022, and thereby encourage digital participation, include:
 - Providing familiarisation online activities for students / ākongā to help them to navigate and effectively use the functionality in assessment master
 - Providing induction to the assessment delivery tools NZQA uses for NCEA Review pilots
 - Providing weekly assessment induction delivery refresher drop-in sessions from the end of May to support pilot kura and schools to be prepared for intra year assessments for NCEA Pilots (PNs and teachers)
 - Developed collateral – online video instructions in English and te reo Māori; e-learning modules; written guides and job aides – to support PN and teachers to use NZQA systems
 - Offering Digital Practice Exams on NZQA's assessment platform to provide a low risk and high value (opportunity to gather data to support derived grade if needed) proposition to teachers and students
 - Working with Ministry of Education Te Mana Tuhono project to identify and prioritise senior secondary schools and kura for equipment upgrades
 - Continuing to work with N4L on initiatives to build school confidence in digital readiness, provide technical support capacity to schools over the examination period, and to better understand barriers within schools that are slowing digital take-up
 - Implementing a support model that includes an induction to pilots and assessment, regular online hui, a virtual collaboration space for pilot teachers (Te Aka), efficient

enquiries management, and learning and development opportunities for PNs and teachers on how to use NZQA's digital assessment tools

- Undertaking analysis of prior digital participation data and PN responses to a digital readiness survey to identify kura and schools needing extra support to prepare for external digital assessment
- Updating the knowledge base for the Contact Centre so that efficient and effective support is provided to kura and schools if called on the day of the assessment (intra-year and end of year)
- Implementing a support model for the NCEA Review pilots that ensures that queries from kura and schools are responded to within 48 hours, including complex matters that may need a policy position to be developed.

24. NZQA continues to enhance the digital assessment experience for students. NZQA is also developing, with an external vendor, a functional text-to-speech application that can be integrated with the NCEA Online platform so that ākonga can hear written te reo Māori text while undertaking their NCEA examinations, as well as providing te reo Māori spellcheck functionality. It is planned to trial this in late 2022.

Next steps

25. NZQA will continue to focus on increasing digital participation in NCEA assessments, in collaboration with, and providing support to, schools/kura and other stakeholders.

26. In particular, NZQA is aligning itself with the Ministry of Education's revised approach to the implementation of the NCEA Change Programme. The continuing digital first focus of the NCEA Programme provides critical momentum to enable NZQA to significantly scale the uptake of its digital examinations.


Dr Grant Klinkum

Chief Executive

6 July 2022



Hon Chris Hipkins

Minister of Education

12 / 7 / 22

*Thank you for this very useful note.
I remain concerned not enough emphasis
has been placed on the equity
implications of a digital first approach.
The challenge can be met, but it
will require a concerted effort.
CH.*



Hon Jan Tinetti

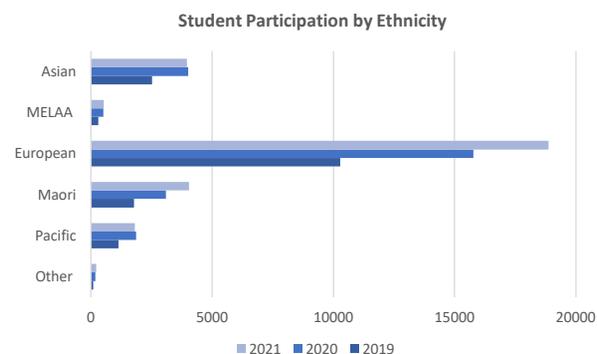
Associate Minister of Education

31 / 07 / 2022

NCEA Online Student Experience 2021

NCEA Online 2021 Overview

- **25,812** unique students participated in NCEA Online in 2021. (Student participation is defined as a student who has a digitally assessed result (Not Achieved, Achieved, Merit, or Excellence).
- 85% of 2021 student survey respondents (15% response rate) reported that doing their exam digitally was a positive experience.
- **7,828** of the **25,812** students who participated in at least one digital exam in 2021 had participated in at least one digital exam in 2020.
- **8,066** of the **25,812** students who participated in at least one digital exam in 2021 had also participated in at least one digital exam in both 2020 and 2019.
- Since 2019, **48,312** students have participated in NCEA Online end of year digital exams.
- In **2021**, Digital Examination Sessions increased from **58** to **67**.
 - Subjects offered increased from **21** to **24** over Levels 1 - 3.
 - Standards increased from **134** to **151**.
- In **2021**, 6.5% of all External Assessed Results are Digital. (Was 5.8% in 2020)
- 19.6% of all External Assessed Results in Digitally Eligible Externals are Digital Results. (Up from 17.5% in 2020)
- 20.6% of students who have at least 1 External Assessed Result, have at least 1 Digital Assessed Result. (Up from 17.7% in 2020)



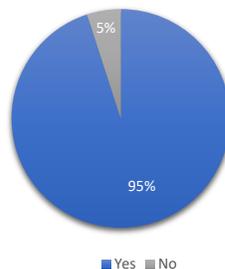
Participation in Digital Examinations

Of the 145,981 total digital entries, 31.7% had an assessed digital result 18.9% had an assessed paper result 49.4% had either a Paper or Digital Void/ Absent result. (i.e. did not attempt the standard or were absent for the exam), with void results making up 8.1% of total digital entries. System responses to COVID-19 impacted on examination attendance in 2021. Results for students affected by technical issues were the higher of their marked response or their school-supplied Unexpected Event Grade.

Did you experience any network or device problems while accessing or completing this digital exam?
 Almost 84% of respondents say they had no problems with the Digital Examination, 9.3% of respondents say they encountered network problems, and 6.7% say they encountered problems with their device.

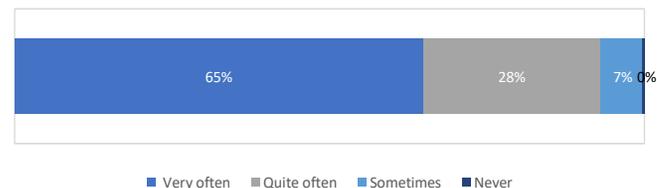
What device did you use to complete this digital exam?
 31% of survey respondents used a school provided device. 69% of respondents used their own device.

Did you sit this digital exam at your usual kura/school?



The ethnicity of participating students in 2021 was 15.7% Māori, 7.0% Pacific, 15.4% Asian, 2.1% Middle Eastern/Latin American/African, 73.1% European and 0.8% students from other ethnicities.

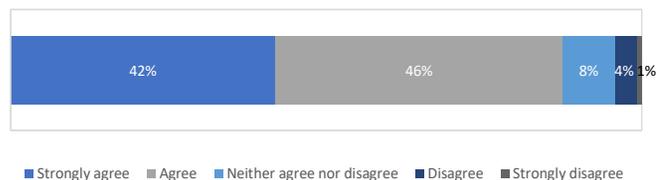
How often do you use digital technology for your schoolwork?



Overall, I found doing this exam digitally was a positive experience.



It was easy to log on to the digital exam.





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2021 Key Points

- 323 schools participated in NCEA Online Exams in 2021, including 56 new schools.
- 17 schools that participated in digital exams in 2020 did not participate in 2021.
- Participating schools are from all around the country and from all decile ranges – 81 in decile 1-3, 137 in decile 4-7, and 102 in decile 8-10.
- Proportionally more digital results are from higher decile schools which tend to be larger than those in lower deciles.

Support for schools

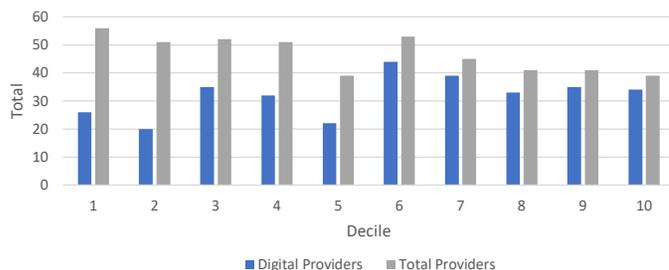
- 233 schools took up the Network Assurance Check with Network for Learning (N4L) assistance.
- N4L also monitored the digital exams in real time, making calls to support 9 schools during the exam period.

Of the 1718 calls handled by NZQA's Exam Helpline over the 28 days of the exam support period:

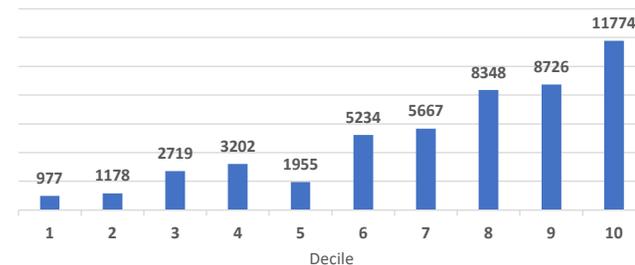
- 759 calls (52%) were resolved by a NCEA Tier 1 Helpline Agent.
- 137 calls (8%) ended with hang up from Tier 1 Agent Helpline.
- for the Tier 1 Agent Helpline:
 - Average speed to answer was 55 secs
 - Average talk time was 3 mins 38 secs
- 686 calls (47%) were transferred to a NCEA Tier 2 Specialist.
- 31 calls (5%) ended with hang up from Tier 2 Specialist line
- for the Tier 2 Specialist line:
 - Average speed to answer was 16 secs
 - Average talk time was 2 mins 49 secs.

NCEA Online School Participation 2021

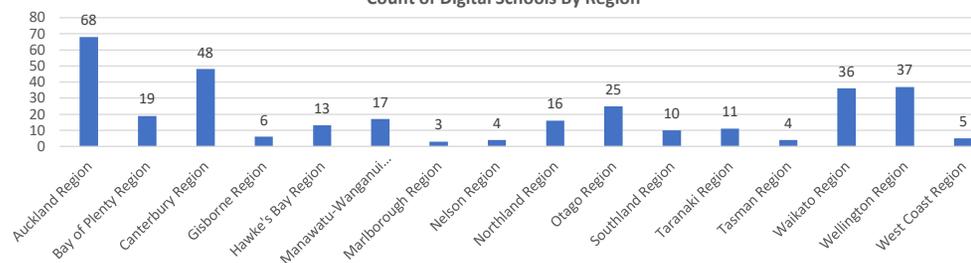
School External Exam Participation by Decile



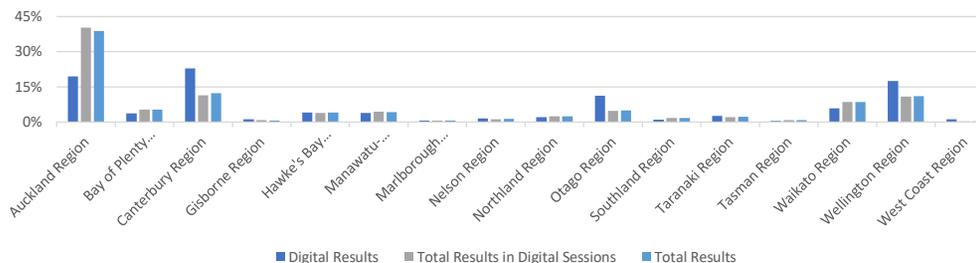
Digital Results by Decile



Count of Digital Schools By Region



Percentage of digitally assessed results against total exam results by region



Themes in student responses to the survey question 'What would improve your experience of the exam location/space?'

- Easy access to power points in case batteries need charging.
- Prefer to be in my classroom
- Prefer larger auditorium/space.
- Nothing, I'm comfortable in this familiar environment.
- No, my classroom was great and the environment was very relaxed. Kei te pai tātou.
- I whakaaro au he pai te nohanga ki te kura.
- A more comfortable environment eg having food available; relaxing music/own music; more comfortable chairs (that don't wobble).
- Using headphones or having ear plugs
- Digital students worry that sound of typing could be distracting for those doing a paper exam in the same room.