

Co-Managed Trials School Case Study

School	Cashmere High School	MoE Id	340
Roll Year 11 cohort	1906 400	Region	Canterbury
School Type	State Co-educational Yrs 9-15	Decile	9

Cashmere High School was involved in the previous digital examinations:

2015 Online Practice Examinations

2016 Digital Trials in L1 Spanish, L1 Health, L1 Business Studies and L1 Economics

2017 Digital Trials and Pilots in L1 English and L1 Media Studies

Situation

Cashmere High School has had a Bring Your Own Device (BYOD) programme for three years and considers it a success. A recent evaluation of the programme indicated that over 90% of students bring their devices to school.

The school runs professional development courses to upskill staff in using technology. Staff are encouraged to take a blended pedagogical approach, combining digital learning with traditional classroom methods. The school is basing their transformation on the SAMR model and staff use this to assess and evaluate the way technology is used within the teaching and learning context.

In most, if not all subjects, students use devices to either submit internal assessments or to support their work.

For Years 11-13 the school strongly recommends students have a PC or Mac laptop with a battery life of 5-8 hours, dual band wireless, 4 GB RAM, SSD 120 GB hard drive and a minimum screen size of 11". Experience has shown that devices with these minimum specifications provide students with the best opportunity to maximise the device within their learning. The school uses Google applications and offers students free Google software.

At times the school has had issues with the reliability of its wi-fi. The school has undergone the second iteration of the School's Network Upgrade Programme which should address the wi-fi issue. The upgrade will also add a significant number of access points across the school which will enhance access for teaching, learning, and assessment.

Examination Management

In 2016 the school took part in NZQA's Digital Trial examinations, which provided it with an opportunity to test its readiness for digital assessment and consider what would be needed in the future.

In 2017 the school organised for the entire cohort of 402 English students to sit the Level 1 English Digital Trial examination. The cohort was split into two groups with 185 students registered for one standard and 188 in the other two standards. 329 students

completed the examination digitally with the rest either opting to do the entire examination on paper or switching (11 students) to paper during the examination.

The school identified the following challenges to overcome in the 2017 Digital Trial Examinations:

- Each internet access point had a limit of 25 students and the examination would be spread across multiple classrooms. The management and supervision of the English examination, in particular, would be logistically challenging.
- The school was unable to use the hall as there was only one internet access point, which would limit the space to only 25 students.
- There were insufficient power points available, so the students would be required to have a fully charged device.
- The school would be using a digital supervisor to manage the digital examinations and a series of supervisors across the rooms. None of these supervisors had managed a digital examination before.

The school ran the English Digital Trial on 21 August and the Media Studies Trial on 22 August 2017.

The English examination was organised across 20 rooms with 70 students completing the examination in computer rooms on PCs and the rest using their own devices. The school used 22 NZQA supervisors plus 18 school staff across these rooms with five staff roving as per NZQA's 2 per room supervisor requirement. The school provided 2 laptops per room for the supervisors and two spare laptops per room for student issues. This was a serious drain on their resources as they still have a large number of year 9 and 10 students at school.

21 students completed the Media Studies Digital Trial, with one student electing to complete the examination on paper prior to the examination starting.

Having learnt from the English Digital Trial, and because the cohort was significantly smaller, the Media Studies examination presented few problems in terms of examination management.

During the trial examination, the school identified some issues they felt they needed to address in the Digital Pilot examinations at the end of 2017. For the digital pilot examination, they ensured that

- All laptops were fully charged
- Year 9 and 10 Student Wi-Fi traffic was restricted to ensure the students completing the examination had priority

The school also identified issues for NZQA to resolve for the Digital Pilot examinations. The start of the examination was messy, and NZQA streamlined the processes associated with provision of passwords and logins, logging on, and getting the examination underway. These processes were communicated to examination supervisors.

The supervisors experienced a “lock out” notification issue during the English Trial whereby students were shown as being locked out, when they were not. This issue has been resolved.

Several students experienced the “loading hang” that has been reported across a number of schools and subjects. This was resolved by refreshing the browser window, with the autosave feature ensuring no work was lost.

The school identified a capacity issue recruiting sufficient supervisors who have a working knowledge of digital technology. Training, in addition to the administrative requirements, needed to be on a reasonably large scale given the number of supervisors the school required.

Staff impressions

Staff were keen to be involved in the Digital Trial examinations and made the decision to register their entire L1 English cohort. It was understood that this would present significant challenges for the school – not least the capacity of their infrastructure to cope with 400 students at one time. However, the school made that decision on the basis that if the experience was not positive, or they felt their students would be at a disadvantage undertaking a digital examination, they could resort to a paper examination at the end of the year.

At the pre-Trial meeting, staff indicated a strong preference to be able to provide individual formative feedback for each student. This is not part of NZQA’s usual examination systems, but NZQA provided a series of image files of student responses and a spreadsheet of the results for the school.

The English staff collectively explored the Familiarisation Activities prior to providing access to the students. They found the activities useful in that they replicate the Trial examination. The ability to save student material was raised as a possible improvement to the Familiarisation Activities.

Students appeared to be fully engaged in the digital examinations – more so than the teachers would expect in a paper examination. Staff interviewed after the digital trial examinations had formed the impression that their results were either the same or slightly better than if they had completed the examination on paper but this has yet to be confirmed by detailed quantitative analysis.

Staff expressed confidence in preparing students and encouraged their students to sit the Digital Pilot examinations at the end of the year. There were some concerns about ensuring there would be sufficient devices available, and the logistics associated with undertaking a digital examination on a similar scale to that of the Digital Trials.

Student impressions

A small group of students (8 students) were interviewed after the digital trial examinations. Some students completed the English Trial on their own devices and two of them used school provided desktop computers. Some reported frustrations with the

noise generated by typing on the keyboards. It is recommended that students consider the use of earplugs to reduce the effect of keyboard noise.

All the students had used the Familiarisation Activities as a classroom exercise and felt that it adequately prepared them for the Digital Trial examination.

At the pre-trial examination meeting, students were concerned about how NZQA would prevent cheating in a digital examination and the anti-breach software was explained to them. At the post-trial examination meeting, the students felt they understood the anti-breach software, but some were concerned about the sensitivity of it. The students who had experienced the lock out message during their examination did not appear to be fazed by it.

One student experienced the “loading hang” and decided to complete her examination on paper. She was not deterred by this though, and indicated that she would still prefer to sit the Digital Pilot examination.

About half of the students used the paper resource for AS 90851 (Show understanding of significant aspects of unfamiliar written text(s) through close reading, using supporting evidence) and wrote all over it. The other half relied on the digital version alone.

Students suggested the ability to highlight within the digital examination would be an improvement.

Most students planned their essays in the digital examination, or planned on paper. While they were comfortable using text, they agreed that the ability to draw mind maps within the planning space of the digital examination would be useful.

All the students appreciated the fact they could edit their work and felt that this assisted them in achieving a grade at least as good as what they would have received had they completed the examination on paper. One of the students had very untidy handwriting and felt that the ability to type enabled him to feel more assured that he was able to get his ideas across.

Most of the students felt they were able to complete their essays faster – leaving them more time to edit thereby creating a better essay.

All of the students in the meeting expressed a preference for the digital examination rather than the paper examination.

2017 Digital Pilot experience

Cashmere High School students were entered in the Level 1 English and Level 1 Media Studies Digital Pilot examinations. The school had a good experience, though some students still struggled with the URL and passwords for logging in, and reverted to paper.

Rooms were set-up in a traditional examination seating plan.

Looking ahead, the school expressed concern about the amount of resources required, in terms of personnel, equipment and infrastructure. There are also concerns about the equity of access for students - those that potentially need this the most have the least amount of access to a device that is of a good quality.