

Scanned Paper Response Innovation Trial 2020 Summary

NCEA Online Programme



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2020 Innovation Trial Summary: Scanned Paper Response

Trial overview

The purpose of this trial was to scan a selection of completed Level 2 Chemistry AS91165 exam booklets and upload them into the RM Assessor³ e-Marking tool. This would combine the marking of students' paper-based and digital exam responses to investigate the benefits from reducing the amount of paper printed and discarded during exams. We wanted markers' feedback about the process and to confirm that the scanned responses could be marked easily.

Trial objectives

The trial was run as a proof of concept to scan booklets for marking in RM Assessor³ with scanned images made available for the 'return to candidate' process.

We wanted to assess whether:

- Scanned images can be successfully loaded into RM Assessor³
- Images in RM Assessor are at an agreed level of quality
- Assessment can be marked in RM Assessor³
- A solution to store images and allow students to access assessments is sourced
- The solution complies with security and privacy regulations
- A successful trial should lead to a 'live' pilot during the 2020 examinations.

Findings

Based on the results of the evaluation and feedback received from participants, the outcome of the trial was relatively positive. Participants' feedback indicates that further discussions and decisions within NZQA are needed, focusing on:

- whether changes to the layout of any scanned examination papers are required
- whether all pages are to be scanned in colour
- the training requirements for markers
- the recommendation to markers to use desktop, rather than a laptop, to mark scanned responses
- how the marks for responses are stored
- the functionality required to trial an end-to-end scanned booklet process.

The reliance on RM Assessor³ to deliver on time will be a key factor in any future scanning work.

Evaluation of the trial

At the end of the trial, nine out of the 15 participants (who included markers, NZQA staff and the scanning contractor), completed an evaluation questionnaire about the management of the trial. Here's some of their feedback:

- Of the nine respondents, five agreed that they understood the purpose of the Scanned Paper Responses Innovation Trial.

- Four out of the nine respondents strongly agreed that they had opportunity to contribute adequately to the requirements-gathering exercise prior to the trial.
- Four respondents felt prepared for their role in the trial, with some reservations expressed that more preparation would be needed for a live marking process.
- Six respondents agreed that the trial work assigned to them allowed an accurate and reliable assessment of marking the scanned paper responses.

The scanning process for the contractor was found to be relatively straightforward once the set-up for the scanners was configured to RM's specifications. The scanning contractor was able to test various elements and workflow assumptions. The quantity of booklets scanned was ideal for this trial.

Conclusion

While highlighting some areas for NZQA to address for any future scanning activities, the trial was a useful exercise to provide NZQA with confidence that scanned responses can be marked in the digital marking application RM Assessor³ and that the process is fit for purpose.

Lessons learned

The following lessons were learned from the trial:

- Full end-to-end testing of the functionality should take place before piloting.
- Collaboration and agreement from the business needs to occur prior to a pilot or trial.
- NZQA and vendor specifications must be understood and agreed by all parties.
- Timelines must allow vendors opportunity to build and test the scanning functions/processes.
- Trial participants should be given comprehensive instructions and training.

Next steps

Another trial to test the required functionality and design solutions for the business is planned for 2021.