The following report gives feedback to assist assessors with general issues and trends that have been identified during external moderation of the internally assessed standards in 2023. It also provides further insights from moderation material viewed throughout the year and outlines the Assessor Support available for Digital Technologies.

Insights

91902: Use complex techniques to develop a database

Performance overview:

This standard involves the design and development of a database to organise, query and present data for a purpose and end-users. The design of the database should include the tables, datatypes, queries, relationships, and input and output interfaces. Testing should show that the data is updated correctly in the database after changes are made and data integrity is checked.

Evidence that met the requirements of the standard showed planning of the tables and datatypes before development. Input and output interfaces were wireframed and the related queries documented. Data integrity and testing was captured using screencasts that clearly showed how the data was updated as a result of changes made using the developed interfaces.

Practices that need strengthening:

A common issue seen in moderation is gathering the planning documentation after implementation, using screenshots of the developed database. This planning should take place before development and could be handwritten or sketched. The input and output interface should also be planned, and wireframes could be used.

For Merit, evidence of using testing to make improvements to the quality of the outcome should be clearly documented. Annotated screenshots showing the changes made could be used. This differs from fixing errors, and should show deliberate improvements.

91903: Use complex techniques to develop a digital media outcome

Performance overview:

This standard involves the development of a digital media outcome to meet end-user requirements. Evidence must show the use of at least two complex techniques during the development. The standard requires a focus on the application of user experience principles, data integrity and testing.

Students who explored user experience principles relevant to their type of outcome before commencing development were more prepared, and were able to show how they had applied the principles. Using annotated screenshots was a good way to show the application alongside evidence of improvements to quality.

Practices that need strengthening:

A common issue seen in moderation is the outcome not incorporating at least two complex techniques, or the outcome not aligning in complexity to curriculum level 8. For example, using applications to make outcomes with pre-built templates that require minimal development. Explanatory Note 4 gives guidance on the expected level, and additional guidance about techniques suitable for the media type should be given to students.

Application of user experience principles could be strengthened by identifying relevant principles, showing how the user was considered and providing screenshots or documentation of how the principles have been applied. For Merit, evidence of the improvements to the quality should go beyond incremental development and show deliberate changes based on testing and user experience principles.

91907: Use complex processes to develop a digital technologies outcome

Performance overview:

This standard requires using recognised and appropriate project management tools to plan the development of a digital technologies outcome. The outcome is decomposed into components which are trialled and tested, and this information is used to ensure the outcome functions as intended.

Evidence that met the requirements of the standard used multiple project management tools and techniques in an authentic manner. For example, using Kanban boards alongside sprints and retrospectives, with screenshots documenting progress and updates. Version control software was used, with well named commits and appropriate comments.

Group projects that had clear evidence of each student's contribution worked well. For example, by colour coding boards and tasks.

Practices that need strengthening:

A common issue with this standard is insufficient evidence of multiple project management techniques throughout the development, or using techniques that do not support the development. For example, mixing Agile techniques with Waterfall, or not updating boards throughout the project.

Components of the outcome should be identified clearly and trialled. This is different to phases of development, and examples could be parts of a website or modules of a program.

Assessor Support:

Online

NZQA's learning management system (Pūtake) offers 150+ easy to access courses, materials and products. These are designed to support teachers, as assessors, to improve their assessment of NCEA standards.

Online, subject-specific or generic, bite-sized learning modules and short courses are now available to complement the traditional face-to-face workshops that NZQA offers. These online courses can be accessed using your Education Sector Logon.

Subject-specific course/workshops available for Digital Technologies include:

- Relevant Implications

Online Making Assessor Judgements workshops are also available throughout the year. These workshops are structured to guide teachers to improve their understanding of each grade level by examining several full samples of student work. The following standards are available for enrolment in 2024:

- 91900: Conduct a critical inquiry to propose a digital technologies outcome
- 91901: Apply user experience methodologies to develop a design for a digital technologies outcome
- 91903: Use complex techniques to develop a digital media outcome
- 91906: Use complex programming techniques to develop a computer program
- 91892: Use advanced techniques to develop a database
- 91893: Use advanced techniques to develop a digital media outcome
- 91896: Use advanced programming techniques to develop a computer program

Feedback from teachers for these workshops indicates that more than 74% of participants agreed or strongly agreed that the content in the module was beneficial:

"*Although I was a bit skeptical that this was going to provide me with better understanding of the standard (and marking it), I found I've picked up more certainty about making judgements about the work my students might produce. I'm also more secure about guiding them through the selection of their topic and setting it up so that they are able to complete a successful investigation.*"

Exemplars of student evidence for all standards at each level of achievement are available on the NZQA subject page for Digital Technologies.

NZQA will continue to provide generic modules and workshops designed to improve general assessment practice. The following modules and workshops will be available in 2024:

- Assessment Approaches, an online workshop exploring different methods of assessment
- Culturally Responsive Assessment
- Assessment Guidance – Reviewing Your Practice
- Tāku Reo, Tāku Mahi – My voice, My work, a guide to managing authenticity
- Why Less is More, a guide to reducing volumes of student evidence
- Integrated Assessment
- Modes of Assessment
- Alternative Assessment
- Acknowledging Sources

"*This was great! I liked that I could choose from different scenarios, see how sources are used and the way the student answered the question.*"

"*Reassuring and very thorough. Easy to use/follow.*"

We will also continue to offer the Transforming Assessment Praxis programme, an online workshop relevant to all subjects which helps assessors learn about re-contextualising assessment resources and collecting evidence in different ways, in order to better meet the needs of students.

Check the NCEA subject pages on the NZQA website regularly, as more online modules, workshops and courses will be added throughout 2024.

Assessor Practice Tool

The Assessor Practice Tool (APT) will be used to support assessors with the new NCEA standards from 2024 onwards. The purpose of the APT is to allow assessors to practice making assessment judgements and immediately receive feedback on their judgements from a moderation panel. The APT will initially have material for some existing Level 3 standards, with moderated samples for the new Level 1 NCEA standard subjects being added as material becomes available. Material for the new Level 2 and Level 3 standards will be added over time, and all material for the old NCEA standards will be archived.

Material is currently available for:
- 91906: Use complex programming techniques to develop a computer program
- 91907: Use complex processes to develop a digital technologies outcome

Workshops and Presentations

The Best Practice Workshops offered by Assessment and Moderation continue to be viewed by the sector as significantly contributing to improved assessor practice:

"I thought the workshop was very clear and helpful, there were a lot of varied examples of ākonga work discussed and opportunity for participants to discuss and ask questions."

We offer several options of online workshops and presentations for events to support assessors with the assessment of internally assessed standards. These can be subject-specific, or general assessment support, and tailored to the audience. Virtual presentation slots, online workshops or webinars can be requested to provide targeted support to local, regional or national audiences.

To give feedback on this report click on [this link.](#)