

Online assessment - guidance for providers

This document provides guidance to tertiary education organisations (TEOs) delivering programmes or training schemes by distance online, including those delivered offshore. It is mainly for TEOs that are moving into online delivery for the first time.

Key messages

- 1. Adhere to the principles of quality assessment. They apply in all delivery modes.
- 2. Design online assessments that link directly to the learning outcomes and, as much as possible, mirror the tasks that learners will encounter in their professional lives.
- 3. Reconfigure group work assessments, and closed-book tests and examinations.

Put robust measures in place to minimise the chances of cheating.

NZQA recommends several strategies to support TEOs to develop an effective online assessment practice:

- Adhere to the key principles
- Use a variety of assessment tools
- Redesign group work assessments
- Ensure security of closed-book tests and examinations
- Provide formative assessment opportunities and timely feedback
- Reinforce prevention and detection of academic fraud.

For more information, see the:

- Glossary
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Adhere to the key principles

The key principles for assessment in NZQA-approved programmes and training schemes are that assessment is fair, valid, consistent and appropriate given the stated learning outcomes.

These principles apply to all delivery modes, including assessments that TEOs develop to be used online.

Principle	What this means in practice
Fair	Assessment processes, activities, conditions and marking provide equal opportunity for all learners to achieve.
Valid	Assessment has a clear purpose and measures what it aims to measure. Learner work is authentic.
Consistent	Assessor judgements are reliable and accurate across all learners, regardless of who does the assessing or when the assessment occurs.
Appropriate given the stated learning outcomes	Assessment activities and assessor decisions reflect the knowledge, skills, and application of knowledge or skills required at the appropriate NZQF level.
	Overall, the quality of assessed learner work provides assurance that the learner credentials are credible.

These principles assume that quality assessment is socially and culturally inclusive. Ensure that your TEO's assessment activities support equitable outcomes for all learners, whether studying in Aotearoa or offshore, and regardless of race, ethnicity, gender, age, disability or social background.

At the core of good assessment are open, respectful and meaningful relationships enabling the cultures, worldviews, relevant contexts, identities, values, ways of learning and needs of diverse learners and whānau to be recognised and acknowledged.

Use a variety of assessment tools

In any delivery mode, assessment is one of the major influences that shapes learning, so online assessments should be designed with learning in mind. Link each assessment directly to the learning outcomes – knowledge, skills and attributes that learners are expected to demonstrate by the end of the course or module.

Contemporary Learning Management Systems (LMS) allow a variety of assessment formats, so take advantage of the available technology but select only those options that suit the learning outcomes.

Consider how you can incorporate multimedia into assessment tasks to maximise relevance and learner engagement. As much as possible online assessments should mirror the tasks that learners will encounter in their professional lives.

For example, an assessment based on a textual case study can be supplemented by videos of real-life situations. Images, video and audio can also be effectively incorporated into question-and-answer assessments.

Many assessment tools can be used online similarly to how they are used in face-to-face contexts:

- open-book written assessments (question and answer, case-study analysis, essay, reflection, report)
- individual oral presentations
- interactive orals and viva voce
- creating artefacts (a piece of software, an artwork, a performance)
- portfolios.

Some assessment tools need adjustment or re-design to successfully implement online. These include group work assessments, and closed-book tests and examinations.

Redesign group work assessments

Cooperative learning or group work is a powerful way to foster a sense of belonging to an online learning community, boost the acquisition of subject competence, develop 'soft' skills and enhance graduate employability.

Assessing group work, however, can pose validity and fairness challenges and needs to be carefully managed.

- Be clear about what you intend to assess
- Make sure to identify and assess each learner's contribution to the group product and process
- Use a combination of individual and group tasks
- Provide clear guidance on the expected workload
- Ensure the mark allocation is fair.

Be clear about what you intend to assess

Group projects may be used to assess subject-specific competence, collaboration skills or both. The assessment task must be appropriate to the learning outcome(s).

Subject-specific competence is often assessed via a 'product' the group creates (for example a document). Collaboration or teamwork skills are assessed as part of the 'process' of group interaction (communication, negotiation, project management, group maintenance). However, both the product and process can provide evidence toward achieving a learning outcome depending on what the learning outcome requires.

A common pitfall when designing group work assessments is lack of clarity around which specific aspects of the group process will be assessed, so make sure these are fully explained in the assessment instructions and marking schedules.

Introduce the group task early in the course, so collaboration skills can be modelled and scaffolded for learners.

Have the facilitator decide group composition and size rather than learners choosing which group to join.

Make sure to identify and assess each learner's contribution to the group product and process

In terms of the product, the assessor should establish who did what, that is, collect evidence showing which content in the group's creation has been proposed by which learner. A straightforward way to do this is to ask each learner to provide this information in their assessment submission.

For example, if the group produced a joint report, the learner would highlight the paragraphs they suggested or drafted. If the product was a visual (a diagram, infographic, film), the learner would describe the parts they contributed. The assessment task can also require the learner to explain how the group product was planned and designed in addition to highlighting their contribution.

Compared to face-to-face classrooms, online learning environments can make the group process more readily accessible to the assessor. This is because all group communications, whether through a discussion forum, chat, wiki, interactive whiteboard or videoconference, are easy to record. Some are automatically captured by the LMS, for example the assessor can filter and view forum posts by learner.

The assessment task should make it transparent what evidence the learner needs to save and include with their submission (for example screenshots, quotes from forum postings, video recordings).

Set up a collaborative space for learners to interact on the LMS and, where necessary, provide specific online tools required for the task.

Use a combination of individual and group tasks

It is strongly recommended to set individual task(s) in addition to the group task to ensure that all learners have an opportunity to meet the learning outcome(s). The assessment would involve two parts, with each learner completing one part with their group and the other part on their own.

Self- and peer-assessment reports, e-portfolios, vivas, tests and other individual assignments can all complement a group task. The weightings of the group and individual components should be determined carefully in light of the requirements of the learning outcome.

Provide clear guidance on the expected workload

Make the workload associated with group interaction clear to learners, for example on average how many times a week you expect them to 'meet' online or post to a discussion forum.

Be aware that some learners may not be able to attend all online meetings due to time zone differences or work commitments, so a combination of live conferencing and asynchronous discussion via a forum or wiki can be a useful approach.

Ensure the mark allocation is fair

Know the difference between group grading and group work assessment. Group grading means all learners in a group receive the same mark. Group work assessment means learners receive individual marks but complete all or some of the assessment task(s) as a group.

Group grading must not be used on its own as a measure of achievement since a group grade is not an accurate reflection of each learner's individual competence.

If you are using peer-assessment, remember:

- Peer-assessment should be anonymous (this can be facilitated through the LMS).
- Learners should be provided with training and opportunities to practise their peerassessment skills prior to undertaking peer-assessment for summative purposes.

Ensure security of closed-book tests and examinations

Closed-book tests and examinations should be reconfigured for online delivery.

Avoid knowledge recall where possible

Avoid tests and examinations that primarily assess knowledge recall, for example by means of multiple-choice or short-answer questions with one correct answer. These assessments rely on blocking access to the information to be recalled, so are vulnerable to cheating in a distance delivery mode unless the TEO invests in an online proctoring system.

Elicit unique responses

Redesign tests and examinations to include tasks that elicit unique, extended responses and involve problem-solving, explanation, creativity, relating to personal or professional experience, applying the learning, reflection on completed course activities and justifying the answer. Although learners are unsupervised and will be able to look up course material and other resources, the risk of academic dishonesty may be lower. Set a time limit to reflect the higher-order thinking required. Release the assessment on an agreed date, then keep it open for at least 24 hours and up to several days.

Randomise questions

To make tests less susceptible to cheating, use the question randomisation feature in the LMS. This involves developing a bank of questions, which are then automatically recombined by the software, so each learner attempts a different version of the test. The larger the question bank, the more secure the assessment. This technique works well for subject areas such as accounting and engineering where it is possible to modify the data parameters or figures embedded in a question without changing the stem, so multiple versions of the same question can be produced quickly.

Use interactive orals or vivas

To secure high-stakes examinations and in situations where knowledge recall under timepressured conditions is critical for the learning outcomes assessed, use an interactive oral or a viva voce. Both are easy to implement online using videoconferencing.

Provide formative assessment opportunities and timely feedback

To succeed in summative assessments, learners need to be ready to be assessed. In addition to learning activities that help learners process subject-specific content, an online training scheme or programme should offer plenty of opportunities for learners to participate in formative assessment and receive feedback.

Make sure learners are familiar with the technology

Formative assessment can be a mechanism to lessen assessment-related anxiety experienced by many learners. Unfamiliarity with a particular technology must never detrimentally affect a learner's performance on a summative assessment. For example, if the task involves annotating an interactive video, the learner should have had a practice run with a similar task and be comfortable using the relevant app or LMS tool before summative assessment occurs.

Embed feedback and feedforward in the course design

In a distance online context, opportunities for feedback and feedforward must be planned. Deliberately incorporate these into your course and assessment design right from the start.

Use self-check quizzes. These are popular with online learners and deliver instantaneous feedback. Quizzes are automatically marked by the LMS and can be pre-populated with substantial feedback comments targeting areas of common misunderstanding. To build self-assessment skills, encourage learners to submit their own questions to be included in future quizzes.

Group work is another valuable formative assessment format that can speed up feedback provision as the assessor prepares comments for groups as opposed to individual learners.

Timeliness refers not only to providing sufficient and detailed comments soon after the assessment event but also to providing feedback as close as possible to the act of learning, when the learner is still able to use it to change their work. While learners are tackling online formative assessment tasks, the facilitator should actively monitor and provide 'just in time' advice on work-in-progress.

Make sure learners understand the criteria and how to meet them

The feedback and feedforward are likely to be effective when they clarify what the expected performance is (the standard) and what the learner can do to close the gap between their actual and desired performance.

Ways to achieve this online include:

- setting up a dedicated forum for learners to raise questions about the task and its criteria for success
- providing exemplars and encouraging learners to articulate their own understanding of the criteria
- making a collection of pre-written feedback and feedforward comments, then customising and adding to it during each delivery cycle
- requiring learners to comment on and peer-review each other's work.

Reinforce prevention and detection of academic fraud

Research suggests that online delivery is not associated with higher prevalence of cheating compared to classroom-based courses. However, studies also confirm that the volume of cheating both in face-to-face and distance contexts is often under-estimated.

TEOs must have robust systems in place to prevent and detect academic fraud. Strengthen your organisation-wide policy and implement specific measures to ensure that the work learners present for assessment is their own.

Prevention strategies

- Update your organisation's policies relating to authenticity of learner work. Ensure they
 cover online assessment and contract cheating.
- Promote a culture of academic integrity among learners and staff.
- Offer proactive guidance and support to help learners establish effective study habits and make ethical decisions.
- Give learners concrete examples of what academic misconduct and acting with integrity look like in your subject area, your online course and even a given assessment.
- Focus on building an online community so that supportive learner-facilitator and learner-learner relationships are formed.
- Develop a short e-learning module on academic integrity and make it compulsory to complete before a learner can start on the main content of the programme.
- Review the timing of assessments so the workload is realistic, particularly when several courses are taken concurrently. Situations where many heavily weighted assessments are due at the same time would push some learners to resort to unacceptable behaviour.
- Select assessment types that are less susceptible to cheating, for example reflections on practicum, personalised and unique tasks, and vivas. In online contexts, when the learner completes an assessment, they can be asked to participate in a video conversation and explain to the assessor how they have developed their work.
- Prefer frequent low-weight assessments to heavy-weighted items with short lead-in times. While effective assessment design cannot entirely prevent cheating, it does decrease its probability.
- Include some 'controlled' (invigilated) assessments in the programme or training scheme but reserve these for high-stakes occasions only, for example demonstration of a capstone project or final examination.
- Avoid using the same assessments year after year. Refresh or develop new assessment activities regularly.
- Provide opportunities for learners to choose their own topics or tasks aligned to their personal and professional experiences.
- Explain how many information sources you expect learners to use for each assessment. Require sources to be reputable and correctly referenced.
- Warn learners of the dangers of cheating and potential penalties.

Detection strategies

- Inform learners that text-matching software will be used to aid detection of plagiarism.
- Alert assessors to the risk and warning signs of contract cheating such as inconsistent or falsified references, very high or very low similarity index on text-matching software, jargon-filled sentences, quality of learner work different to or above expectations.
- Have a clear process for investigating and dealing with academic integrity breaches.
- Maintain a database of breaches, so any repeat occurrences can be identified.
- Obtain a writing sample from learners during enrolment or soon after the course starts.
 Later, if misconduct is suspected, the sample can be used as a benchmark of the quality of the learner's writing.
- Have all course assessments marked by the same person. Where this is not feasible, the course coordinator should review a proportion of scripts to check that the writing style is consistent across assessments for a particular learner.
- Ensure assessors are trained and are given the time to investigate suspicions (for example, interviewing the learner(s), cross-checking their previous work, examining document properties).

Glossary

Term	Definition
Assessor	The person who assesses learner work and awards a mark or grade, usually the facilitator (distance online mode) or tutor (face-to-face mode). Depending on the size of the TEO and learner cohort, the assessor and facilitator may or may not be the same person.
Authentic learner work	The work that the learner produced largely by the themselves. The work was <i>not</i> outsourced to a third party, such as a relative, another learner or a commercial provider. Where the learner used material from sources, for example from the internet, this material is in quotation marks and/or acknowledged by citation. There is <i>no</i> heavy reliance on quoted or referenced material without the learner's own processing. The learner's own processing is demonstrated through explanation, analysis or examples.
Formative assessment	Assessment activities specifically intended to provide feedback and feedforward, improve learner performance and inform further learning. Formative assessment occurs during learning and does not contribute to the final course grade.
Interactive oral	Assessment in the form of unscripted interaction between a learner and other learners, or between a learner and an assessor. The conversation is based around a scenario representative of what learners would encounter in the workplace.
Portfolio	An organised collection of work that illustrates the learner's experiences and accomplishments. The learner purposefully selects items that demonstrate achievement of the learning outcome(s), adds items to their portfolio over time and may write a reflective narrative on why each item was included.
Summative assessment	Assessment activities specifically intended to evaluate and summarise the learner's achievement at a certain point. Summative assessment occurs at the conclusion of learning and contributes to the final course grade.
Viva voce or viva	An oral examination where the learner defends their written work by answering questions, traditionally in front of a panel of examiners.

Bibliography

Ako Aotearoa. (2016). <u>Getting it right: Guidelines for online assessment in New Zealand tertiary contexts</u> (Report prepared by Jane Terrell).

Ako Aotearoa. (2015). <u>Co-operative learning made easy: A practical guide to working with tertiary student groups</u> (Guide prepared by Jill Clark and Trish Baker).

Baker, D., & Zuvela, D. (2013). Feedforward strategies in the first-year experience of online and distributed learning environments. *Assessment & Evaluation in Higher Education 38*(6), pp. 687–697.

Bearman, M., Dawson, P., O'Donnell, M., Tai, J., & Jorre de St Jorre, T. (2020). *Ensuring academic integrity and assessment security with redesigned online delivery.* Deakin University, Melbourne.

Bretag, T., Harper, R., Burton, M., Ellis, C., Newton, P., van Haeringen, K. ... Rosenberg, P. (2019). Contract cheating and assessment design: Exploring the relationship. *Assessment & Evaluation in Higher Education*, *44*(5), 676–691.

Dawson, P. (2020). <u>Detecting and addressing contract cheating in online assessment</u> [Webinar recording].

Eaton, S. (2020). <u>Academic integrity in online courses: Adapting during COVID-19</u> [Webinar recording].

Harris, L., Harrison, D., McNally, D., & Ford, C. (2019). Academic integrity in an online culture: Do McCabe's findings hold true for online, adult learners? *Journal of Academic Ethics*.

Henderson, M., Phillips, M, Ryan, T., Boud, D., Dawson, P., Molly, E., & Mahoney, P. (2019). Conditions that enable effective feedback. *Higher Education Research & Development 38*(7), pp. 1401–1416.

Hill, J., & West, H. (2020). Improving the student learning experience through dialogic feed-forward assessment. *Assessment & Evaluation in Higher Education 45*(1), pp. 82–97.

Meijer, H., Hoekstra, R., Brouwer, J., & Strijbos, J-W. (2020). Unfolding collaborative learning assessment literacy: A reflection on current assessment methods in higher education. Assessment & Evaluation in Higher Education.

New Zealand Qualifications Authority. (2013). <u>Guide to effective practice in preventing and detecting academic fraud</u>.

Nicol, D., & Milligan, C. (2006). Rethinking technology-supported assessment in relation to the seven principles of good feedback practice. In C. Bryan & K. Clegg (Eds.), *Innovative Assessment in Higher Education* (pp. 64–77). Abingdon, UK: Routledge.

Sotiriadou, P., Logan, D., Daly, A., & Guest, R. (2019). The role of authentic assessment to preserve academic integrity and promote skill development and employability. *Studies in Higher Education*.

Tertiary Education Quality and Standards Agency. (2017). <u>Good practice note: Addressing contract cheating to safeguard academic integrity.</u>