

Types of Assessment Method

There are many different types of assessment method. The following will help you choose the most appropriate one. Remember that whatever assessment method you decide to use, it should be clearly aligned with the learning outcomes and teaching and learning activities in your course.

1. Short form and multiple choice tests - do not usually test higher order thinking skills

Short form tests are also known as objective tests. They include multiple choice, completion (or close), true-false and matching types, of which multiple choice is the most commonly used. A multiple choice test item usually consists of a statement, called the stem, and several alternative statements one of which is the correct answer and the others are known as distracters. Few short-form tests assess higher order thinking skills; although not impossible, constructing items to test higher order thinking (e.g. levels of thinking 3 – 6) takes some skill. Objective tests should be critically reviewed to ensure their quality.

Advantages	Disadvantages
<ul style="list-style-type: none"> ▪ Measure wide sample of content ▪ Easy and quick to score ▪ Good for reviewing content ▪ Provide formative feedback ▪ Provide fast feedback ▪ Reusable items in different tests and settings ▪ Marker reliability is high 	<ul style="list-style-type: none"> ▪ Difficult to set items which assess more than memory ▪ Time consuming to produce ▪ Limited range of plausible answer options ▪ Encourage guessing ▪ Restrict creative students and may favour male students ▪ Difficult to interpret wrong answers ▪ Do not develop writing skills ▪ Poorly constructed questions give clues to students

Tips for good practice:

- The stem should consist of a single, clear idea. It should make sense independent of the rest of the question.
- Avoid stems stated in negative terms as these are more difficult to understand and may cause confusion.
- Make sure that all the alternatives are grammatically consistent with the stem and similar in form and length to one another.
- Make the distracters plausible by using common misconceptions and typical student errors.
- If you use the alternatives 'none of the above' and 'all of the above' include them as the incorrect answer about 75% of the time (if you have four answer options).
- The correct answer should appear without pattern and equally often in each of the alternative positions.

2. Short answer test - does not usually test higher order thinking skills

Short answer questions require a brief answer consisting of a phrase, sentence or short paragraph. For example, 'briefly explain the purpose of formative assessment'.

Advantages	Disadvantages
<ul style="list-style-type: none">• Measure relatively wide sample of content• Reasonably easy and quick to score• Encourage clear and concise expression• Encourage literacy• Good for reviewing content• Items can be reused in different tests and settings	<ul style="list-style-type: none">• Relatively difficult to set compared to short form• Difficult to establish criteria• Scoring may be subjective• May encourage guessing• Little opportunity for argument and originality

Tips for good practice:

- Be clear about what you are asking;
- Avoid using phrases straight from the text book.

3. Essay - can test higher order thinking skills

Essays require students to select, organise and integrate material on a given topic. They also test writing skills and the ability to develop an argument and use evidence to support it. Essays may vary from a single page (about 300 typed words) to major assignments of ten pages (3000 words). Essays may be written under timed exam conditions or set as research assignments. Essays which are merely factual, or for which a set model answer can be produced, are unlikely to test thinking skills, and will almost certainly encourage plagiarism.

Advantages	Disadvantages
<ul style="list-style-type: none">• Help students develop writing skills• Can reveal errors in understanding or misconceptions• Take less time to set than short form questions• Can improve understanding of a topic• Help develop information literacy skills	<ul style="list-style-type: none">• May not sample a wide range of content• Questions may not be well thought out• Subjectivity may affect fair grading• Time consuming to mark• Consistency in marks (i.e. reliability) is difficult to maintain

Tips for good practice:

- Make sure the topic is complex and contextualised so students have to apply rather than regurgitate knowledge (students will be less likely to copy and plagiarise).
- Have students submit a first draft, suggest corrections, then regrade, focusing on how the essay has improved.
- Allocate specific marks for the quality of academic writing and referencing.

4. Performance test - can test higher order thinking skills

Performance tests involve either a hands-on activity, such as using a particular analytical laboratory technique or taking a patient history, or the development of products, such as a building design or computer software.

Advantages	Disadvantages
<ul style="list-style-type: none">▪ Encourage students to take ownership of the learning process▪ Replicate real world conditions/contexts▪ Students can demonstrate mastery of a skill▪ Can assess a range of skills or outcomes▪ Allow for a variety of tasks▪ Encourage active learning	<ul style="list-style-type: none">▪ Time consuming▪ Difficult to determine clear assessment criteria▪ Performance anxiety in students▪ May require additional resources▪ Comparison between students may be difficult▪ Subjectivity may affect fair grading

Tips for good practice:

- Check that any special resources needed are available to all students.
- For laboratory tests, pre-test all equipment and have spare materials available.

5. Written report - can test higher order thinking skills

The report is a common way of presenting information and recommendations or conclusions related to a specific purpose. Reports are written based on gathering and analysing information using a discipline specific methodology and format. They can be used to assess laboratory experiments, field work or case studies.

Advantages	Disadvantages
<ul style="list-style-type: none">▪ Replicate real world activity▪ Marking using a template is relatively fast▪ Students practice writing to a standard format▪ Can assess generic skills such as information and computer literacy▪ Allow for a range of topics and foci▪ Supports reflection and problem solving	<ul style="list-style-type: none">▪ Students may fabricate data▪ Marker consistency (reliability) can be a problem

Tips for good practice:

- Explicitly teach students effective report writing skills before using the report as an assessment task.
- State clearly the format of the report, and give examples of good and poor (unacceptable) reports.
- Tell students how language (grammar, spelling, punctuation, referencing) will be assessed.
- Match the percentage of overall marks to the time and effort needed to produce a quality report.

6. Fieldwork/practicum tests - can test higher order thinking skills

Fieldwork experiences and practicums provide opportunities for assessments to be performed on site or subsequent to the experience. Fieldwork practical tests may involve performance tests in the workplace on specific cases or tasks, or may involve the assessment of skills and abilities (particularly professional behaviours) in the workplace over the duration of the placement. The assessments may be conducted by Curtin staff or by staff in the workplace (e.g. supervisor). As it is often difficult to assign a mark to fieldwork assessments, they are often competency based and allocated a pass/fail grade.

Advantages	Disadvantages
<ul style="list-style-type: none"> ▪ Assesses unique, real life and authentic learning experiences ▪ Provides an opportunity for community involvement that may result in job opportunities ▪ Encourages job readiness for student 	<ul style="list-style-type: none"> ▪ Marker consistency (reliability) is a problem ▪ Lack of control of the fieldwork experiences ▪ Student may not be able to perform tasks as they are not registered practitioners ▪ Time consuming for staff to travel to placement and conduct assessment ▪ Difficult to control the assessment task in the workplace

Tips for good practice:

- Use strategies to reduce performance anxiety e.g. practice tests (self assessments), examiner training.
- Ensure the environment is controlled, where possible, to alleviate interruptions to the assessment. This will require organisation and communication with all parties.
- State clearly the format of the test, the performance criteria, and give opportunities for students to have formative assessments.

7. Projects - can test higher order thinking skills

Projects are an extended piece of work involving inquiry based activities. Projects may be small or large, undertaken by individuals or in groups and have outcomes such as a report, design, art work, wiki, a poster or working product.

Advantages	Disadvantages
<ul style="list-style-type: none"> ▪ Allow for greater student engagement in and responsibility for learning ▪ Assess student learning in-context ▪ Encourage initiative, independence and problem solving ▪ Can assess a wide range of outcomes including time and task management ▪ Showcases skills and achievements ▪ Are comprehensive, multidimensional and flexible ▪ Students can explore a topic in depth 	<ul style="list-style-type: none"> ▪ Time-consuming to develop and mark ▪ May make comparison between students difficult if projects are very different ▪ May require online collaborative learning spaces ▪ May require additional resources

8. Presentations - can test higher order thinking skills

Presentations are usually made orally to a class on a prepared topic and may include the use of presentation aids such as PowerPoint or handouts. This assessment may be undertaken individually or as a group. Presentations may take different forms such as role plays, facilitating group activities or seminars, conference presentations, debating, presenting a product, question and answer time, and formal speeches.

Advantages	Disadvantages
<ul style="list-style-type: none">• Can assess a range of outcomes including generic skills• Marking with set criteria is fast and reliable• Immediate feedback to students• Variety of topics• Allow students to display argument and originality	<ul style="list-style-type: none">• Can be time-consuming in limited class meetings• Requires audio/visual learning technologies for external students• Can prompt performance anxiety in students• Students will be tempted to read to the class

Tips for good practice:

- Set minimum and maximum time limits for each presentation.
- If group presentations are used, work out beforehand what is expected from each member of the group and how marks will be distributed among group members.
- Provide students with opportunities to develop and practice oral skill before their presentation.
- Make sure students know they cannot read to the audience but that they must engage them, even if they use prompting notes.

9. Case studies - can test higher order thinking skills

A case study involves a situation, information and issues that provide deep learning opportunities for students. The case could be the account of a real experience, including authentic details, or a real experience in which some elements are changed to prevent identification, or it could be completely hypothetical. The aim is to give students opportunities to explore and apply skills and theories that they have learnt in a related field of study. A case study analysis, which includes the student's personal response to a case, is usually presented as a written or verbal report. In these analyses, assess the evidence of how the students apply skills and/or theories within the boundaries of the unit learning outcomes.

Advantages	Disadvantages
<ul style="list-style-type: none">• Can cover several unit learning outcomes• Encourages authentic learning• Helps develop critical thinking skills• Can develop extended writing skills• Can assess a range of skills or outcomes including generic skills• Discourages plagiarism	<ul style="list-style-type: none">• Assessment criteria can be difficult to determine• Subjectivity may affect fair grading• Time consuming to mark

Tips for good practice:

- Use case studies that students can relate to, given their experience and level of learning in the course.
- Make sure the account of the case is complex and yet clearly constructed so students can recognise where they can apply their knowledge of the skills and theories.
- State clearly the format for the case study analysis report and provide models of good reports.
- If you plan to assess the quality of the academic writing and referencing, state this in the marking criteria.

10. Posters - can test higher order thinking skills

A poster is a visual representation of a topic or the outcomes of a learning activity. Posters can use different media, including learning technologies, and can be created individually or in groups.

Advantages	Disadvantages
<ul style="list-style-type: none">• Allows for creativity and originality• Can assess a range of outcomes• Marking using criteria is fast and reliable• Allow for a variety of topics• Encourage active learning• Has potential for peer assessment	<ul style="list-style-type: none">• Can focus unduly on presentation rather than content or understanding• Makes comparison between students difficult as posters may be very different• May require additional resources

Tips for good practice:

- Make the purpose and marking criteria explicit to students before they begin.
- Do not set tasks for which students can find examples already available (e.g. on the web), thus prompting plagiarism.
- Provide annotated examples of both good and unacceptable examples.
- Arrange a public display of complete posters.

11. Journals and blogs - can test higher order thinking skills

Journals and blogs are written by students over a period of time, such as a semester, to reflect on their learning experiences. They provide an opportunity for students to express their feelings, thoughts and beliefs about the content and process of learning and themselves as learners using an informal writing style and structure.

Advantages	Disadvantages
<ul style="list-style-type: none">• Encourage engagement in and responsibility for learning• Encourage self-assessment and reflection• Provide valuable insight into student feelings, thoughts and beliefs• Comprehensive and multidimensional• Encourage regular and extended writing	<ul style="list-style-type: none">• Difficult to determine assessment criteria• Require time to establish the required high-trust, low risk environment• Issues of privacy and confidentiality• Students may fabricate or sanitise journal entries• May not develop academic writing skills

Tips for good practice:

- Clarify who will be able to read the journal. Ensure confidentiality.
- Encourage constructive comments if students are using a blog.
- Suggest areas for students to focus on, possibly using guide questions or statements.
- Provide frequent feedback, especially in the early stages.
- Keep a journal or blog yourself and share entries with your students.
- Acknowledge the value of student entries by responding to journal items.

12. Portfolios (including Curtin's iPortfolio)

A portfolio is a purposeful collection of student work showing efforts, progress and achievements over time.

Advantages	Disadvantages
<ul style="list-style-type: none">▪ Encourage engagement in and responsibility for learning▪ Assess in-context student learning▪ Encourage self-assessment and reflection▪ Can assess a range of skills or outcomes including generic skills▪ Allow for showcase of skills and achievements▪ Are comprehensive, multidimensional and flexible	<ul style="list-style-type: none">▪ Time-consuming to develop and assess▪ Can be difficult to determine assessment criteria▪ May require additional resources▪ Make comparison between students difficult since the portfolios may be very different▪ Unless they are e-portfolios, a portfolio can take up significant physical space

Tips for good practice:

- Provide examples of completed portfolios.
- Include compulsory items which show learning activities, reflection and self- evaluation.
- Provide guiding questions for the reflection and self-evaluation.
- Use a continuing course portfolio for different functions in different units.



Recommended further reading:

- Brown, G. (2001). *Assessment: A guide for lecturers*. York: Learning and Teaching Support Network. www.bioscience.heacademy.ac.uk/ftp/Resources/gc/assess03Lecturers.pdf
- Dunn, L, Morgan C, O'Reilly M & Parry S (2004): *The student assessment handbook*. London: Routledge Falmer.
- James, R., McInnis, C., & Devlin, M. (2002). *Assessing learning in Australian universities: Ideas, strategies and resources for quality in student assessment*. Melbourne: Centre for the Study of Higher Education.
www.cshe.unimelb.edu.au/assessinglearning/