THE UNIVERSITY OF MELBOURNE

Faculty of Business and Economics

Assessment Practices Working Group

Guiding Principles for Design of Subject Assessment

January 2023

1. Background

In 2022, FBE established an Assessment Working Group, constituted by representatives from each of the teaching departments and the Academic Services team, to consider principles for design of subject assessment. Over the course of its deliberations, the Assessment Working Group has drawn on several internal and external experts to inform and guide our deliberations, and has also been informed by a rich research literature on effective assessment practices (see the citations section of this document). The principles developed by this Working Group were subsequently subject to consultation with heads of departments and external experts before being submitted to the Faculty's Executive Committee for review. Faculty executive endorses these principles in November 2022.

These guiding principles should be read in the context of the University's *Assessment and Results Policy, Student Academic Integrity Policy*, and Academic Board's *Assessment Guidelines*. These principles are not intended to prescribe what types of individual assessment tasks should be used to assess learning in any subject; but offer evidence-based guidance on design of effective assessment – both in terms of the overall 'architecture' (defined here as the mix of assessment tasks that make up the total assessment for a subject), and the effective design of individual assessment tasks.

Over the course of 2022, the University is finalising a new *Advancing Students and Education 2030 Strategy*. Our approach to assessment of student learning will need to be informed by that document once it is finalised.

2. Evidence-based principles for good assessment design.

Principle #1: There is no 'one best way' to assess learning, but there are ways to design assessment tasks effectively and ensure assessment tasks provide a reliable and valid assessment of student learning in a subject.

The mix of assessment tasks used will necessarily need to consider a range of factors.[1] The effectiveness of different methods of assessment will also vary depending on the type of knowledge and skills being assessed. Consequently, the approach to designing assessment will vary from subject to subject. However, the research evidence provides guidance on how to design assessment tasks effectively whatever the method used, and how best to configure the overall mix of assessment tasks (the assessment architecture) used to assess learning. The principles that follow seek to capture the research-based insights.

Principle #2: Students are asked to complete assessments for different reasons, so the mix of assessment tasks in a subject should be designed to meet different purposes and, where appropriate, include a 'requisite variety' of different types of assessment tasks.

Assessing student learning is useful for many reasons, not simply to assess how well a student has mastered the learning outcomes at the completion of a subject.[2] Assessment at the subject level will also include assessment of different types of learning outcomes, including subject-specific learning (e.g., apply the concept of utility maximization to analyse individual consumption choices) and more generic learning outcomes founded in graduate attributes (e.g., communicate effectively or work collaboratively as part of a group or team). Over the course of completing a subject, the mix of assessment tasks students are asked to complete in a subject should therefore include a variety of tasks designed to meet these different purposes for assessing student learning. To assure assessment is unbiased, a 'requisite variety' of assessment methods should be included into the mix of tasks used to assess learning in a subject.

[1] These factors include things such as: university policies related to assessment, departmental/faculty resourcing for assessment design and grading, professional, vocational or accreditation requirements, disciplinary norms, the nature of the subject content and learning outcomes, the mix and characteristics of the students taking the subject, the learning environment and delivery mode of the subject, and the practicalities (costs, feasibility, etc) of implementing alternative assessment tasks.

[2] As well as providing a method for making a final assessment of the extent to which students have achieved the intended learning outcomes set for the subject, assessment tasks completed over a semester can also be useful: (i) as a learning activity in itself, which enables students to practice, make mistakes and track their own mastery over learning outcomes; (ii) to motivate students to actively engage with learning activities and master subject content; (iii) to provide constructive feedback to students as the progress to completion and final assessment of the intended learning outcomes for the subject; (iv) to highlight areas of learning where an individual student the need to focus their efforts and improve; (v) to contribute progressively and fairly to final grades in the subject; and (vi) to promote the ability of students to engage in ongoing self-assessment of learning beyond the confines of the content covered in the subject.

Principle #3: The cadence of assessment tasks should be distributed over the semester or teaching delivery period for the subject and weighted proportionally with the effort required.

The research evidence across many disciplines (including our own) suggests that students learn more effectively (and learning can be more effectively assessed) when they are asked to engage with a diverse set of assessment tasks spaced over the teaching delivery period. Distributing assessment over the teaching period enables students to track their progress, adjust their effort and learning strategies over the semester, and act on the feedback in preparation for final assessment. Assessment tasks should be weighted proportionally with the amount of time/effort required to complete each task – specific guidance for weighting is provided in Academic Board's *Assessment Guidelines*.

Principle #4: Design assessment in a way that balances the tension between ensuring that final grades are determined using a range of assessment tasks and student wellbeing.

Compared with other faculties and disciplines, FBE disciplines rely more heavily on higher weighted summative assessment and other hurdle requirements for determining final grades.[3] Relying on 'high stakes'[4] assessment is demonstrated to adversely affect student wellbeing (e.g., stress and anxiety), their capacity to learn effectively, or perform on an assessment task to their true ability. Providing a mix of assessment tasks completed over a teaching period addresses this concern. At the same time, however, in including a larger number of assessment tasks, we run the risk of 'over-assessing' – that is, including too many assessment tasks that adds disproportionately to workload and adversely affects student wellbeing without addressing the concerns that inform Principles 2 and 3 above.[5] These countervailing effects mean subject assessment needs balance the requirement to rigorously assessment student learning using a range of tasks appropriately weighted to reflect to effort required and difficultly to complete the task, as well as concern for student wellbeing.

Principle #5: Well-designed assessment tasks integrate methods for providing constructive feedback to students.

Well-designed assessment tasks provide students with more information about progress and performance than their grade. Feedback is critical for student learning and provides transparency in assessment. To be effective, feedback needs to: be aligned with course content and specific learning outcomes; provided in a timely way; provide information that allows students to adjust their learning strategies and improve their performance; and contribute to learning by provide a catalyst for reflection, discussion with peers and instructors. Assessments task should be designed to enable an instructor to communicate to students how the mark or grade was derived, how specific qualities of the work were rewarded/penalised, and how students can improve their work.

Principle #6: Designing assessment to assess learning in authentic ways contributes to the validity of assessment and student engagement with learning.

Authentic assessment tasks are designed to enable students to use and apply knowledge and skills in 'real world' ways - or in a way that replicates the context in which the knowledge has application in professional practice. Including tasks that are more authentic contributes to the validity of assessment practice and can be motivating for student learning and mastery. The extent to which authentic assessment is integrated in the mix of tasks used to assess learning will nonetheless depend on the level of subject and the content being delivered.

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[3] The Faculty has prescribed that, subject to accreditation and related factors, instructors should look to reduce reliance on assessment that are weighted to 70% of final assessment or more. Where possible, this should extend to removal of additional hurdle requirements (e.g., a student must pass a final assessment to pass a subject) where it is in effect redundant because of the relative weighting of the assessment task.

[4] 'High stakes' is defined here as a weighting or condition placed on assessment task that has important consequences for a student, such as whether they can pass a subject (e.g., must achieve a particular grade for a specific task to pass the subject), or continue in a preferred course of study (e.g., a student must get a particular grade in one or more subjects to proceed with a particular major).

[5] Student motivation to learn is also found to be related to perceptions of the fairness of the weighting placed on that task, compared with other assessment tasks they need to complete in the subject. Weightings perceived to be unfair are demotivating.

Principle #7: Assessment tasks should be designed to assess learning against explicit standards that are communicated to students, not performance relative to peers.

A standards-based approach involves identifying the learning outcome(s) that the assessment task assesses and describing different levels or standards of achievement relative to that outcome. The University's *Assessment and Results Policy* expects subject coordinators to adopt a standards-based approach to assessment (para 4.47). Assessment standards, and how they relate to learning outcomes are typically communicated to students in the form of a marking rubric. Proactively engaging students in a discussion at commencement of a subject and when individual assessment tasks are discussed can build awareness of standards and how they are applied; provide students with explicit guidance; and build students' capacity to assess their own learning and progress.

Principle #8: Integrating options and choice of assessment tasks to avoid bias and create opportunities for diverse types of learners to do well.

Students learn in diverse ways and have different strengths in how they can best demonstrate learning. This observation provides another rationale for integrating a variety of tasks into the assessment mix – in this case by offering, where feasible, the opportunity for students to choose from alternative assessment options that demonstrate their knowledge and skills against the learning outcomes being assessed.

Principle #9: Design assessment in ways that account for risks to assessment integrity and security.

Assessment design needs to account for different ways in which the integrity and security of the assessment is at risk.[6] In general, higher levels of learning are vulnerable to fewer and more limited forms of cheating or manipulation[7] and, therefore, require fewer controls.

Principle #10: Final examinations remain an integral part of how student learning is assessed – their value and validity is in designing them well.

Examinations are not a required form of assessment – and the University has moved towards a policy position that seeks to reduce overall reliance on traditional examinations as a means of assessing student learning. They nonetheless remain a practical and valid form of summative assessment. Like any assessment, examinations can be more or less effective depending on how well they have been designed. The principles described above generally apply to examinations as they do to other forms of assessment. Well-designed examinations, administered as part of a mix of assessment tasks, provide an effective and efficient form of assessing student learning, especially as a method of final summative assessment. For these reasons, examinations remain an integral part of how student learning is assessed. In designing examinations, instructors are encouraged to consider ways to integrate a variety of different types of tasks, tasks that reflect the application of knowledge in professional practice, and (in light of Principle 7) consider the weighting applied to the final examination relative to other assessment tasks completed for the subject.

[6] For example, tests of recall or application of recalled formula are highly susceptible to cheating in unsupervised or take-home assessment tasks. Unsupervised tasks are less susceptible to cheating (or it is more expensive to do so) where the task requires abstract conceptualisation, reflection, or use of unique elements (e.g., randomised questions or elements within questions, unique data sets generated for each student).

[7] Dawson (2021, p.34) summarises this principle in the following way:

Learning outcome level	***Assessment task descriptor***	***Integrity threat in play***
Extended abstract	Hypothesise, formulate, reflect	Outsourcing, disrupting.
Relational	Analyse, justify, apply, evaluate	The above + cognitive offloading and unauthorised information (assessment specific).
Unistructural/ multi-structural	Describe, list, identify, calculate	The above + Unauthorised information.

The development of AI applications designed to complete tasks requiring higher level abstract may, however, weaken these relationships.

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