

Aligning assessment with teaching and learning

Foundations in Assessment paper 2

February 2022

This briefing paper is the second in a series designed to supplement Cambridge's *Framework for Assessment* by providing fuller definitions and explanations of key terms and concepts around assessment practices. A previous paper looked at the connections between awarding gaps and assessment, with a rationale for more diversification of assessment. Following papers will discuss the design and use of assessment tools, such as assessment criteria and rubrics.

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1. Introduction: shared understanding of the purpose of assessment

The UK QAA's guide to assessment underscores how pivotal assessment is to students' educational experiences:

Assessment is a fundamental aspect of the student learning experience. Engagement in assessment activities and interaction with staff and peers enables learning, both as part of the task and through review of their performance. It is a vehicle for obtaining feedback. Ultimately, it determines whether each student has achieved their course's learning outcomes and allows the awarding body to ensure that appropriate standards are being applied rigorously (2018, p. 3).

Clearly communicated expectations for assessment and its relation to students' learning, along with consistency in language around assessment practices and processes, will enable confidence in their validity, reliability and fairness. In other words, 'learning outcomes' are the cornerstone of course and assessment design.

2. What are 'learning outcomes'?

Learning outcomes, sometimes referred to as 'intended learning outcomes', articulate what a student is expected to know, understand and/or be able to demonstrate after completion of a paper or course. Well-designed learning outcomes will outline to students what and how they will be learning, and why the knowledge and skills will be useful to them. They also help both staff and students share an understanding of assessment expectations, while providing a framework for feedback and student self-evaluation of their progress.

At Cambridge, learning outcomes may appear in the paper or course specifications. In paper specifications, learning outcomes are presented with a list of relevant knowledge and skills it is expected the students will

acquire in that particular paper. In course specifications the learning outcomes are broader and identify the knowledge and skills students are expected to acquire by the time they have finished the course.

The following graphic illustrates the alignment of learning outcomes with a teaching and assessment strategy. This kind of conceptual approach to assessment design within the context of learning outcomes enables dialogue between students and staff and shared expectations for teaching, learning and assessment.

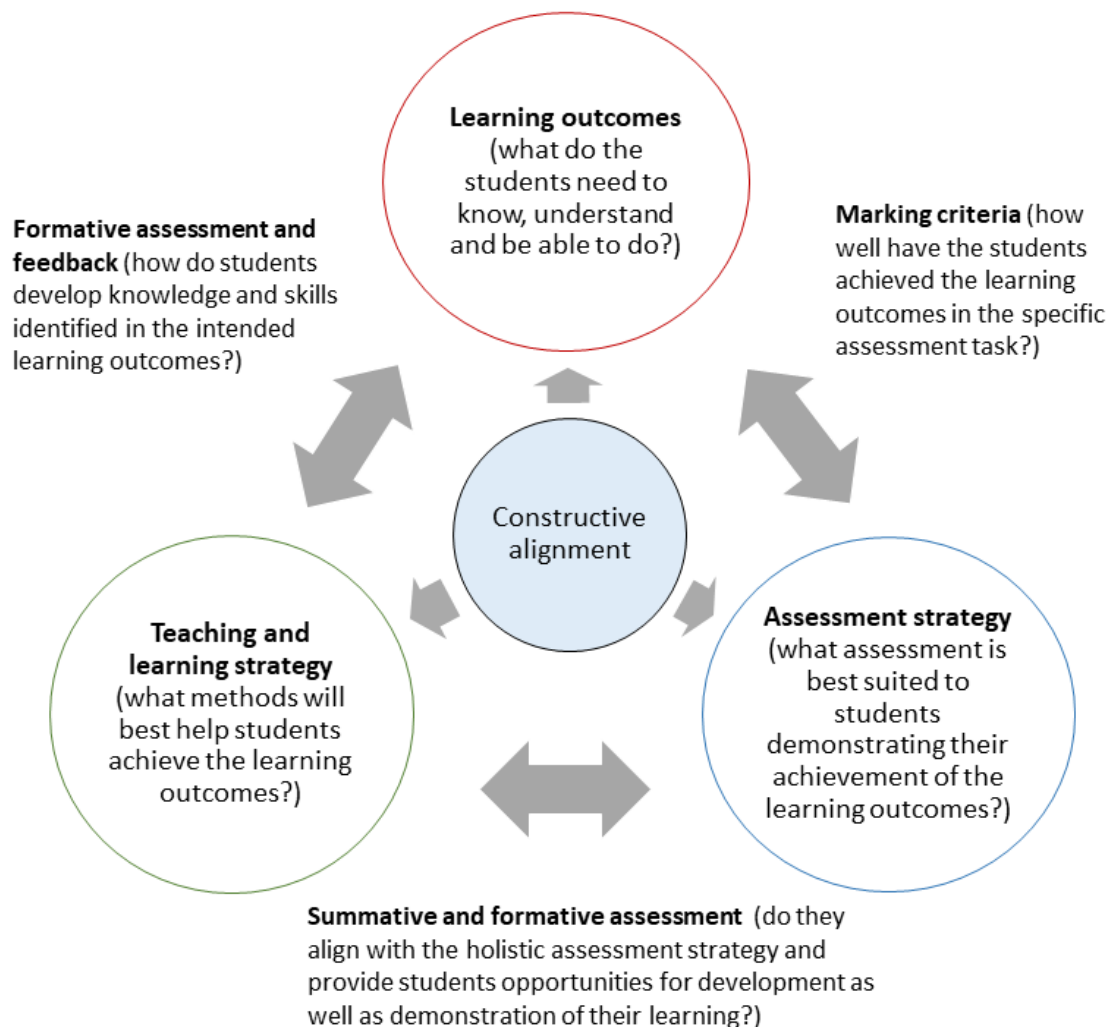


Figure 1 Constructive alignment of teaching, learning and assessment

3. Aligning assessment and teaching with learning outcomes

The objective of aligning learning outcomes with assessment underpins the concept of 'constructive alignment', an approach introduced at the end of the twentieth century (Biggs 1996) and now a foundational expectation for higher education (UUK QAA 2018). Constructive alignment is a course design methodology which emphasises the centrality of intended learning outcomes, which are conceptualised as determining the teaching, learning and assessment so that they are compatible with and act to support one another. A 'constructively aligned' course is one in which the intended learning outcomes articulate what students should know and be able to do on completing the course. Teaching activities are designed to encourage students to develop subject knowledge and skills through teacher-managed (for example, lectures) activities, as well as through peer- and individually-managed (for example, supervision work) learning activities. Formative assessment and feedback (discussed in more detail in the next section) enables students and staff

to monitor and reflect on progress in developing course learning outcomes. A constructively aligned approach thus means attending not just to what is to be learnt, but also how and to what standard. The role of summative assessment is to measure the extent to which students have achieved the intended learning outcomes.

In practice, this means that it should be possible to map a clear alignment between intended learning outcomes, teaching strategies, methods of assessment and assessment criteria. These should be designed at the appropriate level, in consideration of the level or year of study, using consistent language. An individual paper might have its own intended learning outcomes, and that the paper coordinator would ensure that the teaching and learning provides students with opportunities to develop relevant knowledge and skills, and that the assessment tasks would be designed to evaluate students on their achievement of these learning outcomes.

A holistic approach to assessment design would mean that course coordinators would first consider how students might fully demonstrate their achievement of the degree award or class through assessment, before looking at individual units of study. They would consider if the pattern of assessment is equitable and allows students to fairly demonstrate their learning capabilities, and whether some variety or diversification of assessment would be helpful for the development or demonstration of a range of appropriate skills, competencies and learning styles. They would consider how assessment needs to be designed and developed across stages as a student develops and incrementally learns through their levels of study.

The UK QAA’s guide to assessment provides a useful model of the four major steps to achieve constructive alignment for any particular paper or unit of study, in light of whole-of-course aims:

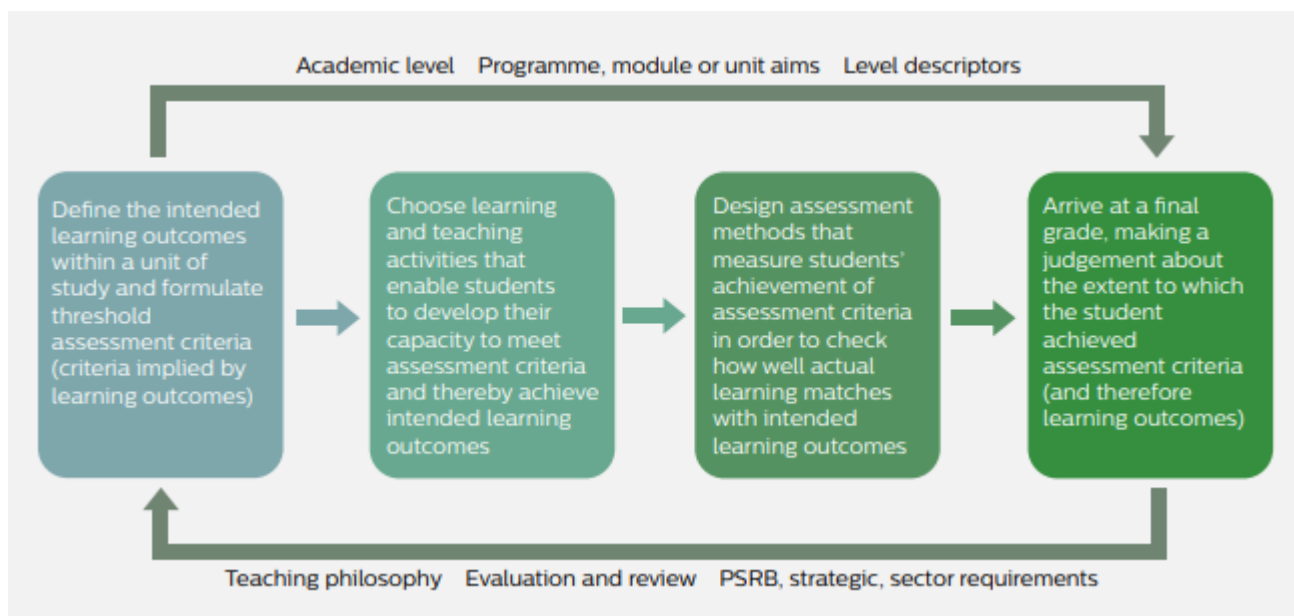


Figure 2 Four steps to constructive alignment (taken from UK QAA 2019, p.4)

Increasingly, clearly communicated learning outcomes are considered essential for inclusive assessment by informing formative assessment and feedback and clarifying overall expectations for all students and staff engaged in teaching and assessment.

4. Balancing summative and formative assessment

The above sections focused mainly on the design of the final evaluative assessment task provided by units of study; that is, what is known as ‘summative assessment’, or the tasks that usually result in marks that count

towards the final grade of the course. These summative assessment tasks are designed by course coordinators as the most effective way of measuring the extent of a student’s success in meeting the intended learning outcomes of the unit or study, and, incrementally, the course.

‘Formative assessment’ may not count for marks or the final grade, but it is equally important. At Cambridge this developmental assessment is most often delivered within undergraduate supervisions or practicals, and is designed to help students learn more effectively by giving them feedback on their learning and performance and how it can be improved and/or maintained. Formative assessment enables students to benchmark their own current level of knowledge or skills, identify areas for improvement and make judgements about their overall progress; this is most effective when the formative assessment aligns to the same set of intended learning outcomes addressed by the summative assessment tasks.

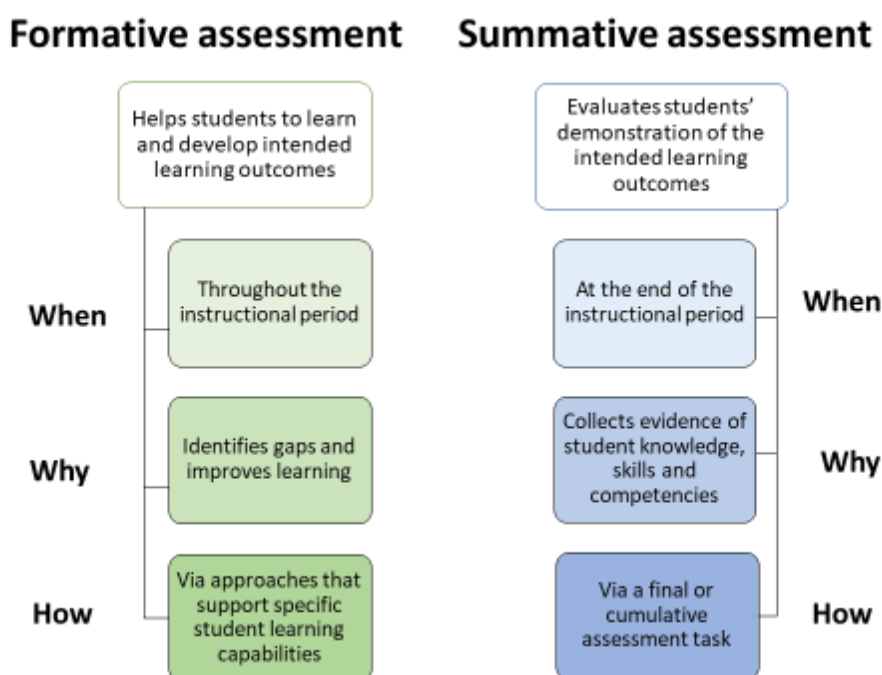


Figure 3 Balancing formative and summative assessment

Feedback on formative assessment is particularly useful when it aligns to the same set of intended learning outcomes addressed by the summative assessment tasks, for instance through marking criteria that are clearly related to the assessment expectations.

References

- Biggs, J (2003) *Teaching for Quality Learning at University*. 2nd edition. Maidenhead: Open University Press.
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- UK Quality Assurance Agency (2018) [Quality Code, Advice and Guidance: Assessment](#)