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Description: Quick guide to outcomes-based design using constructive alignment for module leaders and programme leaders

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Design a module using the principles of constructive alignment

Designing learning is considered one of the most fundamental activities of a teaching practitioner. Good teaching practice is commonly perceived as that which creates and uses learning environments and activities that foster 'deep' student learning. This is a brief guide for new academics on how we can develop modules using the principles of constructive alignment to promote good teaching and thus deep student learning.

When starting out *tabula rasa*, it is useful to consider the design process as consisting of the following set of related tasks:

- a. Review your own teaching philosophy;
- b. Review key components of a module;
- c. Apply five basic steps of outcomes-based module design.

a) Review your own teaching philosophy

Constructive alignment is inherently student-centred in that it is what the *student does* that is responsible for their learning. The teacher's role is to create appropriate learning environments that engage the student in learning activities that enable them to meet the learning outcomes. The expectation during design therefore is to consider 'what do *they* [the student] have to do to...' rather than 'what do *I* [the teacher] have to do...'. Clearly, it is important for you to reflect on what student-centred learning means to you and your practice.

b) Review key components of a module

When designing undergraduate or postgraduate modules in UK HEIs, the main components are considered to be the learning aims, learning outcomes, learning objectives, teaching and learning activities (TLAs), and assessment tasks (ATs). These are described in detail below.

Learning aims are statements of learning which tend to be generalised. It essentially identifies the learning intentions i.e. what the teacher intends the student to learn;

Intended learning outcomes are statements that describe what the students 'should' have learnt having completed the teaching and learning activities;

Learning objectives are teacher-orientated and/or student-orientated statements that specify what activities the students need to perform to achieve the associated learning outcomes. They determine the teaching and learning activities (TLAs) used. When defining learning objectives it is essential to consider the existing knowledge and experience of the typical student entering the module.

Teaching and learning activities (TLAs) refer to teaching methods and techniques that are chosen to get the students to do what the learning objectives (or outcomes) nominate.

Assessment tasks (AT) Formative assessment tasks refer to those student activities that provide an indication (to student and teacher) as to how well the student is developing and attract no formal marks. Summative assessment tasks refer to those student activities that reveal how well they have met the intended learning outcomes and are used to make official judgments about student performance and attract formal marks.

Figure 1 shows how these components inter-relate in a systemic way.

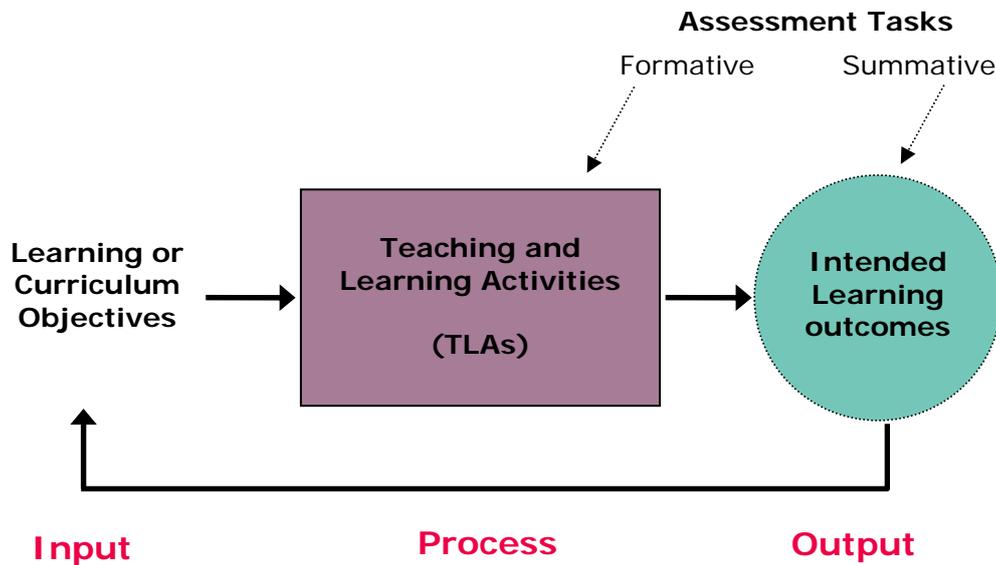


Figure 1. Components of a module design

The learning outcomes are informed by subject benchmark statements, the institution and the School subject team. The learning outcomes, together with the pre-requisite expectations of the incoming student, determine the list of learning objectives students are required to achieve in order to attain the outcomes. The objectives subsequently determine the teaching and learning activities we apply to engage the student. During this process, there is a learning loop where various formative assessments, together with associated feedback, are provided to give some indication as to how the student is progressing. Finally, summative assessments are applied to ‘measure’ how well the student has met the learning outcomes (according to some assessment criteria or taxonomy).

c) Apply five basic steps of outcomes-based module design

Apply the following steps to design your module:

Five Key Steps

1. Define the intended learning outcomes
 - Use level descriptors, subject benchmarks, Academic Standards and Quality Handbook, professional standards bodies
 - Iterative consultation with programme leader—top down and bottom up
 - Avoid too many—breadth kills depth
2. Select appropriate TLAs
3. Engage students in these learning activities during the teaching process
4. Select appropriate ATs
5. Compute final grade and provide feedback

The problem here is what do we base ‘appropriate’ (or aligned) on? The answer at the moment is *verb-matching schemes* as defined and referenced in Biggs (2003). Verbs

refer to an action at a particular level of cognitive or procedural difficulty (e.g. explain, reflect, analysis, integrate, present etc). Currently, Bloom's Taxonomy (1956) is used as a basis for categorising outcome statements according to the cognitive ability they elicit. Research published in Biggs (2003) demonstrates how to associate TLAs and ATs with the level of cognitive ability they elicit or assess. Tepper (2006) has subsequently modified such 'alignment tables' and explicitly linked TLAs and ATs with particular levels in Blooms Taxonomy to help clarify the alignment process.

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