Principles for course design: Guide to writing learning outcomes and developing assessment criteria

This guide has been produced to assist staff who are planning new modules or courses or updating existing documents, and aims to explain the use of learning outcomes and assessment criteria in the context of the Taught Degrees Regulatory Framework at the University.

The guide is presented in the form of a set of principles for the writing of learning outcomes and assessment criteria/grade descriptors, whether in relation to a complete course, as for example part of the programme specification, or for the components of a course, ie the modules or units.

Separate guidance is available for mapping learning outcomes to modules and to exit awards – this is now a requirement for all modules/courses.

Learning Outcomes

1 All courses, programmes of study and modules/units should be presented for validation in terms of intended learning outcomes.

Learning outcomes describe what a student should be able to do at the end of a period of learning. As a tool for curriculum design, the writing of courses, modules and units in terms of learning outcomes places the emphasis firmly on a student-centred approach to learning, focusing clearly on what the student should be able to do on successful completion of the course, module or unit. This approach also indicates to students what they have to do to achieve a pass in the course or module.

2 Credit is awarded for the successful achievement of learning outcomes at a specified level.

Like most UK higher education providers, the University has adopted a modular framework based on the award of credit for the achievement of learning outcomes. Each set of learning outcomes (a module or unit) is allocated a credit value which indicates the notional amount of time required to achieve the learning. A credit is nominally 10 hours of student learning.

In addition to credit value, each set of learning outcomes is related to a particular credit level indicating the relative difficulty of the learning involved. Credit level descriptors give guidance on the relative demand, complexity and depth of learning and learner autonomy expected at each level, and the differences between levels.

Summary generic credit level descriptors can be found at the QAA website Higher education credit framework for England: guidance on academic credit arrangements in higher education in England (2021). More detailed descriptors can be found Credit Level Descriptors for Higher Education produced by SEEC.

These represent an important point of reference for the design of modules. They are complementary to the The Frameworks for Higher Education Qualifications of UK Degree-Awarding Bodies (Qualifications Frameworks) (2024) qualification descriptors which are intended as reference points for setting and assessing standards through exemplification of the main generic outcomes of qualifications at each level of the framework.

3 Learning outcomes should express what it is intended the student will have learnt and therefore be able to do in order to successfully pass a course or module.

Since the achievement of the learning outcomes is the basis for the award of credit, the learning outcomes are statements of essential learning, and as essential learning, they are written at threshold (pass/fail) standard. The learning outcomes specified for a module - usually between 5 and 8 – represent the learning that is of fundamental importance to achieve the minimum acceptable standard to pass the module. The same applies to the learning outcomes for a course.

A list of verbs based on Bloom's taxonomy is provided at Appendix A. These categories may be used at any academic level, although more complex forms of learning, such as analysis and evaluation, and higher order cognitive skills would normally be expected at lower levels 'with (structured) tutor support'. Tutor support would suggest some structuring of learning and assessment tasks, perhaps within clear parameters, and explicit guidance through the processes involved in assessed work.

Where modules are presented for approval at both level 5 and level 6, or level 6 and level 7, it is important to differentiate clearly the learning outcomes relevant to each level to ensure that the curriculum as a whole promotes progression so that the demands on the learner in intellectual challenge, skills, knowledge, conceptualisation and learning autonomy increase. While there may be some element of overlap, the expectations of students at the different levels should be clearly apparent from the learning outcomes. Even though the teaching may be the same, learning activities and assessment tasks should differ, relating to the relevant level descriptor and expected outcomes.

4 All learning outcomes should be assessable and must be assessed as part of the course and/or module.

Since credit is awarded on the basis of successful achievement of learning outcomes, it is essential that learning outcomes are capable of being assessed. This requires careful consideration of appropriate language and avoidance of terms such as 'demonstrate awareness of' 'understanding of' or 'knowledge of' (since these give no indication of level). Equally this means that students should not be assessed on requirements which are not contained within the learning outcomes. The assessment may be implicit rather than explicit, for example when the assessment requires the application of subject knowledge and therefore implicitly assesses an outcome on acquisition of subject knowledge. Assessment methods should provide disabled students with equivalent opportunities as their peers to demonstrate the achievement of Learning Outcomes. Guidance may be found in the work of the SCALE project (Student Centred Adult Learning Engagement in Higher Education, and the UW Inclusion Toolkit.

It should not be possible for a student to pass a module without achieving all of the learning outcomes. This can sometimes prove difficult in the design of assessment tasks which effectively cover all of the learning outcomes, but it should in general be a principle which is adhered to. In some cases it may be justifiable to require students to pass each module assessment with no compensation between assessments.

5 Learning and teaching methods and activities should be designed to support students towards demonstrating their achievement of the learning outcomes through completion of the module/unit assessment.

This means that there should be 'constructive alignment' of learning outcomes, methods and assessment. In other words they should be aligned – with the learning and teaching supporting the demonstration of the learning outcomes through the assessment – and constructivist, in terms of having learning tasks which promote active learning and meaning-making on the part

of the student. The learning and teaching methods should also take into account the needs of disabled students and, where appropriate, reasonable adaptation should be made to accommodate their needs.

6 The learning outcomes for a specific course should include reference to the knowledge and understanding, intellectual or cognitive skills and key or transferable skills as well as subject specific skills expected of a student successfully completing the course. These should be mapped to module learning outcomes.

The learning outcomes of a course as set out in the programme specification should be referenced to the levels of the FHEQ, and take account of the QAA Characteristics Statements if relevant, as well as to Subject Benchmark Statements and to professional or statutory body requirements. Increasingly learning outcomes for vocational courses are also referenced to occupational standards and/or requirements of sector skills councils. For Higher and Degree apprenticeships the relevant standards are important reference points.

The University does not specify a defined set of key or transferable skills to be developed across all courses, but it does place considerable emphasis on those skills associated with effective learning and with employability and enterprise, and it is expected that all courses will have explicit strategies reflected in course level learning outcomes and their approaches to learning and teaching which reflect these commitments.

It has become good practice to present for course approval a set of grids or curriculum maps which show how course level learning outcomes are mapped to modules.

Assessment Criteria

7 Students should be provided with explicit information in the form of assessment criteria and/or grade descriptors about what is necessary to obtain grades above the pass threshold.

Assessment criteria describe the qualities of the work presented for assessment that will determine the grade to be awarded, while grade descriptors provide a description of typical performance at each grade within a level. In other words, learning outcomes describe what students should be able to do; assessment criteria describe how this will be judged, and grade descriptors indicate what is required for the award of particular grades.

This said, it should however be noted that the terms assessment criteria and grade descriptors are frequently used interchangeably, and they can take various forms; what is important is that students are provided with information about how they will be assessed and what is required for achievement of a pass and the grades above this. Assessment criteria and grade descriptors essentially set standards for achievement and their use helps to ensure marking or grading is fair and reliable, whilst also providing students with an understanding of the standards associated with different grades. Subject benchmark statements may provide guidance on such setting of standards.

There is no one approach to assessment criteria and grade descriptors. Some subject areas develop criteria/descriptors for each type of assessment task – eg criteria which relate to the qualities of written essays, or oral presentations, while others have generic subject related criteria relevant to all types of assignment. Increasingly, however, it is becoming common practice to develop criteria which are assignment specific. These are often provided to students as part of the assignment briefing.

We would suggest that it is not necessary to worry too much about terminology. The question to ask is do students know what they have to do to achieve a pass grade in a given assignment, and also what they have to do to achieve A, B and C grades.

8 Subject and assignment specific assessment criteria/grade descriptors should be benchmarked to the University's generic grade descriptors.

The University of Worcester has generic assessment criteria/grade descriptors, which set out the qualities of work associated with each grade band. These perform a similar function to level descriptors or qualification descriptors – they are an important point of reference to assist in ensuring some comparability of standards across different disciplines within the University.

Generic Grade Descriptors - Levels 4-7
Generic Grade Descriptors – Level 8

These should be used as a reference point for the design of more detailed assessment criteria and/or grade descriptors at the level of the assignment. A subject or course team may wish to develop its own level related grade descriptors which then inform the setting of assessment criteria for specific modules or assessments.

Key questions for course and module developers

9 Staff designing new modules/courses or updating existing modules/courses should ensure the following matters have been addressed.

- Are the course learning outcomes and module learning outcomes aligned with the national credit level and qualifications descriptors, and as appropriate the characteristics statements and subject benchmark statements?

- Are the learning outcomes expressed in terms of what a student will be able to do if they successfully complete the module or course, and set at the threshold (pass) level?

- Are the module learning outcomes mapped to the course learning outcomes such that every student will be able to achieve the latter?

- Are the module assessment strategies appropriate for testing achievement of the module learning outcomes? Is there coherence across modules at a particular level and progression between levels?

- Are the assessment criteria and grade descriptors consistent with the learning outcomes, and take account of the University generic grade descriptors?

Academic Quality Unit
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How to Write Effective Learning Outcomes Using Bloom's Taxonomy

When creating learning outcomes and instructional objectives using Bloom's Taxonomy, it helps to include specific verbs. These verbs remind you and your learners what's expected of them.

Below is a list of verbs for each level of the taxonomy to help you create meaningful learning outcomes:

Level: 1
Category: Remembering
Verbs: define, identify, label, list, name, recall, recognise, reproduce, select

2
Understanding
classify, describe, discuss, explain, express, identify, indicate, locate, recognise, report, restate, review, select, translate

3
Applying
apply, choose, demonstrate, dramatise, employ, illustrate, interpret, operate, practise, schedule, sketch, solve, use

4
Analysing
analyse, appraise, calculate, categorise, compare, contrast, criticise, differentiate, discriminate, distinguish, examine, experiment, question, test

5
Evaluating
appraise, argue, assess, choose, compare, conclude, criticise, decide, defend, evaluate, judge, justify, prioritise, rate, select

6
Creating
arrange, assemble, collect, combine, compose, construct, create, design, develop, formulate, generate, organise, plan, prepare, produce, propose, rearrange, reorganise, revise, summarise, write

Examples of Learning Objectives Aligned with Bloom's Taxonomy

For more inspiration for using Bloom's Taxonomy when developing learning objectives, refer to the examples in the table below:

Level: Remembering
Example: "Describe the main characters in..."
Explanation: This example requires learners to remember the characters in a story, as well as some of their distinguishing traits.

Understanding
"Compare and contrast..."
This example requires learners to remember traits of two separate things and explain their similarities and differences.

Applying
"Demonstrate how you would use..."
This example requires remembering and understanding, then takes things a step further by asking learners to explain how they would apply information in a specific situation.

Analysing
"Identify the theme(s) in..."
This example requires more thought analysis to identify specific themes and explain why and how they're present in a story.

Evaluating
"Argue in favour of or against..."
In this example, learners must formulate more in-depth arguments about the benefits and drawbacks of a specific item, solution, etc.

Creating
"Propose a solution for..."
This example requires learners to create something new based on information they've gathered, analysed, and evaluated in the earlier stages.