Learning Outcomes by Level & Language

Learning outcomes (LOs) need to reflect the student level of study and be short statements with an active verb.

Learning outcome levels

The Quality Assurance Agency's (QAA) <u>Quality Code</u> for Higher Education sets and monitors the required standards of UK higher education.

One element of this code is the <u>Framework for</u> <u>Higher Education Qualifications</u> (FHEQ), which are generic statements of the indented learning outcomes at specific study level.

5 study levels

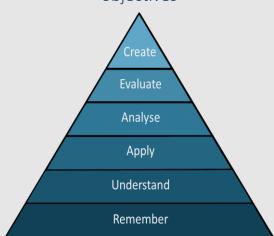
The FHEQ outlines five different framework levels. Three are undergraduate (levels 4, 5 & 6) and two are postgraduate (levels 7 for Masters and 8 for doctoral)¹.

Taxonomy for learning levels

A useful tool for understanding different levels of thinking skills is a taxonomy of educational learning objectives, this runs from lower to higher order thinking skills².

Remember the taxonomy is just a guide; do not take it as a prescriptive measure.

Taxonomy of educational learning objectives



Remember: information as presented and recalling them in assessment tasks, such as exams.

Understand: implies making sense of what was learnt and demonstrating an understanding through a specified task.

Apply: involves demonstrating the applicability of knowledge in new or different context.

Analyse: implies the breaking down of ideas into smaller elements to understand how parts are related and perhaps synthesising by putting those parts back together again.

Evaluate: involves making judgements, based on guidelines and criteria.

Create: involves putting understanding, information and/or data together in *new*, original ways.

² Anderson, L & Krathwohl, D. Eds. (2000) *A taxonomy for Learning and teaching and assessing. A revision of Bloom's Taxonomy of Educational Objectives.* New York: Longman.



¹ Levels 1-3 precede higher education.

The language of levels

Active verbs are critical when writing LOs. Firstly, the verb indicates the **level** of learning required. Secondly using an **active** verb ensures the actions demonstrated by the student can be observed and measured by the teacher.

Moving between levels

Students will move through the levels as they progress, and LOs should make explicit this required increased level of knowledge, practice, skills, and autonomy as the level of study increases.

Active verbs

Below are examples of active verbs as categorised by the taxonomy of educational learning objectives: Once again, this is just a guide and not to be taken prescriptively.

					Create
				Evaluate	compose
			Analyse	judge	develop
		Apply	analyse	appraise	assemble
	Understand	interpret	appraise	evaluate	design
Remember	explain	apply	calculate	rate	create
repeat	discuss	use	test	compare	construct
list	describe	demonstrate	critique	revise	teach
name	review	illustrate	debate	assess	formulate
record	identify	operate	examine	estimate	redefine

Distilled learning outcome vocabulary

Drawing from the <u>FHEQ</u> and the taxonomy of active verbs, below are examples of undergraduate statements of learning that indicate difference in levels, range of context and amount of autonomy.

Undergraduate levels 4 - 6

Level 4	Level 5	Level 6	
Record, review and explain the underlying concepts and principles of	Analyse and critically appraise established principles in /of [area of study]	Judge and apply coherent and detailed knowledge in / of [area of study], which is informed by [appropriate prior knowledge of] defined aspects in	
Interpret and describe your qualitative / quantitative data to develop lines of argument and sound judgements in	Undertake critical analysis of information, and propose solutions to [] arising from your analysis.	Demonstrate an ability to deploy accurately established techniques of analysis and enquiry within a discipline, through	
Communicate the results of your study accurately and reliably, with a structured and coherent argument.	Effectively communicate information, arguments and analysis in a variety of forms to specialist and non-specialist audiences.	Apply the methods and techniques to review, consolidate, extend and apply knowledge & understanding, to initiate and carry out projects.	

Postgraduate levels 7 and 8

Level 7	Level 8	
Synthesise information and make informed judgements by critically evaluating & applying appropriate concepts/arguments/issues etc. supported by valid/ significant evidence.	Identify, explore and interpret aspects at the forefront of a substantial body of knowledge.	
Demonstrate complex and conceptually challenging subject specific knowledge, and a critical awareness of current problems and/or new insights.	Make and justify decisions about appropriate information/ situations/ objects/ artefacts, which are complex, specialised and contradictory etc.	
Critically evaluate appropriate methodologies and methods, some of which could be applied in an original way.	Create new knowledge and outcomes developing, applying and adapting methods and techniques.	