

Intended Learning Outcomes

What are Intended Learning Outcomes?

Intended Learning Outcomes (ILOs) define what a learner will have acquired and will be able to do upon successfully completing their studies. ILOs are expressed from the students' perspective and are measurable, achievable and assessable.

Why should we write Intended Learning Outcomes?

ILOs are the cornerstone of every session, course, programme, module, or unit of study. ILOs allow learners to see what they are aiming for at all times and the value of the appropriately aligned assessments.

The Quality Assurance Agency *Understanding Assessment* guide (2011) illustrates the relationship between ILOs, assessment and learning activities/resources and the order in which they should be considered,

“Stage 1: Decide on the intended learning outcomes. What should the students be able to do on completion of the course (and what underpinning knowledge and understanding will they need in order to do it) that they could not do when they started?”

Stage 2: Devise the assessment task(s). If you have written precise learning outcomes this should be easy because the assessment should be whether or not they can satisfactorily demonstrate achievement of the outcomes.

Stage 3: Devise the learning activities necessary (including formative assessment tasks) to enable the students to satisfactorily undertake the assessment task(s).

These stages should be conducted iteratively, with each stage informing the others to ensure coherence.”

This approach is called **constructive alignment**.

There are a lot of references for constructive alignment, but the work of [Prof. John Biggs](#) provides a good overview of its value. <http://youtu.be/iMZA80xpP6Y> [Part of the *Teaching Teaching & Understanding Understanding* series – video length: 8 mins]

It is due to educational theorists such as Biggs and the Quality Assurance Agency that ILOs are a key element of any HEI programme of study. The Quality Code for Higher Education (2012) ensures equality and parity across the UK HE sector and Part B stipulates HEIs must demonstrate:

“Learning and teaching activities and associated resources provide every student with an equal and effective opportunity to achieve the intended learning outcomes.”

How to write Intended Learning Outcomes?

Intended Learning Outcomes should be written using what is often referred to as, *active verbs* (something students can do to demonstrate the results of their learning).

In this context *passive verbs* would be ‘appreciate’ or ‘show awareness’ – they make it difficult for the student to understand what is needed; and difficult for staff to assess.

A commonly seen *passive verb* used for writing ILOs is ‘understand’. The [UoL Learning and Teaching website](#) highlights the pitfalls of using ‘understand’.

“...take the following example:

Understand how to drive a car.

This could mean several different things.

- Move, steer and stop a car.
- Understand the mechanics of how to drive a car but not actually be able to drive one.”

Consider the first of these,
Move, steer and stop a car.

In order to measure/observe how well the learner can do these things we can use *active* verbs to write the following ILOs:

- **Reproduce** the manoeuvres required to perform a three-point turn safely.
- **Discuss** the stopping distances required when driving a car at 30mph, 50mph and 70mph.

[Bloom's Taxonomy](#) of Educational Objectives is a good starting point for developing learning outcomes. The taxonomy identifies six different levels of learning: knowledge, comprehension, application, analysis, synthesis and evaluation. There are [several resources](#) that list the *active* verbs you might consider for each of Bloom's levels of learning. For example,

Level of Learning	Active Verbs
Knowledge	<ul style="list-style-type: none"> • Define • Reproduce • Arrange
Comprehension	<ul style="list-style-type: none"> • Discuss • Explain • Classify
Application	<ul style="list-style-type: none"> • Demonstrate • Operate • Solve
Analysis	<ul style="list-style-type: none"> • Differentiate • Analyse • Calculate
Synthesis	<ul style="list-style-type: none"> • Predict • Assess • Construct
Evaluation	<ul style="list-style-type: none"> • Assess • Critique • Predict

Measurable/Observable ILO Examples

Archaeology

Demonstrate a knowledge of basic Greek grammar and syntax

Mathematics

Construct basic VBA computer programs for the numerical solution of basic problems

Labour Market Studies

Analyse and critique theories of workplace and work-related learning

Biological Sciences

Explain how chromosomes are inherited through mitosis and meiosis and how genetic variation is generated

Intended Learning Outcomes - Quick Check

- ✓ Can your ILOs be measured/observed?
- ✓ Are all of your ILOs addressed by your assessments?
- ✓ Can the learner achieve **ALL** of the ILOs?

References & Resources

Biggs, J. & Tang, C., 2007. *Teaching for Quality Learning at University* (3rd ed.), Buckingham: Society for Research into Higher Education/ Open University Press. **[eBook available from UoL Library]**

Quality Assurance Agency for Higher Education. 2012. *B3: Learning and teaching Quality Code for Higher Education*. [online] Available at: <http://www.qaa.ac.uk/Publications/InformationAndGuidance/Documents/Quality-Code-B3.pdf> [Accessed 03 February 2013]

Quality Assurance Agency for Higher Education. 2011. *Understanding assessment: its role in safeguarding academic standards and quality in higher education*. [online] Available at: <http://www.qaa.ac.uk/Publications/InformationAndGuidance/Documents/UnderstandingAssessment.pdf> [Accessed 03 February 2013]

University of Leicester. *Learning and Teaching*. [online] Available at: <http://www.le.ac.uk/teaching/learningoutcomesunderstand.html> [Accessed 03 February 2013]

Cox, D. & Matthews, L., 2010. *PGCert Module A Handout*. University of Leicester.

Bloom's Taxonomy - Active Verb Lists

http://www.indstate.edu/academicaffairs/assessment/isu_assessment_handbook/verbs_for_writing_student_learning_outcomes.pdf

<http://apps.medialab.uwindsor.ca/ctl/downloads/2007/Geri%20Van%20Gyn%20-%20Verbs%20for%20Learning%20Outcomes.pdf>

ILO Guides

Race, P. *How to Design Learning Outcomes*. [online] Available at: http://www.glyndwr.ac.uk/pd/newi_mod3/mod3/papers/Race%20Designing%20LO.pdf [Accessed 03 February 2013]

Baume, D. (2009) *Writing and Using Good Learning Outcomes*. [online] Available at: http://www.leedsmet.ac.uk/staff/files/Learning_Outcomes.pdf [Accessed 03 February 2013]