

Designing and Using Learning Outcomes for Modules and Courses at CCCU

Introduction:

This guide aims to help you to write effective learning outcomes (LO) for modules and courses in order to communicate to students clearly and accurately what they are expected to achieve by the end of their studies and modules. The guidance addresses the following six areas:

1. What are learning outcomes and why do we need them?
2. How do I write specific, assessable learning outcomes for my students?
3. Checklist for writing clear learning outcomes
4. QAA pass thresholds at Honours Degree (for Undergraduate courses)
5. Examples of good practice from CCCU courses and modules
6. Examples of weak and enhanced learning outcomes with practice activities
7. Further reading
8. What are Learning Outcomes and why do we need them?

All CCCU courses must communicate to students what they need to have learnt in order to pass their chosen course. These expectations are summarised in the form of written ‘Course Learning Outcomes’ which must align to the UK [Frameworks for Higher Education Qualifications](https://www.qaa.ac.uk/docs/qaa/quality-code/qualifications-frameworks.pdf) (FHEQ). The FHEQ provide the reference basis for all UK courses at HE level, from level 4 to level 7, and they are the basis upon which CCCU accredits its courses (along with Professional Regulatory Bodies requirements if applicable).

It is therefore essential to introduce students to the learning outcomes at the beginning of the course, and to refer to them regularly. In short, learning outcomes are at the very heart of effective learning and teaching practice.

Below are some broad principles to have in mind when designing learning outcomes. These principles should be read in conjunction with the [Guidance for Course Design and Development](https://www.canterbury.ac.uk/learning-and-teaching-enhancement/resources-for-academics/resources-for-academics.aspx).

1. A ‘Learning Outcome’ (LO) should describe what a **learner** can **know** or **do** by the end of a module or course that they couldn’t (necessarily) do before that.[[1]](#footnote-2) E.g. ‘to translate basic greetings from English to French’. The focus is on **what your students can achieve** – student-centred learning – rather than on what you as tutor have done to support them. LOs represent the expected learning that students will need to have demonstrated by the end of their module or course.

*A good LO would be, for example: “By the end of this course, students will be able to interpret complex data relating to child psychology.”*

1. The course learning outcomes form the basis of the modular learning outcomes and the modular outcomes in turn dictate what teaching staff are supporting students to achieve in their sessional learning outcomes. The scope of **course LOs** should therefore be broader and more all-encompassing (knowledge and skills needed by the end of a degree) than the **module LOs** (knowledge and skills needed to be acquired within a discreet unit of learning).

*For example, for a Foundation Degree course, a module LO can be “understand the principles of good customer service and apply them in specific scenarios”, whereas the related course LO can be “critically engage with marketing and business theories and apply them in a wide range of contexts.”*

1. Because academic credit is awarded based on students’ performances in assessments, assessments need to be ‘constructively aligned’ for courses and modules to assess the advertised learning outcomes. The assessment criteria used for a specific assessment should therefore reflect the learning outcomes that must be demonstrated when completing it.

*For example, if students are asked to write a case study where they apply the theories covered in the module, because a module LO is “be able to apply theories X, Y and Z in real case scenarios”, then an assessment criterion to use when marking their case study will be “ability to apply theory Z to your case study” (with theories X and Y being covered by the other assessment in the module)*

1. For your course/module to be constructively aligned you need to make sure that you communicate clearly and then do what you say you will in the following three areas:
	* What should students know or be able to know or do by the end of the course/module? (i.e., what are your intended learning outcomes?)
	* What methods will be used on the course/module to enable students to practise and get feedback on their progress in achieving the identified learning outcomes?
	* How will the assessments be designed to best help the teacher and students know that the outcomes have been achieved?
2. When writing learning outcomes, it is vital to ensure that they are assessable. LOs must be covered within the designed assessment/s for each module.
3. How do I write specific, assessable learning outcomes for my students?
4. When designing LO you need to ensure that they align to the appropriate level of study. Below are some key reference points that your LOs must align with:
* [Frameworks for Higher Education Qualifications of UK Degree-Awarding Bodies](https://www.qaa.ac.uk/quality-code/qualifications-and-credit-frameworks) (FHEQ)
* [SEEC Descriptors](https://seec.org.uk/wp-content/uploads/2021/03/SEEC-Credit-Level-Descriptors-2021.pdf) (applies to both FE and HE)
* [QAA benchmark statements](https://www.qaa.ac.uk/quality-code/subject-benchmark-statements)
* Relevant professional, statutory and regulatory body requirements (e.g. CIMA, NMC, etc.)
* CCCU [Graduate Attributes](https://www.canterbury.ac.uk/learning-and-teaching-enhancement/strategies/graduate-attributes.aspx#:~:text=Canterbury%20Christ%20Church%20University%20is,imaginative%20thinking%20and%20compassionate%20responsibility.)
1. To give students a fair chance to demonstrate their success in assessments, learning outcomes need to sum up the learning goal with a **specific verb** to represent how they will need to demonstrate their ability in the given topic.
2. Specificity is key here so verbs like ‘define’, ‘describe’, ‘demonstrate’, ‘compare’, ‘design’ will guide students’ better in their studies than non-specific verbs like ‘appreciate’ which do not indicate the level of facility: your students may think that they ‘appreciate’ a topic while you do not because behind the word ‘appreciate’ there are in fact other more specific expectations which you are aware of, but your students are not.
3. Bloom’s (revised) Taxonomy is a helpful source of inspiration about which verbs are most appropriate - the verbs at the bottom of the pyramid are more basic/foundation ways in which students can demonstrate ability, the verbs at the top require students to demonstrate the most complex levels of understanding. The higher the level of study, the greater the proportion of higher-level verbs you would expect to find in the course learning outcomes – e.g., on an MA or MSc course (level 7) you would expect to find a lot more ‘analyse, evaluate and create’ than you would on a level 4 module of a degree course where you might see quite a few learning outcomes requiring students to ‘remember, define and apply’ concepts central to the discipline.



Armstrong, P. (2010). *Bloom’s Taxonomy. Vanderbilt University Center for Teaching*. Available at: <https://cft.vanderbilt.edu/guides-sub-pages/blooms-taxonomy/> [Accessed on: 04 March 2021).

1. The higher the level of your module/course is, the more likely you are to use verbs at the top of the pyramid, to ensure students engage with “higher levels” skills and competencies. For example, a module at Foundation Year or level 4 (first year undergraduate) is unlikely to have LOs that use the verbs “analyse” and “evaluate”, unless the scope of the analysis/evaluation is very restrictive.
2. The table below is arranged in the same order as Bloom’s (revised) Taxonomy and provides examples and explanations as well as example Learning Outcomes for each level.

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| **Cognitive skill** | **Meaning** | **Useful Verbs** | **Example LOs – By the end of this module/course students will be able to…** |
| Create | This skill asks whether students can use their skills and knowledge to produce a new product or artefact. It requires them to link information together in a new way or propose alternative solutions. | assemble; build; compile; construct; create; design; develop; formulate; invent; plan; propose; synthesise | …design a new tower block which takes into account the latest developments in green architecture. …propose possible solutions to tackle social inequality in British towns. |
| Evaluate | This skill requires students to make judgements about the knowledge they have acquired through their research and learning. It asks whether they can construct an argument or compare differing/opposing views.  | argue; assess; choose; defend; debate; evaluate; judge; justify; measure; rate; select | …defend the statement “No child is born bad”.…assess to what extent educational theory is applicable to education policy |
| Analyse | This skill requires students to identify and explain relationships between material. It requires students to break their knowledge down into constituent parts and show how these parts relate to each other. | analyse; appraise; compare; contrast; criticise; debate: differentiate; distinguish; investigate | …compare the Communicative Approach to Task-Based Learning and identify the main differences in these pedagogical approaches. …analyse recent political events using two of the following political theories: Marxism, communism, socialism, liberalism and conservativism.  |
| Apply | This skill asks whether students can use a theory or information in different situations. Can students articulate the relevance of what they are taught in other circumstances? | apply; classify demonstrate; examine; interpret; modify; use; practise; solve | …apply supply and demand curves to identify why prices have risen or fallen. …use the phonetic alphabet to transcribe a text of 100 words. …use a haemocytometer to calculate cell density in fluids.  |
| Understand | This skill identifies what expectations we have of our students. What can they interpret? How can they demonstrate understanding and the ability to recall information?  | clarify; conclude; discuss; explain; illustrate; locate; review; select; summarise | …explain how prisoners are rehabilitated for release in UK prisons. …review a range of methods for preparing patients for surgery. |
| Remember | This skill focuses on ability to recall facts and describe objects, processes etc. | define; describe; identify; know; list; memorise; name; present; quote; recall; show; state | …list the main symptoms of patients with heart and circulatory diseases.…identify the key stages of the water cycle.…describe the main forms of poetry used in the Renaissance Period.  |

1. Checklist for writing clear learning outcomes:
2. Write in the future tense: ‘by the end of this module, students **will** be able to…’
3. There is no specific number of Course or Module LOs at CCCU. For modules (e.g. of 20 credits) 3-5 is a good number and for courses around 6-10. There is some flexibility as courses may need to comply with the specific requirements of the relevant professional body.
4. Think SMART: to be useful, learning objectives should be SMART: Specific, Measurable, Attainable, Results-focused and Time-focused.
5. Ensure that outcomes are both achievable and assessable. Keep in mind how you might assess the outcomes as you are writing the learning outcomes. How would you assess if students have ‘read widely’ as opposed to show that they can ‘analyse and synthesize academic texts’?
6. While you will need to use discipline specific terminology that students need to master, avoid using jargon, and spell out acronyms and abbreviations to minimise confusion.
7. Use the learning outcome to indicate the process(es) you are expecting students to undertake. E.g., ‘demonstrate how to take blood pressure measurements accurately’ indicates to students that they will be involved in practical work with patients during contact time and points them towards the format of their assessment. Meanwhile, ‘students will be able to write an essay’ is not as helpful in supporting students to understand what the process of writing an essay involves as ‘be able to research, plan and write a discursive essay’.
8. Learning outcomes should be pitched at the threshold level, which is the level students must attain in order to pass the course/module, and not at the level the highest performing student might achieve. Pitching the learning outcomes at pass level helps to promote inclusivity and achievement for all students on that course/module.
9. Learning outcomes should clearly outline what skills and knowledge will be assessed in both formative and summative assessment.
10. Learning outcomes need to be suited to the level of study e.g., designing a module at level 4 you should not be expecting students to fulfil the course learning outcomes because they’ve got at least another two years' worth of study and scaffolding to help them to reach that level 6 end point outcome. Instead, you’ll be focusing on specific knowledge/skills that they’ll be developing in your level 4 module that will help them on the path to their level 6 end goal. You will find CCCU’s assessment criteria for levels 0, 4, 5, 6 and 7 a helpful starting point to calibrate your word choices for different levels of teaching: <https://www.canterbury.ac.uk/quality-and-standards-office/assessment-criteria.aspx>
11. If you are designing Course Learning Outcomes good practice to ensure that you design the most effective learning outcomes will include: (i) working together on the course learning outcomes as a course team; (ii) noting what was effective about the previous course and what has been identified as requiring change; (iii) consulting the [FHEQ](file:////Users/clairewilliams/Downloads/%E2%80%A2%2509The%20Frameworks%20for%20Higher%20Education%20Qualifications%20of%20UK%20Degree-Awarding%20Bodies%20%28qaa.ac.uk%29) and [QAA benchmark statements](file:///C%3A%5CUsers%5CUser%5CAppData%5CLocal%5CMicrosoft%5CWindows%5CINetCache%5CContent.Outlook%5C6VLSW8YZ%5CSubject%20Benchmark%20Statements%20%28qaa.ac.uk%29) or relevant professional or accrediting body requirements; (iv) consulting [CCCU graduate attributes](file:///C%3A%5CUsers%5CUser%5CAppData%5CLocal%5CMicrosoft%5CWindows%5CINetCache%5CContent.Outlook%5C6VLSW8YZ%5CGraduate%20Attributes%20%28canterbury.ac.uk%29) and key priorities in your sector e.g. around employability; (v) consulting course outcomes at other universities; (vi) organise a session with your Faculty Director of Learning and Teaching (FDLT) and/or Learning and Teaching enhancement (LTE-ADMIN@canterbury.ac.uk) to discuss your course/module design.
12. If you are designing Course Learning Outcomes, you must write **intermediary** course outcomes for early exit awards in order that any students who need to leave a BA or BSc early can leave with a CertHE or DipHE, and any student leaving early from an MA or MSc can exit with a PGCert or PGDip
13. If you are designing Module Learning Outcomes good practice to ensure that you design the most effective module learning outcomes will include: (i) reading the Course Learning Outcomes and identifying which of those your module addresses and at which level; (ii) referring to CCCU’s assessment criteria (linked in 3h) to help to you to calibrate your learning outcomes effectively; (iii) consulting comparable module outcomes at other universities (e.g. if you know one or two colleagues teaching in your field teach a similar module, you could ask to see their module overview and module outcomes to help you to determine how your module will be distinctive and if there were any key or central themes/skills/resources that you had not originally considered including; (iv) consult your Faculty Director of Learning and Teaching (FDLT) or Learning and Teaching Enhancement (LTE) for advice.

4. Examples of threshold LOs at Undergraduate Honours Degree (end of Level 6)

Below are reproduced the threshold pass (3rd class degree classification) descriptions from the [QAA Outcomes Classification Descriptions](file:///C%3A%5CUsers%5CUser%5CDownloads%5Cannex-d-outcome-classification-descriptions-for-fheq-level-6-and-fqheis-level-10-degrees.pdf). These give you an idea of the nature of outcomes that should be contained in your own UG course LOs.

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| **Knowledge and Understanding*** The student has demonstrated a depth of knowledge and understanding in key aspects of their field of study, sufficient to deal with terminology, facts and concepts.
* The student has demonstrated an understanding of subject-specific theories, paradigms, concepts and principles.
* The student has conducted general background investigation, analysis, research, enquiry and/or study using established techniques, with the ability to extract relevant points.
 | **Practical Skills*** The student has demonstrated evidence of developing and applying discipline-specific specialist skills.
* The student has completed practical tasks and/or processes accurately and with a degree of independence.
* The student has demonstrated technical, creative and/or artistic skills.
* The student has presented their research findings, in several formats, and has gathered, processed and interpreted data effectively.
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| **Cognitive skills*** The student has demonstrated the ability to select, evaluate and comment on reading, research and primary sources.
* The student has shown the ability to devise and sustain an argument, with some consideration of alternative views, and can explain often complex matters and ideas.
* The student has demonstrated an ability to solve problems, applying a range of methods to do so, and the ability to make decisions in complex and unpredictable circumstances.
* The student has produced some creative work
 | **Transferable skills*** The student can communicate information, ideas, problems and solutions verbally, electronically and in writing, with clear expression and style. They have also demonstrated numeracy and digital literacy skills.
* The student has demonstrated a capability of making useful contributions to group discussions and/or project work.
* The student has shown an ability to manage their learning and work with minimal or no supervision.
* The student has demonstrated initiative and/or personal responsibility.
* The student has demonstrated the ability to reflect on their work.
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In addition to the 4 categories above, the QAA also provides the following levels of professional competences for courses with professional accreditation:

* The student has demonstrated achievement of professional competence when assessed against the requirements of a PSRB.
* The student has adhered to the appropriate rules and/or conventions set by regulators or the industry.
1. Examples of good practice from CCCU courses and modules

**Level 0 Course Learning Outcomes: Foundation Year in Health**

On successful completion of the Foundation Year, students will be able to:

1. demonstrate a basic knowledge of the essential concepts, principles and theories associated with health and wellbeing; and demonstrate a basic ability to evaluate and interpret these within the context of health and wellbeing
2. present, evaluate, and interpret a variety of health and wellbeing related evidence or data
3. make judgements in accordance with basic theories and concepts of health and wellbeing
4. display study skills necessary to be able to make the transition into Higher Education.

### **Level 6 Course Learning Outcomes: BA (Hons) Musical Theatre**

### On successful completion of the course, you will be awarded a BA (Hons) Musical Theatre, and you will be able to:

1. demonstrate through practice an in-depth and detailed knowledge and understanding of the theories and practices of Musical Theatre repertoire, performance and production;

2. demonstrate a sophisticated conceptual and practical engagement with independent and collaborative generative processes;

3. critically interrogate, analyse and evaluate contextual, historiographic and theoretical aspects of Musical Theatre/s;

4. communicate with confidence a sophisticated understanding of Musical Theatre theories and practices;

5. demonstrate confident, insightful and authoritative critical research skills.

**Level 7 Course Learning Outcomes: MSc in Psychology**

On successful completion of the course, students will be able to:

1. Demonstrate systematic and critical understanding of the latest developments in the areas of psychology and how these are founded on key models, theory and empirical evidence.
2. Engage with critical debates in psychology and demonstrate the ability to assess the limits of different epistemologies from an informed perspective, grounded in advanced conceptual understanding of historical and current debates, theory and evidence.
3. Demonstrate systematic and critical understanding of the challenges involved in the application of psychological concepts and models, including ethical and methodological issues, in a variety of settings and at least one area of practice.
4. Demonstrate sophisticated conceptual and critical understanding of psychology as a discipline that allows you to generate original research questions, evaluate and identify the most appropriate methodologies to investigate them and carry out an original and independent piece of research.
5. Be able to communicate, effectively and coherently, complex ideas, including original research and findings, to a variety of audiences in a variety of formats.
6. Demonstrate autonomy, initiative, personal responsibility and originality in tackling and solving problems.
7. Manage and advance your own learning and demonstrate the capacity to work and research independently while developing new skills that will enable you to become life-long learners.

**Level 4 module “introduction to stagecraft” from the BA Musical Theatre:**

By the end of the module students should be able to:

1. Demonstrate an awareness of the practical roles relating to stagecraft production, such as makeup, costume, lighting, sound and prop.
2. Demonstrate the ability to work as a team to realise a creative live performance project;
3. Demonstrate the ability to develop costume and makeup elements sympathetic to the needs and style of a small form performance;
4. Demonstrate the ability to construct and operate a simple technical support system (such as sound and lighting, or projection), for a small form performance.

**Level 5 module “Integrated Mechanical and Electrical Design for Manufacture" From the Degree Apprenticeship in manufacturing engineering**

By the end of this module apprentices should be able to:

1. Evaluate, identify and design sustainable integrated electro-mechanical technologies for manufacture;
2. Design for manufacture electro-mechanical systems that conform to appropriate legislation or regulations, can be maintained, operated and decommissioned in accordance with current and future planned environmental and climate change legislation.
3. Design electro-mechanical device using suitable components, machine elements and mechanisms manufacture more than one.
4. Design and evaluate fundamental sustainable electro-mechanical service/system to be manufactured meeting customer requirements and functionality.

**Level 6 module on BSc (Hons) Radiography, module Preliminary Clinical Evaluation 2**

By the end of this module students should be able to:

1. Critically analyse the appropriateness of imaging requests in the context of care pathways;
2. Appraise and critically evaluate radiographic appearances of complex traumatic and pathological processes affecting the human body;
3. Demonstrate and apply search strategies in relation to complex trauma and pathologies;
4. Critically reflect on the importance of communication of radiographic findings that affect patient treatment and management.
5. Examples of weak and enhanced learning outcomes with practice activities

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| **Learning Outcome: By the end of this module students will be able to…** | **Evaluation** |
| …have had the opportunity to learn effective presentations skills | This is not a learning outcome. This describes module/course content and not an attribute of a successful student on the module |
| … have deeper appreciation of good presentation skills. | This is too vague, does not start with an action verb, define the level of learning, and is also not specific enough.  |
| …understand principles of effective communication | This is less vague. It starts with an action verb, but does not clarify the level of learning and the subject of any learning is too vague to be assessed |
| …communicate research on academic topics effectively through individual presentations  | This is a specific learning outcome. This starts with an action verb which defines the level of learning. It also provides context thus ensuring that the outcome is specific and measurable |

**Practice Activities: can you enhance these learning outcomes by rewriting them to make them clear, specific and assessable?**

Have a look at the learning outcomes below. Each has an element of their design, wording or composition which might make them less effective based on the tips and advice you have read so far.

**Example Learning Outcome 1**

*By the end of this module students will be able to understand the main features of qualitative research and the principles of research ethics in qualitative studies.*

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**Suggested alternative:**

By the end of this module, students will be able to describe four key elements of qualitative research and explain the main ethical considerations that should be considered when conducting qualitative research.

**Example Learning Outcome 2**

*By the end of the module students will be able to have an appreciation of the use of statistics in Econometrics.*

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**Suggested alternative:**

By the end of this module students will be able to use statistics to forecast money supply growth in Econometrics.

**Example Learning Outcome 3**

*By the end of the course students will be able to complete academic research.*

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**Suggested alternative:**

By the end of this course students will be able to use primary and secondary sources to complete an accurately written and referenced independent research project in a topic of their choice.

1. Further reading
* Anderson, L., & Krathwohl, D. A. (2001*). Taxonomy for learning, teaching and assessing: A revision of Bloom's taxonomy of educational objectives.* New York: Longman.
* Baker, R., Ma, W., Zhao, Y., Wang, S., Ma, Z. (2020). *The results of implementing zone of proximal development on learning outcomes*. International Educational Data Mining (EDM) Society, Paper presented at the International Conference on EDM (13th, Online, Jul 10-13 2020).
* Biggs, J. (2003). *Teaching for Quality Learning at University.* Buckingham: The Society for Research into Higher Education and Open University Press.
* Biggs, J.B. (1996) ‘Enhancing teaching through constructive alignment’. *Higher Education* 32. 347-364.
* Daugherty, R. Black, P. Ecclestone, K. James, M. and Newton, P. (2008) ‘Alternative perspectives on learning outcomes: challenges for assessment.’ *The Curriculum Journal*. 19(4) 243-254.
* Entwistle, N. (2005). ‘Learning outcomes and ways of thinking across contrasting disciplines and settings in higher education’, *The Curriculum Journal*. 16(1) 67-82.
* Kennedy, D. (2006) *Writing and using learning outcomes: a practical guide.* Available at: <http://hdl.handle.net/10468/1613>. [Last accessed 10.03.2021.]
* Tremblay, K., Lalancette, D., Roseveare, D. (2012). *Assessment of Higher Education Learning Outcomes feasibility study report: volume 1 – design and implementation*. Available at <http://hdl.voced.edu.au/10707/241317>. [Last accessed 10.03.2021.]
* Zlatkin-Troitschanskaia, O. (2018). *Assessing student learning outcomes in higher education*. London: Routledge.
1. Biggs and Tang (2011) *Teaching for Quality Learning at University*. 4th ed. Maidenhead: Open University Press. [↑](#footnote-ref-2)