



# Writing Learning Outcomes

## Introduction

The use of aims and learning outcomes to describe what a lecturer or tutor wishes to achieve in his or her course / training session, and what students can be expected to know or do after studying it, are now well embedded in all educational sectors both in the UK and internationally. Used correctly they do not constrain teaching and assessment, rather they provide a valuable signpost for teaching staff, students and external stakeholders.

## Writing unit aims

Aims and learning outcomes are different. Aims can be considered to be teaching *intentions* – they are what you intend to teach or facilitate the learning of. They do not have to be measurable and you can use phrases that would not be acceptable as learning outcomes, such as:

- To instil an appreciation of ...
- To develop an integrated understanding of ...
- To develop a critical awareness of ...
- To provide an understanding of ...
- To provide an introduction to ...

However, your session aims should combine and map reasonably well to the aims as given in the course specification if there is one.

## Writing learning outcomes

Learning outcomes are what you expect the student to be able to do and therefore they must be **measurable** through the assessment. There are a number of ways learning outcomes might be expressed. Throughout the education sector, the topic of learning outcomes has been discussed at length and the guidelines that are given below represent our interpretation of the most important features of learning outcomes and the style to be adopted. The guidelines draw heavily on the original work of Jenny Moon<sup>1</sup>.

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<sup>1</sup> Gosling, D., & Moon, J. (2001). How to use learning outcomes and assessment criteria. London: SEEC.

## Step-by-step guide to writing unit learning outcomes

1. Learning outcomes are what a student who has been successful in the teaching session and who has taken advantage of the learning opportunities might be expected to have achieved. However, in these days of litigation it is safer to start the list with the phrase '*On successful completion of this course students will be expected, at threshold level, to be able to:*'.
2. Number each learning outcome – this makes it easier to cross reference to the outcomes when explaining the assessment or examination strategy. Each outcome should be *measurable*.
3. Make sure (through analysis of your course curriculum) that the course aims are achieved through the learning outcomes. Consider the balance of intended outcomes in terms of:
  - Knowledge and understanding
  - Cognitive skills
  - Transferable e.g. professional, skills
  - Subject specific skills (practical / professional)
4. The learning outcomes for a teaching session may focus on one particular domain or may contain a mix of two or more. There is no requirement for the actual learning outcomes to include outcomes from each domain.
5. Write each learning outcome with:
  - **An active (doing) verb** that lends itself to being demonstrated – do not use verbs such as '*appreciate*', '*understand*', '*know*'. Instead think about what assessment you will use to try and measure the outcome. So to measure understanding you would want the students to (maybe) '*compare and contrast*', '*critically evaluate*' and so on; therefore use these verbs instead. To measure appreciation, you might want students to '*outline*', '*contextualise*' and so on. Avoid using '*demonstrate an understanding or appreciation of*' as this is too non-specific.
  - **Words that indicate on what, or with what, the student is acting** – this indicates what the student is doing, comparing and contrasting, discussing, and so on.
6. **Knowledge, understanding and cognitive skills domains** – use verbs appropriate to the level of performance expected. For an ongoing course, there should be an obvious progression in learning outcomes and assessment criteria as students move from basic levels of competency to more advanced levels. It is useful to refer to Bloom's taxonomy of educational objectives when writing outcomes for knowledge, understanding and cognitive skills. Bloom suggested a hierarchy of cognitive processes, each building on the other, as shown in Figure 1. Recently the original taxonomy has been reviewed by Anderson (a former student of Bloom) and it has been revised very slightly with a juxtapositioning of evaluation and synthesis.

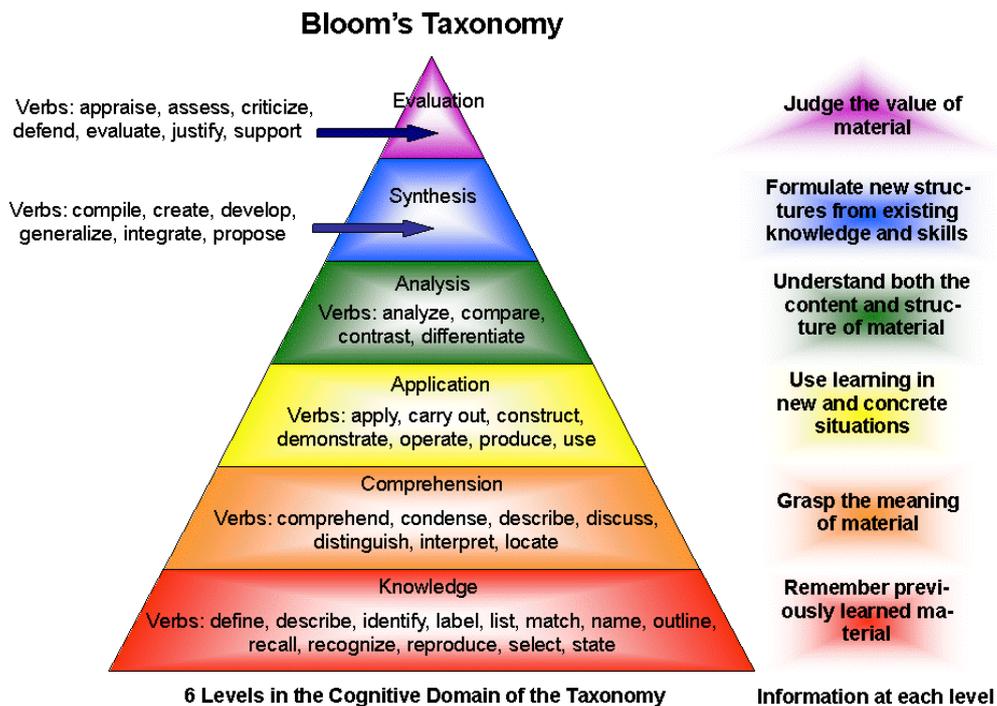


Figure 1. Bloom's taxonomy of educational objectives.

Two sites worth visiting regarding Bloom's 1956 original and Anderson's revised taxonomy are:

- [www.learningandteaching.info/learning/bloomtax.htm](http://www.learningandteaching.info/learning/bloomtax.htm)
- [http://projects.coe.uga.edu/epltt/index.php?title=Bloom%27s\\_Taxonomy#Revised\\_Bloom.27s\\_Taxonomy\\_.28RBT.29](http://projects.coe.uga.edu/epltt/index.php?title=Bloom%27s_Taxonomy#Revised_Bloom.27s_Taxonomy_.28RBT.29)

The former is particularly useful as it attempts to present a hierarchy of affective and psychomotor domains as well as cognitive.

**Knowledge** is the first step, but although it is a verb 'know' is not a good word for learning outcomes - it is better to think of a verb that describes what a student can DO to demonstrate their knowledge, so verbs like describe, identify, recognise, define, name, recall and list are better.

**Comprehension** or understanding is important, but as with 'know', 'understand' is not a very useful verb for learning outcomes as it is imprecise, better to use words like explain, summarise, discuss, recognize, report and review which will show students' understanding.

**Application** is at a higher level where students are able to put their knowledge and understanding to use in new situations so some relevant active verbs are: employ, illustrate, interpret, practice, solve and use.

**Analysis** is about understanding complex structures by the identification of parts and their relationships so learning outcomes can ask students to analyze, appraise, compare, contrast, criticize, experiment or question.

**Synthesis** is about putting parts together to form a new whole, which is important in constructing an argument and integrating knowledge so verbs such as construct, create, design, develop and organise can be used.

**Evaluation** is posited as the highest level where students can make judgements based on the value of evidence and material for a given purpose. Verbs like appraise, argue, assess and judge are relevant.

If you would like help in writing learning outcomes, please contact a member of the Clinical Education Team on x5410 or email [clinicaleducationteam@iow.nhs.uk](mailto:clinicaleducationteam@iow.nhs.uk).