

Learning & Teaching Office

Together, achieving excellence in learning and teaching





Learning Outcomes

Practice Guide



Why Write Learning Outcomes?

Learning outcomes are statements of the knowledge and skills that students acquire and are able to demonstrate as a result of learning, such as at the end of a Course (*Policy: Assessment in Higher Education Coursework, ELICOS and Enabling Courses* - *Definitions, Section 8*). A list of learning outcomes is required for every program, in every course outline, and some educators may even use them in the creation of modules of learning.

For students, learning outcomes improve engagement by emphasising the application of the knowledge and skills they are learning and clarifies the purpose of the assessment tasks. For educators, writing outcomes provides an opportunity to reflect on the context of learning and the knowledge and skills that are most valuable to students while they study and after they graduate. In addition, outcomes facilitate the development of a coherent curriculum across a program and attests to our commitment to provide quality learning experiences.

A well written set of learning outcomes provide a solid base for the development of curriculum (assessment, learning activities, content, learning resources). Remember that a learning outcome is a description of what a student *will be able* to do by the end of the course, not what a student *does* during the course, in other words learning outcomes should generally not be descriptions of course activities (e.g. not assessment tasks).

Writing learning outcomes involves a careful choice of words. To write clear learning outcomes select a verb at the appropriate level of learning and follow with a statement of what will be achieved.

1. Begin with a verb

Begin with a verb that clearly conveys the level of learning students will be expected to achieve. Levels of learning and associated verbs may include the following (<u>Anderson, 2014</u>):

Remembering and understanding: define, identify, label, illustrate, summarize. **Applying and analysing:** use, differentiate, organise, integrate, apply, solve, analyse. **Evaluating and creating:** formulate, advocate, monitor, test, judge, produce, revise, compose.

While we all hope that our students will understand the essential concepts in our courses, some verbs are too vague to be used as outcomes. Terms such as "understand, grasp or appreciate" do not convey the level of understanding you want students to achieve (i.e. it is too amorphous). Thinking about why you want students to "understand, grasp or appreciate", and what they will do with this knowledge will help to write a more useful learning outcome. For example:

Instead of	Rewrite as
Understand key terms and theoretical relationships	Select appropriate terms and theoretical
employed in the science of economics	relationships to support economic arguments
Understand the importance of establishing	Use evidence-based interaction strategies to
therapeutic rapport with patients	establish a therapeutic rapport with patients

- Consult this <u>Bloom's Taxonomy Teacher Planning Kit</u> for additional verbs and levels
- Consult the <u>SOLO taxonomy</u> for more systematic ways of describing how student learning occurs in cycles and how performance increases in complexity when mastering academic skills
- See the Appendix below for an example of the verbs and strategies integrating SOLO and Bloom's taxonomies.

2. Follow with a statement

If the first verb conveys to students the expected level of learning, the rest of the learning objective then signals what students will be asked to achieve. The achievement might be in the domain of content mastery, skills achievement, or values development. For example:

By the end of this course students will be able to:

• Use theories x, y and z to interpret and develop possible responses for common problems in group dynamics

The statement conveys the ability that will be demonstrated and the context in which it will be applied. It is **specific, assessable, and focussed on the students' actions**.

Table 1 contains a selection of learning outcomes taken from real courses (not necessarily from this institution), with comments and suggestions.

Learning outcome	Complexity	Comment/Suggestion
Describe the concept of health promotion	Simple	Could be improved either explicitly or implicitly by considering "in order to"
Demonstrate counselling skills at an intermediate level	Fairly simple	Too vague. What does an intermediate level look like? Which counselling skills?
Apply risk assessment strategies in accordance with government legislation, policies and guidelines in the teaching of science	Intermediate	Will be easy to recognise in an activity or an assessment, strikes a balance between general and specific.
Implement a constructivist framework in a teaching plan	Complex	A professional level skill that could be the culmination of a series of gradually more complex learning activities.

Table 1: Example learning outcomes

In conclusion

When designing a course, the learning activities and assessments need to be aligned to the learning outcomes. In turn, the learning outcomes need to be written to address one or more of the University's graduate attributes. Well thought out learning outcomes will ensure that your learning activities, learning resources and assessments combine *by design* to guide your students to where you had envisaged they would be at the end of the course.

Appendix – Verbs, Strategies and Frameworks

Level of	Typical Characteristics	Bloom's	Typical Verbs	Suggested Strategies
Understanding		Revised		
(SOLO)		Levels		
Pre-structural	Gather alienated items of information	 None 	• Pick	•None
	 No organisation of information 		● Find	
Students do not	•No meaning			
understand	 No demonstrated understanding 			
	Misses the point			
Unistructural	 Simple, obvious, connections made 	 Remember 	 Identify 	 Identify content to be memorized, show examples
	 Focused on one aspect 		• Name	 Name correct labels or terminology associated with
Students know one	 Information still has little meaning 		• Complete	concepts
relevant aspect of the	 Value and significance unclear 		• Conduct	Complete the list of components
whole	Concrete level		• Define	Basic quiz to determine comprehension
	 Unnecessarily reductive 		• Count, Note, Recite	
Multistructural	• Some connections made	 Understand 	 Illustrate 	 Apply method to similar cases
	 Focus on several aspects 		• Describe	• Describe the effect that a crisis has on a business
Students know several	 Meta-connections between connections 		• List	 Develop educational games or a simple website
relevant independent	missing – each treated independently,		 Apply method 	
aspects of the whole	additively		Calculate	
	 Some disorganization and alienation of 		• Enumerate	
	related concepts		• Describe	
	 Significance of parts to whole is absent 			
Relational	 Some meta-connections 	 Apply 	Construct	Reflective journals
	 Connections between facts and theory, 		 Analyse 	• Case studies
Students integrate	behaviour and purpose		 Apply theory 	• Apply theory to explain relationship between two objects
several different	• Understanding and integration of significance		 Adapt, Design, Evaluate 	• Taking a list of case studies and identifying which area of
aspects into a structure	of parts to each other, and parts to whole		Contrast, Arrange	law they belong to, based on their attributes
	 Able to apply to some problem situations 		 Integrate, Implement 	Identify relationships between concepts
Extended Abstract	 Connections with other information in 	 Evaluate 	Hypothesize	 Problem based learning and inquiry learning
	discipline and beyond course, program and	 Create 	Criticize	 Problem based questions – predict what will happen in
Students can generalise	discipline		Predict	circumstances beyond those made familiar in the learning
and relate their	Generalization and abstraction of principles		 Theorize 	activities
understanding to a	and underlying assumptions		• Transfer theory (to new	
new area of knowledge	• Translate knowledge and actions to new		domain)	
	experiences and unexpected problems		 Formulate, Substantiate 	

References

Anderson, L. W. (2014). A taxonomy for learning, teaching, and assessing : a revision of Bloom's (Pearson new international edition.). Pearson.

Biggs, J. (n.d.). SOLO Taxonomy. https://www.johnbiggs.com.au/academic/solo-taxonomy/

University of Notre Dame Australia (2020). Policy: Assessment in Higher Education Coursework, ELICOS and Enabling Courses. <u>https://www.notredame.edu.au/staff/staff-resources/policies-and-</u> <u>procedures?queries_name_query=policy%3A+assessment+in+higher+education&search_page_6458_submit_button=Search¤t_result_page=1&results_per_page=0&submitted_search_category=&mode=results_per_page=0&submitted_search_cat</u>