Creating clearer intended learning outcomes

Adapted and developed from a powerpoint presentation by Dr Melvyn November from the UWC Teaching and Learning Retreat in May 2011.

Learning outcomes

This document is intended to help readers:

• Identify the advantages of making learning outcomes explicit.

• Integrate elements from an appropriate framework(s) to develop learning outcomes.

• Apply the guidelines for creating learning outcomes to create clearer outcomes.

What are intended learning outcomes (ILOs)?

Learning outcomes are

“... the specific intentions of a programme or module, written in specific terms” (Smit, 2011).

“... statements that provide ... a common understanding by course providers ... for course takers ... of what is to be achieved ...” (Butcher, et al., 2006, p. 40).

We need clearly written and expressed ILOS because “[w]e must have a clear idea of what we want students to be able to do at the end of a unit of study and communicate these intended learning outcomes to students to they can at least share in the responsibility of achieving them” (Houghton, 2004).

Benefits of having clearly expressed ILOS

By making it clear to yourself as the lecturer and your students what it is that they need to be able to know and do during and by the end of your course/module and also the academic year and degree programme as a whole, you

• Help students to focus what to study

• Give clarity about the scope of the curriculum

• Provide students with a set of expectations -what they should be able to do as a result of our teaching and their learning (Butcher, et al., 2006, pp. 40-1)

• Give students some of the responsibility, shared with you, for achieving these goals

Curriculum alignment and ILOs

“We first have to be clear what we want students to learn, and then teach and assess accordingly in an aligned system of instruction” (Biggs, 1996).
1. Integrate Outcomes & Assessment

<table>
<thead>
<tr>
<th>Knowledge</th>
<th>Type of learning</th>
<th>Taxonomy of</th>
</tr>
</thead>
<tbody>
<tr>
<td>Recall</td>
<td>Mental skills</td>
<td>Knowledge</td>
</tr>
<tr>
<td>Comprehension</td>
<td>Application</td>
<td>Krathwohl</td>
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<tr>
<td>Analysis</td>
<td>Skills</td>
<td>Simpson</td>
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<tr>
<td>Evaluation</td>
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2. Frameworks

<table>
<thead>
<tr>
<th>Learning domain</th>
<th>Type of learning</th>
<th>Taxonomy of</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cognitive</td>
<td>Mental skills</td>
<td>Knowledge</td>
</tr>
<tr>
<td>Affective</td>
<td>Growth in feelings or emotional areas</td>
<td>Attitude</td>
</tr>
<tr>
<td>Psycho-motor</td>
<td>Manual or physical skills</td>
<td>Skills</td>
</tr>
</tbody>
</table>

The cognitive, affective and psycho-motor dimensions of learning need to be brought into as many of the tasks your students do as possible, and where appropriate or relevant. It is important to recognise, looking at the pictures and text that follows that learning needs to be conceived of holistically, rather than discretely (broken into parts). For cumulative and relevant learning to occur, students must be engaged on more than one level in teaching, learning and assessment, as well as evaluation.
Bloom’s taxonomy for learning

Bloom’s 3 higher order thinking skills

Analysis

List four ways of dealing with x and explain which ones have the highest benefits for SMMEs. Provide references to support your statements.

Synthesis

Convert a negative trial balance for the company to a positive one replacing your choice of expenses. Explain the benefits of using the expenses you chose vs. the original ones.

Evaluation

Present and defend opinions by making judgments about information, validity of ideas or quality of work based on a set of criteria. Questions like: Do you feel that serving apple pie for an after school snack for children is healthy? Why or why not?


Krathwohl's Taxonomy of Affective Domain

Source: http://classweb.gmu.edu/ndabbagh/Resources/Resources2/kraths_tax.jpg
3. Guidelines for creating ILOs

Learning outcomes are characterised by being:

- **Specific** - Provide details of aspect of expectation
- **Meaningful** - Written in understandable language
- **Appropriate** - Suit the learners’ abilities & experience
- **Realistic** - Are achievable given time constraints
- **Testable** - Some measure of progress/achievement towards them can be made

(Butcher, et al., p. 41, 2006)

Learning outcomes include VERBS which should communicate clearly to the lecturer and student what needs to be done by the students in order to demonstrate achievement or mastery of the outcome.
Typical verbs (linked to Bloom’s taxonomy for thinking and learning)

Source: http://www.ssdd.bcu.ac.uk/outcomes/

<table>
<thead>
<tr>
<th>Increasing level of cognitive complexity</th>
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</thead>
<tbody>
<tr>
<td>Knowledge &amp; understanding</td>
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<tr>
<td>Recalling important information</td>
</tr>
<tr>
<td>Comprehension</td>
</tr>
<tr>
<td>Knowledge</td>
</tr>
</tbody>
</table>

Verbs to avoid

Action verbs introduce the learning outcomes, but reconsider the use of ‘Discuss’ and ‘Demonstrate an understanding of’ because these can tend to mean too many things and are not specific or focused enough to avoid causing confusion. Verbs need to be active. When writing your outcomes, as yourself how your students will be able to show you, ion a way you can measure, whether they have achieved the outcome and to what extent.

Avoid using verbs that are not active verbs such as:

Understand
Demonstrate an understanding of
Be aware of
Perceive
Appreciate
Discuss

“Learning outcomes allow all concerned to share an idea of the journey and landmarks en route...” (Butcher, et al., 2006).

Useful references


http://www.kingston.ac.uk/adc/writing_learning_outcomes.pdf.