Writing Learning Objectives

By Jeff Barbee

Writing learning objectives, also known as Learning Outcomes, is activity that many course instructors do, but few have had any type of formal training. Learning objectives set the course on the path it will take in equipping students with the desired post-course training and skills. The biggest challenge that many instructors face is that learning outcomes are often vague, or unmeasurable. It has been shown that students perform better when they know what the course expectations are, and how the assessing of these skills will be measured (Beasley, 2012).

The two types of learning outcomes that instructors and program designers need to be familiar with are learning objectives and program outcomes (Osters & Tiu, 2003). Learning objectives, on a small level, are guidelines of what students are expected to have the ability to demonstrate at the completion of a course (Osters & Tiu, 2003; Beasley, 2012, while program outcomes focus on what the program is expected to accomplish (Osters & Tiu, 2003 & Beasley, 2012). Learning objectives can help improve student learning by helping define the skills that students will develop through and by the conclusion of the course (Beasley, 2012). Often instructors or course designers will write goals for student to be able to accomplish after going through the course. The problem that presents itself is the difficulty of being able to measure goals because of the unfocused nature they provide. Quality outcomes should provide milestones and competencies, while goals often omit these steps (Beasley, 2012).

When writing learning outcomes it is useful to incorporate action verbs, such as those listed in Bloom’s taxonomy (Bloom, 1956). These give the student a better idea of what they will be expected to demonstrate and how well (Kheiry, 2011). When using these type of verbs, it is useful to think of what is expected of students at the end of the course (Kheiry, 2011). Using Bloom’s taxonomy of verbs allows instructors to convey to students to which degree of mastery they will expect to demonstrate with a particular skill. This will help with clarity of what is being assessed through the course (Osters & Tiu, 2003). In some instances lower level skills may be required to be demonstrated at a higher level of thinking (Creation, evaluation) than skills that are being introduced in the later units of a course, such as remembering and understanding (Osters & Tiu, 2003).

There are many way to measure the effectiveness of learning outcomes. Direct methods include any work that is produced by the student, such as papers, tests, and presentations (Kheiry, 2011). Learning portfolios are a great example to track how a student has developed through the course. Assessment tools such as self-reflections, peer assessment, focus groups are indirect methods (Kheiry, 2011). Using both types of assessment measurements offers instructors flexibility and the ability to avoid the limitations that one type of measurement provides (Kheiry, 2011). A possible juxtaposition of these type of assessments can be found in the medical field with OSCEs, or Objective Structured Clinical Examinations. These are staged encounters with actors portraying a simulated patient and the medical student assuming the role of the physician. The direct assessment measurement can be used to determine how well the student performed during the OSCE, and the indirect method could be a focus group, or an exit interview with the students after the encounter to ask how they feel about their performance. When the data for both tools are computed, instructors are able to see if students have an accurate assessment of their progress, or if areas of student growth needs to be addressed.

Writing learning outcomes is a difficult process. Many find it helpful to begin with the desired end result in mind (Beasley, 2012; Office of Distant Learning, n.d.). By working backwards the development of milestones at appropriate stages can be planned out, and articulated to students of the progress they should be making. It may be useful to consider what skills and abilities that students will be developing through the course while writing learning objectives (Office of Distant Learning, n.d) and/or consider the experiences you hope your students will gain (Beasley, 2012). However learning outcomes are written, they need to answer the question “What should a student be able to do at the end of the course that they could not before” (Office of Distant Learning, n.d). The clearer and more concise learning outcomes are, the more likely they will be used by students. By using these, students can gage the skills they will be developing through the course and understand at what level these skills should be developed to (Office of Distant Learning, n.d). Another benefit of learning objectives is the consistency in grading and delivering of instruction (Beasley, 2012). They can also help keep a course on track by focusing on the important tasks (Office of Distant Learning, n.d). Learning outcomes contain three important components: Outcome, assessment method, and criteria for success (Osters & Tiu, 2003).

One popular method of writing learning outcomes is the CBC method, or condition-behavior-criterion (Beasley, 2012). Condition represents under what condition something must be performed, Behavior signals what should be able to be done, and Criterion gives the standard for how well it should be done (Beasley, 2012). This method is also known as the ABC method; Antecedent-Behavior-Criterion (Office of Distant Learning, n.d). Another way to approach this type of outcome writing is the ABCD method (UCSan Diego). Audience-Behavior-Condition-Degree. This can be thought of as A: Who are the student learners? B: What will the students be able to think, know or do, C: Under what circumstances/context will the learning occur, and D: How well of how much must the behavior be performed. After writing the course objectives, consider if they are S.M.A.R.T. objectives. Specific: Be explicit about what will happen, where, and to whom. Measureable: Establish concrete criteria for success. Achievable: Know the outcome is something your students can accomplish. Relevant: The outcome must connect to your objectives, goals, and mission. Time specific: The outcome should be bound to a specific time frame (Student Affairs, n.d.).

 In conclusion, writing effective learning outcomes provide many benefits for a course instructor. The planning process will walk a course designer through the stages of how a student will learn and progress as well as identifying effective assessment techniques to measure student growth. For students will be a clear explanation of what will be expected of a student in terms of growth at the completion of the course, as well how assignments will be graded and what the expectations will be to achieve desired marks. Using a mixture of direct and indirect assessments will provide a complete picture of how student learning is taking place, and provide data to help address any issues.

References

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