Tips for Writing Learning Objectives Based upon Bloom's Taxonomy. Presented by IFEX and IDS.

Course Outlines include Learning Objectives

► Guide course sections
► Descriptions & course learning objectives appear in syllabi
► Should be reviewed every 3 years

After review of course outlines for catalog

► Provide tips for writing learning objectives
► Develop annotated course outline template and other resources

At MCC, we use course outlines to guide teaching and learning in all sections of courses. Course descriptions and course learning objectives from the outline also appear in syllabi. Outlines should be reviewed by the faculty every 3 years and revised, if needed.
Last year, Academic Affairs updated the Course Action Request (CAR) form, and we began to review course outlines submitted for catalog changes. Overall, they are in good shape, but we'd like to provide some tips for writing learning objectives based upon Bloom's Taxonomy. IFEX will also be working with IDS on an annotated course outline form that will include tips for each field, as well as other curriculum resources.

Learning objectives are statements that describe the knowledge, skills and/or behaviors the student is expected to gain after instruction in a course, module, unit, workshop, or other learning activity.

The focus is on the student's actions and achievements
- on what students can do
- not on the instructor's presentation
- not on what the course provides

Learning objectives should be written as observable and measurable statements and begin with an action verb. (Faculty can use other taxonomies, but we will use Bloom's here.)

Benefits of Learning Objectives

▶ Guides for students

▶ Guides for instructors

▶ Serve as a start for course/curriculum design or redesign

Learning objectives can be helpful in many ways. They work as
Guides for students
- introduce and further describe the course beyond the catalog description
- show the whole before the parts, large goals before the details
- provide a topic outline or learning map within which students can find patterns and processes, and organize details
- help students make connections among courses

Guides for instructors by
- describing the specific learner behaviors to be assessed
- distinguishing one unit or course from others in a sequence or prefix
- influencing choice of instructional materials, activities, and technologies
- keeping content that is taught consistent among sections
- reducing unnecessary repetition in the curriculum
- helping instructors show students connections and progressions within and among courses

Learning objectives can serve as a start for course/curriculum design or redesign. Precise learning objectives are the core elements for new courses. They go hand in hand with assessment and our adjustments to the curriculum to improve students' learning.

Learning objectives are also known as
- educational, performance, instructional, behavioral objectives and others
- outcomes
- aims
- goals
- competencies

Many synonyms can be used for objectives. Different colleges, organizations, publishers, and trainers use different terms. For example, at the unit level, one Pearson software uses the terms "learning goals," and in the Nebraska Transfer Initiative Statewide syllabi, what MCC calls course objectives are termed "student learning outcomes." Quality Matters uses "course learning objectives" and "module/unit learning objectives." As long as the terms can be translated to ours in the course outline, we probably need not be too concerned about the differences. MCC uses the terms "student learning outcomes" in program reviews, "course objectives" in course outlines, and "unit objectives" in topical/unit outline section of course outlines. Our focus here is on the course and unit objectives.

Sample Objectives Sections of Course Outline

TITLE: ___Professional Ethics and Issues___ PREFIX/NO. ___HMSV 2050___

COURSE OBJECTIVES: Upon the successful completion of this course, the student will be able to:

1. Define ethics and aspirational or virtue ethics.
2. Compare and contrast the relationship between ethics and the law.
3. Identify and describe the steps involved in ethical decision making.
4. Identify, explain and be able to apply basic ethical principles involved with both general human service work and chemical dependency counseling.
5. Identify and describe positive work behavior necessary for the practicum experience.
6. Describe how professional appearance and behavior are necessary for practicum.
7. Identify and describe personnel issues that may present potential conflict in practicum and work.
8. Describe selected policies and procedures related to the practicum.

TOPICAL UNIT OUTLINE/UNIT OBJECTIVES:

I. **DEFINING ETHICS**

   A. Explain the meaning of ethics
   B. Describe the difference between mandatory and aspirational (virtue) ethics.
   C. Compare and describe the differences and similarities between the terms ethics, morals and values.

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Here is a sample section of a course outline for Professional Ethics and Issues, at about page two. These are the sections and objectives we'll briefly review: the course objectives section and topical/unit outline that contains the unit objectives. (You might notice that the general condition for meeting the course objectives, "upon completion of the course," is stated before the list of them, and that each one begins with a verb.)

Course Objectives

► State the main or essential skills, knowledge, and/or behaviors students will gain
► Achieved "upon successful completion of the course"
► Specific, observable, and measurable
► Begin with an action verb
► Written in language students can understand
  – Some subject matter terminology necessary to accurately convey
  – Avoid jargon, overly sophisticated, complex, or scholarly terms
► How many per course? Perhaps 5-10

Course objectives state the main or essential skills, knowledge, and/or behaviors students are expected to gain--what students will know and be able to do.
Achieved "upon successful completion of the course" (This idea/condition can also be stated as "Students who successfully complete the course will be able to")
Specific, observable, and measurable
Written in language students can understand. Keep in mind that you may have non-native speakers in the class.
- Some subject matter terminology may be necessary to accurately convey the ideas
- Avoid jargon, overly sophisticated, complex, or scholarly terms
How many per course? It depends. Perhaps 5-10. The great majority of Nebraska Transfer Initiative Statewide syllabi have between 5 and 10 student learning outcomes, which translate to our course objectives. Only a few outliers have more.
If your course can be divided so as to accomplish one course objective per week, with a week off for the final exam or project, that number would be consistent with most in the statewide group. If your students practice patterns over time or in units, and their desired behaviors do not fit into a weekly formula, then you might be focusing on the essential attributes/components of a skill and have fewer or more.

Course Objectives and Alignment

Alignment: elements work together to ensure students achieve the desired learning outcomes.
► Might align with General Education Outcomes
► Contribute to achievement of Program Outcomes
► Might align with other courses' objectives and help students see connections and differences from one course to another
► Align with unit objectives, instructional materials, activities, and assessments
► Might overlap with but are more significant than small tasks or activities, such as reading a chapter or examining a map

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Alignment means that elements work together to ensure students achieve the desired learning outcomes (objectives). A good number of us have used alignment tables or curriculum maps that include elements within courses or within programs to see how they correspond.

If we look at them from larger college goals down to the lesson level, course objectives

- might align with and support General Education Outcomes
- contribute to achievement of program outcomes
- might align with other courses' objectives and help students see connections, progressions, and differences from one course to another
- should align with unit objectives, instructional materials, activities, and assessments
- might overlap with but are more significant than small tasks or activities, such as reading a chapter or examining a map

Topical/Unit Outline
- divides the course into topics and/or other units of study that engage and prepare students to meet course objectives
- includes sections/headings and unit objectives
- (Outline of topics can be separate from or integrated with objectives, but objectives must be included)

Sections/headings of the outline can vary, depending on the course, and be
- course objectives or key words from them
- topics or groups of topics
- units
- modules
- weeks
- chapters
- other segments of the course

In the topical/unit outline section, there should be at least two and perhaps several objectives under each topical/unit heading. Each objective states a skill, knowledge, or behavior students are expected to achieve by the end of the unit, topic, module, week, chapter, or other course segment. Again, these are what students should know and be able to do. Unit objectives should be more specific than course objectives and be observable and measurable. They should align with course objectives and course activities, motivating students toward the larger course goals and culminating projects and/or assessments. Unit objectives often build from less to more complex thinking and tasks and toward higher-level course objectives.

Practice: Draft Course and Unit Objectives

► *Upon completion of the course, the student will be aware of the disease concept of alcohol/drug dependency in a case situation.*
  ➢ Understand the factors that influence people to abuse alcohol or drugs
  ➢ Read about the developmental stages of alcohol/drug dependency
  ➢ Know the effects of alcohol/drug abuse and dependency on the family, worksite, friends, society and culture

What can be improved?

For quick practice, here is a draft of a course objective with aligned unit objectives. (In MCC online and hybrid courses, we introduce the unit, topic, or module folder with phrasing something like this: "Students who successfully complete the module will be able to" and a list of objectives.)

In the practice course objective, what needs a second look? Answer: "be aware of," as stated, is hard to measure.

In the unit objectives, what still needs to be adjusted?

- "Understand," as stated, is not measurable.
- "Read about" is possibly an activity that students do to meet an objective.
- "Know" is certainly what we want for students, but we need a verb that describes <u>what they will do to show us they know</u>.

Okay, let's look at a revised version of this segment. (Next slide)

Here is a revised version of the course objective with aligned unit objectives. *Upon completion of the course, the student will be able to <u>apply</u> the disease concept of alcohol/drug dependency to a case situation.*
- <u>List</u> the factors that influence people to abuse alcohol or drugs
- <u>Explain</u> the developmental stages of alcohol/drug dependency
- <u>Describe</u> the effects of alcohol/drug abuse and dependency on the family, worksite, friends, society and culture

Notice the action verbs underlined in each learning objective. All of these are specific, observable, and measurable. And they build from lower-order to a bit higher-order thinking.

Verbs and Phrases to be Avoided

- Know
- Appreciate
- Learn
- Enjoy
- Understand
- Realize
- Cover
- Be aware of
- Be familiar with
- Be exposed to
- Gain knowledge of
- Demonstrate an understanding of

To help make sure your objectives are measurable, begin them with verbs that state observable actions. Avoid the following verbs and phrases: know, appreciate, learn, enjoy, understand, realize, cover be aware of, be familiar with, be exposed to, gain knowledge of, demonstrate an understanding of. These verbs would be hard to observe and not measurable. That last item is a variation on a phrase to be careful of using, except in situations where the student is performing an _actual_ demonstration. If you are inclined to use these, you might state the verb, then ask "how will students show it?" or "by doing what?" to arrive at the more specific, measurable behavior. You can also use Bloom's Taxonomy.

Effective learning objectives focus on the student's behavior. To determine behavior that is observable for use in learning objectives, ask yourself: What will the student be doing or should be able to do as a result of the learning? Also, use Bloom's Taxonomy. Bloom's taxonomy moves students from lower-order thinking skills, such as remembering and understanding, to higher-order thinking skills such as applying, analyzing, evaluating and creating. The words in the left column of this table from "Blooming as a learner" on My Learning Network at http://mylearningnetwork.com/wp-content/uploads/2014/04/bloom-taxonomy-definitions.png indicate each level in the taxonomy. Within each corresponding box to the right is a central question about the level and a list of verbs. You can use Bloom's levels and verbs to help you structure content so as to help students make progress through lessons and units toward those main, essential behaviors stated in the course objectives.

See also the IFEX/IDS handout "Bloom's Taxonomy for Developing Objectives and Assessment Measures"
Arizona State University Online Objectives Builder (formerly Radio James)
http://teachonline.asu.edu/objectives-builder/
Bloom's Digital Taxonomy
http://edorigami.wikispaces.com/Bloom%27s+Digital+Taxonomy
Larry Ferlazzo's "The Best Resources for Helping Teachers Use Bloom's Taxonomy in the Classroom"
http://larryferlazzo.edublogs.org/2009/05/25/the-best-resources-for-helping-teachers-use-blooms-taxonomy-in-the-classroom/