



Course Name: Terminal Objective Enabling Enabling Enabling Enabling Enabling Enabling Objective 1 Objective 2 Objective 3 Objective 4 Objective 5 Objective 6 Information Examples Practice

Feedback

Review

Assessment

Instructional

Instructional

Strategies

Media

Information			
Examples			
Practice			
Feedback			
Review			
Assessment			
Instructional Media			
Instructional Strategies			

Analysis

Audience/Learner Analysis:

- 1 Can you state the goal of the course in one easy sentence?
- 2 Who will be taking your course?
- 3 How many learners will there be? Where are they located?
- 4 What knowledge and skills do they already possess related to the instruction?
- 5 What approaches to instruction do they like or dislike?
- 6 How do they feel about receiving instruction?
- What mandates/culture/outside influences might impact the delivery of instruction or how the learners receive it?
- 8 What does your "spidey-sense" tell you about the learners?

Environmental/Context Analysis:

- 1 How will the instruction be delivered?
- What will learners have access to (e.g., computers, software, Internet, resources)?
- What are the limits with: bandwidth, classroom sizes, time for instruction, support, other?
- 4 Are there any physical space constraints that will make certain activity types difficult or impossible?
- 5 What are the learners' and instructors' roles during instruction?

Task/Content Analysis:

- 1 Did you review existing materials associated with the learning experiences?
- 2 What does evaluation data tell you about past course performance?
- 3 Do the content and associated tasks reflect discipline standards?
- Did you talk to other faculty or stakeholders about what they think should be learned?

Design

Terminal objectives state in measurable terms the overall learning outcome learners should be able to achieve. Terminal objectives include three parts:

- 1. **Condition**: The conditions in which the learner will perform the task
- 2. **Task**: What the learner will do and how the learner will demonstrate the knowledge, skill, or attitude.
- 3. **Standard**: Defines the level in which the learner must perform the task.

Enabling objectives support terminal objectives by breaking the terminal objective down into smaller and more manageable objectives. Enabling objectives address an aspect of the terminal objective and explain the expectations of the learner's performance.

Learning objectives – terminal and enabling – are dependent on a carefully chosen verb that indicates exactly what the learner should be able to do at the completion of the course or unit.

You might also consider choosing a verb associated with the cognitive level you wish to see learner mastery. Bloom's Taxonomy, created by educational psychologist Benjamin Bloom (1956), identifies six levels of the cognitive domain that go from simple to higher-order thinking skills: Remembering, Understanding, Applying, Analyzing, Evaluating, and Creating. The following table links each Bloom's level with a verb category and possible verbs. Below, Salama et al. (2014) portrays examples of Bloom's-aligned action verbs to include in learning objectives.

Bloom's Level REMEMBERING: Can the student recall or remember the information?	Category Recognizing Recalling	Verbs Define, duplicate, find, identify, list, locate, match, recognize Draw, label, name, recall, recite, repeat, reproduce, retrieve, state, tell, write
are mormatori:	Interpreting	Indicate, interpret, locate, paraphrase, represent, select, translate,
UNDERSTANDING Can the student explain ideas or	Exemplifying Classifying Summarizing	Chart, diagram, exemplify, illustrate, Categorize, classify, convert, relate Describe, generalize, summarize, report,
concepts?	Inferring	restate, rewrite, trace Associate, conclude, extrapolate, infer, predict
	Comparing Explaining Executing	Compare, contrast, describe map, outline Articulate, explain, express, model Demonstrate, dramatize, employ,
APPLYING Can the student use	Executing	execute, install, produce, operate, schedule, sketch, show, solve, use, write,
the information in a new way?	Implementing	Administer, apply, complete, compute, conduct, implement, perform, practice,
ANALYZING Can the student	Differentiating	run, use Appraise, contrast, detect, differentiate, distinguish, explain, find, question, research, select, test
distinguish between the different parts?	Organizing	Compare, connect, contrast, correlate, categorize, classify, find, integrate, organize, outline, separate, sort, structure

Development

Developing learning activities courses is a tremendous undertaking as there are a lot of factors to consider:

Organization of the Lesson

How do you plan to organize your lesson? What will you do first? In the middle? At the end?

Things to consider:

- Beginning/Opener: motivating learners and activating prior knowledge.
- Middle/Mini-Lesson: instructional lesson given to learners, so they have the required content knowledge to engage in learning activities and/or practice independently.
- Middle/Work Session: learning activities such as role play, discussions, games, independent practice, etc.
- *End/Closer*: prompting reflection and lasting change in knowledge, skills, or behavior.

Delivery Method and/or Media Involved

Which are selected? Where are they available? Which will need to be developed? Things to consider:

- What digital technologies/new media will you use?
- What traditional tools and methods will you use?
- What materials do you already have, and how will you adapt them to the new context?
- What can you purchase and what do you need to create yourself?
- What are your criteria for selecting appropriate materials and products?

Guidance for the Student

Things to consider:

Organization and/or navigation

Student orientation to the course

Communication of expectations

Sources of support (e.g., Q&A forum, technology support, etc.)

Guidance for the Instructor

In some contexts, the instructional design and the teaching are done by different people who may not ever meet. Your goal here is to provide enough background that someone else could realize your vision when teaching the course you designed.

Things to consider:

- Overview of organization
- Overview of course goals
- Tips for facilitation, etc.

Formative Evaluation

Remember that we are focusing on formative evaluation at this stage. Summative evaluation comes later – it is one part of the "E" in ADDIE - but at this stage we are focused on anticipating problems and opportunities and acting on them early. Things to consider:

How will you evaluate the course before implementation?

- How will you continuously evaluate the course and learners during implementation?
- Is some type of pilot testing possible or required?
- How will you accomplish it?

Implementation

The details of an implementation plan will vary greatly depending on your context (e.g., a professor facilitating a course you designed, an instructional designer in an educational software company planning for a new product roll-out, a corporate elearning designer, etc.). For your implementation plan, address the following questions in some detail:

- Who will be teaching the course?
- What kind of support will be available to instructors while the course is underway? (ex: Teaching Assistant, ITLE support)
- How will you deal with unexpected problems that occur during implementation?
- How will you manage changes (e.g., immediate bug-fixes versus improvements to make for the future, etc.)?
- Can you think of any other implementation issues not listed above that you may have to address?

Evaluation

The latest version of the OSU Student Survey of Instruction (SSI) is highly focused on the learner, how they engaged with the course, and their learning experience. This data should give you information on your instructional design (Kirkpatrick & Kirkpatrick, 2016):

- Results: Are the targeted outcomes achieved? (to test the effectiveness of the instruction to create the desired outcomes)
- Behavior: How do participants apply what was learned to change their behavior? (to determine students' ability to perform task with genuine consequences and judge whether the performance gap has been closed)
- Learning: What knowledge is learned, skills developed, or attitudes changed? (to measure the acquisition of knowledge, skill, and efficacy)
- Reaction: How satisfied are the learners with the instruction? (to determine degree learners' and/or instructors' satisfaction with the instruction)