# How to Write CTE Standards and Benchmarks

Below are steps and resources to write high-quality learning objectives so that educators know what to teach, students have marketable skills and employers can hire individuals that are ready to quickly be fully productive.

## Step 1: Identify Occupational Tasks

**Identify & Break Down Occupational Tasks**

**1.a. Identify the tasks of a given occupation.** Job tasks can be identified through reviewing ONet, online job posts and job descriptions; expert interviews and questionnaires; work observations; log sheets; and desk audits.

**1.b. Break the task down into prerequisite skills and knowledge.** It may be necessary to repeat this process multiple times, continuing to break complex tasks into subcomponent skills and knowledge. See 'Standards vs. Benchmarks' section below to learn about the hierarchy of learning objectives used in Florida.

## Step 2: Write Observable Learning Objectives

**Use Observable Action Verbs to Write Learning Objectives**

**2.a. Write observable learning objectives**. Do <u>not</u> use verbs like 'know' – no mind reading! Only write how a student can apply their knowledge in a way that can observed and measured through an assessment – written, oral, or practical. See the list of action verbs included below in this document.

## Step 3: Taylor Rigor & Specificity to Student & Educator Audience

**Balance the Rigor:**
Not Too Easy, Not Too Hard

**3.a. Edit the rigor of the learning objective to match the capability of the student body.** High-quality learning objectives should neither be easy nor overly taxing – neither boring nor anxiety inducing. Find the right balance where most students can achieve the learning objective, but only initially with assistance.

**Balance the Specificity:**
Not Vague, Not Overly Restrictive

**3.b. Edit the learning objective to ensure the right level of specificity for educators.** A good learning objective should be specific enough that it is not open to multiple, different interpretations but not so specific as to lock in the educator into one means of engaging students in skill development.

## The Secret Formula for Learning Objectives

| The student will be able to… | + | [action verb] | + | [career-specific skill that is:<br>• **Observable**<br>• **Challenging but achievable for students**<br>• **Specific but not restrictive for educators**] |
|---|---|---|---|---|

## Sources of Occupational Skills

- Employee job descriptions, expert interviews and questionnaires, work observations, log sheets and desk audits.
- EmployFlorida.com is Florida Commerce's job posting site that aggregates from other job posting platforms.  Click on: Menu > Labor Market Services > Occupational Profile > Skills > Advertised Job Skills to view skills listed by Florida employers in Florida job posts.  You can click on the numbers under 'Job Opening Match Count' to view the actual job posts that listed the summarized skills. In addition, the system pulls in skill lists created by O*Net, a national occupational database operated by the US Department of Labor.

## Banned Learning Objectives Words

Never use the following verbs when writing learning objectives (these are not observable):

| | | | | | |
|---|---|---|---|---|---|
| • Know | • Understand | • Familiarize | • Be Aware | • Gain Knowledge of | • Learn |
| • Comprehend | • Memorize | • Study | • Become Acquainted with | • Cover | • Realize |

In addition, never use vendor names, jargon, or abbreviations.

## Standards vs. Benchmarks

**Standard**:  A statement describing a specific behavior, action, or competency a student should be able to demonstrate based on the underlying instruction.

**Benchmark**:  A clear, specific description of knowledge or skill (competency) that students should acquire in order to demonstrate achievement of the related standard.

**Example**

01.0     Standard #1
       01.01     First benchmark of Standard #1
       01.02     Second benchmark of Standard #1
02.0     Standard #2
       02.01     First benchmark of Standard #2
       02.02     Second benchmark of Standard #2

## Bloom's Taxonomy (Adapted)

| | Cognitive Domain Verbs | | | | Psychomotor Domain Verbs | | |
|---|---|---|---|---|---|---|---|

**Increasing Complexity**

### Cognitive Domain Verbs

**Knowledge**
- Define
- Describe
- Identify
- Label
- List
- Match
- Name
- Outline
- Recall
- Recognize
- Reproduce
- Select
- State

**Comprehension**
- Classify
- Convert
- Defend
- Distinguish
- Estimate
- Explain
- Extend
- Generalize
- Infer
- Interpret
- Paraphrase
- Predict
- Rewrite
- Summarize
- Translate

**Application**
- Apply
- Change
- Compute
- Construct
- Demonstrate
- Discover
- Manipulate
- Modify
- Operate
- Predict
- Prepare
- Produce
- Relate
- Show
- Solve
- Use

**Analysis**
- Analyze
- Break down
- Compare
- Contrast
- Diagram
- Differentiate
- Discriminate
- Distinguish
- Identify
- Illustrate
- Infer
- Outline
- Relate
- Select
- Separate

**Synthesis**
- Categorize
- Combine
- Compile
- Compose
- Create
- Design
- Devise
- Explain
- Generate
- Modify
- Organize
- Plan
- Rearrange
- Reconstruct
- Relate
- Reorganize
- Revise
- Rewrite
- Summarize
- Write

**Evaluation**
- Appraise
- Compare
- Conclude
- Contrast
- Criticize
- Critique
- Defend
- Discriminate
- Evaluate
- Explain
- Interpret
- Justify
- Rate
- Summarize
- Support

### Psychomotor Domain Verbs

**Perception**
- Choose
- Describe
- Detect
- Differentiate
- Distinguish
- Identify
- Isolate
- Relate
- Select

**Set**
- Begin
- Display
- Explain
- Move
- Proceed
- React
- Show
- State
- Volunteer

**Guided Response**
- Copy
- Trace
- Follow
- React
- Reproduce
- Respond

**Mechanism & Complex Overt Response**
- Assemble
- Calibrate
- Construct
- Dismantle
- Display
- Fasten
- Fix
- Grind
- Heat
- Manipulate
- Measure
- Mend
- Mix
- Organize
- Sketch

**Adaptation**
- Adapt
- Alter
- Change
- Rearrange
- Reorganize
- Revise
- Vary

**Origination**
- Arrange
- Build
- Combine
- Compose
- Construct
- Create
- Design
- Initiate
- Make
- Originate