Tips for Writing Learning Objectives

What are learning objectives?

- Learning objectives are **specific, measurable, observable student behaviors**;
- An objective is a description of a performance you want learners to be able to exhibit before you consider them competent; and
- Learning objectives can describe these behaviors at a course, module/unit, or session level.

Why have objectives?

- To convey instructional intent to students;
- To ensure that learning is focused clearly enough that both students and teacher know what is going on;
- To provide direction to instruction; and
- To provide guidelines for alignment of assessment.

How specific and detailed should objectives be? What are the components of a learning objective?

A common way of framing objective components is using the A-B-C-D model. These include: **audience**, **behavior**, **condition**, and **degree**.

- **A** (audience) – Who is the target audience? (e.g. “Students will…”)
- **B** (behavior) – What is the real work to be accomplished by the student? (e.g. “design”)
  - They should be both observable and measurable behaviors.
- **C** (condition) – What are the conditions/constraints where the audience will be expected to perform these tasks within? (e.g. “given an amino acid sequence of a protein…”).
- **D** (degree) – How will the behavior need to be performed? (e.g. “the gene for expression of a protein”).

Examples:

- Students will be able to predict the net charge on ionizable groups at any given pH.
- Students will be able to predict, in qualitative terms, the role of molecular forces in stabilizing protein-drug complexes and the potential effect of chiral centers on drug activity.
- Given the target of a drug in polymer biosynthesis, students will be able to predict the effect of that drug on bacteria or viral growth.
- Students will describe past public policy debates in the United States that exemplify a broad range of historical and contemporary concerns and analyze them using a provided theoretical framework.
- Students will identify which patients will benefit from the pertussis vaccine based on their demographics and comorbidities.
Bloom’s Taxonomy is a classification of different objectives. The taxonomy was proposed in 1956 by Benjamin Bloom but was recently updated. These 6 levels can be used to structure the learning objectives, lessons, and assessments of your course. The taxonomy ranges from the **Remembering** *(Lowest cognitive task)* to **Creating** *(Highest cognitive task)*. Note: This taxonomy addresses the cognitive domain but other taxonomies are available for the psychomotor and affective domains.

It is important to remember that these verbs are not observable and therefore are not measurable:

- understand
- know
- grasp
- appreciate
- comprehend

Consider using the verbs below to define your objectives and the example activities to assess achievement of the learning objectives.

Please feel free to reach out to CETL *(cetl@uconn.edu)* if you would like further assistance on writing learning objectives and aligning them with your assessments.
# Measurable Action Verbs across Bloom’s Taxonomy for Writing Learning Objectives

*“After successfully completing this course/module, you will/should be able to…”*

<table>
<thead>
<tr>
<th>Lower Order Thinking</th>
<th>Higher Order Thinking</th>
</tr>
</thead>
<tbody>
<tr>
<td>Remembering</td>
<td>Creating/Synthesis</td>
</tr>
<tr>
<td>Understand/Comprehension</td>
<td>Applying</td>
</tr>
<tr>
<td>Applying</td>
<td>Evaluating</td>
</tr>
<tr>
<td>Analyzing</td>
<td></td>
</tr>
<tr>
<td>Evaluating</td>
<td></td>
</tr>
</tbody>
</table>

### Lower Order Thinking
- **Remembering**
  - Gather & recall information
- **Understanding/Comprehension**
  - Grasp meaning; explain, restate ideas
- **Applying**
  - Use learned material/knowledge in a new situation
- **Analyzing**
  - Separate material into component parts; show relationships between parts
- **Evaluating**
  - Make choices; judge the worth of material against stated criteria

### Higher Order Thinking
- **Creating/Synthesis**
  - Put together separate ideas to form new whole; establish new relationships

### Action Verbs
- **Remembering**
  - Define, identify, describe, label, find, state, match, select, locate, memorize, recall, reproduce, tabulate, tell, copy, discover, duplicate, enumerate, listen, omit, read, recite, record, repeat

### Activities:
- **Read books, articles**
- **Watch video content**
- **Research Notes**
- **List**
- **Label**

### Understanding/Comprehension
- **Explain**
  - Explain, describe, interpret, paraphrase, summarize, classify, compare, differentiate, discuss, extend, associate, contrast, demonstrate, express, identify, indicate, infer, relate, restate, select, translate
- **Describe**
  - Give examples of group, illustrate, order, report, represent, research, review, rewrite, show

### Activities:
- **Analogy**
- **Outline**
- **Summary**
- **Graph**
- **Drawing, Diagram**
- **Collage**
- **Skit**
- **Speech**
- **Personal statement**
- **Collection**

### Applying
- **Apply**
  - Solve, illustrate, modify, use, calculate, change, choose, demonstrate, discover, experiment, relate, show, sketch, complete, construct, interpret, prepare, produce, report, teach, administer, collect, compute, determine, develop, examine, explain, measure, list, operate, practice, record, schedule, transfer, convert
- **Solve**
- **Illustrate**
- **Modify**
- **Use**
- **Calculate**
- **Change**
- **Choose**
- **Demonstrate**
- **Discover**
- **Experiment**
- **Relate**
- **Show**
- **Sketch**
- **Complete**
- **Construct**
- **Interpret**
- **Prepare**
- **Produce**
- **Report**
- **Teach**
- **Administer**
- **Collect**
- **Compute**
- **Determine**
- **Develop**
- **Examine**
- **Explain**
- **Measure**
- **List**
- **Operate**
- **Practice**
- **Record**
- **Schedule**
- **Transfer**
- **Convert**

### Activities:
- **Abstract**
- **Chart, graph**
- **Model**
- **Survey**
- **Break down an argument**
- **Diagram**
- **Dissect**
- **Estimate**
- **Experiment**
- **Illustrate**
- **Organize**
- **Outline**
- **Plan**
- **Question**
- **Test**

### Analyzing
- **Analyze**
  - Compare, classify, correlate, contrast, distinguish, infer, separate, explain, select, categorize, connect, differentiate, discriminate, divide, order, point out, prioritize, subdivide, appraise, break down, conclude, deduce, devise, diagram, dissect, estimate, experiment, illustrate, organize, outline, plan, question, test
- **Compare**
- **Classify**
- **Correlate**
- **Contrast**
- **Distinguish**
- **Infer**
- **Separate**
- **Explain**
- **Select**
- **Categorize**
- **Connect**
- **Differentiate**
- **Discriminate**
- **Divide**
- **Order**
- **Point out**
- **Prioritize**
- **Subdivide**
- **Appraise**
- **Break down**
- **Conclude**
- **Deduce**
- **Devise**
- **Diagram**
- **Dissect**
- **Estimate**
- **Experiment**
- **Illustrate**
- **Organize**
- **Outline**
- **Plan**
- **Question**
- **Test**

### Activities:
- **Checklist**
- **Rubric**
- **Editorial**
- **Evaluation**
- **Recommendation**
- **Review**
- **Discussion**

### Evaluating
- **Evaluate**
  - Justify, assess, recommend, choose, select, weigh, critique, criticize, judge, distinguish, estimate, appraise, support, defend, compare, decide, determine, discriminate, predict, rank, order, score, rate, grade, measure, test, conclude, argue, debate, editorialize, reframe, find errors, persuade, convince, infer
- **Justify**
- **Assess**
- **Recommend**
- **Choose**
- **Select**
- **Weigh**
- **Critique**
- **Criticize**
- **Judge**
- **Distinguish**
- **Estimate**
- **Appraise**
- **Support**
- **Defend**
- **Compare**
- **Decide**
- **Determine**
- **Discriminate**
- **Predict**
- **Rank**
- **Order**
- **Score**
- **Rate**
- **Grade**
- **Measure**
- **Test**
- **Conclude**
- **Argue**
- **Debate**
- **Editorialize**
- **Reframe**
- **Find errors**
- **Persuade**
- **Convince**
- **Infer**

### Activities:
- **Abstract, Chart, graph**
- **Poem, song, media product**
- **Game**
- **Report**
- **Invention**

### Note:
Depending on the context, several of these Verbs/Activities can be used at different levels of Bloom’s Taxonomy. www.teachthought.com/wp-content/uploads/2013/08/verbs-for-blooms-taxonomy.jpg 1/1