Parts of an Outcome

**Condition**
Under what circumstances is the student expected to perform?

**Behavior**
What is the student expected to do?

**Criterion**
Is the performance sufficient?
Conditions

- Given a set of whole numbers...
- In the presence of an audience..
- After a detailed examination of the causes...
- Given a list of chemical elements...
- By using the design principles...
Behavior (a measurable outcome)

- Describe
- Apply
- Analyze
- Support
- Evaluate
- Design
Criterion

Quality
- effectively, successfully

Accuracy
- precisely

Speed
- immediately, in two hours
Example

Design functioning programs using structured and object-oriented approaches.
Example

Develop strategies for broadening perspectives for reaching educational and personal goals.
Example

behavior: Prepare presentations

condition: using relevant evidence and examples from original sources.
More Examples

- Design and implement a hardware component and/or system to meet desired needs
- Solve engineering problems related to computer systems and applications
- Produce a technical report by participating in the writing process of planning, drafting, revising and editing
More Examples

- Design and implement a hardware component and/or system to meet desired needs
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Bloom's Taxonomy

- Remember
  - Recall facts and basic concepts
    - Define, duplicate, list, memorize, repeat, state
- Understand
  - Explain ideas or concepts
    - Classify, describe, discuss, explain, identify, locate, recognize, report, select, translate
- Apply
  - Use information in new situations
    - Execute, implement, solve, use, demonstrate, interpret, operate, schedule, sketch
- Analyze
  - Draw connections among ideas
    - Differentiate, organize, relate, compare, contrast, distinguish, examine, experiment, question, test
- Evaluate
  - Justify a stand or decision
    - Appraise, argue, defend, judge, select, support, value, critique, weigh
- Create
  - Produce new or original work
    - Design, assemble, construct, conjecture, develop, formulate, author, investigate
Action Verbs for **Create** Level

- arrange
- assemble
- build
- attach
- combine
- compile
- design
- develop
- devise
- discuss
- elaborate
- enforce
- estimate
- evaluate
- integrate
- invent
- manage
- modify
- organize
- perform
- plan
- predict
- prepare
- produce
- propose
- review
- solve
- test
- verify
- write

Can the student create a new product or point of view?
Action Verbs for Evaluate Level

- appraise
- argue
- arrange
- assess
- compare
- conclude
- decide
- defend
- estimate
- evaluate
- explain
- incorporate
- interpret
- judge
- justify
- manage
- measure
- predict
- prioritize
- prove
- qualify
- rate
- recommend
- reconstruct
- review
- set up
- select
- solve
- supervise
- support

Can the student justify a stand or decision?
<table>
<thead>
<tr>
<th>Action Verbs for Analyze Level</th>
</tr>
</thead>
<tbody>
<tr>
<td>advertise</td>
</tr>
<tr>
<td>analyze</td>
</tr>
<tr>
<td>appraise</td>
</tr>
<tr>
<td>breakdown</td>
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<tr>
<td>calculate</td>
</tr>
<tr>
<td>categorize</td>
</tr>
<tr>
<td>compare</td>
</tr>
</tbody>
</table>

Can the student distinguish between the different parts?
Action Verbs for **Apply** Level

- apply
- appraise
- build
- calculate
- carry out
- change
- choose
- classify
- complete
- construct
- contrast
- criticize
- demonstrate
- develop
- diagnose
- dramatize
- estimate
- experiment
- follow
- identify
- illustrate
- interpret
- interview
- make use of
- modify
- operate
- organize
- plan
- practice
- produce
- relate
- report
- ...
Action Verbs for **Understand** Level

- associate
- classify
- compare
- contrast
- convert
- defend
- demonstrate
- describe
- discuss
- distinguish
- estimate
- explain
- extend
- generalize
- give
- examples
- identify
- indicate
- illustrate
- interpret
- match
- organize
- outline
- paraphrase
- predict
- recognize
- relate
- report
- review
- select
- show
- summarize

Can the student explain ideas or concepts?
Action Verbs for Remembering Level

- define
- describe
- duplicate
- enumerate
- examine
- identify
- label
- list
- locate
- match
- memorize
- name
- observe
- omit
- outline
- quote
- recall
- recognize
- repeat
- reproduce
- select
- state
- tabulate
- tell
- visualise

Can the student recall or remember the information?
Thank you!

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