# Problem Solving VALUE Rubric

Adapted from the Association of American Colleges and Universities

**Definition**

Problem solving is the process of designing, evaluating, and implementing a strategy to answer an open-ended question or achieve a desired goal.

<table>
<thead>
<tr>
<th></th>
<th>Exemplary</th>
<th>College Level</th>
<th>Below College Level</th>
<th>Failure</th>
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</thead>
<tbody>
<tr>
<td><strong>Define Problem</strong></td>
<td>Demonstrates the ability to construct a clear and insightful problem statement with evidence of all relevant contextual factors.</td>
<td>Demonstrates the ability to construct a problem statement with evidence of most relevant contextual factors, and problem statement is adequately detailed.</td>
<td>Begins to demonstrate the ability to construct a problem statement with evidence of most relevant contextual factors, but problem statement is superficial.</td>
<td>Demonstrates a limited ability in identifying a problem statement or related contextual factors.</td>
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<td><strong>Identify Strategies</strong></td>
<td>Identifies multiple approaches for solving the problem, only some of which apply within a specific context.</td>
<td>Identifies multiple approaches for solving the problem, only some of which apply within a specific context.</td>
<td>Identifies only a single approach for solving the problem that does not apply within a specific context.</td>
<td>Identifies one or more approaches for solving the problem that do not apply within a specific context.</td>
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<tr>
<td><strong>Propose Solutions/Hypotheses</strong></td>
<td>Proposes one or more solutions/hypotheses that indicates comprehension of the problem. Solutions/hypotheses are sensitive to contextual factors as well as all of the following: ethical, logical, or cultural dimensions of the problem.</td>
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<td>Proposes one solution/hypothesis that is “off the shelf” rather than individually designed to address the specific contextual factors of the problem.</td>
<td>Proposes a solution/hypothesis that is difficult to evaluate because it is vague or only indirectly addresses the problem statement.</td>
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<tr>
<td><strong>Evaluate Potential Solutions</strong></td>
<td>Evaluation of solutions is deep and elegant (for example, contains thorough and insightful explanation) and includes, deeply and thoroughly, all of the following: considers history of problem, reviews logic/reasoning, examines feasibility of solutions, and weighs impacts of solutions.</td>
<td>Evaluation of solutions is adequate (for example, contains thorough explanation) and includes the following: considers history of problem, reviews logic/reasoning, examines feasibility of solutions, and weighs impacts of solution.</td>
<td>Evaluation of solutions is brief (for example, explanation lacks depth) and includes the following: considers history of problem, reviews logic/reasoning, examines feasibility of solution, and weighs impacts of solution.</td>
<td>Evaluation of solutions is superficial (for example, contains cursory, surface level explanation) and does not include the following: considers history of problem, reviews logic/reasoning, examines feasibility of solution, and weighs impacts of solution.</td>
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<tr>
<td><strong>Implement Solution</strong></td>
<td>Implements the solution in manner that addresses thoroughly and deeply multiple contextual factors of the problem.</td>
<td>Implements the solution in a manner that addresses multiple contextual factors of the problem in a surface manner.</td>
<td>Implements the solution in a manner that addresses the problem statement but ignores relevant contextual factors.</td>
<td>Implements the solution in a manner that does not directly address the problem statement.</td>
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<td><strong>Evaluate Outcomes</strong></td>
<td>Reviews results relative to the problem defined with thorough, specific considerations of need for further work.</td>
<td>Reviews results relative to the problem defined with some consideration of need for further work.</td>
<td>Reviews results in terms of the problem defined with little, if any, consideration of need for further work.</td>
<td>Reviews results superficially in terms of the problem defined with no consideration of the need for further work.</td>
</tr>
</tbody>
</table>