Problem Solving Rubric

The process of designing, evaluating and implementing a strategy to answer a question or achieve a desired goal.

<table>
<thead>
<tr>
<th>Problem Solving</th>
<th>Benchmark</th>
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<tbody>
<tr>
<td>Define Problem</td>
<td>Demonstrates a limited ability in identifying a problem statement or related contextual factors.</td>
</tr>
<tr>
<td>Identify Strategies</td>
<td>Identifies one or more approaches for solving the problem that do not apply within a specific context.</td>
</tr>
<tr>
<td>Propose Solutions/Hypotheses</td>
<td>Proposes a salutation/hypothesis that is difficult to evaluate because it is vague or only indirectly addresses the problem statement.</td>
</tr>
<tr>
<td>Evaluate Potential Solutions</td>
<td>Evaluation of the solutions is superficial (for example, contains cursory, surface level explanation) and includes the following: considers history of problem, reviews logic/reasoning, examines feasibility of solution and weighs impacts of solution.</td>
</tr>
<tr>
<td>Implement Solution</td>
<td>Implements the solution in a manner that does not directly address the problem statement.</td>
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<tr>
<td>Evaluate Outcomes</td>
<td>Reviews results superficially in terms of the problem defined with no consideration of need for further work.</td>
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<thead>
<tr>
<th>Benchmark</th>
<th>Milestone 2</th>
<th>Milestone 3</th>
<th>Capstone</th>
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</thead>
<tbody>
<tr>
<td>Demonstrates a limited ability in identifying a problem statement or related contextual factors.</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 the ability to construct a problem statement with evidence of most relevant contextual factors, and problem statements is adequately detailed.</td>
<td>Demonstrates the ability to construct a clear and insightful problem statement with evidence of all relevant contextual factors.</td>
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<tr>
<td>Identifies one or more approaches for solving the problem that do not 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 multiple approaches for solving the problem, only some of which apply within a specific context.</td>
<td>Identifies multiple approaches for solving the problem that apply within a specific context.</td>
</tr>
<tr>
<td>Proposes a salutation/hypothesis that is difficult to evaluate because it is vague or only indirectly addresses the problem statement.</td>
<td>Proposes one solution/hypothesis that is &quot;off the shelf&quot; rather than individually designed to address the specific contextual factors of the problem.</td>
<td>Proposes one or more solutions/hypotheses that indicates comprehension of the problem. Solutions/hypotheses are sensitive to contextual factors as well as the one of the following: ethical, logical, or cultural dimensions of the problem.</td>
<td>Proposes one or more solutions/hypotheses that indicates a deep comprehension of the problem. Solution/hypotheses are sensitive to contextual factors as well as all of the following: ethical, logical, and cultural dimensions of the problem.</td>
</tr>
<tr>
<td>Evaluation of solutions is superficial (for example, contains cursory, surface level explanation) 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 brief (for example, explanation lacks depth) and includes the following: considers history of the problem, reviews logic/reasoning, examines feasibility of solution, and weighs impacts of solution.</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 solution, and weighs impacts of the solution.</td>
<td>Evaluation of the solution is deep and elegant (for example, contains thorough insightful explanation) and includes, deeply and thoroughly, all of the following: considers history of problem, reviews logic/reasoning, examines feasibility of solution, and weighs impacts of the solution.</td>
</tr>
<tr>
<td>Implements the solution in a manner that does not directly address the problem statement.</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 addresses multiple contextual factors of the problem in a surface manner.</td>
<td>Implements the solution in a manner that addresses thoroughly and deeply multiple contextual factors of the problem.</td>
</tr>
<tr>
<td>Reviews results superficially in terms of the problem defined with no 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 relative to the problem defined with some consideration of need for further work.</td>
<td>Reviews results relative to the problem defined with thorough, specific considerations of need for further work.</td>
</tr>
</tbody>
</table>

Bloom’s Taxonomy Levels

<table>
<thead>
<tr>
<th>Bloom's Taxonomy Levels</th>
<th>Remember &amp; Understand</th>
<th>Apply &amp; Analyze</th>
<th>Evaluate &amp; Create</th>
</tr>
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