

Core Curriculum Core Skills 2A #6 Scientific Concepts Rubric

Students will recognize scientific evidence and apply the basic principles of scientific inquiry.

Student Learning Outcomes:

- 1) Apply the methods of scientific inquiry
- 2) Analyze evidence using scientific methods

	Accomplished (4) [Exceeded]	Proficient (3) [Met]	Developing (2) [Partially Met]	Beginning (1) [Not Met]	Null (0) [Not Met]
SLO1: Apply the methods of scientific inquiry.	<p><input type="checkbox"/> Proposes one or more solutions/hypotheses/research methodologies that indicate a thorough comprehension of the problem.</p> <hr/> <p><input type="checkbox"/> Solutions/hypotheses/research methodologies are sensitive to contextual factors as well as the ethical, logical, and cultural dimensions of the problem.</p>	<p><input type="checkbox"/> Proposes one or more solutions/hypotheses/research methodologies that indicate comprehension of the problem.</p> <hr/> <p><input type="checkbox"/> Solutions/hypotheses/research methodologies are sensitive to contextual factors as well as one of the following: ethical, logical, and cultural dimensions of the problem.</p>	<p><input type="checkbox"/> Offers one solution/hypothesis/research methodology that is “off the shelf” rather than individually designed to address the specific contextual factors of the problem.</p> <hr/> <p><input type="checkbox"/> Solutions/hypotheses/research methodologies are not sensitive to contextual factors and do not address the ethical, logical, or cultural dimensions of the problem.</p>	<p><input type="checkbox"/> Offers a solution/hypothesis/research methodology that is difficult to evaluate because it is vague or only indirectly addresses the problem.</p> <hr/> <p><input type="checkbox"/> Solutions/hypotheses/research methodologies are not sensitive to contextual factors and do not address ethical, logical, or cultural dimensions of the problem.</p>	No evidence provided
SLO2: Analyze evidence using scientific methods.	<p><input type="checkbox"/> Organizes and synthesizes evidence to reveal insightful patterns, differences or similarities related to focus.</p> <hr/> <p><input type="checkbox"/> Evaluation of solutions is thorough and includes all of the following considerations: history of the problem/issue reviews logic/reasoning, examines feasibility of solution/s, and weighs the impact of solution/s.</p>	<p><input type="checkbox"/> Organizes and synthesizes evidence to reveal important patterns, differences or similarities related to focus.</p> <hr/> <p><input type="checkbox"/> Evaluation of solution/s is adequate and includes the following considerations: history of the problem, reviews logic/reasoning, examines feasible solution/s, and weighs impact of solution/s.</p>	<p><input type="checkbox"/> Organizes evidence, but the organization is not effective in revealing important patterns, differences, or similarities.</p> <hr/> <p><input type="checkbox"/> Evaluation of solution/s is brief and lacks depth. It does include the following considerations: history of the problem, reviews logic/reasoning, examines feasibility of solution/s and weighs impact of solution/s.</p>	<p><input type="checkbox"/> Lists evidence, but it is not organized and/or is unrelated to focus.</p> <hr/> <p><input type="checkbox"/> Evaluation is superficial and lacks depth. It does include the following considerations: history of the problem, reviews logic/reasoning, examines feasibility of solution/s and weighs impact of solution/s.</p>	No evidence provided

Definitions:

- Accomplished: Completed, done, effected, highly skilled
- Proficient: Undergoing development, growing, evolving
- Developing: In the process of becoming, becoming more prominent
- Beginning: Exhibiting a marked lack of competence
- Null: no evidence detected

Working Draft endorsed 6/1/15 Core Curriculum Committee