Creative and Practical Problem Solving
Task Model

Performance Indicators for Creative and Practical Problem Solving:

a. Observe and evaluate situations in order to define problems.
b. Frame questions, make predictions, and design data collection and analysis strategies.
c. Identify patterns, trends, and relationships that apply to solutions.
d. Analyze, evaluate, and synthesize evidence, arguments, claims, and beliefs.
e. Generate a variety of solutions, use evidence to build a case for best responses, critically evaluate the effectiveness of responses, and repeat that process to generate alternate solutions.
f. Identify opportunities for innovation and collaboration.
g. Use a range of tools, including technology, to solve problems.
h. Persist in solving challenging problems and learn from failure.

Task Model

An embedded performance task can be created within any subject area to assess Performance Indicators A-E. Performance Indicators F - H would be better assessed through reflections with evidence from the students’ academic and extra-curricular experiences. Any Performance Assessment that is designed to elicit student work that will allow the student to demonstrate proficiency in Creative and Practical Problem Solving must include these elements:

The task must be open-ended & lend itself to many possible solutions. In the final product:

- The student defines the problem that he or she is addressing (Performance Indicator A).
- The student explains his/her research questions and how he or she searched for/gathered information/data (Performance Indicator B).
- The student describes his/her own research - observations, research, data collection (Performance Indicators B & C).
- The student describes how he or she worked within real-world constraints or parameters (Performance Indicator E).
- The student interprets, evaluates, and analyzes data/information (Performance Indicators C & D).
- The student evaluates the effectiveness of several solutions and supports this evaluation with evidence (Performance Indicator E).
- The student synthesizes findings to make a claim about the best proposed solution, and supports his/her choice with evidence (Performance Indicator E).
- The final student product must be assessed using the Creative and Practical Problem Solving Scoring Criteria in addition to any content area rubric that is used.