

# 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.



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