Technological Problem-Solving Organizer

BLM G-6

Goal • Improve your design planning for technological solutions to problems.

Introduction

As science inquiries, technological problems are best solved through a step-by-step systematic process. The process in the flow chart provides a guide to consider before building a useful product or carrying out an improved technique.

What to Do

- Use the flowchart below to help you develop a proposed design for a technological solution to a problem.
- Use the question to help you introduce your idea to an audience

patent the product or technique

for possible mass production

identify the problem decide on design criteria plan and construct sketch draw a complete plan build a model revise design criteria plan evaluate product or technique excellent plan had design criteria were inadequate solution to the problem identifiable flaws

Solving a Technological Problem

State the problem to be solved.

•	Area or topic:
•	Key words for research:

Develop design criteria:

- · Materials needed
- Cost of materials
- Time required (for each step)
- Account for design adjustment(s)

Plan and build working model:

- Sketch with estimates
- Blueprints with specifications
- Construction criteria (i.e., safety, space, testing)

Evaluation:

- · Adjustments, if flaws found
- Repeated testing, if design works
- Suggest uses

Question

use the product

or technique

1. You have been asked to speak to a meeting of citizens concerned about the problem your proposal is designed to solve. Draft a fact sheet for them describing the uses of your design. You may include a sketch and offer to demonstrate your model. Include any safety, ethical, and special social considerations related to the model.