GENERAL
TECHNOLOGICAL
PROBLEM
SOLVING

Technological Problem-Solving Organizer

BLM G-5

Goal • Plan and design technological solutions to problems.

Introduction

Technological problems are best solved through a step-by-step process. Consider the process in the flow chart before building a useful product or carrying out an improved technique.

What to Do

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

Solving a Technological Problem identify the problem decide on design criteria plan and construct sketch draw a complete plan build a model revise revise design criteria plan evaluate design criteria product or technique excellent plan had were inadequate solution to the problem identifiable flaws patent the product or technique use the product or technique for possible mass production

State the problem to be solved	ite the p	oroblem	to be	e sol	ved
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•	Area or topic.
•	Key words for research:

Develop design criteria:

Materials needed

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- 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

You have been asked to speak to a group 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.