

Technological Problem-Solving Organizer

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

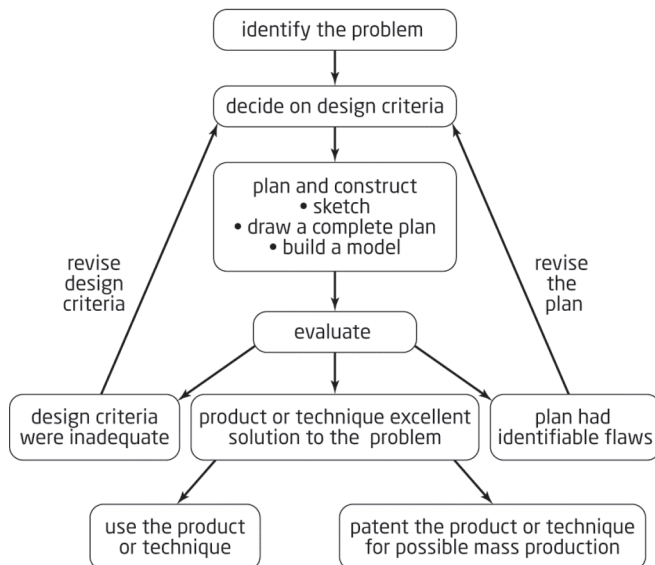
Introduction

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

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

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.

