

What Is Problem Solving?

The act of defining a problem, determining the cause of the problem, identifying, prioritizing and selecting alternatives for a solution, and then implementing the best solution.

Begin with a Problem

For example:

 You have received a complaint, or you are not satisfied with the standards of performance or the plan, or recent events cause you to question your plans, or you have to seek advice from your director or someone else.

STEP 1: Define the Problem

- Identify the problem.
- State the problem specifically and so everyone understands.
- Avoid including implied cause or solutions in the definition.

Questions to Consider:

- Is the problem stated objectively and includes "just the facts"?
- Is the scope of the problem limited enough for you to handle?
- Will everyone who reads it have the same understanding of the problem?
- Does the problem statement include any "implied causes" or "implied solutions"?

STEP 2: Identify Underlying Causes

- Identify potential cause(s).
- Determine the most likely cause(s).
- Identify the true root cause(s).

5W's and the H Questions

Look at the problem and ask questions that will help you understand how you got here.

- **1.** Who? (was involved, impacted, etc.)
- **2.** What? (happened, was the result, was the process)
- 3. Where?
- 4. When?
- **5.** Why?
- **6.** How?

Cause and Effect diagram

- Condense your problem statement to one key word or phrase.
- Define the major categories of causes.
- Brainstorm possible causes for each category.



STEP 3: Identify Possible Solutions

Best way to identify possible solutions is by brainstorming.

Brainstorming (Ground Rules)

- Avoid criticism and "knocking down" of ideas.
- Look for wild/exaggerated ideas.
- Go for quantity at least 20 or more.
- Try to build on the ideas of others (when in groups).
- "Think outside" of your own experience and expertise.

Benefits of Brainstorming

- Opportunity to be creative
- No fear of criticism
- Generates more ideas from more people
- Allows you to choose the best solution

STEP 4: Determine the Best Solution

- Develop and assign weights to criteria
- · Apply the criteria
- Choose the best solution

How to develop and assign weights to criteria

Example: after school tutoring program for the community.

<u>Criteria</u>	<u>Weight</u>
Enough volunteers to run program	20%
Funding available for material/snacks	20%
Meet the need of the community	50%
Space for the program/set up for each day	<u>10%</u>

Total weighing 100%



Apply the criteria

Rate each possible solution on your list against the criteria.

Example:

	Weight	Church	Building 1	Building 2
Criteria		3.1.3.1 3.1.		
Location	40%	10%	40%	35%
Cost	30%	50%	10%	25%
Size	20%	20%	30%	20%
Design	10%	20%	5%	10%
Totals	100%	100%	85%	90%
Summary		No cost, space, but location isn't best	Great facility; Higher cost	Large facility Good price/design

Choose the best solution(s)

- Which one best meets all the criteria?
- Look at the ones with the highest score, evaluate them against the criteria.
- Weigh the pros and cons of each.

STEP 5: Develop an Action Plan

- Divide the solution into sequential tasks.
- Develop a contingency plan.

Questions to Consider:

- Who will be affected?
- What resources will be needed?
- How will information be shared?

Points to Consider:

- What specific opportunities and threats may occur?
- How will you deal with those opportunities and threats?
- What can be done to prevent potential problems from occurring?



STEP 6: Evaluate Progress

- What's working?
- What's not working?
- What can be improved?
- What may not need to be done?
- Have any new problems surfaced?

Challenges of Problem Solving

- Working on problems that are too general, too large, or not well-defined.
- Jumping to a solution before really analyzing the problem.
- Failing to involve critical decision-makers or persons affected by the problem when identifying potential solutions.
- Tackling problems that are beyond the control or influence of the individual or group
- Applying "pet" solutions rather than seeking a creative solution
- Failing to develop good reasons for choosing a solution.
- Failing to plan adequately how to implement and evaluate the chosen solution.