

Problem Solving Activity

The Lawn

Participant Guide

Activity Description

In this activity you apply a systematic approach to problem solving to solve a problem with a customer's lawn. You and your team play the roll of co-owners of AAA Lawn Care, a service company that prides itself on keeping the communities' lawns healthy and green. A customer brings in a problem that requires you and your team to solve and correct; therefore, it is your responsibility and that of your team to correctly identify the cause of the problem and develop an action plan that prevents the problem from reoccurring.

You will be evaluated on how well you apply a systematic approach to problem-solving, how well you communicate with the customer (the instructor) and your team members, and how well you work together as a team.

Time to Complete

Approximately 30 minutes

Objectives

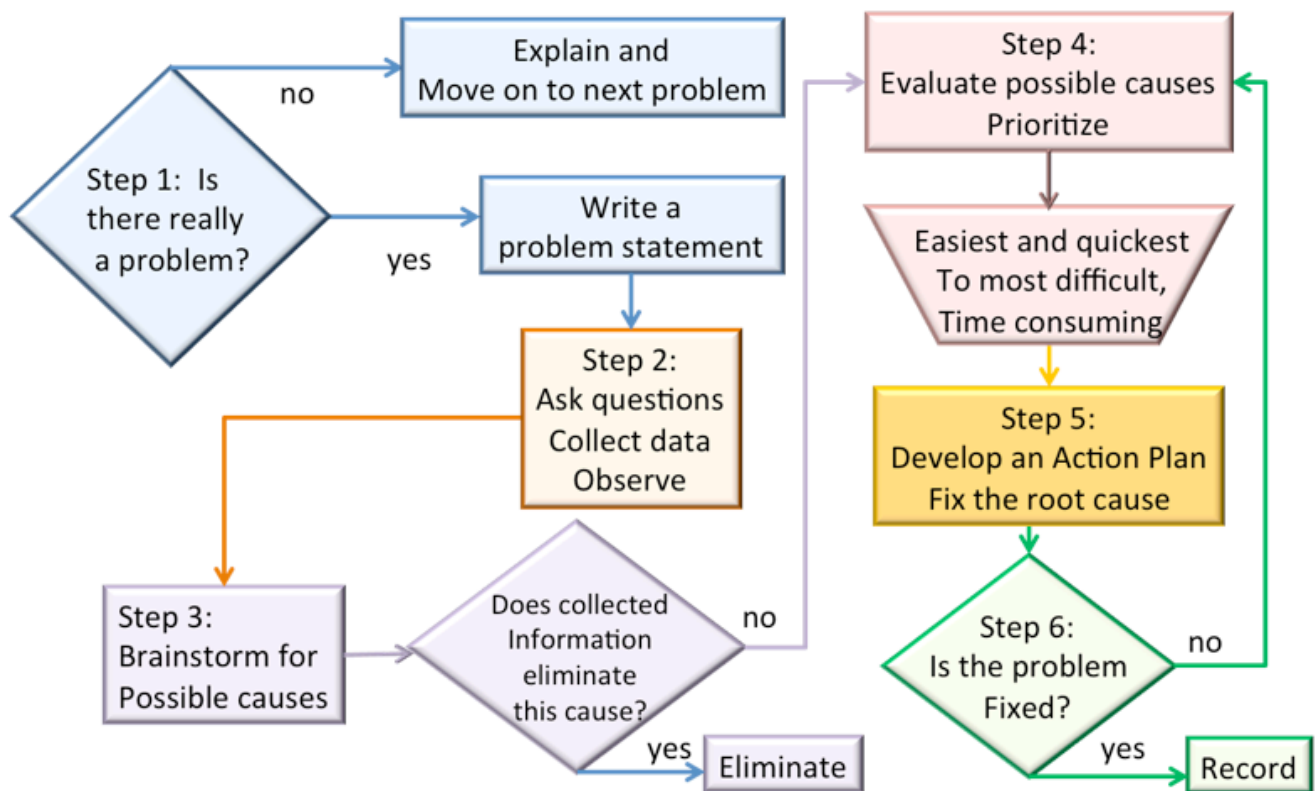
- Given a problem, work with at least two other people to solve the problem using a systematic approach to problem solving.
- Develop an action plan that fixes the problem.
- Apply effective communication skills through the entire problem solving process.

Activity – The Lawn



1. Assign the following roles:
 - a. Recorder - Writes necessary information on the board, flip chart or computer screen for all to see and keeps a written accounting of the team's process. Recorder is also a participant in the problem solving process.
 - b. Facilitator – Keeps the team members on track during the activity and the activity moving forward. Mediates the exchange of information and ensures that all team members participate and understands before moving forward. The facilitator is also a participant; however, the facilitator has to be able to ensure that ALL participants participate and should be careful not to dominate nor control the conversation. An effective facilitator usually waits to contribute until all other participants have contributed. Choose this person wisely.
 - c. Timekeeper – Keeps track of the amount of time it takes to finish the activity.
2. The team's role – As owners of AAA Lawn Care you solve problems with people's lawns.
3. The Problem – A customer has come to you and has said that she has “dead spots in her lawn”.

As a team, you are to use the Six Steps of Problem Solving to solve this problem.



Step 1: Write the problem statement.

Step 2a: Make a list of questions that you would ask the customer.

Step 2b: Ask your instructor for the “symptoms cards”. Use the information on the cards to identify “data” or symptoms of the problem.

Step 3: Brainstorm for possible causes to the problem.

Step 4: Analyze the possible causes and identify the root cause of the problem.

Step 5: Develop an action plan on how AAA Lawn Care will solve the customer’s problem.

Step 6: State how you and the customer will verify that the problem has been fixed.

Post-Activity Questions

Below are the objectives of this activity.

- Given a problem, work with at least two other people to solve the problem using a systematic approach to problem solving.
- Develop an action plan that fixes the problem.
- Apply effective communication skills through the entire problem solving process.

Answer the following questions based on how well you satisfied the objectives.

1. How easy/hard was it to following a systematic approach for solving this problem?
2. Take a look at the questions you developed in Step 2.
 - a. Which of the questions would you consider a “weak” question?
 - b. Which question was a strong question (i.e., provided relevant information)?
 - c. How could the team have improved upon the questions they asked?
3. When going through the “data” (the cards), what criteria did you use to determine what was relevant and what was NOT relevant?
4. What criteria did you use in developing your action plan?
5. As a team, what were your strengths?
6. As a team, what areas could be improved upon?
7. What behaviors helped the team to complete its task?
8. What behaviors hindered the team from completing its task?

[Original source of activity: The Encyclopedia of Team-Building Activities, Edited by William Pfeiffer, Pfeiffer & Company, 1991]

Support for this work was provided by the National Science Foundation's Advanced Technological Education (ATE) Program through Grants. For more learning modules related to microtechnology, visit the SCME website (<http://scme-nm.org>).