COOPERATIVE EXTENSION

ACOUNTY-STATE-FEDERAL PARTNERSHIP



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PROBLEM-SOLVING TECHNIQUES Community Board Development – No. 3

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"If the only tool you have is a hammer, you tend to see every problem as a nail"

Abraham Maslow

Every board at one time or another has the task of problem solving (i.e., the gap between the current situation and a desired situation). Problem solving is an ongoing process that is an integral part of work and life. However, as Maslow describes, if a board continually approaches a problem from the same angle, or repeatedly applies the most obvious tool without exploring other options, the board can easily be addressing the problem incorrectly. If this happens, the problem may continue to emerge, causing frustration among board members.

It is important to use common sense about what is practical and what the board's priorities are to maximize people's time, energy, and creativity in solving problems. Some boards may find that a more creative, less rigid approach to solving problems will produce solutions that are more satisfying for all parties. Creative thinking, or creative problem solving, is a process by which imagination feeds off memory and knowledge to cause one idea to lead to another. Creative problem solving is about an "association of ideas." Outlined in this handout is a simple problem solving guide with some creative thinking tips for you to use with your board.

Problem-Solving Guide

1. Define the Problem

A primary source of board ineffectiveness is rushing to solutions before properly defining the problem. A good problem definition states the current situation and the desired situation. For example, reduce speeding on our neighborhood streets. Use clear and concise language supported by facts when defining the problem. When defining the problem, the statement should not imply any solutions or causes; these will come later. The current situation is defined by facts (e.g., speeding on our neighborhood streets). The desired situation, or what the board wants to happen, is defined as an objective (e.g., to reduce speeding).

The board may find that it takes time to define the problem. Facts may need to be gathered and objectives may need to be outlined. Taking the time in the beginning to identify everyone's concerns helps create a shared understanding of the problem as well as increasing awareness about the problem's multiple dimensions. Although you can never learn everything about the problem, you can learn enough to define the current situation and the desired situation. Once the problem is

defined, then the board should work to understand and **analyze the root causes** to make sure the potential solution addresses the cause of the problem.

It is important to understand the difference between causes and symptoms of the problem. Causes are reasons for the problem. Symptoms are something that indicates the presence of the problem. For example, a board may experience meetings that continually run longer than expected. This is a symptom of a problem. The root cause may be ineffective meeting management skills. One tip to help distinguish between causes and symptoms is to conduct brainstorming around the question, "what is a potential cause of ...?" It is also important to examine assumptions that led to conclusions. An invalid assumption will also lead to an invalid root cause.

Brainstorming is a technique for finding a variety of ideas in a short time and can be used at all stages in the creative problem solving process. The underlying principle of brainstorming is the greater the number of ideas generated, the greater the possibility that a quality solution will be found. You can even help the board to feel comfortable by providing a warm-up problem such as "How many uses can you think of for a paper clip?" When brainstorming follow the steps outlined below.

Ground Rules for Brainstorming

- No criticism of an idea allowed
- Strive for quantity of ideas
- Wild and crazy ideas encouraged
- Build on the ideas of others piggyback on other's ideas
- ✓ Focus members on the issue or problem statement. Repeating the

- statement and writing it on a flip chart or chalkboard will help to focus members.
- ✓ Next you will want to <u>review the ground</u> rules for brainstorming.
- ✓ Ask members to think of as many ideas as possible and write them down either on a flip chart paper or on a piece of paper in front of them. Brainstorming can be done individually or as a whole group.
- ✓ After an allotted time (no more than 30 minutes) share ideas if conducted individually or as small groups. One technique for sharing ideas after brainstorming is to conduct a round robin.

Round robin is a simple and quick way for collecting everyone's ideas.

- ✓ Begin with one person in the room and ask them to share one idea on their list, or choose one group to begin if the board was divided into smaller groups.
- ✓ Write their idea on a flipchart or chalkboard for all the members to view.
- ✓ Continue going around the room with each member providing one idea from their list until all the ideas have been recorded. If one member has an idea that was already recorded on the flip chart ask them to share the next one on their list.
- ✓ After all the ideas are recorded, discuss the potential causes to verify their relevancy and impact on the problem.

Some boards may prefer to verify potential causes by gathering data or some other form of analysis beyond group discussion. Remember to keep in mind two important ingredients for successful problem solving: 1) "what is practical?" and 2) "what are your priorities as a board?".

2. Generate Alternatives

Now that the board has identified root causes, the next step to problem solving is to generate alternative solutions. An important ground rule for this step is "generate, don't evaluate." Boards that generate and evaluate together often reduce the number of potentially viable solutions (i.e., when one member suggests a solution, other members offer reasons why it will not work). Some creative tips for generating alternatives include brainstorming again or you may want to try a different form of brainstorming known as a brain pool.

Brain Pool

- ✓ Have each member write the problem statement in the form of a question on the top of a sheet of paper (e.g., "how can we reduce speeding on our neighborhood streets?").
- ✓ Ask each member to come up with 2 to 3 ideas in 4 to 5 minutes and write those under the question. No discussion is allowed.
- ✓ After listing 2 to 3 ideas, board members place their papers in the middle of the table and exchange them for someone else's. They then examine the new sheet and record any new ideas or modifications.
- ✓ Continue the exchange, still in silence until an agreed upon time limit is reached (e.g., 20 minutes).
- ✓ To help process the ideas, have each member read the ideas listed in front of them to begin discussing alternative solutions, or discussion can be evaluated at a later time. Some solutions may integrate the best aspects of various ideas and also may be more likely to find consensus in the group.

3. Evaluate Alternatives

Before evaluating alternatives, the board should first **establish criteria** for judging solutions. The criteria should define general characteristics of a solution. One way to help members develop criteria is to ask them to complete sentences that naturally lead to identifying criteria. For example, "the solution should be one that..." Criteria should be objective and measurable rather than emotional.

A simple and efficient way to evaluate solutions is to vote by using dots. Colored dots are self-adhesive and can be cheaply purchased at any local bookstore, computer, or office store. The dot method ensures that all members are actively involved and it presents a visual representation of areas of consensus. First, list all generated solutions on a large flip chart paper or on a chalkboard. Give each board member an allotment of dots (approximately 3 to 5 depending on the number of solutions). Instruct board members to vote for solutions by placing a colored dot next to the idea. Dots can be allocated in any manner. For example, if each person is given 5 dots, 2 dots may be placed next to their highest priority solution, thus reducing their vote to 4 options. After everyone has voted, tally the results. The solution receiving the greatest number of votes is selected for further analysis, discussion, or implementation.

REMEMBER, dots are only tools to help the board make efficient decisions. It should never be thought of as a formula that will automatically produce correct answers. Dots should <u>never</u> take the place of valuable group discussion, or the board's collective judgment about the selected solution or idea.

4. Develop an Action Plan

Action planning is designed to involve people, build their commitment and ownership in the solution, and increase the likelihood that the solution will be implemented effectively and on time. Because goal setting and action planning are such important components to any board development, this topic is the focus for next handout: Goal Setting and Action Planning.

Summary

Solving problems is an ongoing process that is an integral part of everyday life, either at home or at work. A problem must first be defined, root causes understood, and alternatives generated before effective boards can consider a solution. With the help of creative problem solving techniques, boards can broaden their perception of the problem and explore a variety of solutions.

The key to using creativity when solving problems is to change your perspective of yourself, your creativity, and the problems you face. This will help you reduce anxiety, relax and focus your creative powers exactly where they can do the most problem-solving good.

References

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This is a handout in a series of **Community Board Development** training materials.

- "Time and Meeting Management Skills"
 Community Board Development No. 1
- "Conflict Management Skills"
 Community Board Development No. 2
- "Problem Solving Techniques"
 Community Board Development No. 3
- "Goal Setting and Action Planning Skills"
 Community Board Development No. 4
- "Decision Making Skills and Techniques"
 Community Board Development No. 5