LESSON

2

Defining a Problem

LESSON SUMMARY

In this lesson, you will discover how to differentiate between real problems and perceived problems (those most immediately apparent), as well as understand the most common reasons for missing actual problems. When you locate and clearly define the issue you must resolve, you can then begin to work on a solution.

O MATTER WHAT issue you face, the only way to come up with an effective solution is to identify the actual problem that needs to be solved before you do anything else. If you don't, you could end up spending your time treating the symptom or consequence of your problem while the real problem remains waiting to be dealt with.

Did you ever spend time finding a solution to something, only to discover that the real problem was still there, as big as ever, waiting for your attention? Perhaps you worked for a few hours pulling up weeds in your garden, only to discover a few days later that the very same type of weed was back in that place. What you failed to notice was that the birdfeeder full of sunflower seeds spilled into the garden every time a bird landed on it. Unless you move the birdfeeder, or change the type of birdseed you buy, you will continue to have a problem with sprouted sunflower seeds in your garden. In other words, the real problem is the location of the birdfeeder coupled with the type of birdseed you fill it with. The weeds are merely a symptom of the problem.

The scenario above represents a common error in problem solving. Many people mistake the more obvious consequences of a problem for the actual problem. This might happen for a number of reasons.

You could be busy so whatever irritates you the most gets the greatest amount of attention without much thought about whether it is the real problem. Or, you may make assumptions about the nature of your problem and act on them rather than determining first if they are valid.

There are two common results that occur when you "solve" something that is not your actual problem.

- **1.** Your solution will be unsatisfactory. (It fails to deal with the real problem.)
- **2.** Further decisions will have to be made to solve the real problem.

▶ What Is the Actual Problem?

Many times, the real problem facing you can be difficult to determine. For instance, your teacher returns your essay with a poor grade and tells you to rewrite it. With no other feedback, you may be unsure about the real problem with the essay and therefore unable to correct the problem effectively. In this case, defining the problem entails some work; you will need to read the essay over carefully first to see if you find it. If it is still not apparent, you should approach your teacher and ask him to be more specific.

At other times, your problem may seem overwhelming in its size and complexity. You may avoid dealing with it because you think you do not have the time or energy to deal with such a large issue. However, when you take a closer look, there may be only one real problem of manageable size, and a number of offshoots of that problem which will resolve themselves once you deal with the actual problem.

How do you go about defining the real problem? There are a few of things to keep in mind.

- Get the information you need, even if you have to ask for it.
- Do not be tricked into solving offshoots, or other consequences, of your problem instead of the problem itself.
- **Do not be overwhelmed** when you are faced with what looks like, or what you have been told is, a giant problem.

Practice

What is the actual problem and what is the perceived problem in the following scenario?

The owner of an office building decides to add ten floors to increase the number of tenants. When construction is complete, the original tenants begin to complain about how slowly the elevators are running. The owner calls an elevator company, explains the situation, and asks them to install a faster elevator. He is told that there is no faster elevator, and that the problem is not the speed of the elevator, but

Answer

The real problem is that the tenants must wait longer for the elevator because there are more of them using it and the elevator must travel to more floors than before. The tenants' perceived problem is the new slower speed of the elevator. In reality, the elevator is moving at exactly the same speed as before.

Now that you are thinking about defining real problems as opposed to perceived problems, try distinguishing offshoots of a problem from the main problem from which they stem.

Practice

What is the real problem, and what are the offshoots of that problem?

- **a.** There is a leak in the roof.
- **b.** A heavy tree branch fell on the house during a storm.
- **c.** A large, dead oak tree is located next to the house.
- d. The bedroom floor has water damage.

Answer

The tree, **c**, is the real problem. If it is not remedied, any solutions you come up with will be faulty. In other words, you can repair the floor and the roof and remove the branch. But the next storm could bring another branch down and you will end up with the same consequences. A real solution requires either removing the dead tree or removing any remaining branches that could fall on your house.

When you can distinguish between a real problem and its offshoots, you should also be able to envision a large, overwhelming problem as something more manageable.

Practice

What is the actual problem in this situation?

While on vacation, you withdrew money from your checking account using your debit card. The account balance went to \$0, but the check you wrote for your water bill before you left came into the bank for payment. Although you have overdraft protection, the bank charged you a fee for insufficient funds, and returned the check to the water company, which is also charging a returned check fee.

Identify the real problem from the choices below:

- **a.** You owe money to the bank and the water company.
- **b.** The bank made a mistake by not covering the check.
- **c.** Your vacation cost more than you budgeted for.
- **d.** You do not have enough money in your checking account.

Answer

The real problem is **b**. The bank should have used your line of credit you established as overdraft protection in order to cover the check. You need to alert them to their error and have them contact the water company about your check.

Distinguishing between Problems and their Symptoms or Consequences

How can you be certain you are dealing with real problems rather than their symptoms or consequences? There are two things you can do whenever you believe you need to find a solution: avoid making assumptions, and think the situation through.

Avoid Making Assumptions

What is an assumption in terms of problem solving? It is an idea based on too little or not very good information. For example, the manager of a convenience store has an employee who is often late for her shift. The manager makes the assumption that the employee is lazy and does not take her job seriously. In fact, the employee has had car trouble and must rely on unreliable public transportation to get to work.

When you avoid making assumptions, you get all the information you need before deciding anything. With the right information, you can see the problem clearly rather than focusing on its consequences or mistaking them for the real problem. Then you can work toward a satisfactory solution. For instance, when the manager realizes that transportation is the real problem, she might be able to help the employee find another way to work rather than reprimand her for being lazy.

Practice

Write an (A) next to each of the assumptions below. If it is not an assumption, leave it blank.

- 1. I couldn't take good notes during the lecture because the professor was speaking too quickly.
- ____ 2. I don't know much about cars, but I think mine is rattling because it needs a new muffler.
- ____ 3. It's the baking powder in this recipe that makes the muffins rise.
- **4.** Our manager is criticizing our work today because he has problems at home.
- ____ 5. The cable TV went out after the wind knocked down those wires.

Answers

- **1.** This is not an assumption. The student knows why her notes were poor.
- **2.** This is an assumption. The problem with the car might be caused by something other than the muffler.
- **3.** This is not an assumption. Baking powder is a leavening agent.
- **4.** This is an assumption. Perhaps the manager is criticizing the work because it is not good enough.
- **5.** This is not an assumption. If the cable lines were knocked down, that is the reason the cable TV is not working.

Think It Through

Another important way to distinguish between problems and their symptoms or consequences is to think it through. Ask yourself, "What is really happening?" Look at the problem carefully to see if there is a cause lurking underneath or if it is going to result in another problem or set of problems. Thinking it through allows you not only to define the issue(s) you face now, but can help you anticipate a problem or problems (See Lesson 7 for more information about predicting problems.).

Practice

What problems might result from the following scenario?

The town of Colchester voted against three school budgets in elections held in April, May, and June. As a result, all school hiring and purchasing was put on hold. The school board then recommended cutting two teaching positions, which would save the town \$92,000 in salary and bene-

people approved the budget.							

Answer

Think about some of the problems that might result. First, with the loss of two teachers, there will be larger class sizes as fewer classes accommodate the same number of students. In addition, since the budget was approved just a month before school was to start it could be difficult to get the supplies needed by the remaining teachers using the money that was saved. Initially it may look like the town solved the problem, but in reality they have created new problems. To learn more about brainstorming possibilities or about troubleshooting, see Lessons 4 and 6.

Defining a Problem within a Group

If it is sometimes difficult to distinguish between real and perceived problems on your own, the difficulty is much greater when you are told of a problem by someone else. For instance, your boss asks you to call a meeting for all paralegals to explain how to correct the problem of poor communication. "Why aren't your e-mails getting read by the attorneys on time?" he asks. Your boss wants the paralegals to somehow change the way they send e-mails. However, after looking into the situation, you discover that the real problem is that the

attorneys are not in the habit of checking their e-mail often enough.

Sometimes pinpointing the real problem must involve taking a step back and figuring out if the right question is being posed. The problem described above can't be solved by asking, "What can the paralegals do differently?" It can be solved by asking, "How can we get the attorneys to read their e-mail more frequently?"

When you are certain you are dealing with a real problem and you must solve it in or as a group, you must lead others to see that real problem. Some may be focused on the symptoms or consequences of it, while others may have made assumptions about the problem. In order to find a successful solution, everyone needs to clearly understand the problem.

Practice

You are running a fund-raising meeting for your daughter's soccer team. Last year, the team did not end up with enough money to travel to all of their away games. What represents the best choice for a discussion topic?

- **a.** Can we buy cheaper food to sell at the snack bar to increase our profits?
- **b.** Should we order team t-shirts and sell them to the girls at cost?
- **c.** Who has ideas for new fund-raising activities that will bring in more money?
- **d.** How much money will it cost the team to travel to the championship game this year?

Answer

The best choice is **c**, because the actual problem facing the group is how to raise more money than they did the previous year. The other topics are also important but they are not the best way to lead the discussion. When you are running the meeting, it is up to you to help the group see the actual problem clearly so time is not wasted trying to solve other issues.

Roadblock to Defining a Problem

Often the biggest impediment to defining a problem is speed. When you are busy, especially on the job, you may be tempted to simply deal with superficial evidence, especially when it comes in the form of an aggravation or irritation. In such as case, you act quickly, rather than stop to look and see if the problem is merely the symptom of a larger or more serious issue.

However, what seems like a time saver (quickly resolving an aggravating situation) could actually cost you more time in the long run. If you have mistakenly identified the symptoms of a problem as the true problem, as stated earlier in this lesson, then your solution will be inadequate and the real problem will still be there.

In addition to wasting time by focusing on the false problem, you should keep in mind that there are many instances when doing the right thing is actually faster and simpler that dealing with the symptoms of a problem. For instance, in the elevator scenario described on page 18, the real problem is that the tenants do not like the effect the extra floors have on their elevator use. When defined as such, you will not consider expensive and complicated problems such as where to buy faster elevators or how to construct additional elevator shafts.

► In Short

Effective problem solving begins with the identification of the real problem, as opposed to the perceived problem. Do not allow the size of the problem, your own assumptions, or a lack of information stand between you and an effective solution. Think the situation through, and do not be tempted to deal quickly with consequences or symptoms of your problem instead of the actual one.

Skill Building Until Next Time

Have you ever started to make a recipe, only to discover three steps into it that you are missing an ingredient or that the food needs to rest in the oven for six hours? Getting all the information you need before you begin a process such as making dinner or taking a test means reading everything through first. The next time you try a new recipe or set up a piece of equipment, for example, installing a new DVD player, spend at least ten minutes reading through and reviewing the instructions before you do anything else. Effective problem solving happens when you know exactly what you are facing before you begin.