

Using Technology to Solve Problems

Steve Quann

BEFORE YOU READ: Talk about a problem you had and the steps you took to deal with it.

Using Technology to Fix My Hot Water Heater

It is the middle of winter. I have a **problem**. My water heater is broken. But that is not the real problem. I know how to fix the water heater.

The real problem is that I need to replace a part. Right now, my **goal** is to show that part to the salesperson at the hardware store. Then I can replace the broken part with the new one. Since I can't bring the old part with me, I need to think of possible **solutions**. The person at the hardware store can't come to my house to see the problem. If I try to draw the part, I don't think it will help. The person at the store will not recognize the part and probably just laugh.

Then I realize I have a camera in my pocket...my cellphone! I decide to take a picture of the part and bring it to the store. What were the **results**? I found the new part, my problem is fixed and my family can take showers again. My wife is happy about that.



Photo from <www.wiki-how.com/Repair-an-Electric-Water-Heater>.

Educational Uses for Your Camera

What are some other ways you might be able to use your camera?

A teacher told me how a student used technology to improve how he studied vocabulary. The teacher wrote



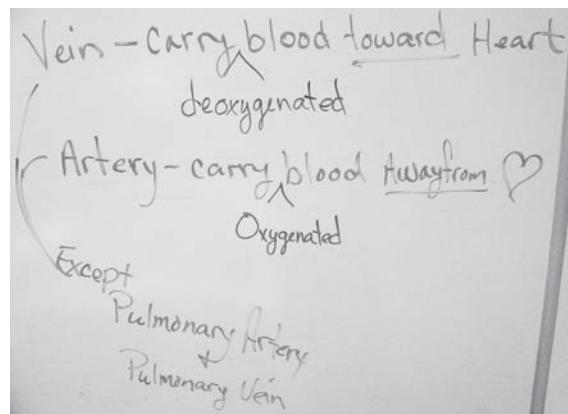
the meaning of a number of vocabulary words on the board and asked students to write them in their notebook. After class, a student came to the board to take a photo of the words and the definitions. His problem was that he didn't want to carry his notebook with him everywhere. Now, he studies the words on his phone.

Fix it with YouTube

How about using the Internet for problem solving? Everyone knows they can find *information* on the Web, but do you use it to *discover solutions to problems*? Do you know where I learned to fix the water heater (and other plumbing and mechanical problems)? You probably guessed it: YouTube! I also use YouTube for problems at work and study. How about you? Maybe you need help writing a topic sentence. YouTube has almost 2000 videos teaching you how to write topic sentences.

Searching for Solutions

And of course, speaking of technology, I am often asked at work how to solve technology problems.



A photo of notes from a classroom's white board. Do you take notes in class? Would this be a helpful way to capture information that the teacher shares so that you can study it later?

Many times I do not *know the solution*, but I know where *to find the solution*. Most times, if you have a problem, someone else is talking about that same problem on a discussion board or forum. Try searching for an answer to your problem—whether it is an issue with technology or a grammar question—by going to google.com and clicking on groups. As always when you use the Web, read and evaluate carefully. And don't forget to take these steps to solving a problem:

- Step 1: Identify and understand the problem
- Step 2: Think of possible solutions
- Step 3: Select the best solution
- Step 4: Evaluate the results

Steve Quann works at World Education where he helps others use technology in instruction. He is also writes for the blog <techtipsforteachers.weebly.com>.

Use Technology to Fix It!



Not sure you will remember where you parked your car? Take a picture of the row number or other identifying marker.



Can't remember the comma rules? Wondering if you should use "who" or "whom"? There's a grammar app for that!



Looking for the lowest price? The highest quality? Find websites or apps that help you comparison shop.



Loaning a book to a friend? Take a picture of him or her with the book, so you can remember who has it.



Taking something apart in an effort to fix it? Take pictures as you go so you can remember how to put it back together.

Extension Activities

Identify the steps. Look back on p. 33. List the steps Steve went through to deal with his broken hot water heater:

1. _____
2. _____
3. _____
4. _____

Solve a problem using technology. Share it with us on *The Change Agent* Facebook page.

Share your solutions! Identify a problem and write out the steps for solving it. Gather helpful graphics from the Internet. Search for ideas about giving presentations. Use <slideshow.com> to create a presentation. And then share it.

Learn something new. Try going to <www.wikihow.com> to learn about how to do something. Look for other how-to sites on the Internet and share them.

Teachers: try these lesson plans on problem solving: <www.cls.utk.edu/pdf/lis/Week3_Lesson21.pdf>.