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## The Importance of Understanding Root Cause

First, I would like to thank those individuals who attended our Group Session titled *Successfully Managing Rising School Technology Costs* at the NJASBO conference in Atlantic City. We had a wonderful turnout and many of you asked great questions.

In this month's education letter I would like to further explain one of the items we outlined in our presentation: the importance and the process of solving the root cause(s) of technology problems.

Technology problems will never be completely solved if the root cause of an issue is not understood and ultimately addressed.

### Asking the Right Questions to Get to the Right Answers

Let's start with a typical example:

A virus outbreak occurs on your school's or district's network and your IT Personnel spend an enormous amount of time containing the virus and cleaning the infected machines.

Several weeks later another virus outbreak attacks the network and brings down systems. This places yet another serious strain on your IT department's time.

Though your staff may have been successful in addressing the initial clean up of the first virus outbreak, they never successfully defined and fixed the root cause of the outbreak. Defining the root cause is much easier when the right questions are asked. I have outlined some example questions below:

- What type of virus infected the network?
- How did the virus enter the network? (Email, Web Browsing, Floppy Disk, CD Rom)
- When it entered the network what methods did it use to spread?
- Why didn't the virus systems prevent it from occurring?
- What servers and workstation did it infect and why?
- What servers and workstations did it **not** infect and why?
- How do we prevent the systems from future infection of a similar variant?
- Has the route of entry into the network been secured?

These questions are the most important part of the troubleshooting process. Time spent in understanding the root cause allows your staff to implement or modify your school's network security model; therefore, drastically reducing the chances for reoccurrence and future outbreaks.

### The Goal

By asking and answering the right questions, your IT personnel are able to function in a “proactive mode” instead of a “reactive mode.” This can reduce your IT staff’s time spent on troubleshooting and allows them to concentrate on the technological needs of your various departments. They will be able to explore new and innovative ways to implement technology into your school’s or district’s curriculum.

This procedure should be followed to solve not only problems with viruses, but also all of the other technological issues that confront your IT staff.

Enjoy your Thanksgiving,



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