

GenYES Sample Activity: Keeping Computers Healthy



The Big Idea

This activity is similar to the previous one on maintaining hardware. By reinforcing the research aspect of the class, we reinforce good habits that will help the students when they have to figure things out for themselves.

Objectives

- Regular maintenance for computer operations systems, software and hard drives
- Using scheduled tasks to keep computers in shape

Motivation and Presentation

Keeping a computer running well takes physical maintenance like cleaning, but it also takes software upkeep. One must also perform regular maintenance on the operating system, software and the hard drive. These elements get heavy daily use and without regular maintenance they will break down.

Resist the temptation in this activity to just tell the students what they have to do to get these jobs done.

Yes, it takes a little longer to allow the students to research what tasks need to be done and how to do them, but the reward is that they are honing their research skills and not developing a dependency on you as the keeper of all knowledge.

In fact, if this activity is successful, the students may well find new virus software or other maintenance solutions that can be implemented to improve current procedures. Be open to these findings, this is exactly what you want your students to be doing for you!

Preparation

Explore the terms and their definitions. Discover what your organization is using for the software and hard drive maintenance.

Resources

WEBSITE

[Top Ten Anti Spyware Reviews](#)

WEBSITE

[How Stuff Works - Computer Viruses](#)

WEBSITE

[How Stuff Works - Spy Ware](#)

WEBSITE

[How Stuff Works - Disk De-fragmentation](#)

WEBSITE

[Microsoft Data Back Up Information \(XP\)](#)

Vocabulary

Backup

Virus Scanning

Spyware Scanning

Hard Drive De-fragmentation

Scheduled Tasks

Patch

Upgrade

Activity

One hour:

1. Have students research common software maintenance issues and record findings in their blog. (15 Minutes)
 - a. Students should define the terms and concepts they discover
 - b. Have them include the URL of the resource found
2. Results from the research should include:
 - a. Virus scanning and removal
 - b. Spyware scanning and removal
 - c. Regular data backups
 - d. Hard drive de-fragmentation
 - e. Software and operating system updates
3. Share findings with class (10 Minutes)
4. Examine examples online (15 Minutes)
5. Using the Internet and student blogs, examine some of the resources found by students
6. Discuss the information and its relevance to your organization and the students personal computing habits (for example, preventing viruses from being downloaded)
7. Share with the class how these issues are currently being taken care of and discuss if their research supports the current maintenance regime and schedule.
8. Create or modify the schedule for these upkeep tasks based on the new research. (10 Minutes)

Assessment

Read blog entries for details and ensure class participation in the sharing activity.

Closure and Lesson Extensions

Preventative maintenance will help any computer run more efficiently. Without proper upkeep a computer will slow down and begin to fail, potentially losing data. We don't want this, do we! These steps are not optional. Often someone who has suffered a computer problem will say that they haven't done anything. That is precisely the problem.

- Have students discuss how to do preventative maintenance on classroom computers without disruption to learning activities.
- Review any TAPs in the help desk system that illustrate where preventive maintenance would have helped prevent the problem.