



# INFO-TECH TITANS

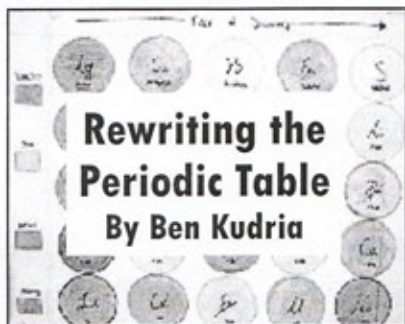
## SCOUT REPORT: COMPUTERS IN SCHOOL

By Bill Garrison  
and Jacob Makler

Computer technology is dominant in today's world. It provides thinking tools we should learn with, and tools we should learn about. However, there is much dispute over how this technology should be handled in schools, which slows progress. We believe students should be an active part of that discussion.

First, the topic matters most to us, who are preparing for life

See *Scout Report*, Page 2



As a student in Ms. Jeffrey's Chemistry Class, I participated in the Elements WebQuest, which was the first time our class used the Internet for research and a database to share information.

We enjoyed the work, and made interesting, creative periodic table projects. As a Tech Scout, I interviewed Ms. Jeffrey about how the Elements WebQuest worked from her perspective. I also spoke with Mr. Moreinis, who helped her develop the project.

Ms. Jeffrey decided to do a project to motivate students enter-

See *Elements*, Page 5

## VIDEOCONFERENCES WITH SPANIARDS SEE STORY, PAGE 3



## COMPUTING WITH CLUSTERS: MRS. WILSON An Interview By Bill Garrison

*What's it like having a 5-computer cluster in your classroom?*

Having a cluster has been invaluable saving time for both teachers and students. It allows me to use multi-media presentations for numerous units and specific projects while allowing students to stay in the room to start, check, research, finalize, and print assignments.

*Where did the idea for getting a computer cluster in your room come from?*

I got an email from Bram about summer workshops last year announcing there was a possibility of computers for your room. I have always had station or cluster activities incorporated into my curriculum this opportunity allowed me to add technology as a cluster.

At my old school I had one computer, so I jumped at the chance to take classes and get extra computers for a workstation. We use technology in so many ways it is great to have a cluster in your room for easy access.

*Why do you use computers with Learning Stations rather than full-class teaching?*

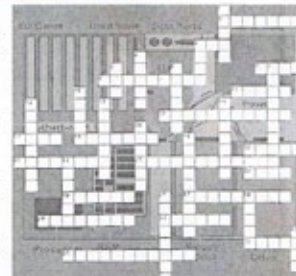
I have always had station or cluster activities incorporated into my curriculum. Now I have added computers as a new cluster. Learning stations allow students to work in small groups on specific tasks with all the necessary materials in one area to complete that task.

Break-out groups put students in charge of learning allowing them to work independently at their own pace. This allows the teacher to circulate and give greater attention to groups or individuals as needed saving time and increasing productivity.

See *Clusters*, Page 4

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**Teacher Feature Interview:****Nancy Hughes**

By Bill Garrison

**SCOUT REPORT**  
CONTINUED FROM P. 1**Would you describe the WWI Powerpoint project you recently completed?**

The students were given a handout as to what to do, a rubric for how the assignment would be graded, and a passage to read in the book. They had to create a storyboard of the slides on paper before they went on the computer to find images and other information. Then they had to complete a PowerPoint presentation to teach the rest of the class the information they had read. Two days after they presented, they were tested on much of the information they taught each other, and the test results were very good.

**Was this a collaborative project?** Yes! Sharon Davis created a fantastic hot list, as she has done for many of my projects (check out the teacher projects page from the library) and Sandy Baker guided us through the saving and dragging part so that all projects would be in place. She also stayed late when she had over 40 kids utilizing the lab!

**What were the advantages of doing the project electronically?**

All students were actively engaged. No paper waste, so it's environmentally better. And there were no restrictions on creativity. Even some of the special needs students shined during this project. We can all feel good about this one!

**How much extra setup was necessary for this project?**

None, it was actually easier. The students are generally already familiar with technology, so I wasn't holding any hands.

**What should other teachers know about this kind of project?**

When using the internet, sites must be approved, so information is valid. That's why Mrs. Davis is so critical. We don't want the students relying on information from a fifth grader's project on the internet.

**How well did the technology function to support the project?**

It was one of the smoothest projects I have ever done. One important thing was that the kids could all save to one folder that I had created, so that presentations could all be opened, without the hassle of logging in and out for each one.

**Do you think the students engaged more deeply with the material because of the Powerpoints, or were they distracted by the software?**

Some of both. Students were forced to evaluate much of the material to see if it was applicable to their presentation, but some were more interested in the "bling! bling!" as the kids would say, or the bells and whistles.

**For teachers interested in doing this sort of thing, what basic computer and management skills do you think they would need to succeed?**

I do not recommend having groups create Powerpoints. Individual presentations hold all students accountable and are easier to manage in the long run. Basic teacher skills needed to manage this activity include the ability to create a meaningful rubric, log on to the computers and navigate the common folder, work cooperatively with the media specialist to have a "hotlist" of web pages that are approved, and know PowerPoint!

outside school, and second, we are generally much more familiar with what computers can do for us than our parents or teachers are. Some people want what is cost efficient, other want what is easy to maintain and operate, and still others want what is fun and interesting.

These choices affect us directly. For example, Internet filters are useful in school to block unwanted websites out, but when they start blocking out important educational sites, a change has to be made.

Second, giving students a voice in how computers are used in school will make us more interested in school. School has always been about teaching children how to make good choices, and we would like the chance to exercise these skills in a real-world situation that will affect us. We know that the technology choices we are growing up with are different from what our parents and teachers had.

Most students feel technology has a big impact on our personal lives. It helps with our homework, helps us learn more about the world, and makes school more fun. Many students say they would first consult the Internet, before reading books or asking teachers. We expect reliable computers to be available to all students, at all times.

In every class there are always a few students who know how to figure out the problem, and even fix it in many cases. We would like an opportunity to help out more, both to develop our own abilities and to make it easier for teachers who use them to teach with.

The more interested and the less frustrated students are with our computers, the more we will learn.

*NOTE: Student work examples can be found in: Common/A Safe Place/Student Work/7-12/WWI Hughes—Completed*

## The Spanish Cultural Exchange Project

A collaborative E-Fund project by Jennifer Bentivegna Li, with Bram Moreinis, Carol Ueland, Ken Lampila, Sharon Davis, and partner teachers and students from the Valencia region of Spain.

Middle School Spanish teacher Jennifer Li is working with partner teachers in Valencia, Spain to provide direct cultural encounters to her students. Taconic Hills' first teacher to try videoconferencing, Ms. Li also used the Middle School Lab for follow up activities suggested by Bram Moreinis, who co-wrote the E-Fund proposal.

Ms. Li's students created Learning Village Home Pages to share Web-quest research, and posted to team projects for online dialog with their Spanish partners. Recently, her students began digital film editing with Ken Lampila to create movies of life on this side of the Atlantic.

It takes courage to try many new technologies all at once, particularly heavily-coordinated international videoconferences. Ms. Li took these on to motivate her students in foreign language and culture study through the authentic, natural language context of trying to communicate with peers overseas.

"We were able to learn things directly, not through other people's assumptions about culture," said one student. "We like to learn from our peers ... some of us relate better to kids."

In a videoconference, students are as aware of themselves as they are of their partners. Cross-cultural interactions opened students' minds to other cultural perspectives, but also let them see themselves from the eyes of others.

There were three student-to-student videoconferences (in addition to brief teacher planning sessions). The first was a highly structured question and answer session to establish the relationship, including getting a sense of who everyone was and how much they did not know. It went as planned, and got the project off to a great start.

"It was fun to see the sudden recognition in everyone's faces when they understood what we were saying," said another student. "It was cool to be able to laugh about something with people on the other side of the Atlantic."

After the first conference, students worked in the Middle School lab for a week on a Web Quest adapted for Ms. Li by Carol Ueland, with web sites identified by Sharon Davis. Bram Moreinis co-taught the Web-Quest class, focusing on how to insert found text and images into Learning Village Home Pages.

These student pages, the archived Team Project discussions, and the Web Quest they were created for remain on the district website: look for Spanish CEP at the lower right hand corner of the Middle School web page. The E-fund proposal and lesson plan for the first videoconference may also be found there.

The second videoconference was a sharing session to showcase the web pages created about Spanish culture by Ms. Li's students, and check in with the Spanish students about their understandings.

Partner misunderstandings about scheduling and responsibilities made the second conference awkward at the start. (Tip: always triple check expectations and model the interactions when partners do not share the same first language!)

Because this was an experimental project, Spanish partners thankfully agreed to waive the \$350 fee for a third try. The third session, scheduled for March 27th, has been planned mostly by Mrs. Li's students. In it, students from both countries will share what they care about and experience through videotape collages of local life and customs.

## Lightspan: Playstation-Based AIS Games for the Elementary School

To build the home-school connection and help struggling students catch up to their peers, Taconic Hills purchased Lightspan "Achieve Now", Sony Playstation-based learning games designed to address learning standards in Language Arts and Math (on the web at [lightspan.com/portal/corporate/product\\_tour/lano.asp](http://lightspan.com/portal/corporate/product_tour/lano.asp)).

The district initially purchased two carts with six Sony Playstations II consoles each and grades 3-6 software bundles each. Recently, an additional twelve Playstation I consoles with K-2 and 3-6 software from another district. These have carrying cases and require television hook-ups, and will therefore be used only for home loans.



After two staff development days, many teachers have been trained to use the software and are familiar with many of the selections. The two 6-station carts have begun two-week rotations between grades for teachers try out in various classroom structures (including learning stations, paired activities, and enrichment for students who complete tasks early).

To give students opportunities for extra help at home, teachers will create "home tasks" for parents who sign out stations for their children. The Parent Connection will make sure these assignments are printed out and go home with the software and stations as they are signed out. Lightspan will be featured during Parent Activity Night, April 1st. Call Tricia Petromelis for details.

## CLUSTERS: ABBY WILSON

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*What do they clusters help you do better?*

Students use the computers to research, edit, and write assignments. Multiple computers allow a group of students to search the web, play nutrition games or work on my Web quest at the same time freeing me up to work with other students in small group settings.

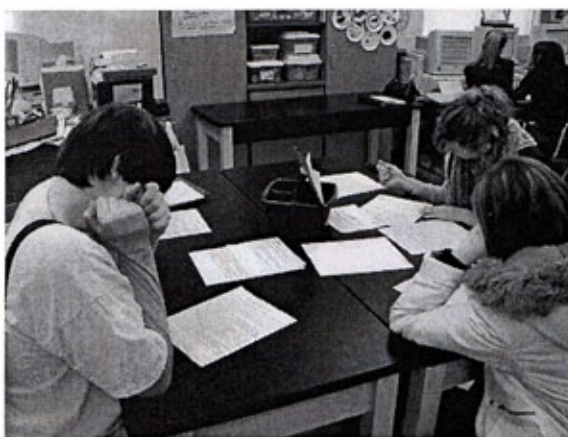
*How much extra setup does it require?*

Minimal. The most time I spent was typing lesson plans on PowerPoint, but as with any technology, it saves time in the long run. As for student stations, it only took minutes to incorporate technology activities, extra time is necessary to research sites or create a web quest.

*Why is it worth it?*

In the age of technology, you need students working with computers. It is a fact of life. Not only is it how people exchange information and communicate especially young people, it is a way they learn about all sorts of topics. It saves time and can make lessons more interesting.

*What else do you think other teachers should know about this system?*



It saves a lot of time in planning and organizing. There is no need to send kids to another location for computer access. The cluster adds dimension to



lessons by incorporating multiple intelligences and helps students create high quality products.

*What kinds of activities do the students do on the computer stations?*

The clusters have been used in numerous ways, but mostly in learning stations where students work around the room on different tasks within a unit. My use the machines for Internet research, Nutrition Games, "Career Zone" activities, and product comparison write-ups.

Adding a "Nutrient Web Quest" to the 7<sup>th</sup> Grade curriculum this year also gave a technology twist to existing curriculum

*NOTE: Explore this great webquest at [taconichills.k12.ny.us/highschool/nutrients](http://taconichills.k12.ny.us/highschool/nutrients).*

*How did you start using Learning Stations rather than full-class teaching?*

I have always had station or cluster activities incorporated into my curriculum. This opportunity allowed me to add computers easily as a new cluster. Learning stations allow students to work in small groups on specific tasks with all the necessary materials in one area to complete that task. Break-out groups put students in charge of learning

allowing them to work independently at their own pace. This type of format also allows the teacher to circulate and give greater attention to groups or individuals as needed saving time and increasing productivity.

*What learning standards do students achieve more directly, authentically, or fully with classroom computer access?*

Some specific NY State and National standards addressed for Health and Family and Consumer Science using technology projects, web searches an quests include:

- Understanding and ability to manage personal and community resources with online surveys, organization, website searches.
- Integrate knowledge, skills and practices required for careers with technology presentations, editing, NY State Career Zone site
- Demonstrate ability to access valid Health information, products, and services with web tours,



product comparison, research projects.

- Analyze influence of Culture, Media, and Technology with web tours, web quests, PowerPoint projects.
- Demonstrate Interpersonal Communication Skills with journaling, editing, presentations
- Personal, Family, Community and Environmental Advocacy with pamphlets, surveys, art, projects using research or items from technology sources.

We look forward to using the cluster more and more as we evolve the curriculum to add in technology.

## Web Resources for Teachers

Compiled by  
Carol Ueland



The following is a list of web sites that I have e-mailed to you over the past year. Enjoy and make use of the great info on the Web! Most links were located through research, some were happened upon by accident, and others were located through listings in The Journal's Web Road Map: [www.taconichills.k12.ny.us/infotech/spring/websites.html](http://www.taconichills.k12.ny.us/infotech/spring/websites.html)

## Rewriting the Periodic Table

ing a new unit of study. She brainstormed project ideas with Mr. Moreinis over lunch, and ended up choosing this one. The purpose of the Elements WebQuest was for us to develop familiarity with the periodic table and the properties of common elements.

Individual students would use the Internet to research the properties of common elements, record these properties in a shared database, and then organize and relate the results through new periodic tables we would create in teams.

Ms. Jeffrey described the process: "We decided on having two parts: the WebQuest, where stu-

dents were randomly assigned an element and directed to fill in a form, using provided websites as information resources, and the Periodic Table project, where students were put into groups of four, and worked together to design their own table, organized any way they wished."

Ms. Jeffrey and Mr. Moreinis collaborated throughout the project, finding and evaluating web sites, creating forms and the database, picking a movie, structuring the lessons, and teaching the classes. On the first day, they gave an introduction about the role of scientific discovery in how we live, and it was a coincidence that two new elements had been discovered the week before. They hooked up a projector, and we were shown a video about the life of Marie Curie, included her discovery of two radioactive elements, Radium and Polonium.

The project was then introduced to the students, with emphasis on the WebQuest research. Elements were assigned using a random number creator from a website. "The WebQuest was the easiest part of the project", Ms. Jeffrey said. "Students said they liked working at their own pace." For the next two days, students looked up information from websites Ms. Jeffrey had chosen, supplemented with their own Internet searches. Then, once they had the information they needed, it was entered into a database everyone could write to and read from.

## Continued from Page 1

This was the first time Ms. Jeffrey had used a database in the classroom, so both experimentation and preparation were important parts of this learning process for her. She needed to know database and how it worked beforehand, so that she could assist any students without trouble. There were some glitches when two students entered data on the same record that was then lost, but these were worked out after the first day.

"Working with the database was initially difficult, but after a bit of learning, the students took right to it," she said.

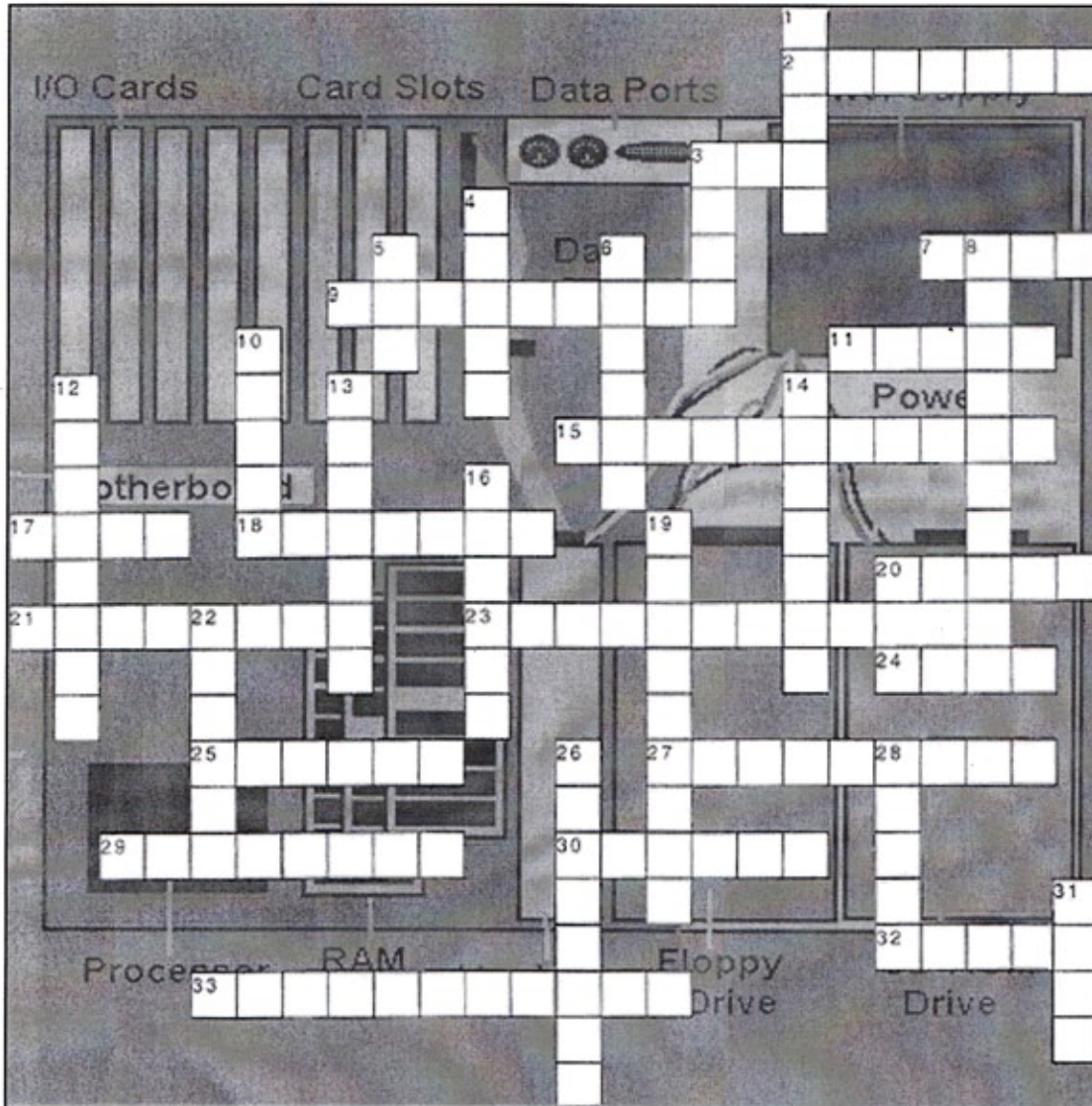
Ms. Jeffrey feels that it was a good choice to use computers to do a project. First, students appreciated the chance to use in class the same learning tools they use and enjoy at home, which are more appealing to work with than books. Students do not want to spend a lot more time looking up subjects in a card catalog, finding the book on the shelf, and looking through it to see if it had the information they needed. With the Internet, they know how to type in a search, and be shown the part of the web page with the words they are looking for. She felt students were more interested and absorbed the material better than if it had to be manually looked up.

A hand-drawn periodic table on lined paper. The top row of elements is labeled: Hg, Ag, Fe, Cu, S, C, Sn, Pb, Au, P, Zn, Ni, Al, N, O, Cl, Mg, H, Ti, Cr, K, Na, Ca, B, Li, Si, Br, F, He. Below these symbols are vertical lines representing the periodic table's structure, with atomic numbers written at the bottom of each column.

However, the choice also made sense because it was a science class, and computers are the main tools used by scientists. Beyond using the Internet, it was also important to use a database, because databases are the main way scientists share information with each other and look for patterns.

Another advantages of the WebQuest model is that students conduct research at an individual pace, responding to what they find interesting. This interest can then be built upon and connected to in classroom presentations. Finally, Ms. Jeffrey appreciated the chance to shift into product-oriented work, and give her students the chance to be more creative. "It required some modification of my teaching techniques, particularly in using the computer lab", she said.

# Computer Parts & Terms Crossword – Test Your Computer Literacy!



## DOWN

1. The function of the computer that receives information from the user.
2. The metal box that holds the computer parts together.
4. It converts telephone sounds into computer data.
5. Where the information you are working with is stored while your computer is on.
6. A moveable frame in which programs run and files are displayed.
8. A place for files you don't need anymore.
10. A place to store large files and folders, often used to install programs.
12. When you click on a task bar icon to open a window back up.
13. An output device that puts files to paper.
14. The background of your screen, where you organize your icons.
16. An area where you store files of the same type.

## ACROSS

2. How computers talk to each other.
3. An abbreviation for "Central Processing Unit"
7. If a mouse clicks on an icon and holds, it can do this to it.
9. Where all the information on your computer is remembered when you turn it off, measured in bytes.
11. How a mouse selects an icon
15. How a mouse runs a program from an icon
17. Most memory is stored on this, except for memory on chips.
18. An output device that shows you what's going on.
20. Connected wires that share data between disk drives and other "peripherals".
21. When you click on the minus sign, your window becomes an icon on the task bar.
23. A mini-window where you can make a set of choices.
24. Where programs list choices.
25. The function of a computer that communicates to the user.
27. The place to look for all your installed programs.
29. An input device for entering text and symbols.
30. A device for copying files from one computer to another, easily damaged if not cared for properly.
32. The first computer, named after Abel's brother.
33. The "spine" of your computer, through which all the other parts connect and communicate.

19. The computer's brain, speed measured in hertz.
22. RAM, ROM and Disk Drives are all examples of this.
26. A general name for programs that run on the computer.
28. An input device for selecting and dragging icons and other graphic elements.
31. A small picture associated with the name of a file or program.

### Word Bank:

cables case cd rom click cpu desktop dialog box disk double click drag eniac floppy folder hard drive icon input keyboard maximize menu minimize modem monitor motherboard mouse network output printer processor ram recycle bin software start menu storage window