

# Heights Bits and Bytes

*Colonial Heights Schools' Office of Technology and Learning*

**Volume IV Issue I**

**Newsletter Editors: Debbie Walwer and Buddy Palatiere**

**Instructional Technology Integration Specialists**

**November  
2008**



## **Welcome Maurice Jones**

Maurice Jones has joined our Technology and Learning Staff as our Technology Field Technician, a new position that the School Board approved for this school year. Maurice comes to us from Charles City County Schools, where he served as their Technology Specialist, and wore many hats in providing technology support to that school district. He has a Bachelors degree in Computer Information Systems from Virginia State University. Welcome Maurice!

## **Modernizing of Data Center Cooling**

By Mark Webster, Director of Technology and Learning

Our school buildings in Colonial Heights were built many years ago, and the facilities housing our information technology were not intended for this particular purpose at the time of their construction. We have experienced some electrical and overheating problems in our main Data Center located at Colonial Heights High School.

Because of the huge expense involved with retrofitting the facility in order to implement something like an APC InfraStruXure solution, an alternative solution was desired. After investigating some different solutions, last May I decided to turn to the company Attronica, who provided assistance with implementing specialized cooling racks in our main Data Center. We installed two Liebert MCR (Mini Computer Room) rack enclosure systems, that provide customized cooling designed specifically to protect IT infrastructure and network servers.

More recently a new KVM (keyboard/video/monitor) console was installed, and another KVM relocated. I am presently involved with procuring and installing new intelligent PDUs (Power Distribution Units) to provide more enterprise quality electrical power and equipment protection for our IT equipment. These PDU devices will have temperature sensors to measure environmental conditions according to preset thresholds, and a web-based interface to provide network management of the devices.

Although in Colonial Heights our efforts with facilities tend to focus on renovating our existing schools, this doesn't mean that we cannot build the same enterprise quality technology resources that larger organizations have. A more solid and reliable infrastructure provides the sure foundation needed to support our educational use of technology in our classrooms by teachers and students.

## Using Microsoft Photo Story for Digital Storyboarding

By Mark Webster, Director of Technology and Learning

What exactly is storyboarding? Back in the days when folks created slide presentations the old fashioned way, they would typically place their slides on a board that would enable them to conveniently reorder slides and add new slides as the project was being created. If you have used Microsoft PowerPoint, you have seen the digital equivalent of this with the "Slide Sorter" that allows you to see a thumbnail of all your slides, and this screen is used to move things around, and work with transitions and other effects. Nowadays, storyboarding is essentially using digital slides along with a text narrative, where the emphasis is on telling a story, and using pictures with corresponding text, rather than the same old showing of bulleted lists of text.

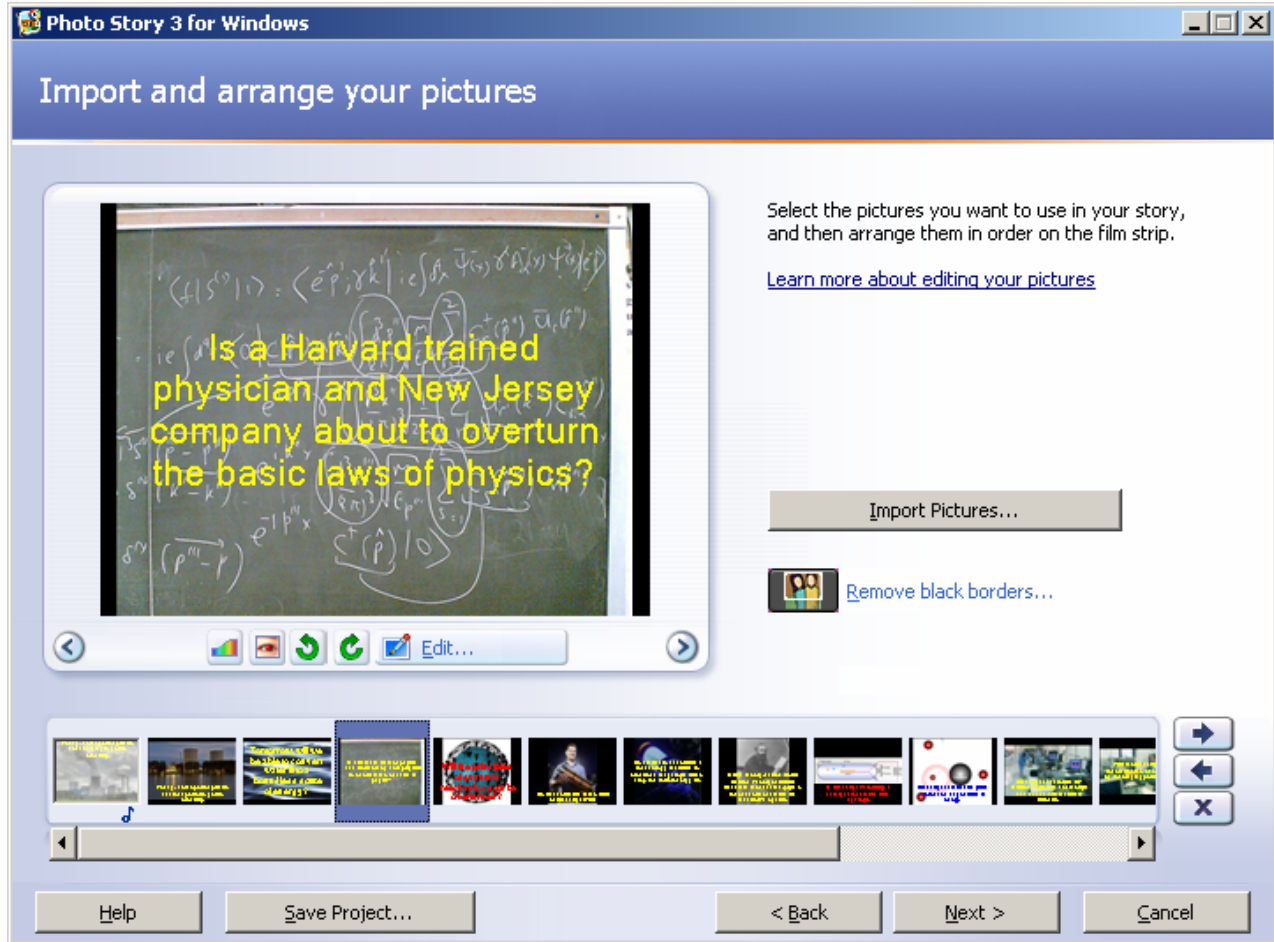
Involving students in editing and storyboarding digital projects can be a powerful technique for learning! Students become absorbed and engaged in the creative process, while researching, scripting, and storyboarding the curriculum content. I believe that the use of storyboarding makes what could otherwise be a somewhat uninteresting or even confusing topic, a little more manageable for students by sequencing the main ideas, and using images with accompanying text. Burmark recommends the technique of using sequencing, and stated (Burmark, 2002) "Every day, take the most tedious thing you have to convey that day and imagine a digital-visual way to make it engaging and fun" (p. 86).

I wanted to learn to use storyboarding for instruction, so I created a physical science project that leverages the current interest that students may have on energy issues and the energy crisis. The curriculum focus of my storyboard relates to physical science and current events, and correlates with SOL objectives for eighth grade physical science and high school physics.

Microsoft Powerpoint is probably one of the easiest ways to create a storyboard, because of the ease with which you can combine images and text. However, ***I wanted to convert my finished storyboard to a video, while including music with the storyboard for added interest.*** Therefore, I decided to use the popular application ***Microsoft Photo Story***, which features a user friendly interface that allows the creator to import images, drag and drop them into the storyboard sequence, add formatted text and easily change the text style, import music, and finalize and export the finished product to Windows Movie Video format.

Microsoft Photo Story uses a type of “wizard” approach in that it walks the creator step-by-step through the process of creating a storyboard. Images are represented with small thumbnails, and they can be easily dragged and dropped in order to sequence them in the desired order. After moving forward to later steps, you can easily step back to add additional images, change the sequence of images, or to change or edit text. I found that adding text was easy, although I found it necessary to alter the color or size of the text depending upon which photograph I was using for a particular slide, in order to make the information more legible. Typically I found that yellow was the best color for most slides, although I also utilized other colors such as red and blue for better readability, or for emphasis.

Most of the photographs used for my project were collected from the royalty free images available on [www.flickr.com](http://www.flickr.com). When any image editing was required, I used the freeware graphics application *Paint.NET*, that was originally developed by Washington State University students with funding from Microsoft. The music that accompanies my narrative was original music that I created using the program *Acoustica Mixcraft 3*, which features a custom loop library of royalty-free sounds from different musical genres and styles.



I tried to include an emotional dimension to the content and information being presented. Springer wrote (2005), “the role of the emotions in learning has lately assumed new importance in research and learning theory” (p. 54). I suppose if the advertisers and politicians use this approach so effectively, maybe we educators could do the same?

I also wanted to include an element of controversy in my project, to encourage critical thinking. In researching information related to the energy crisis, I discovered the controversy that surrounds Blacklight Power’s claim to have discovered technology that can harness energy by using a catalyst to cause hydrogen atoms to move to a lower energy state. If Blacklight’s technology truly can do what the company claims, it means an overturning of physical science theory, and a revolution in physics and energy production.

At first I was intimidated by the idea of creating a project on this curriculum topic, because I know next to nothing about quantum theory. I mention this, because storyboarding is often thought of as more appropriate for younger students just learning to read; however, I believe it can also be useful with older students. Burbank wrote (2002, P. 8) that “it is through the combination of words and images that we can elevate our thinking to the highest levels of understanding.” I discovered that storyboarding can perhaps be an effective instructional technique to take complicated (and convoluted?) subjects, and present them in an engaging way through images and storyboarding by focusing on key concepts and ideas. I found it took some work and editing of text to break the complex topic and information into succinct phrases that would be best suited within the constraints of the storyboard, to accompany the images.

### References

- Burmark, L. (2002). *Visual literacy: Learn to see, see to learn*. Alexandria, Virginia: Association for Supervision and Curriculum Development.
- Springer, J. (2005). Every picture tells a story. In G. Bull & L. Bell, *Teaching with digital images* (pp. 49 – 62). Washington, DC: International Society for Technology in Education.

## CHMS SCA Elections go Hi-Tech

By Buddy Palatiere, Instructional Technology Integration Specialist

Colonial Heights Middle School Elections took a turn into the 21<sup>st</sup> century. There was no SCA assembly filled with speeches and hoots and hollers from the audience. In the past SCA Assemblies took about 45 minutes to an hour out of instructional time. This year each candidate for President, Vice-President, Historian, & Secretary made videos of their speeches. Each speech was less than 2 minutes and was videotaped in front of a blue screen so all candidates were on the same footing. All V-casts (Video-podcasts) were collected and placed into 4 different files, one file for each office. During a 10 minute extended MS101 (Middle School Home Room) the videos were played through the projection system in each room as each class watched attentively. The next day Picture/Name Ballots were handed out so students could put a name to the face. The elections were carried out in a timely manner. Most students really enjoyed hearing the speeches and seeing their friends on the projection systems. Many teachers commented that it was the first election that students paid attention to what each candidate said. All in all it was a successful jump into the 21 century.

## 2009 Summer Technology Institute Is Another Big Hit

By Buddy Palatiere, Instructional Technology Integration Specialist

For the third year in a row the Colonial Heights Summer Technology Institute was well attended. 79 teachers earned about 624 re-certification points while taking 208 summer classes this year. Over the past three years about 250 staff members have taken over 700 three hour classes. This year's Institute was expanded in several ways to accommodate several teachers' suggestions. First we expanded the number of days classes were offered. In the past the Institute ran for 4 weeks. This year we had 5 weeks. We also offered classes at different times during the day. Late afternoon and early morning classes were offered to allow those staff mem-



bers to attend as they juggled busy schedules. The third improvement to the Institute was an increased number of classes offered. This year 17 different classes were offered. The most attended classes were Moodle, Web Page Design and Basic Computers. Top attendees to the institute were Bill Jordan and John Brannan. Each earned 24 re-certification points as they attended 8 classes each. Be on the look out for a new technology needs survey so we can add your suggestions and plan the fourth CHPS Summer Technology Institute.

## What's New in the Elementary Schools?

**By Debbie Walwer, Instructional Technology Integration Specialist**

During this school year, the students have made excellent use of available computer and internet technology. More students are using the program "Study Island". This program works as an added resource in preparation for the Virginia Standards of Learning Tests. The students log into the web based program and answer a series of questions at their own pace, helping them to become more confident and comfortable when taking actual tests. The fourth and fifth grade students have been using "Study Island" integrated with e-Instruction's Classroom Response System. This helps every student to be engaged in the learning process.

BrainPop is a web based resource that provides animated, curriculum-based content that supports educators and engages students. Resources include video content and quizzes to check for understanding. Teachers will receive information through email with the username and password necessary to use this resource. Many new PowerPoints have been added to our MOODLE website for elementary teachers to integrate into their teaching of the SOL. If you need a Moodle account, contact me and I will set one up for you.

Several teachers have added "Teacher Web" web sites to their resources for teaching and learning. This is an excellent way to inform students and parents of activities and expectations in our classrooms.

## "My Access" Gets Classroom Try

**By Buddy Palatiere, Instructional Technology Integration Specialist**

A very powerful writing program gets a try at CHMS in the 7<sup>th</sup> grade English Classes. Mrs. Asenza and Mrs. Thompson are two teachers that are involved in this project. Each teacher has selected about 75 students who will have access to the "My Access" program. The Central Virginia Consortium has funded this program from a Grant application through the Department of Education. The grant award is approximately \$4,000.00 for each of the next two years. The "My Access" program is an active writing and correction program. Each student writes when they are given a prompt. When the student is finished, they submit their essay and the program grades their essay on several levels and returns the corrected essay to the student. Then the program assigns a writing score (1-6 scale) to the assignment. The student can make changes to the essay and re-submit it to see how that affects the scoring. Each essay is compared (by the program) to about 20,000 other essays from the same age and class to arrive at a score. The teachers can assign different writing prompts or have the computer select an age appropriate prompt. The goal is to increase the students writing ability and show them how simple changes in writing can improve their abilities. Each student has their own login and password so they can access the "My Access" program from any computer with internet access. Their private logins enable the scores they achieve to remain private. So far 4 classes in the 7<sup>th</sup> grade have used this program and everyone seems to think that it will have a positive benefit on the writing ability of the students.