



# Jefferson Township Public Schools Office of Instructional Technology

*"Developing 21st Century Skills One "Byte" at a Time"*

**Newsletter**

**June 2009**

## The Connected Student

In my previous edition of the technology newsletter I discussed Web 2.0. The transition from web 1.0 to 2.0 has brought a number of technologies and new opportunities into the classroom. Over the next school year, I will be offering workshops that cover many of the web 2.0 technologies available to support learning. These will include [blogs](#), [wikis](#), [podcasts](#), [skype](#), [RSS Feeds](#), [Digital Stories](#), [internet search](#), [social networks](#) and [information literacy](#).

Together these tools are used to support the educational philosophy of [connectivism](#). *This is a theory that presumes that learning occurs as part of a social network of many diverse connections and ties.*

The outcome expected from using these tools is to develop 21<sup>st</sup> century skills. **Collaboration, Creativity, Critical Thinking, Problem Solving, Innovation and Information Literacy** are the skills that are seeing an increase in demand in our global economy. By incorporating these tools into our curriculum areas at an early age, we are providing an opportunity for students to utilize the tools that assist in the development of 21<sup>st</sup> century skills. We allow for development of both the left and right brain.

The inclusion of web 2.0 tools in instruction provides an authentic learning experience for our students. They are able to make connections to these mediums. Many of these tools are variations of the same online resources that the students are using on a daily basis.

All of these tools are now accepted at the college level and are entering the workforce. Microsoft Sharepoint, Social Networks and Wikis are a part of almost every fortune 500 company today.

The following story illustrates how these Web 2.0 tools are used together to facilitate 21<sup>st</sup> century skills. Please read the following example of how a connected student uses these tools in the learning process.

Let us consider a high school student of today. This student attends a local high school. She is taking a combination of classroom courses as well as courses offered through the virtual high school. These virtual courses are all online. She receives a topic of study from her teacher. The topic is "Water Quality in Developing Nations."

Immediately this student begins to research the topic in order to develop a greater understanding. She begins by locating websites that contain information on the topic. She has been taught *how to validate and assess websites to ensure its credibility*. She also searches Google Scholar [www.google.com/scholar](http://www.google.com/scholar) and her school's library databases to search for scholarly peer reviewed articles on her topic.

*As she discovers websites of interest she begins to bookmark them in her social bookmarking account* ex: [www.delicio.us](http://www.delicio.us). These sites allow you to save sites that interest you. You can organize them by category, access them from any computer with Internet access, and share links with people you add to your network. She begins to find other people who have bookmarked other sites on the same topic. She quickly adds them to her network so that she can share links.

*She then begins to find blogs with postings related to this topic. She has been taught to understand that blogs offer personal opinions on topics.* She may decide to comment on blog postings in order to communicate her own opinions on the topic to advance her learning.



*When she finds a number of blogs of interest she subscribes to them in a reader. Ex:*

[www.google.com/reader](http://www.google.com/reader). A reader will provide her a central place to review updated postings from blogs she is interested in. The new content will come directly to her when she subscribes to the **RSS Feeds**.

She may even decide to start her own blog in order to post her own thoughts on the subject. She may receive comments from a classmate or from anyone around the world interested in the topic.

This student never leaves the house without her MP3 player. (iPod) However, she is not only listening to music. *She can subscribe to a host of educational podcasts available at iTunes U. There she has access to thousands of courses recorded by actual professors from some of the top universities in the country.* She can subscribe to these lectures through iTunes and download them directly to her iPod. Our student has just found a lecture from Dr. Hamburg from Stanford University on her topic of study. She downloads it and listens to it at her convenience.

While researching her topic, this student stumbles upon a documentary that was produced on her topic. She is able to uncover contact information for the creator by conducting a couple of Google searches. *She connects with the creator and sets up a free video conference/telephone call using **SKYPE**.* She also exchanges some emails with him for specific questions.

The culmination of this research is her own online textbook populated by the various resources she has accumulated in her social bookmarking account as well as her Google Reader account. Her project can now come together in the creation of her choice.

She may decide to make a video on the topic and post it to a video sharing site like [YouTube](http://YouTube) or [Google Video](http://Google Video). Another option would be the creation of a Wiki on the topic so others can view and contribute content to it. ([www.wikispaces.com](http://www.wikispaces.com)). She may decide to create a voice thread ([www.voicethread.com](http://www.voicethread.com)) so others can view her production and post their own comments/reviews of her work.

You may ask, "What is the role of the teacher?" The role of the teacher is very important in this example - the teacher provides the following for the student:

- How to build this network and take advantage of learning opportunities
- Offers guidance when you get stuck.
- Model how to communicate properly and ask respectfully for help from subject area experts.
- He or she shows the student how to differentiate between good information and propaganda.
- How to vet a resource
- How to organize a mountain of information
- How to turn a web search into a scavenger hunt.
- How to get excited when they find that pearl of content.

He or she hopes that when this student leaves his or her class she will maintain this learning network and use it to navigate his or her future and creatively solve the world's problems. **These are the skills required in the 21<sup>st</sup> century.**

The ability for a student to use these tools with minimal direction to solve a problem or demonstrate knowledge of a subject area is the ultimate goal. These tools allow for self-directed learning and the development of a personal learning network. By introducing these tools at an early age we are arming our students for success.

**Sources:**

The Connected student "connectivism" [www.youtube.com](http://www.youtube.com)  
[www.classroom20.com](http://www.classroom20.com)

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## Technology Integration In Action

The students in Mrs. Maxwell's English 12 Honors class are blogging. Mrs. Maxwell was looking for an alternative method of recording and organizing student journals. Having done some preliminary research she decided that student blogs might be her answer.

After meeting with Colleen and documenting her goal with the journals, we decided to setup a "Social Network" for her class. We used free software that allows anyone to create a secure and moderated network. The service provided by [Ning](#) is advertisement free for use in schools.

The social network allows each student to maintain their own profile page. On that page they can post blog entries, add pictures, videos and other messages. They can even change the template of the page. The main page of the site can be setup by the teacher and can include options such as: a listing of members, a threaded discussion forum for whole class discussions, a listing of most recent activity, group pages, live chat, and rss feeds.

Setting up this network allowed Mrs. Maxwell to be able to view each student's blog (journal entry) without having to travel to 20 different sites. It also allows Mrs. Maxwell to leave comments on each student's postings. We setup the site security to allow only the teacher to view student blog entries. However, this could be adjusted to allow students to comment on each others blogs. The site is setup to allow read and write access to only the members.

Mrs. Maxwell is putting together some ideas for using this network in other areas. She may utilize the discussion forum to host threaded discussions in her classes. There is also an option to create group pages where students can collaborate on projects.

The social network we created is a classroom version of Facebook. It has proven to be effective in Mrs. Maxwell's classroom. By using this tool we are extending our classroom beyond the four walls. We provide 24/7 access to learning.

## What's Cool On The Web

### Novelinks

Novelinks is a website created by the English Department of Brigham Young University. It is a resource for Language Arts teachers in grades 6-12. The "Reading Resource" section contains strategies and resources for most of the common novels taught in grades 6-12.

<http://english.byu.edu/novelinks/default.html>

### Our District Instructional Technology Website

<http://www.jefftwp.org/InstrTECH/index.shtml>

I have created a website for the Instructional Technology Department. The link for the site is found on the district page under "District Offices" The main page will list announcements and host the navigation to the rest of the site.

### Blog

The blog will be updated constantly. I will be using this blog to share various technology and curriculum resources with everyone. I will also be posting thoughts regarding the implementation of technology into the classroom. I welcome everyone to click on a posting and leave a comment.

### Wiki

The Wiki is a central location where I post all of the resources I wish to share with faculty. It is organized by topic. This is also a place where I will be sharing all of the handouts and additional resources for the workshops I host.

### Tutorials

The tutorials section is where I will post any screencast tutorials that I create. Many of these are also found on the wiki.

### Online Professional Development

The online professional development section is where I will host online courses. These courses are available on demand 24/7. Please check this site for course additions in the future.

