TUESDAY TIPS

TECHNOLOGY IN ACTION

Network Math

Math Addition Problem:

When your school has a network that you plug into via an ethernet cable and a wireless network that doesn't require a cable connection, how many networks do you have?

Answer: Only one.

In the wireless portion of the network, your device connects to the network via radio waves going to access points (airports). The access points are connected via ethernet to the actual ethernet cabled network. So no matter how you connect, you're still accessing one network. No matter the size of the enterprise, there is only one network.

Math Logic Problem:

Consider E=IR, an equation that deals with electricity, as a way to look at the relationship between bandwidth, usage, and traffic flow on our network. Let E= 75Mbps (our bandwidth), I = the speed of the network, and R = the bandwidth required by 200 or more applications in use at the same time. E is unchangeable. So, the speed of the network is totally dependent upon how much bandwidth is required by the applications in use. What will happen when the applications being used at any given time require more bandwith than usual?

Answer: The network will slow down.

No matter how great the infrastructure, there is only so much bandwidth available. Whether or not you are actively using your device, if you have open applications, then you are using bandwidth.

Bandwidth Bandits

What are the biggest users of bandwidth? Any streaming application eats bandwidth. So video streaming (i.e. amazon.com video rentals) and audio streaming (i.e. Pandora) use huge amounts. Testing apps and games also eat bandwidth.

Wonderopolis

The daily articles at the National Center for Family Literacy's *Wonderopolis* are allegedly educational and supposedly aimed at kids. Don't let that fool you. They're just plain interesting, and make for addictive reading even for those of us who are, in theory, all grown up. For example, "How Does an Eraser Work?" doesn't just explain how erasers work — did you know they usually contain vegetable oil? — but also reveals how people removed pencil marks before Englishman Edward Naime invented the eraser in 1770. (They used rolled-up pieces of bread.)

By clicking on the "Explore Wonders" button, you can find information about all kinds of intriguing things. Do fish sleep with their eyes open? Do dogs really eat homework? If blood is red, why are veins blue? The answers are concise and interesting.

Patrons can submit their own questions and vote for their favorite wonders. The "Educators Sandbox" is especially for teachers.
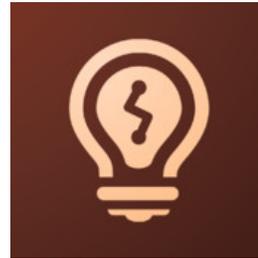
THOUGHT-PROVOKING APPS

Idea Flight

Idea Flight enables one person, the Pilot, to use his or her iPad to control content to an audience, the Passengers, using other iPads via W-Fi. Preparing materials for Idea Flight is simple; content must be saved as a PDF and can easily be accessed through Dropbox, iTunes File Sharing, or email. Passengers are then invited to come on board directly from the app. *Idea Flight* includes a Passenger List allowing Passengers and Pilots to connect via a variety of ways.

Adobe Ideas

Adobe® Ideas gives you the ability to draw freeform vector illustrations wherever you are. Replace your pen and paper with a huge virtual canvas, customizable brushes, and pressure sensitive stylus support. With a Creative Cloud membership, easily sync Adobe Ideas projects to Creative Cloud and open them for refinement in Illustrator. With *Ideas*, it's easy to take your initial concept to finished design.

iBrainstorm

With *iBrainstorm*, capturing and sharing your inner most creative genius has never been easier. It gives up to four people the ability to create ideas on their iPhones and 'flick' them over to the iPad! It makes the brainstorming process engaging and fun. You and your students will love this app!