



## Diffusion of Innovations

One great thing about graduate school is that I get to read all those books we know we “should” read. I just finished Everett Rogers’ classic work, *Diffusion of Innovations*, which was first published in 1962 and is now in its fifth edition.



I am reading the book as part of a course in educational technology professional development, a subject near and dear to my heart. Both the book and the course have made me think hard about the work I do, and I think Rogers has some

important lessons for all of us involved in working with teachers and technology.

The first one is that before a teacher will even think about using technology, she must have a felt need or problem. So, for the change agents working with teachers, the first questions should focus on the teacher’s perceived needs and problems, rather than the latest gadget that the school just purchased.

Another lesson focuses on the concept of technology clusters, or groups of unique technologies that are related to each other in some way. In schools, it often means that teachers must know something about the network in order to be able to use software applications, access the Internet, or save documents in a shared location. It isn’t enough to teach them how to use Inspiration if they don’t know how to navigate the computer to find the application in the first place or are unable to locate the templates or other documents.

The final lesson--and the most important one for me--is to treat teachers with respect. There is a tendency for innovators and early adopters to look down on those who are not as quick to integrate technology into their classrooms or who do so in more traditional ways. Rogers tells the story of the farmer that he met in 1954 who resisted all attempts to get him to use chemical fertilizers and pesticides. As the years went by and research showed that many of these chemicals were dangerous to humans, organic farming became a new trend, and organic farmers were able to charge a premium for their crops. Rogers comments, “Today, looking back five decades to my Iowa diffusion study, the organic farmer I interviewed...has had the last laugh over agricultural experts. My 1954 research classified him as a laggard. By present-day standards he was a superinnovator of the then-radical idea of organic farming” (p. 194).

If we always work from a position of respect for teachers, looking for ways to meet their needs or solve problems, I believe we can help them navigate the sometimes overwhelming world of technology and aid in the diffusion of instructional technology in effective and efficient ways.

# Conference

# Calendar

The best place to look for educational technology conferences is at T.H.E. Journal (<http://www.thejournal.com/>). Their searchable calendar is a comprehensive guide to national and international conferences. In this space, we'll be featuring conferences of particular interest to Virginia educators.

**Educational Technology Leadership Conference: November 29-December 1, 2006, Hotel Roanoke Conference Center, Roanoke, Virginia.** Designed for educational technology leaders, this conference is co-sponsored by the Office of Educational Technology of the Virginia Department of Education and the Virginia Society for Technology in Education. This year, the theme is **Technology and Learning, Virtually Everywhere**. Visit the website for more information:  
<http://www.pen.k12.va.us/VDOE/Technology/OET/conf.shtml>

**EdTech2007: February 7-8, 2007, Randolph Macon College, Ashland, Virginia.** Sponsored by WCVE-TV, this two-day conference is designed for all K-12 educators including administrators, teachers, media specialists, and technology resource teachers. The conference offers hands-on workshops as well as concurrent sessions. Each day features a keynote speaker. Visit the website for more information:  
<http://www.ideastations.org/teachers/conferences.html>

**Virginia Society for Technology in Education: February 25-27, 2007, Virginia Beach Convention Center, Virginia Beach, Virginia.** Designed for teachers, this conference focuses on instructional uses of technology. The conference features over 100 concurrent sessions and 40 hands-on workshops. The Office of Educational Technology of the Virginia Department of Education is the co-sponsor. Visit the website for more information:

<http://www.vste.org/conference.html>

**National Educational Computing Conference: June 24-27, 2007, Atlanta, Georgia.** Thousands of educators come together once a year to talk about technology. Just amazing! And this coming year, it is close by. Plan now to send a team to this premiere educational technology conference. Visit the website for more information:

<http://center.uoregon.edu/ISTE/NECC2007/>

## Get Involved

Several of the conferences listed on this page, including EdTech 2007 and VSTE, are currently calling for presentation proposals. If you have never done a conference presentation before, now is a great time to get started. I think the most interesting presentations are those that highlight specific projects and programs developed by a school or division. What exciting things has your school done that might be of interest to others in Virginia? Why not consider putting in a proposal...it will probably be accepted, and it's a great way to get to go to the conference!

# Web-based Learning

A monthly look at instructional technology websites. This month, we feature interactive math websites.

## Algebasics

Where was this website a few years ago when I needed to review for the Graduate Record Exam? Narrated lessons take viewers step by step through problem solving. They feature typical problems and give clear instructions. <http://www.algebasics.com/>

## Mathcasts

What an interesting idea! This website, which uses a wiki for organization, is a series of screencasts that demonstrate math concepts. The narrated lessons discuss the process of solving problems. Most were created using whiteboard software and a screen recorder like Camtasia Studio. You can request new lessons or, even better, contribute your own. <http://www.algebasics.com/> eMathOnline also features these whiteboard movies, some made by students. <http://www.emathonline.com/WMM/wmm.php>

## Junior High Interactive

Interactive website that includes 23 lessons with videos and interactive activities. Lessons are geared specifically to 6th, 7th, and 8th grade. Many of the videos make real world connections with the math concepts discussed.

<http://www.learnalberta.ca/content/mejhm/index.html?launch=true>

## Counting Down

From Chicago's cable access Channel 21, video clips from Counting Down, a weekly math program. The site includes handouts, manipulative activities, and computer instruction. The site has a liberal copyright policy, making it perfect for teachers, students, and parents.

<http://countdown.luc.edu/index.html>



Looking for more great websites? Visit Virginia's Community of Learning at <http://www.virginialearning.org>.

# Good Reads



We can't be good technology ambassadors if we aren't well-informed. And with the Internet, keeping up to date has never been easier. Each month, I'll be highlighting interesting, relevant sources from research projects to government reports and ezines to bloggers.

## Computer and Internet Use by Students

This report from the National Center for Education Statistics examines the use of computers and the Internet by American children enrolled pre-kindergarten through grade 12. It includes information about the overall rate of use, the ways in which students use the technologies, where the use occurs (home, school, and other locations), and the relationships of these aspects of computer and Internet use to demographic and socioeconomic characteristics such as students' age and race/ethnicity and their parents' education and family income. The report suggests that schools appear to help narrow the digital divide.

<http://nces.ed.gov/pubsearch/pubsinfo.asp?pubid=2006065>

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## Just for Fun (and maybe some learning, too!)

### Make Your Own Wiki

“A wiki is a work sustained by a community.”

Ward Cunningham, inventor of the first wiki, WikiWikiWeb  
(<http://c2.com/cgi/wiki?FrontPage>)

Wikis are collaborative writing tools that allow groups to create and edit text quickly and easily on the web. Wikipedia (<http://www.wikipedia.org>), the online user-written encyclopedia, is probably the most famous. Several websites, however, allow users to create their own wikis from scratch, perfect for teachers who want to use them with their students or for groups of educators who need to create shared documents like curriculum or technology plans. Two of the most popular of these wiki-creation sites are pbwiki (<http://www.pbwiki.com>) and wikispaces (<http://www.wikispaces.com>). Both sites offer free wiki space with various storage and access options.