

# Watch out! The disruptive power of technology!



**Daniel S. Christian**  
Title II Grant Professional Development Conference  
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## Feedback/questions/comments/further resources

Comment/question: I am amazed at the changes in technology...how do I stay informed of updates and changes? Is there a website or other tools to go to in order to stay informed?

Related comment/question: How – what is the best way for an “average Joe or Jane” to keep current or be prepared for the next wave of technology...and to at least have a “working knowledge” of what is going on?

Related comment/question: What is the “best” way to stay current (other than becoming a 20-year old again)?

DSC: Here are some possibilities...

A good place to start is by learning about and using **blogs** (also see **Will Richardson's writeup** on what blogs are and how to use them). You may want to start out by using **Google Reader** to subscribe to various blogs out there. Check out the following sites/blogs as examples:

- [eSchoolNews.com](http://eSchoolNews.com)
- [Angela Maiers](#)
- [Dr. Delaney Kirk](#)
- [Free Technology for Teachers](#)
- [The Journal](#)
- [Edutopia.org](#)
- [Virtual High School Meanderings](#)
- [Educational Origami](#)
- [The Innovative Educator](#)
- [iLearn Technology](#)
- [Virtual School News](#)

- [EdWeek.org](http://EdWeek.org)
- Check out [Larry Ferlazzo's site](#) and blogroll
- [Miguel Guhlin](#)
- Etc.

Notice what they talk about...the technologies they bring up and how they use them...the websites they refer to...the companies they refer to.

Other ideas:

- Attend a conference or virtual seminar or webinar
- Go to Barnes & Noble to check out some related books
- Subscribe to eSchool News, Campus Technology, The Journal, or other periodicals

**Comment/question:**

**As in all things there's the good and the bad. I can see much of the good in what is coming with technology but how will this affect students/people in a negative way? How do we as Christians bring a balance?**

**Comment/question:**

**What are the sociological and psychological effects of so much online engagement for children? For adults?**

DSC:

Good points. As with many communication-related technologies such as the web, there can be appropriate and helpful uses on one hand...and on the other hand, not so helpful – even harmful – uses of the web. My personal belief is that the web needs to have some light in it, and we should not, as Christians, back away from it. It could be the LORD himself orchestrated its coming together to achieve His own purposes – or at least we can use it to help others learn about many things...while hopefully making the world a better place in the process. Good call though.

I don't have reports for you on the latter question. But I'm sure that they are out there. Some sites that can help parents in protecting their kids include:

- Pledges -- [http://www.safekids.com/contract\\_kid.htm](http://www.safekids.com/contract_kid.htm) and [http://www.safekids.com/contract\\_parent.htm](http://www.safekids.com/contract_parent.htm)
- [4Kids.org](http://4Kids.org)
- [5 tech secrets parents need to know](#) -- 9/26/08, from MSNBC.com, by Helen Popkin
- [How do I help my child learn to use the Internet wisely?](#) -- 8/13/08, from The Innovative Educator
- Parents. The Anti-Drug.
  - [Parents. The Anti-Drug. — E-Monitoring](#)  
A crash course for parents on teens and technology
  - [Digital Technology 101 for Parents. The Anti-Drug. — E-Monitoring](#)  
Social networking, cell phones, IM and more for parents
  - [Internet Lingo](#)
  - [Social Networking Sites](#)
  - [Monitoring Tools](#)
  - Many Web sites offer guidance and advice on how to monitor your teen in the Digital Age. While *TheAntiDrug.com* provides basic steps on how to monitor certain technologies, other sites offer more specific details. [Here is a list of credible, user-friendly sites that can provide you with more information.](#)

- Michigan Family Forum's Guide to Internet Safety (2007)  
The Internet is amazingly powerful. Yet like the other types of media out there, it has its strengths and weaknesses...its good and bad sides. So while the Internet can be beneficial, it can also be the Wild Wild West. This booklet -- [The Family Guide to Internet Safety](#) -- from the Michigan Family Forum might help you protect your youth from some of the pitfalls of being online. It discusses some potential risks of kids being online that parents need to know about and offers some steps you can take to educate your kids about these things.
- [Kids Keep Parents in the Dark About Cyberbullying](#) -- from All Things Digital
- [From CyberSmart!](#)
  - [Letters to Families](#) are appropriate for any grade level, and provide teachers with a simple way to encourage parental support and involvement.
  - Printable Poster [Internet Safety for Elementary Students \(PDF\)](#)
  - Printable Poster [Top Ten Cyber Security Tips for Teens, Their Teachers and Families \(PDF\)](#)
  - [Social Networking: Questions, Answers, and Lessons](#) to spark a conversation with teens. Plus selected lessons from the non-sequential CyberSmart Curriculum. Lesson plans and student activity sheets.
  - [Online Safety – “Supervising Cyberspace”](#)
  - [Online Safety – “Suited up for Cyberspace”](#)
  - [Be CyberSmart! – “2 Thrive in the 21st Century”](#)  
Issue Discussion: What are the attributes for success in the 21st Century and how can we apply them to educating students today?
- [WiredSafety.org](#)  
WiredSafety.org is the world's largest Internet safety, help and education organization. It includes a helpful [index of safety topics for teachers](#).
- [Mitigating the Internet's Negative Consequences](#) -- from The Journal.com  
For the last 11 years Marje Monroe and Doug Fodeman have worked to educate schools, parents and students about the issues that affect children in an online world. Their Web site, [ChildrenOnline.org](#), offers practical articles, resources, research, and a monthly newsletter on the topic. Recently, the team, which has a long background in education, self-published [Safe Practices for Life Online](#), intended to show middle and high school students what scams target them and how to use the Internet more safely. A [teacher's edition of the book](#) will be available through the International Society for Technology in Education in November. In August, they'll self-publish a third guide, intended to help parents set appropriate limits around technology use and talk to their teens about how to protect their privacy online.
- [Media Awareness Network](#) -- for Parents (though they have for Teachers section as well)
- [How do I help my child learn to use the Internet wisely? -- from "The Innovative Educator" blog \(8/13/08\)](#)
- [Cyberbully Pledge for Teachers](#)
- [Parents Guide to Social Networks](#)
- [Connect Safely](#)
- [Digizen: Digital Citizenship](#)
- [Yahoo! Safely](#)
- [Study Debunks Sexual Predator Myths](#)
- [BJ Fogg on Web Credibility](#)
- [eSchool News: Online Safety Myths](#)
- [Digital Safety](#) -- from Cable in the Classroom

Again, these are not meant to say Christians should not use the Internet! Far from it! We just want you to be aware of some challenges out there. Here's an article that you might want to read as well:

[Internet not the child-devouring swamp many adults fear](#)

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**Comment/question:**

**I love what technology can do, but I'm concerned with losing personal connections and the personal touch. Compare handcrafted furniture (more expensive but more unique and valuable) to Sauder (cheap and like everyone else's). Where are the personal connections going in Education?**

**Related comment/question:**

**With all of this new technology, *who* is going to provide our children with the ability to be social with each other? Where is the face time between teacher and student?**

DSC:

Thanks for the comments here. These thoughts bring to mind some personal experiences that I want to share. I went to Northwestern University in Evanston, IL for my undergrad education. Out of 4 years, I knew only 1 faculty member well enough to ask for a letter of recommendation...or who would even have known me had I bumped into him or her on the street.

Yet in the online world, I almost always develop a much closer, better relationship with my faculty members that I'm taking courses from. I, too, thought online education would be isolating. But my experience has been that the online-based discussion boards have brought up better discussions than I ever had at Northwestern. Also, note the explosive growth of online-based social networks (MySpace, FaceBook, Twitter, etc.). Using blogs, I've met people from around the world that I never would have known otherwise.

I think our children will be able to interface with teachers throughout the United States...but also throughout the world. It would be pretty cool for our kids to do a virtual classroom with teachers (or other students) in Uganda, the Ukraine, Australia, or the UK. The Internet can bring about conversations that most of us could only have dreamed of growing up.

The downside is that there is online bullying, gossip, sexting, and probably the comparisons of who has the latest gadgets and who doesn't.

I look at the [plusses and minuses](#) of technology at:

<http://www.calvin.edu/~dsc8/technology.htm>

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**Comment:**

**It would be so great for older teachers to have a paid "tech sabbatical" with equipment budget in order to take several months to learn to use and apply new tech resources and then bo back to the classroom better equipped to teach.**

DSC:

Agreed – that *would* be great, and what you are getting at is important here. We need to provide solid incentives and resource -- tangible, concrete assistance to integrate technology into the classroom. To think we can learn about these things "on our free time" doesn't cut it these days. For myself, I am fortunate to spend a lot of time learning about technologies because that is part of my job. However, I myself, am overwhelmed by the pace of technological change. Also, I wonder if all teachers and professors even want to learn more about technologies and how to use them in the classroom...probably not. I think we are asking faculty members and teachers to do too much. That's why I believe in the use of teams – so everyone can do what they do best. When we do this, everyone else benefits.

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**Comment/question:**

How can small Christian schools keep up with the cost of staying technically current? I see the need and am okay with it applications in education, but without proper training and materials, it will end up in complete frustration for many of us “older” teachers. How can I use technology with integrity in my classroom?

**Related comment/question:**

How do schools financially keep up with the demands of preparing and exposing our students to all this?

**Related comment/question:**

How can the cost of these emerging technologies be paid for?

DSC:

Yes, I hear you. We face that here to some extent. A few thoughts here:

- Use of **consortiums** and **pooling of our resources**; see: <http://www.calvin.edu/~dsc8/consortiums.htm>
- **Experiment with open source (free) applications and/or cloud-based applications** which are also often free of charge
- **Pray** for the LORD to show us how to use the resources that we do have to the best of our ability and to steer us towards the most beneficial technologies that we can employ. There are many technologies that have come and gone...help us LORD to know about and use the ones that bring the most bang for the buck...the biggest ROI for our students.

**Comment/question:**

How do we market to parents who aren't technology natives this idea of model for educating and lifelong learning? How do schools financially keep up with the demands of preparing and exposing our students to all this?

DSC:

Good questions, thoughts here. Possibilities:

- Inform them via a school newspaper, flyers, notes to the home, emails, listserves, or whatever your communication channels are about what is happening along these lines in other schools throughout the county. Using the blogs, pick up researched articles and reports that reflect the successful implementations of technologies.
- Create the need/hunger for wanting technologies to be introduced.
- Help parents recognize the fact that their sons and daughters will be growing up in a VERY different world than the world we grew up in. As examples, check out this month's *The Journal* and/or other such items below:





YouTube Broadcast Yourself™  
Worldwide | English

Home Videos Shows Channels Community

2008 Latest Edition - Did You Know 3.0 - From Meeting in Rome this Year

The U.S. Department of Labor estimates that today's learner will have 10-14 jobs...  
by the age of  
**38**

1:12 / 5:16

**Comment/question:**

With so many sites developed to help in education, is there some way to filter through the junk sites w/out spending large amounts of time investigating them? In other words, are there top recommended sites for teacher information?

DSC:

Use any and all of your districts'/school's instructional technologists to do that work for you. They can help you comb through [the 3000+ applications out there](#) to see what's valuable and what's not. Also, after a while, if you build up a trusted network of bloggers, you will see the cream of the crop rise to the top in terms of trusted, beneficial, effective sites, tools, pedagogies, etc.

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**Comment/question:**

**With this plethora of free information and resources, have you found any that would be exceptional to use in a school setting?**

DSC:

You bring up an excellent point. It takes time to go through the free materials out there. Consider the wealth of resources out there – see [http://www.calvin.edu/~dsc8/learning\\_objects.htm#repositories](http://www.calvin.edu/~dsc8/learning_objects.htm#repositories)

Some neat examples that I've seen include:

- <http://www3.interscience.wiley.com:8100/legacy/college/boyer/0471661791/animations/animations.htm>
- Tutorials at [Lynda.com](http://Lynda.com)
- <http://www.food-force.com/> and others mentioned at [http://jolt.merlot.org/vol5no2/mcdaniel\\_0609.htm](http://jolt.merlot.org/vol5no2/mcdaniel_0609.htm) including:

Table 1 : Games for Teaching

<a href="#">COTS Games</a>	"Commercial off-the-shelf games". Modifiable games such as <i>Neverwinter Nights</i> and <i>Oblivion</i> can be used for a variety of teaching exercises, such as <a href="#">learning American History</a> . The Queensland-based Games in Learning Project lists <a href="#">many potential types of COTS games</a> .
<a href="#">CyberCIEGE</a>	Used in the discipline of Information Technology and computer science to teach students about network security issues.
<a href="#">Dafur is Dying</a>	Used in history, cultural studies, or special topics humanities courses to teach students about war and its consequences.
<a href="#">Food Force</a>	Used in various humanities courses to teach students about world famine issues.
<a href="#">Global Conflict: Palestine</a>	Used in writing and history courses to teach students about journalistic techniques and about the history of Palestine.
<a href="#">Planet Green Game</a>	Used in the discipline of ecology or general earth science to teach students about global ecological issues.
<a href="#">Fantastic Contraption</a>	Used in math and physics courses to teach students basic physics concepts.
<a href="#">Simport</a>	Used in the discipline of engineering to help teach students about large infrastructure projects.
<a href="#">Burn Center</a>	Used in the discipline of medicine to help train doctors.
<a href="#">Tycoon (game series)</a>	Used to teach business students resource management and other key business concepts.
<a href="#">Legsim</a>	A virtual simulation of the U.S. Congress, State legislature and the European union for students in history and government courses.
<a href="#">Hazmat: Hot Zone</a>	Used to train first responders to deal with hazardous materials.
<a href="#">Geosense</a>	Game used to teach students geography.

- Mapping the global recession:  
<http://www.economy.com/dismal/map/default.asp?src=economist>

- IBM's INNOV8 BPM simulation game:  
<https://www-01.ibm.com/software/solutions/soa/innov8/index.html>
- Examples found in:  
<http://www.amazon.com/dp/0470462736?tag=thebloofclaal-20&camp=213381&creative=390973&linkCode=as4&creativeASIN=0470462736&adid=1GH707K6QMGHW733J1WF&>
- Or others found at <http://www.calvin.edu/~dsc8/simulations.htm> or at <http://www.calvin.edu/~dsc8/games.htm>

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**Comment/question:**

**If you had one piece of advice for schools (K-12) regarding technology, what would it be?**

DSC: Wow! That's a tough one...but I think I would go back to this one:



...our students NEED to know how to use various technologies because their livelihoods and future performance depends upon it.

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**Comment/questions:**

**I'm scared for the future...where will the world be?**

DSC:

Yes...what a great and honest response. Change is not easy -- not for me and not for many people. That is true whether the change is a personal change I need and am trying to make or whether it is in some business process or tool that I need to learn how to use. There are different points along the change continuum; and it seems like I've been at them all. So I appreciate your fear.

I can only offer encouragement in return. Try to be patient with yourself and others. With those crazy IT guys like me coming at you, trying to get you to use another technology...and with folks who don't want to initiate change that you want to see happen.

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**Comment/questions:**

**Where do websites such as hulu.com, with full-length TV episodes and movies, get funding? Is advertising the main way?**

DSC:

I'm not positive on all of this, but I would imagine advertising still plays a big role here. Advertising dollars are shifting more and more towards online-based methods. I just subscribed to a new blog that I'm hoping will help in answering how business models will be forming around providing content: <http://feeds.paidcontent.org/pcorg/> -- The Economics of Content. Also see:

- [http://en.wikipedia.org/wiki/Paid\\_content](http://en.wikipedia.org/wiki/Paid_content)
  - [http://en.wikipedia.org/wiki/Free\\_content](http://en.wikipedia.org/wiki/Free_content)
  - <http://www.calvin.edu/~dsc8/ocw.htm>
  - Keep you eye on what happens in journalism:  
<http://www.calvin.edu/~dsc8/journalism.htm>
-

**Comment/questions:**

**How do “free online universities” exist? Where does the \$\$ and/or support come from?**

**Related question/comment:**

**Who pays for the free services like Skype or Virtual Schools? Why do people those these things online? Who makes money on them?**

DSC:

I don't have a solid answer for you here...not sure. But I suppose it varies out there depending upon which one(s) that you are talking about...some may have philanthropists behind them, some may have advertising \$\$'s behind them, some may have a cadre of willing professors and other specialists who seek to make the world a better place...they want to make their contribution to it and are willing to GIVE things away.

**In terms of Skype**, they want you to begin using their tool so that they can make money when you call someone who does NOT use Skype:

- Skype-to-Skype video and voice calls are always free. As are group IMs and conference calls on Skype. [View free features](#)
- Make calls and send text messages anywhere in the world direct from Skype with pay as you go [Skype Credit](#).
- [Subscriptions](#) include unlimited calls to landlines<sup>1</sup> and additional benefits. Call any time of the day, any day of the week. [Learn more](#)

**In terms of virtual schools**, the funding models probably vary depending upon which organization/school you are using – is it state-sponsored and are you an in-state student? Are you using a service from K-12? Kaplan? Other? If you were using materials from K-12, you would have to pay for them. You may want to check out this July 2009 report by John Watson and Butch Gemin from Evergreen Consulting Associates:

[http://www.inacol.org/resources/promisingpractices/NACOL\\_PP-FundPolicy-Ir.pdf](http://www.inacol.org/resources/promisingpractices/NACOL_PP-FundPolicy-Ir.pdf)

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**Comment/questions:**

**How does the government feel about open education? Can they control or limit it? Is it out of hand already? Do they want to intervene?**

DSC:

Again, I wish I had all the answers for you here. However, I can tell you that I believe our current President and his administration is very in touch with using technology and is pro-technology and pro-online-based education. I just ran across this item the other day for example, here's an item called “The Streaming President” from <http://www.steverubel.com/the-lifestreaming-president?c=1> :



-- from <http://www.steverubel.com/the-lifestreaming-president?c=1>

## *Ace Online Schools*

### Obama's Plan to Boost Community Colleges and Free Online Education

posted by Mark on July 30th, 2009

Guided by the philosophy that a better-educated population will lead to better job opportunities and long-term economic recovery, President Obama recently **unveiled a proposed education package** that focuses on community colleges, with a sizable chunk devoted to free access to online education.

The plan calls for \$12 billion in funds to be distributed to the country's community colleges



-- from <http://aceonlineschools.com/obamas-plan-to-boost-community-colleges-and-free-online-education/>

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#### Question/comment:

What are some worthwhile websites to steer younger students (grades 1-3) toward to help differentiate instruction for gifted students?

DSC:  
Are you looking for any particular topic/area? Math? Science? English? Other? Perhaps you can check out the following to see if any of them might help:

- <http://www.thenationalacademyforthegifted.org/>



- <http://epgy.stanford.edu/>
  - <http://distancelearn.about.com/od/virtualhighschools/a/GiftedOnlineHS.htm> -- focused on high schools, but they may have some thoughts on earlier grades
  - <http://journals.prufrock.com/IJP/b/journal-for-the-education-of-the-gifted> -- for example, see the article "Distance Learning for Gifted Students: Outcomes for Elementary, Middle, and High School Aged Students" at <http://journals.prufrock.com/IJP/c.abs/journal-for-the-education-of-the-gifted/volume32/issue3/article855>
  - ...or do a search in Google for gifted programs
- 

**Comment/question:**

**How do we address the digital divide that is taking place?**

DSC:

If you are talking about resources, I'm hopeful the answer will come in various forms:

- Reduced prices for various technologies
- Government subsidies, grants, scholarships
- Changing of our hearts to help others in need and who are not as fortunate
- I was wondering if we could have a book-mobile on steroids for example...ones that would travel around (or be in permanent locations) that would have many systems on board with high-speed internet access and various software applications.
- Perhaps libraries can help here as well.

If you are talking about the divide in terms of the digital natives and digital immigrants, I supposed learning as much and as fast as possible would be helpful. See the above Q&A on blogs.

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**Comment/question:**

**How do you maintain certification and checks and balances in a "Walmart of knowledge?"**

DSC:

I'm not sure what you are getting at here. I would need to ask some follow up questions.

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**Comment/question:**

**How can these technologies be used to bring God's kingdom into our communities? Should we focus on our neighbors before trying to go global?**

DSC:

Wow...what a great question but a tough one for me to try and handle. I have some ideas about using the Internet and multimedia to create illustrations of scripture ( I call it the "One Minute Word" idea – 60 seconds illustrations of scripture.)

Other people are using the web as a ministry already:

- [Biblegateway.com](http://Biblegateway.com)
- [GospelCom.net](http://GospelCom.net)
- <http://www.tangle.com/> and <http://www.tangle.com/prayerwall/>
- [Leadership Network](http://Leadership Network)
- <http://www.themorningstaracademy.org/>
- <http://www.dramatichurch.webs.com/>
- <http://www.worldwide-classroom.com/courses/info/ch523/>
- [Friends of the Groom](http://Friends of the Groom)



www.friendsofthegroom.org

**Welcome to the Friends of the Groom!**

We're a Christian Theater Group that tries to bring the truth of the Gospel of Jesus Christ alive through drama and comedy.

We offer scripts, tapes, videos and other presentation materials for sale. Check out the full descriptions on the [Scripts, Etc.](#) link and place your order via the [Order Form](#) link.

God's blessings to you and your loved ones.



Best regards,  
**Tom Long**  
Director/Writer

But I hear what you are saying, our neighbors are everywhere, and the folks right next to us need our help and we need their help. We're all in this boat together I say. We all impact each other.

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**Question/comment:**

**How do we prepare kids for the future – work, communications, relationships, ethics – that they are going to grow up and live in? It will be significantly different than it is today, but that is maybe all we know about it...? What skills do they need? What kind of Christian foundation will they need?**

DSC:

Whew...another good set of questions. Tough ones though.

Some would refer to the skills found in/on these sites:

- <http://www.21stcenturyskills.org/>
- [http://www.21stcenturyskills.org/documents/p21\\_framework\\_definitions\\_052909.pdf](http://www.21stcenturyskills.org/documents/p21_framework_definitions_052909.pdf)
- <http://www.shambles.net/pages/school/Ed21cent/>
- <http://www.edutopia.org/digital-generation>

I believe there are some absolute truths that the Word covers pretty well – no matter that year we live in or what the current technologies in use are. But I love your questions and thoughts here.