

## A Dozen Geeky Things

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### Here is a magical number to consider: 1989

I frequently ask Student Affairs colleagues and graduate students the question, “What is important about 1989?” The answers are varied: the amount of bytes in a megabyte (wrong); the year the Internet was invented (wrong); the year that Microsoft created Windows (wrong); the year the mouse was introduced (wrong); the year the Beatles broke up (very wrong).

The correct answer? This is the year that most of our first year students were born, give or take a year or two. And, obviously, this question was slightly different last year (1988) and will be different next year (1990). But the basic premise holds true: Our students grew up with technology. I find [Prensky's framework](#) (2001) for defining this generation useful. Today's traditional aged college students are “digital natives.” For these students, multi-tasking seems hardwired in the brain; graphics seem to have more value than text; right here/right now communications have led to an expectation of instant gratification. The rest of us are considered “digital immigrants” – that is, mere visitors in this strange world. Most of us adapt, but with varying degrees of success. We can remember the days of four television channels that had to be changed by standing up and turning the dial on the set. We have a working knowledge of the Dewey Decimal system. We've mastered email, but texting and instant messaging are sometimes daunting.

Why is this schism important to Student Affairs? The infrastructure of most of our institutions, which includes our pedagogies, was built by and for the digital immigrants. We are already playing “catch up” and it is time to adapt. One way to help Student Affairs employees to adapt is to keep up with current technology trends and resources. That is the purpose of this article, which is a follow up to [Ten Technologies to Watch & Learn](#) (2005). Keeping the list to just ten was a bit limiting – so many geeky things, so little time – so this version is expanded to a full dozen. The information below won't get into all the nuances associated with each item. This paper is intended to provide a brief sketch of each item and then point you to more resources should you want to explore further. Anyone who rates themselves at 7 or above on the “Geek IQ” scale (1 = technophobe; 10 = technophile) may find some of these items to be not quite cutting edge. However, most folks I've encountered in Student Affairs had not been exposed to these concepts and resources. Hopefully, there's a little something for everyone in this list.

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### **1. Web 2.0**

**The Basics:** To understand “Web 2.0” it is helpful to understand “Web 1.0,” which is essentially the use of the web as a static presence designed to share information in a one-way manner. As web technologies become more sophisticated, it also becomes more dynamic, more interactive. Thus, Web 2.0 is a characterization of today's web, and includes resources such as blogs, wikis, podcasts, RSS

feeds, social bookmarking and other web-based services and programs. Common use of this phrase might be something like “In today’s Web 2.0 world, it is important to understand security and privacy issues.”

**The Geeky Stuff:** Nothing real geeky here. This is a concept, a way to lend description to how the Internet today is different from five or ten years ago. We are in the second generation of the web.

**The Student Affairs Connection:** It is important for staff in the field of Student Affairs to recognize this fundamental shift in how the web operates. The shift is mirrored by the shift in what today’s students expect from Student Affairs services and programming: online, always available, user-defined experiences, social experiences.

**Learn More:**

[Tim O’Reilly’s Description of Web 2.0](#)

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## **2. Texting**

**The Basics:** Text messaging – “texting” – is using the number pad on your mobile device (or the keyboard on your smart phone) to create short messages that are sent over the wireless voice network. These messages are typically fairly short – usually just a sentence or two – and often using shorthand such as “L8R” (later), “OMG” (oh my god), and “J/K” (just kidding). It usually costs about \$.10 to send or receive a text message. You can text an individual (if you know their mobile phone number), but you can also sign up for services that will send real-time updates via texting (sports scores, news, stock reports and so on). Texting is also used to vote for participants in contests, such as American Idol.

**The Geeky Stuff:** Texting is accomplished with Short Message Service (SMS) on wireless voice networks. Texting functionality overlaps and interfaces with instant messaging, email, and the web. Originally developed work with the GSM protocol, texting now works with non-GSM systems.

**The Student Affairs Connection:** Texting may be the number one preferred mode of communication for today’s college students. According to a [2005 Pew Internet Report](#), email is considered to be an out-dated mode of communication when compared to texting and instant messaging. It is no wonder that in the post-Virginia Tech culture higher education institutions are widely implementing systems that will send emergency information through text messaging.

**Learn More:**

[Net Lingo for Texting and IM](#)

[Pew Internet Report: Americans and Their Cell Phones](#)

[Text Messaging Booms at U.S. Colleges](#)

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## **3. Micro-Blogging**

**The Basics:** Micro-blogging is the act of creating very brief text content and then publishing that content via texting, instant messaging, or the web. The person who posts the update can make it available to the public or to a restricted group. Micro-blog entries run from the banal diary entry (“I’m eating a banana”) to the ultra-productive communication (“Baby Jasmine born at 4:18 a.m. Baby, parents and sibs tired but happy.”) The Facebook “Status Update” functionality could be considered as a form of micro-blogging. A popular micro-blog service is [Twitter](#), which portrays itself as “a

service for friends, family, and co-workers to communicate and stay connected through the exchange of quick, frequent answers to one simple question: What are you doing?"

**The Geeky Stuff:** There are a number free services (Twitter, [Pownce](#), [Jaiku](#) ). All three of these offer APIs (Application Program Interface), which means that bells and whistles will continue to be developed. Jaiku has [joined forces](#) with [Google](#), which should be interesting to watch.

**The Student Affairs Connection:** It is not clear how popular micro-blogging is with college students. The concept is so new that there is little research at this point. However, this social activity has some potential use as a teaching and learning tool. From there, it is not a big jump to envision how this tool could be used in student developmental programming. We certainly know the value of journaling and story telling, and blogging and micro-blogging are merely new conduits for that type of content. Imagine the value of being able to follow a student's experience as a member of the GLBT community on a given day; the student could "twitter" any interactions or experiences that she believes to be related to her sexual orientation. Those who "follow" the student's micro-blog via Twitter would then have more insight into the experiences of the GLBT community.

**Learn More:**

[7 Things You Should Know About Twitter](#)

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#### **4. Image Sharing**

**The Basics:** Digital Immigrants are often curious about (amazed? horrified?) the content that Digital Natives post online. This, of course, includes photos and video. Image sharing is the practice of posting photos and videos online for others to view, whether that content or restricted to users defined by the poster. Image sharing can be a very social activity. Witness [YouTube](#), which by [one account](#) uses 45 terabytes to store more than 6 million videos which receive about 100 million views per day...and this estimate is 18 months old! Likewise, [Flickr](#) is provides photo sharing functionality in addition to photo storage. According to this interview with the co-founder, about 80% of photos on Flickr are public and searchable. I first experimented with YouTube about one year ago by uploading a short, silly, video. My colleague and I were trying to demonstrate all the power of WebCT Vista (now Blackboard Vista). We created a "course" called "PBJ 101" where the "students" (our Student Affairs colleagues) learned all the important elements of making a peanut butter and jelly sandwich. Obviously, our goal was to use basic content so they could focus on the tools. We created the video for that project and I uploaded to YouTube just for fun. One year later, the video has been viewed 1,164 times, has a 4.5 star rating, and boasts both very positive and negative comments. It is fascinating to think that so many individuals stumbled across [this video](#) and took the time to watch it.

**The Geeky Stuff:** While many image sharing services are free, there are limits. This is a good time to learn about taking and saving photographs at the appropriate resolution if the ultimate goal is to upload. Likewise, the ability to properly render video is a good skill to have. While working with still and moving images on a Windows machine is more user friendly than it used to be, you can't beat the Macintosh OS and native multimedia apps (iPhoto, iMovie) for managing and manipulating your images. Also, check out [Radar](#), which is billed as "instant picture conversations." This is micro-blogging with images.

**The Student Affairs Connection:** Many Student Affairs practitioners see this formula: Student + photograph + Internet = Disaster! And with good reason. We all know more than one story where a student's online photos or video cost them in some way – with a potential employer, or in a personal relationship, or even their student status in the cases of misconduct. The issue here is about educating students regarding security, privacy and restraint when it comes to posting material to the Internet.

We also know there is concern that this behavior does little to offer beyond entertainment value. On the other hand, this is an exciting medium for self-expression and has tremendous potential that is already being tapped for the classroom. **Learn More:**

[7 Things You Should Know About YouTube](#)

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## **5. Tagging**

**The Basics:** Tagging may very well be the most mundane of the dozen items in this article, but it may almost be one of the most exciting. Tagging is the application of short, free-form labels on Internet content. Think of tags as keywords that you attach to a photo, video, podcast, or blog post. When you visit a site that allows tagging, you can just search for a keyword and all the photos (or videos, or blog posts, or whatever) that have been tagged with that word will show in your search results.

Tagging is not just an organizational tool. It is also a true Web 2.0 tool that can be collaborative and social. Objects can be tagged by both the author and the viewer: The author attaches tags to the blog posting; when the viewer decides to save that post in her social bookmark list, she can give it her own tags that have meaning for her. Tags are also very interesting from a visual perspective. Tags can be viewed as straight lists, or as clouds. A tag cloud is a visual depiction of the tags associated with that particular website. Size, color and order can indicate tag popularity. See [this example](#) from Flickr.

**The Geeky Stuff:** Creating the code for a tag cloud can be done with [TagCrown](#), a free online code generator that is compatible with most blog software, or a similar tool called [Tag Cloud Generator](#).

**The Student Affairs Connection:** Tagging is very useful in researching content on the web. It may also lead to new ways to organize information within desktop applications, like email and office productivity software. (Imagine being able to tag everything dealing with your Leadership Project with that tag – Leadership Project – then get results including email, PowerPoint files and web pages when searching for that tag.) Beyond research and productivity, the social aspect of tagging needs to be noted. This is a unique way in which our students connect with each other.

**Learn More:**

[Tagging Tips](#)

[Folksonomy and Web 2.0](#)

[Social Tagging at Harvard](#)

[Why Tagging Matters](#)

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## **6. Social Bookmarking**

**The Basics:** Social bookmarking is saving bookmarks to a public website and then attaching tags to those bookmarks. I first tried social bookmarking at [del.icio.us](#) as an easy way to always have access to my favorite bookmarks, especially when traveling. The social aspect didn't sink in until I noticed this notation on one of my bookmarks: "saved by 79 other people." Clicking on that phrase led me to a list of other people who had saved that bookmark. From there, I could click on any name and see their bookmarks. Suddenly, I was exploring their tags and I truly felt like I was getting to know these people, even if in a small way.

**The Geeky Stuff:** There's nothing overly complex about social bookmarking at this juncture. [An individual's bookmark page on del.icio.us](#) can be viewed as an RSS feed, which is handy for monitoring any changes. Learning to work with bundles (which are categories for tags) can be a little tricky.

**The Student Affairs Connection:** Don't let the word "social" throw you. Sharing bookmarks is a great way to share information with colleagues and conduct research.

**Learn More:**

[7 Things You Should Know About Social Bookmarking](#)  
[Social Computing: Lifestyle Becomes a Workstyle](#)

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## **7. Online Social Networks**

**The Basics:** Facebook, MySpace...this may seem almost old hat by now. But online social networks are worth mentioning because of their still-growing popularity. These sites have evolved to include many new tools – such as [DogBook](#) which essentially creates a profile for the pets of Facebook users. There are now scads of networks on just about any conceivable topic – sports, health issues, political issues, nutrition, hobbies.

**The Geeky Stuff:** Facebook and MySpace both now offer an API for developers. They now have competition from Google, which is launching its own online social network (called "[OpenSocial](#)"). It will have open APIs and allow users to own their own data.

**The Student Affairs Connection:** Students' use of online social networks continues to concern Student Affairs practitioners. Those concerns include time spent engaged in social networking, and poor decision making with regard to content posted by students. There is a recent trend for Student Affairs practitioners to advertise programs and services through Facebook, and to connect one-on-one with individual students through their respective Facebook accounts.

**Learn More:**

[7 Things You Should Know About Facebook – Part 1](#)  
[7 Things You Should Know About Facebook – Part 2](#)  
[Facebook as a Tool for Learning Engagement](#)

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## **8. Copyright Infringement**

**The Basics:** The online version of copyright infringement is referred to as illegal downloading. This is the practice of downloading, copying and/or sharing copyrighted material such as music, game and movies. This behavior is a violation of federal law. While this is primarily a student issue, employees also engage in this behavior. The term "P2P" is also used, which stands for "peer to peer" networking and may include legal file sharing as well as illegal file sharing. The Recording Industry Association of America (RIAA) is targeting college students and institutions of higher education in their efforts to curb illegal file sharing. As a result, thousands of pre-litigation notices have been presented to students across the country which give the student the option of paying a steep settlement fee (usually several thousand dollars) or go to court.

**The Geeky Stuff:** Many universities place a high value on having an open network. Thus, implementing a technical solution that would block illegal file sharing would be impossible without compromising the openness of that network. For example, the Linux OS is updated through file sharing, so that functionality would be lost. Some of the services available for file sharing, such as the [LimeWire Pro](#), don't always make clear what is being purchased, resulting in the student believing they are actually purchasing music when in fact they are just purchasing software.

**The Student Affairs Connection:** (The following is based on [efforts at NC State University](#) to address this issue and our own observations of student behavior.) One basic concern is getting students to understand that this behavior is stealing, which is illegal. Beyond that moral, students seem to either not understand the potential consequences or to not believe they will be subject to potential consequences.

**Learn More:**

[Seek and Destroy](#)

[Resources on: P2P File Sharing](#)

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## **9. Net Neutrality**

**The Basics:** Net neutrality is a guiding principle that preserves a free and open Internet. According to [Save the Internet](#), “Net Neutrality prevents Internet providers from speeding up or slowing down Web content based on its source, ownership or destination.” The phone and cable companies want to reserve separate portions of the Internet for their own content and service. This would speed up their content, while slowing down other web content. There could be action by Congress on this issue in the next year. The philosophy of Net Neutrality is supported by the higher education industry as well as many web companies.

**The Geeky Stuff:** Nothing too geeky to understand at this point. However, if Net Neutrality doesn’t survive, then that will require the geeks to rethink how content is delivered in a different environment.

**The Student Affairs Connection:** The consequences of retaining Net Neutrality are really for higher education as an institution, rather than Student Affairs as a profession. This battle is worth keeping an eye on.

**Learn More:**

[The Net Neutrality Debate](#)

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## **10. Virtual Worlds**

**The Basics:** A virtual world is an online environment where individuals create an online identity and then participate – or live – in those worlds. These alternate identities are called avatars and can be personalized right down to the socks. A prime example is Second Life, which has many different worlds within it that have been created by the participants themselves. Sometimes these worlds mirror our own real world; other times these worlds are quite fictional. This technology has been primary for entertainment.

**The Geeky Stuff:** Some campuses are building their own virtual worlds as they explore pedagogical uses. Make sure Student Affairs is well represented in those efforts so that you can take advantage of those tools as they are developed.

**The Student Affairs Connection:** There is a lot of excitement about the potential for virtual worlds to be used for teaching and learning. However, there seems to be an equal amount of skepticism as to the true value of using a package like Second Life as an educational resource; this skepticism seems to follow other suggestions to use gaming as a classroom tool. In Student Affairs, we know that most classroom tools can often be used to deliver student services and programs. This resource is worth watching for future application in Student Affairs.

## **Learn More:**

[7 Things You Should Know About Virtual Worlds](#)  
[Second Life: Reaching into the Virtual World](#)

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## **11. Clickers**

**The Basics:** Finally...a gadget for this list! Clickers are small, wireless devices that allow the facilitator of that group to gather quick feedback. Remember the show “Who Wants to Be a Millionaire?” The audience had an opportunity to provide their answers to the various trivia questions. This is similar to how a clicker system would work. In the classroom, they are intended to be used as a tool for gathering formative data during the class. After I present Concept A to the class, I then have them use clickers to respond to a brief quiz – just one or two questions. The answers pop onto my laptop and I quickly see that only 62% answered correctly. This suggests that I need to review Concept A again, possibly from a different angle.

**The Geeky Stuff:** One issue on many campuses is establishing a uniform clicker hardware, software and support. Many textbooks now offer deals to faculty that include the clicker systems. Pretty soon the tech staff is supporting 15 different clicker systems, which is a real nightmare. Clickers typically use either InfraRed or Radio Frequency technology. Many integrate with popular office productivity suites, like MS Office.

**The Student Affairs Connection:** Clickers have lots of potential uses for Student Affairs. Any setting where students are engaged in learning might be appropriate for clickers. Leadership workshops, diversity seminars, RA training, staff development – these are all examples where clickers could be used.

## **Learn More:**

[7 Things You Should Know About Clickers](#)

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## **12. Net Savvy**

**The Basics:** Today’s students – whom we can characterize as the Net Generation – should also be “net savvy.” However, that is not always the case. The Net Generation is indeed very experienced and comfortable with technology, and these folks adapt new technologies with ease. Students seem to prefer online communication, services, and programs. They [seem to prefer](#) that faculty use technology in the classroom. However, this experience and comfort with technology does not necessarily translate into students making good decisions with their use of technology, and the Internet in particular. Being Net Savvy means thinking critically about the accuracy and validity of web content. It means using the Internet efficiently. It means understanding and considering the ethical, legal, safety and security implications of using the Internet. Being Net Savvy means having some good old fashioned street smarts about Internet use.

**The Geeky Stuff:** No special technical considerations with this item.

**The Student Affairs Connection:** Net Savviness should be important to Student Affairs practitioners in two ways. First, we want our students to be Net Savvy. When students lack this savviness, it results in situations that many of us then have to help them resolve. Our individual experiences – whether as personal or career counselors, residence hall staff, judicial officers – tell us that students are not as savvy as they could be and should be. Thus, we need to be involved with campus efforts on that front.

Second, it is just as important for employees on campus to be Net Savvy as well. Granted, that might be a particularly difficult challenge for some of the Digital Immigrants among us, but we should not shy away from the task at hand. In order to serve our students well, we must understand the world that they live in. In the end, that means continually growing, learning, improving our Geek IQ, and becoming as Net Savvy as possible.

**Learn More:**

[Defining “Net Savvy” as a Concept](#)

[Becoming Net Savvy](#)

[Ensuring the Net Generation is Net Savvy](#)

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**13. It's a Baker's Dozen...and More!**

A dozen is only twelve, and that just isn't enough! So here are a few more Geeky Things to explore on your own.

- Applications
  - [Google Earth](#)
  - [Mind mapping](#)
  - [Google Reader](#)
  - [Jott](#)
  - [Phixr](#)
- Philosophies/Concepts
  - [Creative Commons](#)
  - [Green IT](#)
  - [Cult of the Amateur](#)
- Geeky Terms
  - [Digeratti](#)
  - [Social Shaping](#)
  - [Feature Fatigue](#)
  - [Buzzword Compliant](#)
  - [Mashups](#)
- Gadgets/Hardware
  - [iPhone](#)
  - [Internet Over Power Lines](#)
  - [Google Phone](#)
  - [One Laptop Per Child](#)
  - [Google Gas Pumps](#)