

🕒 **The Wisdom of Crowds** (Opening Keynote)
James Surowiecki

Surowiecki contends that under the right conditions, groups of people can be very smart if they can tap into the collective intelligence of all members. The wisdom of the crowd is generally smarter than any one individual. If the group can work well together, the range of possibilities is tremendous and technology allows more group work to happen. The conditions needed to make the group smart are:

- Aggregation – there needs to be a tool that allows lots of different opinions to be aggregated into one group opinion & technology can be that tool
- Diversity – the fundamental characteristic of crowd wisdom; diverse groups do better at solving problems; there needs to be sociological **and** cognitive diversity
 - *Cognitive diversity* – people who look at problems from different perspectives and people who use different tools give strength to the group’s collective wisdom; need to have trust and be able to welcome arguments/conflict
 - *Power of diversity:*
 - Expands range of knowledge
 - Makes it less likely that everyone will make the same mistake
 - Helps get around the problem of “group think” – group think makes it hard to see what’s wrong
 - *Devil’s advocate:* important to a group but it should not be the same person always being the devil’s advocate because the group will habituate to that person which lessens the divergent thinking
 - *Everyone’s opinion matters:*
 - people need to voice their intuitive opinion
 - it is imperative that everyone shares
 - getting people to think for themselves is difficult to do because humans by nature are imitative and are worried about what others will think
 - **groups are smartest when people in them are acting as individual as possible**
 - get people to speak by going in reverse order so that it’s not always the same people to speak first
 - need to be careful of talkative people because they can shape where the group goes; there’s no correlation between the amount a person talks and their intelligence
 - if the net is cast more widely, it is more likely to get you the information you need

Role of technology & the wisdom of groups:

- technology allows for the incorporation of opinions & knowledge of people who normally wouldn’t speak up
- and it also allows for the net to be cast more widely

Overall impression: ☆☆☆☆☆ Loved everything about this presentation; always knew about the power of group work but to hear the data/examples given to support this claim was just amazing!

🕒 **Immersive Collaborative Simulations in Augmented Reality** (Concurrent Session)

Chris Dede & Rebecca Mitchell – Harvard University

This session was about a research project (Handheld Augmented Reality Project – HARP) being conducted at Harvard and tested with school children. The project encompassed using handheld devices (ex. PDAs, GPS), virtual environments, and other traditional technology to solve a problem.

There is a tendency to do problem solving first but it should be *problem finding* before problem solving. One needs to look at a complex situation and figure out how to frame it to solve problems. Therefore there should be comprehension by a team, not an individual and meaning needs to be made out of complexity.

The challenge of education today is to find a way for problem finding to be possible. The 21st century generation of learners will interface for distributed learning and ubiquitous computing. Ubiquitous computing is computing through the use of wireless devices (ex. PDAs, cell phones, etc.) coupled with smart objects for “augmented reality.”

Why ubiquitous computing?

- 1:1 student to tool ration
- wireless mobile devices offer great ratio of power to cost
- wireless mobile computing allows for instant on, anytime, everywhere
- equity & effectiveness via ubiquity
- animistic environments for learning

Smart objects and intelligent contexts enable augmented reality. Fundamental concept of augmented reality is to function in the real world with a virtual overlay.

The first generation of the project was called Alien Contact and was tested on middle school students. The premise of the project is that aliens have landed near the school and the students need to figure out why the aliens are there. Students were divided into groups of 4 with each student having a different role (FBI agent, chemist, cryptologist, computer hacker). The students used the GPS to find clues and messages from witnesses were given via the PDA. Math skills on ratios and literacy skill on Latin word roots were used to solve the clues.

At the end of HARP, the researchers found that there was a high level of engagement (with the exception of weather and equipment issues, lack of map reading skills), a high level of collaboration, distinct roles allowed for increased engagement, and the students naturally competed against each other. For some teachers the project was logistically complex for a single teacher to manage. The researchers are currently working on the second generation of the project called Gray Anatomy (beached gray whale, need to figure out why).

Overall impression: ☆☆☆ Fascinating topic, project looked like a lot of fun for the students, but a lot of prep on the teacher’s part. I would love to do a project like this but augmented reality projects are currently being used by researchers only. Nonetheless, it was helpful to get a glimpse of what kinds of things are on the near horizon in terms of teaching with 21st century technology and handheld tools.

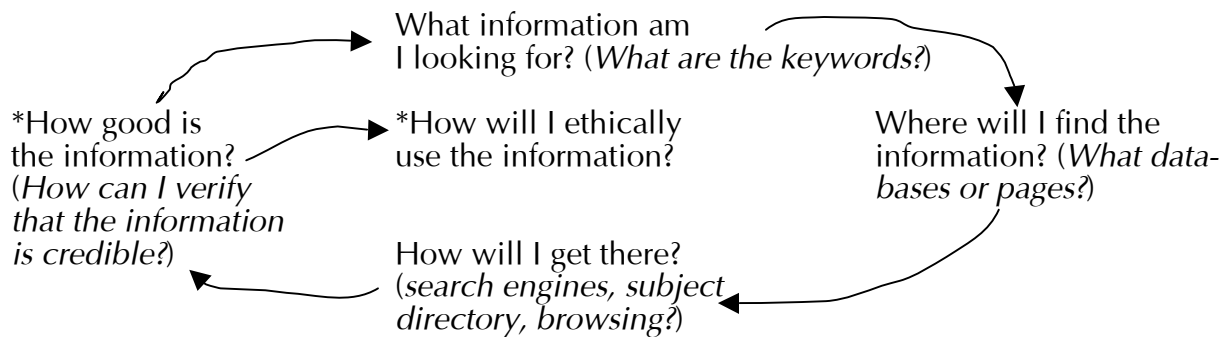
🕒 An Introduction to Information Forensics – Website Investigator

(Concurrent Session)

Carl Heine & Dennis O'Connor – Illinois Mathematics & Science Academy

The focus of the session was to discuss how students access information on the Internet and how to instruct them to be savvy users.

The Digital Information Fluency Model:



What the majority of today's students DON'T do well	What they tend to do instead
• choose keywords wisely	• rush ahead toward an answer
• choose the right database	• enter words or phrases into Google
• recognize information when they find it	• rush past important information & clues
• find better keywords	• stick with original words
• verify credibility of information	• accent what they find

Examples of websites used to show how easily students can be fooled into assuming what is on the site to be true:

- Save the Pacific Northwest Tree Octopus (zapatopi.net/treeoctopus)
- Shrine to Cary Grant (webusers.physics.umn.edu/~jenny/CG_Shrine.html)
- Martin Luther King, Jr.

To judge the credibility of information:

- Search the domain name (use godaddy.com)
- Do a links search for all other sites linked to it (use yahoo.com, go to link: URL)

Other information:

- Power Point of presentation on NECC website
- 21cif.imsa.edu (for 21st Century Information Fluency Project)

Overall impression: ☆☆☆☆ Information presented is very relevant and necessary to learn about. The 21st Century Information Fluency Project seems very interesting. I will need to visit the website to get more in-depth information. Most of what was presented was an overview.

🕒 Truly Technologically Integrated Planning for Teaching & Learning

(Concurrent Session)

☆☆☆☆=Excellent ☆☆☆=Good ☆☆☆=Satisfactory ☆☆=Fair

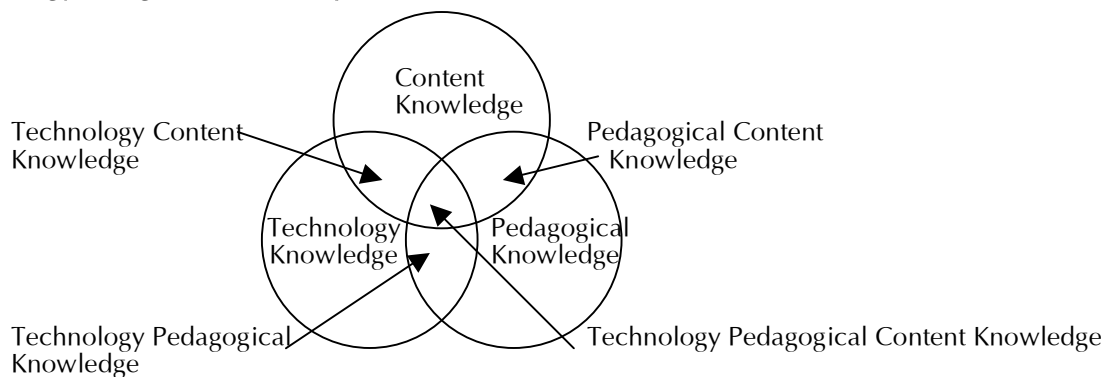
Judi Harris & Mark Hofer – College of William & Mary

The focus of the session was to explain how teachers should plan lessons/projects that involve technology integration. There's a tendency to do technocentric planning where instruction is planned based on the ed tech tool; the tool is selected first and then planning follows. The message of the session is that teachers need to do learner-centered curriculum-based planning and then choose the tools accordingly afterwards.

Teachers' planning tend to be:

- situated
- contextual
- activity-based
- routinized

Technology integration is complex.



Steps to go through when planning for instruction integrated with ed tech:

1. learning goals
2. pedagogical decisions
 - Types of learning (convergent/divergent)
 - Prior knowledge (less/more)
 - Understanding goal (introductory/in-depth)
 - Duration (shorter/longer)
 - Structure (less/more)
 - Grouping (individual/small/large)
 - Additional resources (fewer/more)
3. activity types (go to the presentation website on NECC for a full list)
 - **it's all about the content**
 - knowledge building vs. knowledge expression
4. assessments
5. tools & resources (***don't choose tools until everything else has been decided**)

Overall impression: ☆☆☆☆ Information presented helped to validate what I always believed to be true: that the curriculum drives the technology and not the technology driving the curriculum. The technology is a tool and there still needs to be solid content.

🕒 Energize Your Classroom with Google Applications for Education

(Concurrent Session)

Cristin Frodella & Andrew Chang – Google

Google Apps:

- cloud computing = applications and data accessible on Internet from all types of devices
- Google will not share your data, will keep your data for as long as you want, will remove your data when you ask, will enable you to take your data anywhere
- Platform: collaboration (free), messaging (free), security (fee), compliance (fee)
- Free for all users
- No ads
- 6.8 GB mail quota
- use your domain name
- 24/7 admin support
- advanced inspiration capabilities

Google Docs: (google.com/educators)

- free web-based word processing, spreadsheet, presentation anywhere access & collaboration
- saved online & can be accessed from any computer connected to Internet
- collaboration on same document concurrently or not
- no software requirements
- no more “I forgot my homework” excuses
- saves automatically & saves as a new revision
- can see who revised and when (time stamps work)
- collaboration gets students excited & engaged
- can add collaborators to documents
- folders organize students’ work
- writing for an authentic audience; can publish document as a webpage or to a blog
- online spreadsheets can be used like a quiz
- spreadsheets can be used by groups to enter data for a class

Overall impression: ☆☆☆ Much of what was presented was a quick overview so therefore there’s still a lot of exploring & learning to do through exploration.

Leveraging the Collaborative Power of Technology to Help Students Help Others Worldwide (Keynote)

Jim Carleton & Mali Bickley – Ontario, Canada

The presentation was done interview style with a moderator asking the questions. These two teachers wanted a way to incorporate technology into their classrooms. They used the iEARN (International Education and Resource Network, iearn.org) organization to help them hook up & collaborate with other schools around the world. One of the main points they wanted to emphasize is that *the goals drive the tools*. Some of the projects they have created are:

- Children Connecting Children Project
- The MY HERO Project (myhero.com)
- The Art Miles Project
- TakingITGlobal (takingitglobal.org)
- Zero Footprint (zerofootprint.net)
- One Dream Project

Their advice to other teachers:

☆☆☆☆=Excellent ☆☆☆=Good ☆☆☆=Satisfactory ☆☆=Fair

- Take a risk
- Follow your passion
- Collaborate, collaborate, collaborate
- Ready, aim, fire
- DREAM BIG

Other resource mentioned was NBC Learn – Archives on Demand, iCue

Overall impression: ☆☆☆☆☆ Loved it! Very inspiring to see how students so enthusiastically wanted to connect with students from other parts of the world. iEARN is an awesome resource that makes international collaboration very do-able.

🕒 **Get a MUVE On – The Power of Synchronous Online Environments**

(Concurrent Session)

Kathy Schrock – Kathy Schrock Guide/Nauset Schools (MA)

kathyschrock.net/muve/

MUVE = multi-user virtual environment (act independently, collaboration not required)

Why synchronous?

- Live interaction in real-time
- Individual & group work
- Varied presentation formats
- Learning from instructor and peers
- Resources that can be easily shared
- Student activity can be monitored
- Engaging & motivating

Common components:

- Communication
- Collaboration
- Presentation
- File sharing
- Response
- Session recording

SOEs (some are free, some are not)

- Tapped In
- Adobe Connect
- Illuminate
- WiZiQ
- Wimba
- Second Life

Virtual worlds – could be games, shared virtual environments, used for meetings/lectures, professional development, etc. embedded with Power Point, etc.; participate as an Avatar

Why Second Life? A new frontier, experience a new interface, learn new skills, distance education & events, global networking, collaboration

Things to Know about Second Life:

- Prims = building blocks
- Main grid (18+ yrs.) vs. teen grid (13-17 yrs.)
- Avatar = your virtual persona
- Sim (Island) = the land in Second Life
- In-Life = talking about things in the environment
- RL/SL = real life/second life
- No cost to use the main grid
- Begin at Orientation Island
- Lindens = virtual money (\$4US = \$1000L); can used to purchase virtual things
- \$2395 for purchase & maintenance of sim for educational institutions
- can stream info from outside

Overall impression: ☆☆☆ Learned a lot about MUVES (multi-user virtual environments) & how it can be incorporated into a classroom environment. For example, a student's Avatar can be in the Antarctic and experience global warming or you could be in Van Gogh's Starry Night painting to experience it. Although I have not experienced it yet, I can see that there's much potential for students & teachers as both learners & users.

🕒 **SMART Notebook Software 10** (Software Presentation)

Learned new additions and changes to the SMART board notebook software.

Overall impression: ☆☆☆☆☆ Most helpful; many examples were given in terms of how to use the software in the classroom

🕒 **Green Ribbon School Pilot Project** (Concurrent Session)

Susan Hopper & Toni Herrin – St. John's Episcopal School K-8 (Dallas, TX)

Use global project to integrate technology into curriculum. Every grade level does a global project. Green Ribbon School Pilot Project (GRSPP) is the 8th grade project.

What is the GRSPP? Began 5 years ago as a way to engage students in an environmental science course. It was modeled after the Blue Ribbon program. Students came up with criteria and researched what it means to be a green school. Joined up with iEARN and the project has gone global.

5 Parts of the GRSPP (begin by joining project via iEARN website)

- school profile (can have students do it & use Google Earth)
- outdoor survey (one school divided a class into teams and had each team research a different part of the survey)
- indoor survey
- greenness survey (development of criteria for what will become the Green Ribbon award, will be worked on for about 2 more years; criteria in 8 areas: environmental education, outdoor environmental quality, water conservation, transportation, waste management, energy use, organic product usage, community service)
- make a difference

How was technology integrated into GRSP?

- Google Earth (for school profile)
- Skype or video conferencing
- Video

Overall impression: ☆☆☆☆☆ Awesome project; very do-able, relevant, global, interdisciplinary, collaborative, innovative. I will definitely do this project next school year. If my team does not buy into it, I will do it in just my class because I feel it's that important.

🕒 Machinimas & 3D StoryWorlds: Creating Digital Storytelling in Second Life (Concurrent Session)

Bernajean Porter, Kevin Jarrett, Marianne Malmstrom, & Peg Sheehy
2008 Ramapo Schools Storytelling Camp

peggysheehy@mac.com

tinyurl.com/4gxb8r (session stream)

Task: take Robert Frost's poem "The Road Less Traveled" and do the reading as a voice-over & interpret it on a deeper level in the form of a visual story (iMovie, machinima (video with screencapture software), 3D world). Movie was made with iMovie and then placed in a virtual world to be accessed. Videos can be accessed through YouTube.

Students had a tendency to want to focus on the bells/whistles of the technology and had to constantly brought back to focus on the story. The teachers didn't want the students to "tell about" – wanted them to tell a story that's been internalized. Students designed the movie, diagrammed it, etc. Had to use royalty-free images and create their own music. They were coached in doing the voice overs to have the emotion.

During the presentation, the students were online while the sessions was being streamed live on the web. Questions were asked of the students who then typed back their responses. Used Audacity, iMovie. Second Life stripped away trappings of middle school (ex. clothes you wear, appearance, etc.).

Student feedback indicated that they enjoyed the project and the use of Second Life. They seemed to have a deeper understanding of the poem

Lesson learned: Students really had to get narrative content first, then need to make an emotional map (storyline), need to slow down & get down the content first before using the technology. Machinima can be tricky the first time.

Overall impression: ☆☆☆☆☆ Fascinating project; do-able, engaging. I haven't participated in Second Life myself, so I have a lot to learn, but I would like to try a project like this in the future.

soundzabound.com (royalty free music site)

Deane DeCastro
NECC Conference 2008
San Antonio, TX

I also attended a number of exhibitor-sponsored sessions by the SMART Board & Blackboard vendors. In addition, I had a one-on-one tutorial session with a Blackboard trainer.