

2008 Fall MM - K20 Meeting

Internet2 K20 Initiative Open Meeting - Fall 2008

Monday, October 13, 2008
Grand Chenier Room, Sheraton New Orleans Hotel
New Orleans, LA

Please note:

While at the conference, please remember to tag your photos, bookmarks and other documents by following the [TAGGING GUIDELINES](#).

Agenda Meeting Notes -

8:00am-8:30am - Breakfast

8:30-8:40am - Louis Fox - K20 Initiative Overview and Introduction to the day's events

8:40am-9:00am - SEGP Update [[Slides](#), [Video](#)]

Speaker(s): Dr. Susan Lancaster, Jennifer Oxenford

Session Abstract: Jennifer and Susan will announce the recent partnership between the Kentucky Regional Optical Network (KyRON), a statewide network sponsored by the Council on Postsecondary Education, the University of Kentucky and the University of Louisville and MAGPI to offer state-wide applications support and development on use of advanced networks. We'll discuss respective roles and responsibilities in this collaborative as well as timeframe for Kentucky driven content opportunities. Dr. Lancaster will also provide a brief update on the status of KyRON connectivity to schools and anticipated program offerings coming soon including programs around the 2010 Equine Games and more.

Notes: KY school network, Southern Skies, and the new Equestrian collaboration for students along with a Zoo interactive program, and Big Blue.

9:00am-9:25am - Ohio Remote Electron Microscope Presentation [[Slides](#), [Video](#)]

Speaker(s): Ann Zimmerman, TJ Sandor, and Karen Tomko

Session Abstract: Overview of advanced networking applications that include Academic and industry use of Scientific instruments that are operated remotely over the network. The instruments would include Electron Microscopes, Spectrometers, and Telescopes. In each instance, an instrument is operated and/or viewed remotely by students and researchers. Remote instrumentation enhances the return on investment for the labs owning the instruments while saving money for the users by not duplicating the instrument investment. There are challenges that include the network design and bandwidth, security, video conferencing issues and file system management. There are policy issues such as SLA's between the vendor, lab, ISP etc.

Notes:

- The program used OARnet networking, high power computing, storage, and analytics
- The pilot program involved Miami University (in Ohio), OSU, and Ohio University
- The team is designing a web portal so students can use the instruments more easily over the network
- Rice Software Solution (Windows OS) RICE=Remote Instrumentation Control Environment: Voice chat, Text Chat, Control-lock passing for teachers
- Cost structures have not been set yet. The project team is still working on whether the tool can be made available to schools outside Ohio.
- Demos of the resource were available during this conference

9:25am-9:55 - International K20 Partners [[Slides](#), [Video](#)]

Speaker(s): David Koa, Senior Director, Partnerships and Strategic Alliances, Ontario Research and Innovation Optical Network (ORION)

Abstract: Orion representatives will focus on who's connected, how they are connected, how the network is being used (particularly by the research, schools, libraries, museums, cultural centers, etc.), and how Orion approaches customer outreach. The audience would also be very keen to hear any thoughts on how we could leverage the peering relationship between Orion/Canarie and Internet2 to promote international collaborations.

Notes:

- Ontario is not the largest province in Canada but has the largest in GNP and 40% of population in Canada
- Post secondary schools are all public funded institutions - there are no private ones
- 20 universities in Ontario, 24 colleges, 100 campuses in total
- Total population of students 3,000,000
- ORION is 3500 miles long - largest R&E networks in North America connecting 20 universities, 20 of the colleges, and 15 school boards
- Challenges for local groups is that it is not subsidized by the government - school boards have to pay out of their own budgets
- 75,000 researchers and educators are connected to the network and 1mil students
- They do connect to Merit Network in U.S. and and NYSErnet in NY and they have a sister network RISK in Quebec; CANARIE is the Internet2 member
- Provide national and global connections to members
- Looking at developing value-added services and spent last month traveling around and interviewing customers - what do they want/need
 - o On-line networking and collaboration
 - o Web conferencing
 - o Online backup and storage - cost of real estate/servers is more costly
- Looking at combining several districts/schools/colleges to share the cost of storage through them
- o Videoconferencing: service to allow students to create their own content and disseminate to other students in the Province - provide opportunity for students to share their talents
 - o IPTV
- **Success Stories:**
 - o ABEL: advanced broadband enabled learning - focused on helping teachers (knowledge and training) bring broadband into their classrooms
 - o COSI Live Surgeries: Grade 12 students located in northern Ontario borders Minnesota - provided connectivity for them to experience a live knee surgery and interact with the surgeons and other students around the
 - o Northern Ontario School of Medicine - joint venture with two universities (Thunder Bay & Sudbury 120 kilometers apart) - a lot of their programs are remote/video using an application called IAnatomy (virtual database anatomy instruction program that allows students to literally work with a cadaver and with other students around the country)
 - o University of Waterloo Videoconference Theatre
 - o Ryerson University - CineGrid (international non-profit consortium with many research labs around the world mandated to use grid technologies for creating, editing, and transmitting digital movies around the world)
 - o Algoma University College --- Master's Program in Computer Gaming - the degree is granted by the Univ of Abertay, Dundee, Scotland. Students are able to participate in classrooms via video and earn two-year degrees
- Question from audience: You mentioned focus groups - can you explain?
- David: We're trying to coordinate researchers in different venues with students with similar interests. They developed eight different segments and learned from each area so they can enhance what ORION provides their customers (they try to get behind the CIOs to find out what the next layer of practitioners might need)
- There are all kinds of researchers: Applied Researchers, Social Science Researchers, Educators post secondary, Educators at k-12, Students (larger base of potential users are students but no one has ever talked to them or asked them what they need/want - and yet a small % will become educators and researchers so keep that in mind)

9:55am-10:10am - BREAK**10:10am-10:40am - Science Centers Update [[Slides](#), [Video](#)]**

Speaker(s): Rob Rothfarb, Exploratorium & Walter Staveloz, Director, International Relations, Association of Science-Technology Centers, ASTC

Session Abstract: What happens when America's premier science centers meet a global advanced research and education network? Participate in a lively discussion of the latest projects and possibilities.

Notes:

Rob Rothbarb Presentation

Exploratorium

- Committed to developing programs for teachers
- Active web casting program
- Digital Library series: interchange of information, unified meta data, specifications for resources and learning
- Collection has been on-line for about a year - there are 700 resources for teachers
- Taken the "best of" activities and created a series of "how to" videos on their web sites
- CDs available if anyone wants a copy
- SMILE Pathway: Science Math Informal Learning Education
 - o Experiment with Face Book coming up - tapping into social networking on-line education
 - o Free and licensed under the common license of Smile Pathway - resources are free to educators
 - o Multimedia resource they offer take advantage of network capability
- Archive of 500 web casts that include video clips - available to educators
- TOTAL SOLAR ECLIPSE
 - o Recent activities included China, Turkey, and the Caribbean
 - o They created an active webcast with China on an eclipse on 8/1/08. Experimented with getting people to comment and ask questions. All the events have been archived on the Exploratorium website.
 - o Live transmission into a virtual 3D world - The Turkey eclipse was put into Second Life so the avatars from students could comment and ask questions. 250 people were involved. People participated for well over an hour on the island in Second Life about the solar eclipse
- ICE STORIES
 - o Public understanding of popular research
 - o Number of scientists working at both poles. Last summer in Antarctica - they trained scientists in video production, sound stories, audio production and the like so that they could transform their work into something students and educators could understand in their work better.
 - o Used Internet2 networking for the transmission
 - o Just trained more scientists on "how to"
- EVIDENCE: new product just launched
 - o How do we know what we know?
 - o Understand the steps that scientists use to do their work---for example, theory and documentation is part of their research process
 - o This study uses a cast story in anthropology
 - o Going to a laboratory in field science
 - o Gave them some tools so they could learn what to use from science in their every day life
- In just a few short years it will be moving to the waterfront in San Francisco with a maritime focus and engaging the public into the Internet to encourage scientists to use the Exploratorium as a vessel to promote their explorations and what they've learned and know.

Walter Staveloz Presentation

ASTC - Association for Science -Technology Center

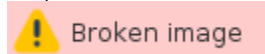
- Science of International Polar Year
 - o Partnered with NASA and MAGPI to bring people together via Videoconferencing from all over the world to address / recognize global environmental changes
 - o Brought together areas from Mexico, China, Australia, the UK, Egypt, and the US. Kids from China were able to speak to scientists and ask questions.
 - o Scientists would present what was happening in their area on global changes and then students could then elaborate on what they saw in their environment. Then students used this information to go back to their school and help other students learn how to make changes in their area.
 - o Australia, for example, took that information to a larger science audience that had greater participation
 - o Goal: use the information learned in the 20-minute videoconference and take it to a greater audience that might generate more discussion and make contributions.
 - o They also put the material on the web making it available before new meetings so it would generate discussion
 - o Invited all science centers to create an event in their science center even if they weren't participants in the program. So it was another extension of other communities and countries to use the information that is created and take it far beyond.
- o Walter Staveloz joined the Session on Wednesday - topic on Museums on Internet2 presented by Dan Gross.

10:55am-11:20am - Cool New Applications and Why They Matter to the K20 Teaching & Learning Community [Video]

Speaker(s): Dan Gross

Session Abstract: Internet2 is all about connecting networks, computers and exchanging data faster than ever before. As these networks get faster and more robust, the technological hurdles to once seemingly impossible tasks continue to fall. Meanwhile, Web2.0 applications seek to connect users personally through personal publishing applications that allow almost anyone to have a voice through Blogs, Podcasts and video sharing sites like YouTube. Around these "thermal vents" rich communities are springing up of users sharing common interests and goals. In a short series of exercises and demonstrations I2K20 will "peek in" on this evolving world and how the Internet2 Teaching & Learning K20 community can leverage some of these tools.

Notes: Dan shared the intersection between Web2.0 and Internet2. Focus of our meetings is on bringing things back that teachers can use in their classrooms now - not just firehose applications, but the little drops of information that make up those firehoses. As an example of an online read/write collaborative web tool, we did a round robin asking each person to name something that brings them to our meetings. The resulting image is the compilation of those words run through wordle.net.



- Poll of audience: what interests you most/what do you want to get out of this work

- o International partners
- o Leveraging the teachers
- o Collaboration with research
- o Digital content
- o Making it work in the classroom
- o Rich current content
- o Science project
- o Undergraduate research collaboration
- o Effective collaboration
- o Partnerships
- o Creative collaboration
- o Applications
- o Digital archives and databases
- o Global interactivity
- o Classroom projects
- o Engaging student voice in real issues
- o Workforce readiness
- o On-line research capacity
- o Hands on training via distance education
- o Getting teachers to understand that Internet2 is "add-ins" not "add-ons"
- o Brown beat science community to get them active in politics and learning: interactive partnerships and politics
- o Marketing
- o Delivering high quality interactive music
- o Partnership
- o Scalability
- o People networking
- o Teaching 21st century skills
- o Inter-segmental collaboration
- o Outreach and promotion of application
- o Collaboration with results
- o Science support
- o Public library and community
- o Project partnerships
- o Opportunities to interact with Arts and Sciences

11:20am-11:30 - National Park Service at the Brown v. Board of Education National Historic Site [Slides, [Video](#)]

Speaker(s): Linda Rosenblum

Session Abstract: The Brown v. Board of Education NHS plans to employ partnerships with members of communities in Delaware, District of Columbia, South Carolina and Virginia, who represent primary source accounts from plaintiffs and appellants in the five cases consolidated in the historic Brown decision. This network enabled collaboration will enhance public dialogue and understanding of *Brown v. Board of Education*. This session will connect participating communities through videoconferencing with a virtual panel of experts, one from each of the locations in the cases consolidated under Brown, et al. The presentation will highlight local historical resources, share primary source accounts, and demonstrate how videoconferencing can be incorporated in teaching and learning to support inquiry, scholarship, and awareness.

Comments: remote presentation

Notes:

- Only park site and historic site (dedicated on 5/17/2004) that commemorates a landmark May 17, 1954 Brown vs Board of Education Supreme Court case
- The facility is very high tech for the National Park Service with lots of video/audio and kiosks and a Videoconferencing suite
- Planning to do 2/24/09 video conference broadcast of the reconvening of the Supreme Court plaintiffs and the children of plaintiffs, all of whom were originally involved in all five cases
- DE, VA, DC, SC, KS --- will have representatives who were directly involved in the cases telling their stories
- Interactive component where several schools can ask questions directly
- Resources will be posted on their web site and the Great Plains web site - so teachers can have pre-conferencing materials with activities that can be done ahead of time in the classroom allowing teachers to prepare for the event
- Web site information is www.nps.gov/bvrb

11:30am-11:45 - Kids Creating Content: The KC3 Story <http://kc3.cilc.org/> [Video]

Speaker(s): Ruth Blankenbaker, Monica Cougan - CILC

Session Abstract: The KC3 Contest (Kids Creating Community Content) received first place honors at the 2008 National Education Computing Conference (NECC) in the category of Online Learning Awards. The award was sponsored by the International Society for Technology in Education (ISTE) Special Interest Group for Telelearning (SIGTEL). TANDBERG and the Center for Interactive Learning and Collaboration (CILC) created this event as a way to engage students at a deeper level in their learning. The goal of the KC3 program is to challenge middle and high school teams to develop and present engaging and dynamic videoconferencing programs about their communities. In 2008, teams researched topics relevant to their community and developed live informational videoconferencing programs, which aligned to national standards. Project teams were located from Hawaii to New Jersey. Each project was presented to another school and a team of judges reviewed the videoconferences that had been captured on a Content Server. Prizes for top 3 schools included cash, free Virtual Fieldtrips and a week in Boston at the Building Learning Communities Conference for the winning teacher! The KC3 is slated to go international in the 2008-09 school year and will have separate judging categories for middle and high school participants.

Notes:

- 31 applications have been received for this contest: 10 states, 6 provinces in Canada, Philippines, and Morocco
- Last year's winning project was a web site that was interactive with students based upon what's important in their community -- Oklahoma
- Judges from around the world will judge - students will be creating content, delivering the content, and receiving the content. Schools starting to do this have started jumping right into collaborations
- Schools that win will be able to have funds to donate to their favorite charity sources
- Students have become very creative and integrate a lot of different things

11:45am-noon - Teaching and Learning Update [[Video](#)]

Speaker(s): Jennifer Oxenford, Ann Doyle

Session Abstract: Update on T&L SIG activities and face to face meeting.

Notes:

- Jennifer and Anne went over the agenda for session on Wednesday Teaching & Learning - strategic planning discussion with prioritization of Teaching & Learning activities
- Virtual worlds - two session panels co-sponsored with the K20 Initiative will take place Tuesday and Wednesday afternoon

12:00-1pm - Lunch - Meeting Wrap Up**Larry Fourtnoy and FCC [[video](#)]**

- Working to relax restrictions on eRate
- Rural health care program has had its own challenges in rural America
- Put pressure on the rural health care program in your area -- it's an opportunity to change the way eRate is handled
- Larry's trying to promote a concept of community networks
- If your community can pro-rate the circuits --- they can then share the networks in rural America with other areas
- 1996 Act has confused a number of issues at the FCC - we're doing a lot for community networks and trying to make changes to help the communities