K20 KS Summer Seance

Internet2 K20 Initiative Kansas City Meeting - August 2007

ATTENDEES

- Andrea Deau - WiscNet
- Sherilyn Evans - CENIC
- David Stroud - NASA
- Jennifer Oxenford - MAGPI
- Carol Willis - TETN
- Ruthie Blankenbaker - CILC
- Marla Davenport - TIES
- Jim Moran - MERIT
- Bob Collie - ENA
- Dan Gross - SWING
- Randy Stout - Kan-ed
- Joe Cassis - Iowa ICON
- Trista Peitzman - Iowa public television IPTV
- James Werle - I2 U.Washington
- Bill Giddings - MOREnet
- Louis Fox - I2 U.Washington
- Ann Zimmerman - OSCNet
- Bill Mitchell - MOREnet (by videoconference)
- Janet Hurdman - NKCS site host welcome
- Megan, MOREnet
- Sandra, MOREnet

The K20 Advisory Committee gathered in Kansas City, MO from Monday August 20 - Wednesday August 22, 2007. The two day meeting was an opportunity to reflect on the purpose of our work together, define success in the short and long term, and create a road map that leverages our collective efforts.

ONE PAGE EXECUTIVE SUMMARY

Internet2 K20 Initiative History

Louis Fox, Director, Internet2 K20 Initiative and Bill Mitchell, Executive Director of MOREnet and past Chair of the K20 Initiative, (Bill joined via video conference) shared some background on the history and development of the K20 Initiative at Internet2. In particular, Louis and Bill outlined three key factors providing a rationale for the formation of the initiative.

1. Surface innovators and innovation at the intersection of technology and teaching and learning
2. Advanced networking technologies provide unique opportunities for the K-20 audience
3. Serve as a convener and catalyst

In terms of progress and results, it was pointed out that in a relatively short period of time the K20 Initiative developed the SEGP category of membership affiliation and now the community participating through SEGP generates $2M in fees (per year).

Big Picture Questions

1. Who are we?
2. Why do we exist?
3. What will you contribute?

- More interaction with K12 to higher education - K through 20 - ENA
- Collaboration a big aspect - interconnectedness leveraging both sides - CENIC
- NASA - universities play an important role in the community - also training future teachers - professional development too - curriculum dev needs to be systemic from K through the universities - collaboration key - articulation - going to offer on a graduate class for how to work with NASA
- Dan Gross - teacher preparation - communication technologies - need a methods course
- PreK - 20 - libraries, museums community
- Is a relationship between K12 & higher ed a good thing?
- Is there a role for us in that environment? What is it? To facilitate? To Illuminate?
- Perhaps a role in explaining the value of being part of R&E networks and the value they provide, - the value of being part of this community
- Provide examples of what can be used locally
- Support for applications: who supports it, who provides support for the applications like what Lehigh university has to offer (Jim, Merit) - typically specialized support - how do I regularize these activities so they can be integrated into the curriculum on a regular basis? How do we develop the support mechanism to get these into the K12? K12 normally - seems to want things in ready form.
- Maybe take some applications and try to find a model to regularize a few? - taking some ideas and regularize them as a role for this group? - set expectations
- Perhaps provide FAQs / step by step and who do I turn to - where do I go for this?
- Obstacles are rather great - technology - firewalls - not enough bandwidth - some are limiting it - videoconferencing logistics - separate groups: video and network, don't typically collaborate. Worse than trying to get a purchase order signed. - lack of technical expertise. Need flexibility
- Feds and state govs can help by letting schools know what they need to have in place to take advantage of broadband technologies and the applications facilitated by them.
- This is high end R&D - not everyone is going to have that capability.
• Randy: opportunity for us to work together to open the box of innovation and what's possible: also what can we do together to articulate a value proposition that is clear and concise enough to reach this broad audience: how do we get our products and services, collaborative tools, resources together so we can give others access: and even discussing operational details relative to firewalls and support: there is a reason why K20 is part of the name of the initiative - is a central piece to this effort and addressing those challenges to better work together.

What do you want from the K20 initiative and how can you contribute?

Marla: ideas - guidance - partners - people we can work with - collaborate with - how to get schools connected - going for a grant - partnerships - continue this - take a look at the SEGP fee - is becoming an issue - to contribute: have our experiences, help with planning and support - testing, R&D, supporting new people coming on.

Ruthie: learning how other states are connected - learning best practices - lessons learned - to personalize it, make sure we are not working in isolation but as part of a larger community - working with this group helps position our group better - a grounding

Carol: not so much about the bandwidth as it is about the community: like to see an effort to reach out to the international community - doing some, but want more - and an effort to continue to work on the relationships between K12 and higher education. Include experts from higher ed to K12 - chat, speakers, etc. Want to see examples and ways to build on a best practice collaborative approach. Question? Are we all about innovative technologies or do we do other projects as well? Don't have the answer. Contribute - continue to be part of this group. Tying to communicate the value of I2

Jennifer: found a great value in the community. The breadth of the community shows other value being part of this and the goals of the initiative. Is a place to come and vent some frustration? See a more inclusive approach to working with our end users - get broader support from other groups like ISTE, ALA, etc. Looking forward to releasing the new social networking tool - Contribute: coming to meetings, calls, bringing our perspective - development of program ideas, applications. Can't bring lots of money, which is a challenge.

David: Problem: projected NASA and other science and technology (STEM workers - science, technology, engineering and math) shortage of stem workers - goal is to encourage more to enter these fields. Internet2 is a vehicle by which we can disseminate information - See K20 as the convener, collaborator - where we can find collaborators - connectivity, community and collaboration. Question, what's the value of internet2 - why would you use internet2 - what would you do on Internet2 that couldn't be done on Internet1? Value is the community and the opportunity for a true partnership. Want: make sure the I2K20 community knows what NASAs resources are and how to access them: Bring? NASA can bring excitement - a huge human capital, especially at Goddard. Creating technologies and content that is cutting edge - universities are also involved. Have huge amount of science data, imaging, simulations. Resources are free. Internet2 science and engineering speaker series. Professional development and training - lunar robotics - maybe universities may want to team teach something like that. Don't take the mass media approach to programming to the lowest possible common denominator. Push the limits in a technical sense.

Shelbyn: to illuminate and continue to highlight those new innovative things that are high end. Continuing to have a national sense. We are now doing more across states - internationally looks even more interesting. Broadening the reach of the community. Brings the infrastructure perspective to the group - Scalability is an important word to bring to our conversation - we don't do much of that now. Have made some progress with videoconferencing - due to the energy being devoted to it. I2 has made some investment. Multicasting has not yet taken off with K12. Not pervasive. Maybe need more rich multicast resources that people want to get to. Find ways as a community to look at how we scale out these sort of things and help others try and figure this out in their own states. More effort on our part to scaling infrastructure so people can use them in a more plug and play fashion.

Andrea: project (Neptune? immersive learning environments, NASA projects), community, set some standards / expectations- Bring expertise, time, ideas - we are a translator with both a technical and teaching and learning perspective - act as translators for our education community - bridges.

Bill G.: access brought folks to the table: want - Community, successes, failures, dreams, and nightmares. Want help with their Kauffman Foundation project - they want to know what I2 brings to the table - what kind of change occurs - they are after economic development - Bill wants to know how all this helps with economic development - then he can explain this to the legislature. Contribute: always willing to work with our members - will support our folks as we get engaged with these activities. Will bring content to the table - RiverBluffCave, have a circuit in there. Missouri botanical garden - working on them. Negro League baseball museum - math and science tied to the museum. Working on them to get them out there - Laura Ingalls wilder, Winston Churchill memorial museum. Question? Why is United Streaming successful? They've atomized them and made them successful in small chunks that make them as easy to access as a page in the text book

Ann: Collaboration is key. Grant would be a good way to focus efforts - Is very results oriented. Keep bringing people together, some people just aren't there yet. As we collaborate we will find better ways to bring this to the schools. Would like to find a model for how to bring I2 to the schools in Ohio

Trista: How does it work, how much does it cost. What kind of content is available to me. Is it worth it? What are the basic pieces of information here. What can I do with it that's different than what I currently have? Excited about the content Bill mentioned. Bring: we have the same type of content - Hygienic lab - talking to 1st and 2nd graders to talk about germs.

Joe: Collaboration, Community. Consider economic development issues. Need to define what you can do on Internet2 that you can't on I1. We're a diamond in the rough - need to make it sparkle and attract people. Would be great to have a project. Must be some commonalities between projects that have been done. Identify those and create a FAQ - how to use internet2.

Randy: many of these things are things we are doing for the first time. Need to address people and policy and technology issues. When doing these things, there isn't a cookbook on how to proceed. This group provides me that and is a value. Potential for creating some sort of frame work for partnerships. Need to spend some time thinking about this. When such framework is available, find out what is needed by the schools of the future to transform - and what can we bring to help make that happen - To translate promising best practices into effective best practices. To translate successful practices on a larger scale. Contribute: unique in that we don't provide internet services. Part of a state agency and policy making role - to incent our members. Have a number of test beds where we can bring those uses of technology to a new level of engagement - determine which work best.

Dan: modularity of programming - being able to take parts and pieces is very important to me. How can I make this work for my school district. Sense of community is very important to me. Learning from this group. Bring some projects: Ship to shore, HD video under lake Michigan. Knowing what other people are doing is important. Bring: continue to contribute programs, ideas. Enthusiastic - hard to understand why teaching and learning doesn't have a greater role in the I2 group.

Bob: Want to help translate the vision and the projects done in the higher education place into K12. Needs to be on demand - United Streaming is a good example (ratio 10:53 million higher ed students to K12) Want partnerships with concrete how can K12 use this and it can't be just video conferencing - want it to be differentiable. Need to translate the value of being part of this with concrete examples of in practice implementation. Want to grow the community. Contribute: have a lab of 4500 schools. Need to tie it to the question: "How does this improve instruction & student achievement?". Contribute energy and time to move forward.
How do we define our success?

Together - an impressive set of resources & capacity if we do that. Changes on the horizon: cyberinfrastructure & e-science - no reason why some form of etc.. and their needs. We tend to preoccupy with K12. As we move forward we get closer to creating a national education grid - resources etc coming. Don't lose site of the diversity of institutions in this community - higher ed, libraries, science centers, major national organizations (NOAH, Smithsonian, etc.) and their needs. We tend to preoccupy with K12. As we move forward we get closer to creating a national education grid - resources etc coming.

We are part of Internet2 which is a leading edge technology organization. Keep our eye on innovation - something may not be scalable at first but overtime may be. Bring ideas to the light of day. This area may be an area we can make a greater contribution. Hope we don't lose site of the diversity of institutions in this community - higher ed, libraries, science centers, major national organizations (NOAH, Smithsonian, etc.) and their needs. We tend to preoccupy with K12. As we move forward we get closer to creating a national education grid - resources etc coming - an impressive set of resources & capacity if we do that. Changes on the horizon: cyberinfrastructure & e-science - no reason why some form of etc.. and their needs. We tend to preoccupy with K12. As we move forward we get closer to creating a national education grid - resources etc coming.

Visioning Exercise

How do we define our success?

What is our vision for 2012?

- Struggling with what we do with the kid that comes to school with a wireless device - we have to come to a point where we allow these devices vs. computer labs. Need to think about personal learning networks - need to consider the last mile and even the last yard. Collaborative learning environments. How do we get this in place. Virtual learning environments: Croquet, Second Life - big driver - how do we share what's in our personal database and how to share them. (Dan) Should K20 be involved in promoting it? Shaping it? Be a model for it. Using these tools, promoting them and helping to develop them. Perhaps collaboration with the corporate world to develop and provide interactive feedback in the development of applications.

- Marla: potential power with handhelds - maybe missing some of the middleware for that.

- Joe: comes to a mindset - people think of education as a brick and mortar thing. Need to empower the individual. If we can provide the kids with the power, they won't have to think about it.

- David: would like to see the walls being torn down and decentralize the education process. Rel to Tim Magner Dept of Ed re: School 2.0. We must work in a diversity of institutions - higher ed, libraries, science centers, major national organizations (NOAH, Smithsonian, etc.) and their needs. We tend to preoccupy with K12. As we move forward we get closer to creating a national education grid - resources etc coming - an impressive set of resources & capacity if we do that. Changes on the horizon: cyberinfrastructure & e-science - no reason why some form of etc.. and their needs. We tend to preoccupy with K12. As we move forward we get closer to creating a national education grid - resources etc coming.

- Ruthie: when thinking about visioning for the future, I like to think about the barriers to getting there. Rewire the American free education for all - drive legislation away from the concept of proof of education and work toward engaging the mind of the child. We have this historic framework - if we want to affect change - we should go out and change things.

- Tie it to economic boundaries - why you need it to compete - explain to the parents and community - from an economic standpoint.

- Putting promotional videos up on youtube - google video...we are not using some of these tools available to us - block lots of access - make these kids communicate literate.

- Jim: good vision and bad vision: our success is in communicating the value of the high performance network and the new set of problems the use of this brings - policy issues etc...We're not done inventing the internet yet, we are at the Model T stage - Greg Marks. We demonstrate the value, effectiveness of high performance networks and then the pedagogical side - if we are successful, we will have a new set of issues to deal with.

- Jennifer: kids have to power down to go to school. I2 20 to help teachers understand how to teach those kids.

- Ruthie: new learning theories transferred to an avatar we have access to.

- Louis: make the refrigerator a learning device because his kids are always opening it up and staring into it.

- Louis: think about other platforms too. Role for us to talk about a variety of learning environments and learning technologies and talking about a convergence. Learning environments work done By ELI / Educause is pretty good - haven't seen anything for a broader audience, maybe there is a role for us in this area. Maybe we can make an authoritative statement on these topics.

How do we define success one year out?

- Grow the community? Establish a more defined audience

- Point to some successful models of use of I2

- Able to communicate the value of I2 and connectedness

- Cross-boundary collaboration - more broadly

- Non-formal education members - museums libraries - show a growth

- Rejigger the leadership to reflect non-formal participation

- Focus our efforts / prioritize

- Don't lose site of our innovation

- Success - resources that help support our activities

- Define a project with a specific scope and seek funding - would reflect innovation, establish respect - encourage more participation

- Collection of research and data - pockets of data we could issue a call for that we could use to articulate the value and show results

- Work collaboratively - ISTe is trying to collect these sorts of things. Work together?

- Collaboration with other partners

- Increase engagement of the entire community
• Should we consider a name change that reflects our desire to involve informal education more?
• Refresh / revisit the SEGP contact list and purge - renew - who is this group? Who should be this group?
• Merit- if the educational community feels like they've missed something if we’re not part of this - If the K12s and the higher ed community feels like the have to participate or they are missing something.
• Enhanced - reworked arrangement with Internet2 for SEGP community. Ongoing vocalization of what the needs and wants of the community are. We need to explore membership category and how we want segp membership to move forward. How this plays with the new membership category going forward - how does this fit with R&E network category.
• We don’t see a drop of our content providers leaving because of lack of use. Our ability to increase the number of high quality content providers.

What communities show promise for collaboration and outreach activities?

• ISTE IDC sig - publishing research - technology & collaboration
• CoSN * - have a lobbying effort - we could prepare a position paper on how I2 is changing things for them to distribute.
• StateNets *
• American Library Association (working on an MOU) , Zoological Society, American Association of Museums, Webwise - conference, Association of College and Research Libraries
• CoLEA (working on an MOU) (science centers)
• Educause? ELI - Electronic Learning Initiative - ECAR - pricy engagement $10,000 to join (great conference though)
• Vendor partners - focusing on what we want them to work on
• ViDe- video development initiative
• International: TERENA, CANARIE - Rnet - APAN - asia pacific academic networks; CLARA - latin america; CUDI - latin america; Western Cooperative for Educational Technology, focused on higher education, but spun off a K12 group, NACOL.
• There is a special international group that meets at I2.
• DIVERSE
• Association of Supervision and Curriculum Development (K12 focused)
• NASBE- National Assoc. of State Boards of Education
• Private Foundations?
• Federal government: FCC - invite Kevin Martin?, Department of Ed., Department of Commerce. State Department? Re-engage the UN and their efforts, i.e. Food Force - UN is now a member of I2.
• National Endowment for the Humanities and for the Arts? No success to date.
• 21st Century Skills.org
• EUNIS - like European Educause
• Community Colleges - League for innovation
• Supercomputing centers - in K12 outreach
  • San Diego Supercomputing center
• Department of Energy Labs
• Academic CoLab - Wisconsin
• Sandia Labs
• Military schools
• Education Commission of the States
• State Chief State School Officers?
• I-EARN - International Education and Research Network

Next Steps

• Restructure the K20 Initiative leadership
  • This is needed to accommodate and exploit the explosive growth and momentum we've created over the last few years. The priority is to become more nimble and efficient without becoming too formal in terms in procedure or structure. Simplicity and informality are important characteristics of the new structure. The more formal we make it the more we will focus on governance issues and not on the important work.
    • Questions
      • Should we allow private sector to participate in our advisory committee meetings?
      • How do we better involve the international community in the Initiative?
      • How are members of the Executive Committee selected
      • What are the roles and responsibilities for each leadership group at large and for positions within the groups (Chair, Co-Chair, Funding Liaison, Secretary, Past Chair)
  • TO DO:
    • Review the following proposed structure provide comments via email or at the upcoming 10/8 meeting.

• Update our mission and goals statement
  • The current versions were written at the inception of the Initiative and were intended to outline the goals of the Initiative but also allay fears over connecting the K-20 community to the R&E backbone
  • TO DO: Louis will take a shot at re-writing and present to the group for review in advance of the October 8th meeting.

• Working Groups
  • Create several focus groups or committees that focus on a single topic and report back, producing a tangible benefit and result from their discussions on their assigned topic. Committees should include topics such as K12-HE collaboration, K12 IVC, non-IVC applications and content, connectivity survey development, web presence steering committee, Partnerships/Outreach Working group, Funding Opportunities

Include: Community - connectivity - communication - content - collaboration

Priorities:

1) Put together a simple document of recommendations for content providers (hopefully not just video conferencing folks!) to help them reach the K-12 (and K-20) audience. These recommendations should include encouraging them to archive and provide on-demand (non real time) access to their materials, encourage listing within CILC's extensive list of materials and mapping to state standards, and encourage feedback to the I2K20 group as to how we might be able to help them increase distribution of their product. As part of this effort, I think that we should strongly consider a database or tool that is only available to I2- connected institutions and encourage some valuable content to be only provided over I2 versus both I2 and the commodity network, thus increasing the value of the community and connectivity to I2.
Committee Structure - visual diagram of possible structure

Committee of the Whole or K20 Advisory Committee is open with respect to participation and serves as a forum for information exchange, resource sharing, engagement, collaboration, and program participation.

Advisory Council is a group defined by Internet2 membership or affiliation through SEGP and conducts the business of the K20 initiative in relation to the larger organizational structure of Internet2.

Executive Committee consists of a Chair, a Co-Chair, a Secretary, a Funding Liaison/Treasurer, and I2 Staff, - past chairs are members of this committee ex-officio. This is a dynamic group of individuals who share the responsibility for seeing that the logistics, agenda, vision and goals for the initiative are carefully planned and well executed.