# **Utah Education Network Steering Committee**

April 23, 2010



# UTAH EDUCATION NETWORK STEERING COMMITTEE

#### AGENDA

APRIL 23, 2010

9:00 a.m.-11:00 a.m. Committee of the Whole / Business Meeting

## Welcome and Introductions

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11:00 a.m.-12:00 noon

# **Instructional Services Subcommittee Meeting**

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#### UPCOMING MEETINGS

Steering Committee Meeting - June 11, 2010, 9:00 a.m.
Instructional Services Subcommittee Meeting - June 11, 2010, 11:00 a.m.
Technical Services Subcommittee Meeting - June 11, 2010, 11:00 a.m.

 ${\it Please place these materials in your Steering \ Committee \ Binder.}$ 

TAB 14

# New KUED Representation at Steering Committee Meetings - Discussion

## Issue

With the upcoming retirement of KUED General Manager Larry S. Smith on May 10, we will soon have a new KUED representative at UEN Steering Committee meetings. The new general manager is no stranger to the Eccles Broadcast Center. He is Michael A. Dunn, an Emmy-award winning writer, producer and director, who has also served as a long-time volunteer, advisory board member and independent documentary producer for the station.

# **Background**

Dunn succeeds Larry Smith, who is retiring at the end of April after 12 years as GM. Under Smith's leadership, KUED became the first recipient of the Overall Station Excellence Award from the Rocky Mountain Regional Emmy Awards. Dunn becomes KUED's seventh general manager since its founding in 1958.

He was selected from more than 100 candidates and nominees from across the country. He is founder of Dunn Communications, Inc, a Salt Lake City advertising agency and film production company, and has worked in broadcasting and media production for nearly three decades. During much of that time he has also volunteered at KUED.

Dunn served six years as a senior writer and producer for Bonneville Communications, where he worked on the highly acclaimed *Homefront* campaign for the LDS Church. He spent eight years with Fotheringham & Associates. Prior to that, he worked in radio at KALL and as a television reporter at KUTV. He earned both his Bachelors and Masters degrees in Communication from the University of Utah.

He has received gold and silver medals from the New York Film Festival, several ADDY's from the American Advertising Federation, and four CLIOs - an award considered the "Oscar" of the advertising industry. He won an Emmy Award for public service in 1992 from the National Academy of Television Arts and Sciences.

Starting as a volunteer with KUED fund drives in 1984, Dunn has appeared on the station for 25 years. "People who don't know me well just assume that I work for KUED," he says. "I am often asked by people, 'How are things at the station?' Now I can tell them." He has also served on KUED's Advisory Board and has written and produced several documentary films in conjunction with the station, including *Shared Vision*, *In Those Days* and *Flagship in the Desert*.

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# Recommendation

This is an information item and requires no further action by the committee.

**TAB 15** 

# SUMMARY OF LEGISLATIVE RESULTS FY 2010 - DISCUSSION

## Issue

This report provides a summary of the results of the budget decisions for FY 2010 and FY 2011 made during the 2010 Legislative General Session. UEN staff worked closely with Legislative leadership and Higher Education Appropriation Subcommittee members to soften the impact of budget reductions proposed for UEN. Consequently, our budget situation for FY 2011 will be quite manageable.

# **Background**

Utah's legislature continued its practice of prudent financial management by resolving to close a potential \$850 million shortfall in state revenues. Early budget guidelines adopted by the Executive Appropriation Committee included the enactment of state agency budget cuts, using one-time rainy day fund reserves, and using modest revenue increases to offset the funding deficit. The proposed plan held Public Education essentially harmless from reductions faced by the remainder of state government.

The session began with the likelihood that UEN would receive a 4 percent one-time cut in FY 2010, an ongoing base budget cut of 5 percent for FY 2011 (about \$0.9 million) and the loss of \$1.5 million back fill funds appropriated for FY 2010. Because over half of the UEN budget is committed to long term circuit and Internet contracts, cuts of that magnitude would have required significant staff reductions and other cuts that would hurt our ability to provide the services we perform for public and higher education.

Early in the legislative session, the original 4 percent across-the-board budget cut planned for UEN for the current year (FY 2010) was reduced to a 3 percent one-time base budget cut from funds designated for personnel services. This amounted to a one-time reduction of \$231,600 – a savings of \$464,700 compared to the initial proposal.

The award to UEN of the \$13.5 million NTIA BTOP grant played a valuable role in persuading the Legislative decisions to minimize budget reductions initially planned for UEN. Consequently, support from the Higher Education Appropriations Subcommittee and Legislative leadership resulted in two key budgetary decisions: First, the legislature did not make an additional 5 percent cut in our FY 2011 budget. Instead, our base budget will be at the same level as it is this year. Second, a \$1,000,000 one-time appropriation was made to partially defer for one year the loss of backfill funds appropriated for FY 2010. That one-time appropriation will be utilized to match

the NTIA BTOP grant funds to upgrade network connectivity for 88 elementary and charter schools, 35 public libraries and 7 head start administrative facilities. UEN also received \$81,800 to cover increases in the cost of employee health insurance for FY 2011.

The actions taken by the Legislature are summarized in the following table:

Utah Education Network – State Funding					
	LEGISLATIVE ACTION				
Authorized Base Funding FY 2010	\$18,949,200				
One-time 3% Adjustment (S.B. 3)	(\$231,600)				
Available Funding FY 2010	\$18,717,600				
Authorized Base Funding FY 2011	\$18,949,200				
Less: One-time 9% Backfill	(\$1,540,700)				
Less: 2% Base Cut (S.B. 1)	(\$348,200)				
Adjusted FY 2011 Base	\$17,060,300				
Funding Restoration ( H.B. 2)	\$348,200				
Health Benefit Adjustment (H.B. 6)	\$81,800				
One-time Allocation (H.B. 3)	\$1,000,000				
Available Funding FY 2011	\$18,490,300				

In spite of these difficult economic times, UEN was granted sufficient financial relief by the Legislature to continue with planned bandwidth expansion projects in FY 2010 and FY 2011. Additional staff cuts will not be required, nor will we need to reduce services we currently provide public and higher education.

# Recommendation

This is an information item and requires no further action by the committee.

TAB 16

# FY 2011 BUDGET AND PLANNING - ACTION

#### Issue

It is time to establish a timeline to prepare our FY 2011 budget and strategic plan. The consultation and collaboration with stakeholders is always essential when determining the overall needs and strategic directions for the organization. The upcoming fiscal year will require priority setting that may be more difficult compared to times when there has been more funding available.

# **Background**

Our current Long Term Strategic objectives focus upon Wide Area Network, Web Resources, Enterprise Applications, Distance Education, Broadcast Services, and Professional Development. We are not expecting these Long Term objectives to change radically. But, we do expect the number of projects and outcomes to be limited because of budget cuts that UEN has implemented during the past two years.

To get some initial feedback, we encourage you to review our FY 2010 Strategic Plan, which is Attachment A of this agenda item. Topics that we would appreciate some preliminary thinking about include the following:

- 1. Linking the UEN strategic plan to the new FCC Broadband Plan
- 2. UEN priorities in the face of further state funding cuts
- 3. Integrating data and content systems to support public education and school districts
- 4. Course management system support for higher education and public education
- 5. On-going funding for new schools requiring broadband connections
- 6. Replacement cycle for IVC equipment and implementation of new technologies (including new HD technologies)
- 7. Outside grant and fundraising priorities
- 8. Integration of network services including partnerships with UTN, DTS, etc. and associated network policies
- 9. New educational enterprise systems/services that UEN can implement in the future

# Recommendation

It is recommended that a day-long Strategic Planning Retreat be scheduled during the third week of May. Our goal will be to finalize a specific day, and suggest that Wednesday, May 12, or Thursday, May 13 be reviewed prior to the Steering Committee meeting for availability. We propose a central location, perhaps at Utah Valley University or Salt Lake Community College Larry Miller Campus. The day-long retreat would allow thorough discussion of network, technical, and instructional issues. The results of this planning session and the 2010-2011 budget would then be ready for discussion and adoption at the June 11th and August 20th, 2010 Steering Committee meetings.

# TAB 16 ATTACHMENT A FY 2010 STRATEGIC PLAN

#### **Mission**

We network to create educational opportunities, connect citizens and collaborate with partners

#### **Vision**

Be Utah's most trusted, accessible and recognized partner for innovation in educational technology

#### **Values**

Caring – Supporting community, customers, and co-workers

Leadership – Advancing relationships and encouraging ideas

Integrity – Keeping our promises

Communication – Listening to meet needs

Service – Benefiting our partners

#### **Needs**

Utah faces unprecedented challenges and opportunities as the first decade of the 21st century draws to a close. The state leads the nation in population growth according to new census data. Utah also continues to be the nation's youngest state. Nearly one-in-ten Utahns are under the age of five. The state has the nation's lowest median age, at 28.5 years. Even so Utah is also poised for a burgeoning group of senior citizens as baby boomers age. In just five years, it is estimated that one Utahn will turn 65 every 15 minutes. From preschoolers to the elderly, from graduate students to first graders, almost all Utahns use services of the Utah Education Network in their schools, libraries and communities.

Utah's public schools, colleges, and universities depend on UEN to perform their missions. UEN provides Internet and network connectivity to every public school, college and university through the UEN wide area network. The Network also manages a statewide video conferencing system and hosts enterprise-level software applications for our public and higher education partners. In addition, UEN offers instructional programming and life-long learning opportunities through KUEN, a 24/7 television station which reaches most Utah citizens. UEN also supports a growing range of rich educational resources at UEN's website, <code>www.uen.org</code>; and provides professional development in technology to Utah educators.

For thousands of Utah students and educators, the Internet is their school, classroom, meeting place, and library. The Internet must be accessible to every educator, student,

administrator, and staff member from any location and at all times. It is the data and communications distribution system used to deliver hundreds of administrative, academic and student support applications affecting every student, educator, and staff member countless times each day. To ensure full-time access to the Internet, UEN must provide reliable, high capacity, and scalable network connections.

Network capacity reached an all time high on Tuesday, January 20, 2009 with the inauguration of President Obama. Inbound traffic from UEN's multiple Internet providers more than quadrupled reaching 90 percent of the capacity of some of our vendors. To keep up with growth in demand, UEN works collaboratively with college and university and school district leaders and Utah telecommunications providers to increase the capacity of network connections throughout the state.

In the Utah System of Higher Education, enrollment in online, technology-enhanced, Interactive Video Conferencing, and KUEN classes has grown dramatically for the past several years. Technologically-delivered courses and course components are quickly becoming the norm. In the FY 2009 UEN charted more than 5.6 million visitors to Vista Course Management Service. Enrollment in the Utah Electronic High School has also increased significantly from 23,000 students the previous year to more than 29,000 currently. Because of these trends educators, public and higher education staff members, and UEN employees must be technologically competent. UEN plays a key role in providing training to its own staff members, and to teachers, faculty members, and technology staff members in educational organizations throughout the state.

UEN is driven by the diverse needs of education in a time of rapid growth and change. As it responds to these needs, it grows in complexity, and supports more services at more locations. The result is increased pressure on all of us to meaningfully connect, create and collaborate for the mutual benefit of all regions of the state, all levels of education, and ultimately all citizens. Improved coordination of IT policies and backbone infrastructure will guarantee effective sharing of resources, lower prices through joint purchasing, and assure efficient use of technical support and training as UEN staff members work collaboratively with their public and higher education colleagues. Gaps in effective coordination, planning, and governance must be identified and eliminated.

Significant challenges face us during the coming year. Although Utah's economy is among the nation's best, no state has escaped the nation's most serious economic downturn in eight decades. State financial resources must be creatively prioritized to meet numerous compelling needs. UEN must achieve the greatest value possible from limited state resources, and continue to successfully seek grants and other revenue sources to augment state funds. By networking people and technology, by fostering connections and collaboration, UEN and its partners can help education and the state at large meet the challenges and the opportunities we face in the decade ahead.

#### I. WIDE AREA NETWORK

Operate, maintain, and expand a free, reliable and secure high speed network, connecting every public school, college, university and public library in Utah.

To achieve this goal, UEN will pursue the following objectives:

#### A. Operate and maintain the UEN network based on best practices and standards.

- 1. Catalog and maintain a circuit database.
- 2. Maintain an IP management database.
- 3. Continue to develop and support an Internet content filtering system for K-12 and Libraries.
- 4. Standardize how we develop and rollout future network deployments.
- 5. Monitor the backbone to identify bandwidth, security, and utilization issues; and to increase capacity as necessary.
- 6. Monitor endsites to identify bandwidth, security and reachability.
- 7. Continue to develop tools which provide essential information about the network.
- 8. Work smarter with decreased Network Operations and Field Operations Staff.
- 9. Strengthen operational coordination between Technical and Instructional Services departments and staff members.
- 10. Develop tools and reports to better manage network assets.

#### B. Increase reliability of the network to 99.999%.

- 1. Provide redundancy for core UEN critical services and network connections.
- 2. Increase network effectiveness at locations where diverse paths exist, i.e. fast re-route, efficient routing, consolidation of data centers.
- 3. Continue to explore diverse path options throughout the backbone.
- 4. Develop a plan to provide a redundant handoff point for district offices.
- 5. Perform scheduled maintenance according to best practices and standards.
- 6. Monitor and respond to network outages.

# C. Increase network capacity by upgrading remaining elementary and charter schools to high speed broadband connectivity.

- 1. Continue toward completion of phase 6 Ethernet projects (K-12) in close partnership with districts and charters.
- 2. Manage high bandwidth sites and provide additional resources allowed by UEN policy.
- 3. Continue to use E-Rate funds to develop broadband access throughout the state.
- 4. Explore additional needs for UEN Points of Presence (PoP) sites.
- 5. Continue to work with community networks to leverage network resources.
- 6. Encourage cooperation and foster relationships between local telephone companies and community networks.

- 7. Continue to work with Districts that have allocated funds for broadband elementary connectivity.
- Continue to work with the State Office of Education, Districts and charter schools to outline a
  multi-phase project plan for future upgrades in broadband to elementary and charter schools.

# D. Provide support to district and higher education technology staff to ensure that the enhanced capacity and reliability of the network is fully utilized.

1. Post and share collaborative tools.

#### E. Expand Internet capacity to meet growth in network traffic.

- 1. Explore additional alternate Internet Point of Presence (PoP) sites.
- 2. Explore, develop and implement ways to keep local network traffic local.
- Work with FRGP and other intermountain state network organizations to develop national peering opportunities.

#### F. Protect the network through improved security and security practices.

- 1. Continue UtahSAINT user group.
  - a. Keep current and publish security contacts list.
  - b. Conduct AdHoc Security calls.
  - c. Plan and conduct one security conference per year (UtahSAINT).
  - d. Support other State security activities.
  - e. Develop single-issue forums for specific needs.
- 2. Provide a leadership role for security expertise and assistance as required by districts and higher education institutions.
  - a. Work with Regional Service Centers to perform Network Security Assessments on school districts.
  - b. Assist with security configuration and design.
  - c. Provide security monitoring and reports.
- 3. Work with the Steering Committee to develop security policies.
- 4. Continue to develop security monitoring tools.
- 5. Work with the state CIO and institutions to support USHE security audits as required.

#### G. Support the high capacity/high speed network needs of university researchers.

- 1. Continue participation in national and regional network partnerships (Internet 2, National Lambda Rail, The Quilt, and Western Lights).
- 2. Continue to work within the SURIN Board as directed by the UEN Steering Committee.
- 3. Provision the network to accommodate research requirements.
- 4. Work with UDOT and DTS to place fiber between UofU and USU to support research.
- 5. Investigate UEN's role in the USTAR project.

- 6. Support development of the Utah Fiber Infrastructure Project.
- 7. Assist the UofU as a technical resource in the planning and development of its new data center and metro fiber ring.

#### H. Provide technical leadership and staff/stakeholder development.

- 1. Undertake outreach and promotion efforts of Wide Area Network projects.
- 2. Work with the Steering Committee to formalize Regional Technical Forums.
- 3. Define expectations (i.e., frequency of meetings, leadership roles, format, participants, etc.) of regional technical forums.
- 4. Establish an annual reporting relationship between regional leaders and the UEN Steering Committee.
- 5. Provide leadership in technical training: including expanded regional training, greater depth, more frequent and topic-specific training at tech summits, and refined security training.
- 6. Provide training and leadership for improving LAN reliability and speed on a local level.
- 7. Expand advocate program to libraries, USDB, and Charter Schools.
- 8. Support USHE IT staff in efforts to increase operational expertise across all institutions and explore the possibility of taking advantage of virtual staff or staff leasing.
- 9. Support the CIO's and TCC to research and develop a disaster recovery plan for the network and planning to provide back up equipment and staffing for emergency situations.

#### II. EDUCATIONAL WEB RESOURCES

Aggregate and deliver a suite of free high quality Web-based educational resources to support core services and best practices in teaching and learning.

To achieve this goal, UEN will pursue the following objectives:

#### A. Host, support, and maintain web projects and services.

- 1. Move uen.org to new hardware.
- 2. Review and update code on legacy applications.
- 3. Coordinate lesson plan development and publishing with USOE.
- 4. Expand and maintain the core curriculum resource database.
- 5. Conduct website and link clean-up.
- 6. Update my.uen portal software.
- 7. Create Core Management interface to update the core database.
- 8. Expand the Tech Services Projects Interface to include Regional Priorities.
- 9. Consolidate UTIPS testing server with USOE server.

#### B. Develop and implement new and expanded web resources.

- 1. Complete Professional Development Management "My Courses" tool including Premium Registration.
- 2. Expand CACTUS interface as defined by USOE.

- 3. Launch blog portlets for my.uen.
- 4. Consult with USOE on development of an online interface to share instructional resources.
- 5. Develop web modules with educational resources that end users can drop onto their web pages.
- 6. Integrate WIMBA Voice with my.uen for K12.
- 7. Increase user interactivity on uen.org.
- 8. Improve and expand NetSafeUtah and Financial Literacy web sites (pending grant results).
- 9. Develop Climate Literacy website (pending grant results).
- 10. Create a web interface for Higher Education Math/Science Education project.

# C. Promote new and existing UEN Web services through technology, outreach, special events and media relations.

- 1. Discuss, plan, and develop promotion and communication at the monthly Instructional Services/Public Communication Coordination meeting.
- 2. Produce and distribute NetNews Newsletters for public education and higher education.
- 3. Promote UEN's key services and resources in a variety of ways.
- 4. Increase readership and click through rates of UEN-hosted enewsletters and interactive content.

#### D. Support administrative activities for the uen.org site.

- 1. Gather, review, and post monthly web statistics.
- 2. Sunset obsolete web services in accordance with established policies.

#### **III. ENTERPRISE SOLUTIONS**

License, host and maintain statewide enterprise solutions supporting public education, higher education, and libraries.

To achieve this goal, UEN will pursue the following objectives:

#### A. Host, support and maintain existing enterprise solutions.

- 1. Support license, host, and promote the Pioneer Library, Preschool Pioneer, CMS (Course Management Service) and associated software, eMedia/CollegeMedia, and Moodle for Utah Electronic High School.
- 2. Provide support escalation between vendors and institutions as needed.
- 3. Review and update service level agreements with CMS hosted institutions.
- 4. Support and facilitate inter-institution collaboration with shared online content.
- 5. Ingest and catalog UIMC, KUED, and UEN media assets; maintain existing assets.

# B. Expand existing service functionality or implement new enterprise solutions services to meet stakeholder needs.

1. Install Flash I-Piece. Make necessary changes to DMS (Digital Media Service) system and metadata model.

- 2. Develop federated searching of eMedia using Primo.
- 3. Facilitate discussion of CMS alternatives for higher education and K-12 communities.
- 4. Install additional hardware infrastructure to support increased CMS load.
- 5. Explore Vista single sign-on via Luminus campus portal for SLCC, CEU, Snow, and Dixie.
- 6. Redesign and publish a Vista-admin support webpage and knowledge base.
- 7. Explore WIMBA & IVC interoperability.
- 8. Explore phone bridge options for K12 WIMBA.
- 9. Install and train key UEN staff on TeleScope integration broker, to allow integration with the PBS EDCAR media-sharing project in addition to other online libraries.
- 10. Expand the Utah DMS assets through collaboration with PBS and other stations/services
- 11. Develop North Plains customization for permanent links to individual assets.
- 12. Implement adding closed captions into video encoding workflow.
- 13. Define UEN's role and support for USU's Open Courseware initiative.
- 14. Plan and design DMS / my.uen integration.
- 15. Pursue DMS integration with Course Management Service in partnership with North Plains, Equella, and the University of Utah.
- 16. Complete Preschool Pioneer evaluation in coordination with Advisory Group.

#### C. Increase awareness and use of enterprise services. Provide service reports.

- 1. Support the Pioneer Library advocates, promotion, and outreach.
- 2. Continue developing Vista report generation capabilities for hosted institutions.
- 3. Pilot test, design, and deliver tools at open house events in coordination with institutions.
- 4. Redesign and maintain a DMS service basic information webpage.
- 5. Publish RSS announcements of features and new content available via the DMS.
- 6. Provide and publish quarterly reports on DMS access and media download activity.
- Design and publish training materials for DMS, including video tutorials to assist users in troubleshooting common problems.
- 8. Support WIMBA promotion and outreach, K-20.

# D. With USHE CIO's and the TCC, investigate other services or IT functions that might be centrally hosted by UEN.

- 1. Explore feasibility of centrally hosting campus SIS such as Banner.
- 2. Research consortium licensing for tools to create standards-based portable learning content.
- 3. Foster collaboration and information sharing with other state networks around the topic of centrally hosted enterprise services.
- 4. Explore single sign-on technologies and standards and what roles UEN could serve in identity management.
- 5. Assist USHE CIOs and TCC to evaluate centrally managed disaster recovery services and the role UEN should perform in providing that service.

#### IV. DISTANCE EDUCATION

Deliver Core Distance Education classes and programs offered by public and higher education that use real time and on demand, reliable, high quality interactive video conferencing technologies.

To achieve this goal, UEN will pursue the following objectives:

#### A. Support and maintain core IVC systems.

- Continue to improve technical support and efficiency in the Technical Services Support Center (formerly VOC).
- 2. Maintain certifications, validations, inventory and equipment documentation.
- 3. Provide training and applications for delivery services and content services.
- 4. Update and maintain web pages for IVC (Interactive Video Conferencing).
- 5. Upgrade site equipment when applicable to comply with current standards.
- 6. Continue support of the course scheduling process.
- 7. Obtain IVC server provider status.
- Continue to support UEN Distance Education Catalog.

#### B. Research, design, and implement new Distance Education integrated resources.

- 1. Continue to evaluate new and emerging video technologies.
- 2. Enable extension of both IVC and desktop conferencing solutions.
- 3. Continue efforts to integrate IVC and WIMBA resources.
- 4. Integrate IVC and Course Management System, eMedia, eCollege Media, and other application technologies.
- 5. Provide engineering resources and lab for testing new technologies.
- 6. Evaluate interactive media for integration into Distance Education.

#### C. Revise IVC policies, develop operational practices and procedures to reflect new technical systems.

- 1. Increase internal communication, project management, and coordination.
- 2. Create UEN Steering Committee advisory group to consider and review relevant issues.
- 3. Develop and support IVC purchasing/vendor/stakeholder project agreements.
- 4. Continue assignment of billing and facilitation responsibilities to ready individual institutions.
- 5. Create internal UEN Distance Education Management team.

#### D. Promote new and existing UEN IVC services through outreach, special events and media.

- 1. Increase school district Technical Coordinators' and educators' understanding of Interactive Video Conferencing Services to improve satisfaction with use of system.
- 2. Continue transition from current funding practices for IVC equipment and circuits to site based funding mechanisms.
- 3. Provide and distribute new applications for HDTV.

- 4. Promote IVC and increase advocacy for IVC on Steering Committee and elsewhere across state.
- 5. Participate in faculty support open houses highlighting IVC services and tools on campuses.

#### V. BROADCAST SERVICES

Educate, engage and enrich the lives of Utah citizens through broadcast programs and services with UEN-TV.

To achieve this goal, UEN will pursue the following objectives:

#### A. Continue programming and outreach for education stakeholder groups.

- 1. Program blocks and interstitials for targeted areas.
- 2. Conduct research into the use of the channel by teachers, students and general viewers.
- 3. Support high need academic programming and outreach (adult basic ed., job training, child care, educational technology, teacher licensing, STEM).
- 4. Enable and encourage locally produced programs, particularly by students and teachers.
- 5. Develop and support more statewide partnership-specific programs.

#### B. Implement new projects to support educational programming and outreach.

- 1. Utilize broadcast airwaves to promote UEN services and increase channel promotion.
- 2. Coordinate screening events with institutions, departments, and community partners; report on the results of these events.

#### C. Support broadcast engineering infrastructure.

- 1. Expand digital translator system.
- 2. Move toward tapeless MassTech system.
- 3. Implement Next Generation Interconnection System (NGIS).

#### D. Manage station administrative projects; document and report on results.

- 1. Coordinate with national programming consortia and affinity groups.
- 2. Continue cable relations for carriage of UEN-TV digital channels.
- 3. Manage grant projects (Internet Safety, STEM, Financial Literacy, etc.).

#### VI. PROFESSIONAL DEVELOPMENT

Provide cost effective development opportunities to improve the quality of K-20.

To achieve this goal, UEN will pursue the following objectives:

#### A. Assess and respond to changing technology professional development needs.

- 1. Teach classes and report participation statistics.
- 2. Develop new courses.

- 3. Increase video tutorials, increase visibility of staff my.uen web pages for course resources.
- 4. Survey participants on 6-12 month outcomes of their course participation.
- 5. Re-design professional development home page for more participant input and interactivity.

#### B. Implement non-traditional methods for providing technology integration professional development.

- 1. Develop use of WIMBA to manage online courses more effectively.
- 2. Incorporate "office hours" using WIMBA.
- 3. Increase interactivity in online courses without increasing facilitator time commitment.
- 4. Create new online course model for instruction about Wimba targeted for higher education.

#### C. Maximize use of current communication channels and develop additional audiences.

- 1. Develop "viral marketing" using 2.0 tools.
- 2. Develop tech minute videos and other content for broadcast and web sharing.
- 3. Explore course rating and recommendation system for incorporation in PDMS.
- 4. Explore working with public libraries to inform more educators about professional development.

#### VII. GOVERNANCE AND ACCOUNTABILITY

Coordinate educational technology governance across the state, and be accountable to our stakeholders.

To achieve this goal, UEN will pursue the following objectives:

#### A. Coordinate UEN Steering Committee, subcommittee, advisory committee and constituent meetings.

- 1. Involve broad representation when making network/system decisions.
- 2. Regularly update the UEN policy manual.

# B. Request new funding for UEN priorities and maximize state funds through external grants, E-Rate, and federal stimulus monies.

- 1. Develop briefing papers and documents in support of funding requests.
- 2. Seek grant and foundation funds; coordinate these projects with stakeholders as appropriate.
- 3. Coordinate E-Rate process with SLD, K-12 Districts, Libraries, Head Start, and telecom providers.
- 4. Facilitate creation of Higher Education purchasing group libraries, IT, education, E-Media.
- 5. Seek out and foster readimade funding partnerships.
- 6. Match federal stimulus funding opportunities to local needs.

# C. Track UEN performance, projects, and services and communicate with stakeholders concerning our progress.

1. Provide monthly and quarterly performance dashboards to Steering Committee and to public and higher education regional, district, and campus level entities.

- 2. Report monthly statistics on use of UEN WAN, Web Services, IVC, Enterprise Applications, Professional Development.
- 3. Assure the UEN Service Level and Connection Agreements with stakeholder groups are in place and current.
- 4. Highlight UEN services and tools at faculty open houses on campuses.
- 5. Focus on promoting UEN successes with Steering Committee and with education and community partners.

#### D. Increase internal communication, project management and coordination of services.

- 1. Hold bi-monthly managers meetings, weekly executive meetings, and project team meetings to improve cross-department communication.
- 2. Build skills and knowledge of UEN staff through professional development, industry publications, conferences, workshops and membership in professional organizations.

# STATUS REPORT ON FEDERAL GRANT PROPOSALS - DISCUSSION

## Issue

UEN staff will brief the Steering Committee on our initial activities associated with the major BTOP award made by NTIA and several other pending grant proposals.

# **Background**

In February 2010, UEN received a \$13.5 million award from NTIA for our Round 1 BTOP infrastructure application, Utah Anchors: A Community Broadband Project. It will serve over 130 community anchor sites. It will extend fiber-based 1000MB broadband to 62 Elementary Schools, 100MB broadband to 26 Charter Schools and 35 Public Libraries, and broadband Ethernet (both fiber and copper) to 7 central Head Start programs. Improvements will occur in 59 communities in rural and urban areas of Utah. A total of 35,160 households and 309 businesses will be adjacent to locations where the broadband infrastructure is being installed.

Building on that successful application, We have also applied for two additional BTOP awards in Round 2 Infrastructure and Round 2 Sustainable Broadband Adoption.

The BTOP Round 2 infrastructure project would provide broadband connectivity to an additional 140 community anchor locations, including elementary and charter schools, public libraries, and Head Start programs, community and applied technical colleges, and fiber rings benefiting the University of Utah and Utah State University.

The BTOP Round 2 Sustainable Broadband project requests \$2.5 million and would address critical gaps that have prevented Utah's most vulnerable learners from using the Internet for education, career preparation, and personal growth.

A primary objective of the BTOP Round 2 infrastructure project is to provide broadband services to low-income and minority populations at fifty-five Utah Head Start programs, including five on the Ute Indian Reservation in Duchesne County. Additionally, the demand for public Internet usage has grown substantially in Utah's public libraries, which have inadequate bandwidth to meet the demand. The Utah Anchors project will increase public access and availability of broadband at local libraries within each city and county of this project. In support of the Utah public libraries in our application, the Bill and Melinda Gates Foundation awarded UEN and the Utah State Libraries (USL) a BTOP Matching Challenge Grant in the amount of \$660,000. UEN and USL submitted a grant application to the Foundation in September 2009, and this past December, Utah was only one of 15 states to receive such an award.

UEN, the University of Utah, and Utah State University have worked together to develop a comprehensive middle mile project with private carriers to build fiber rings in downtown Salt Lake City (to the new University of Utah off-data campus Center) and north to Utah State University. These fiber ring projects establish public/private partnerships that enable connecting 12 major community anchor sites, incumbent telecom and long-haul telecommunications providers, and national education and research networks such as Internet 2 and National Lamba Rail (NLR). The proposed University of Utah/UEN Salt Lake Metro Ring will connect the main University campus to its new off-campus data center in downtown Salt Lake City, support research networking and connect key community anchors including Salt Lake City Main Library, Salt Lake Community College, and the Salt Palace. The ring will connect and make accessible to all participants essentially all the major commercial telecom vendors operating in the region: Level 3, including Internet2 and National Lambda Rail (NLR), Owest, Western FiberNet (at the Kearns Building, which is the downtown Salt Lake City interconnect location for Utah's independent telecom companies), American Fiber Systems, Syringa, UTOPIA, and others. The Salt Lake City Library will receive significant benefits from the Salt Lake Metro Ring. This facility provides Internet services to over 200,000 patrons annually and Internet service demands continue to grow at a steady pace. For five years, the Salt Lake City Library has used unlicensed radios to connect to the UEN backbone, because fiber services have been cost-prohibitive. By connecting to the Salt Lake Metro Ring, the library will dramatically expand bandwidth at a reasonable cost in order to meet the increasing network requirements of library staff and patrons.

UEN created a consortium with several school districts and regional service centers to address the need for additional video equipment as a new Mathematics Teaching Endorsement is rolled out to rural elementary teachers. UEN will be working with these partners to submit a U.S. Department of Education Ready to Teach proposal. UEN is also assisting several rural educational service centers with applications to the federal Rural Utilities Service program for additional IVC video equipment.

Finally, UEN is partnering with the Utah Climate Center, Clark Planetarium, University of Utah, Weber State University, 4H through USU Extension, Utah State University, Brigham Young University, and the Utah Museum of Natural History to apply for a Teaching Climate Change grant from NASA.

UEN will continue to keep Committee members aware of these opportunities as funding decisions are made at the Federal level.

# Recommendation

This is an information item and requires no further action by the committee.

**TAB** 18

# FCC NATIONAL BROADBAND PLAN - DISCUSSION

## Issue

The FCC National Broadband Plan is intended to ensure that America has a world-leading broadband infrastructure, that our citizens have access to the opportunities provided by that broadband infrastructure, and recommendations to maximize broadband use to address national priorities.

# **Background**

On March 16, 2010, the National Broadband Planning Task Force presented the National Broadband Plan to Congress and the public.

"The mission of this plan is to create a high-performance America—a more productive, creative, efficient America in which affordable broadband is available everywhere and everyone has the means and skills to use valuable broadband applications."

A good overview of the National Broadband Plan (NBP) may be obtained by reading the plan's five page Executive Summary. The complete plan may be downloaded or viewed online at *www.broadband.gov*. While we can already claim substantial progress toward some goals (1 gigabit per second service to anchor institutions for instance), much work remains to be done in Utah to realize broadband ubiquity in all communities and therefore universal access to all of UEN's public resources as well as state and local governments' online resources. Taken from the plan:

Part I of this plan makes recommendations to ensure that America has a world-leading broadband ecosystem for both fixed and mobile service. It discusses recommendations to maximize innovation, investment and consumer welfare, primarily through competition. It then recommends more efficient allocation and management of assets government controls or influences, such as spectrum, poles and rights-of-way, to maximize private sector investment and facilitate competition.

Part II makes recommendations to promote inclusion—to ensure that all Americans have access to the opportunities broadband can provide. These include reforming the Universal Service Fund and inter-carrier compensation. It also makes recommendations to promote broadband affordability, adoption and digital literacy.

Part III makes recommendations to maximize the use of broadband to address national priorities. This includes reforming laws, policies and incentives to maximize the benefits of broadband in areas where government plays a significant role. This part makes recommendations to unleash innovation in health care, energy, education, government performance, civic engagement, job training, economic development and public safety.

For many years now, while pursuing the E-Rate funds to which our state is entitled, UEN has been actively providing input, advice, and occasionally guidance during numerous rulemaking efforts by the FCC aimed at improving or updating the E-Rate program. The recent FCC Public Notice released November 3, 2009, (DA 09-2376, seeking comment on various issues related to broadband access in education, as part of development of a national broadband plan), led to comments submitted by (among thousands of others) the State E-Rate Coordinators Alliance (SECA), UEN, and our national partners at I2, NLR, etc. – collectively the U.S. R & E Networks. In many ways, the National Broadband Plan acknowledges our collective recommendations with regard to E-Rate and other Universal Service Fund (USF) reform suggestions. Obviously the National Broadband Plan (NBP) goes far beyond USF reforms alone. The plan acknowledges on a national level that broadband is a transformative technological engine for our era. The following is taken directly from the plan.

#### Broadband as a Transformative General Purpose Technology

Technological progress drives long-term economic growth. As economists Timothy Bresnahan and Manuel Trajtenberg explained in a 1995 paper, "Whole eras of technical progress and economic growth appear to be driven by a few key technologies, which we call General Purpose Technologies (GPTs). The steam engine and the electric motor may have played such a role in the past, whereas semiconductors and computers may be doing as much in our era. GPTs are characterized by pervasiveness (they are used as inputs by many downstream sectors), inherent potential for technical improvements, and innovational complementarities, meaning that the productivity of R&D in downstream sectors increases as a consequence of innovation in the GPT. Thus, as GPTs improve they spread throughout the economy, bringing about generalized productivity gains." The report continued, "As use of the GPT grows, its effects become significant at the aggregate level, thus affecting overall growth." The Internet has the characteristics of a GPT. Businesses of all kinds and sizes use it to improve their processes, from procurement to supply chain management, market research to sales and asset management to customer support. It has driven performance improvements; for example, the average U.S. broadband connection speed has grown more than 20% per year for the last several years. These improvements are driving technology and business innovation in several other sectors, including health care, education, energy, online commerce, and the government.

For the UEN Steering Committee, what follows are some of the highlights from the plan that have the most significant implications for UEN and our stakeholders.

The plan establishes an ambitious rulemaking timeline for the FCC, the first stage of which has already been published (included as Attachment A within this tab).

Approximately 70% of the recommendations in the plan pertain to FCC regulatory reform. The remainder will require congressional, state, and local government actions. The most significant opportunity during this rulemaking period appears to lie with the University of Utah and Utah Education Network's potential role as a Unified Community Anchor Network (UCAN). This recommendation, taken from the U.S. R & E Networks comments, if applied as stated in the plan, could lead to designation of UEN/UofU as a "UCAN coordinator", the role of which aligns extraordinarily well with UEN's and the University of Utah's current missions. This has the potential of creating another source of on-going funding for our cause and further increases our leadership role in broadband deployment, research, and advocacy.

The notion of UCAN designation for the U/UEN has been further reinforced with the most recent BTOP Round 2 application submitted to the Dept. of Commerce by Internet2 and NLR. Support letters for this application were provided by UEN. Additionally, Steering Committe member Dr. Steven Corbato (U-OIT) was a member of the Technical Design Review Team for UCAN as described in the US R&E networks recommendations to the Broadband Planning Task Force.

One potential additional funding source is identified in the plan as the Connect America Fund (CAF). One of the USF reforms suggested in the plan addresses the now archaic and overly costly High Cost Mechanism by creating new, broadband focused Universal Service Support Mechanisms. The CAF, a mobility fund, and others to be fleshed out during the rulemaking process will likely replace the existing High Cost Fund, currently at around \$4.4 billion annually.

E-Rate recommendations provide more positive potential with swift action more likely on some. Based upon demand and the number of unfunded Priority Two E-Rate requests, the cap may be nearly doubled. Additionally, it is recommended that the cap be indexed to inflation to keep it current and the FCC is directed to find ways to fund more Priority Two E-Rate requests (Internal Connections & Basic Maintenance) and distribute it more evenly. Currently Priority Two requests are unfunded for all but the most needy.

The most significant challenges will come from the extensive wireless spectrum reallocations called for in the plan, new fee structures, sharing requirements, and the commensurate oversight and enforcement activity that follows. The legacy broadcast spectrum will likely be the source for most of the additional 500 MHz of spectrum that the plan calls for by 2012. Even within the existing DTV spectrum, it is recommended that multiple broadcast licensees "volunteer" to share their stations bandwidth. Spectrum reallocations, ever increasing spectrum and bandwidth efficiency requirements, and spectrum auctions with licensees held to minimum service requirements will create an extremely dynamic regulatory environment for some time to come. The opportunity in all this comes from the potential creation of a trust fund established with proceeds from spectrum sales of "donated" spectrum from commercial and public broadcasters. This trust fund may be used to fund public digital media creation, ingestion, and archiving, another function of UEN aligning well with the plan's recommendations.

Comments submitted by SECA and UEN were acknowledged in the NBP in at least two recommendations. This citation was made in the NBP with regard to Expanding Online Learning Systems – "Utah's state government said that it "lack[s] affordable digital asset management systems that will be able to take full advantage of public repositories of information such as that made available from the PBS Digital Learning Library and the vast treasure trove of online content yet to be harvested from other public repositories like the National Archives and the Smithsonian Institution."

In a PBS response to the release of the NBP they stated, "The transformational change in public media that PBS and its member stations have begun will require significant resources. As the plan recognizes, the continued development of a robust digital public media ecosystem would be enhanced by the creation of sustainable funding sources dedicated to this important work.

PBS commends the FCC's hard work on this plan, and we look forward to working with the FCC and Congress as we move forward."

With such an ambitious rulemaking period ahead and the potential for significant change to numerous laws, rules, and regulations governing our collective mission, we cannot stand idly by during this period. We hope to coordinate efforts among OIT, University Research, Internet2, National Lambda Rail, UEN, and our stakeholders during the various rulemaking processes to ensure a smooth and fruitful transition to the world envisioned in the NBP. Our state should take great pride in the acknowledgement that our state's organizational model for UEN is in many ways now being replicated (or suggested) across the nation. Our success and leadership in network planning, deployment, management, and oversight sets a standard to which all other state networks should aspire.

## Recommendation

This is an information item, and no action is required by the Steering Committee. We encourage the members to become more familiar with the NBP, and it will be the subject of further discussion at our strategic planning retreat and at future meetings.

# TAB 18 ATTACHMENT A

# Proposed 2010 Key Broadband Action Agenda Items

http://www.broadband.gov/plan/broadband-action-agenda-items.html National Broadband Plan - Proposed 2010 Key Broadband Action Agenda Items FE COMMUNICATION **BROADBAND.GOV** ABOUT BROADBAND EVENTS INITIATIVES GET INFORMED EN ESPAÑOL NATIONAL BROADBAND PLAN CONNECTING AMERICA Proposed 2010 Key Broadband Action Agenda Items\* 📤 Consumer & Governmental Affairs Bureau Public Safety & Homeland Security Bureau Office of Engineering and Technology 1 International Bureau Wireless Telecommunications Bureau Office of Strategic Planning & Policy 🎽 Media Bureau Wireline Competition Bureau Analysis Quarter 2 Quarter 3 Quarter 4 **National Purposes** Mobile Roaming Order and AWS Bands Analysis 🧏 🌣 AWS Potential Order 🧏 🌣 FNPRM M D Block Order/NPRM 🧏 💓 Secondary Markets Internal Review 🟋 Multi-Quarter Project Launch Strategic Spectrum Plan Spectrum Sharing/Wireless Spectrum Dashboard 2.0 🖫 🌣 🗪 🛎 📵 and Triennial Assessment Backhaul NRPM/NOI 🧏 🌣 Promote World-Leading Mobile w 🜣 🖻 Broadband Infrastructure and 2.3 GHz WCS/SDARS Order Oppor. Use of Spectrum NPRM Recommendation re: Contiguous Innovation ☆ 🖞 🕀 🌣 🖫 🖨 📺 🗬 **Unlicensed Spectrum Proceeding ☆** 🖫 TV White Spaces Opinion & Experimental Licensing NPRM 🌣 Order 🌣 💢 🦞 MSS NPRM 🌣 🕮 🦞 Broadcast TV Spectrum Innovation NPRM 🌣 苗 🧏 USF Reform NPRM and NOI ♥ 🏋 🔲 Mobility Fund NPRM 🦞 ♥ Multi-Quarter Project Lifeline/Low-Income Joint Board Hearing Aid Compat. Second Spectrum on Tribal Lands NPRM Report & Order/FNPRM Referral Order 🖖 🧏 W 🌣 🛦 E-Rate FY2011 NPRM \* E-Rate FY2011 Order 🦊 Multi-Quarter Project Accelerate Universal Broadband **USF Merger Commitments Order** Rural Health Care Reform 🖖 USF Transformation NPRM 🖖 🏋 Access and Adoption Lifeline Pilot Roundtable 🏺 🧏 Lifeline Flexibility NPRM 븆 🧏 Intercarrier Compensation NPRM FCC/FDA Workshop and PN on Establish Accessibility and USF Contributions NPRM 💆 🧏 Converged Devices 🌣 Innovation Forum 📤 🦊 🦹

	Launch FCC Office of Native American Affairs	Real-Time Text NOI	Real-Time Text NPRM
	FCC-Native Nations Broadband Task Force		Internet Video and Device Accessibility NOI 📤 🦊 🦞 🗂
	Mobile Wireless Competition Report 🖫 📴	☐ Interconnection Clarification Order ♥	Small Business Broadband & Wholesale Comp. NOI
	Pole Attachments Order and FNPRM	Rights-of-Way Task Force 📤 🏓	
	Small Business Broadband & Wholesale Comp. PN	Special Access NPRM W W W W Multi-Quarter Project	
Foster Competition and Maximize	Special Access Workshop 🐓 🖫  Multi-Quarter Project		Smart Video Devices NPRM
Consumer Benefits Across the Broadband Ecosystem	CableCARD NPRM 🌣	Transparency & Disclosure NPRM   Multi-Quarter Project	
	Smart Video Devices NOI 🍎 🌣		Broadband Data NPRM
	Launch Tech. Adv. Grp. on Speed		
	Launch Speed and Performance  Measurement Program  Measurement Program		
	Public Safety Roaming & Priority Access NPRM T  Multi-Quarter Project		☐ NG 911 NOI 🗪 🌣 💆
	D Block Order/NPRM Multi-Quarter Project		Back-Up Power NOI 🗪 🌣 🦞
Advance Robust and Secure Public Safety Communications Networks	700 MHz Waiver Petitions W M  Multi-Quarter Project		Serv. Outage & Homeland Security NPRM 💜 🌣 🦞 🤀 📵
,	ERIC Public Safety Interoperability Order	700 MHz Public Safety Order/FNPRM W 🔭 🔅	
	Cybersecurity Certification NOI	Location Accuracy FNPRM	
	Survivability NOI 🗪 🌣 🦞 😃		
	Serv. Outage & Homeland Security Workshop		

<sup>\*</sup> This document reflects only proposed FCC actions, not those of other government agencies, and is not exhaustive of all 2010 FCC actions. The location and timing of actions in this document represents a series of targets that may be adjusted to respond to changing conditions as appropriate; items that span quarters are expected to occur late in the earlier quarter, or early in the later quarter. Does not include initiatives discussed in Agenda from Q1 2010 and earlier (E-rate Community Use Order, Rural Health Care Pilot Program Extension Order, Spectrum Dashboard Beta, and Tower Siting Declaratory Ruling).

#### COMMON FCC REGULATORY PROCEEDINGS

The Agenda discusses a number of common FCC regulatory proceedings, including:

- Public Notice (PN): A PN is issued by the Commission or by one of its Bureaus and Offices to notify the public of an action taken or of the
  occurrence of an event, or to seek public comment on a matter the Commission is considering.
- Notice of Inquiry (NOI): A NOI is issued by the Commission to ask the public for information on, or to generate ideas about, a topic. A NOI is
  often followed by a Notice of Proposed Rulemaking.
- Notice of Proposed Rulemaking (NPRM): A NPRM is issued when the Commission is considering a change to its rules and regulations. The NPRM
  asks the public to comment on whether they agree with the proposed changes or to propose alternatives.
- Further Notice of Proposed Rulemaking (FNPRM): A FNPRM is issued by the Commission to seek further comment from the public when new issues arise in a proceeding after an NPRM has been issued, or the Commission desires additional public comment on issues raised in an NPRM.
- · Order: An order is a decision of the Commission or one of its Bureaus and Offices.
- Report and Order (R&O): A R&O is a decision issued by the Commission to conclude a rulemaking proceeding. R&Os may adopt new rules, amend existing rules, or announce that rules will remain unchanged.

TAB 19

# NATIONAL EDUCATION TECHNOLOGY PLAN - DISCUSSION

#### Issue

On March 5, 2010 the U.S. Department of Education issued a draft version of the National Educational Technology Plan (NETP). Input on the NETP may be provided through May 5, 2010 from individuals or from UEN Steering Committee. Committee members should also consider how the plan relates to UEN Strategic Planning and funding.

# **Background**

For the first time, the National Educational Technology Plan is available online in draft form for public comment, and introduced by video from Secretary Duncan. Users can comment on each individual page, and download the full plan in myriad formats at the following site:

www.ed.gov/technology/netp-2010

The plan is driven by two education goals of the Obama administration:

- We will raise the proportion of college graduates from where it now stands (39%) so that 60% of our population holds a 2-year or 4-year degree.
- We will close the achievement gap so that all students regardless of race, income, or neighborhood – graduate from high school ready to succeed in college and careers.

The NETP presents five goals with recommendations for states, districts, the federal government, and other stakeholders in our education system that address learning, assessment, teaching, infrastructure, and productivity. The plan also identifies far-reaching grand challenge problems that should be funded and coordinated at a national level.

## Recommendation

A summary of the NETP recommendations is included under this tab. This is an information item presented for Steering Committee member consideration through the UEN Strategic Planning process.

# TAB 19 ATTACHMENT A NATIONAL EDUCATION TECHNOLOGY PLAN

(DRAFT March 5, 2010) www.ed.gov/technology/netp-2010

#### 1.0 Learning

All learners will have engaging and empowering learning experiences both in and outside of school that prepare them to be active, creative, knowledgeable, and ethical participants in our globally networked society. To meet this goal, we recommend the following actions:

- 1.1 Revise, create, and adopt standards and learning objectives for all content areas that reflect 21st century expertise and the power of technology to improve learning.
- 1.2 Develop and adopt learning resources that use technology to embody design principles from the learning sciences.
- 1.3 Develop and adopt learning resources that exploit the flexibility and power of technology to reach all learners anytime and anywhere.
- 1.4 Use advances in the learning sciences and technology to enhance STEM (science, technology, engineering, and mathematics) learning and develop, adopt, and evaluate new methodologies with the potential to enable all learners to excel in STEM.

#### 2.0 Assessment

Our education system at all levels will leverage the power of technology to measure what matters and use assessment data for continuous improvement. To meet this goal, we recommend the following actions:

- 2.1 Design, develop, and adopt assessments that give students, educators, and other stakeholders timely and actionable feedback about student learning to improve achievement and instructional practices.
- 2.2 Build the capacity of educators and educational institutions to use technology to improve assessment materials and processes for both formative and summative uses.
- 2.3 Conduct research and development that explore how gaming technology, simulations, collaboration environments, and virtual worlds can be used in assessments to engage and motivate learners and to assess complex skills and performances embedded in standards.
- 2.4 Revise practices, policies, and regulations to ensure privacy and information protection while enabling a model of assessment that includes ongoing student learning data gathering and sharing for continuous improvement.

#### 3.0 Teaching

Professional educators will be supported individually and in teams by technology that connects them to data, content, resources, expertise, and learning experiences that enable and inspire more effective teaching for all learners. To meet this goal, we recommend the following actions:

- 3.1 Design, develop, and adopt technology-based content, resources, and online learning communities that create opportunities for educators to collaborate for more effective teaching, inspire and attract new people into the profession, and encourage our best educators to continue teaching.
- 3.2 Provide pre-service and in-service educators with preparation and professional learning experiences powered by technology that close the gap between students' and educators' fluencies with technology and promote and enable technology use in ways that improve learning, assessment, and instructional practices.
- 3.3 Transform the preparation and professional learning of educators and education leaders by leveraging technology to create career-long personal learning networks within and across schools, pre-service preparation and in-service educational institutions, and professional organizations.
- 3.4 Use technology to provide access to the most effective teaching and learning resources, especially where they are not otherwise available, and to provide more options for all learners at all levels.
- 3.5 Develop a teaching force skilled in online instruction.

#### 4.0 Infrastructure

All students and educators will have access to a comprehensive infrastructure for learning when and where they need it. To meet this goal, we recommend the following actions:

- 4.1 Ensure that students and educators have adequate broadband access to the Internet and adequate wireless connectivity both inside and outside school.
- 4.2 Ensure that every student and educator has at least one Internet access device and software and resources for research, communication, multimedia content creation, and collaboration for use in and out of school.
- 4.3 Leverage open educational resources to promote innovative and creative opportunities for all learners and accelerate the development and adoption of new open technology-based learning tools and courses.
- 4.4 Build state and local education agency capacity for evolving an infrastructure for learning.
- 4.5 Support "meaningful use" of educational and information technology in states and districts by establishing definitions, goals, and metrics.

#### 5.0 Productivity

Our education system at all levels will redesign processes and structures to take advantage of the power of technology to improve learning outcomes while making more efficient use of time, money, and staff. To meet this goal, we recommend the following actions:

5.1 Develop and adopt a common definition of productivity in education and more relevant and meaningful measures of learning outcomes and costs.

- 5.2 Improve policies and use technology to manage costs including those for procurement.
- 5.3 Fund the development and use of interoperability standards for content, student learning data, and financial data to enable collecting, sharing, and analyzing data to improve decision-making at all levels of our education system.
- 5.4 Rethink basic assumptions in our education system that inhibit leveraging technology to improve learning, starting with our current practice of organizing student and educator learning around seat time instead of the demonstration of competencies.
- 5.5 Design, implement, and evaluate technology-powered programs and interventions to ensure that students progress through our K-16 education system and emerge prepared for the workplace and citizenship.

# **The Grand Challenges**

We urge the national research center to focus on grand challenge problems in education research and development. "Grand challenge problems" are important problems that require bringing together a community of scientists and researchers to work toward their solution.

American computer science was advanced by a grand challenge problems strategy when its research community articulated a set of science and social problems whose solutions required a thousand-fold increase in the power and speed of supercomputers and their supporting networks, storage systems, and software. Since that time, grand challenge problems have been used to catalyze advances in genetics (the Human Genome Project), environmental science, and world health.

To qualify as grand challenge problems suitable for this organization, research problems should be:

- Understandable and significant, with a clearly stated compelling case for contributing to long-term benefits for society
- Challenging, timely, and achievable with concerted, coordinated efforts
- Clearly useful in terms of impact and scale, if solved, with long-term benefits for many people and international in scope
- Measurable and incremental, with interim milestones that produce useful benefits as they are reached.

This kind of grand challenge problem strategy has driven innovation and knowledge building in science, engineering, and mathematics, The time is right to undertake it to improve our education system (Pea, 2007).

The following grand challenge problems illustrate the kinds of ambitious R&D efforts this organization could lead. Notably, although each of these problems is a grand challenge in its own right, they all combine to form the ultimate grand challenge problem in education: establishing an integrated, end-to-end real-time system for managing learning outcomes and costs across our entire education system at all levels.

1.0 Design and validate an integrated system that provides real-time access to learning experiences tuned to the levels of difficulty and assistance that optimizes learning for all learners, and that incorporates self-improving features that enable it to become increasingly effective through interaction with learners.

- 2.0 Design and validate an integrated system for designing and implementing valid, reliable, and cost-effective assessments of complex aspects of 21st century expertise and competencies across academic disciplines.
- 3.0 Design and validate an integrated approach for capturing, aggregating, mining, and sharing content, student learning, and financial data cost-effectively for multiple purposes across many learning platforms and data systems in near real time.
- 4.0 Identify and validate design principles for efficient and effective online learning systems and combined online and offline learning systems that produce content expertise and competencies equal to or better than those produced by the best conventional instruction in half the time at half the cost.

# Course Management Service Timeline - Discussion

# Issue

UEN proposes a process for shifting its Course Management Service platform. This process is presented in draft form for discussion. Additional input will be sought in the coming months from each Institution and through the UEN Steering Committee planning retreat. Action on this item is slated for UEN's June Steering Committee meeting.

# **Background**

UEN holds and has negotiated the software subscription contract for the Blackboard Vista online course management suite for the last six years and currently hosts all of the Higher Education Institutions except for Weber State University and Southern Utah University. The current contract with Blackboard expires on June 30, 2012. Additionally, Blackboard has determined that the Vista product line will be "end of life" as of December 2012. UEN and all USHE institutions relying on this product must shift to another CMS/LMS platform before June 30, 2012.

## **CMS/LMS Options**

UEN in coordination with each institution has been actively pursuing alternatives to the current Blackboard Vista product. Several pilot projects are now in place and/or planned. Most of the pilots are of a small nature, either hosted at the individual institutions or offered through Software as a Service (SaaS) providers hoping to win over those that pilot their solution. Some pilots have centered on Moodle, an Open Source CMS/LMS initiative. Additionally, UEN will host a pilot of Moodle for Weber State University during the Summer Semester 2010. UEN currently hosts production instances of Moodle for The Utah Electronic High School (EHS) and Blackboard Learn version 9 for Tooele Applied Technology College.

The Weber State Summer Moodle Pilot will be hosted by UEN in its EBC Data Center. The pilot will consist of approximately 20 courses and 400 students, with various Moodle plug-ins. The pilot will proceed throughout the summer and will be evaluated at the end of the semester.

The EHS Moodle instance will continue to be hosted for the foreseeable future, and UEN continually maintains this installation. UEN has gained many insights into the Moodle platform by hosting Moodle for EHS.

Since July 2009, UEN has hosted the Tooele Applied Technology College on the latest Blackboard Learn product. This also has given UEN many opportunities to explore

and develop experience with this Blackboard product, that will continue to be their flagship offering beyond 2012.

Additionally UEN continues to host development installations of Blackboard Learn and Moodle and would likely work out ways to give institutions opportunities to test and look at the feature sets of other CMS/LMS products, open source or commercial.

#### **USHE and UEN CMS Product Decision Plan**

We have proposed the following plan and timeline to come to a consensus on which CMS/LMS system/s will replace the Blackboard Vista platform.

Proposed LMS Evaluation Timeline Activities:

- Spring Semester 2010
  - ♦ Collaborate with all institutions on LMS requirements, each institution decide and submit their 10 most important requirements.
  - ♦ UEN will compile the results and publish a summary of the most important requirements. These will become the basis for RFP requirements.
  - ♦ Finalize the timeline and milestones for the evaluation process for Summer Semester 2010.

#### Summer Semester 2010

- Research and Evaluate commercial LMS vendors and open source solutions to determine how closely these meet established requirements.
  - Arrange for demos and Q&A sessions with commercial vendors.
  - Arrange and/or provide demos for Open Source solutions and Q&A with possible commercial entities that provide professional support for Open Source solutions.
- ♦ Interview representatives of other higher education institutions that have adopted any of the alternate platforms we end up considering as replacement candidates.
- ♦ Experiment with systems in a sandbox, including content migration from Vista courses.
- ♦ Develop RFP and Evaluation criteria throughout the Summer Semester to be ready by the end of August 2010.
- ♦ Determine whether any evaluated solutions meet our established requirements. If necessary, finalize the RFP for replacement CMS/LMS product. If either Open Source solution or Blackboard Learn are the preferred solution, begin renewal process for Blackboard, or establish Open Source support plan.

#### • Fall Semester 2010

- ♦ Most likely outcome will be issuing an RFP for the Blackboard Vista replacement. RFP would be issued at the beginning of Fall Semester 2010.
- ♦ RFP decision would be concluded by end of December 2010.
- ♦ Plan for implementation/migration process and set projects in motion for each institution.

- Spring Semester 2011
  - ♦ Prepare new LMS platform and begin course migration and faculty trainings.
- Summer Semester 2011
  - First courses offered in the new system. Continue course migration and faculty training.
- Fall Semester 2011
  - Continue course migration and faculty training.
- Spring Semester 2012
  - ♦ Continue course migration and faculty training.
- Summer Semester 2012
  - ♦ All courses in new system. Retire Blackboard (WebCT) Vista on July 1, 2012.

## **Blackboard Vista Administrators Meetings**

The Blackboard Vista Administrators group has monthly meetings held via Wimba. This group last met on April 1st, 2010 and this timeline was presented to them. We also organized a smaller group with representation from each of the higher education institutions and have been working together with them to define CMS/LMS requirements and a process for evaluating possible solutions.

#### **Summary**

UEN now actively hosts three different CMS systems (Moodle, Blackboard 9, Blackboard Vista). By doing so, we are gaining expertise in how each functions, and better understanding on how to scale these systems. Additionally, pilot projects will provide important requirements for the future replacement of Blackboard Vista.

There is much work ahead for UEN and Institutional support staff to determine and implement a replacement platform. Following the above outlined plan will ensure that UEN will be able to continue supporting the CMS service well into the future.

# Recommendation

This is an information item presented in draft form for consideration by committee members and stakeholder groups. Action on this item is expected in the June UEN Steering Committee Meeting, after further discussion during our strategic planning retreat in May.

# NATIONAL AWARD AND PUBLICITY FOR UEN - DISCUSSION

# Issue

At an award ceremony with the Council of Chief State School Officers and the Corporation for Public Broadcasting, UEN received a "My Source Community Impact Award for Education" for its my.source campaign promoting NetSafe Utah. In addition UEN has been featured in news reports by KSL-TV, *The Salt Lake Tribune* and the nationally-distributed public broadcasting trade publication *Current*. The coverage concerned the \$13.4 million BTOP grant, UEN-TV Cheese Science programming and West High School's UEN-facilitated participation in the PBS NewsHour.

# **Background**

The My Source Community Impact Awards for Education were created by CPB to recognize local public television stations for outstanding service to students, teachers, parents and caregivers in their communities.

UEN's my.source campaign for NetSafe Utah prompted this accolade from CPB president and CEO Pat Harrison, "Stations across the country are using technology in creative and innovative ways to deliver educational tools and resources that are making a real difference to teachers, parents and children. Public media is the definitive education partner for a new generation of learners and CPB congratulates UEN for its outstanding contribution to the state of Utah."

"NetSafe Utah is a great example of a strong partnership and resources that positively impact Utah communities," said UEN Instructional Services Director Laura Hunter, who accepted the award on behalf of the Utah consortium. UEN Public Information sent out a statewide news release on the award which is included in this tab.

In addition to the national CPB award, UEN has received favorable publicity for its recent federal broadband grant on KSL-TV news and in the national trade publication *Current*.

UEN participated in a joint news conference with Congressman Jim Matheson which highlighted the \$13.4 million dollar grant UEN received in round one of its BTOP grant application. The congressman and UEN Executive Director Mike Petersen hosted a demonstration of the enhanced remote learning opportunities gained from building out the broadband capability from UEN's high speed backbone to schools and communities. KSL-TV reported on the demonstration. Included under this tab are an online version of the story, a link to the video and copies of the *Current* article which include a front page color photo of UEN staffers Mike Petersen and Colleen Nordberg.

Also attached are screen captures from The Salt Lake Tribune articles on Cheese Science and West High School.

# Recommendation

Committee members are encouraged to promote the award-winning and publicitygenerating services of UEN in their local districts and institutions. No further action is required at this time.

# TAB 21 ATTACHMENT A NATIONAL AWARD AND PUBLICITY FOR UEN

My Source CPB Award News Release

#### UEN News Release: For Immediate Release, 3/20/2010

For more information, contact: Rich Finlinson, <u>rfin@uen.org</u>, 801-585-7271 or Laura Hunter, <u>lhunter@uen.org</u>, 801-581-5852

# Utah Education Network's Internet Safety Project Receives National Award from the Corporation for Public Broadcasting

(Washington, DC) – The Utah Education Network (UEN) received a *My Source* Education Innovation Award from the Corporation for Public Broadcasting (CPB) this weekend in Washington, D.C. The national award is for UEN's NetSafe Utah project which brings Internet safety resources to schools and communities throughout the state.

"NetSafe Utah is a great example of a strong partnership and resources that positively impact Utah communities," said UEN Instructional Services Director Laura Hunter, who accepted the award on behalf of the Utah consortium. Pat Harrison, the president and CEO of the Corporation for Public Broadcasting, presented the award to Hunter at the Council of Chief State School Officers/Public Media Executive Summit. The award includes a \$3,000 grant to further support the project which has an extensive online component at <a href="https://www.netsafeutah.org">www.netsafeutah.org</a>.

"Stations across the country are using technology in creative and innovative ways to deliver educational tools and resources that are making a real difference to teachers, parents and children," explained Harrison. "Public media is the definitive education partner for a new generation of learners and CPB congratulates UEN for its outstanding contribution to the state of Utah." The *My Source* Education Innovation Awards recognize and showcase how public broadcasting stations such as UEN-TV use pioneering approaches and emerging digital technologies to serve the educational needs of their communities on-air, online and in the classroom.

NetSafe Utah is supported by the Utah State Legislature through a grant from the Commission on Criminal and Juvenile Justice Services and is a collaboration of many Utah educational and community partners.

CPB is a private, nonprofit corporation created by Congress in 1967 and is steward of the federal government's investment in public broadcasting. It helps support the operations of more than 1,100 locally-owned and -operated public television and radio stations nationwide, and is the largest single source of funding for research, technology, and program development for public radio, television and related online services.

The Utah Education Network operates UEN-TV (KUEN) on behalf of the Utah State Board of Regents. UEN is a consortium of education partners, including the Utah System of Higher Education and its ten universities and colleges; the Utah State Office of Education, local school districts and the Utah Electronic High School and; the state's Library system. In addition to broadcasting, UEN designs, manages and operates the state education wide area network.



Caption: President Pat Harrison, CEO of the Corporation for Public Broadcasting, presents a *My Source* award to Laura Hunter, Director of Instructional Services at the Utah Education Network. The national award recognizes UEN's NetSafe Utah project which brings Internet safety resources to schools and communities throughout the state of Utah. High res .jpg file of the above photo available here

 $\underline{http://my.uen.org/documentmanager/downloadfile?userid=59337\&documentid=6219248}$ 



## PBS at West High School - The Salt Lake Tribune

more savvy consumers of news and mentoring the next

national stories, cultivating

student perspectives on

"I want to do this in real

something that I'm very

0

0:00 / 4:51

life," Purk said. "It is passionate about."

generation of journalists.



clerk attacked by pit dispute

SLC cops nab womi

bull in 'spice' sale

• SLC police: Store

MORE UTAH NEWS HEADLINES

departing justice, awaits Obama's next choice Man connected to murder case charged with kidnapping

Hatch salutes

in growing homicide

NewsHour Extra Web site and

could be plugged during a

NewsHour broadcast.

have any money to buy new Wright said, in a year when

video gear. The students'

videos are posted on the

he's been told he does not

equipment -- a "boon,"

PBS NewsHour, Clapman said, is interested in gathering

documentary or dramatic filmmaking, but she's also open to broadcast journalism. She has been offered a debate scholarship to the University of Southern California, and she's crossing her fingers that she gets accepted into the film program. She hopes her work producing videos for TV West and an advanced film Purk leans toward class will give her an edge.

High School student Max Wilson tapes... (Steve Griffin / The Salt Tribune)

talk of basebail games and junior prom.

They're producing videos about the U.S. Supreme Court and global calmate change for national viewers.

Newsflour Extra, an online educational branch of the Washington, D.C.-based Newsflour with Jim Lehrer, has launched a Student

Reporting Lab with a \$200,000 grant from the Corporation for Public

was behind calls

Tip leads to planned

Inmate's lawyers try to stop execution

Ex-legislator says he

ands on top -- he's

Fired Stockton

"If I get into the film school it's definitely because of this," says Purk, 17. "I could not have done anything I've accomplished [in film] without this class and without the equipment."

Sail Lake City's West High is one of six high schools across the county chosen to participate this great. The other schools are in Pennsylvania, Connectiout, Texas, containing and Washington, D.C. year.

To see more videos from the Student Reporting Lab Go to » http://tinyurl.com/y8ohbdy

mom falsely accused in St. George photo case

Utah artifact defendant loses round

Preparing for Utah's

Art on the move at

Sides gear up for

city's north rim Man abused 2 boys,

solice say

accident slowing I-215

sing St. George Vevada search for

Corrected reprint from **Current**, the newspaper about public media, March 22, 2010 | Current.org

# Utah's UEN earns a tweak of broadband stimulation

robably the only public TV operator to receive a Recovery Act economic stimulus grant for broadband is Utah Education Network, based at the University of Utah in Salt Lake City.

UEN not only operates KUEN, an instructional TV station that is sister of KUED, the university's pubTV station. UEN also operates an expanding statewide broadband net for public schools, public universities, libraries and the state government.

The network is about to get upgraded with that \$13.4 million grant awarded by the National Telecommunications and Information Administration. The state will put up the required match of \$3.5 million over three years.

As early as the late 1970s the university was looking at microwave relays and other ways to bring teachers and students together over great distances, says Mike Petersen, UEN executive director.

The grant will upgrade wiring for 88 public and charter schools, 35 public libraries and seven Head Start centers.

About half of the elementary schools with the slowest connections will be upgraded from copper wiring to fiber operating at a 100 to 1,000 megabits per second.

For a high school or small state college, speeds of 1 gbps may be enough, Petersen says. A big university needs the data capacity of 10 gbps.

Fast Internet connections are a 21st-century

necessity, not a media luxury, Petersen says. When the state legislature mandated frequent testing of students to guide teachers, paper tests could not be graded quickly enough, and neither could online testing, because T1 phone lines couldn't handle the data traffic for a school.

"What's been happening is that the schools spread the testing days out further, and they test fewer students," says Laura Hunter, UEN director of instructional services.

Rather than laying its own cable, UEN leases capacity enough for the long-term future in circuits operated by Qwest and other carriers. Branches of UEN's network become "the anchor tenant" in a fiber cable, something like the anchor tenant in a shopping mall. Its lease payments cover enough of the costs that wiring homes and businesses becomes feasible, Petersen says. This helps bring faster Internet connections to homes and businesses in towns around the state's less-populated areas.

UEN also offers services to go with the bandwidth, including two-way telecourses for high schools and colleges and other online teaching materials. Most library patrons in the state consult periodicals and reference works in an online library maintained by UEN.

UEN also advises schools and libraries how to get aid from the federal E-rate subsidies that can reduce their payments for online service.

**ABOUT PUBLIC TELEVISION AND RADIO** March 22, 2010

# Trust fund to 'fortify' pubmedia

FCC's Broadband Plan proposes major giveback of TV spectrum

he FCC gives several nods to public broadcasting in its ambitious new National Broadband Plan, but makes

is elf fino its next incarnation of "public me da" to fulfill its potential for public survice. Several of the plans 17 recommenda-tions could dureful safe to publicating. The ECD is advising Congress to:

In Give bond-acters to incentives to n Give bond-acters to mentive so to surrender some of their spectrum for auc-tions. Use speceeds from public broadcast-ers' channels to endow a trust final "to fortify public media accors putforms"; in Americal downward in the case of confine and broadcast distribution and archiving of content, giving "ressonable noncom-mercial downward may girls for this content to the American people", and in Increase federal funding to public media. "As broadband adoption and uti-lization continue to grow," the Broadband Plan notes, "public media vall require greater and more flexible funding to sup-port new digital platforms." Plucksafing now receives less than 20 percent of its nev-ment from Congress, the plan says, but it decent suggest how much more is needed where the funds would comer from. The much handicipated document of research is online at broadband gor/plan. It asserts that this speed furter connectivi-ity for every American is now a presessity;



10 Utah: Broadband grant went to a pubcaster deep into fiber

16 Joaquin Alvarado: What's missing from the FCC's plan

"Like electricity a century ago, broadband is a foundation for economic growth, job creation, global competitiveness and a best rew woy Off leef? Teseks to extend high-capeary connection, at a rate of 100 Megabits per second funds) to 100 million homes by 2020. Right now the majority of the country's Internet subscribers have service of three to 10 mills According to the FCC, 59 million Americans, about a third of the

population, do not have broadband service at home, and it smillson hare roseces to broadband, and the millson the plan will have blacktism appeal, it requires action by congress, which has knight across the sist for months over what rights Americans andain in health care got the week in Congress, the condition on the plan begin this week in Congress, freeday, March 23, in the Serante

the Wilth through Lay and Stephen Odomis ACC rise the Wilth Home Lay are brighted to Odomis According to the Control of the Co Commerce, Serices and Impages in the Ground of the manners, Serices and Impages in the Ground of the Minds of the Series of the Minds of the Mind

spectrum a station or region gives up, the more cash for them. It's hard to say how big the fund might grow. Octobran Meters the plan is the first fed-eral report to specified by address the growing tifformation teosystem however applia free -dan. The report recognises the wake of public conditioning as secretal component. Fut also wants for a current incarate. In a current incarate wants from two beyond, as current incarate wants from two beyond as a current incarate. It is the companient, Gordman and Vivols to public in questions, Gordman and Vivols to public in questions, Gordman and Will be public in questions, and the control of the companient of the public media in their attainments welvern— by apprinciate for a trainments welvern— when the proper as it was released March 17. To Vew appreciate for a trainment welvern— of public media in proper and the companient of the continued development of a robust digital

to that mings give that public stations free-ing spectrum would host about channels and transmission failures. These stations would transmission failures. These stations would their primary streams under their on ad-al literars. In addition, these stations would call their stations the season of the stations would remain direct PCC licenses as they are body, and would commerce receipt all the benefits of body a direct PCC licenses, such as must. public media ecosyonem would be enhanced by the century of statuth of statuthness for indicate and an area of the statuthness and are evolving from broaden esentic organizations to andro community unstitutions that create and distribute digital content across all platforms.

Advocacy for broadband came back into fash-ion at the FCC with the return of a Democrat to

icipien in this action, first, it could provide diplicate services to the time of the could be a country of the could be a country of the cou

in the form the branches of the pulse and the pulse by the pulse branches of the pulse branches of the pulse branches br

# Righting copyrights

On Jan. 4 the FCC requested comments from WGBH to the document's copyright recommendations. The big public TVY production house has frequently spoken for pubrasers, charging that copyright laws are outdated.

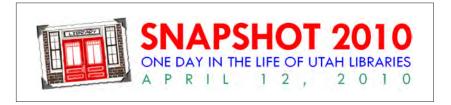


# SNAPSHOT 2010 REPORT - DISCUSSION

# Issue

On April 12, 2010 the entire library community across Utah, including Academic, Public, Bookmobiles, School, and Special Libraries conducted a one-day project, "Snapshot 2010: One Day in the Life of Utah Libraries." This joint statewide effort was designed to highlight the important service libraries play in our community. Donna Jones Morris will provide an update on the Snapshot 2010 results.

# **Background**



Snapshot 2010: One Day in the Life of Utah Libraries was designed to provide a simple, effective method to capture all they ways that libraries offer vital services every single day. Participants from libraries throughout Utah documented April 12, 2010 with statistics, stories, and photographs for this statewide effort.

Snapshot 2010 was a joint statewide effort of the Utah Library Association, Utah Educational Library Media Association, Utah Academic Library Consortium and the Utah State Library Division. UEN promoted the event via email and website.

The project was also innovative in that participants contributed using Web 2.0 tools, PBWorks, Flickr, and online templates. More information is available at the following sites:

Snapshot 2010: http://utahlibrariessnapshot.pbworks.com/

FlickrSet: http://www.flickr.com/photos/utahstatelibrary/sets/72157623325220907/

Results Page (available after April 24, 2010): http://utahlibrariessnapshot.pbworks. com/Results

# Recommendation

This is an information item and requires no further action by the committee.

# NETWORK PERFORMANCE AND IVC SERVICES METRICS AND UPDATES - DISCUSSION

# Issue

The UEN Network Operations Center continues to monitor and manage the health and utilization of the network. This report provides the latest statistics regarding network performance. Additionally, UEN Technical Services and the UtahSAINT continue to focus on security related training and awareness. IVC Services Metrics were collected from our UEN Interactive Video Conferencing application, Tandberg Management System (TMS). Network performance and IVC metrics cover the period of spring semester from January 1 through March 31st.

# **Background**

#### Network Performance Metrics for Jan 1 through Mar 31

#### **Network Backbone Availability**

Month to date	100%
Quarter to date	99.986%
Year to date	99.986%

Availability Notes: Outages contributing to network performance metrics continue to occur where UEN has no significant redundancy.

#### **Network Backbone Utilization**

North Ring	53%
Central Ring	16%
South Ring	34%

Utilization Notes: We continue to see a growing trend on the North Ring of 2-3% per quarter. Additional capacity for this section of the network will become important in the near future. This increase has occurred even though more efficient traffic routing has been achieved as a result of the recent 3B Project.

## **IVC Metrics Summary**

The following metrics are provided by the Tandberg Management Suite (TMS) for UEN IVC system. Events on the UEN IVC from January spring semester time frame through March 31st were offered conducted as follows:

- 1,011 Public Education (High School credit only)
- 2,526 Concurrent Enrollment
- 3,327 Higher Education
- 345 Administrative meetings supporting various academic and government programs

There were also 5,482 stakeholder initiated events. These classes and meetings combined for a total of 12,691 recurrences over the IVC system during this three month period.

UEN Technical Services Quick Ticket metrics for the month of January through March 31st are as follows:

• 2,504 different and unique tickets were opened

♦ 2,079 – TSSC Tier 1

♦ 50 – Logistics

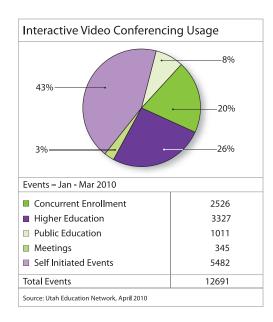
♦ 44 – TSSC Tier 2

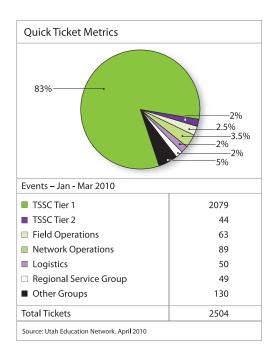
♦ 49 – Regional Service Group

♦ 63 – Field Operations

♦ 130 – Other Groups

♦ 89 – Network Operations





# Recommendation

This is an information item and requires no further action by the committee.

# STEERING COMMITTEE MEETING MINUTES

# UTAH EDUCATION NETWORK STEERING COMMITTEE February 26, 2010 – 9:00 a.m.

**Members Present:** Debbie Rakhsha for Kenning Arlitsch, Clark Baron, Steve Corbató, Rick Gaisford, Stephen Hess, M. K. Jeppesen, Gary Koeven, Eric Mantz, Gail Niklason, Mike Petersen, Glen Taylor, Robert Wagner for Ronda Menlove, Ray Walker, Gary Wixom.

Others Present: Scott Allen, Barry Bryson, Lisa Cohne for Laura Hunter, David Devey, Jeff Egly, Rich Finlinson, Boyd Garriott, Jeff Grandia, Cyd Grua, Troy Jessup, Lisa Kuhn, Don Mahaffey, Steve Mecham, Joni Robertson, Dennis Sampson, Larry Smith, Jim Stewart, Scott Wygle.

#### **Welcome and Introductions**

Gary Wixom welcomed everyone to the February Steering Committee meeting. Glen Taylor and Gary Koeven, and Scott Wygle joined remotely.

#### **Committee of the Whole**

#### Tab 3 - UEN Legislative Update

Mike Petersen updated the Steering Committee on the legislative session and UEN's budget. Mike reported that over half of the UEN budget is committed to long term circuit and Internet contracts, and proposed cuts would require significant staff reductions and hinder our ability to provide the services we perform for public and higher education. Summaries of the UEN budget proposals for FY 2010 and FY 2011 can be found on Tab 3, page 1.

The Legislature adopted SB3 that is a supplemental appropriation that reduces the UEN budget by \$231,600. This cut will be covered through a cost reduction in personnel from the recent reduction of one FTE employee plus the collection of additional E-Rate funds. The Legislature also passed SB1 that appropriates 98% of UEN's adjusted base budget for FY 2011. This represents a cut in State funds of \$348,200. He also said that even though revised revenue estimates for FY 2011 are down \$49.6 million, the \$3.5

million matching requirement for the \$13.4 million NTIA BTOP grand is a compelling reason to minimize budget reductions proposed for FY 2011.

# <u>Tab 4 - Desktop Video-Tandberg MOVI Pricing Structure</u>

Jeff Egly reported to the Steering Committee that Tandberg MOVI Desktop Conferencing had been chosen as UEN's solution for reliable and supportable desktop video conferencing applications. For a complete definition of what MOVI is and what it can do, please refer to Tab 4, page 1. Jeff detailed the pricing structure of a MOVI seat which would run \$450 and a yearly maintenance charge of \$100 which also includes upgrades, A motion was made and seconded to approve the pricing structure of \$450 per seat and \$100 for upgrades and yearly maintenance fees. THE **MOTION CARRIED.** 

#### <u>Tab 5 – Commercial VoIP Task Force</u>

Ray Walker reported that the VoIP Task Force has been organized and has met twice. Input from the members of the task force has identified five VoIP service offerings:

Internet based port 80 VoIP Intra-Organization VoIP

Commercial PBX Toll bypass

**SIP Trunking** 

Of these five services the first three are already being used widely by UEN stakeholders. It is the current view of UEN staff that UEN should not provide Commercial PBX services on the UEN network. Commercial PBX services present their own unique set of challenges. See detailed list of the concerns and issues please at Tab 5, page 1. For VoIP service definitions please see Tab, Attachment A. UEN will continue to work with the Commercial VoIP Task Force to identify and resolve issues and make recommendations to the Steering Committee.

#### Tab 6 – SURIN Update

Jim Stewart reported that the SURIN Board has met twice in the last few months. Two action items were developed from these meetings. First, UEN recently signed the American Registry for Internet Numbering (ARIN) Legacy Registry Service Agreement (Legacy RSA). The second item addressed by the SURIN Board deals with IPv6. Many SURIN members are anxious to implement IPv6. The exhaustion of IPv4 address space continues to be of concern to the community since the address space is being rapidly consumed. The SURIN Board passed a resolution to encourage every SURIN member to make all public facing servers reachable with IPv6. To review the ARIN Legacy RSA agreement, please see Tab 6, Attachment A.

#### Tab 7 – E-Rate Funding

Lisa Kuhn reported that the E-Rate filing window closed on Friday, February 19. She summarized that UEN filed 44 applications for approximately \$18 million net E-Rate dollars for Fiscal Year 2011. Once again, UEN provided support for district, library, and Head Start filings and when requested to do so, filed all applications for some of those entities. The increase in the state discount this year is up from 68% to 70%. To see the master entity list showing the school districts' discount rates, please see Tab 7, Attachment A.

#### <u>Tab 8 – NTIA BTOP Update</u>

Mike Petersen thanked Dennis Sampson for all of his hard work on the NTIA BTOP grant application and recognized the efforts of many other UEN staff and telco employees. Dennis Sampson reported that UEN had submitted two applications to the NTIA for the BTOP grant. It is part of the Federal American Recovery and Reinvestment Act (ARRA) Broadband stimulus legislation passed by Congress in February 2009. Requested NTIA funds in our proposal came to \$13.4 million. UEN is currently awaiting final funding notification from the NTIA.

#### <u>Tab 9 – Cheese Science Project Update</u>

Lisa Cohne reported on behalf of Laura Hunter that UEN is continuing STEM education efforts as reported in the last Steering Committee meeting. The newest partnership that has been launched is "Cheese Science". Cheese Science builds on the same premise that helped UEN SciFi Friday receive a national community impact award---using popular culture as a bridge to science. Starting in October 2009, the advisory board was assembled; more than \$10,000 was raised for the video production of "Farm to Fork". More than 15 local scientists were scheduled to appear on camera answering questions regarding cheese and science. This program was launched publicly with UEN hosting a Cheese Party at which more than 80 community members enjoyed locally produced (and donated) cheeses while viewing the first episodes of Cheese Slices and Cheese Cubed. From the positive feedback that has been received to date, UEN expects interest to rise as new episodes are broadcast. To read the Cheese Science Project Press Release and the Farm to Fork Video Contest Announcement please see Tab 9, Attachment A.

#### <u>Tab 10 – my.uen Web Statistics</u>

Lisa Cohne reported that my.uen continues to experience significant growth. Plans have been implemented to increase the document storage by 1 gigabyte for Premium users.

#### <u>Tab 11 – UEN Network Performance and IVC Metrics Report</u>

Troy Jessup shared that UEN Network Performance and the IVC Metrics are still doing remarkably well. They are still over 99.9%, but not at the "five" 9's that they strive for.

#### <u>Tab 12 – Steering Committee Meeting Minutes</u>

A motion was made and seconded to approve the minutes as written. THE MOTION CARRIED.

# Tab 13 - Other

The next Steering Committee meeting will be held on April 23, 2010 at 9:00 a.m. at the Dolores Doré Eccles Broadcast Center.

COMMITTEE OF THE WHOLE

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# New UEN Course Management Interface - Discussion

# Issue

Educators who register for classes offered by UEN's Professional Development group can now manage their courses via the new *My UEN Courses* interface.

# **Background**

The UEN Professional Development group has been using an online catalog and registration system for several years. This system allows educators to search and register for courses and lets the UEN Instructors view class rosters, take attendance and record credit information.

Although the system worked well, it did not provide a way for educators to manage their courses themselves. If they wanted to cancel a registration or be added to a course waiting list, the only option was to call UEN Professional Development.

Now, however, educators can log into my.uen and access the new *My UEN Courses*. This interface allows educators to:

- View a list of the courses they are registered for
- Confirm or cancel a course registration
- Request to be added to a course waiting list
- View their position on the course waiting list
- Review the type of credit they signed up for and the date it was submitted

This new interface should empower the educator and eliminate a lot of the administrative phone calls that the Professional Development group receives.

The new *My UEN Courses* interface requires that all educators who want to register for a UEN course have a my.uen account. Creating an account is free and simple to do, but some educators may be challenged because they do not remember their my.uen login and the email address associated to their record is outdated.

The system has built-in steps to help educators through the process, and the UEN support contact email phone number is on every screen, so we don't anticipate much inconvenience.

In the next couple of weeks, before the new Summer schedule is posted on May 1st, UEN will be using a variety of tools to communicate this change to educators.

#### Screen Capture



# Recommendation

Although this is mainly an informational item, we would like Instructional Service Subcommittee members' help in communicating this change.

# UEN COMMUNITY OUTREACH AND PARTNERSHIPS - DISCUSSION

# Issue

UEN has been actively working with community groups to promote specific services. Lisa Cohne will provide an update regarding Preschool Pioneer, UEN-TV Film Screenings and IVC Field Trips.

# **Background**

Partnerships with community members are a key element of UEN service, particularly for UEN-TV. In the last two months, UEN has participated in several community partnership events.

#### **Preschool Pioneer**

Preschool Pioneer continues to grow, with over 9,000 visitors in February and 10,000 visitors in March. The site includes comprehensive resources that follow Utah's school readiness guidelines. The Preschool Pioneer Advisory Committee has been instrumental in helping to promote the site and resources, and contribute content to enrich the site.

UEN participated in "Week of the Young Child" April 11 – April 17 by presenting Preschool Pioneer Library at Discovery Gateway.

## **UEN-TV Film Screenings**

UEN continues to host community film screenings with partners:

"Wipe Out" is a production of the National Film Board of Canada and focuses on brain injury prevention for high risk sports, such as Snowboarding and Skateboarding. The film features several nationally ranked athletes in these sports, and is targeted for teen and college-age men, who are the highest risk for injury in these areas.

Sandy City Parks and Recreation is partnering with UEN to host a film screening of "Wipe Out" on May 10, 2010, with the possibility of a monthly outreach program partnership over the summer. In addition, Ski Utah, The Brain Injury Association of Utah, Spock Skate Camps and others are partnering with UEN for screenings of "Wipe Out" in the fall in both Salt Lake and Ogden.

UEN has also licensed "In Search of Memory." This film tells the story of Nobel Prize winning neuroscientist Dr. Eric Kandel who is attributed with developing scientific understanding of the brain's role in recording and preserving memory.

Congregation Kol Ami hosted a screening of "In Search of Memory" followed by discussion with Dr. Ray Kessner, U of U Psychology Cognitive Neurology Lab on April 21, 2010. In addition, the University of Utah Psychology Department and UEN will partner to screen, "In Search of Memory" at the Psychology Department Film Series this fall.

"Hollywood Librarian" an award winning documentary that illustrates the important role libraries play in civil society was screened at the Utah Educational Library Media Association conference in March. An additional screening will be held at the Utah Library Association conference May 13, and the program will air on UEN-TV Saturday, May 15 at 8:00 p.m. and again on May 20 at midnight.

## **Interactive Video Conferencing Field Trips**

Partnerships to provide virtual field trips using UEN's IVC system have been active this spring. The National Parks Service is broadcasting an Electronic Fieldtrip live from Bryce Canyon on May 18. UEN and KUED will also carry the trip broadcasting live May 18, 11 a.m. MST. *brycanyoneft.org* 

In May, both Canyons and Jordan School Districts will be using UEN IVC for distance learning experiences in elementary schools.

# Recommendation

Subcommittee members are encouraged to participate in these events, promote them with constituent groups, and contact Lisa for similar events to be scheduled in your area.

# WIMBA UPGRADES - DISCUSSION

# Issue

Wimba is releasing some upgrades to the Wimba Collaboration Suite that will be rolled out to UEN Wimba Classroom servers sometime during the months of May through June 2010.

# **Background**

## **Wimba Classroom Update**

It has been almost a year since the last update to Wimba Classroom 6.0 in August 2009. Wimba recently announced a new update to Wimba Classroom at the annual Wimba Connect 2010 Conference. The update will be available later this month and will be rolled out to hosted clients during the months of May and June 2010. This Wimba update is not as major as the 6.0 release last August, but will include several new features.

#### **Video Improvements**

Probably the most noticeable improvements in Wimba Classroom will be with video. The maximum video window size will be increased from 320x240 pixels to 640x480 pixels and the maximum video bandwidth will be increased to 512 kbps. If your computer will support the video input device, then Wimba will also be able to support it. This will allow for more specialized cameras to be used with Wimba, such as microscope cameras and other video input devices that Wimba doesn't currently support.

#### **Security Improvements**

The update to Wimba Classroom will support SSL, so all content, including usernames and passwords will be encrypted. This also means that users will no longer be prompted about going to an insecure site when connecting to a Wimba Classroom from a Blackboard Course.

#### **Archive Reminder**

The Wimba Classroom upgrade will include an archive reminder in the presenter's panel to remind presenters to archive the session if the archive has not been started.

#### **Lobby Link**

The lobby link in Wimba Classroom can be turned off or customized to link to any web page that you can customize to display whatever message you desire.

#### **Hand Raise Chime**

This will be an audio alert to the presenter to indicate that one of the participants has raised a hand. Currently there is a visual display in the presenter's panel that indicates the order that participants have raised hands, but no audio alert.

#### **Guest Access Link**

Instructors enabling guest access to a Wimba Classroom from a Blackboard course currently receive a very long URL to give to participants, such as http:// uenlive.wimba.com/launcher.cgi?room=\_uen\_s\_1447945111041\_633573&X-Wimba-ContextType=SECTION&X-Wimba-InstitutionLCID=43486021&X- $Wimba-IntegrationType=classroom\&X-Wimba-RoomId=\_$ uen s 1447945111041 633573&X-Wimba-LCID=1447945111041&X-Wimba-Account = uen & X-Wimba-Platform Type = bbvista & X-Wimba-Platform*IntegrationVersion=4.0.0-1.* 

This URL will be much shorter in the upgrade to Wimba Classroom.

#### **Pronto Upgrades**

Although we don't have many institutions using Wimba Pronto, it (Pronto Basic) is included with our license and there are some improvements coming soon to Pronto as well. The improvements include tools for administrators, instructors, and students to invite other users to download and use Pronto, and to integrate with any system (Angel, Sakai, Student Information System, etc.) via flat file synchronization.

## **Wimba Voice Upgrades**

Wimba has collaborated with Blackboard to introduce some new functionality in Blackboard 9.1. Wimba Voice Anywhere (available in Blackboard 9.1) allows instructors and students to place Wimba Voice content anywhere within the Blackboard visual editor. This means that voice content can be inserted into assessment questions, student responses, or anywhere else that the visual content editor is used in Blackboard 9.1. The update also includes improvements in copying Wimba Voice content from courses in Blackboard.

#### **LiveX**

Wimba's longer-term product development (2011 and beyond) is focused on a new platform called LiveX, which is designed to be comprehensive, easy, and use proven technology. Wimba began building Pronto on this platform, and future product development will be built upon this foundation. A beta of LiveX is planned for the first quarter of 2011.

# Recommendation

This is an information item and requires no further action by the committee.

# PIONEER LIBRARY BUDGET AND PLANS - DISCUSSION

# Issue

Overall the Pioneer Library budget will remain the same in the coming fiscal year, with the exception of a reduction of \$5,000 for EBSCO's AutoRepair database. This reduction will cut the cost for each Pioneer partner of the consortium (i.e., K-12 School Libraries, Public Libraries, and Academic Libraries) by \$1,666.

# **Background**

The current EBSCO contract will expire in FY 2012, so during the coming year, the Pioneer Library Consortium will release a Request for Proposals (RFP) to review online library offerings from EBSCO and similar products. This will allow for the consortium to pool and then to leverage their funding to purchase the best resources at the best price for all of the Pioneer Library's constituents. The RFP is anticipated to be released in January of 2011.

Additionally, Pioneer Library committee members have been researching a new product that the Academic Libraries are using, Primo from Ex Libris. UEN is considering leveraging this license to increase federated search capabilities for the K-12 Pioneer Library.

Pioneer Library provides electronic information resources to the students, teachers and citizens of Utah. Created in 1996 through the combined efforts of Utah's public libraries, higher and public education, state government and the Utah Education Network, Pioneer Library provides access to resources that would otherwise be too expensive for each partner to offer.

When Pioneer started the partners collaborated to create a gateway website *pioneerlibrary.org* that each could promote jointly; however, each partner has also created a website that specifically meets the needs of their respective patrons or constituents (i.e., K-12, College/University, and local communities).

# Recommendation

This is an information item and requires no further action by the committee.

# NETSAFE UTAH UPDATE - DISCUSSION

# Issue

The NetSafe Project began in 2006. Since then, UEN has partnered with the following organizations:

- Utah State Office of Education
- · University of Utah, College of Education
- Internet Crimes Against Children Task Force
- NetSmartz
- National Center for Missing and Exploited Children
- Utah Council For Crime Prevention
- KUED Channel 7
- · Children's Service Society of Utah, Grand-families Program
- Salt Lake Interfaith Roundtable
- · Utah PTA
- K-12 Technology Coordinating Council
- · Northeast Utah Educational Services
- Central Utah Educational Services
- · Southeast Educational Service Center
- Southwest Educational Development Center
- · Utah State Library Division
- · Head Start Centers
- · NutIntuit Studio

#### Accomplishments:

- Distributed 5,000 Parent Packets
- Distributed the "Leader Toolkits" to Utah's 40 School Districts
- Produced and aired a one-hour program, "NetSafe Utah: Cybersafe Your Teens" on KUED-TV Channel 7 and UEN-TV Channel 9

- Produced and aired six short video clips targeted for parents and grandparents:
  - ♦ Cell Phones & Photos (5:16)
  - ♦ Parents, Kids, & Technology (7:50)
  - ♦ Grooming Gracie (5:08
  - ♦ Online Chat Begins at Home (8:25)
  - ♦ Kids Know Technology, Now It's Your Turn (6:44)
  - ♦ It's Just a Game: Or is it? (8:48)
- Produced and aired fourteen Public Service Announcements targeted for parents and grandparents:
  - ♦ Cyber-bully (:40)
  - ♦ Agree on Rules (:41)
  - ♦ Communication (:30)
  - ♦ Internet Safety (:30)
  - ♦ Where to Go for Help (:25)
  - ♦ Social Networking Sites (:40)
  - ♦ Avoid Isolation (:25)
  - ♦ Keep Identity Private (:30)
  - Implement Filters (:45)
  - ♦ Kids vs Adults Usage of the Internet (45)
  - Staying Connected with Your Teen (:50)
  - ♦ Cell Phones & Photos (:45)
  - ♦ Online Predators (:45)
  - Online Gaming (1:00)
- Creation of a website at http://www.netsafeutah.org
- Provided website widget which is a graphic of the NetSafe Utah logo which can be used as a link to the website (1,000+ school websites)
- · Advertisements in the Diversity Times and SL Weekly Newspaper
- · NetSafe Utah Posters for conferences
- · Research and Publication
  - Book was published under the title Adolescent Online Social Communication and Behavior: Relationship Formation on the Internet, edited by Robert Zheng, The Uniersity of Utah, USA; Jason Burrow-Sanchez, University of Utah, USA; and Clifford J. Drew, University of Utah, USA.
  - Journal article: Burrow-Sanchez, J., Call, M., Zheng, R., & Clifford, D. (in press). Are youth at risk for Internet predators?: What counselors need to know. *Journal of Counseling and Development*.
- Produced videos for K-12:
  - ♦ K-3 Grades

- What is the Internet?
- What is Personal Information?
- Tell an Adult
- Be Kind Online

#### ♦ 4-6 Grades

- What is personal information?
- Talk to an Adult You Trust
- Online "Friends"
- Cyber-bullies are No Fun
- Posting Pictures Online

#### ♦ 7-12 Grades

- Cyber-bullying
- Stick with What's Real
- Adults Can Help You
- Posting a Picture
- Collaborated with health teachers to create Lesson Plans

#### ♦ 7-8 Grades

- Cyber-bullying: What To Do
- Appropriate Use of Technology
- Cell Phone Safety
- Online Risks of Sharing your Personal Information
- Potential Internet Addictions
- Violence in the Media

# ♦ 9-12 Grades

- Being Good Digital Citizens with Today's Technologies
- Being Good Digital Citizens Project
- Cyber-Bullying Tee-Shirt Activity
- Internet Behaviors and their Consequences
- The Dangers of and Ways to be Safer Online
- Conducted other statewide outreach activities
- Aired videos on UEN-TV (80,000 households)
- ♦ Distributed Electronic UEN Newsletter (33,000 educators)
- ♦ Offered Online Classes (120 educators have completed)
- ♦ Provided Fourteen Regional Trainers located statewide for local presentations at K-12 schools statewide:
  - NUES, CUES, SEDC, SESC, UEN-PD
- Presented sessions at and/or had booth space at local conferences:

- UEA (Utah Education Association)
- UCET (Utah Coalition for Educational Technology)
- UELMA (Utah Educational Library Media Association)
- UACCE (Utah Association for Adult, Community, & Continuing Education
- URSA (Utah Rural Schools Association)
- In process to distribute 390,000 NetSafe lenticular cards to all 4-12 grade students statewide.
- The "My Source Education Innovation Awards" were created by the Corporation for Public Broadcasting (CPB) to give well-deserved recognition to stations for educational impact in their communities. UEN/KUEN in Salt Lake City received a "My Source Education Innovation Award" for the NetSafe Utah project.

# **Background**

Utah ranks number one in the nation for home computer use, with computers in more than 74 percent of households. Utah ranks 5th highest in the nation for Internet use in the home and has the highest population of children in the nation. These statistics point to the need for Utah parents to make sure their children are safely using the Internet.

The NetSafe Utah project is funded in part by the Utah State Legislature through a grant from the Utah Commission on Criminal and Juvenile Justice.

# Recommendation

This is an information item and requires no further action by the committee.