

Utah Education Network Steering Committee

August 21, 2009

**UTAH EDUCATION NETWORK
STEERING COMMITTEE**

A G E N D A

AUGUST 21, 2009

9:00 a.m.-
11:00 a.m.

Committee of the Whole / Business Meeting

Welcome and Introductions

Tab 14	
FY 2010 STRATEGIC PLAN - ACTION	1
ATTACHMENT A - FY 2010 STRATEGIC PLAN.	3
Tab 15	
NEW STEERING COMMITTEE MEMBERS - ACTION	15
Tab 16	
STATUS REPORT ON FEDERAL GRANT APPLICATIONS - DISCUSSION	17
Tab 17	
NETWORK CONNECTION AGREEMENTS - DISCUSSION	21
Tab 18	
VISTA COURSE MANAGEMENT SERVICE UPDATE - DISCUSSION	23
Tab 19	
STEERING COMMITTEE MEETING MINUTES.	29
Tab 20	
OTHER	33

U P C O M I N G M E E T I N G S

Steering Committee Meeting - October 23, 2009, 9:00 a.m.

Instructional Services Subcommittee Meeting - October 23, 2009, 11:00 a.m.

Technical Services Subcommittee Meeting - October 23, 2009, 11:00 a.m.

Please place these materials in your Steering Committee Binder.

FY 2010 STRATEGIC PLAN - ACTION

Issue

The FY 2010 Strategic Plan now includes input from the June meeting of the UEN Steering Committee, the June Instructional Services Planning Retreat, and the May Strategic Planning Retreat.

Background

At the last Steering Committee meeting in June, 2009, the committee suggested minor changes which have now been incorporated into the document. The plan is now ready for any further needed discussion and formal approval.

Recommendation

It is recommended that the Steering Committee approve the FY 2010 Strategic Plan.

TAB 14 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 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, www.uen.org; 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.
8. 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.
3. 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.
7. 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.

1. 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.
8. 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.

NEW STEERING COMMITTEE MEMBERS - ACTION

Issue

The terms of four members of the UEN Steering Committee ended on July 30th. They are Randy Merrill, Pat Lambrose, Glen Taylor, and Kay Jeppeson. It is recommended that the Steering Committee take action to reappoint and replace these Steering Committee members as explained below.

Background

Kay Jeppeson is completing his first term as a member of the Steering Committee, representing CIOs of the Utah System of Higher Education and Utah State University. Higher Education Co-Chair Gary Wixom is recommending that Kay be nominated for a second term, and Kay has agreed to serve another term on the Steering Committee.

Randy Merrill, Superintendent of Provo School District, has completed a term as a member representing district superintendents. We greatly appreciate his service on the Steering Committee. At the suggestion of the Utah School Superintendents Association, Co-Chair Brenda Hales recommends that Barry Walker, Superintendent of South Summit District, be nominated to the Steering Committee. Superintendent Walker is eager to serve on the Steering Committee.

Glen Taylor and Pat Lambrose are now finishing second terms on the Steering Committee. Glen represents directors of regional service centers and Pat represents public education instructional technology trainers and teachers. Brenda Hales has requested both of them to serve for another term, and they have both agreed. The Steering Committee is fortunate that the in-depth knowledge and experience Glen and Pat have gained from 8 previous years of service will be available to the Committee. We look forward to their continued involvement in guiding UEN for the next 4 years.

Recommendation

It is recommended that the Steering Committee approve Kay Jeppeson, Barry Walker, Glen Taylor, and Pat Lambrose to serve 4 year terms on the UEN Steering Committee from August, 2009 through July, 2013. The nominations will be subject to final approval by Governor Herbert.

STATUS REPORT ON FEDERAL GRANT APPLICATIONS - DISCUSSION

Issue

UEN is completing preparation of three major grant applications. Two request funding from the Broadband Technology Opportunities Program (BTOP), administered by NTIA (National Telecommunications and Information Administration). The third will be submitted to NSF (National Science Foundation).

Background

Utah Anchors: A Community Broadband Project is submitted to the NTIA BTOP Infrastructure program. This project is a Middle Mile request to improve inadequate or non-existent broadband connections at 130 elementary and charter schools, public libraries, and head start programs in underserved and unserved areas statewide. Sixty-three of the community anchor projects in this proposal are “shovel-ready,” approved by the Universal Service E-Rate program for eligible support, and can be commenced immediately upon funding. The goals of this project are commensurate with the statutory purposes of ARRA (American Recovery and Reinvestment Act) of immediately creating and sustaining jobs; building broadband infrastructure for education, communities, and economic development; assisting and training vulnerable and unserved populations on broadband education and use; and increasing broadband access to unserved and underserved communities. UEN has worked closely with both the public and private sector in planning this BTOP grant project. UEN’s partners include: the Governor’s Office of Economic Development; Governor’s Office of Planning and Budget; State Division of Technology Services; State Library Division and Public Libraries; Utah State Office of Education; Utah Telehealth Network (UTN); the University of Utah; University Office of Information Technology; Utah Center for High Performance Computing; Higher Education Institutions; Public School Districts; Charter Schools; Head Start Programs; Regional Education Service Centers; Qwest Communications, OneTel, Frontier Communications, and the Utah Rural Telecommunications Association.

UEN’s request for this BTOP grant is a continuation of a critical community anchor project that UEN began two years ago in building out broadband Ethernet connections to elementary, charter schools, public schools, and head start programs that assist economically disadvantaged families. UEN has a strong track record of successful broadband implementation in both middle mile and last mile projects combined with successful filings with the Universal Service Fund E-Rate program for schools and

libraries. UEN now receives over \$10 million in E-Rate support on eligible Internet and Telecommunication services.

In 2001, with support from the State Legislature and the Governor, UEN began working on a strategic vision and plan to extend broadband capacity to upgrade the state's Wide-Area-Network (WAN) backbone infrastructure and circuits into colleges and Universities, school district offices, many public libraries, high schools and middle schools from T-1 or less network capacity to Gigabit (1000MB) fiber-based Ethernet connections. Today through the hard work and efforts of UEN and our telecommunications partners, all 300+ secondary schools (high schools and middle schools) and school district offices have broadband connections. UEN successfully upgraded its core central backbone with redundant rings last summer to 10GBps and aggregate Internet capacity to 10GB to ensure future capacity for this project.

UEN's overall vision is to leverage existing network resources to build and share fiber infrastructure for all community needs — education, business, health care, public safety, library resources, and supporting head start programs for economically disadvantaged families and children. The State Department of Technology Service has worked with UEN to identify key strategic public safety and governmental organizations that can benefit from fiber built with this BTOP project. UEN is also working closely with the Utah Telehealth Network (UTN) on the Utah ARCHES Project: a \$9 million dollar project awarded to UTN by the Rural Health Care pilot program for hospitals, clinics, and care providers utilizing telemedicine and health information technology, to share resources and provide critical access to the national advanced research networks, Internet2 and National Lambda Rail, for improved quality of care and life.

The second NTIA grant being prepared is the *UEN COST Project for Sustainable Broadband Adoption*. In this project UEN will increase broadband subscribers through compelling educational services. The four-tiered state-wide approach: Content, Outreach, Support, and Training (COST) also represents the cost to our citizens if we fail to make quality Internet tools and resources accessible to all, equally. COST will reach all 2,736,424 Utah residents and innovatively targets 385,000 vulnerable children and adults.

The budget for the UEN COST project totals \$3.34 million, and federal grant funds would comprise \$2.4 million.

The third proposal UEN is planning to submit targets the National Science Foundation Academic Research Infrastructure – Recovery and Reinvestment (ARI-R2) program. It is being developed in close coordination with the University of Utah and Utah State University. The full proposal will be entitled *Renewing Advanced Networking Support for Research within the Utah Education Network* and will request \$2 million in NSF support over three years.

The target facility to be renovated includes UEN backbone segments for supporting research in northern Utah. The design is scalable and modular. It will accommodate future growth of optical networking along the I-15 corridor south from Salt Lake City in support of research activities at the universities along this route and several new and existing science facilities in southwest Utah. We are in discussion with research colleagues around the state about the potential use of another NSF funding source (EPSCoR) that is newly available to Utah. We expect several closely coordinated proposals to be submitted to NSF this fall.

The proposal will strengthen UEN's existing capabilities to support high-speed research connectivity for the two public research universities in the state – the University of Utah and Utah State University. Two closely coordinated optical networks will be developed in this effort. The first will be in the Salt Lake City metropolitan area to provide research connectivity among the main campus of the University of Utah, its off-campus data center that will house its high performance computing (HPC) and other cyberinfrastructure (CI) capabilities, a key telecommunications point of presence hosting the regional Internet2 and NLR nodes, and potentially other research partners in the vicinity. The second part of this project will extend a fiber-based optical spur from Salt Lake City to Logan for USU. Of course, the Cache Valley is a historically underserved area of the state for telecommunications, and this network would represent a major advance in USU's research connectivity.

We intend to work with public sector partners (including UTA and UDOT) to procure dark fiber pairs on most routes and to work through the commercial sector to acquire additional necessary segments. On both segments, we intend to light the fiber with the optical technology to support 10-Gbps wavelengths today and 40- and 100-Gbps wavelengths in the near future.

UEN has a long history of providing both advanced and general Internet connectivity to these two research institutions. UEN is currently connected via a 10-Gbps metro fiber link to both Internet2 and National LambdaRail (NLR). In addition, by connecting all other K-12 and higher education institutions in the state, UEN is in a strong position to facilitate research outreach and other forms of educational cooperation. This proposal is being closely coordinated with UEN's concurrent proposal to the NTIA broadband stimulus program and the University of Utah's own ARI proposal for data center renovation.

Recommendation

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

NETWORK CONNECTION AGREEMENTS - DISCUSSION

Issue

The progress of network connection agreement discussions.

Background

A new connection agreement was presented to the Steering Committee in April and approved in June. Since its approval, the UEN staff has had a further review of the document and outlined a plan to proceed with these discussions.

The process of meeting with UEN stakeholders began the first week of August. These discussions have been consistently positive. This process formalizes the working relationships UEN has with its stakeholders and establishes a foundational baseline for those entities establishing new connections.

An up-to-date list of these visits will be provided to the Steering Committee at the August meeting.

Recommendation

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

VISTA COURSE MANAGEMENT SERVICE UPDATE - DISCUSSION

Issue

UEN made several significant changes with the Course Management Service through the summer in preparation for fall 2009.

Background

Salt Lake Community College Migration to online.uen.org

Beginning summer 2009, Salt Lake Community College began offering courses through UEN's Blackboard Vista instance (622 sections, not counting crosslisted sections). Prior to summer semester, SLCC had been hosting Blackboard Vista on its own campus. UEN now hosts all SLCC courses using Blackboard Vista. This change frees up a portion of the time of SLCC personnel who were previously managing Vista servers and the Vista database at SLCC to work on other projects. It also enables SLCC to have the same benefits that other institutions hosted by UEN enjoy, such as restoration of sections from a remote database, section backups, disaster recovery, etc.).

The transition to hosting by UEN went very well. We began by migrating course content from spring 2009 (778 sections) fall 2008 (892 sections), and summer 2008 (380 sections). We also set up real time integration with Banner and migrated users and course information for summer 2009. Because of the short timeline for making the switch and the complexities involved in making the change, SLCC made the decision to not implement single sign on from their Luminis portal initially. This integration can take place at a later date.

Utah Electronic High School Migration to Moodle

The Blackboard contract for the Utah Electronic High School expired at the end of June, 2009. EHS migrated from Blackboard (\$106,000 per year licensing) to a combination of Moodle, MySQL and Drupal (open source - no annual licensing fees).

Timeline for the migration:

- June 15stopped accepting new student account requests
- June 19started enrolling teachers into Moodle
- June 20stopped student access to Blackboard
- June 30stopped teacher access to Blackboard

July 1.....finished importing student accounts into Moodle
July 2.....started re-enrolling students into classes and students allowed to login
July 2.... 839 seats filled
July 6.... 5,202 additional seats filled
July 7.... 3,362 additional seats filled
July 8.... 1,555 additional seats filled
July 5.....began accepting new student account requests
July 31.....began processing new seat requests

Total Numbers (as of 8/12/2009)

- 29,333 total student accounts (all accounts active in the past 2 months were migrated from Blackboard)
- 16,649 students active in Moodle during the past month
- 33,645 seats filled
- 71 teachers staffing 302 quarter classes
(These seats are equivalent of a HS with 1,402 full time students.)

Highlights

- Class navigation for students is standardized and feedback to student work is easier for teachers.
- Teachers report they like the Moodle process for assessing student work.
- Students report the navigation is much cleaner.
- Parents report they like the information in the gradebook.
- New structure makes it easier to share the curriculum outside of EHS and EHS has attached a Creative Commons license to the content.
- Moodle internal structure makes it easy to get ad hoc information and to make global changes.
- UEN has provided hosting support for the Moodle and MySQL system.
- Over 5 years, using Moodle will save up to half a million dollars in licensing fees to Blackboard.

Challenges

- EHS underestimated the number of days it would take to bring students into the new system.
- EHS underestimated the problems involved with getting assessments out of Blackboard. This was the single biggest reason for the delays.

- EHS was understaffed to move all of the content, assessments, and class rolls into the new system even with bringing on two temporary employees and one full-time person.
- Some students were unable to work in their current classes during the summer break and lost between two weeks to six weeks of access time in some classes. New class requests have been delayed.
- Change can be unsettling for faculty, staff, students, parents and school systems resulting in call volume increases during the migration time.

Tooele Applied Technology College Hosted by UEN

House Bill 15 introduced some restructuring changes for the former Salt Lake/Tooele Applied Technology College. As of July 1st, 2009, the programs offered by Salt Lake/Tooele Applied Technology College were split between Salt Lake Community College and the new Tooele Applied Technology College. The programs offered at the Salt Lake Campus are now serviced by the School of Applied Technology at Salt Lake Community College, and the programs at the Tooele Campus are now serviced by the new Tooele Applied Technology College.

The former Salt Lake/Tooele ATC was hosting Blackboard 7 on its own campus (and paying Blackboard a separate licensing fee). UEN had several discussions with Blackboard and we negotiated to include the Tooele Applied Technology College with the Utah Consortium Blackboard license (running Blackboard Learn 9 hosted by UEN) and allow Salt Lake Community College to continue to offer courses in Blackboard 7 for a maximum of 1 year while they are migrated to the SLCC Blackboard Vista environment hosted by UEN.

As of July 6th, UEN has hosted Blackboard Learn 9 courses for Tooele Applied Technology College. These courses were migrated from Blackboard 8 and the transition was fairly smooth, since Blackboard Learn 9 is essentially an upgrade of Blackboard 8.

Blackboard Licensing Renewal

The new 3-year contract with Blackboard for Blackboard Vista (and Blackboard Learn) went into force as of July 1st, 2009. Blackboard agreed to not increase licensing costs for 2009-2010, and small increases in licensing costs for 2010-2011 and 2011-2012. The current Blackboard contract goes through June 30, 2012.

Wimba Upgrade

On August 2nd, 2009, most of the Wimba Classroom and Wimba Voice hosted servers for Utah institutions were upgraded to version 6.0. The following weekend (August 9th), the servers for Southern Utah University, Weber State University, and Utah Valley University were upgraded as well. This software update introduces few interface changes, but enables the saving of Wimba Classroom archives as MP4 files, and a new gradable voice board in Wimba Voice.

Blackboard Vista Administrators July Meeting

Although the Blackboard Vista Administrators group holds monthly meetings via Wimba, this group met face-to-face at UEN on July 2nd, 2009 for a day-long discussion of topics of interest to this group. We had some people from Wimba present to this group about some of the new features of Wimba Classroom 6 and how Wimba can incorporate the use of analog video into a session, and most of the afternoon discussion was focused around long-term planning for offering courses beyond the current Blackboard contract. Following a discussion about future directions and alternatives, we decided to explore both commercial (Blackboard Learn) and open source alternatives (Moodle & Sakai), and have each institution recruit faculty members to participate in pilot courses with Moodle and/or Blackboard Learn 9 in the fall. There has also been some interest in getting together to explore the feasibility of creating our own system, either using a mash-up approach or utilizing existing tools.

System Hardware

Significant hardware improvements have been made to handle new use and growth anticipated this fall. UEN has expanded the application server hardware supporting the Vista cluster. Over the summer eight new servers in two blade chassis were installed to host 32 cluster nodes. Starting this fall, UEN's Vista cluster will have 35 nodes: 32 to serve the application, and three dedicated to administrative tasks. Half of the older server hardware that housed the previous sixteen-node cluster is being repurposed for disaster recovery. The other half will be used to create new lab and development environments for testing patches, configuration changes, etc. Additionally, the UEN Storage Area Network (SAN) has been expanded with more storage on faster disk arrays in preparation for SLCC's courses and content, and continued system-wide growth.

Disaster Recovery

UEN is expanding the Disaster Recovery equipment supporting the Vista Course Management Service that resides in the Richfield Data Center. In addition to the Oracle standby database implemented last year, UEN will add an eight-node application server cluster and load balancing switch. This will provide for a minimal system that UEN could switch over to in the case of a disaster. This switch would be a manual and temporary one, and would allow the Vista service to operate at a degraded performance level. UEN would only move service in the event of a real disaster. Such a scenario would occur if 24 or more hours would be required to have the production system return to service. (Moving service back to the production environment will require an additional service outage of extended length.) This DR system is expected to be deployed before the end of fall semester. Additional SAN storage has also been added to the storage node in Richfield to accommodate system growth.

UEN has also deployed a virtual tape library (VTL) system that has decreased the backup window for the 2+TB Vista Database from over 10 hours to about 2 hours. With this improvement UEN can keep from having to increase the time of our weekly maintenance window (2am to 10am every Sunday). This VTL system also has a

replication unit placed in Richfield to which UEN plans to replicate two weeks worth of all UEN backups. With the EBC VTL in place, UEN will use our tape library strictly for archival purposes only and will no longer need to send tapes to off-site storage. Nearly all UEN's backup jobs are now using this system.

Banner Integration for Snow and CEU

UEN has been working with Weber State University this summer to integrate Blackboard Vista course and account information with Banner. This will provide automated course and enrollment information in Vista, and eventually single sign on from the Luminis Portal to Blackboard Vista. These changes should be completed in time for the beginning of fall semester.

Reporting Tools

Several new reporting tools have been created to summarize activity on the Blackboard Vista system. These tools are available to anyone and currently include the following:

- Total logins (per day)
- Unique users (per day)
- Student logins (per day)
- Unique students (per day)
- Instructor logins (per day)
- Unique instructors (per day)
- Active users (for period)
- Active sections (for period)
- Active students (for period)
- Active instructors (for period)

Each of these different dynamic reports can report by institution or system wide. The report results can be a graph, table or cvs file for importing into a spreadsheet.

The reporting tools are available at this address:

<http://tools.uen.org/vista/reporting/form.php>

Summary

UEN now actively hosts three different CMS's (Moodle, Blackboard 9, Blackboard Vista), by doing so we are gaining expertise in how each of these function and better understanding on how to scale these systems.

The numerous technical improvements made this summer have increased the reliability of UEN Course Management Services. These projects took many hours of staff time, much of it outside normal business hours. The changes also required the active assistance of each hosted institution. UEN greatly appreciates this collaboration which is continuing with testing and trouble shooting.

Recommendation

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

STEERING COMMITTEE MEETING MINUTES

UTAH EDUCATION NETWORK STEERING COMMITTEE

June 26, 2009 – 9:00 a.m.

Members Present: Kenning Arlitsch, Ron Barlow, Steve Corbató, Rick Gaisford, Brenda Hales, Stephen Hess, M. K. Jeppesen, Robert Wagner for Ronda Menlove, Pat Lambrose, Eric Mantz, Mike Petersen, Barry Walker, Ray Walker, Gary Wixom.

Others Present: Scott Allen, Bill Bingham, Charice Black, Barry Bryson, Rick Castillo, Lisa Cohne, Paul Crawford, Becky Davis for Larry Smith, Jeff Egly, Rich Finlinson, Claire Gardner, Boyd Garriott, Jenn Gibbs, Thom Gourley, Jeff Grandia, Eric Hawley, James Hodges, Sheryl Hulmston, Laura Hunter, John Jesse, Troy Jessup, Karen Krier, Lisa Kuhn, Don Mahaffey, Dan Patterson, Julie Quinn, Kevin Quire, Joni Robertson, Dennis Sampson, Jim Stewart.

Welcome and Introductions

Brenda Hales welcomed everyone to the business portion of the Steering Committee Meeting. Brenda introduced our newest member Barry Walker, who is the Superintendent of South Summit School District.

Committee of the Whole

Tab 4 – FY 2010 Strategic Plan Draft

Mike Petersen reported on the FY 2010 Strategic Plan Draft. This draft has been created with input from the Steering Committee Retreat which was held on May 19th in Orem. Input from staff and the Instructional Services Planning Retreat held in June also provided useful suggestions for this draft. The FY 2009 Plan has been modified and edited to reflect the goals, objectives, and tactics for the upcoming year.

Mike highlighted several areas which include, but are not limited to:

- Process of prioritizing
- Structure same as previous years
- 7 goal areas
- Plan this year less ambitious due to limited funding

- Reflects successful effort regarding stakeholders needs
- Maintain free model based upon the funding

For a complete detailed outline regarding the FY 2010 Draft please see Tab 4, Attachment A. There were suggestions from the floor that a couple of sections have one more line item added and they are:

(page 5) Item II – Educational Web Resources, Section A., an item 9 be added to read “Consolidate UTIPS server with USOE server”.

(page 7) Item III – Enterprise Solutions, Section C., add item 8 to read “Support WIMBA promotion outreach, K-20”.

Mike encouraged those in attendance to read through this draft and if there are any other additions to please let him know so they could be brought up for discussion at the next meeting.

Tab 5 – FY 2010 Budget

Mike Petersen reported that detailed information about the FY 2010 budget is provided in this tab. He highlighted information on pages 16 and 17 regarding the steps that were taken to plan this years budget to accommodate the financial cuts we have had to take.

The supporting documentation for the FY 2010 Budget is very detailed and Mike encouraged everyone to go through these charts and graphs. There is also a breakdown of “Summary of Revenue Sources and Expenditures by Specific Program Areas” which can be found in Tab 5, Attachment A.

A motion was made and seconded to approve the FY 2010 Budget. THE MOTION CARRIED.

Tab 6 – Internet Filtering

Mike Petersen shared that UEN plays a key role in maintaining the wide area network and schools are responsible for their local network; filtering software and hardware are also decentralized with responsibility shared across all levels. Access to inappropriate material for minors on the network is a concern that must be kept in check through a coordinated effort that includes every level of educational technology governance. He noted that districts always have the option to customize their filtering criteria.

UEN licenses a filtering product, 8e6, which can be locally customized and keeps our network E-Rate compliant. Institutions are responsible for maintaining the 8e6 hardware box, and the minimum configuration of software as recommended by UEN, the Steering Committee and the vendor. Of course, no software is 100% failsafe. UEN along with the Steering Committee’s approval, has made a concerted effort to provide the best filtering software and hardware solution the industry has to offer, and continues to work with districts and schools to implement and monitor that solution effectively. UEN’s goal is to offer and provide effective solutions and support districts with their unique requirements.

To read the complete Filtering in Practice and Policy Issues, please see Tab 6 in its entirety. There is also a detailed list of Minimum Filtering Categories for UEN 8e6 configuration and this can be found in Tab 6, Attachment A.

A motion was made and seconded to adopt as UEN policy the Policy Issues outlined in Tab 6. THE MOTION CARRIED.

Tab 7 – UTIPS Server

Jim Stewart reported that UEN has assisted the USOE in supporting the UTIPS online formative assessment service. USOE is currently working on redefining the role and future of UTIPS. Last fall an agreement was reached between UEN and USOE that allowed for a UTIPS server to be placed at the Dolores Doré Eccles Broadcast Center. This server will now provide a centralized question master server and core master server. While UEN does not own the platform and has a limited, defined role in providing machine room space for this hardware, we also interface with many of the users in the community. At the request of community members this item has been placed on the steering committee agenda for discussion. A list of issues is also provided as an attachment to this document.

Julie Quinn from USOE was introduced and she described the Phases of their Implementation Plan.

Phase I includes bringing the servers to a central place

Phase 2 includes updating the item pool

Phase 3 includes rewriting the software and doing updates

It was suggested that when the servers are consolidated all support roles be clarified. The teachers across the state absolutely need and use this tool in order to better support students achievement. Tab 7, Attachment A has the criteria for moving the UTIPS to a consolidated server.

Tab 8 – Federal Grants Stimulus Update

Dennis Sampson reported that UEN is actively looking at new funding opportunities through grants including the Federal Broadband Stimulus program. These two major funding opportunities would allow UEN to increase connectivity to public and charter schools, libraries, Head Start programs, and the metro fiber ring, just to name a few. Due to funding constraints, UEN cannot participate financially with these projects; therefore grant money is needed to help offset these costs.

UEN is also working with the State Libraries Division to identify public libraries in the state that would like to work with UEN on a grant application to improve their connectivity. UEN also has a top priority of assisting in obtaining funding through federal resources for the Salt Lake Metro Fiber Ring project to the new UofU Data Center (Coke Bldg.). Steve Corbató from the Office of Information Technology at the University has been leading these efforts.

Tab 9 – Consortium Licensing

Laura Hunter reported on three licensing agreements that have been completed in preparation for the new academic year. She also shared several areas of cost savings as a result of consortium licensing managed by UEN. For WIMBA UEN negotiated for an incremental 3% price increase in years two and three of the licensing period.

As institutions that are not participating in the consortium license for Respondus LockDown Browser join in, we can pass the 30% price reduction on to the rest of the institutions participating in the license. UEN was able to keep all Pioneer products for the coming school year for all K-12 students at home and at school, although a few components will be dropped.

Tab 10 – Connection Agreement

Jim Stewart outlined the Steering Committee’s earlier request for a revised connection agreement to address the current environment. The Technical Services staff has been working on developing a draft connection agreement document. It is attached for consideration by the Steering Committee. Once approved, UEN Technical Service staff will begin a 3-4 month process of visiting with each Library, University, College, District, Region and others to review this agreement, answer any questions and move forward to operate within this renewed framework.

A motion was made and seconded for the Technical Services group to use this document as a template for Jim’s group to proceed. THE MOTION CARRIED.

Tab 11 – UEN-TV Analog Shut Off

Laura Hunter reported that UEN-TV became exclusively digital as of June 12, 2009 at 7:30 am with the shutdown of KUEN’s analog transmitter. The transition went fairly smoothly. The remaining glitch is that UEN-TV has no presence on the basic Comcast tier. Instead both channels are now carried on the digital tier. After consulting with legal counsel, other stations and viewers, UEN chose to accept an agreement that was brokered with the National Cable Telecommunications Association and American Public Television Service for digital must-carry rules. Although basic cable no longer carries UEN-TV, Comcast and other Utah cable providers are required to carry both digital channels on their digital tiers. In the long run that will be to the advantage of both stations and viewers.

Tab 12 – Steering Committee Meeting Minutes

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

Tab 13 – Other

The next Steering Committee meeting will be held on August 21, 2009, at 9:00 a.m. at the Dolores Doré Eccles Broadcast Center.

T A B **20**
O T H E R

