

Utah Education Network Steering Committee

August 15, 2008

**UTAH EDUCATION NETWORK
STEERING COMMITTEE**

A G E N D A

AUGUST 15, 2008

Committee of the Whole / Business Meeting

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

Welcome and Introductions

Tab 24	NEW STEERING COMMITTEE MEMBER - ACTION	1
Tab 25	FISCAL YEAR 2009 STRATEGIC PLAN - ACTION	3
	UTAH EDUCATION NETWORK 2009 LONG TERM STRATEGIC PLAN - DRAFT	5
	UTAH EDUCATION NETWORK FY 2009 TACTICAL PLAN	11
	GLOSSARY OF ACRONYMS AND TERMINOLOGY	17
Tab 26	PRELIMINARY FY 2010 BUDGET REQUEST - DISCUSSION	23
Tab 27	STEERING COMMITTEE MEETING SCHEDULE - DISCUSSION	27
Tab 28	UEN PERFORMANCE DASHBOARD - DISCUSSION	29
	UEN PERFORMANCE DASHBOARD FY 08 QUARTER 4	31
Tab 29	VISTA COURSE MANAGEMENT SERVICE SUMMER UPDATE - DISCUSSION	35
Tab 30	SALT LAKE METROPOLITAN OPTICAL NETWORK PROJECT - DISCUSSION	39
Tab 31	NETWORK PERFORMANCE METRICS - DISCUSSION	41
Tab 1	STEERING COMMITTEE MEETING MINUTES	43

Instructional Services Subcommittee

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

Tab 2	ADULT EDUCATION DISTANCE LEARNING PILOT FY 09 - ACTION	47
Tab 3	PRESCHOOL PIONEER LIBRARY - ACTION	51

Tab 4	DIGITAL MEDIA SERVICE SUMMER 2008 UPDATE - DISCUSSION	55
Tab 5	ITC PROFESSIONAL DEVELOPMENT PARTNERSHIP - DISCUSSION	59
	ITC LEVEL 2 DETAILED AGENDA FOR ADVANCED POWERPOINT AND ITC LEVEL 2 DETAILED AGENDA FOR MOVIE MAKER AND IMOVIE	61
Tab 6	USOE PROJECTS - DISCUSSION	65
Tab 7	PUBLIC EDUCATION AND HIGHER EDUCATION ADVISORY COMMITTEE REPORTS - DISCUSSION.	69

Technical Services Subcommittee

11:00 a.m. - 12:00 p.m.	Tab 8	IVC TRANSITION TO NEW BRIDGING, SCHEDULING AND MANAGEMENT PLATFORMS - DISCUSSION.	71
	Tab 9	DNS (DOMAIN NAME SERVICE) ANYCAST PROJECT UPDATE - DISCUSSION	73
	Tab 10	GL3/ELEMENTARY AND CHARTER SCHOOL NETWORK IMPROVEMENTS - DISCUSSION .	75
	Tab 11	IVC PROJECT MANAGEMENT - ACTION.	77
	Tab 12	OUTAGE IMPACT ON NETWORK SERVICES - DISCUSSION.	79

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

Steering Committee Meeting - October 10, 2008, 9:00 a.m.
 Instructional Services Subcommittee Meeting - October 10, 2008, 11:00 a.m.
 Technical Services Subcommittee Meeting - October 10, 2008, 11:00 a.m.

Please place these materials in your Steering Committee Binder.

NEW STEERING COMMITTEE MEMBER - ACTION

Issue

Ryan Thomas has retired from College of Eastern Utah and from the UEN Steering Committee. It is recommended that Eric Mantz of College of Eastern Utah be approved to replace him.

Background

Ryan Thomas has recently retired from his position as President at College of Eastern Utah. Ryan served as the Co-Chair of the Technical Services Subcommittee and the Steering Committee Executive Committee and his service is sincerely appreciated. Higher Education Co-Chair Gary Wixom is recommending that Eric Mantz replace Ryan, and Eric has agreed to serve on the Steering Committee.

Eric Mantz is Chief Information Officer at College of Eastern Utah. He was hired at CEU in 1993 as the Director of Networking and a faculty member in the Computer Science Department. He developed the first network for the college. Before coming to CEU, Eric served in the U.S. Army as a network engineer. He holds a Master of Science in Business Information Systems from Utah State University. Eric grew up in Blanding, so he is a southeastern Utah native.

Recommendation

It is recommended that the Steering Committee approve Eric Mantz to serve a 4 year term on the UEN Steering Committee from August, 2008 through July, 2012. The nomination will be subject to final approval by Governor Huntsman.

FISCAL YEAR 2009 STRATEGIC PLAN - ACTION**Issue**

The long term strategic plan and the annual tactical sections of the UEN Plan are provided for Steering Committee review, discussion and final approval.

Background

A draft of the FY 2009 Strategic Plan was developed from the feedback we received through a series of planning visits during the months of April and May and the day long retreat in early June. The draft has three major sections: mission/vision/values/need statements, long term strategic goals, and tactical plan. It was sent out for review in late July, 2009. Several changes have been incorporated from Steering Committee and staff feedback. For your ease of use, we have now included a Glossary of Terms used in the Plan.

Long term objectives complement the annual tactical plan and help guide policy, funding and legislative priorities for this next year and beyond. The seven main goal areas of UEN remain constant and are based on statute and mission. These goals are:

- I. Operate, maintain, and expand a reliable and secure high speed network, connecting every public school, college, university and public library in Utah.
- II. Aggregate and deliver a suite of high quality Web-based educational resources to support best practices in teaching and learning.
- III. License, host and maintain statewide enterprise solutions supporting public education, higher education, and libraries.
- IV. Deliver Distance Education classes and programs offered by public and higher education that use real time and on demand, reliable, high quality interactive videoconferencing technologies.
- V. Educate, engage, and enrich the lives of Utah citizens through broadcast programs and services, with UEN-TV.
- VI. Provide professional development opportunities to improve the quality of K-20 instruction and assure effective implementation of technology in education.
- VII. Coordinate educational technology governance across the state, and be accountable to our stakeholders through communication, measurement, and reporting UEN services.

The annual tactical section of the plan lists specific projects and activities that UEN will be conducting in the coming fiscal year, which began July 1, 2008. This portion of the plan is a guide to staff as they prioritize projects and allocation of staff. Updates for this portion of the plan are reported to the Steering Committee each quarter.

Recommendation

It is recommended that the Steering Committee review the plan to make sure that it includes objectives, tactics, and activities that are of concern to the members. After careful discussion and review, we request that final approval of the FY 2009 Strategic Plan be given.

TAB 24 ATTACHMENT A

UTAH EDUCATION NETWORK 2009 LONG TERM STRATEGIC PLAN - DRAFT

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 community

Leadership – Advancing relationships and encouraging ideas

Integrity – Keeping our promises

Communication – Listening to meet needs

Service – Benefiting our partners

Needs

Utah's public schools, colleges, and universities depend on the Utah Education Network to perform their missions. UEN provides Internet and network connectivity to every public school and college and university through the UEN wide area network; manages a statewide video conferencing system; hosts enterprise-level software applications for our public and higher education partners; offers instructional programming through KUEN, a 24/7 television station; supports a growing range of rich educational resources at UEN's Web site, www.uen.org; and supports the technology professional development needs of Utah teachers.

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.

The demand for increasing network capacity in public and higher education is demonstrated by network backbone utilization statistics. During spring, 2008, backbone utilization reached 117% of capacity on the central ring and 76% of capacity on the northern ring. To keep up with growing network capacity demands, UEN has worked

with college and university and school district leaders and Utah telecommunications providers to increase the capacity of network connections throughout the state and to expand backbone capacity tenfold where it is needed.

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. More than 30 percent of USHE college students now enroll in at least one technologically-delivered course each term. Enrollment in the Utah Electronic High School has also increased significantly and there are now about 23,000 students actively completing courses offered by the Utah Electronic High School.

Because of the trends described above, educators, public and higher education staff members, and UEN employees must be technologically competent. UEN must play 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 needs of education. As it responds to more diverse needs, it grows in complexity, and supports more services at more locations. The result is increased pressure on all of us to coordinate, plan, and make decisions collaboratively for the mutual benefit of all regions of the state and all levels of education. 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.

There will be significant challenges facing us during the coming year. The economy of Utah is growing but at a slower pace than it has in the recent past. Consequently, state financial resources must be carefully prioritized to meet numerous compelling needs that compete for available state resources. UEN must achieve the greatest value possible from limited state resources, and continue to aggressively seek grants and other revenue sources to augment state funds. And we must carefully prioritize Network projects to gain the greatest benefit from the dollars we spend.

Strategic Objectives

A summary of recent accomplishments and long term strategic objectives is included below:

WIDE AREA NETWORK

Recent Accomplishments

1. Completed NEMO standardization project for monitoring and managing network
2. Launched outage notifications system
3. Developed new network management tools, ie. Weather Map and Quick Ticket
4. Completed GigE migration at secondary schools

Long Term Objectives

1. Increase backbone capacity to 10 Gigabits/second

2. Expand connectivity to elementary, charter and satellite campus locations
3. Develop plan and secure funding for 10GE Internet connectivity
4. Support research community initiatives
5. Develop, plan and acquire fiber optic resources
6. Develop and implement strategy for high performance network connectivity
7. Complete disaster recovery plan
8. Evaluate and expand network tool suite
9. Continue with Tech and Security Summits
10. Focus on Regions – Priorities, advocates, tech forums
11. Develop plan and budget for refreshing network technology beyond usage of E-Rate funding

WEB RESOURCES

Recent Accomplishments

1. Launched redesigned *uen.org*
2. Rolled out additional *my.uen* functionality
3. Supported the development of Secondary Math lesson plans
4. Aligned additional resources to support the K-12 Core curriculum

Long Term Objectives

1. Develop personalization features for *uen.org* which will allow visitors to collaborate and share information online
2. Update pages for 501 accessibility compliance and increased functionality
3. Make internal and external resources that support instruction seamlessly available to end users

ENTERPRISE APPLICATIONS

Recent Accomplishments

1. Deployed a federated search service across the licensed Pioneer Library databases
2. Increased the Digital Media Service collection to over 10,000 media objects
3. Handled over 5 million faculty and students logins from 15 campuses accessing online course materials via the centrally hosted Blackboard Vista Course Management System
4. Completed UVU and USU migration to Blackboard Vista
5. Contributed technical leadership to creating the national PBS Educational Content Asset Repository (EDCAR) project
6. Secured licensing and began implementation of the Wimba web conferencing service for higher education, K12 and the State Libraries

Long Term Objectives

1. Continue to expand the Pioneer Library partnership and resources for all Utah residents
2. Provide an easy-to-use web interface enabling fast, reliable searching of Pioneer Library premium services and partner repositories
3. Provide a reliable; sustainable centrally managed course management service supporting higher education institutions and K-12 teacher professional development.
4. Provide a statewide Web conferencing service supporting courses and meetings for all state higher education and K-12 institutions
5. Acquire, manage, distribute and share high-quality digital media content collections from trusted education partners
6. Enable inter-institution collaboration in building, maintaining and delivering course content online through tools designed to create portable, shareable learning content
7. Encourage online course delivery best practices by facilitating regular information sharing events among consortium institutions
8. Integrate enterprise services to provide easy, personalized access to educational media, and web collaboration services from my.uen and online courses

DISTANCE EDUCATION

Recent Accomplishments

1. Implemented new hardware and software platforms (TMS- Tandberg Management System)
2. Completed UENSS conversion to IVC
3. Completed statewide training on new IVC equipment
4. Implemented new Video Operations and Logistics reorganization and remodel

Long Term Objectives

1. Evaluate new and emerging video technologies with an eye toward integration with web conferencing environment
2. Transition from current UEN IVC equipment and circuit funding practices to alternative institution/site based funding mechanisms
3. Create standardized practices and guidelines for IVC users
4. Develop and support IVC purchasing/vendor agreements
5. Increase internal communication and project management to develop operational practices to reflect new technical systems

BROADCAST SERVICES

Recent Accomplishments

1. Launched the new 9.2 digital channel, MHz Worldview.
2. Received two awards from the National Educational Telecommunications Association for “SciFi Friday” and “NetSafe Utah” outreach.
3. Expanded programming and outreach efforts to include new audiences, ethnic festivals, science fiction conventions, health conferences, and senior citizen care centers.
4. Met consumer education goals with the DTV education campaign.

Long Term Objectives

1. Expand digital translator system to rural areas
2. Expand use of the digital signal through datacasting to youth corrections, adult corrections, and other clients.
3. Use the programming and outreach resources of the station to support and promote education in Utah.
4. Leverage our national broadcast relationships to improve eMedia, CollegeMedia, and other content services.
5. Develop and support statewide partnership-specific programs tied to our educational mission

PROFESSIONAL DEVELOPMENT

Recent Accomplishments

1. Developed 13 new courses, revised and updated 39 courses
2. Hosted 40 new episodes of Faculty Lounge
3. Created, tested, revised, and launched community professional development blogs
4. Revised the Integrating Technology and Curriculum program to two workshops, added 21st Century Learning component, added new programs
5. Implemented new orientation for online courses.

Long Term Objectives

1. Assess and respond to changing technology professional development needs
2. Expand online, web conferencing, and other methods for providing technology integration professional development beyond face-to-face workshops
3. Maximize use of current communication channels and develop additional audiences

GOVERNANCE AND ACCOUNTABILITY

Recent Accomplishments

1. Used strategic planning and budget processes to increase the capacity and reliability of the UEN WAN, implement state-level enterprise applications, and improve other UEN services
2. Implemented the quarterly performance dashboard, and regularly reported key service metrics to UEN stakeholders.
3. Improved cross-departmental communication by implementing bi-monthly managers' meetings

Long Term Objectives

1. Coordinate educational technology governance across the state, and be accountable to our stakeholders through communication, measurement, and reporting on UEN services
2. Ensure that the UEN Steering Committee, subcommittees, advisory committees and constituent groups effectively guide UEN in providing services needed by UEN stakeholders.
3. Request new funding for UEN priorities and maximize state funds through acquiring external grants, E-Rate, and other revenue sources.
4. Track UEN performance, projects and services and communicate with stakeholders regarding our work.
5. Strengthen communications about UEN with Steering Committee and to public and higher education administrators, staff, and faculty.
6. Increase internal communication, project management and coordination of services.

Tab 25 ATTACHMENT B

UTAH EDUCATION NETWORK FY 2009 TACTICAL PLAN

I. WIDE AREA NETWORK

Operate, maintain, and expand a 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. 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. Increase 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 UEN critical services and network connections
2. Increase network effectiveness at locations where diverse paths exist, i.e. fast re-route, efficient routing, etc.
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 higher education campuses and secondary schools to high speed broadband connectivity.

1. Complete phase 6 Ethernet projects (K-12)
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. Work with UTOPIA and other community networks to leverage network resources
6. Encourage cooperation between local telephone companies and community networks

D. Work with USOE and school district leaders to develop a strategy to provide high capacity network connections to remaining elementary schools.

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

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

F. 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 CENIC and FRGP to develop NLR TransitRail for national peering opportunities

G. 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 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 Steering Committee to develop security policies
4. Continue to develop security monitoring tools
5. Work with state CIO and institutions to support USHE security audits as required.

H. 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 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 USTAR project
6. Support development of Utah Fiber Infrastructure Project
7. Assist UofU as technical resource in the planning and development of their new data center

I. 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 annual reporting relationship between regional leaders and 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, Charter Schools
8. Support USHE IT staff in efforts to increase operational expertise across all institutions and explore 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 network and planning to provide back up equipment and staffing for emergency situations.

II. EDUCATIONAL WEB RESOURCES

Aggregate and deliver a suite of high quality Web-based educational resources to support 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. Coordinate lesson plan development and publishing with USOE
2. Expand and maintain core curriculum resource database
3. Support USOE Web pages in coordination with specialists
4. Conduct web site and link clean-up
5. Update Professional Development Management System
6. Continue development of my.uen

B. Develop and implement new and expanded web resources.

1. Develop Textbook Alignment project for USOE
2. Expand CACTUS interface as defined by USOE
3. Create Online Multimedia Resource Guide
4. Enhance personalization features for uen.org and my.uen

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

1. Discuss, plan, and develop promotion and communication plans at the monthly Instructional Services/Public Communication Coordination meeting.
2. Produce and distribute NetNews Newsletters for public education and higher education.
3. Promote UEN services and resources with online NetNews features on UEN.org
4. Feature uen.org at statewide conferences and exhibits

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 and train managing personnel.

1. Expand Pioneer Library in key need areas; explore an interface merger between Higher Education Pioneer and the Mountain West Digital Library
2. Maintain IP Address listings for Pioneer Library
3. Maintain federated search and Pioneer Library products
4. Refine CMS hardware monitoring and outage notification processes and tools
5. Maintain Blackboard licensing for Electronic High School
6. Maintain Blackboard Vista consortium licenses for higher education institutions
7. Maintain Blackboard Vista software by applying required service packs and updates as needed
8. Maintain consortium Respondus license and provide support escalation between institutions and Respondus
9. Provide institution administration support and training and act as escalation agent with Blackboard and Respondus
10. Enable individual CMS section backup recovery from a remote database
11. Review and update service level agreements with CMS hosted institutions
12. Maintain SIS integrations and automated account and enrollment batch processing for CMS hosted institutions
13. Support University of Utah migration from CE6 to UEN hosted Blackboard Vista
14. Support and facilitate inter-institution collaboration in building, maintaining and delivering shared online course content
15. Maintain WIMBA Collaboration Suite license for K-12, Higher Education and State Libraries
16. Manage consortium/vendor relations with WIMBA
17. Assist higher education institutions and EHS with WIMBA/Blackboard integration
18. Provide ad-hoc WIMBA account support for institutions where UEN is acting as the WIMBA technical administrator
19. Coordinate collaborative development of WIMBA orientation materials
20. Maintain North Plains TeleScope Enterprise digital asset management system software license
21. Upgrade TeleScope to version 8.3 and apply software patches and updates as needed to maintain system performance and reliability
22. Digitize, encode, ingest and catalog UIMC, KUED and UEN provided education media assets
23. Manage and maintain hosted media assets

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

1. Develop and pilot-test a Preschool Pioneer Library service in coordination with districts and KUED
2. Build eMedia and CollegeMedia content to support key areas such as STEM and Concurrent Enrollment
3. Develop federated searching of eMedia from K-12 Pioneer Library
4. Facilitate discussion of Blackboard licensing & CMS alternatives for higher education and EHS
5. Negotiate and secure new Blackboard licensing based on institutional input
6. Deploy a standby CMS database to provide data redundancy
7. Install additional hardware infrastructure to support increased load from U of U migration
8. Develop remote database section backup and recovery capabilities for institution administrators
9. Explore Vista single sign-on via UVU Luminus campus portal
10. Redesign and publish a Vista-admin support webpage and knowledge base
11. Integrate WIMBA Classroom with my.uen for K12
12. Integrate WIMBA Voice with my.uen for K12
13. Explore WIMBA & IVC interoperability
14. Explore phone bridge options for K12 WIMBA
15. Upgrade TeleScope software to version 8.3
16. Upgrade TeleScope Video Manager to Video Manager 2

17. Install and configure TeleScope Distribution Broker to support Youth-in-Custody datacasting
18. Install and train key UEN staff on TeleScope integration broker
19. Modify customized TeleScope interfaces to incorporate appropriate 8.3 new features
20. Research and implement more efficient video ingest and captioning systems and workflows
21. Develop data provider capability in the UEN digital asset management system so that metadata may be harvested by the Mountain West Digital Library
22. Provide technical consulting and build basic integration with the PBS EDCAR media sharing project
23. Develop infrastructure supporting DMS access to specified media from UEN and KUED websites
24. Plan and design DMS / my.uen integration
25. Pursue DMS integration with Course Management Service in partnership with North Plains

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

1. Support the Pioneer Library advocates
2. Develop and implement Pioneer Library promotion tactics and collateral materials
3. Publish Pioneer Library product usage reports to the UEN website
4. Publish and maintain a CMS service basic information webpage
5. Publish overall CMS service usage reports to the UEN website
6. Develop Vista report generation capabilities for hosted institutions
7. Provide sponsorship for the Teaching with Technology Idea Exchange conference with UVU
8. Participate in institutional faculty awareness events as requested
9. Publish and maintain a WIMBA Conferencing Service basic information webpage
10. Identify and support WIMBA advocates at each institution and K12
11. Develop and deliver WIMBA technical orientation information to TCC and campus IT departments
12. Institute a monthly WIMBA orientation and best practices webinar series promoted through UEN website and UEN news email lists
13. Demonstrate WIMBA and facilitate key events with stakeholders to model WCS benefits and best practices
14. Publish and maintain a DMS service basic information webpage
15. Publish RSS announcements for announcing features and new content available via the DMS
16. Provide quarterly reports on DMS access and media download activity

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 CIO's and TCC to evaluate centrally managed disaster recovery services and the role UEN should perform in providing that service

IV. DISTANCE EDUCATION

Deliver 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 IVC systems

1. Streamline and improve technical support through VOC and UEN Logistics
2. Update certifications, validations, inventory and equipment documentation
3. Upgrade and update all formats of IVC training materials
4. Update and keep current web pages for IVC
5. Upgrade site equipment when applicable to comply with current standards
6. Continue support of course scheduling process
7. Continue to support of UEN Distance Education Catalog

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

1. Evaluate new and emerging video technologies
2. Establish guidelines for ad-hoc network
3. Integrate IVC and WIMBA resources
4. Integrate IVC and Course Management System, eMedia, eCollege Media, and other application technologies
5. Implement desktop conferencing solution
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 agreements
4. Assess role of UEN in billing and facilitator payments

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

1. Discuss transition from current funding practices for IVC equipment and circuits to site based funding mechanisms
2. Provide and distribute new applications for HDTV
3. Help institutions promote Distance Education courses they offer
4. Investigate new methods of communication of IVC information to stakeholders

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. Promote academic majors in high need areas: nursing, engineering, teacher education, math, technology, science, and work with Institutions to further promote their services and education programs.
4. Enable and encourage locally produced programs, particularly 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. Develop and program on-air education calendar of events.
3. Work with K-12 administrators and USOE to promote effective uses of multimedia in the classroom.

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. Datacast educational media to youth in custody; explore this as an adult corrections service and find other potential clients for datacast services.
2. Develop expanded adult basic education services in coordination with Adult Ed providers
3. Coordinate with national programming consortia and affinity groups
4. Continue cable relations for carriage of UEN-TV digital channels.
5. Feed monthly Comcast video on demand service and metadata.

VI. PROFESSIONAL DEVELOPMENT

Provide professional development opportunities to improve the quality of K-20 instruction and assure effective implementation of technology in education.

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. Reduce paper handouts; increase video tutorials, improve my.uen web pages
4. Update course evaluation to 5* with single comment system
5. Survey UEN-TV participants regarding courses no longer available for broadcast; survey registrants by email regarding how or who referred them; survey participants on 6-12 month outcomes of their course participation

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. Create opportunities for more cross-state collaboration using WIMBA
4. Revise online course model to enable more participation
5. Explore alternatives/new partners for UEN-TV workshops that provide subject-specific curriculum
6. Increase interactivity in online courses without increasing facilitator time commitment
7. Explore expanding Faculty Lounge concept to increase awareness and usage of eMedia, Pioneer, and other new media resources

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

1. Develop "viral marketing" using 2.0 tools
2. Develop commercials and tech minute videos for broadcast and web sharing
3. Reach out to recertifying teachers who are not in the classroom
4. Explore course rating and recommendation system for incorporation in PDMS

VII. GOVERNANCE AND ACCOUNTABILITY

Coordinate educational technology governance across the state, and be accountable to our stakeholders through communication, measurement, and reporting on UEN services.

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

A. Coordinate UEN Steering Committee, subcommittee, advisory committee, and constituent meeting groups.

1. Utilize the annual strategic planning and budget process.
2. Regularly update the UEN policy manual.

B. Request new funding for UEN priorities and maximize state funds through external grants, E-Rate, and other revenue sources.

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, and telecommunications providers.
4. Support 21st Century ETI as determined by the Steering Committee

C. Track UEN performance, projects, services and communicate with stakeholders regarding our work.

1. Provide quarterly performance dashboards and other reports as requested to Steering Committee and other appropriate entities, including public and higher education regional, district, and campus level entities.
2. Report monthly statistics on use of UEN WAN, Web Services, Enterprise Applications, Professional Development.
3. Assure that the UEN Service Catalog and Service Level Agreements with stakeholder groups are in place and current.
4. Strengthen communications about UEN with Steering Committee and to public and higher education administrators, staff, and faculty.

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

1. Hold bi-monthly managers meetings and weekly executive 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.

TAB 25 ATTACHMENT C

GLOSSARY OF ACRONYMS AND TERMINOLOGY

10GE - 10 Gigabit EtherNet - ten times the speed of GigE.

21st Century Learning Component - Emerging professional development curriculum related to best practices including innovation, media, technology, life and career skills.

510 Accessibility - Section 510 of the Americans with Disabilities Act providing standards for easier Internet access for people with disabilities.

99.999 (five nines) - Measurement of quality, certifying a product or process as 99.999% defect-free.

Adult Ed - Adult Education - The practice of teaching and educating adults. May take place in the workplace via the employer, or in public education or higher education facilities. Adult education is also available via the Internet and broadcast television.

Backbone - High Speed Network. The UEN Backbone provides high-speed connectivity among hub sites located at higher education institutions across Utah.

Blackboard Vista Course Management System - A centrally-hosted system to facilitate higher education courses online.

CACTUS - Computer Aided Credentials of Teachers in Utah Schools.

CE6 - Campus Edition 6 of Web CT.

CENIC - Corporation for Education Network Initiatives in California.

Charter School - A publicly funded school that has been granted a charter exempting it from selected state or local rules and regulations.

CIO - Chief Information Officer - Stephen Hess is the CIO of the University of Utah and the Utah System of Higher Education.

CMS - Course Management System (see Blackboard Vista).

CollegeMedia - The Higher Education component of UEN's Digital Media Service (DMS). CollegeMedia content is licensed for Utah higher education faculty and students. See also eMedia, DMS (Digital Media Service) and Media Hub.

Datacasting - The use of digital broadcast television technology to deliver computer files over the air. UEN used datacasting to send education resources to Youth in Custody facilities.

Digital Translator - a broadcast relay system which receives a distant digital signal and retransmits it to a local community, extending the geographical reach of a broadcast station. UEN-TV and KUED use extensive translator systems to extend broadcast to communities throughout the state.

DMS - Digital Media Service - A UEN repository of educational media items licensed for Utah educators. Components include eMedia, CollegeMedia and Media Hub.

DTV - Digital Television - The sending and receiving of audio and video via digital signals, in contrast to analog signals used by analog TV. In the United States all analog transmitters are scheduled to shut down February 17, 2009.

EDCAR - Educational Digital Content Asset Repository – A national repository of educational media produced by public broadcasting. UEN designed the EDCAR prototype and sits on the EDCAR steering committee.

EHS - Electronic High School – Also known as UEHS, the Utah Electronic High School.

eMedia - The Public Education and K12 component of UEN’s Digital Media Service (DMS). eMedia content is licensed for K12 educators by the Utah Instructional Media Consortium (UIMC). See also CollegeMedia, DMS (Digital Media Service) and Media Hub.

Enterprise Applications – Multi-institutional computer applications and services centrally coordinated by UEN. Examples include WebCT and the Pioneer Library.

E-Rate – Education Rate – Federally-funded telecommunication discounts for schools and libraries provided by Universal Service Fund for Internet bandwidth and many IT-related products such as routers.

Ethernet - An international standard for computer connectivity over Local Area Networks and Wide Area Networks (LANS and WANS). It may connect end systems to a network via copper cable, and multiple sites via fiber optic cable on high speed backbones.

FRGP – Front Range GigaPop consortium of Universities, non-profit corporations, and government agencies that cooperate to share multiple Wide Area Networking (WAN) services including National Lambda Rail (NLR).

Faculty Lounge - A 30-minute live web event providing a weekly technology training session for Utah teachers via UEN’s Professional Development department.

Fiber Optic - A network medium especially advantageous for long-distance communications, because light propagates through the fiber with little attenuation compared to electrical cables.

GigE - (also GbE) – A high capacity version of Ethernet which supports data transfer rates of 1 Gigabit or 1,000 megabits per second.

HDTV - High Definition Television (one form of DTV)

IP - Internet Protocol - A standard for communicating data across a packet-switched network. IP is the common element found in today's public Internet.

IP Management Database - A system such as IP Control which enables a network to maintain and manage IP addresses. See also SURIN.

IT - Information Technology - the study, design, development, implementation, support or management of computer-based information systems, including software applications, computer hardware and data networks.

ITC - Integrating Technology and Curriculum - A professional development course for classroom teachers on the effective integration of technology into their curriculum and classroom, offered through a partnership of UEN, USOE and Utah school districts.

IVC - Interactive Video Conferencing - Two-way video and audio communication supported by a computer network or digital phone line that facilitates interaction between people in two (point-to-point) or more (multipoint) locations, creating a virtual classroom or conference room.

K12 - Educational matters ranging from Kindergarten through Grade 12.

K12 Core Curriculum - The Utah State Core Curriculum represents those standards of learning that are deemed essential for students including language arts, math, science, social studies and other disciplines. K12 Core Curriculum is also the name of an extensive Internet site for educators at: www.uen.org/core

Login - or Log On – The process by which a computer system or network recognizes a user and authorizes use of the system. The user usually enters a username and password to initiate the login.

MassTech – The tapeless video storage system used by UEN-TV and KUED for recording and on-air playback of broadcast programming.

Media Object - An element such as video, audio, pictures, graphics, maps, etc. which can stand alone or be combined with other elements to create a multimedia presentation.

MHz Worldview - An independent, non-commercial television channel delivering newscasts and other programs from around the world, providing diverse cultural perspectives for a globally-minded US audience, UEN-TV broadcasts MHz Worldview on digital channel 9.2.

NEMO - An open source software toolbox to perform a variety of stellar dynamics and related calculations.

NetNews Newsletter - A monthly email publication distributed to more than 16,000 UEN-registered Utah educators.

NetSafe Utah - A national award-winning project bringing Internet safety information and training to Utah parents, teachers and students, a collaborative project of UEN, KUED, the University of Utah Department of Education, the Utah State Office of Education, the Utah Attorney General's Internet Crimes Against Children Task Force, and the National Center for Missing and Exploited Children.

NLR - National Lambda Rail – A high-speed national computer network infrastructure in the United States that runs over fiber-optic lines, and is the first transcontinental Ethernet network. The Utah Education Network receives NLR via an agreement with University of Utah and Front Range GigaPop.

NOC - Network Operations Center. The UEN NOC provides a single point of contact for reporting and resolving UEN network service issues. The UEN Network Operations Center is the location within the UEN organization where network activities are supervised, monitored and maintained. The NOC serves as the central point of coordination and communication for network support. Also see: VOC

On Demand - Asynchronous delivery of content, the service of making content and applications available anytime, anywhere.

PBS - Public Broadcasting Service - According to a Roper survey, the American public says PBS is the most trusted institution on a list of nationally known organizations in the country and the best use of tax dollars, second only to military defense.

Pioneer Library - Utah's Online Library - A collection of premium online databases made possible by statewide contracts with vendors such as EBSCO, CultureGrams, SIRS and WorldBook. Pioneer is a collaborative project of UEN, the Utah State Office of Education, the Utah State Library Division and the Utah Academic Library Consortium, representing Utah colleges and universities. See <http://pioneerlibrary.org>

PoP - Point of Presence, an access point on the Internet.

Quick Ticket - Trouble ticketing software developed by UEN for efficient reporting, tracking and resolution of Network incidents and problems.

Regional T-Forums – Technical forums to facilitate ongoing communication among stakeholders within Regional Service Centers.

Ring (central, northern, etc.) - a network topology in which nodes are connected in a loop.

SciFi Friday - An award-winning UEN-TV movie broadcast paired with science podcast featuring Utah researchers and other experts.

SLA - Service Level Agreements - A written agreement between a service provider and customer(s) that documents agreed service levels for a service.

SIS - Student Information System.

SURIN - State of Utah Registry for Internet Numbering - committee that regulates allocation of all UEN IP addresses. See IP Management Database.

TCC - Technical Coordination Committee – A statewide school district coordination group which meets bi-monthly to discuss common problems and issues. Speaks as a single voice on major issues of legislative concern.

TeleScope - A commercial system for the management of learning media items such as video, audio and text. Telescope is the software core of UEN’s Digital Media Service.

TeleScope Distribution Broker - Software for automatic distribution of digital media items from the UEN Digital Media Service (DMS).

TMS - Tandberg Management Suite - A scalable system to integrate existing ITV applications which provides centralized control for on-site and remote video systems.

UDOT - Utah Department of Transportation.

UEN - Utah Education Network - A nationally-recognized collaboration of public education, higher education, public broadcasting, government, business and data communications. UEN links schools, districts, colleges, universities and libraries. It also provides IT leadership, technical services including a statewide high speed data network, distance learning coordination and infrastructure, and instructional services including web-based resources, professional development for educators, digital media management and broadcast services.

UEN Service Catalog - A dynamic web-based resource outlining the Wide Area Network, Web Resources, Distance Learning, Enterprise Applications, Broadcast, Professional Development and UEN Operational Services

UIMC - Utah Instructional Media Consortium - A council of public education media experts with representation for all Utah school districts and regional service centers.

USDB - Utah School for the Deaf and Blind.

USHE - Utah System of Higher Education - Utah’s ten public colleges and universities governed by the Utah State Board of Regents, assisted by a local Board of Trustees. The system includes two major research/teaching universities, two metropolitan/region universities, two state colleges, three community colleges, and a college of applied technology.

USOE - Utah State Office of Education The state agency that facilitates student achievement and educator quality for the Utah State Board of Education. USOE assists Utah’s independent school districts and schools providing statewide leadership, service, and accountability.

USTAR - The Utah Science Technology and Research initiative, a long-term, state-funded investment to ensure that Utah remains a leader in the knowledge economy. USTAR provides funding to recruit top research leadership to the University of Utah and Utah State University.

Utah Fiber Infrastructure Project – Initially a project coordinating the use of fiber optic cable from EBC to downtown Salt Lake City, it now coordinates fiber resources throughout the state.

UtahSAINT - Utah Security Advisory and Incident Network Team.

UVU - Utah Valley University, formerly known as UVSC and Utah Valley State College.

Viral Marketing - A marketing technique that uses social networks to produce increased awareness or product use. Word-of-Mouth is a long-standing form of viral marketing. Online video, email and social networking sites spread viral marketing via the Internet.

VOC - Video Operations Center. The UEN Video Operations Center is located within the UEN organization where video-conferencing and some network support activities are supervised, monitored and maintained. See also NOC.

WebCT – An online virtual learning environment system for colleges and other institutions and used in many campuses for e-learning. WebCT is proprietary solution owned by Blackboard.

Weather Map - a real time graphic depiction of latency on the UEN backbone, available online at <http://weathermap.uen.net/>

Wimba - A collection of web collaboration tools for virtual meetings and live classes.

Wimbits - Announcements and tips on how to optimize use of Wimba, a feature of the UEN Web Collaboration Service, online at uen.org/wc

PRELIMINARY FY 2010 BUDGET REQUEST - DISCUSSION

Issue

The FY 2010 UEN budget request requires approval by the Steering Committee before submittal to the Governor and the Legislature for their consideration. Our final recommendations on the FY 2010 budget request will be presented at the October meeting. However, we want to provide a preliminary indication of budgetary priorities at the present time.

Background

Utah Outlook – Utah’s economy continues to head towards lower long-term average rates of growth. Anticipated revenue collections remain unsure due to falling consumer confidence, the national housing downturn, tighter mortgage lending standards, reduced consumer access to credit, higher heating and gas prices, and increased stock market volatility.

The Governor’s Office of Planning and Budget and the Legislative Fiscal Analyst’s Office project revenues to be from \$70 million to \$100 million off target in FY 2008. Going into FY 2009, the economy continues to remain sluggish. They don’t expect recovery in the economy until the latter part of FY 2010. Therefore, it is anticipated that funding requests for budget increases and for employee compensation will be held to a minimum.

Nevertheless, rapid enrollment growth projected in public education will generate an immediate problem for the state. Constitutional mandates require a significant financial commitment to pay for all the educational services and structural facilities needed to educate so many students. According to the Utah Tax Payers Association:

“Unless the state begins to evaluate and plan for this projected surge of growth, the state and its citizens could sink under the financial weight of educating its children.” (*Education Growth Projections in Utah 2008-2022, Prepared for the Utah Taxpayers Foundation, October 2007*)

Since the State appears to be on a continued path toward higher enrollment growth in public education, it is advisable that alternatives to educating so many children be considered to avoid financial hardship for the state’s residents. In the Governors report on the economy for 2008, it is suggested that:

“The public education system must continually change in order to effectively incorporate research and technology in the preparation of students of varying abilities for the future.” (*Economic Report to the Governor for 2008, Pg. 153*)

UEN is in a strategically strong position to help mitigate the projected increase in demand for educational technology services that the growth in students will produce. These services include network and Internet connections, interactive video classrooms, enterprise applications, web resources, and professional development for teachers.

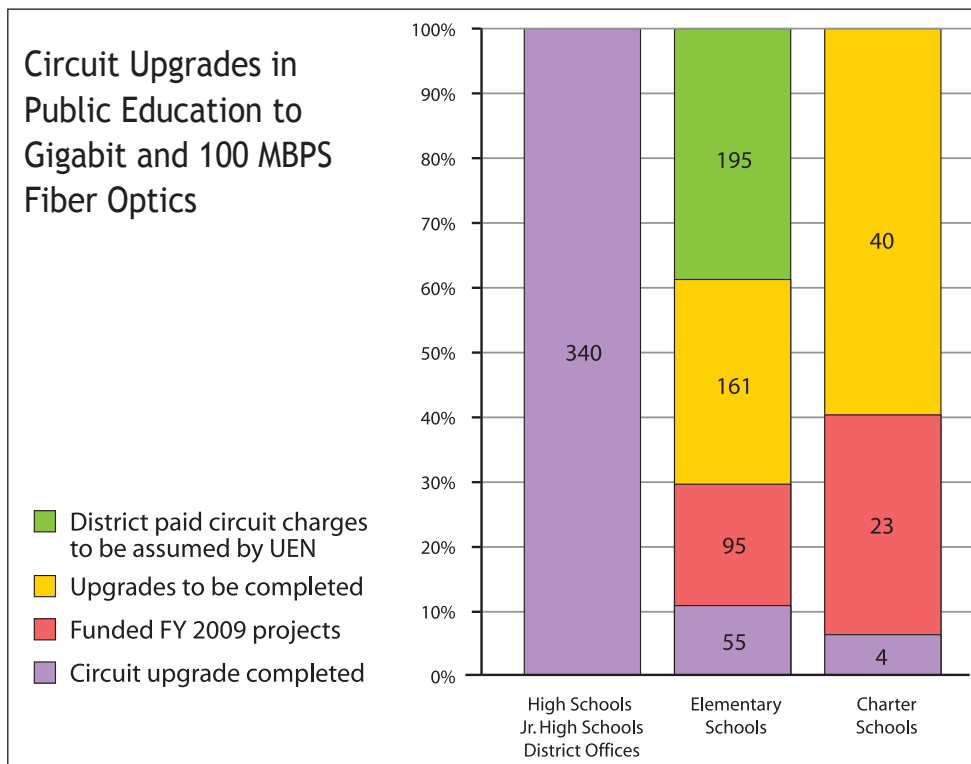
Recognizing that new financial resources will be limited, the UEN FY2010 budget request must focus on only the highest priorities.

Major Budget Issues for FY 2010

- **Upgrade connectivity for elementary and charter schools and new secondary schools** – The second phase of a multi- phase project to increase bandwidth at elementary schools and charter schools to 100 Mb/s Ethernet capacity will require about \$700,000 ongoing and \$500,000 one-time. State funds will be leveraged with \$2.4 million Federal E-Rate funds. In FY 2010, the UEN budget request is intended to upgrade approximately 100 institutions.

This is an urgent need to support the technology-intensive instructional improvements and online testing requirements that are now being made in classrooms throughout the state. The full scope of this network infrastructure project provides upgraded bandwidth service to all 501 elementary schools, 66 charter schools and new secondary schools planned over the next four years.

UEN progress toward completing these network upgrades is illustrated in the following graph:



- **Internet Network Redesign & Expansion** – The UEN Network is outgrowing its current 1 Gigabit Ethernet Internet connection design and will require upgrades to support increased demand. New routers will enable UEN to scale Internet capacity for the next five years. The new Internet design will also allow UEN to more efficiently utilize Internet capacity resulting in fewer funds spent purchasing bandwidth. It is estimated that approximately \$250,000 one-time appropriation will be needed to purchase three new Internet Border Routers capable of bandwidth speed of 10 Gbps.
- **Pioneer Online Library/eMedia** – Utah K-12 students are performing below their peers in comparable states, particularly in mathematics. Pioneer Library addresses this gap because it provides essential educational content to all Utah students, in their school, home, and public library. Pioneer Library and eMedia provide equal access to the highest educational content for 1/10th the cost that districts or institutions would pay. Course materials will be added to the UEN-hosted course management system where teachers and students can download educational media for effective learning. Preliminary estimates for this budget item are \$400,000 ongoing and \$400,000 one-time.

Summary

The preliminary budget estimate for new funding for FY 2010 is \$1.1 million ongoing and \$650,000 one-time.

Recommendation

It is recommended that the UEN Steering Committee review and discuss the preliminary FY 2010 Budget Request. Final action on the request will be taken during the October meeting of the Steering Committee.

STEERING COMMITTEE MEETING SCHEDULE - DISCUSSION

Issue

Is it appropriate to modify our meeting schedule for the remainder of 2008, and in 2009 by moving our meetings to a different day of the week?

Background

The remaining 2 meetings of the Steering Committee in 2008 are scheduled on Friday, October 10 and Friday, December 19. Now that state agencies are closed on Friday, several members of the Steering Committee may be inconvenienced by this meeting schedule. Therefore, we felt it was appropriate to raise this issue for your consideration.

Recommendation

No formal recommendation is proposed. Instead, we would appreciate your feedback regarding the appropriateness of continuing to hold Steering Committee meetings on the 3rd Friday of every other month.

UEN PERFORMANCE DASHBOARD - DISCUSSION

Issue

In August 2007, the UEN Steering Committee approved a final draft of the UEN Performance Dashboard and authorized UEN to begin producing and distributing the dashboard on a quarterly basis. This item reviews the FY08 Quarter 4 report and indicates where the quarterly performance dashboards can be found on UEN's Web site.

Background

As a state-funded organization serving a range of stakeholders, the Utah Education Network has historically collected large volumes of data concerning its performance from a variety of sources. This information is distributed to stakeholders both in periodic detailed reports and on an as-needed basis. Recent requests from UEN stakeholders for greater coordination across departments and trends in performance-based accountability, in addition to the ongoing development of new data collection tools, have highlighted the need for UEN to regularly present its performance on key measures in a single report for stakeholders. Performance dashboards are utilized by many organizations to provide an at-a-glance indication of organizational performance. UEN believes this to be an effective way of communicating critical information and is now posting a quarterly performance dashboard online at www.uen.org/ueninfo.

The UEN Performance Dashboard from Quarter 4 of FY08 is included as Attachment A. Please note that, because many of the measures are based on databases that purge historical data on a rolling basis, historical measures of most indicators are not available. As a result, you will see several graphs and charts that appear blank. As time goes by and a historical record is built, these graphs will be populated with trend data.

We invite your continued input and feedback; please contact Nate Southerland at nate@uen.org or 801-581-4194 with any comments.

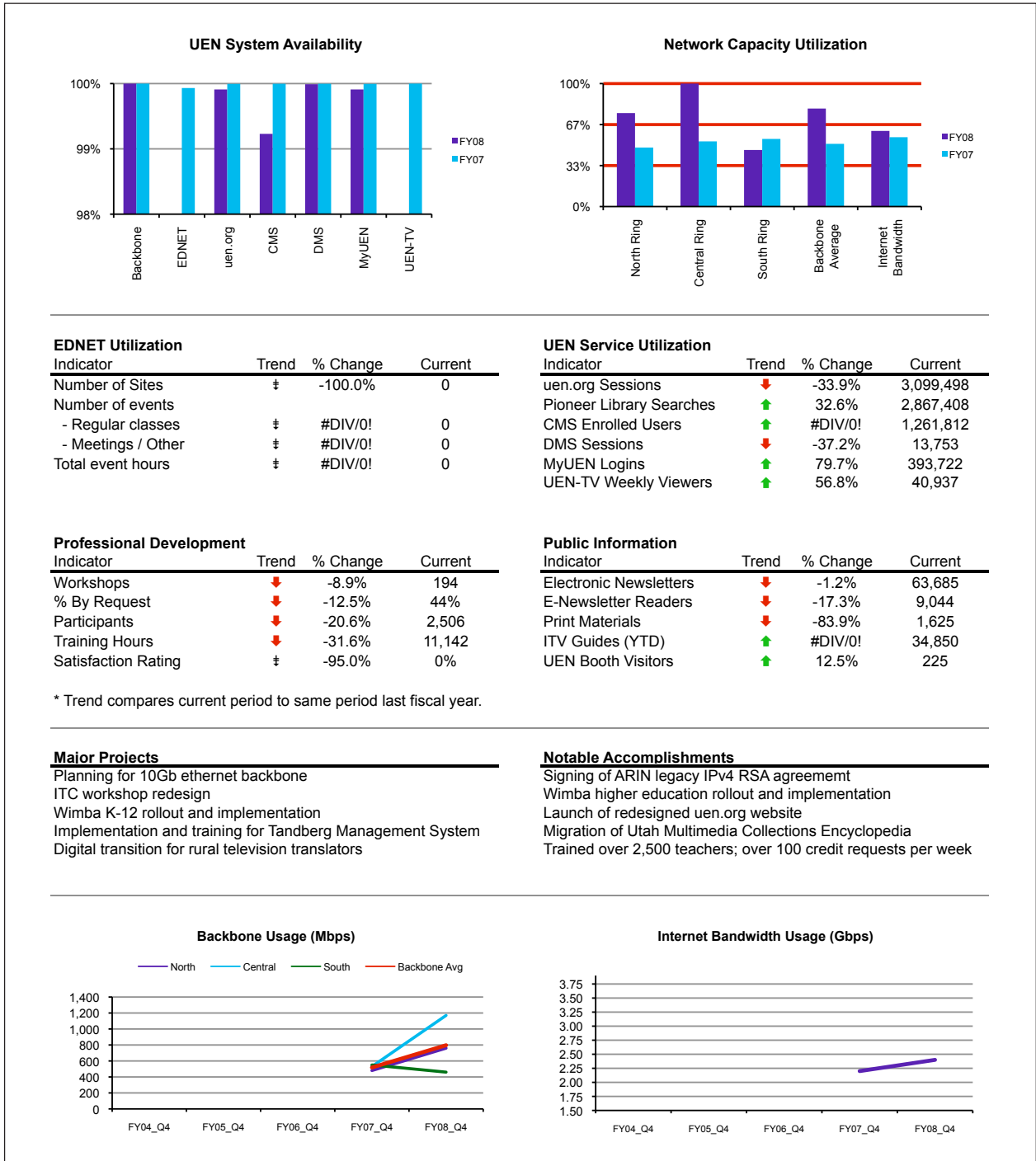
Recommendation

This is an informational item and requires no further committee action.

TAB 28 ATTACHMENT A

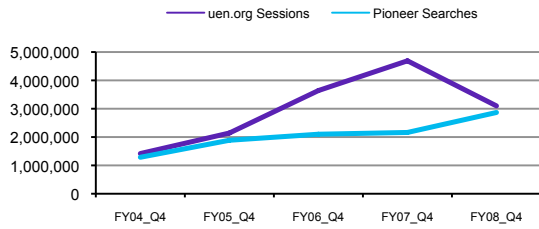
UEN PERFORMANCE DASHBOARD FY 08 QUARTER 4

UEN DASHBOARD CONDENSED

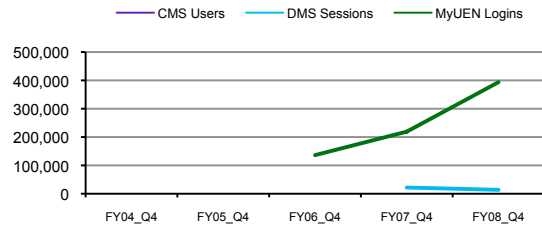


UEN DASHBOARD CONDENSED – CONTINUED

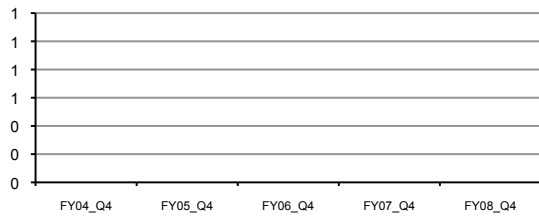
Website Traffic



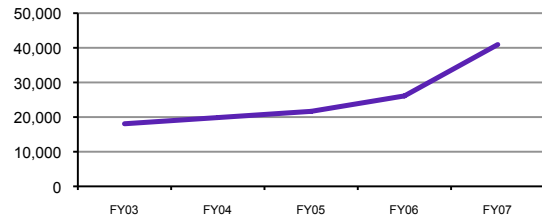
Enterprise System Usage



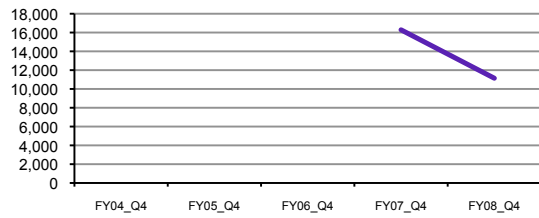
Total EDNET Events (Hours)



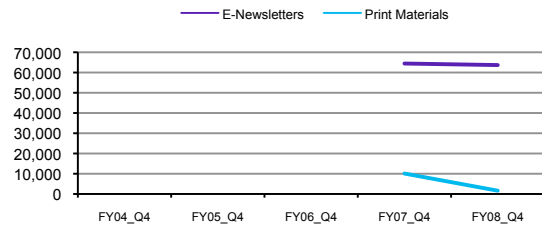
UEN-TV Weekly Viewers



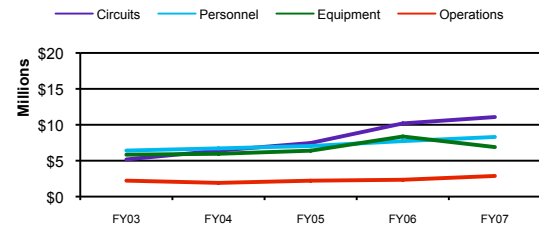
Professional Development Training Hours



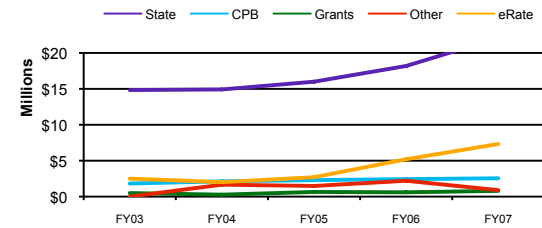
PI Materials Distributed



Annual Costs



Revenue Sources



UEN DASHBOARD SOURCE DATA

UEN Performance - FY08_Q4

Metric	Status	Trend	% Change	Target	Previous								Frequency	Notes		
					Current	FY08	FY05	FY04	FY03	FY06	FY05	FY04			FY03	
Administration																
Yearly operating budget			2.8%		FY07	\$29,415,505	\$28,526,949	\$23,116,100	\$20,985,500	\$19,647,800					annually	
Total state appropriations			21.5%		FY07	\$22,693,800	\$18,188,700	\$15,988,000	\$14,818,600	\$14,633,300					annually	
CPB Community Service Grant			4.9%		FY07	\$2,551,264	\$2,432,955	\$2,291,255	\$2,122,900	\$1,822,021					annually	
Other grant income			33.1%		FY07	\$7,969,912	\$5,958,628	\$4,646,700	\$2,701,700	\$4,911,679					annually	
All other income			-59.3%		FY07	\$988,071	\$2,206,525	\$1,481,415	\$1,661,600	\$0					annually	
Total value of estate reimbursements			40.8%		FY07	\$7,326,450	\$5,202,243	\$2,688,700	\$2,011,700	\$2,500,800					annually	
Estate reimbursement per K-12 student			40.5%		FY07	\$13,939	\$10,888,518	\$7,461,247	\$6,398,841	\$5,177,097					annually	
Peripart costs			8.7%		FY07	\$11,075,654	\$10,188,518	\$7,461,247	\$6,398,841	\$5,177,097					annually	
Equipment, maintenance & licensure costs			7.4%		FY07	\$9,300,900	\$7,726,300	\$7,045,900	\$6,714,400	\$6,412,500					annually	
Capital costs (libraries, utilities, travel, etc.)			-17.6%		FY07	\$9,693,730	\$9,569,729	\$9,359,253	\$9,569,659	\$9,552,803					annually	
Estimated cost savings for Utah libraries			22.6%		FY07	\$2,613,021	\$2,344,405	\$2,163,500	\$1,972,800	\$2,222,400					annually	
						0										
Wide Area Network																
Total backbone capacity - Gbps			0.0%		FY08_Q4	1.00	FY07_Q4	1.00	FY06_Q4	1.00	FY05_Q4	1.00	FY04_Q4	0.10	quarterly	
North Backbone Utilization (95th Percentile) - Mbps			53.3%		FY08_Q4	760	FY07_Q4	480	FY06_Q4	530	FY05_Q4	530	FY04_Q4	530	quarterly	
Central Backbone Utilization (95th Percentile) - Mbps			28.0%		FY08_Q4	1,170	FY07_Q4	530	FY06_Q4	530	FY05_Q4	530	FY04_Q4	530	quarterly	
South Backbone Utilization (95th Percentile) - Mbps			64.0%		FY08_Q4	460	FY07_Q4	550	FY06_Q4	550	FY05_Q4	550	FY04_Q4	550	quarterly	
% South Backbone Utilization (95th Percentile)			-16.4%		FY08_Q4	46.0%	FY07_Q4	55.0%	FY06_Q4	55.0%	FY05_Q4	55.0%	FY04_Q4	55.0%	quarterly	
% Total Backbone Utilization (95th Percentile) - Mbps			-3.0%		FY08_Q4	48.0%	FY07_Q4	55.0%	FY06_Q4	55.0%	FY05_Q4	55.0%	FY04_Q4	55.0%	quarterly	
1091 Backbone Utilization (95th Percentile) - Mbps			53.9%		FY08_Q4	797	FY07_Q4	516	FY06_Q4	516	FY05_Q4	516	FY04_Q4	516	quarterly	
% Total Backbone Utilization (95th Percentile) - Gbps			26.1%		FY08_Q4	79.7%	FY07_Q4	51.6%	FY06_Q4	51.6%	FY05_Q4	51.6%	FY04_Q4	51.6%	quarterly	
% Internal Bandwidth Utilization (95th Percentile)			9.1%		FY08_Q4	2.40	FY07_Q4	2.20	FY06_Q4	2.20	FY05_Q4	2.20	FY04_Q4	2.20	quarterly	
Backbone availability (% uptime)			5.1%		FY08_Q4	61.6%	FY07_Q4	56.4%	FY06_Q4	56.4%	FY05_Q4	56.4%	FY04_Q4	56.4%	quarterly	
Average recovery time (MTR)			0.0%		FY08_Q4	100.000%	FY07_Q4	100.000%	FY06_Q4	100.000%	FY05_Q4	100.000%	FY04_Q4	100.000%	quarterly	
# of end sites connected through a T1 or better			-100.0%		FY08_Q4	0	FY07_Q4	27.0	FY06_Q4	27.0	FY05_Q4	27.0	FY04_Q4	27.0	quarterly	
# of qualified sites connected through a T1 or better			-100.0%		FY08_Q4	0	FY07_Q4	832	FY06_Q4	832	FY05_Q4	832	FY04_Q4	832	quarterly	
# of total training hours (total # participants x # hours per participant)			-100.0%		FY08_Q4	0	FY07_Q4	110	FY06_Q4	110	FY05_Q4	110	FY04_Q4	110	quarterly	
Distance Learning																
# of certified EDNET sites			-100.0%		FY08_Q4	0	FY07_Q4	389	FY06_Q4	389	FY05_Q4	389	FY04_Q4	389	quarterly	
# of regular class sessions			#DIV/0!		FY08_Q4	0	FY07_Q4	0	FY06_Q4	0	FY05_Q4	0	FY04_Q4	0	quarterly	
# of other (lockable exams)			#DIV/0!		FY08_Q4	0	FY07_Q4	0	FY06_Q4	0	FY05_Q4	0	FY04_Q4	0	quarterly	
EDNET Core availability (% uptime)			-100.0%		FY08_Q4	0	FY07_Q4	99.932%	FY06_Q4	99.932%	FY05_Q4	99.932%	FY04_Q4	99.932%	quarterly	
Average recovery time (MTR)			#DIV/0!		FY08_Q4	0	FY07_Q4	0	FY06_Q4	0	FY05_Q4	0	FY04_Q4	0	quarterly	
# of higher ed. courses			#DIV/0!		FY08_Q4	0	FY07_Q4	0	FY06_Q4	0	FY05_Q4	0	FY04_Q4	0	quarterly	
# of public ed. courses			#DIV/0!		FY08_Q4	0	FY07_Q4	0	FY06_Q4	0	FY05_Q4	0	FY04_Q4	0	quarterly	
# of concurrent enrollment courses			#DIV/0!		FY08_Q4	0	FY07_Q4	0	FY06_Q4	0	FY05_Q4	0	FY04_Q4	0	quarterly	
Web Resources																
# of overall user on visitor sessions			-33.9%		FY08_Q4	3,099,498	FY07_Q4	4,690,240	FY06_Q4	3,640,898	FY05_Q4	2,442,169	FY04_Q4	1,417,714	quarterly	
% of visitor sessions originating in Utah			0.0%		FY08_Q4	42,230	FY07_Q4	11,783	FY06_Q4	11,650	FY05_Q4	10,617	FY04_Q4	10,617	quarterly	
Average length of visitor session (mins)			3.8%		FY08_Q4	99.210%	FY07_Q4	99.398%	FY06_Q4	99.398%	FY05_Q4	99.398%	FY04_Q4	99.398%	quarterly	
Site availability (by URL/MTR)			#DIV/0!		FY08_Q4	0	FY07_Q4	0	FY06_Q4	0	FY05_Q4	0	FY04_Q4	0	quarterly	Analytics server uptime
Forecast (by quarter) MTR			#DIV/0!		FY08_Q4	0	FY07_Q4	0	FY06_Q4	0	FY05_Q4	0	FY04_Q4	0	quarterly	Analytics server uptime
Forecast (by quarter) # of searches			32.6%		FY08_Q4	2,667,408	FY07_Q4	2,182,211	FY06_Q4	2,100,017	FY05_Q4	1,866,725	FY04_Q4	1,286,625	quarterly	Does not include CultureGrams
Enterprise Applications																
CMS (Course Management System) availability (% uptime)			-0.8%		FY08_Q4	99.230%	FY07_Q4	99.998%	FY06_Q4	99.998%	FY05_Q4	99.998%	FY04_Q4	99.998%	quarterly	WebCT server uptime
CMS # of sections with active enrolled users			#DIV/0!		FY08_Q4	9,815	FY07_Q4	9,815	FY06_Q4	9,815	FY05_Q4	9,815	FY04_Q4	9,815	quarterly	WebCT server uptime
CMS # of user sessions			#DIV/0!		FY08_Q4	1,261,812	FY07_Q4	99,990%	FY06_Q4	99,990%	FY05_Q4	99,990%	FY04_Q4	99,990%	quarterly	DMS server uptime
DMS Digital Media Services availability (% uptime)			0.0%		FY08_Q4	99.990%	FY07_Q4	99.998%	FY06_Q4	99.998%	FY05_Q4	99.998%	FY04_Q4	99.998%	quarterly	DMS server uptime
DMS # of user sessions			-37.2%		FY08_Q4	13,753	FY07_Q4	21,900	FY06_Q4	21,900	FY05_Q4	21,900	FY04_Q4	21,900	quarterly	DMS server uptime
DMS # of downloads			33.8%		FY08_Q4	7,420	FY07_Q4	5,545	FY06_Q4	5,545	FY05_Q4	5,545	FY04_Q4	5,545	quarterly	DMS server uptime
DMS # of K-12 media items			47.8%		FY08_Q4	1,178	FY07_Q4	1,895	FY06_Q4	1,895	FY05_Q4	1,895	FY04_Q4	1,895	quarterly	DMS server uptime
DMS # of Higher Ed. media items			-40.1%		FY08_Q4	99,010%	FY07_Q4	99,998%	FY06_Q4	99,998%	FY05_Q4	99,998%	FY04_Q4	99,998%	quarterly	IMJEN server uptime
IMJEN # of verified Premium users			26.0%		FY08_Q4	22,664	FY07_Q4	18,016	FY06_Q4	18,016	FY05_Q4	18,016	FY04_Q4	18,016	quarterly	IMJEN server uptime
IMJEN # of verified Basic users			51.5%		FY08_Q4	12,311	FY07_Q4	8,127	FY06_Q4	8,127	FY05_Q4	8,127	FY04_Q4	8,127	quarterly	IMJEN server uptime
Aggregate availability (% uptime) for all Enterprise Applications			-0.3%		FY08_Q4	99.710%	FY07_Q4	99.997%	FY06_Q4	99.997%	FY05_Q4	99.997%	FY04_Q4	99.997%	quarterly	
Aggregate average recovery time (MTR) for all Enterprise Applications			#DIV/0!		FY08_Q4	0	FY07_Q4	0	FY06_Q4	0	FY05_Q4	0	FY04_Q4	0	quarterly	
Broadcast Services																
(Annual indicators)																
% compliance with FCC and CPB firm requirements			0.0%		FY07	100%	FY06	100%	FY05	100%	FY04	100%	FY03	100%	annually	
% of broadcasts in DVX (estimated)			0.0%		FY07	100%	FY06	100%	FY05	100%	FY04	100%	FY03	100%	annually	
# of broadcasts in DVX (estimated)			9.2%		FY07	810,939	FY06	620,445	FY05	822,130	FY04	810,939	FY03	810,939	annually	http://www.governor.utah.gov/real/Programs
# of broadcasts in DVX (estimated)			56.8%		FY07	416,332	FY06	261,132	FY05	261,132	FY04	261,132	FY03	261,132	annually	
% of broadcasts received per user (estimated)			1.6%		FY07	4.89%	FY06	3.08%	FY05	2.47%	FY04	2.47%	FY03	2.32%	annually	

UEN DASHBOARD SOURCE DATA – CONTINUED

Metric	Status	Trend	% Change	Target	Current	Previous	Previous2	Previous3	Previous4	Frequency	Notes
# of viewers reached through outreach publications & events	0	↑	-3.6%		11,624	12,053	9,826	8,972	11,498	annually	
# of sites served by databasing services	0	↑	#DIV/0!		0	0	0	0	0	annually	
(Quarterly Indicators)											
# of program downloads through Connect Video On Demand	0	↑	#DIV/0!		FY08 Q4	FY07 Q4	FY06 Q4	FY05 Q4	FY04 Q4	quarterly	
# of Uen on TV visitor sessions		↑	66.9%		161,810	97,016	143,224	61,931	20,519	quarterly	NOTE: FY06 Q4 number inflated due to m
% of Uen on TV visitor sessions		↑	99.2%		59,139	62,028	12,809			quarterly	
% of Uen on TV visitor sessions		↑	-100.0%		54.0%	100.000%				quarterly	
Availability of broadcast signal (% uptime)	0	↑	#DIV/0!	100%						quarterly	
Average recovery time (MTRR)	0	↑	#DIV/0!							quarterly	
Professional Development											
Total # of workshops conducted		↓	-8.5%		194	213				quarterly	
# of workshops conducted for Higher Ed		↓	11.1%		10	9				quarterly	
# of workshops conducted for Public Ed		↓	-9.8%		184	204				quarterly	
% of workshops offered by request		↓	-28.2%	70%	85	120				quarterly	
% of workshops offered by request		↓	-12.6%		43.81%	86.3%				quarterly	
# of participants		↓	-20.6%		2,306	3,155				quarterly	
# of total training hours (total # participants x 4 hours per participant)		↓	-31.6%		11,424	19,288				quarterly	
# of attendees		↓	-21.6%		1,142	1,928				quarterly	
# of attendees		↓	0.0%	100%	100.0%	100.0%				quarterly	
% of attendees		↓	-95.0%	95%		85.0%				quarterly	=average rating / 4.00
Satisfaction rating on post-workshop evaluations	0	↑								quarterly	
Public Information											
# of electronic newsletters delivered		↓	-1.2%		63,685	64,448				quarterly	
# of electronic newsletters opened		↓	-17.3%		9,044	10,936				quarterly	
# of NetNews newsletters opened		↓	-27.6%		4,450	6,145				quarterly	
# of Professional Development newsletters opened		↓	-47.6%		2,270	4,325				quarterly	
# of quick threads for course information		↓	-15.6%		2,271	2,691				quarterly	
# of TV guides distributed (TV)		↓	#DIV/0!		34,890					quarterly	
# of hard materials distributed		↓	63.3%		1,625	10,100				quarterly	
# of e-newsletters distributed	0	↓	#DIV/0!							quarterly	
# of e-newsletters distributed		↓	0.0%		1	1				quarterly	
# of e-newsletters distributed		↓	12.5%		225	200				quarterly	
# of visitors at UEN booth during events		↓	5.0%	100%	90.0%	85.0%				quarterly	
% of Public Information goals completed		↓								quarterly	

STATUS - Default Ranges
 90% or greater of target = green
 >=75% to <90% of target = yellow
 less than 75% of target = red

TREND and % CHANGE compare Current period to Previous period.
 Grey shading indicates an unused cell.
 Blank cells indicate data is not available.

NOTES

VISTA COURSE MANAGEMENT SERVICE SUMMER UPDATE - DISCUSSION

Issue

Throughout the summer, UEN has made improvements to improve the reliability and redundancy of the Blackboard Vista service and to prepare for the University of Utah to migrate from CE 6 to Vista. In addition, UCAT institutions have collaboratively built several course templates that can be shared among all UCAT institutions.

Background

A Vista Redundancy Update

Over the Summer UEN Technical Staff have put in place a number of improvements to UEN's Vista environment. These changes improve the performance and reliability of the system as a whole.

Network improvements include the following: The Load Balancing switches were replaced with newer redundant switches, with support for Gigabit Ethernet on all ports. Each of the application servers are now connected to a full mesh of network switches allowing for complete failure of a network switch, or server network port. Network improvements also include new higher capacity firewall blades in redundant up-stream switches.

Database improvements now include a stand-by database that will reside in the Richfield Data Center once the 10Gbit Backbone upgrade is finished. The stand-by database is active and is currently housed in the EBC Data Center. Scheduled for fall is a second stand-by database that will employ the Oracle Flashback feature allowing for course/section recovery, and for report queries. Testing of these features will be completed by the end of August.

Each of these improvements represent many hours of work by multiple UEN departments and many additional maintenance windows outside of normal working hours. UEN Technical staff greatly appreciate the patience and assistance of the staff at each hosted institution.

Blackboard World Update

Scott Allen, Cory Stokes, Jerry Matson, and John Desha from UEN, along with Marc Hugentobler from UVU, hosted a panel at the Blackboard World Conference in Las Vegas in July. We presented a case study of our Vista implementation in Utah, and

made some contacts with people at other schools who are interested in what we have been doing.

At Blackboard World, we also learned more about Blackboard's future product directions and its next generation (NG) product. NG is a multi-year, multi-application pack phased delivery that attempts to combine the best of both the classic Blackboard Learning System and WebCT Vista, with the addition of more Web 2.0 features and functionality.

Blackboard 9, to be released in late Q4 2008 or early Q1 2009, will be the first common code base release that combines the best of both WebCT Vista and the Blackboard classic learning system. However, the initial release of Blackboard 9 will not have all the functionality of the current Vista product (it lacks templates, learning context hierarchies, or the ability to run multi-institution deployments). These capabilities are planned for future releases. The next major release of Blackboard (Blackboard 10) will have full feature functionality with our current product. UEN is actively working with Blackboard to make sure the features we need (multiple institution support, templates, support of learning context hierarchy, etc.) are included.

From what we have seen, Blackboard's Product NG shows a lot of promise. Some of the most compelling features include the ability to use drag and drop within the browser, link out to other CMS systems such as Vista 8, Moodle, and Sakai, and the ability to create mashups from sites such as Google Earth, YouTube, Digg, and Flickr. You can find out more about the new features in Project NG at www.blackboard.com/projectng/.

More details about the roadmap for migrating to NG for Vista clients will be provided when Blackboard 9 is released. In the meantime, Blackboard has committed to supporting Vista 8 through October 2012, and we are confident that we can continue to run Vista 8.x for several years as we work on a strategy to migrate to NG or another CMS product.

University of Utah Vista Migration Update

Throughout the summer, work has progressed in preparing for the University of Utah to go live with all fall semester courses on UEN's Vista instance. All fall 2007 and spring 2008 sections were migrated from the University of Utah's CE 6 server to Blackboard Vista during the summer. In addition, web-based applications were developed for faculty to select other CE 6 sections to be migrated, and to activate and crosslist fall 2008 sections in Blackboard Vista. As of this writing, 595 sections have been migrated to online.uen.org and 293 sections have been activated for fall 2008.

On August 16th, a change will be made to redirect users from webct.utah.edu (University of Utah's CE 6 server) to online.uen.org (Blackboard Vista). From this time on, the University of Utah will be fully on the UEN Vista instance. The CE 6 server (webctold.utah.edu) will continue to run for grade challenges etc. for another year.

Work is continuing on providing nightly student enrollment updates to Vista and will be ready before the semester begins.

Vista 8.0.1 Upgrade

UEN plans on installing an update to the Vista software during the semester break.

The upgrade to Vista 8.0.1 fixes several known bugs and should improve the reliability and stability of the system for the fall semester. The upgrade has been done on our lab environment and will be completed in our development environment with a copy of our production database the first week in August. If all goes well with testing, we will install the update in production on August 10th.

UCAT Shared Vista Course Templates

UCAT has developed several course templates that leverage Blackboard Vista's content sharing capabilities across institutions. UCAT designers collaborated to develop these templates under the direction of Lee Tansock. These templates allow all UCAT institutions to use a common course template, which can be customized for each institution.

The course templates developed by UCAT so far include Computer Literacy, Job Seeking Skills, Workplace Relations, OSHA General Industry, and Math I.

CMS Licensing Next Steps

The consortium licenses to Blackboard Vista expire in 2009. On August 14 the institutions are gathering to see demonstrations from groups running various CMS systems and discuss the course management landscape. In the September Vista Admins group meeting we will discuss each institution's immediate and long-term CMS plans. A recommendation for CMS licensing will be presented to the UEN Steering Committee in October.

Recommendation

This is an informational item and requires no further action.

SALT LAKE METROPOLITAN OPTICAL NETWORK PROJECT - DISCUSSION

Issue

Steering Committee member Steve Corbató of the University of Utah will provide an update on the planning now underway for the Salt Lake City metropolitan optical network. This new facility will support the University's new off-campus data center and other strategic IT projects, including support for UEN connectivity.

Background

This spring the University of Utah acquired an existing industrial building south of downtown Salt Lake City with the intention of converting it into an off-campus data center to serve the long-term needs of the University, its medical center, and their statewide partners. Initial plans call for at least 25,000 square feet of the 75,000+ square foot facility to be developed for IT use. At this time, UEN technical staff members are actively considering the relocation of the UEN node currently in the Dolores Doré Eccles Broadcast Center to this new data center.

In support of this data center project, the University – in close collaboration with UEN – will deploy a robust metropolitan optical network in Salt Lake City to provide reliable, cost-effective, and high performance connectivity among the University campus network, the new data center, and several other strategic facilities in the city. This optical network will expand on an existing optical connection between the campus and the principal carrier location near the airport and housing the region's Internet2 and National LambdaRail (NLR) nodes. A key objective of the optical network will be to insure always-on, high-throughput connections between the strategic computational capability located at the data center and the end users and other computers located at the University five miles away.

The network is envisioned as being built as a fault-tolerant ring with at least six active nodes initially, but it will be scalable to support other research and education (R&E) partners who may wish to join the project either at the outset or once the network is operational. On top of an optical fiber pair, an established technology known as Dense Wave Division Multiplexing (DWDM) is utilized to establish distinct, high speed circuits (at 10 Gigabits per second) using slightly different wavelengths of light. The envisioned initial capacity of this network will be 60 Gigabits per second or roughly 600 Terabytes per day. As a measure of its capability, this amount of bandwidth would be sufficient to transmit the entire print collection of the Library of Congress – in digital form – in just 24 minutes.

The initial nodes of this network will be:

- University of Utah campus network node, Park Building
- Utah Education Network, Dolores Doré Eccles Broadcast Center
- New University of Utah off-campus data center
- Utah System of Higher Education, Gateway
- Salt Palace convention center, downtown Salt Lake City
- Principal Level 3 telecommunications facility near the airport

In addition, we are interested in developing initial nodes at the following locations:

- Principal Qwest & AT&T telecommunications facilities downtown
- Kearns Building, downtown Salt Lake City

We intend to work with both commercial and governmental partners to acquire the strands of dark fiber needed to build this facility. We are pleased to report that we have held very productive discussions with the Utah Transit Authority (UTA) on a joint fiber approach and are working to conclude a formal partnership agreement.

We have established a joint technical working group with the engagement of the network leaders and lead engineers from both the University of Utah and UEN. We are preparing to start the procurement process for the bundles of optical fiber strands and installation for a key fiber segment from the University to the UTA Central Station west of downtown along the UTA TRAX University line. Conveniently, the TRAX line to Sandy passes within a block of the new University data center.

We note that over the last five years, a number of other U.S. research universities have invested in similar optical networks to support their connections to Internet2 and NLR as well as providing a new level of connectivity to research partners and affiliates in their own region. A key benefit is that these optical networks provide more scalable and rapidly reconfigurable networks to support high-end research and education, as well as addressing persistent local loop issues that have inhibited high performance connectivity in many locations. The University of Utah is fortunate to be located within seven miles of the major regional node for a major national wholesale telecommunications carrier and the principal national R&E networks. Building this metro optical network will insure that the emerging new capabilities deployed nationally can be accessed by researchers and clinicians on campus as well as the key computers located at the new data center. In addition, it will provide cost-effective, high-speed transport for UEN's national backbone links at a time when UEN is upgrading to 10-Gbps physical connections with its Internet service providers.

Recommendation

This is an informational item and requires no further action by the committee. We will provide status updates at future meetings.

NETWORK PERFORMANCE METRICS - 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.

Background

Network Backbone Availability

Month to date 99.933%
 Quarter to date..... 99.943%
 Year to date..... 99.979%

Network Latency Report

PoP name	Average
USU	4.7 ms +0.1ms
WSU.....	3.8 ms +0.1ms
DATC.....	3.5 ms +0.1ms
EBC.....	3.1 ms -0.1ms
SLCC	2.9 ms
UVU	2.6 ms
UVUW	3.2 ms
CEU	4.0 ms
Snow	3.3 ms +0.1ms
SnowS.....	3.8 ms
SUU	5.2 ms +0.1ms
Dixie.....	6.2 ms

Network Backbone Utilization

North Ring..... 74%
Central Ring..... 102%
South Ring..... 27%

Internet Bandwidth Summary

Available Bandwidth 3.9 Gbps
Peak Utilization..... 1.97 Gbps

Network Events of Significance Since the Last Report

Dixie State College – A fiber-cut south of Cedar City caused the network to be severed which isolated Dixie State College from the rest of the UEN Network. Although internet connectivity was not interrupted, Dixie State College was unable to access UEN resources during the outage.

10-GigE Turnups – As planned, UEN has turned up a number of 10GigE links throughout the state which will increase capacity for the entire network. The following links have been completed at the time of this report: UVU↔RDC, SLCC↔UVU, UVU↔EBC.

*** Note: “Peak Utilization” statistics are calculated using the 95th percentile industry standard formula.*

Recommendation

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

STEERING COMMITTEE MEETING MINUTES

UTAH EDUCATION NETWORK STEERING COMMITTEE

June 4, 2008 – 8:00 a.m.

Members Present: Kenning Arlitsch, Marlies Burns for Clark Baron, Steve Corbato, Stephen Fletcher, Rick Gaisford, Brenda Hales, Stephen Hess, M. K. Jeppesen, Christine Kearn, Gary Koeven, Pat Lambrose, Donna Jones Morris, Gail Niklason, Mike Petersen, Robert Wagner for Ronda Menlove, Gary Wixom.

Others Present: Dale Bills, Bill Bingham, Charice Black, Melinda Brereton, Leroy Brown, Barry Bryson, Karl Buchanan, Rick Cline, Lisa Cohne, Kevin Dent, Dave Devey, Kevin Dutt, Jeff Egly, Rich Finlinson, Monty Georgi, Claire Gardner, Boyd Garriott, Thom Gourley, Eric Hawley, James Hodges, Sheryl Hulmston, Laura Hunter, Troy Jessup, Randy Johnson, Doug Jones, Karen Krier, Bill Kucera, Lisa Kuhn, Chad Lyman, Don Mahaffey, Bryan Peterson, Kevin Quire, Victoria Rasmussen, Joni Robertson, Dennis Sampson, Eddie Sorenson, Nate Southerland, Cody Spendlove, Rick Stallings, Jim Stewart, Cory Stokes, Cory Stokes (south), Glen Taylor, Louie Valles, Kathy Webb.

Welcome and Introductions

Gary Wixom welcomed everyone to the business portion of the Steering Committee retreat and then turned it over to Mike Petersen. Mike thanked everyone for their participation in the retreat that was held prior to the business meeting.

Committee of the Whole

Tab 17 –FY 2009 UEN Budget

The FY 2009 UEN Budget is now ready for approval by the UEN Steering Committee. The proposed budget has been reviewed by the Executive Committee, which recommended that it be considered by the full membership of the Steering Committee at this meeting.

For a complete detailed list of the breakdown on the UEN budget, please see Tab 17 and Tab 17 Attachment A. The full membership of the Steering Committee has had an opportunity to review the proposed FY 2009 budget and is now ready for approval.

A motion was made and seconded to approve the FY 2009 UEN Budget as submitted. THIS MOTION CARRIED.

Tab 18 – ARIN – Legacy Registration Service Agreement

Jim Stewart shared with the committee that the American Registry for Internet Numbers (ARIN) is responsible for distribution of IP address space in North America. UEN and many other education entities in Utah fall under the legacy status and must consider whether to sign this agreement for the new registration process. A sample of the Legacy Service Agreement can be found in Tab 18, Attachment A.

Jim also reported that the SURIN Board has voted on and passed the following resolution:

SURIN moves to have UEN sign the Legacy RSA pending the review and approval of the agreement by the University of Utah legal department. Further, SURIN moves to have UEN develop a position paper providing information to other legacy holders of IPv4 space, enabling these holders to make a decision regarding signing the ARIN Legacy RSA. These motions passed unanimously.

A motion was made and seconded that UEN Steering Committee adopt a resolution in support of this action by the SURIN Board. THIS MOTION CARRIED.

Tab 19 – Network Performance Metrics

Jim Stewart reported that the UEN Performance Metrics were still looking good. For a detailed list of the Network Latency numbers and Network Backbone Utilization, please see Tab 19.

Tab 20 – WIMBA Web Conferencing

Cory Stokes reported that WIMBA implementation and training is taking place. Access through *uen.org* is being developed and will be fully implemented in the fall. All teachers will have access to this conferencing tool via the web.

Tab 21 – Public and Higher Education Advisory Reports

Laura Hunter and Rick Gaisford had nothing new to report.

Tab 22 – Steering Committee Meeting Minutes

A motion was made and seconded to approve the minutes as corrected. THIS MOTION CARRIED.

Tab 23 – Other

Nothing to report.

The next Steering Committee meeting will be held on August 15, 2008, at 9:00 a.m. at the Dolores Dorè Eccles Broadcast Center.

UTAH EDUCATION NETWORK STEERING COMMITTEE MINUTES

April 11, 2008

Annual Retreat

Gary Wixom welcomed everyone to the annual UEN Steering Committee retreat. Introductions were made around the room.

Brenda Hales also thanked UEN for all of their hard work this last year and for putting together this annual retreat.

Mike Petersen shared with the attendees the 6 strategic areas to be covered in today's working retreat. Those areas are:

- Wide Area Network – Recent Accomplishments and Long Term Objectives
- Web Resources – Recent Accomplishments and Long Term Objectives
- Enterprise Applications – Recent Accomplishments and Long Term Objectives
- Distance Education – Recent Accomplishments and Long Term Objectives
- Broadcast Services – Recent Accomplishments and Long Term Objectives
- Professional Development – Recent Accomplishments and Long Term Objectives

For a complete detailed list of all Recent Accomplishments and Long Term Objectives please see the handout labeled Utah Education Network Long Term Strategic Plan.

Mike Petersen also reviewed the Strategic Planning input and information which was gathered on the trips around the state in April and May. For a detailed list of each institution and a summary of the topics discussed, please see handout labeled Strategic Planning Input 2008-2009. There is also another handout labeled Dates and Locations and Attendees at Strategic Planning Meetings. This handout lists the dates and who attended at each of these meetings.

Kevin Quire gave a brief overview on the 10GB upgrades that are going to happen.

Jeff Egly gave a brief report on the IVC classrooms and the beginning of a move towards hi-definition.

Troy Jessup briefly talked about the filtering issues related to the 10GB network.

Bryan Peterson talked about the network usage.

Jim Stewart reported on the RFP's for the elementary schools and the charter schools. He also explained the progress on the expansion of the fiber network and the U of U off site data center.

Cory Stokes reported on the WIMBA Implementation Project Status and had a handout for attendees. Cory also shared a handout regarding Enterprise Learning Services Usage – which was a 90 day login trend for hosted institutions.

Karen Krier briefly talked about *myuen.org* and the updates her group has been implementing.

Once this brief overview was completed, Mike Petersen then asked each subcommittee to go to their breakout rooms and start working on the strategic plan. The committees would then reconvene at 11:30 a.m. to go over their recommended plans.

The group reconvened and heard reports from the chairs of the subcommittees. The input from the numerous meetings was reinforced. There were several suggestions highlighting the importance of certain objectives. It was decided that a draft strategic plan be prepared and distributed to the Steering Committee members and others by mid-July. That would give people time to review the draft and be ready to discuss it further at the August 15th meeting. The hope is that the final plan will be approved by mid-August, 2008.

The retreat ended with lunch and was followed by the regular business meeting.

ADULT EDUCATION DISTANCE LEARNING PILOT FY 09 - ACTION

Issue

This item describes a cooperative pilot program involving UEN and USOE Adult Education Services based upon the *GED Connection* series and accompanying materials.

Background

According to the 2000 census, 211,000 Utah residents lacked a high school diploma or equivalent. While adult education programs under the Utah State Office of Education served nearly 25,000 individuals during the 2006-2007 school year, many individuals are unable to access these programs due to time, location, and childcare constraints. Distance education technologies offer an important means for reaching these potential students.

For a number of years, UEN has cooperated with USOE to offer the “GED on TV” program incorporating the *GED Connection* broadcast series from Kentucky Educational Television. This program was essentially an independent study program in which participants viewed the *GED Connection* episodes on UEN-TV and completed exercises in the accompanying workbooks to prepare for the GED examination. Participants were not formally enrolled in an adult education program. Consequently, participation rates were relatively low, and no persistence or completion data is available.

In response to the growing need for distance alternatives and new guidelines published by the U.S. Department of Education’s Office of Vocational and Adult Education, USOE Adult Education Services has recently formulated a set of policies regarding distance education that allow local adult education programs to count distance students for funding purposes under certain conditions. With these policies in place, Adult Education Services has been moving forward with several pilots of distance learning curricula and delivery mechanisms.

GED Connection Pilot:

With funding from a federal Star Schools grant and other sources, Kentucky Educational Television (a respected leader in adult education) created the *GED Connection* series and accompanying workbooks and PBS LiteracyLink online learning management system in the late 1990s. *GED Connection* and the derivative *Pre-GED Connection*

materials are intended to serve as a multimedia preparation program for individuals taking the GED examination. *The GED Connection* video programs have been broadcast on UEN-TV since 2001, and copies on VHS and DVD have been placed in many of the state's adult education programs and public libraries. These videos are also available to Utah educators and students online through eMedia, UEN's digital asset management system.

On February 25-26, 2008, Nate Southerland from UEN attended a workshop hosted by KET in Lexington, KY with Loma Prince and Wayne Mifflin (two adult education / GED testing coordinators) at the request of Marty Kelly, coordinator of USOE Adult Education Services. The KET workshop covered the *GED Connection* and *Pre-GED Connection* materials and helped participants prepare to train others in how to use these materials. At the ensuing adult education directors' meet in March, Nate, Loma, and Wayne presented an overview of these materials to Utah adult education directors and coordinators and asked for volunteers to participate in a pilot program using the KET materials to prepare individuals for the GED examination. Nineteen programs from across the state volunteered to participate, and a training workshop was held on August 7th to prepare instructors for the beginning of the standard school year. On-site follow-up will take place throughout the 2008-09 school year. In addition, two formal assessments will be conducted mid-year and at year end.

Purposes of pilot:

The *GED Connection* pilot program has two main purposes – to resolve problems of implementation and practice and to establish proxy contact hour guidelines for programs using the *GED Connection* materials for distance instruction.

Contact hours and outcomes (completion of an adult high school diploma or successful completion of the GED examination) serve as the primary metrics for determining local program funding from year to year. Strict guidelines and reporting mechanisms have been established for determining contact hours (the equivalent of seat time) in face-to-face instruction. In contrast, there is currently no valid way to measure contact hours for individuals in Utah participating in distance GED instruction. A primary purpose for this pilot program is to establish and validate contact hour equivalencies (referred to as “proxy contact hours” after a standard set by Project IDEAL at the University of Michigan) that can be used in the future as a way of counting participation by distance students for program funding purposes. Successful GED completion will continue to be used as an outcome measure for funding.

The second purpose of the pilot is to discover and resolve problems of implementation. On-site visits and formal assessments will focus on how the program is being implemented, what obstacles are being encountered, and how these obstacles can be overcome. In addition, an email list will be established and utilized to address questions and foster dialogue. By so doing, best practices for programs participating in the future will be formulated. Results from the pilot will inform future implementation of site-based and distance-delivered GED preparation programs in Utah. Results will also be shared with KET and others exploring similar programs.

Recommendation

It is recommended that the Instructional Services Subcommittee indicate their support for the pilot-test, and request a final report be added to the Subcommittee agenda when the project is completed.

PRESCHOOL PIONEER LIBRARY - ACTION

Issue

Quality early childhood resources for youngsters age 3-6, parents, and caregivers are essential for the success of individual children, their families, and ultimately the economic viability of our state. As Utah's educational technology network, UEN is prepared to address this need by creating Preschool Pioneer Library, an online collection of high quality educational resources modeled after the very successful K-12 Pioneer Online Library. UEN will aggregate interactive learning games, curriculum ideas, parent support materials, and other vetted resources from PBS, national, and local providers. The site would be available free to all families with young children in Utah—and accessed via the Internet in homes, libraries, and school-based early childhood programs.

To achieve this goal, UEN has developed a pilot-test for Preschool Pioneer Library during the 2008-2009 school year, and a plan for ongoing support. This idea was discussed at the UEN Steering Committee meeting in June and has been further refined with USOE, the Pioneer Committee, and others. An advisory board consisting of early childhood experts and other interested parties will be convening for their first meeting on August 15, 2008 at 12:30 p.m. A draft outline of the Preschool Pioneer Library site is included under this tab.

Background

Pioneer, Utah's Online Library is a successful model of collaboration for cost efficiencies and quality of resources. Through consortium licensing, the Pioneer Library resources are licensed at considerable cost savings. For example, the K-12 products would cost Districts between \$11-\$17 per student if licensed separately. Through Pioneer, UEN licenses these products for about \$1.12 per student. UEN plans to partner with Early Childhood providers, parents, caregivers, school programs, and public libraries to make online school readiness resources available in the same equitable, and cost efficient way that the K-12 Pioneer Library is available to all students in their school, library, and home.

Pioneer Library's K-12 web site is hosted and paid by UEN. By adding a Preschool Pioneer Library site, UEN will leverage a very successful K-12 model to meet the educational needs of Utah's youngest citizens. The costs for pilot-testing a Preschool Pioneer Library will be covered through discounted arrangement from PBS Kids Play and some one-time UEN funds. Ongoing costs for the Preschool Pioneer Library are included in the future legislative request for Multimedia Educational Resources.

The Governor's Office held an Early Childhood Summit on April 18, 2008, where Utah Early Childhood State Action Plan called "Ready to Succeed" was presented. The plan identified several major factors that have increased in Utah and focused attention on the need for quality early childhood experiences: 1) the increase in the labor force of women with young children, which is creating a pressing demand for child care and preschool programs; 2) the increasing number of young children living below the poverty line; 3) the increasing diverse nature of Utah's population and achievement gap between Latino, Native American, and Caucasian students in Utah.

As the report indicated, when parents, educators, caregivers, community agencies, and business partners work together, that benefits the future success of children and the economic stability of the state. As Utah's educational technology organization, and because of our relationship with PBS and other national providers, UEN is uniquely positioned to address the rising need for school readiness curricula—and we can leverage existing infrastructure to achieve cost efficiencies.

For the pilot-test, UEN consulted with early childhood providers at the state and national level. The new site is organized around the Pre-Kindergarten Guidelines developed by the Utah State Office of Education and the Utah Department of Workforce Services Office of Work and Family Life. An anchor tenant on the site is PBS Kids Play. PBS Kids Play is an interactive school readiness Web site developed by national preschool education experts that offers customized, leveled learning experiences for young children in all curriculum areas. Ben Grimley from PBS will briefly demonstrate the PBS Kids Play site during the Instructional Services subcommittee meeting on August 15 (www.pbskidsplay.org).

During the pilot phase, UEN will be conducting research in coordination with the Early Childhood offices at Granite School District. Research questions to be asked during this phase: How is the Preschool Pioneer Library used by kids and their parents? How is it used by caregivers? Does use result in increased readiness for school? What resources are needed? Can ongoing funding be secured for this service? How would the service be expanded to other locations in the state (districts, public libraries)? How would the service be expanded for home use?

Recommendation

It is recommended that the Instructional Services Committee support this pilot test, and place pilot-test reports on its meeting agendas for discussion during the year.

Preschool Pioneer Site Outline

- **PBS Kids Play.** A personalized learning service for kids ages 3 to 6 that is designed to enhance school readiness. PLAY! offers all-new educational games that adjust in difficulty based on each child's skill level. It also features easy-to-use parental tools which enables parents to track their child's learning progress.
- **PBS Kids Island.** With PBS KIDS Island, children ages 2-5 can play reading games, earn tickets, and collect prizes. Then, track your child's progress and get activities, lesson plans and tips just for parents, caregivers and teachers with PBS KIDS Raising Readers.

- **Preschool eMedia.** Downloadable video programs including *Number Crew* mathematics in English and Spanish, and *Draw Me A Story*.
- **Parent eMedia.** Downloadable video programs for job skills, adult basic education, and parenting programs.
- **Numbers.** Developmentally appropriate Internet games that build early mathematics skills, such as counting, matching, comparing, sorting, patterns and attributes, shapes, special relationships, time, and problem solving using data.
- **Letters.** Developmentally appropriate Internet games that build early literacy skills, such as listening, speaking, vocabulary, questioning, making meaning from print, alphabet, elements text, phonological awareness, phonemic awareness, rhyming, writing, and environmental print.
- **Me.** Developmentally appropriate Internet games that build physical health and safety skills, social and emotional skills, support multiple approaches to learning—but most particularly illustrate that learning is fun and desired.
- **Parent/Caregiver Resources.** Links to information about community events, workshops, and support ideas for parents/caregivers of preschool age children in Utah, such as the *Little Bites Big Steps* nutrition and physical fitness program.
- **Read.** A literacy section focused on the goals of the *Utah Kids Ready to Read* initiative encouraging parents to read to their children, visit their local public library, develop writing and vocabulary skills, and highlighting age-appropriate books for the seasons, holidays, or local events.
- **Watch.** A television section highlighting programs from UEN-TV that support parents and caregivers, such as *Words That Cook* using children’s books as a springboard for family cooking, *Parenting Counts* updates from the U.S. Department of Education, *Signing Time* teaching preschoolers American Sign Language, and *Real Moms, Real Lives* offering parenting tips on potty training, discipline, and family organization.
- **Contact information.** Links to get support for remembering passwords, finding resources, or making suggestions.

DIGITAL MEDIA SERVICE SUMMER 2008 UPDATE - DISCUSSION

Issue

It's been a very active summer for the digital media service. Adriane Anderson, Digital Media Coordinator, will provide an update on recent activity and new content. Committee members are encouraged to visit eMedia and CollegeMedia at www.uen.org/dms.

Background

UEN offers downloadable digital video and other media items to Utah educators, students, and citizen learners via three branded services:

eMedia—Videos and other media from the Utah Instructional Media Consortium, local documentaries and current affairs programs from KUED-7, national PBS programs, and additional media from UEN and other trusted education partners. Accessed via K-12 Pioneer Library.

CollegeMedia—Videos and other media include college telecourses, local documentaries and current affairs programs from KUED-7, national PBS programs, and additional media from UEN and other trusted education partners. Faculty and students can request to have login information automatically sent to their institution email account by going to www.uen.org/dms

MediaHub—Media items available to the general public including KUED current affairs programs and public events such as recordings from the Veterans Oral History lectures at the Salt Lake City Library. This service does not require a login or password.

These services along with other specialized download services make up the UEN Digital Media Service (DMS). The service runs on the TeleScope Enterprise media management system from North Plains Systems. The Enterprise Learning Services group at UEN manages the system including associated media digitizing and cataloging work.

Summer Accomplishments

This summer UEN added some large collections of educational content including:

- 6,700 Utah Collection Multimedia Encyclopedia items from a legacy system into the digital media services for K12, Higher Ed and the public.

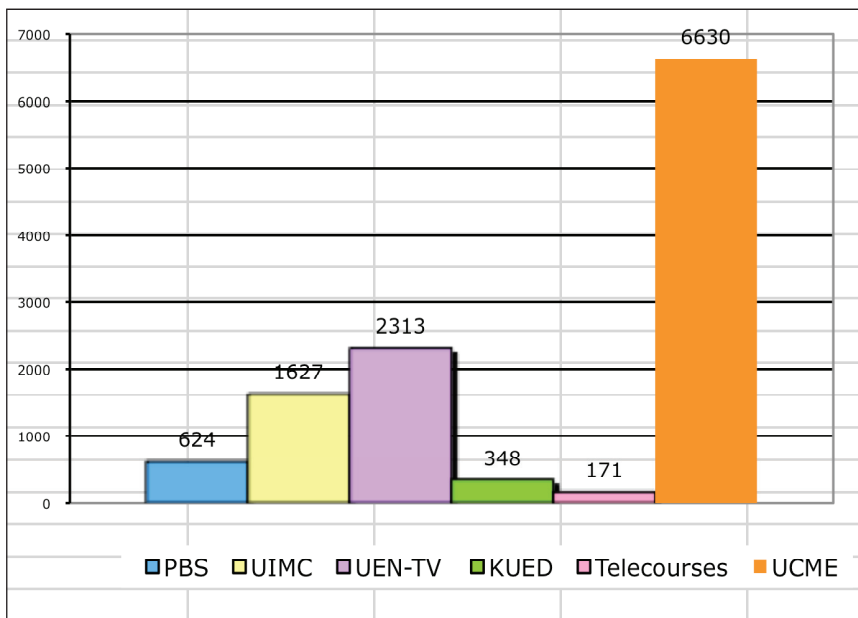
- 330 episodes of educational TV series including: TumbleTown Tales (math), Number Crew (math in English and Spanish), The Magic School Bus (science), and Bill Nye the Science Guy
- 701 Learning Chinese language videos licensed by UEN

As a result, media item counts have increased for all services:

- eMedia (K-12) – 11,666 items (7,600+ items added in Summer 2008)
- CollegeMedia (Higher ed) – 8,428 items
- MediaHub (General public) – 6,899 items

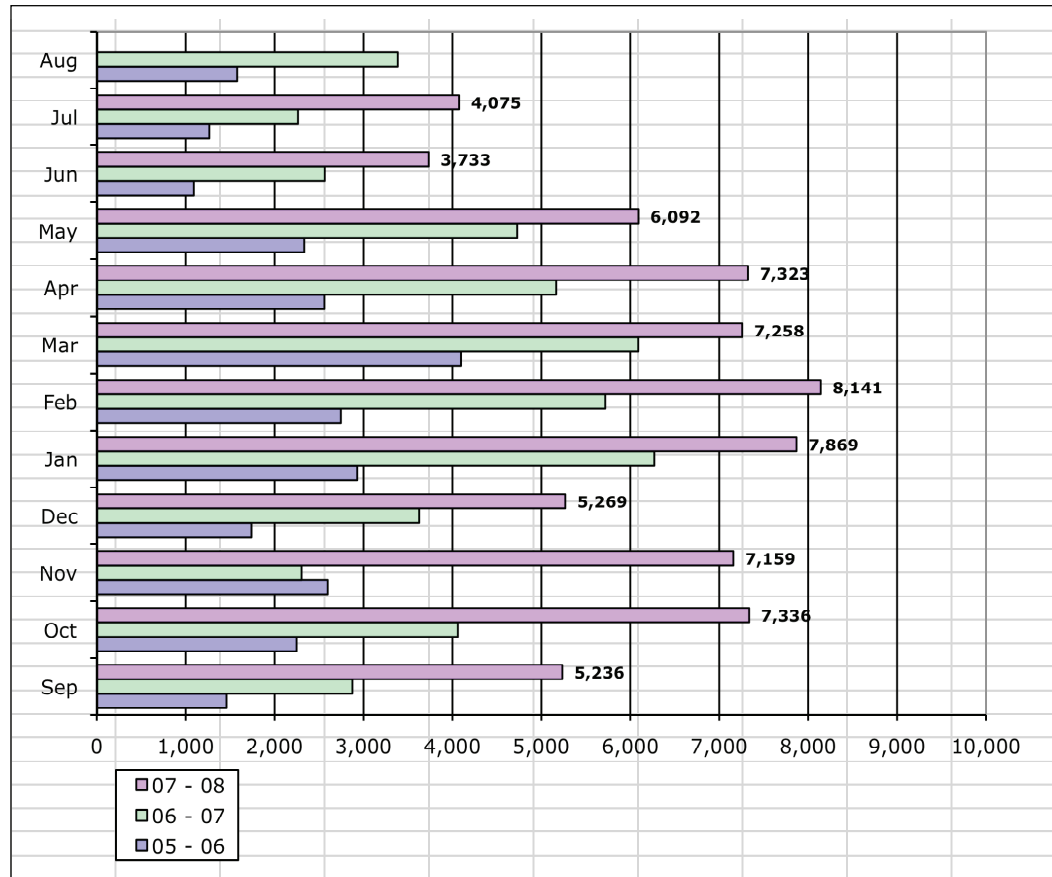
Digital content licensed by UEN-TV makes up the majority of the content, with other resources provided through the collaborative Utah Instructional Media Consortium group buy, PBS content licensed by UEN, local KUED productions, and college telecourses. The following table illustrates a break-down of the major collections.

Major Collections



As the following table illustrates, visits to eMedia and CollegeMedia continue to increase dramatically, with additional visits expected when the school year begins this fall.

Visitors Session Month to Month (3 year composite view)



Work Currently In Progress

UEN continues our partnership with KUED by encoding productions of their current affairs programs Utah NOW and Utah Conversations with Ted Capener. In addition, the team will be working on the following collections:

- 50 French culture and language titles (in French) provided by the French Consulate
- 12 Electronic Field Trip episodes to complete a 41-item set licensed to UEN from Ball State University
- 70 video lessons for basic math, pre-algebra and algebra licensed from the Wisconsin Technical College system, targeting UBSCT students and remediation
- GED Connection titles in Spanish to compliment the 39 English GED Connection items we currently have available. Part of our ongoing effort to increase multi-lingual and multi-cultural resources for our viewers.

In addition to content collections, UEN plans to upgrade the core Telescope system to support the Youth in Custody datacasting project and improve system reliability. Staff members are currently testing the upgrade in our development environment.

Recommendation

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

ITC PROFESSIONAL DEVELOPMENT PARTNERSHIP - DISCUSSION

Issue

Integrating Technology and Curriculum (ITC) workshops have been offered as a partnership between USOE and UEN for a number of years. Periodically, there have been changes to the program and updates to the curriculum. As a result of requests from and discussion with members of the Public Education Advisory Committee, the workshops have been updated significantly for the 2008-09 school year.

Background

Previously, ITC workshops were three days long and included modules on integration of video, web resources and multimedia in curricula. The workshops were targeted for the most basic computer and technology users.

UEN Professional Development staff and USOE education technology specialists have revised the program to address two expressed needs: 1) Some districts were unable to accommodate teachers being absent three days in a row. 2) Especially in smaller districts, participants had attended several years in a row and wanted something new. District leaders wished for ITC-like professional development for those with a slightly higher level of technical experience.

Over the past six months, the UEN/USOE team has developed two courses of two days each—ITC 1 and ITC 2. The first course is very similar to the original ITC workshops. It addresses file management and technology-enhanced communication, effective integration of digital video, and an overview of a variety of Internet resources such as Pioneer library, PBS Teachers, Thinkfinity and others. The workshop builds toward a final project which is a PowerPoint presentation that includes images and sounds and supports a curriculum objective of the participant's choice. The original ITC workshops were based on research and funding from the National Teacher Training Institute. Although that organization has discontinued their grant program, their principles of effective video integration apply just as well to multimedia and digital video today as they did to film and video several years ago.

The ITC 2 workshop builds upon skills and strategies developed in ITC 1 and participants' subsequent practice and classroom implementation of video, Internet and multimedia technologies. District hosts may choose to use iMovie, MovieMaker or advanced PowerPoint, but the focus is on developing a project-based lesson or unit in which students will have the opportunity to create multimedia products. Strategies for

effectively integrating these projects include use of tools like storyboards and rubrics and students' self and peer evaluation. Teacher participants learn software skills and create a sample product, but are also accountable for designing curriculum in which students will use the software to create their own products. Research has proven that students working on real-world projects are more engaged and learn more. Beyond using the software, multimedia projects enable students to develop other important 21st Century skills such as effective communication and collaboration, and higher level, critical thinking skills.

Recommendation

This is an informational item and requires no further action.

Tab 5 Attachment A

ITC LEVEL 2 DETAILED AGENDA FOR ADVANCED POWERPOINT AND ITC LEVEL 2 DETAILED AGENDA FOR MOVIE MAKER AND I MOVIE

ITC LEVEL 2 DETAILED AGENDA FOR ADVANCED POWERPOINT

Module	Approximate Times	Skills Focus	Modeling
Mood Music	30 min prior	n/a	Use of digital audio to gain attention
Welcome, Agenda, Introductions	20 min	n/a	Clear learning goals
Behind the Scenes	30 min	Reviewing, evaluation, effective multimedia, viewed vs. presented	Recalling prior knowledge, discuss the difference in what students learn when consuming vs. creating media; higher level thinking skills, critical thinking
Creating your PSA	75 min	Reminders: Insert video, audio, Insert Pictures, New Skills: Custom animations, slide transitions (with timing) Hyperlinks	Teachers do a project, but see how they could do this same project with students in their own classroom
Break	15 min	n/a	
Managing a Student Project	30 min	File structures, naming conventions, Managing student collaboration,	how to and why use a storyboard, how to and why to use rubrics
Acquiring Audio	60 min	Downloading, ripping a CD, searching for files on the computer	Review copyright/fair use issues
Lunch	30 min		
Editing Audio	75 min	Import audio, fade in, fade out, multiple tracks	Importance of using audio to “illuminate” the subject rather than merely “decorate” the presentation
Break	15 min		
Acquiring Video	75 min	eMedia, download, save target as, video conversion sites	Emphasize importance of using targeted video segments
Develop Your Storyboard	30 min	Folded line activity	Teachers participate in this brainstorming - peer review activity and see how they could use it in their own teaching

ITC LEVEL 2 DETAILED AGENDA FOR ADVANCED POWERPOINT – CONTINUED

Module	Approximate Times	Skills Focus	Modeling
Welcome	1 min		
Storyboarding review Activity	30 min	Peer Review	Do peer review and get ideas for ways to manage this process in the classroom
Reminder about Elements for Video	10 min		
Acquiring media	80 min	Practice the techniques	While developing software skills, teachers gain an understanding of what they can expect their students to experience.
Break	15 min		
Importing media	90 min	Practice the techniques	
Lunch	30 min		
Editing the elements	90 min	Transitions, Custom Animations, Timings, Motion Paths	
Break	15 min		
Final Editing	75 min	Advanced timeline techniques, narration,	
Exporting/Finalizing your project	15 min	Creating a .pps; Package for a CD/Thumb Drive	Experience the satisfaction of sharing – teachers will understand that when more than just the instructor is the audience, students are motivated to produce better products.
Share your movies	15 min	Share your project, post your project to a host location (my.uen.org)	
Good Byes	15 min	credit form	

ITC LEVEL 2 DETAILED AGENDA FOR MOVIE MAKER AND I MOVIE

Module	Approximate Times	Skills Focus	Modeling
Mood Music	30 min prior	n/a	Use of digital audio to gain attention
Welcome, Agenda, Introductions	20 min	n/a	Clear learning goals
Behind the Scenes	30 min	Reviewing, evaluation, effective multimedia	Recalling prior knowledge, discuss the difference in what students learn when consuming vs. creating media; higher level thinking skills, critical thinking
Creating your PSA	75 min	Import video, Import audio, Import Pics,	Teachers do a project, but see how they could do this same project with students in their own classroom
Break	15 min	n/a	
Managing a Student Project	30 min		how to and why use a storyboard, how to and why to use rubrics
Acquiring Audio	60 min	Downloading, ripping a CD, searching for files on the computer	Review copyright/fair use issues
Lunch	30 min		
Editing Audio	75 min	Import audio, fade in, fade out, multiple tracks	Importance of using audio to “illuminate” the subject rather than merely “decorate” the presentation
Break	15 min		
Acquiring Video	75 min	eMedia, download, save target as, video conversion sites	Emphasize importance of using targeted video segments
Developing your own Storyboard	30 min	Folded line	Teachers participate in this brainstorming - peer review activity and see how they could use it in their own teaching

ITC LEVEL 2 DETAILED AGENDA FOR MOVIE MAKER AND IMOVIE — CONTINUED

Module	Approximate Times	Skills Focus	Modeling
Welcome	1 min		
Storyboarding review Activity	30 min	Peer Review	Do peer review and get ideas for ways to manage this process in the classroom
Reminder about Elements for Video	10 min		
Acquiring media	80 min	Practice the techniques	While developing software skills, teachers gain an understanding of what they can expect their students to experience.
Break	15 min		
Importing media	90 min	Practice the techniques	
Lunch	30 min		
Editing the elements	90 min	Transitions, credits, titles, subtitles,	
Break	15 min		
Final Editing	60 min	Advanced timeline techniques, narration,	
Exporting/Finalizing your project	15 min	Creating a .mov or .wmv	Experience the satisfaction of sharing – teachers will understand that when more than just the instructor is the audience, students are motivated to produce better products.
Share your movies	15 min	Sharing your video, posting your video to a host location (my.uen.org)	
Good Byes	15 min	credit form	

USOE PROJECTS - DISCUSSION

Issue

UEN is currently working on three projects for the Utah State Office of Education: Textbook Alignment Project, Social Studies Core Resources, and an online version of the Multimedia Guide.

Background

Textbook Alignment Project

During the 2007 General Session the Utah legislature passed House Bill 364. This bill prohibits a school district from purchasing certain instructional materials unless the materials have been evaluated by an independent party for alignment to the core curriculum. This bill also requires that the alignment be made available on a Web site at no charge. Details about this bill can be found in rule r277-469 Instructional Materials Commission Operating Procedures.

In May 2008, the Utah State Office of Education asked the Utah Education Network to develop online tools that will meet the various requirements outlined in the rule. UEN's Software Development Group and Web Services group are working together on the three major components of this project:

1. **Textbook Alignment Interface:** an online tool that will allow independent reviewers to login and align textbooks to the Utah core curriculum. The tool will also allow a reviewer to upload a Review Credential Sheet, an 180 day curriculum map and submit a reviewer's final evaluation.
2. **Administrator Interface:** an online interface for designated administrators to create accounts for independent reviewers and to generate reports.
3. **End User Display:** web pages that will allow educators and the general public to view the textbook alignment data.

Project Status

Complete:

- Use Case Scenarios for Textbook Alignment Interface and Administrator Interface
- Mock-ups for Textbook Alignment Interface and Administrator Interface
- Data design and creation of development database

- Creation of a “clean” version of the Core database that does not contain formatting html tags
- Struts 2 development installation and configuration
- Hibernate configuration (which allows, among other things, the Struts Java application to communicate with the database server)

Currently working on:

- Coding of the JSPs and the Java classes
- Mock-ups and use case scenarios for the End User Display

Future:

- End User Display screens
- Reporting functionality

Estimated Completion: End of October 2008.

Screen capture of mock-up

Textbook	Alignment Status	Edit	Delete
Scott Foresman - Addison Wesley enVisionMATH Student Edition	Completed		<input type="button" value="Disable"/>

Social Studies Core Resources

The Utah State Board of Education approved the new Social Studies core for grades 3-6 in June 2008. The Utah Education Network has been working with the former Social Studies Specialist, Robert Austin, and the current Specialist, Tom Sutton, on web resources that will help educators teach the new core.

Project Status

Complete:

- Robert Austin gathered over 50 educators for 4 days in June to develop and collect resources to support the new 3-6 Social Studies courses.

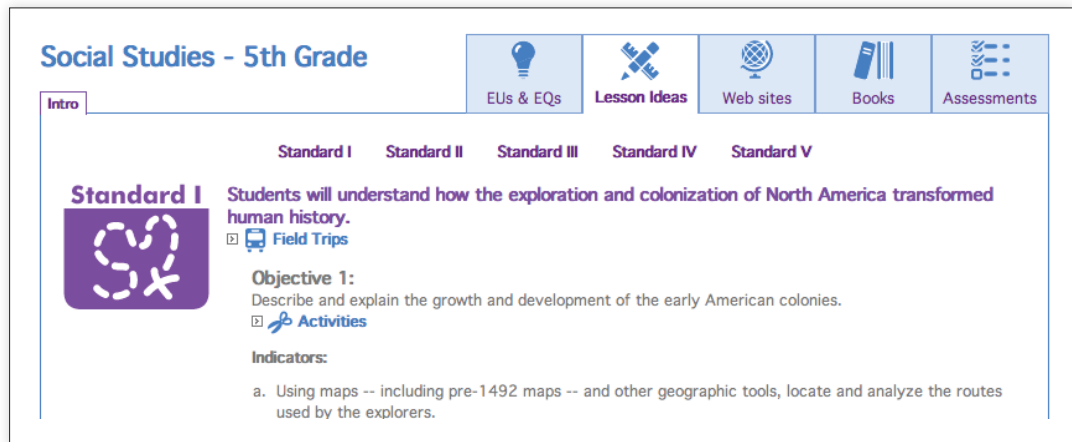
- The Utah Education Network developed web pages that organize the materials into five main areas: Enduring Understandings/Essential Questions, Lesson Ideas (Field Trips, Activities, Lesson Plans), Web sites, Books, and Assessments.

Currently working on:

- Designated educators are reviewing and cleaning up the materials gathered during the 4 days in June.
- UEN is posting the resources on the development web pages as they are completed.

Estimated Completion: The Core Resource web pages will go live mid-August 2008. This is a “work in progress” so resources will continue to be added and revised throughout the year.

Screen capture



In addition to working on the Core Resources web pages, UEN has updated the core database with the new standards and objectives and are working with educators to realign the USOE lesson plans and the supportive Web sites.

Online Version of the Multimedia Guide

After 15 years of publication, UEN, USOE, UIMC (Utah Instructional Media Consortium) and KUED decided to stop printing the Multimedia Guide—the catalog of video resources Utah educators received each fall. Providing a print catalog just got too expensive.

Instead, educators will be able to go online to *www.utahitv.org* and locate all of the instructional video resources available on UEN-TV, KUED and eMedia. The materials will be searchable by keyword, grade level and subject areas.

Project Status

Complete:

- Identification of basic Web site functionality
- Web site design and initial development
- Identification of UEN-TV/KUED broadcast data fields and eMedia data fields

Currently working on:

- Dynamically retrieving and displaying data from both UEN-TV/KUED and eMedia
- Adding grade level and subject area metadata for all ITV programs on UEN-TV/KUED

Estimated Completion: Mid-August 2008.

Screen capture

The screenshot shows the homepage of the Utah Instructional Television website. At the top, there is a logo for 'utah instructional television' with the tagline 'quality content for your utah classroom'. Below the logo is a navigation menu with links: 'home', 'videos by subject', 'videos a to z', 'search videos', 'television schedule', 'program availability', and 'teaching strategies'. The main content area features a grid of video thumbnails on the left and a television schedule on the right. The schedule is organized by time slots: 3:00 PM, 3:30 PM, 4:00 PM, and 4:30 PM. Below the schedule are two buttons: 'browse core videos' and 'view entire tv schedule'. A 'welcome to utahitv.org' section contains placeholder text and a photo of a teacher and students in a classroom. At the bottom, there are logos for 'sponsored by: uen', 'Instructional Materials UIMC Utah School Districts', and 'KUED 7'.

Recommendation

This is an informational item and requires no further committee action.

PUBLIC EDUCATION AND HIGHER EDUCATION ADVISORY COMMITTEE REPORTS - DISCUSSION

Issue

Doug Jones, representing the Public Education Advisory Committee and Cyd Grua, representing the Higher Education Advisory Committee will provide an update on recent committee activities. Committee members provided input via email, as no meetings were held in July or August.

Background

The Public Education Advisory Committee

Members of the Public Education Advisory Committee did not meet this summer, but have scheduled a Wimba video conference on September 18, 2008. Members of the committee received an email copy of the UEN Strategic Plan and Preschool Pioneer Library information and provided input through email. For more information about the September meeting, contact Doug Jones.

The Higher Education Advisory Committee

Members of the Higher Education Advisory Committee participated in the Course Management System Meeting on August 14, 2008. Committee members did not meet this summer, but were emailed a copy of the UEN Strategic Plan and Preschool Pioneer Library information and provided input through email. The next meeting of this committee is scheduled for September 16, 2008 by Wimba video conference. Cyd Grua should be contacted for more information about that meeting.

Recommendation

This is an informational item and requires no further committee action.

IVC TRANSITION TO NEW BRIDGING, SCHEDULING AND MANAGEMENT PLATFORMS - DISCUSSION

Issue

The UEN Interactive Video Conferencing (IVC) operations department has completed the migration, testing and summer production use of the new video infrastructure hardware and application software platform in preparation for full Fall schedule production.

Background

In early spring of 2007 UEN determined that the existing statewide IVC platform would not meet the growing requirements of our stakeholders. UEN solicited four top vendors to provide information and equipment/software in order to test and evaluate new products. The four vendors were Radvision, Tandberg, Polycom and Codian. All companies provided full hardware and engineering support during the lengthy testing period.

The testing period ended in March 2008 and Tandberg was selected to provide the next generation of infrastructure. New equipment consists of 8 Tandberg 40 port bridges and the Tandberg Management Suite (TMS) which provides schedulable endpoint bridging and an extensive reporting tool. Installation and implementation began in April and testing started in May. Production testing began with the start of summer term and was successfully completed in early August.

During the test period, we have had no significant failures or issues with the new platform and a smooth start of IVC classes is anticipated for fall term.

A TMS demonstration will be provided as part of the presentation.

Recommendation

This is a discussion item and requires no further action by the committee.

DNS (DOMAIN NAME SERVICE) ANYCAST PROJECT UPDATE - DISCUSSION

Issue

In spring of 2007 UEN started the DNS AnyCast project in order provide a highly available DNS Service throughout the network. This project provides uninterrupted DNS service at nearly any point in the network at all times. A server was required at each hub providing DNS lookups on the same IP address with every query being answered only by the closest server.

Background

Test Deployment

By the end of August 2007 UEN had deployed four distributed DNS AnyCast Servers at EBC, SLCC, SUU, and Dixie State. Each of these servers are continually updated by the UEN master server and resolve DNS queries. Initially this was done on a new name server IP address. Each server is connected redundantly into network backbone switches in each hub. Testing was complete by September 2007 and additional servers were installed in the network hubs at USU, WSU, DATC, UVU, Snow and Snow South by the end of December 2007.

Production Deployment

On December 19, 2007 each of the ten servers went into production and started to resolve DNS queries on UEN's primary name server IP address. In addition to DNS the servers also serve as NTP (Network Time Protocol) Servers.

AnyCast Benefits

Through this project UEN has been able to distribute the DNS service throughout the Network, placing servers closer to the many network devices that rely on the DNS service, including every desktop computer, laptop and server on the network. Each query will now be directed to the closest DNS server, thereby greatly decreasing response times. This also distributes the load from one server to many servers.

The distributed nature of the service dramatically increases reliability. The DNS service stays up locally even in the event of a hub losing connection to the network backbone. Additionally, in the event of a server failure, the query is automatically routed to the

next closest DNS server in the network. In order for the service to fail completely all ten servers would need to fail at the same time, a very unlikely event.

UEN has also been able to piggy-back the NTP service onto the same servers and reap all of the same benefits for the NTP service as well.

Project Staff

UEN staff responsible for design, testing and deployment of this service are Josh Loveless, Kevin Quire, Kelly Genessy, Shawn Lyons, Jamie Kellerstrass, Jerry Matson and Bryan Peterson.

Recommendation

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

GL3/ELEMENTARY AND CHARTER SCHOOL NETWORK IMPROVEMENTS - DISCUSSION

Issue

UEN is nearing completion of five remaining sites that are part of the GL3 project, and is in the initial planning stages of the first phase of the Elementary School GL3 project.

Background

Five sites of the GL3 project are nearing completion. These projects were delayed by right-of-way issues and/or environmental studies requiring input and approvals by state, local and/or federal agencies.

The initial work on the first phase of Elementary School network improvements is now beginning. The first phase of this project will include over 165 rural and urban elementary schools in addition to 23 charter schools.

The elementary school project will begin in earnest in August, starting with comprehensive site surveys. Some preliminary work to prepare for the project has been underway for the past few months.

Two UEN project coordinators are assigned to this effort. One will coordinate all Qwest related projects, and the other will work with all rural telephone company sites.

The Schools and Libraries Division (SLD) of the Federal Communication Commission (FCC) is reviewing UEN's applications for the elementary school project. While we wait for E-Rate approval, our staff will focus on planning and engineering details in order to ensure that service providers will be able to quickly transition into the implementation phase.

The first phase of the Elementary School project is large in scope, and requires significant work and resources by UEN, its stakeholders and service providers. However, with the experience gained through the previous GL3 phases, UEN Network Engineering, the Network Operations Center and Field Operations continue to fine-tune the planning and implementation process.

UEN will coordinate closely with all stakeholders and will soon schedule combined installation planning meetings with all districts and charter schools to cover expectations throughout the project. Site priorities, site improvements, network designs, circuit installation and the turn up process will all be covered in the planning process.

UEN is excited about the opportunity to work with school districts, charter schools, and the Regional Service Centers to improve network connectivity to elementary and charter schools throughout Utah.

Recommendation

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

IVC PROJECT MANAGEMENT - ACTION

Issue

How may UEN provide project management, implementation and support of stakeholder funded Interactive Video Conferencing (IVC) classrooms and meeting rooms?

Background

As a result of changes in the economic climate in Utah, legislative funding to UEN for Interactive Video Conferencing (IVC) improvements will diminish or likely not be available for the foreseeable future. However, IVC has been fully embraced by UEN's stakeholders who continue to identify funds of their own for additional classrooms, meeting rooms, and site improvements and they are looking to UEN for its experience, staff and resources to manage the planning, installation, and implementation of IVC rooms on their campus or within their district.

Regardless of the funding source UEN stakeholders turn to UEN for IVC project management and implementation services. Over the last six months UEN stakeholders have funded on their own over sixty rooms, half of which UEN has been asked to play a role in the classroom implementation. UEN has been a technical resource for the other classrooms. However, a number of current stakeholder funded IVC rooms are at risk of not meeting their fall semester deadline due in part to a lack of centralized coordination and project management.

UEN maintains a long standing reputation as the state's leader in IVC in addition to a history of setting and meeting deadlines. With the transition to stakeholder funded IVC rooms, UEN must review its processes in order to appropriately support stakeholder requirements as they strive to utilize and support one of UEN's core services.

Recommendation

It is recommended that a process and model be established for UEN planning, project management, purchasing, and implementation of stakeholder funded IVC classrooms.

OUTAGE IMPACT ON NETWORK SERVICES - DISCUSSION

Issue

In June and July the UEN Network sustained a pair of fiber cuts that impacted network services at Dixie State College and surrounding areas. Most concerning is the impact these outages have on enterprise services such as Blackboard Vista, Banner and other network dependent applications.

Background

Two separate backbone fiber cuts south of Cedar City on June 9, and again on July 29 severed the UEN backbone. Both events isolated Washington county facilities from the rest of the UEN network. Cuts of this sort are generally rare, but the close proximity in time and location of these two events is a cause of concern.

As a result of these outages, both southern links were off line for hours and Dixie State College and the Washington School District were completely isolated from the network. Although UEN provides an internet circuit at Dixie State College, access to Blackboard Vista, Wimba, Banner and other services was not possible due to the configuration of network routing and the necessity to route certain services across the UEN WAN. During such outages, all the services residing on the UEN Network would be unavailable.

These routing configuration issues have caused some confusion. Stakeholders have indicated that there is an expectation of greater continuity in access to network services because of the Dixie State Internet link. General Internet traffic was not affected by either fiber cut. However, services dependent on the UEN Wide Area Network (WAN) connectivity were off line.

Recommendation

This is a discussion item and requires no further action by the committee.

