Utah Education Network Steering Committee

October 28, 2011



UTAH EDUCATION NETWORK STEERING COMMITTEE

AGENDA

OCTOBER **28**, **2011**

9:00 a.m.-10:00 a.m.

Working Session / Steering Committee

Credit Union Conference Room

- 1. Steering Committee members' discussion of selected topics.
- 2. Agenda items and topics for upcoming Steering Committee meetings.

10:15 a.m.-12:00 noon

Dumke Conference Room

Committee of the Whole / Business Meeting

Welcome and Introductions

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UPCOMING MEETINGS

Steering Committee Meeting - December 16, 2011, 9:00 a.m.

Please place these materials in your Steering Committee Binder.

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STEERING COMMITTEE MEMBERSHIP - ACTION

Issue

The terms of several members of the UEN Steering Committee expired at the end of August. Co-chairs Gary Wixom and Brenda Hales have requested that Kenning Arlitsch, Steve Corbató, Gary Koeven, Ronda Menlove, Gail Niklason, Clark Baron, Rick Gaisford, and Kirk Sitterud agree to serve new terms and recommend to the governor that he extend their terms.

Background

The Steering Committee has equal numbers of higher education and public education members. The terms of five of the higher education members have expired and Co-Chair Gary Wixom recommends that their terms be renewed. Kenning Arlitsch represents higher education librarians and is the Associate Dean for Information Technology Services at The University of Utah Marriott Library. Steve Corbató represents higher education research and is Director of Cyberinfrastructure Strategic Initiatives at The University of Utah. Gary Koeven represents higher education administrators at small Utah colleges and is the Chief Information Officer at Dixie State College. Ronda Menlove represents higher education continuing education administrators. She is the Senior Vice Provost for Regional Campuses and Distance Education at Utah State University and the Representative of District 1 to the Utah House of Representatives. Gail Niklason is Senior Research Analyst for Institutional Effectiveness at Weber State University.

The terms of four public education members have now expired. Co-Chair Brenda Hales recommends that Clark Baron serve a second term on the Steering Committee. Clark is the principal at Utah County Academy of Science. Rick Gaisford has been asked to serve a second term. He is Educational Specialist, Education Technology, at Utah State Office of Education. Kirk Sitterud has been asked to serve a third term on the UEN Steering Committee. He is the Superintendent of Emery School District.

Recommendation

It is recommended that the Steering Committee approve the nominations of Kenning Arlitsch, Steve Corbató, Gary Koeven, Ronda Menlove, Gail Niklason, Clark Baron, Rick Gaisford, and Kirk Sitterud to serve new terms as members of the Steering Committee. These nominations will be subject to approval by Governor Gary Herbert.

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TAB TAB FY 2013 BUDGET REQUEST - ACTION

Issue

The FY 2013 UEN budget request requires approval by the Steering Committee before it is submitted to the Governor and the Legislature for their consideration. We propose an increase in state funds of \$286,000 in ongoing funds for operating expenses in FY 2013 and a one-time appropriation of \$150,000. Our priorities were initially presented to the Steering Committee during our August meeting and address the issues outlined below.

FY 2013 Budget Recommendations

First Priority: Elementary and Charter School Network Connectivity

UEN provides broadband connectivity to high schools and middle schools at no cost to the districts. However, when the legislature and governor statutorily gave UEN the responsibility to build and maintain the educational wide area network, elementary schools were treated differently. UEN was not funded to connect and pay for elementary network connections. If districts wished to connect their elementary schools to the UEN network, they were expected to pay for the after E-Rate cost of those connections.

Over the years, to connect elementary and charter schools UEN, districts, and charter schools have worked together on a variety of projects and with various funding mechanisms. In most cases, districts and charter schools have contracted with UEN, but some have worked directly with telcos. Five different funding scenarios have been used, and Attachment A provides details on the historical and financial relationships that have been followed.

To provide a brief historical review, UEN's ongoing annual appropriation in FY 2009 provided \$700,000 to pay after-E-Rate elementary and charter school connectivity charges and \$500,000 one-time for construction charges. In October, 2008, we were required to reduce our FY2009 budget by a total of \$1.8 million. The Steering Committee approved reductions of \$500,000 in ongoing and \$140,000 in one-time funds for elementary school projects. UEN retained \$200,000 ongoing and \$360,000 one-time for elementary and charter school projects. Since then, the UEN ongoing state appropriation was reduced by an additional \$2.3 million for a total of \$4.1 million in reduced state appropriations. Except for \$1 million one-time funds UEN received to match our BTOP grant in FY 2010, we have received no additional ongoing revenue to pay partial or full after E-Rate MRC for elementary and charter schools. The on-going annual cost of elementary and charter school network circuits are approximately \$5.6 million. After E-Rate costs are about \$1.6 million annually.

Table 1: Scenarios Used to Pay for Elementary and Charter School Network Connections

Elementary Schools District Controlled Contracts	Number	School District	LIENI
		2300. 2.00.100	UEN
Dadia/Miarauraua	127		
Radio/Microwave	24	\$ -	
Telcom			
No Charge (UTOPIA 7, Iprovo 13)	20	\$-	
Contract with Telco (71% E-Rate Discount)	52	\$97,846	
Fiber	31		
BTOP Elementary Schools	69		\$289,596
District pays 2/3rds UEN pays 1/3rds	55	\$47,551	\$23776
Districts pay UEN Managed Contracts	265	\$1,003,884	
UEN Pays 100% Elementary Schools	10		\$46,546
TOTAL ELEMENTARY SCHOOLS	526	\$1,149,281	\$359,917
		-	
		Recurring Costs	
Charter Schools	Number	School District	UEN
Charter Controlled Contracts	39	\$-	
BTOP Charter Schools	22	\$-	\$57,991
Charter Schools Pay 2/3rd UEN pays 1/3rds	18	\$47,686	\$23,487
Charter School pays UEN Managed Contract	5		
UEN Pays 100% Charter Schools	8		\$11,512
TOTAL CHARTER SCHOOLS	92	\$47,686	\$92,990
	618	\$1,196,967	\$452,907

To assure a sustainable funding plan for elementary and charter school connectivity within the UEN BTOP project, UEN proposes to request from the legislature an ongoing appropriation of \$250,000 to pay the after E-Rate monthly recurring costs for elementary and charter school connections installed during the BTOP grant project.

Table 1 above shows the different scenarios UEN, school districts, and charter schools use to pay for elementary and charter school network connections. School districts pay \$1.149 million and charter schools pay \$48,000 in after-E-Rate connection costs annually. Current UEN expenditures for elementary and charter school connections are slightly more than \$450,000. We spend \$105,000 for 1/3rd of the after-E-Rate share of 55 elementary and 18 charter schools and 100% of the after-E-Rate cost of 10 elementary schools and 8 charter schools. In the middle of FY 2013 our BTOP grant ends and there will be an on-going obligation to pay \$348,000 for the after-E-Rate costs of 69 elementary and 22 charter schools.

In recognition of the \$200,000 that UEN retained in FY2009 to pay for charter and elementary school connections, we request \$250,000 to provide the total of \$450,000 that will be required long-term to pay the UEN cost of connectivity. Districts and charter schools would continue to be billed by UEN to pay \$1.1 million for connections that are managed under UEN contracts; and pay \$145,000 for contracts the districts currently have with telcos.

Priority Two: New School Network Connectivity

We estimate that 12 to 15 new public education and charter schools will be built and become operational annually. The one-time construction cost to connect to the UEN network infrastructure are treated like other utility connections to the new facility and funded through the district's construction bond or the facility lease for charter schools. Consistent with other schools connected to the UEN network, ongoing monthly circuit charges would be funded annually through an incremental appropriation by the Legislature to UEN. It is therefore proposed that \$36,000 be included in the UEN FY 2013 budget request to cover the circuit charges for 12 new public education and charter school facilities scheduled to operate in FY 2013.

Priority Three: Statewide Filtering Service

The Children's Internet Protection Act (CIPA) addresses concerns about access to offensive content over the Internet on school computers. UEN hosts the filtering applications for all public and charter schools that provide for Internet safety against: (a) access by minors to inappropriate matter on the Internet; (b) the safety and security of minors when using electronic mail, chat rooms, and other forms of direct electronic communications; (c) unauthorized access, including so-called "hacking," and other unlawful activities by minors online; (d) unauthorized disclosure, use, and dissemination of personal information regarding minors; and (e) those measures restricting minors' access to other materials harmful to them.

Because of favorable contract negotiations over the past 5 years, the efficiencies generated by a centrally hosted statewide filtering application and from economies of scale, UEN has spent \$100,000 annually to provide filtering services for all public schools statewide. This has proven to be a great cost-saving to school districts and to the state. The software license for our current filtering service is \$110,000, which our existing budget is able to support.

As the network has increased in capacity and complexity, equipment costs to support district-level and charter school filtering have increased. We propose that \$150,000 be allocated by the legislature to offset these higher costs. Without that additional revenue, districts and charter schools will absorb all equipment costs; the one-time funds would allow UEN to help lower the burden for the districts and charter schools.

Recommendation

It is recommended that the UEN Steering Committee approve our requests for ongoing funds to pay network after E-Rate expenses for BTOP elementary and charter schools, new school network connectivity and one-time funds to offset districts' equipment expenses to filter the Internet.

TAB 7 ATTACHMENT A

Managing and Paying for Elementary and Charter School Network Connections

For nearly twenty years, Utah school districts have relied on UEN to provide broadband connectivity to high schools and middle schools at no cost to the districts. UEN contracts for services with telcos, files for E-Rate reimbursements, and seeks other grant funding. Because of this funding model, Utah's school districts do not have the responsibility for E-Rate filings, contracts, competitive bidding, billing and payments for their high school and middle schools.

When the legislature and governor statutorily gave UEN the responsibility to build and maintain the educational wide area network, elementary schools were treated differently. UEN was not funded to connect and pay for elementary network connections. If districts wished to connect their elementary schools to the UEN network, they were expected to pay for the after E-Rate cost of those connections. The establishment of public charter schools and their rapid growth has similarly been a new challenge that has been addressed by UEN.

Progress in connecting elementary and charter schools with high capacity network connections must be understood in the context of the sequence of steps UEN has taken to convert the network backbone to a dense wave division multiplexed technology that is scalable and highly reliable; and to build out from regional higher education campus-based points of presence to school district offices, high schools, and middle schools. Table 1 summarizes that build-out of network infrastructure that has occurred during the past decade.

Within the context of the sequence of network improvements summarized in Table 1, UEN, school districts, and charter schools have worked together on a series of elementary and charter school connectivity projects. In most cases, districts have contracted with UEN to connect elementary schools, often in conjunction with high school and middle school build-outs that were occurring at the same time. Other districts worked directly with local telcos, and in some instances microwave radio or dark fiber solutions were deployed by the districts and UEN.

Table 2 summarizes five different funding scenarios that have been used to complete elementary and charter school network improvement projects during the past 8 years. In 2004-2005, UEN applied for and was awarded two Community Impact Board Grants. Total funding was approximately \$2.2 million. The grant was used to replace the legacy analog radio microwave networks in the Uintah Basin and San Juan County. This digital microwave system is still in place today and will probably need to be replaced within the next 2-3 years. Parts are now scarce and the lifecycle of the system is being tested.

Table 1: UEN Network Infrastructure Improvements, 2002-2012

Year	Project (Phase)	Scope	Funding	Comments
FY 2002- 2003	Central Ring	Ethernet ring to include EBC, SLCC, UVU	UEN circuit budget	First GigE circuits in the UEN backbone; preparation to replace Qwest CVDS
FY2003	Uintah Basin	GigE installed in 9 Schools in Uinta SD and Duschesne SD	UEN circuit budget	First GigE circuits to Schools served by UEN
FY2004	GL3 Phase One	Geomax backbone and several Rural projects	UEN circuit budget; \$400K from Legislature	Second phase of UBTA; Frontier; Manti; South central; many district offices were included in this phase; also CVDS included in separate fiber channel (dependent on Qwest gifting \$2 million in CVDS equipment)
FY2005- 2006	Phases 2, 3	155 sites, satellite conversion, 85 additional sites	\$400K one-time from Legislature, then converted to ongoing; \$1.5M one-time	Salt Lake, Weber, Cache districts partnered with UEN to upgrade elementary schools
FY2007- FY2008	Phases 4, 4.5 & 4.75	final secondary sites; ~60 sites	\$1.3M converted to ongoing; additional \$1.5M one-time allocated to install final secondary sites	\$1.3 million converted to 1.5 mil on going
FY2009- FY2010	10G upgrade & Elementary Phase 1	upgrade to 10G on five backbone links; Elementary schools phase 1 upgraded 70 elementary schools and 18 charter schools	10G (\$200K onetime; \$200K ongoing); Elementary Phase 1 \$3600K one- time, \$200K ongoing	In FY 2009, and FY2010, elementary and charter schools were upgraded. UEN paid most one-time costs and shares the ongoing costs (1/3 UEN & 2/3 district)
FY2011- FY2012	BTOP round one and BTOP post award modification	Elementary, Charter Schools, libraries, UofU and USU Metro Rings	BTOP Grant and \$1 mil onetime from Legislature	Most work deferred to summer 2011 due to delay in receiving NTIA approval to proceed; 144 sites, including 40 in Post-award modification and UofU and USU rings

Table 2: Managing and Paying for Elementary and Charter School Network Connection Improvements

			Recurring Costs Paid By:	
Elementary Schools (K-6)	Number	%	School District	UEN
District Controlled Contracts	127	24%	100%	
Radio/Microwave	24	5%		
Telcom	72	14%		
Fiber	31	6%		
BTOP Elementary Schools	69	13%		100%
District pays 2/3rds UEN pays 1/3rds	55	10%	66.67%	33.33%
UEN Managed Contracts Elementary Schools	265	50%	100%	
UEN Pays 100% Elementary Schools	10	2%		100%
TOTAL ELEMENTARY SCHOOLS	526			
Charter Schools (K-12)	Number	%		
Charter Controlled Contracts	39	42%		
Telcom	39	42%		
BTOP Charter Schools	22	24%		100%
Charter Schools Pay 2/3rd UEN pays 1/3rds	18	20%	66.67%	33.33%
UEN Managed Contracts Charter Schools	5	5%		
UEN Pays 100% Charter Schools	8	9%		
TOTAL CHARTER SCHOOLS	92			
Total Elementary and Charter	618			
Schools				

In 2005-2006, Salt Lake, Weber, and Cache School Districts partnered with UEN on broadband Ethernet contracts. The districts took advantage of UEN's projects to build out the statewide backbone and school district offices and secondary schools throughout the state. UEN had received state appropriations from the legislature to make the backbone and secondary school network improvements. Through memoranda of understandings, the school districts agreed to pay 100% of the after E-Rate cost of the Gigabit Ethernet circuits after implementation. Because of circumstances that varied from one district to another, during this time several districts undertook their own fiber projects without UEN's financial involvement: prominent examples are Davis, Murray, and Provo districts.

In 2008, after successive years of completing statewide fiber backbone and build-out to secondary schools throughout the state with a combination of state appropriations and E-Rate, the UEN Steering Committee directed UEN to begin a strategic initiative to improve bandwidth to elementary schools and charter schools with inadequate bandwidth. Twin goals were to provide 100 mb/s to 1000 mb/s Ethernet capacity and increase UEN's role in managing and paying for the connections. To fund the initiative, the UEN Steering Committee recommended

and the State Legislature approved appropriation of \$500,000 of one-time money and \$700,000 of on-going money to begin the initial phase of this project.

UEN issued competitive RFPs on qualified projects and began to negotiate MOUs with school districts and charter schools. Unfortunately, economic conditions nationally and in Utah deteriorated that summer, and in October 2008 the State Legislature reduced UEN's budget with a mid-year cut. Because most other budget projects had already been completed, UEN staff recommended and the Steering Committee supported reduction of the elementary network project budget to \$200,000 ongoing and \$360,000 one-time appropriations.

Under these difficult circumstances, in an effort to complete as many of the connections as possible, UEN proposed to the school districts a cost sharing plan in which UEN paid for the off-premise construction of fiber from the nearest interconnection point into the UEN network. School Districts and charter schools were responsible to pay the after E-Rate cost of installing entrance conduit into the school building. The ongoing after E-Rate costs were to be shared proportionately: 1/3rd would be paid by UEN and 2/3rds by the participating districts/charter schools. The goal of this cost sharing proposal was to reach as many schools as possible with available funding. Projects in thirteen school districts were completed using this plan; and UEN assisted with point-to-point projects with Alpine, Sevier and South Sanpete school districts on radio and fiber build where costs and resources were shared to complete connections to nearby or adjacent secondary schools that already connected to UEN.

In 2010, UEN received a federal NTIA BTOP grant; its primary focus is to connect elementary, charter, and library locations to the UEN network. The 20% matching requirement of the grant is a UEN obligation, therefore all of the matching cost and after E-Rate monthly recurring costs during the period of the grant will be paid by UEN. A one-time appropriation in FY 2011 of \$1 million will assist UEN to meet this match obligation. Through a competitive RFP process, UEN negotiated contracts with several telcos to install network connections to elementary schools and charter schools. We are meeting the grant construction, installation, and turn-up timelines and have currently completed or are in the process of completing 69 elementary school and 22 charter school locations.

Since 2004, multiple scenarios have been followed by UEN working cooperatively with school districts, As a result, virtually all elementary schools are now connected or will soon be connected with high capacity fiber connections to the UEN network. Not counting the to-be-completed BTOP locations, there will remain 23 elementary schools that have inadequate network connections. Most are in the Alpine school district and the others are in remote rural locations.

IVC Support for Governor Herbert's Rural Tour of Utah - Discussion

Issue

Governor Gary Herbert's rural tour October 11-12, utilized and highlighted UEN's broadband and Interactive Video Conferencing (IVC) networks and services to address Utah's High School Students and the press.

Background

In early September, State Representative, Steering Committee member, and Utah State University Senior Vice Provost for Distance Education and Regional Campuses, Ronda Menlove, coordinated an IVC event to be included in Governor Gary Herbert's rural tour of Utah. UEN supported a statewide video conference connecting all Utah high schools. Part of the rural tour, it originated from the Utah State University - College of Eastern Utah (USU-CEU) campus in Blanding, and utilized UEN's Interactive Video Conferencing network. The Governor's purpose for the videoconference was to "meet with students for an hour in an interactive conversation" to stress the benefits of a higher education.

UEN also assisted with a press conference. On the first day of the tour, Governor Herbert was at Grouse Creek School, in northwestern Box Elder County. It is one of the smallest schools in Utah with 17 students in grades K-10. Grouse Creek School is now connected to the UEN network with a 1 gigabit Ethernet fiber connection which we lease from Beehive Telecom. The connection allowed us to originate a high definition point-to-point video conference from Grouse Creek School to the Dumke conference room at the Dolores Doré Eccles Broadcast Center. From Grouse Creek School, Governor Herbert conducted a press conference with reporters at the Dumke conference room. This event provided Governor Herbert with an opportunity to discuss his rural tour and his objectives. Several television stations and newspapers used content from the press conference for stories which featured UEN's IVC system.

Excerpts of the news conference can be viewed at http://www.utah.gov/governor/news_media.

On Wednesday, October 12th, from a USU-CEU campus IVC classroom in Blanding, the Governor addressed high school students at 110 UEN IVC classrooms in high schools throughout the state. UEN also provided a high quality stream for schools without an IVC classroom and to extend the address to non-IVC classrooms in each school. 405 live streams were sent during the address, and the recording has been

viewed nearly 1700 times. We recommended to high school administrators that the stream be viewed as a classroom or class assembly rather than on a one-to-one basis to better manage the demand on the live stream.

Governor Herbert spoke about the importance of post-secondary education to be a successful adult. He then gave students from Orem High School (his alma mater), Rich High School, Murray High School, and Emery High School the opportunity to ask questions. He called on Ronda Menlove, participating from her office at USU in Logan, to assist him in answering the question from the Murray High School student.

The event was the first of its kind. It demonstrated the interactive capabilities that instructors and students use daily on the system, and it highlighted the extent of UEN broadband improvements to even the most remote regions of Utah. It showed the extent of UEN's IVC network that serves rural and urban students with high quality interactive video and audio for distance education. Although logistical and technical demands were extensive to conduct an event of this magnitude, it was judged to be a success by the Governor's office.

The Governor's address to Utah's high school students can be viewed at www.uen.org, Utahfutures.org and Utah.gov. A short excerpt can be viewed at http://www.utah.gov/governor/news_media/.

Recommendation

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New Children's Internet Protection Act (CIPA) Compliance Requirements - Discussion

Issue

New Children's Internet Protection Act (CIPA) Compliance Requirements.

Background

The FCC issued an Order on August 12, 2011 incorporating into E-Rate program rules the 2008 "Protecting Children in the 21st Century Act" requirements for Internet Safety Training of minors who are provided access to USF supported Internet. These new requirements are effective July 1, 2012. UEN must obtain certification of CIPA compliance from all consortium members annually via the FCC Form 479 (Certification of CIPA Compliance) and Utah E-Rate applicants must certify compliance themselves annually on FCC Forms 486 (Notification of Service Delivery).

To assist Utah entities in complying with the new rules, UEN has distributed to UEN members via our E-Rate mailing list and the TCC mailing list, this checklist. It is also posted on the UEN website at http://www.uen.org/e-rate/cipa.shtml.

CIPA Policy Compliance Checklist (10/21/2011)

Must be completed and/or you must have documentation that shows your compliant policy is already in place by 7/1/2012

- Document proof of public (board) meeting where CIPA policy is included as an agenda item and its announcement to the public (web page, or newspaper notice)
- Post, publish, or otherwise document that the policy is/was approved by the board.
- Policy should include the following terms and/or phrases:
 - Technology Protection Measures are in place and used for all Internet Access
 - Monitoring of Internet usage for minors and adults is policy
 - ♦ Internet Safety Training is to be provided to minors and addresses:
 - Appropriate online behavior
 - Cyberbullying awareness and response
 - Social networking sites
 - Chat rooms

Please keep in mind that policies should not include detailed procedures describing how schools comply with policy. Whatever is written in policy becomes an auditable item that schools and libraries will be held accountable for. If the above items are included in documented policy, the school has complied with the rules. Additionally, the documentation of a public (community of interest) meeting requirement could be considered an "amnesty" offering by the FCC for those that cannot already provide such evidence.

An excellent discussion of the differences between policy and procedures and links to example (Acceptable Use Policies) AUP's is posted on the CoSN website: http://www.cosn.org/Default.aspx?TabId=8139

CIPA Compliance Resources:

Technology Protection. UEN provided filtering is the easiest way for schools and libraries to satisfy this requirement. Also, it's important to note that filtering may be disabled for bona fide research/use by adults, however a default configuration for Internet attached computers must include or enable filtering. Current network user authentication processes make this a virtual non-issue but it must be a consideration when enabling access to the network.

Monitoring. UEN provided filtering configurations permit logging of Internet usage, which satisfies the monitoring requirement. Local policies and standards may define other methods of monitoring.

Internet Safety Training. The new requirements stemming from the "Protecting Children in the 21st Century Act" apply only to schools. Internet Safety Training is not required for libraries to be compliant with CIPA.

NetsafeUtah.org. Provider of numerous online resources for all age groups which should make it easy for schools to incorporate Internet Safety Training into their processes or curricula. The K-12 Core Curriculum in Utah already incorporates Internet Safety Training into grade 7-12 Health Education. We expect this to be expanded to include all grade levels where minors have access to the Internet.

Other E-Rate related information:

2010 – UEN Invoices to USAC = \$11,405,047 (Approximately \$200K in the pipeline with more project related infrastructure funding remaining available from 2010 until September 20, 2012.)

2011 – Funding Commitments to UEN so far by USAC = \$18,841,048 (Approximately 80% of funding requests have been funded so far.)

Recommendation

CPB BANDWIDTH OPTIMIZATION PROPOSAL - DISCUSSION

Issue

UEN, KUED, and KBYU are in the process of preparing a Collaborative Bandwidth Optimization grant proposal to the Corporation for Public Broadcasting. A final draft of the proposal will be presented for Steering Committee adoption in the December 2011 meeting.

Background

UEN, KUED, and KBYU comprise Utah's three public television stations who receive federal Community Service Grant operation funds from the Corporation for Public Broadcasting (CPB). Utah is considered an "overlap" market because the signals of the stations are redundant throughout the state. For many years, KUED and KBYU have benefited from a program differentiation fund administered by CPB which is soon to be retired. A new opportunity from CPB encourages stations in overlap markets to differentiate and coordinate their services in order to maximize the resources available to viewers and community members.

As a result, UEN, KUED, and KBYU are developing a collaborative agreement that follows CPB guidelines. This document includes formal agreements on how we will share services and also differentiate our services. For example, KUED is Utah's premier PBS member station and will take the lead with iconic PBS programs. KUED also airs digital channels Vme and PBS World. KBYU airs fewer PBS programs on a different schedule, includes locally produced programs and sports, and airs the secondary channel Create. UEN airs educational programs including teacher training, GED, and telecourses. UEN also airs MHz Worldview and the new Teaching Channel.

In addition to programming, the collaborative agreement will include formal arrangements for fundraising, staffing, community engagement, technical coordination, and other factors. Each station's board will be asked to formally adopt the agreement prior to CPB submission in January. If successful, the grant will result in an additional \$250,000 per station for three consecutive years.

Recommendation

STRATEGIC COMMUNICATION REPORT - DISCUSSION

Issue

UEN submitted a requested report on BTOP video update recommendations to NTIA. We also participated in multiple outreach events and tracked e-newsletters sent to educators in July, August and September.

Background

UEN submitted a report to NTIA for possible inclusion in an addendum to the Stakeholder Outreach and Sustainability Toolkit for BTOP recipients. The addendum provides tactical guidance, examples, tips, and best practices in several areas of outreach and communications.

Among UEN's recommendations were the following ideas on the production of video updates:

- Obtain and integrate internal staff feedback prior to release to stakeholders and the general public.
- Evaluate early and often, integrating feedback from staff and early users in subsequent iterations.
- Tell the story with photos, video, maps and colorful, appealing graphics.
- Show viewers the project's impact on the community.
- Shoot and edit your video in a high resolution format, so that it can be shown on a large screen or made available for use on TV stations in addition to a web version.

Through exhibitions at public events UEN had face-to-face interaction with students, parents, educators and citizens-at-large. UEN participated in the following events:

- Radio Disney Safety Safari at Utah's Hogle Zoo
- Health Fair at Rice/Eccles Stadium at The University of Utah
- · KSL-TV and Radio Book Fair at The University of Utah
- SUECON (Southern Utah Educational Conference) in St. George
- UEA Convention, at the SouthTown Expo Center in Sandy
- UEN and Clark Planetarium Super SciFi Celebration

We also tracked the results of the UEN NetNews newsletter emailed to Utah educators in July, August and September. 16,529 of these messages were opened. The five most followed newsletter links were:

- 642 clicks Seven Tips for a Successful Back-to-School Night
- 541 clicks Nine Notable Ways UEN Serves Educators
- 514 clicks Summer Schedule of Professional Development Courses
- 204 clicks Interactive Whiteboard Resources
- 170 clicks UEN Video Tutorials on YouTube

Recommendation

UEN IN A NUTSHELL VIDEO - DISCUSSION

Issue

UEN in a nutshell is ready to be watched online and viewed on UEN-TV.

Background

Based on the encouragement of the Steering Committee, and especially members of the ad hoc governance committee, we have clarified our services to public education and higher education. UEN infrastructure services include network services, application hosting, and application support. To provide an entertaining and informative way to learn about UEN services, we engaged Planet Nutshell to produce a brief video that effectively describes UEN and its infrastructure services.

The video will be shown during the Steering Committee meeting.

Recommendation

PROFESSIONAL DEVELOPMENT POLICY RECOMMENDATION - DISCUSSION

Issue

UEN Professional Development has been able to provide high-quality, professional workshops for teachers at no cost to participants. However, due to slowly increasing operations expenses with no funding increases in the past 10 years, we now find it necessary to begin assessing a modest fee for the classes for which credit is available.

The fee will be set between \$30 and \$50 per credit, and will be assessed to individuals who register for in-person classes offered at our facility here at The University of Utah and for those who register for our online offerings.

In FY 10/11, we offered 162 in-person classes and 66 online classes for 2341 and 1048 participants respectively. These are the classes for which individual registration was required and for which we would assess a fee beginning in January 2012.

During the same time period, we offered 266 sessions (54%) that were requested by schools, districts and conference organizations around the state. This service will continue to be available to requestors at no cost.

Background

UEN Professional Development offers high-quality technology skills training and is the primary "face" of UEN promoting and teaching about our many web services for educators. We have been able to offer classes for lane change credit online and in our computer classroom here at The University of Utah, though the largest portion of our instructors' effort is committed to presenting by request at schools, districts, conferences and educational centers throughout the state. All of these services have been available at no cost.

Unfortunately, over the past 10 years, costs have increased while funding has not. For example, parking permits for in-person classes have increased from \$3.00 per day in 2001 to \$7.00 per day last year. During the same time, the number of people coming to campus for classes has nearly doubled. We spent about \$18,000 on parking last year. Postage costs have increased along with the number of forms and certificates we need to mail out, and we have recurring costs for cutting edge devices to demonstrate and teach about, paper and copier maintenance and other small operations expenses which have slowly but steadily increased over the past 10 years.

Another challenge that comes with offering free classes is that participants often undervalue the opportunity and/or fail to commit for an activity that is free. As a

result, though our classes have huge waiting lists, we've had as many as 50 people cancel their registration for class that was capped at 40. Some people register for every available class during the summer, and then drop out of all but one or two as vacation and other activities come into conflict. Although we've been able to automate much of the waiting list process, we still have had 3 or 4 empty seats in every class. This is very frustrating when there are 25 or more people on a waiting list.

We also find a small portion of class participants who neither know nor care what the class is about – they have come because it is the only way to get license points with no charge.

We have researched the charging practices of other professional development organizations and districts, as well as assessed responses through our Public Education Advisory Committee and other colleagues. Response has been all neutral or positive with many understanding the current economic challenges, and others recognizing the benefits charging will have on attendance and engagement in class.

Recommendation

We recommend that the steering committee approve the change to allow UEN Professional Development the general practice of assessing a modest fee for individuals to participate in online and in-person classes that we offer for lane change credit. Providing presentations in schools, districts and at conferences at the request of our constituents would remain available as a free service.

Detailed policies and procedures will be submitted for review by the Public Education Advisory Committee. Subsequent approval by the Steering Committee will then be requested.

T A B 14

WEB CONFERENCING RFP - DISCUSSION

Issue

As our licensing agreement for the Wimba Collaboration Suite (Wimba Classroom, Wimba Voice, Wimba Pronto, and Wimba Create) ends on August 31, 2012, UEN is beginning the process to select a replacement web conferencing service.

Background

A committee consisting of representatives from higher education, public education, and state libraries is being formed and a draft RFP is now being written. We anticipate that the RFP will be released within a few weeks and that the committee will give their recommendation to the UEN Steering Committee at the December 16th meeting.

Recommendation

BTOP INFRASTRUCTURE IMPROVEMENT GRANT - DISCUSSION

Issue

UEN is making excellent progress on the Broadband Technologies Opportunities Program (BTOP) project called Utah Anchors. During the third quarter of 2011, UEN has been actively working with telecommunication partners on the network build out, installation and turn up of Community Anchor Institutions (CAIs). By the end of September, 65 CAI installations were successfully completed. In order to meet the substantially complete milestone required by NTIA, UEN will need to complete broadband connections to as many as 95 institutions when we reach the end of the second year of the project. We are currently on schedule and we believe we will reach this milestone. Construction work continues on the major segments of fiber installation this fall with favorable weather.

Background

Several UEN staff attended the mid-course BTOP workshop hosted by OneCommunity and NTIA in Cleveland, OH during the first week of October. Over 350 BTOP recipients and their partners attended the event. UEN staff were able to meet with Dr. Frank Monteferrante, the Director of Environmental Assessments at NTIA and review our Post-Award Modification environmental review with him at the conference. Several of our peers from other states and regional education networks were in attendance, and we found the workshop to be informative and valuable for learning and sharing ideas with our peers from around the country who are also working on BTOP projects.

NTIA has scheduled a site visit to UEN during the first week of December to review BTOP compliance and conduct field visits with UEN staff.

BTOP Post-Award Proposal Approval

On Friday, October 7th, Janice Wilkins, our Federal Program Officer confirmed that the Post-Award Modification Proposal allowing the addition of 40 Community Anchor Institutions, including the Salt Lake and Logan Middle Mile Rings had been approved by the Environmental Review Team at NTIA; with this approval the associated funding for these projects has been released by NTIA. Receiving this approval to move forward on major middle mile optical ring segments for research and education in the state and connecting additional institutions that lack broadband access to UEN was tremendous news for UEN and our stakeholders. A list of the approved CAI additions is included with this report as Attachment A. A big thanks to Jeff Egly and Kevin Dutt from UEN who worked with the service providers and SWCA to complete the Environmental

Review and successfully obtain this Post-Award approval. Also thanks to Steve Corbató and Earl Lewis for working through the issues to receive approval on the Metro Ring project. We learned from NTIA staff and other project representatives in Cleveland that our Post-Award Route modification was far more involved in scope than typically approved by NTIA. This is a great vote of confidence for UEN's project by NTIA and the BTOP team.

Other activities during this quarter include: additional Metro Optical equipment procurement; related procurement of construction activities; IRUs for the Salt Lake City and Logan Metro Ring; and continued development of information for community outreach purposes.

Recommendation

TAB 15 ATTACHMENT A

THE UNIVERSITY OF UTAH BTOP INFRASTRUCTURE GRANT ROUND 1 PROJECT AWARD #NT10BIX5570024 COMMUNITY ANCHOR INSTITUTIONS PROPOSED MODIFICATION

(EXISTING INFRASTRUCTURE, NO EA REQUIRED)

COMMUI	NITY ANCHOR INSTITUTION	ADDRESS	CITY
1. Barra	att Elementary	168 N 900 E	American Fork
2. Bloo	omington Elementary School	425 Man of War Road	St George
3. Cath	nerine C Hoskins Head Start Center	6447 W 4100 S	West Valley
4. Ceda	ar Ridge Elementary	4501 W Cedar Hills Dr	Cedar Hills
5. Cent	terfield Head Start Center	270 E 300 N	Centerfield
6. Chris	stmas Box Head Start Center	3660 S West Temple	Salt Lake City
7. CS L	ewis Academy	364 N State Rd 198	Santaquin
8. Dale	C Young Community Center	230 W 200 S	Brigham City
9. Gran	ntsville Headstart	7 S Park Street	Granstville
10. Grov	vecrest Elementary	200 E 1100 N	Pleasant Grove
11. Hanl	ksville Elementary School	50 South Center	Hanksville
12. Lega	acy Elementary	28 E 1340 N	American Fork
13. Maje	estic Head Start Center	7430 S 1700 W	West Jordan
14. Mon	roe Head Start Center	4450 W 3100 S	Kearns
15. Mou	ınt Pleasant Head Start Center	1150 Blackhawk Blvd	Mount Pleasant
16. Mt N	Mahogany Elementary	618 N 1300 W	Pleasant Grove
17. Muri	ray Head Start Center	73 W 6100 S	Murray
18. Nort	th Point Elementary	1931 N 2300 W	Lehi
19. Nort	thridge Elementary	1660 N 50 E	Orem
20. OW	CAP Head Start Annex (NIF)	176 W 30th St	Ogden
21. Qua	il Run Primary School	600 W 3300 N	Pleasant Grove
22. Red	Cliffs Elementary	1199 S Main St	Nephi
23. Red	wood Head Start Center	3060 S Lester	Salt Lake City
24. SLCC	C Head Start Center	4600 S Redwood Rd	Taylorsville
25. Sold	lier Hollow Charter School	2002 S Olympic Dr	Midway
26. Stan	sbury Head Start Center	3050 S 2700 W	West Valley City
27. Terra	a Linda Head Start Center	8400 S 3400 W	West Jordan
28. Too	ele Community Learning Center	211 S Tooele Blvd	Tooele
29. Too	ele Headstart	222 Coleman St	Tooele
30. Triur	mph Youth Services (58 S)	58 S 950 W	Brigham City
31. Valle	ey View Elementary	941 Orchard Dr	Pleasant Grove
32. Vista	a at Entrada	585 E Center S	lvins
33. Wind	dsor Elementary	1315 N Main	Orem
34. Yout	th Track Youth in Custody	693 S 400 E	Brigham City

Continued on next page

MIDDLE MILE IRU CAI DIRECT CONNECTORS		ADDRESS	CITY
1.	The University of Utah	875 S West Temple St and 201 S Presidents Circle	Salt Lake City
2.	Utah Education Network	101 Wasatch Blvd	Salt Lake City
3.	Utah State University	1400 Old Main Hill	Logan
4.	Salt Palace Convention Center	100 S West Temple	Salt Lake City
5.	Utah Transit Authority Headquarters	669 W 200 S	Salt Lake City
6.	Utah System of Higher Education Regents	60 S 400 W	Salt Lake City
7.	Salt Lake Main Downtown Public Library	201 E 400 S	Salt Lake City

UEN INFRASTRUCTURE RFP FOR BACKBONE, INTERNET AND END SITES - DISCUSSION

Issue

UEN issued a RFP on October 4 to address expiring contracts with the state Wide-Area-Network core ring backbone and Internet access services and examine future technologies to implement in the core network at Points-of-Presence (POP) Locations.

Background

The RFP covers UEN's existing statewide backbone segments (the Northern, Central, and Southern Rings), all Internet Access contracts from incumbent Tier 1 ISP providers, and public and higher education sites that currently have Gigabit Ethernet service with expiring contracts. In addition, there are a number of new requests for services for new charters schools, higher education campus facilities, libraries, etc. The RFP contains requests for over 350 end sites that will be evaluated in this process.

Canyons and Weber School Districts have requested UEN work with them in obtaining additional capacity to each of their school buildings and data centers within their districts to meet growing demands for network services. The RFP contains requests for additional circuits to each of their school buildings within their districts.

UEN held a pre-bidders conference on October 17 at the Dolores Doré Eccles Broadcast Center. The conference was well-attended, and UEN expects to receive a number of competitive proposals in response to the RFP. Max Mulliner from Canyons District and Jared Ganske from Weber School District attended the conference to talk about projects within their districts. They will be participating with UEN in the evaluations of the proposals.

Responses to the RFP are due on Thursday, November 10, and UEN expects a large participation from potential providers.

Recommendation

$_{\text{TAB}}$ 17 Recent Awards for UEN - Discussion

Issue

UEN and our collaborative partners have received four awards recently. Steve Corbató and Laura Hunter will share details about these awards.

Background

Utah and Wyoming institutions partnered for a successful collaborative research award from the National Science Foundation called CI-WATER, Cyberinfrastructure to Advance High Performance Water Resource Modeling. This three year project includes Brigham Young University, Utah State University, The University of Utah, and University of Wyoming with a total grant award of \$3,435,873. The project, will provide a robust and distributed CI consisting of integrated data services, modeling and visualization tools, and a comprehensive education and outreach program that can revolutionize how computer models are used to support water resources research in the Intermountain West and beyond.

UEN also received three awards through the peer-juried National Educational Telecommunications Association:

- Promotion Award for Online and Social Media UEN Climate Science
- Community Engagement Award for Community Impact UEN Climate Science
- Community Engagement Award for National Project Put a Lid On It

The awards are a nice recognition for UEN and our many community and education partners. In evaluating UEN Climate Science, one judge wrote: "This project responds directly to a need that teachers have expressed, how to tackle climate change in the classroom; very impressive analysis, content development and documentation of results. This is a very compete presentation executed at a very high level." Another judge said, "This is the sort of work that sets public television apart from everyone else in the medium. It is not only well done, but actively takes on a difficult issue and makes a constructive effort to move the public dialogue in a positive direction."

Recommendation

This is good news! Steering Committee members are asked to spread the word.

тав 18

UEN PERFORMANCE REPORT - DISCUSSION

Issue

This report provides the UEN Performance Dashboard for October 2011. We now have the capability to show latency reports for Canvas. We are confident that as we continue to implement Canvas that performance will improve and latency times will decrease.

Background

The UEN Performance Dashboard reports data on the following key service areas:

- Network
- · Web Services
- · Learning Management System
- · Interactive Video Conferencing

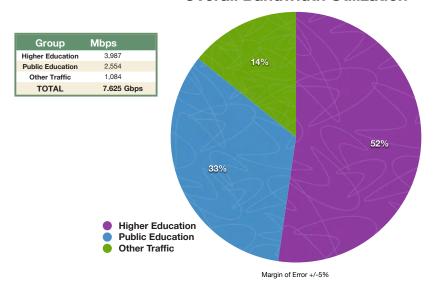
Managers for these areas will present highlights during the meeting. Detailed performance data can also be viewed online at http://www.uen.org/ueninfo/

Recommendation



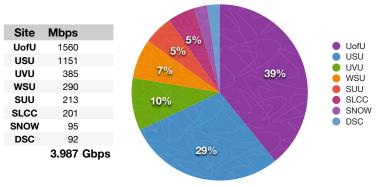
Our network performance metric report for this month differs from the overall uptime/percent of utilization summary. For the month of September, NOC Manager Troy Jessup prepared a report on traffic utilization showing the share of traffic generated by higher education institutions, school districts, UCAT campuses, and other UEN network users. Technical Services staff will be available during the meeting to answer your questions about the report.

Overall Bandwidth Utilization



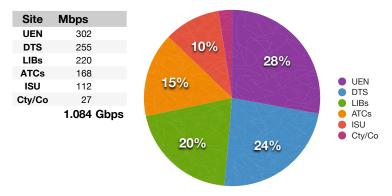
Bandwidth measured by Peak 95th Percentile

Higher Education Distribution



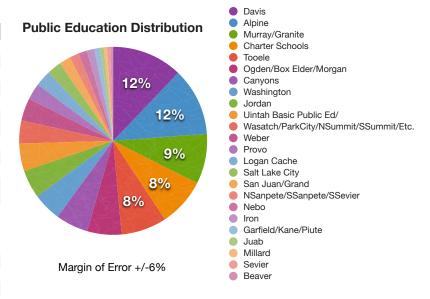
Margin of Error +/-2%

Other Traffic Distribution

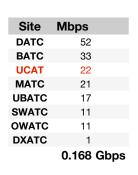


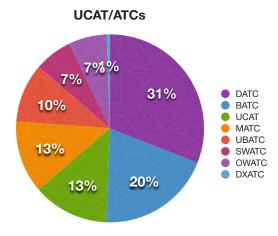
Margin of Error +/-6%

Site	Mbps
Davis	310
Alpine	298
Murray/Granite	220
Charter Schools	212
Tooele	200
Ogden/Box Elder/ Morgan	151
Canyons	143
Washington	125
Jordan	123
Uintah Basic Public Ed/	122
Wasatch/ ParkCity/ NSummit/ SSummit/Etc.	101
Weber	98
Provo	73
Logan Cache	70
Salt Lake City	63
San Juan/Grand	50
NSanpete/ SSanpete/SSevier	41
Nebo	38
Iron	33
Garfield/Kane/ Piute	25
Juab	17
Millard	14
Sevier	14
Beaver	13
	2.554 Gbps



NOTE: These metrics are in some cases grouped logically based on the layout of aggregation points on the network.





STEERING COMMITTEE MEETING MINUTES

UTAH EDUCATION NETWORK STEERING COMMITTEE August 19, 2011 – 9:00 a.m.

Working Session

Opening Remarks

Gary welcomed everyone to the working session and went through the topics they would be discussing.

- Governance Ad Hoc committee
- FY 2012 Strategic Plan
- · FY 2013 Budget

Tab 29 - FY 2012 Strategic Plan

Open discussion was held regarding the Strategic Plan and the new format. Some of the positive comments include:

- plan is focused
- people outside organization will be able to follow the plan
- · glossary is added bonus
- presented in a clear way

The discussion also raised several concerns about the plan: question to staff: is it in enough detail?

- make sure ongoing projects are incorporated into document (column 4)
- · cost per student needs to be added
- add visual for Legislators to see what we do vs other states
- is there a way to identify individual schools cost without UEN vs cost with UEN?

There is a need to identify which service(s) would be cut if there is another budget cut. Improving ways to report the metrics along with tying the budget and costs into them.

- Cost-service analysis
- Make it more simple -- not the finite details but the big picture

- Tailor the figures to the general public
- Take it down to a more personal level to the students
- Are we losing opportunities and if so, how can we capture those?
- Message needs to be delivered by individual School Districts, not just UEN
- Overall liked the new format

Laura agreed to have a new draft format with additional information ready for the September Ad Hoc Governance meeting.

Tab 28 - FY 2013 Budget Recommendations

Gary invited open discussion regarding the FY 2013 Budget. Some of the highlights of this topic are listed below.

- The budget is cautiously optimistic
- Can we be more efficient and if so, in what areas?
- · Network infrastructure is robust
- Can the FY 2013 Budget be linked to a performance plan?

There was also discussion concerning School District leadership structure. Will Superintendents sense of loss of control when it comes to parceling out money?

Tab 31 - Governance Ad Hoc Committee

Gary shared that this committee was still gathering their information. Rick Gaisford wanted to thank Ronda for all of her hard work that she has done for this committee and noted that there is still a lot of work to do. They will be presenting their recommendation regarding changes and updates soon. More to follow.

Committee of the Whole

Members Present: Eric Denna, Rick Gaisford, Brenda Hales, Eric Hawley, M. K. Jeppesen, Christine Kearl, Gary Koeven, Eric Mantz, Ronda Menlove, Donna Jones Morris, Rachel Murphy, Gail Niklason, Mike Petersen, Glen Taylor, Barry Walker and Ray Walker.

Others Present: Bill Bingham, Charice Black, Lisa Cohne, Rebecca Davis, Jeff Egly, Rich Finlinson, Sheryl Hulmston, Laura Hunter, Lisa Kuhn, Jim Matsumura, Bryan Peterson, Dennis Sampson and Jim Stewart.

Gary Wixom welcomed everyone to the August Steering Committee meeting.

Tab 27 - FY 2012 Budget

Mike Petersen shared with the Steering Committee that the UEN FY 2012 budget reflects the zeroing out of one-time state appropriations and a slight increase in federal

E-Rate reimbursements. The budget is based on maintenance of the current funding model. It relies on school districts to pay most elementary school ongoing charges. There are no one-time dollars appropriated to UEN and our State ongoing base budget for FY 2012.

To see complete detailed information about the FY 2012 budget it is provided in Tab 27, Attachment A.

A motion was made and seconded to identify savings that would allow UEN to restore the Service Centers across the state. THE MOTION CARRIED.

A motion was made and seconded to approve the FY 2012 Budget as submitted. THE MOTION CARRIED.

<u>Tab 28 – FY 2013 Budget Recommendations</u>

Gary Wixom reported that the Steering Committee will be considering specific budget proposal recommendations for the UEN FY 2013 budget in the October meeting. UEN has identified three priorities and they are as follows:

- Sustain Elementary School Connectivity
- · Fund New School Monthly Connectivity Charges
- Supplement Existing Funds to Continue Statewide Filtering Strategies

In order for UEN to perform its mission and maintain the critical services we provide to our education and state government partners, we will be asking the Legislature to give consideration to the budgetary needs listed above. For more information on each priority, please refer to Tab 28.

<u>Tab 29 – UEN FY 2012 Strategic Plan (draft) and FY 2011 Performance Report</u>

Mike Petersen highlighted that this Performance Report would be going through some changes. During the work study meeting there were a lot of great ideas and suggestions on items to add and remove from these tables. The draft for the Strategic Plan and Performance Reports will be a work in progress for a few more months. Laura Hunter agreed to have her group work on the changes.

<u>Tab 30 – Steering Committee Terms and Roster</u>

Mike Petersen reported that the terms of several of the Steering Committee Members would be expiring this summer. It is recommended that the co-chairs of the UEN Steering Committee work with a variety of UEN constituents to bring forth suggested Public Education and Higher Education nominees and/or suggestions for term extensions so that the Steering Committee may take action at the next meeting.

Tab 31 - Governance Ad Hoc Committee

Gary Wixom reported that this Committee is making progress but that there is still a lot of information to gather. They will be meeting again in September and hope to be

able to make a recommendation soon. Rick Gaisford took a moment to thank Ronda for all of her hard work on this committee.

<u>Tab 1 – Infrastructure Improvement</u>

Dennis Sampson reported on the key activities of the BTOP projects that have been occurring over the summer. New infrastructure improvements on the digital broadcast system and the launch of Mobile DTV are two of the highlights. To read more information about these improvements, please refer to Tab 1.

Tab 2 - Application Hosting

Scott Allen reported on the key activities of the Learning Management System (LMS). The first group of pilot courses taught in Canvas hosted by UEN took place over the summer and there are now over 696 published courses with over 9,000 enrolled users. Scott said that the Canvas pilot has gone very well overall and that there have been a lot of ideas that have been submitted to Instructure for improvement. To see the breakout on the ideas and priorities please refer to Tab 2.

<u>Tab 3 – Application Support</u>

Staff reported on recent Application Support activities. Rich Finlinson highlighted four areas in a draft communication plan which are Research, Analysis/Planning, Communication/Implementation/Execution and Evaluation. Laura Hunter gave a brief report on the following three topics: eLearning for Educators, Teaching Channel and APTS Community Council. To read more on each of these topics please refer to Tab 3, and Tab 3 Attachment A.

<u>Tab 4 – UEN Performance Report</u>

Jim Stewart shared the UEN Performance Dashboard Report for August with the Steering Committee. To see the graphs associated with each category please refer to Tab 4.

<u>Tab 5 – Steering Committee Minutes</u>

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

Tab 6 - Other

The next Steering Committee meeting will be held on October 28, 2011 at 10:30 a.m. at the Dolores Doré Eccles Broadcast Center.

COMMITTEE OF THE WHOLE

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