Utah Education Network
Steering Committee

February 20, 2009
Committee of the Whole / Business Meeting

Welcome and Introductions

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UPCOMING MEETINGS

Steering Committee Meeting - April 17, 2009, 9:00 a.m.
Instructional Services Subcommittee Meeting - April 17, 2009, 11:00 a.m.
Technical Services Subcommittee Meeting - April 17, 2009, 11:00 a.m.

Please place these materials in your Steering Committee Binder.
Committee of the Whole

UEN Legislative Update - Discussion

Issue

The following is a summary of key developments so far in the legislative session.

Budget Actions

The Legislature adopted a Fiscal Year 2009 Supplemental Appropriations Act at the beginning of the second week of the session. The key actions for UEN included a further reduction of the state appropriations base budget of $1.6 million. The effect of the cut for the current year was lessened by appropriation of $710,000 of one-time funds, so the net reduction of funds for UEN is $908,000.

Details of the necessary actions we will take to reduce our current year budget by $908,000 will be provided to the Steering Committee at the February 20 meeting.

The Higher Education Appropriations Subcommittee will be finalizing its recommendations this week. More details will be available on their actions at the February 20 meeting.

Representative Kory Holdaway is sponsoring legislation (HB 287) to authorize UEN to allow city and county governments to access the network to back up data and perform disaster recovery activities at a secure data center. The legislation was unanimously approved by the Public Utilities Committee, and is on the Consent Calendar of the House of Representatives. Further information about this legislation will be provided at the February 20 meeting.

Recommendation

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

February 12, 2009, was the deadline for filing applications for E-Rate funding for Fiscal Year 2010, which runs from July 1, 2009 through June 30, 2010. UEN E-Rate staff and the School Districts have been very busy filing their respective applications.

**Background**

Many activities led up to the February 12, 2009 filing deadline:

- UEN held multiple training workshops in the fall and winter months in preparation for the filing window. UEN also did extensive outreach to Schools, Libraries and Head-Start Administrators to explain the E-Rate Program and how it could benefit their entities and bring more E-Rate funds to the State of Utah.

- UEN provided support for District, Library, and Head Start E-Rate filings – and when requested to do so – filed all applications for some of those entities.

- UEN’s E-Rate Statewide filings for FY 2010 used the state discount of 68%. The increase in the Statewide E-Rate discount from 63% to 68% is the result of all Head Starts being recognized by USAC as E-Rate eligible entities.

- UEN filed E-Rate Applications for newly signed contracts; these contracts include service to Head Starts, Elementary and Charter schools. The contracts are with Qwest, Broadweave, Comcast, UBTA-UBET, Emery, Frontier-Citizens, Centracom, and South Central. UEN also signed Internet access contracts with Integra, Qwest, and XO.

In summary, UEN filed for approximately $15.7 million net E-Rate dollars for Fiscal Year 2010.

**Recommendation**

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

TAB 8

UEN-TV Update - Discussion

Issue

Nate Southerland will provide an update on the digital television transition originally scheduled for February 17, 2009 and presents the Spring 2009 block schedule for UEN-TV.

Background

On February 4, 2009, the U. S. House of Representatives passed a bill previously approved by the U. S. Senate to delay the digital transition until June 12, 2009. Reports of widespread unpreparedness for the transition, together with concerns about the FCC’s converter box coupon program, led Congress and the Obama administration to cooperate on passing this legislation.

Though originally the Utah Broadcasters Association announced the intent of the commercial television stations in the Salt Lake market move ahead with the digital transition on the February 17th date, they have since distributed a press release in which the major commercial network stations in Utah will join the public broadcasting stations in delaying their analog shutoff until June 12th.

Some areas of the state have already moved to digital-only transition. For instance, Cache County elected to switch entirely to digital broadcast in November 2008. As UEN and KUED continue to update their rural translators, some areas are “flashcut,” or converted fully from analog to digital, while other areas are served by both and analog and a digital transmitter (for more information, visit www.uen.org/tv and click on the “Find UEN-TV” link on the left side of the page). Over time, the remaining analog transmitters will be converted to digital as funds become available.

In addition to distributing information about the digital television transition to schools, most of whom are served by cable or digital satellite companies and will not be affected by the digital TV transition, UEN has been working to identify and educate UEN-TV viewers who will be affected by the DTV transition. Recent efforts have included outreach to senior citizen center directors and aging programs in Box Elder, Cache, Davis, Salt Lake, Utah, and Weber counties. Aging services agencies in these counties have been active in distributing information to their customers about the DTV transition and have been in the process of training volunteers to go into the homes of the elderly to assist them with connecting their converter boxes. As the June 12th deadline approaches, UEN will continue to reach out to over-the-air viewers and agencies that assist them, UEN also serves as an information source for viewers who call in requesting information about the DTV transition.
UEN-TV’s broadcast schedule continues to evolve. In addition to adding the MHz Worldview station to the UEN digital lineup in spring 2008, UEN has updated its block schedule to reflect new programming needs. Attached is the UEN block schedule for Spring 2009; daily program schedules can be found at www.uen.org/tv.

**Recommendation**

This is an informational item and requires no further action by the committee.
# TAB 8 ATTACHMENT A

## UEN Block Schedule

### Spring 2009 - UEN TV Schedule

<table>
<thead>
<tr>
<th>Time</th>
<th>Sunday</th>
<th>Monday</th>
<th>Tuesday</th>
<th>Wednesday</th>
<th>Thursday</th>
<th>Friday</th>
<th>Saturday</th>
</tr>
</thead>
<tbody>
<tr>
<td>12:00 AM</td>
<td>Science / Technology</td>
<td>History 1110 - Western Civilization since 1300</td>
<td>Growing Old in a New Age</td>
<td>Philosophy 2050 - Ethics and Values</td>
<td>Film 2010 - American Film and Culture</td>
<td>Economics 1740 - US Economic History</td>
<td>Psychology 1010 - General Psychology</td>
</tr>
<tr>
<td>1:00 AM</td>
<td>Health</td>
<td>Newswriting</td>
<td>Earth Revelation - Introductory Geography</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2:00 AM</td>
<td>History / World Culture</td>
<td>Ethics in America</td>
<td>The Power of Place</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3:00 AM</td>
<td>Documentary</td>
<td>Economics 2010/2020 - Principles of Micro/Macro</td>
<td>Writers</td>
<td>History 1516 - World History</td>
<td>Bioengineering 1510 - Science Without Walls</td>
<td>UGS 1730 - The Performing Arts</td>
<td>Documentary</td>
</tr>
<tr>
<td>4:00 AM</td>
<td>Documentary</td>
<td>Habitable Planet</td>
<td>The Short List</td>
<td>World of Chemistry</td>
<td>Zoology 1090 - Intro to Anatomy and Physiology</td>
<td>Sociology 1010 - Intro to Sociology</td>
<td>Humanities 1010 - Humanities Through Art</td>
</tr>
<tr>
<td>5:00 AM</td>
<td>Needle Arts</td>
<td>Knit &amp; Crochet</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6:00 AM</td>
<td>Auto B Good</td>
<td>Math 1050 - College Algebra</td>
<td>Anthropology 1010</td>
<td>Social/Cultural Anthropology</td>
<td>Biology 1010 - General Biology</td>
<td>Zoology 1090 - Intro to Anatomy and Physiology</td>
<td>Performing Arts</td>
</tr>
<tr>
<td>7:00 AM</td>
<td>Milly and Friends</td>
<td>Biscuit Brothers</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>8:00 AM</td>
<td>Kid Fitness</td>
<td>Biz Kids $</td>
<td>Classic Stretch</td>
<td>Priscilla's Yoga</td>
<td>Classic Stretch</td>
<td>Priscilla's Yoga</td>
<td>Classic Stretch</td>
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<tr>
<td>9:00 AM</td>
<td>Big Comfy</td>
<td>Classic Stretch</td>
<td>Sit &amp; Be Fit</td>
<td>Wai Lana Yoga</td>
<td>Sit &amp; Be Fit</td>
<td>Wai Lana Yoga</td>
<td>Sit &amp; Be Fit</td>
</tr>
<tr>
<td>10:00 AM</td>
<td>Wonderkind</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>11:00 AM</td>
<td>Zula Patrol</td>
<td>Health Sense</td>
<td>Keep Kids Hifly</td>
<td>Healthy Body</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>12:00 PM</td>
<td>French</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1:00 PM</td>
<td>Spanish</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2:00 PM</td>
<td>German</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3:00 PM</td>
<td>Dragon's Tongue</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4:00 PM</td>
<td>Sew w/ Nancy</td>
<td>For Your Home</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5:00 PM</td>
<td>Scarecrow</td>
<td>Irish Eyes</td>
<td>Team Kids News</td>
<td>Biz Kids $</td>
<td>Team Kids News</td>
<td>Animal Attractions</td>
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</tr>
<tr>
<td>6:00 PM</td>
<td>Woodshop</td>
<td>Paper Paper Craft</td>
<td>Jerry Yarnell</td>
<td>Hands On</td>
<td>Quilling Arts</td>
<td>Wonderkind</td>
<td></td>
</tr>
<tr>
<td>7:00 PM</td>
<td>Woodturning</td>
<td>Quilt &amp; Quill</td>
<td>Gary Spreck</td>
<td>Cartoon Fac</td>
<td>Font &amp; Porter</td>
<td>Draw Me a Story</td>
<td></td>
</tr>
<tr>
<td>8:00 PM</td>
<td>Garden Paths</td>
<td>Scrapbook</td>
<td>One Stroke</td>
<td>Baker/Des/Cele</td>
<td>Needle Arts</td>
<td>Curiosity Quest</td>
<td>New Fishlife</td>
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<tr>
<td>9:00 PM</td>
<td>P. Allen Smith</td>
<td>Glass w/ Vick</td>
<td>Terry Maddren</td>
<td>Katie Brown</td>
<td>Knit &amp; Crochet</td>
<td>Donna's Day</td>
<td>ferry/Canada</td>
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<tr>
<td>10:00 PM</td>
<td>Travelscope</td>
<td></td>
<td>TV 411</td>
<td>TV 411</td>
<td>TV 411</td>
<td>TV 411</td>
<td>TV 411</td>
</tr>
<tr>
<td>11:00 PM</td>
<td>Great Communities</td>
<td>GED</td>
<td>Workplace</td>
<td>GED</td>
<td>Workplace</td>
<td>GED</td>
<td>Natural Heroes</td>
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<tr>
<td>12:00 AM</td>
<td>Performing &amp; Visual Arts</td>
<td>World Focus</td>
<td>World Focus</td>
<td>World Focus</td>
<td>World Focus</td>
<td>World Focus</td>
<td>Native Report</td>
</tr>
<tr>
<td>1:00 AM</td>
<td>Science / Technology</td>
<td>World Business</td>
<td>La Plaza</td>
<td>Career Clusters</td>
<td>Wealth Track</td>
<td>Monthly Features</td>
<td></td>
</tr>
<tr>
<td>2:00 AM</td>
<td>Health</td>
<td>History / World Culture</td>
<td>Current Events/Public Affairs</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3:00 AM</td>
<td>Performing &amp; Visual Arts</td>
<td>Science</td>
<td>Health</td>
<td>History / World Culture</td>
<td>Current Events/Public Affairs</td>
<td>Health</td>
<td>Monthly Features</td>
</tr>
<tr>
<td>4:00 AM</td>
<td>Science / Technology</td>
<td>GED</td>
<td>Workplace</td>
<td>GED</td>
<td>Workplace</td>
<td>GED</td>
<td>Short List</td>
</tr>
<tr>
<td>5:00 AM</td>
<td>Documentary</td>
<td>World Focus</td>
<td>World Focus</td>
<td>World Focus</td>
<td>World Focus</td>
<td>World Focus</td>
<td>World Focus</td>
</tr>
<tr>
<td>6:00 AM</td>
<td>Documentary</td>
<td>The Whole Child</td>
<td>Science</td>
<td>Science</td>
<td>History</td>
<td>History</td>
<td>Woodsongs</td>
</tr>
</tbody>
</table>

## Instructional Television Blockfeed

- **Teachers Professional Development**
- **Television Schedule**
- **Programs**
- **Sections**
- **Themes**
- **Activities**
- **Schedules**
- **Dates**
- **Locations**
- **Contact Information**
### Spring 2009 - UEN TV Schedule

<table>
<thead>
<tr>
<th>Biographical/People</th>
<th>Lifelong Learning/Special Interest</th>
</tr>
</thead>
<tbody>
<tr>
<td>Business/Economics</td>
<td>Monthly Features</td>
</tr>
<tr>
<td>Children's Programs</td>
<td>News/Public Affairs</td>
</tr>
<tr>
<td>College Telecourses</td>
<td>Science/Technology</td>
</tr>
<tr>
<td>Documentaries</td>
<td>Parenting</td>
</tr>
<tr>
<td>Exercise/Yoga</td>
<td>Outdoors/Travel</td>
</tr>
<tr>
<td>Health/Seniors</td>
<td>Performing &amp; Visual Arts</td>
</tr>
<tr>
<td>History/World Culture</td>
<td>Professional Development</td>
</tr>
<tr>
<td>Hobby/How To</td>
<td>Workplace/GED</td>
</tr>
<tr>
<td>K-12 Instructional Television Blockfeed</td>
<td>UEN-TV Sci-Fi Friday</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Telecourse Schedule</th>
<th>Institution</th>
<th>Time</th>
<th>Day</th>
</tr>
</thead>
<tbody>
<tr>
<td>Anthropology 1010 ~ Social/Cultural Anthropology</td>
<td>UVU</td>
<td>5:00-8:00 AM</td>
<td>Tue</td>
</tr>
<tr>
<td>Bioengineering 1510 ~ Science With Out Walls</td>
<td>UofU</td>
<td>2:00-3:30 AM</td>
<td>Thur</td>
</tr>
<tr>
<td>Biology 1010 ~ General Biology</td>
<td>UVU</td>
<td>5:00-8:00 AM</td>
<td>Wed</td>
</tr>
<tr>
<td>Economics 1740 ~ US Economic History</td>
<td>SLCC</td>
<td>12:00-2:00 AM</td>
<td>Fri</td>
</tr>
<tr>
<td>Economics 2010/2020 ~ Principles of Micro-Economics</td>
<td>UofU</td>
<td>3:00-5:00 AM</td>
<td>Mon</td>
</tr>
<tr>
<td>Film 3210 ~ American Film and Culture</td>
<td>UofU</td>
<td>12:00-1:00 AM</td>
<td>Thur</td>
</tr>
<tr>
<td>History 1110 ~ Western Civilization to 1300</td>
<td>UofU</td>
<td>12:00-1:30 AM</td>
<td>Mon</td>
</tr>
<tr>
<td>History 1510 ~ World History</td>
<td>UofU</td>
<td>3:00-4:00 AM</td>
<td>Wed</td>
</tr>
<tr>
<td>Humanities 1010 ~ Humanities Through the Arts</td>
<td>UVU</td>
<td>5:00-8:00 AM</td>
<td>Sat</td>
</tr>
<tr>
<td>Math 1050 ~ College Algebra</td>
<td>UVU</td>
<td>5:00-8:00 AM</td>
<td>Mon</td>
</tr>
<tr>
<td>Philosophy 2050 ~ Ethics &amp; Values</td>
<td>UVU</td>
<td>12:00-3:00 AM</td>
<td>Wed</td>
</tr>
<tr>
<td>Psychology 1010 ~ General Psychology</td>
<td>UVU</td>
<td>12:00-3:00 AM</td>
<td>Sat</td>
</tr>
<tr>
<td>Psychology 1220 ~ Infancy</td>
<td>UofU</td>
<td>7:00-8:00 AM</td>
<td>Thur</td>
</tr>
<tr>
<td>Psychology 3400 ~ Abnormal Psychology</td>
<td>UofU</td>
<td>1:00-2:00 AM</td>
<td>Thur</td>
</tr>
<tr>
<td>Sociology 1010 ~ Introduction to Sociology</td>
<td>UVU</td>
<td>5:00-8:00 AM</td>
<td>Fri</td>
</tr>
<tr>
<td>UGS 1730 ~ The Performing Arts</td>
<td>UofU</td>
<td>2:00-4:00 AM</td>
<td>Fri</td>
</tr>
<tr>
<td>Zoology 1090 ~ Introduction to Human Anatomy</td>
<td>UVU</td>
<td>4:00-7:00 AM</td>
<td>Thur</td>
</tr>
</tbody>
</table>
Committee of the Whole

Tab 9

10 Gigabit Internet and WAN Circuit RFP - Discussion

Issue

UEN issued a Request for Proposal last September to address new Internet, Backbone, and WAN school circuits needs for UEN customers. In addition, with recent plans for the Jordan School District to relocate to a new building in Jordan Landing (West Jordan), UEN worked with Jordan District to issue a Request for Bid to address needs of moving their IT and Telecom operations from their existing Sandy office to the new location and relocating their Auxiliary Services Building to West Jordan on Redwood Road. Davis School District also requested that UEN send out a Request for Bid to have UEN contract and file E-Rate for their WAN services in addition to planning for two new elementary and two new junior high schools to be built in Davis District in the next three years. UEN staff successfully completed and filed 12 new contracts for E-Rate funding by February 10th before the 471 window closing.

Background

Proposals were sought for the installation of 10GB Ethernet Internet links through consolidation of existing UEN Gigabit Internet connections for at least 2-3 Gigabits of Internet capacity with three (3) service providers in multiple UEN Points-of-Presence (POPs). UEN also sought proposals for districts who have elementary schools with T-1 lines without migration plans (primarily Box Elder School District and Alpine School District), the Salt Lake County Library System with 17 branch locations (including the main Whitmore Library location to the UEN backbone), the Grand County Library in Moab, 8 Regional Head Start Programs, the School for the Deaf and Blind, 3 branches of the Weber County Library System, and 38 charter schools in addition to new high schools and elementary schools in Jordan and Tooele School Districts.

UEN also worked with the Southwest Applied Technology Center for a new automotive training center campus in Cedar City that will open in the spring to obtain a contract for Gigabit Ethernet service in time to meet their construction schedule. UEN also included two critical backbone segments: Salt Lake Community College to Dixie State University and Uintah Basin Applied Technology College in Roosevelt to College of Eastern Utah in Price.

UEN was also able to bid and receive a contract from Emery Telecom to replace the OC-3 circuit between Emery High School and College of Eastern Utah to a 200MB circuit over a 1GB interface at a substantially lower cost after the first year of implementation.

UEN received seventeen (17) proposals from the following telecom/ISP Providers: 360 Networks, American Fiber Systems, Broadweave Networks, Cogent Communications,
Conterra Broadband, Comcast, Centracom Interactive, Emery Telecom, Frontier Communications, Gunnison Telephone, Integra Telecom, Level-3, Manti Telephone, PAETEC, Qwest Communications, UBTA-UBET Communications, XO Communications.

After the initial RFP evaluations, UEN issued a Best and Final Offer for Box Elder School District and the Salt Lake County Libraries in December.

**Internet Contracts**

UEN awarded three 2Gbps over 10GigE Circuits to three ISP providers to the following locations: Eccles Broadcast Center, Salt Lake Community College, and Utah Valley University. The new agreements allow UEN to burst above the 2GB minimum if network usage requires additional bandwidth for events like the U.S. Presidential Inauguration or if one of the circuits fail. The new circuits also provide a vast amount of potential bandwidth growth without having to install new circuits and routers. The total new available Internet bandwidth available to UEN customers as of this next year will be ~1.5 Gbps. This is not as large of an increase in bandwidth that we have seen in past years, but by moving to 3 large circuits rather than many smaller ones, UEN customers will be able to more fully utilize the bandwidth that is provided. UEN was able to enter into these agreements with existing budget and save approximately **$60,000 the first year and $170,000 in following years** over current expenditures. This savings can be used for anticipated bandwidth growth in the future, without the need to request additional funding from the legislature. If needed the current Internet budget will allow for almost an additional 2Gbps of Internet bandwidth.

**WAN Circuit and Backbone Contracts**

After several years of bidding, UEN was finally able to contract for two important 1GB Ethernet backbone circuits for network diversity: Salt Lake Community College to Dixie State University and Uintah Basin Applied Technology College in Roosevelt to College of Eastern Utah in Price. Pricing for these circuits, as compared to past years, was very reasonable. However, given the uncertainty of the state reductions to UEN budget, we are uncertain regarding the implementation of these circuits, but hope to move forward in the next fiscal year. After negotiating new contracts for WAN circuits and backbone renewals and new projects, UEN was able to reduce approximately $108,000 annually from current circuit billings.

**Elementary, Charter, and Library Contracts**

UEN entered into a contract with Frontier Communications for 100MB service at six elementary schools in Box Elder School District and the Grand County Library, a contract with Broadweave Networks for Gigabit Ethernet for the Walden K-12 Charter School in Provo, and a contract with Qwest Communications for the Salt Lake County Library System for 200MB Metro over Ethernet service to all library branch locations including 1GB backbone connection to Eccles Broadcast Center. **The stakeholders in the RFP process with UEN were required to commit 100% of any one-time and on-going funding necessary (after E-Rate) for UEN to enter into the new contracts.**
Head Start Programs

UEN entered into Ethernet contracts for the following Head Start programs:

- Centro de la Familia de Utah Migrant Head Start (Salt Lake)
- Mountainland Head Start (Provo)
- Ogden-Weber Community Action Partnership (Ogden)
- Rural Utah Child Development Head Start (Wellington)
- Salt Lake CAP Head Start
- Southern Utah University Head Start (Cedar City)
- Ute Indian Tribe Head Start (Roosevelt)

It is anticipated these programs will increase the consortium E-Rate discount for UEN and result in a substantial cost saving in the coming fiscal year.

Recommendation

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

UEN received a national award for Community Engagement with the Water Wise Utah Partnership. A press release with this announcement is included under the tab.

**Background**

Water Wise Utah was a grant project from the Partnership for a Nation of Learners – a partnership of The Corporation for Public Broadcasting (CPB) and The Institute of Museum and Library Services (IMLS). The Water Wise Utah partners were UEN, KUED, KUER public broadcasters and the Utah Museum of Natural History and the Marriott Library. The deliverables for community engagement included:

- Creating and hosting a Web site collaborating state water conservation resources
- Student and educator pages highlighting conservation curriculum
- Host to community discussions and forums for public education about water conservation across the state and in particular 5 target communities (highest water consuming communities in the state):
  - Salt Lake City
  - St. George
  - Draper
  - South Jordan
  - Ogden
- Work with community partners and advisors that led to continued partnerships:
  - Utah Society for Environmental Education
  - Utah Water Conservation Forum
  - Jordan Valley Water Conservancy District
  - Salt Lake City Public Utilities
  - Utah State University Extension programs for Water Quality and Quantity
  - Utah Rivers Council
- The UEN digital asset management system hosts content specific to water conservation.
- Host to film screenings of KUED produced Utah water issue related films.
• Water Conservation Broadcast Week among all 3 public broadcasting partners (KUER won a UBEE for Tasha Cook’s piece, “Water Wise in Industry”).
• Traveling Museum Exhibit: The Bear River: Last Chance to Change Course
• J. Willard Marriott Library’s Western Waters Digital Library

**Recommendation**

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

For more information contact:
Lisa Cohne, 581-5176
Rich Finlinson, 585-7271

Utah Water Conservation Project Wins National Education Award

Water Wise Utah, a two-year collaborative project of the Utah Education Network and Utah museums and libraries took top community impact honors when the National Educational Telecommunications Association (NETA) honored twenty-three public broadcasters at a conference in Tampa, Florida earlier this month.

UEN spearheaded Water Wise Utah to encourage Utah citizens to conserve water resources and to link all the Water Wise partners – KUED, KUER, UEN, the J. Willard Marriott Library, and the Utah Museum of Natural History – into an effective presence. The organizations are based at the University of Utah.

“We empowered local communities and groups such as Interfaith Power and Light. We also created a replicable partnership model for future projects,” says Laura Hunter, Director for Instructional Services at UEN. “In a time of economic challenge, this award recognizes how Utah organizations can effectively collaborate, leveraging resources and expertise to engage communities.”

“UEN worked collaboratively with media, community partners, libraries and museums to make a huge difference in the communities we serve,” says Lisa Cohne, Water Wise Utah project manager. “We also met hundreds of people face-to-face by holding community events every other week for two years.” Cohne, Hunter, Denise Tribble, Jessica Anderson, and Rich Finlinson led the award-winning project at UEN.

A fact-filled “water wheel,” a drinking cup printed with water-saving tips, and the project’s Web site (waterwiseutah.org) were rated as a “wonderful balance of written / visual / multi-media materials,” by the national panel of judges reviewing the entries. They praised the endeavor’s visual design, giving it high marks for the ease with which the information could be conveyed and understood by the widest possible audience.

“The materials were designed to be colorful and engaging, but mostly useful. Each team member brought a unique perspective which gave the project its wide appeal,” says UEN graphic designer Denise Tribble.

“Through Water Wise Utah we were able to reach more Utahns and expand our impact – anchored by the Bear River Exhibit – well beyond our Salt Lake location,” explains Becky Menlove of the Utah Museum of Natural History.”

“KUED is honored to partner in this project addressing one of the most critical natural resources in our very dry state,” says Scott Chaffin, KUED Associate Director.”
is committed to telling unique and compelling stories about Utah and the West, and the Water Wise Utah Project gave us a perfect opportunity to explore this important natural resource broadly,” says Jennifer Napier-Pearce, News Director at KUER.

The project received guidance and support from the Partnership for a Nation of Learners (PNL), a leadership initiative of the Corporation for Public Broadcasting (CPB) and the Institute of Museum and Library Services (IMLS). In addition to statewide broadcasts, community engagement events were held in Ogden, Salt Lake City, South Jordan, Draper and St. George. Through this multimedia, multi-institutional approach students and citizens of all ages learned about water in the West and how to conserve it.

In all, thirty-nine projects in the areas of program production, promotion, community engagement and instructional media were honored. The NETA Awards are annual recognition of member-produced excellence in public broadcasting, a tradition established more than forty years ago by the pioneering Southern Educational Communications Association.

The Utah Education Network is a consortium of public and higher education partners, including the Utah System of Higher Education and its ten universities and colleges and Utah eLearning Connection; the Utah State Office of Education, local school districts and the Utah Electronic High School and the state’s library system.

Laura Hunter, Instructional Services Director at the Utah Education Network (UEN), accepts national community impact award for Water Wise Utah from Skip Hinton, President of the National Educational Telecommunications Association (NETA).

Full resolution version of this photo suitable for publication available at:

http://my.uen.org/documentmanager/downloadfile?userid=rfinlinson&documentid=4123599
The UEN Network Operations Center continues to monitor and manage the health and utilization of the network. This report provides the latest statistics.

**Network Backbone Availability**
- Month to date: 99.990%
- Quarter to date: 99.992%
- Year to date: 99.994%

**Network Latency Report**

<table>
<thead>
<tr>
<th>PoP</th>
<th>Average</th>
<th>Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>USU</td>
<td>5.0 ms</td>
<td>+0.3ms</td>
</tr>
<tr>
<td>WSU</td>
<td>5.6 ms</td>
<td>+0.8ms</td>
</tr>
<tr>
<td>DATC</td>
<td>3.4 ms</td>
<td>-0.1ms</td>
</tr>
<tr>
<td>EBC</td>
<td>3.3 ms</td>
<td>+0.2ms</td>
</tr>
<tr>
<td>SLCC</td>
<td>3.7 ms</td>
<td>+0.3ms</td>
</tr>
<tr>
<td>UVU</td>
<td>3.0 ms</td>
<td>+0.4ms</td>
</tr>
<tr>
<td>UVUW</td>
<td>3.7 ms</td>
<td>+0.5ms</td>
</tr>
<tr>
<td>CEU</td>
<td>4.5 ms</td>
<td>+0.5ms</td>
</tr>
<tr>
<td>Snow</td>
<td>3.3 ms</td>
<td>+0.1ms</td>
</tr>
<tr>
<td>SnowS</td>
<td>3.8 ms</td>
<td>+0.5ms</td>
</tr>
<tr>
<td>SUU</td>
<td>5.5 ms</td>
<td>+0.3ms</td>
</tr>
<tr>
<td>Dixie</td>
<td>6.2 ms</td>
<td>+0.7ms</td>
</tr>
</tbody>
</table>
**Network Backbone Utilization**

North Ring .................... 10%
Central Ring .................... 12%
South Ring .................... 3%

**Internet Bandwidth Summary**

Available Bandwidth ....... 6.6Gbps
Peak Utilization**: ........... 2.82Gbps

**Network Events of Significance Since the Last Report**

NLR Outage
Level 3

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

**Recommendation**

This is a discussion item and requires no further action by the committee.
Welcome and Introductions
Brenda Hales welcomed everyone to the business portion of the Steering Committee meeting.

Committee of the Whole

Tab 22 – FY 2010 Budget Status
Mike Petersen reported on the Governor’s budget recommendation for UEN for FY 2009 and FY 2010. Governor Huntsman released his budget recommendations for FY 2010 on December 4th. His budget will require cuts by all state agencies including UEN. The Legislative Fiscal Analyst Office has requested that UEN formulate a plan to implement a 7.5% one-time reduction in funding (approximately 1.5 million) for FY 2009. This is in addition to the $900,000 that has already been cut from the budget by the Legislature in the 2008 Special Session.

For FY 2010 the Fiscal Analyst is asking that UEN cut our budget by an additional $3.0 million, or 15% from the FY 2009 adjusted base budget. If UEN were to have a reduction of this magnitude it would have a devastating impact on our ability to provide continued capacity, reliability and security over the network infrastructure. The requested cutback may potentially be reflected in the official FY 2010 base budget adopted by the Legislature.
during the first week of the 2009 General Legislative session.
The Governor’s recommended budget cuts and the preliminary budget adjustments proposed by the Legislature are summarized and can be found in Tab 22.

**Tab 23 – E-Rate Report**
Lisa Kuhn reported to the Steering Committee that, so far, we have been approved for $13.9 million in E-Rate funding for FY 2009. UEN still has three applications being reviewed. UEN is working hard to get all of the 2009-10 applications filed before the window closes on February 12, 2009. She also supplied a complete breakdown by Congressional District of the UEN/E-Rate Overview which can be found in Tab 23 Attachment A.

**Tab 24 – UEN Steering Committee Meeting Schedule for 2009**
Brenda Hales reported on the dates for the upcoming Steering Committee meetings to be held in 2009. It is once again proposed that the Committee of the Whole begin at 9 a.m., and that the meetings of the Instructional Services and Technical Services subcommittees will follow at approximately 10:30 a.m. It is anticipated that all meetings will be concluded by noon. The dates for the 2009 meetings are as follows:

- February 20
- April 17
- June 26
- August 21
- October 23
- December 18

All meetings will be held at the Dolores Doré Eccles Broadcast Center, on the University of Utah campus. *A motion was made and seconded to approve the meeting dates as listed. This motion carried.*

**Tab 25 – Resignation of Committee Members**
Brenda Hales announced the two vacancies that we have on the Steering Committee. One of the vacancies is from Jason Stanger who has accepted the position of Executive Director and Principal at InTech Collegiate High School in Logan. The State Charter School Board will be recommending a replacement for him.

Carlene Walker is the second vacancy and as she was not re-elected this last fall, a new Senator will be nominated by the President of the Senate to replace her. We extend our thanks to both of these individuals for their diligent service as members to the Steering Committee.
Tab 26 – Steering Committee Meeting Minutes

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

Tab 27 – Other

The next Steering Committee meeting will be held on February 20, 2009, at 9:00 a.m. at the Dolores Doré Eccles Broadcast Center.

Utah Education Network Technical Services Subcommittee Meeting Minutes

Attendees: Ron Barlow, Barry Bryson, Steve Corbató, Jeff Egly, Claire Gardner, Eric Hawley, M.K. Jeppesen, Gary Koeven, Don Mahaffey, Eric Mantz, Mike Petersen, Bryan Peterson, Glen Pryor, Kevin Quire, Joni Robertson, Dennis Sampson, Ray Walker.

Tab 28 – Vista Course Management Service Backup/Recovery – Discussion

Bryan Peterson updated the committee on the Disaster Recovery and Section Backup/Recovery. In September UEN moved the Oracle standby database to the Richfield Data Center. This consists of an Oracle standby database that is actively synchronized to the production database.

A third node for the UEN Storage Area Network (SAN) is located in Richfield. This allows us to mirror any SAN and have the data stored down in Richfield. We will begin moving volumes and monitoring in January. It will not affect Vista at this point.

We have a second standby database for section/course backups. It is housed here at the Dolores Doré Eccles Broadcast Center (EBC). We keep the database at a 24-hour lag from production. We have the capability of linking from the Blackboard Vista product to the other database. School administrators can do a restore immediately on their own without intervention by any UEN staff. Testing was done in September and put into production in October 2008. With a little intervention on our part, it can be rewound and retrieve a course. These two databases allow us to do upgrades, testing and sync backups. UEN can fully test, upgrade and rewind the database and start it up new before pushing it out to the schools.

The University of Utah migrated from their campus edition of Vista and went live in August with all fall semester courses on UEN’s Vista. The migration was completed smoothly. University of Utah instructors and students were not aware of the change. Over 700 courses were migrated over. We have had no down time or unscheduled outages. USU has been instrumental in helping us with testing. We had another success when USU went to Banner 8, which had significant potential problems, but the transition went very smoothly. Initially, we thought all the schools had to be on the same Banner program and had to be migrated all at the same time.
Mike Petersen stated the Steering Committee authorized us to renegotiate a contract with Blackboard. We have not had a final offer as yet brought back to us. It appears to us that they are prepared to hold our license renewal to the same level as last year. There may be a 3% increase in the second year but overall will stay within the terms that UEN has lain out.

SLCC has agreed to move over to our Vista system. They will start providing courses from our system beginning this summer and will go full-time in the fall. What this means for us is more users, more nodes in the cluster and more memory. We will need to purchase more memory for the Oracle database when SLCC comes on board. UEN has started sharing course content between some of the institutions.

**Tab 29 – The Utah State Division of Technology Services and UEN – Discussion**

Mike Petersen met with Steve Fletcher, State CIO and Ken Petersen, COO for DTS last August. The Utah State Division of Technology Services (DTS) has operated its videoconference system for several years. They currently will need to either rebuild their system or take advantage of the UEN system. UEN has offered to work cooperatively with DTS to meet the interactive video conferencing needs of state agencies. We believe there is a consensus that this is the direction we want to go. Dennis Sampson and Jeff Egly are developing a Memorandum of Understanding (MOU) to define the standards. It should be ready for review next week.

Once the MOU has been signed, DTS and UEN will focus on a pilot project utilizing some of DTS’s existing video sites with UEN providing the scheduling, bridging and video support. We are looking at all options in tying in with our network and tying in to the rural locations and the most cost effective way to communicate. Something that is very important to UEN and DTS is defining what the standards are going to be and what is required to have a seamless and quality experience when using the system. UEN does have some capacity now to support the immediate needs of DTS. DTS has committed to provide the resources to address additional capacity as well as support requirements.

**Tab 30 – Elementary and Charter School Network Improvement Projects – Discussion**

After the emergency session of the Utah State Legislature, the budget for this project was reduced by $500,000. We decided upon a fall back strategy where it was proposed that the school districts and charter schools pay 2/3 of the on-going cost of the monthly recurring charges and UEN would pay the remainder 1/3 of the cost.

In November, Jim Stewart and Dennis Sampson visited with most of the districts throughout the state. We asked for a commitment and provided the districts with an MOU with all the information so they could make a good decision. All but two of the districts have committed to moving forward with this. We only recently met with the Canyons School District so we do not have their decision. The twenty-two charter schools that were involved in this project have signed the revised MOU’s or have their copies in the mail. They are going ahead with the understanding that they could not get a better deal.
Because UEN has no new money for this project, the approach we are taking for future years is that if a district wants to exercise a contract that will be a UEN contract with a Telco they need to pay the full cost – both one time and ongoing. It appears at this point, most of the districts are uncertain about their future financial status and they are not prepared to do that. It appears after this first effort, it will probably stall at about where we were at the end of the year. Box Elder will probably be the only district with a partial build out.

UEN met with Jerry Fen and spoke with Suzanne Montgomery of Qwest. UEN’s contract with Qwest is a two-phase agreement. It was an all or nothing agreement. One of the early concerns was the disposition of Qwest and how they would feel about this, however, they indicated they are willing to work with us within our contract and appreciate our relationship. Ogden District is tied up in this contract and is moving their district offices in February. If they were not able to move forward with the Quest contract it would have been a very expensive move for them. Granite School District has been very cooperative. They are going forward with 30 sites they are going to fund themselves. We had initially offered to take 1/3 of those sites and fund them. By cutting back, we have only been able to take care of three of the sites. Granite has considered funding all 30 of their sites and we can use the funding for those three sites elsewhere.

*Utah Education Network Instructional Services Subcommittee Meeting Minutes*

**Attendees:** Kenning Artlitsch, Lisa Cohne, Rich Finlinson, Rick Gaisford, Jenn Gibbs, Cynthia Grua, Laura Hunter, Doug Jones, Christine Kearl, Karen Krier, Pat Lambrose, Juan T. Lee, Ronda Menlove, Bryan Peterson, Victoria Rasmussen, Nate Southerland, Cory Stokes, Kathy Webb, Gary Wixom, and Jo-Ann Wong.

**Tab 31 – Teachers TV - Discussion**

Laura Hunter explained a March, 2009 “soft” launch date for Teachers TV USA. Teachers TV originated in the United Kingdom and that country and have invested $100 million into the 5-year-old project. It is a series of professional development videos for educators and the education community. WNET/Thirteen is the exclusive distributor for the U.S. market and will provide the funding. Utah’s UEN-9.3 and other states will provide the distribution of these highly professional programs.

**Tab 1 – Digital Media Service Update - Discussion**

Cory Stokes presented a list of over 9,500 new titles that have been added to eMedia (which include many math, careers, and Chinese titles) and UEN’s Top 20 Downloaded titles. In the past 90 days, there have been 22,470 logins to eMedia; 45,141 searches and 11,493 downloads. There have been 76,903 total eMedia downloads since service began, January, 2004. The IS subcommittee also learned that PBS, UIMC, KUED, UCME and Utah colleges and universities have contributed to the eMedia catalogue and that monthly user visits have increased to over 9,000 in September and October, 2008.
Kenning Arlitsch, of the University of Utah Marriott Library said it is signing a contract with “Primo”, a library catalogue/digital system and will look into possible partnerships with UEN and the UALC with this new software.

Tab 2 – UEN YouTube Channel - Discussion
Victoria Rasmussen explained that UEN has created a nonprofit account/channel on YouTube that educators and students can use as a model to produce and share videos that are made in the “Dreamweaver Basics” class. Other videos on UEN YouTube include six NetSafe Utah Internet safety video clips. TeacherTube mirrors the YouTube channel and iTunes sharing.

Tab 3 – Preschool Pioneer Library – Discussion
The Preschool Pioneer Library is fully operational. Lisa Cohne has been coordinating the recruitment and evaluation of 500-plus 4-year-olds from along the Wasatch Front, mainly in Granite school district. Washington County is also involved in the pilot phase of this project. The evaluation will determine if participation in PBS Kids Play, with a focus on programs that support literacy and math development, results in children being better prepared for school. The responses from parents, children, preschool providers and early childhood professionals are very positive.

Tab 4 – NetSafe Utah Project - Discussion
The project was extended through June 2009. Rick Cline will be making NetSafe Utah presentations to PTA groups and other organizations that desire the training.

Tab 5 – Public Education and Higher Education Advisory Committee Reports – Discussion
Cyd Grua asked members of the committee to provide challenging agenda and materials for Higher Education Advisory Committee meetings. The last meeting was cancelled because of low RSVP.
Doug Jones reported on the Public Education Advisory Meeting. Discussion items are included under Tab 5. Karen Krier will assemble a list of the promotion and marketing efforts for K12 educators to learn and use Wimba.

Other Business
Rick Gaisford said the Legislature would be looking at legislation re: protecting children in the 21st century. It may require E-Rate money recipients to provide Internet safety instruction. UEN is already in a good position to meet that requirement.
Laura Hunter reminded the subcommittee about the Analog to DTV change and showed four UEN-TV produced announcements leading to February 17, 2009.
**Issue**

UEN’s grant funded through the Corporation for Public Broadcasting’s Digital Services Fund called *Datacasting Educational Media for Youth in Custody* ended in December. An executive summary that accompanied UEN’s final report to CPB is below. The 30-page final report is available by committee member request.

**Executive Summary**

Through the project “Datacasting Educational Media for Youth In Custody,” UEN provided digital media content and equipment to 13 secure juvenile detention sites administered by the Utah Division of Juvenile Justice Services. The three-year project resulted in a number of positive developments. First and foremost, UEN reached an underserved group of educators; the teachers who work with youth in administering court-ordered individual learning plans. YIC students have wide-ranging needs and abilities, and may be in custody programs that are long-term or short-term, residential or day-only. Giving their teachers access to the same digital media their mainstream peers use can make customizing instruction easier and more effective.

The project required UEN to develop the throughput for the media assets, which included providing each site with a server and designing and implementing secure Desktop Planning Stations for teachers and mobile Presentation Kiosks for classrooms. The grant also included teaching trainings that covered pedagogical as well as technical aspects of using digital media. Teachers responded enthusiastically to both the assets themselves and the new capacity they have for sharing these resources with their students.

As a result of this project, UEN has gained a much greater understanding of the technical requirements and limitations of datacasting. We have concluded that it is best for small files and is an inefficient way to move a large content library, as we attempted to do. Our eMedia Digital Media Service has thousands of assets. We sought to replicate this service via datacasting, but over the course of the project, we were forced to reduce the scope of assets for the YIC sites several times in our attempts to make datacasting work. The number of assets we could successfully datacast was so reduced that we felt it would benefit the teachers and students more if we uploaded a version of the eMedia repository directly to the site servers and used datacasting for small updates. This was our ultimate solution, and the site servers now have more than 3,000 media assets.
Considering the increase of wireless and broadband devices, we conclude that datacasting likely won’t be a robust digital delivery solution, but the lessons we have learned will provide direction for future projects such as one we are currently exploring with our state transportation office. The grant funds also allowed UEN to bring the Utah Collections Multimedia Encyclopedia to modern protocols and develop the Utah Metadata Application Profile. This content and the expertise we have gained has had a direct, positive impact on the PBS EDCAR project.

**Recommendation**

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

Distance Education coordinators are in the process of submitting their IVC and TV courses for the coming academic year. This report summarizes the process and provides a link to the Distance Education Course Catalog.

Background

Through an online course scheduling process, the Utah Education Network schedules distance education courses that are delivered through UEN’s Interactive Video Conferencing (IVC) or broadcast television station UEN-TV Channel 9. A summary table, shown below lists courses that have been submitted for the 2007-08 and 2008-09 school years:

<table>
<thead>
<tr>
<th></th>
<th>2007-08</th>
<th></th>
<th>2008-09</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>IVC</td>
<td>UEN-TV</td>
<td>Total</td>
<td>IVC</td>
</tr>
<tr>
<td>Adult Ed.</td>
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<td>19</td>
<td>18</td>
<td>18</td>
</tr>
<tr>
<td>High School</td>
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<td>49</td>
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<tr>
<td>College</td>
<td>441</td>
<td>53</td>
<td>494</td>
<td>420</td>
</tr>
<tr>
<td>Conc. Enroll.</td>
<td>272</td>
<td>20</td>
<td>292</td>
<td>189</td>
</tr>
<tr>
<td>In-service</td>
<td>2</td>
<td></td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>TOTAL</td>
<td>783</td>
<td>73</td>
<td>856</td>
<td>675</td>
</tr>
</tbody>
</table>

* The 2008-09 data will increase as institutions continue to submit courses.

Summary of Courses Submitted for 2007-08 and 2008-09

UEN requires that providers who are submitting a course proposal for IVC and UEN-TV courses also include a syllabus for the course. We have built a tool so this can all be handled online by uploading a document where the syllabus is hosted locally. Yes, a representative syllabus can be used and it should be submitted annually or at the beginning of a semester (not after the fact). This is a fiscal issue, required in order for UEN to retain its community service grant. UEN isn’t trying censor or judge course content – UEN is trying to maintain about $2.5 million of federal funding which benefits the entire state. Courses over the IVC and UEN-TV systems are considered non-federal financial support as a match for our community service grant. The requirements of the grant stipulate that courses “may be included only if the station can prove that the instructional service is both of direct benefit to the station’s provision of telecommunications services, and under the station’s direct
management and operational control.” The guidelines also state, “The station must have control over the distribution of the materials or services received [for distribution over ITV].” In this case, the services we include as match are courses from the colleges and universities. Each year representatives from each of the institutions completes a financial report listing the expenses they incurred in teaching the course, which is then non-federal match. UEN has interpreted our content oversight quite liberally to mean that we need a copy of the syllabus on file so that, in the case of an audit, we can produce and exhibit direct knowledge of the content. In 2006 UEN was audited by the office of the inspector general and asked very specifically about this issue. At that time, and each year we submit the grant application, we must provide evidence that UEN retains “the responsibility and authority to determine when and what material” is being distributed over the system. Those are the regulations by which UEN is bound. Be assured that UEN has no desire to police Utah’s higher education courses. UEN does need their cooperation for us to retain essential federal funding, and we believe uploading a syllabus once a year is the least painful way to accomplish this.

Eight years ago the Utah Education Network built an online system to facilitate a process that allows Utah’s public and higher educational institutions to deliver their respective course offerings via Utah’s IVC, and UEN-TV delivery systems. Over 700 courses are delivered each year through one of these two systems.

All of the courses delivered via the UEN IVC and UEN-TV delivery systems are available in the UEN Distance Education Catalog at www.uen.org/decatalog. This catalog provides Utah’s K-12 school counselors, students, and parents valuable information on courses offered at Utah’s public and higher educational institutions statewide.

**Recommendation**

This is an discussion item and requires no further action by the committee.
In accordance with UEN’s “sunset clause” for ending web services, three of UEN’s web services (ExplorA-Pond, Shadow A Swan and Utah’s Stream Connections) will be terminated on March 9, 2009.

Over ten years ago the Utah Education Network worked with the Utah State Office of Education and Utah educators to develop three interactive science-related web projects.

- ExplorA-Pond
  *Study pond ecology*
- Shadow A Swan
  *Track tundra swans*
- Utah’s Stream Connections
  *Connect with local streams and watersheds*

UEN is preparing to move the uen.org Web site to a new web server. Unfortunately, these three services were developed in a code base that is no longer supported and therefore cannot be moved to the new server without significant software revisions.

Following the steps outlined in UEN’s End-of-Life policy, we analyzed the web statistics, gathered feedback from educators and stakeholders, and determined not to use our limited software development resources to update these three online projects.

**Web Statistics – November 2008**

Utah’s Stream Connections ............ 2,176 visitors
Shadow A Swan.......................... 2,965 visitors
ExplorA-Pond............................ 4,732 visitors

For comparison:
my.uen.................................... 220,005 visitors
Notification about the termination of these services has been posted on the appropriate web pages and sent to C-Forum and the people who worked on the development of these projects.

**Recommendation**

It is recommended that the UEN Steering Committee supports UEN’s decision to sunset ExplorA-Pond, Shadow A Swan and Utah’s Stream Connections on March 9, 2009.
Issue

UEN has experienced steady growth in the use of Wimba web conferencing services, both in higher education and public education.

Background

**Wimba Web Conferencing Service**

Both public and higher education educators, students and administrators are using a powerful new web conferencing tool called Wimba which is licensed and paid for by UEN. Wimba takes advantage of the UEN network infrastructure and web resources to maximize faculty productivity and efficiently use state resources to educate students and replace costly in-person meetings.

Wimba sessions are fully interactive and use individual desktop and laptop computers with high-speed Internet connections, microphones and web cameras to enable two-way audio and video communication. Wimba does not require expensive and specialized audio and visual equipment. Many new computers now come with web cameras and microphones built-in. When purchased separately, this equipment costs less than $50.

Educators know that live, personal interaction with students is the most valuable element of quality teaching and learning experiences. Wimba allows educators to create virtual office hours and conduct student-teacher and teacher-parent conferences. Students use the technology to interact and collaborate with each other. K-12 teachers use Wimba for professional development and collaboration with other teachers, especially as travel budgets continue to diminish.

**Wimba Usage Statistics**

Wimba has just recently been rolled out to both K-12 and higher education. During the 2nd quarter, there were over 10,386 total participant hours logged by users of Wimba Classroom throughout higher education and public education in Utah. Usage of the service varied widely by institutions, with K-12 using the service the most (25%), followed by USU (24%), SLCC (20%), UofU (16%), and UEN/UCAT/Snow/CEU (10%).
Cost Savings Made Possible by Wimba

Wimba is a tool that can be used to save money by eliminating travel costs and lost productivity incurred by holding face-to-face meetings. The Utah State Office of Education (USOE) conservatively estimates that this year alone, $80,000 will be saved annually from eliminating in-state travel for teachers and administrators. USOE will recover approximately $132,200 annually by increasing productivity from reduced travel time. These savings do not reflect classroom/instructional uses, professional development, or administration services at the region, district or local school level. The savings will be significantly greater next year as the use of Wimba grows exponentially.
Other groups, such as the state libraries and higher education can demonstrate similar cost savings by holding meetings via Wimba instead of face-to-face, as illustrated in the attached spreadsheets.

**Recommendation**

This is a discussion item and requires no further action by the committee.
### Utah State Library Online Training Events

#### Personnel Services (Hourly Wages & Benefits)

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<th># of events</th>
<th>Staff</th>
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<td>20</td>
</tr>
<tr>
<td>Miles (Round Trip)</td>
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<tr>
<td>Hours on the Road</td>
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<td>subtot @ $1.050 per mile</td>
<td>$1,087</td>
<td>$674</td>
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<td>Pioneer* online training</td>
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<td>Avg hours on the road</td>
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<td>Pioneer subtot @ $1.050 per mile</td>
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<tr>
<td>Lost Productivity</td>
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<td>Bookmobile librarians</td>
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<td>Bookmobile technicians</td>
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<td>Subtotal</td>
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<td>Total Worker Efficiency (Dollars Saved)</td>
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**Assumes that travelers return the same day so per diem and housing not included.**

### Higher Education

#### Personnel Services (Hourly Wages & Benefits)

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<thead>
<tr>
<th>Meeting</th>
<th>Time/En</th>
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<td>Mileage (Round Trip) @ $1.50 per mile</td>
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<td>Hours on the Road</td>
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<tr>
<td>Total Efficiency (Dollars Saved)</td>
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**Assumes that travelers return the same day so per diem and housing not included.**
Issue

Doug Jones, representing the Public Education Advisory Committee will provide an update on recent committee activities.

Background

Members of the Public Education Advisory Committee met via Wimba online conference system on February 5. Doug Jones facilitated the meeting where the following topics were discussed:

- Wimba
- Budgets
- Distance Ed Catalog and Course Scheduling Process
- Educational Technology Endorsement Program
- DTV transition plans
- GED Pilot project
- USOE updates

A Higher Education Advisory Meeting was not scheduled during this period. Cyd Grua welcomes input regarding this committee.

Recommendation

This is a discussion item and requires no further action by the committee.
Idaho Sponsored Education Group Participation (SEGP) Program - Discussion

Issue

The University of Utah (UofU) and UEN have been working with the new Idaho Regional Optical Network (IRON) to provide Internet2 connectivity through the Sponsored Education Group Participation (SEGP) program to public and higher education in Idaho. We expect IRON will accomplish this through a working partnership with the emerging Idaho Education Network (IEN), a K-12 focused project of the Idaho Departments of Administration and Education.

Background

Internet2’s SEGP program allows traffic to and from public education and 2- and 4-year college traffic in a state to be routed across the I2 backbone. For a state to participate in the program, at least one in-state member university as well as the regional Internet2 connector must provide letters of support. This is an Internet2 requirement, and the connector assumes responsibility for the SEGP connection. Through the sponsorship of UofU, UEN has been recognized as the Internet2 SEGP for Utah since September 2002.

The State of Idaho is beginning the process of creating a statewide education network – IEN. IRON has the participation of multiple research, clinical, and higher education groups in Idaho including the University of Idaho, Boise State University, Idaho National Laboratory, and the Idaho Hospital Association. From our perspective, IRON represents the best candidate for enhancing Internet2 connectivity for Idaho universities and for providing the SEGP connection for Idaho public education. UEN and IRON currently are in discussions to establish a high-speed circuit from Idaho (most likely, Boise) to the UEN core presence in Salt Lake City. IRON is not currently an Internet2 connector and must look to a current connector for its sponsorship.

After extensive discussions with multiple groups in Idaho and in coordination with UEN, the University of Utah (UofU) recently endorsed IRON’s application for the Idaho SEGP status. In addition, the University of Idaho has provided the requisite letter of support as an in-state I2 university member.

UEN/UofU have received a letter of intent from IRON assuring that IRON will cover any associated fees incurred through our sponsorship. Internet2 has also assured UEN/UofU that no invoices will be forthcoming until all issues related to IRON’s I2
connectivity have been resolved. We are continuing discussions with IRON with the goal of establishing this connectivity this spring.

**Recommendation**

This is a discussion item and requires no further action by the committee.
The University of Utah and UEN jointly provide the Internet2 connection in Utah and southeastern Idaho. Additionally, UEN has partnered with the Front Range Gigapop (FRGP, operated by the National Center for Atmospheric Research in Boulder, Colorado) to aggregate the Internet2 connection for Colorado and Wyoming. The University of Utah holds the connector agreement with Internet2 and is responsible for overall Internet2 connectivity in this region. The University of Utah and UEN are working with Internet2 to provide a new dynamic circuit connection to a research and development (R&D) installation of the Northrop Grumman Corporation in Louisville, Colorado.

Background

In the spring of 2008, the Chief Technology Officer of the information technology subsidiary of Northrop Grumman Corporation (NGC) and Internet2 approached the University of Utah (UofU) about the possibility of providing a connection to the new Internet2 Dynamic Connection Network (DCN) in Colorado. The DCN is an R&D network that is operated in parallel to the IP-based backbone service that we currently receive from Internet2. The DCN allows for establishing short-term, high-bandwidth connections (usually Gigabit or 10-Gigabit Ethernet) to support individual research projects. NGC is interested in trialing this technology for a variety of applications including high performance computing and disaster recovery among distributed data centers. We felt that there was significant overlap in our technical interests to justify pursuing this relationship. The technical requirements and the connectivity specifications were discussed and agreed to over a series of telephone conversations with representatives of all involved parties. The UofU Office of General Counsel assisted in working through the legal issues of this academic-corporate partnership and the drafting of the final agreement.

The additional capacity and connectivity will increase the Internet2 cost to the UofU/UEN by $90,000 while enabling a doubling of the Internet2 bandwidth this winter to 2 Gbps (we plan to upgrade this connection again to 10 Gbps later this spring). NGC has agreed to incur the full amount of these additional charges with a small overhead consideration provided to UofU/UEN for management.

Internet2 moved ahead with the new connection and made it available immediately to NGC in Colorado upon completion of the formal agreement between UofU and NGC.
The UofU/NGC agreement was signed by both parties in early February and associated technical activity and connectivity has moved forward.

**Recommendation**

This is a discussion item and requires no further action by the committee.
NLR OUTAGES AND INTERNET2 CPS SERVICE – DISCUSSION

Issue

During the first week of February UEN’s National Lambda Rail service (NLR) suffered three failures resulting in loss of service to the national research network. In response UEN turned up a similar new service, Internet2’s commercial peering service (CPS), which provides similar service with less failure points.

Background

NLR suffered three outages during the first week in February. These outages resulted in significant downtime to the national research network. While these outages were alarming, all three occurred in different parts of the circuit path and were unrelated.

Outage #1

Started...................... 1:00AM Sunday 2/1/2009
Ended....................... 5:00PM Tuesday 2/3/2009
Total outage time....... 64 hours

This outage was the result of a bad transponder card located in an optical switch in the Ogden level 3 hub. This issue was resolved through a hardware replacement of the transponder card.

Outage #2

Ended....................... 1:22AM Thursday 2/5/2009
Total outage time....... 4 hours

This outage was due to optical card issues located in an optical switch in the Denver level 3 hub. This issue was resolved through configuration changes in the optical switch.

Outage #3

Started...................... 1:30PM Thursday 2/5/2009
Ended....................... 2:30PM Thursday 2/5/2009
Total outage time....... 1 hour
This outage was due to a Cisco Ethernet switch software issue in the Salt Lake level 3 hub. This issue was resolved through a hardware reset of the switch.

During the first failure UEN brought up the Internet2 Commercial Peering Service (CPS), which is similar to the NLR Transit Rail service that was lost during the outage. While NLR was down UEN demonstrated that CPS was technically a viable alternative to NLR Transit Rail. CPS was able to offload approximately the same amount of traffic as Transit Rail with no reported service issues.

While CPS can serve as an alternative to NLR, the Internet2 connection must first be upgraded from 1Gb/s to match NLR at 10Gb/s. The current Internet2 connection is not sized properly to be a permanent replacement but can act to offload traffic in the interim.

**Recommendation**

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