Utah Education Network
Steering Committee

AGENDA
April 25, 2003 – 9:00 AM

9:00 am - 12:00 pm

Steering Committee Meeting

Welcome and Introductions................................. Ray Timothy

Committee of the Whole

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UPCOMING MEETINGS

Technical Services Subcommittee Retreat - May 13, 2003
UEN Steering Committee - June 27, 2003

Please place these materials in your Steering Committee Binder.
Issue

UEN staff and stakeholders will, over the next three months, identify the major goals and projects which we will undertake during the coming fiscal year. This agenda item provides an overview of major budget issues, and outlines a recommended procedure for Executive Committee, Subcommittee, and Steering Committee to be actively involved in reviewing staff recommendations, determining major planning goals and budget priorities, and then reviewing and approving the UEN Strategic Plan and Budget for Fiscal Year 2004. This agenda item incorporates and replaces material from the Instructional Services Subcommittee agenda (Tab 2) and the Technical Services Subcommittee agenda (Tab 4).

Background

The budget picture UEN faces for FY 2004 is a mixed one. Considering the limited financial resources available for FY 2004, however, the outcome was as positive as could have been expected. UEN received strong support from the leadership and members of the Higher Education Appropriations Committee. They understand and appreciate our mission and the important services we provide public and higher education, and they made a concerted effort throughout the legislative session to secure funding for several key network projects.

The following UEN budgetary decisions were made by the Legislature:

1 An increase of $400,000 in ongoing appropriations was provided to UEN to increase our network capacity. Combined with federal E-rate funding, this will make possible approximately $1.2 million in new spending to upgrade the network.

2 For the second straight year, no funding was provided by the Legislature for salary increases. Approximately $140,000 was allocated to cover increasing medical insurance premiums and state retirement rate increases. That will not be enough to fully cover insurance premium rate increases, and employee contributions will also be increased.

3 Base budget reductions totaling $287,000 for all UEN-related line items were adopted during the December 2002 Special Session. Most of the cuts, $250,000, were in the general UEN line, and the remainder are in the satellite budget. With these cuts, over the past 2 years our base budget will have been reduced by a total of 7 percent.
For the past several years, College of Eastern Utah received funds for its distance learning program within the UEN budget. For example, in FY 2003 UEN transferred $268,700 to CEU. For FY 2004, a new line item has been established within the CEU budget and these funds have been transferred into that line item. Consequently, UEN will no longer have a role in transferring the revenues to CEU.

UEN staff members have already begun preliminary strategic planning and budget preparation activities and have developed several budget recommendations:

1. Most of the $250,000 budget reduction will be achieved through personnel savings, primarily by reducing positions in administrative services.

2. University of Utah employees will receive a 1.5% salary increase through reallocation of budgets and increased student tuition collections. That salary increase will offset the increased employee contributions for medical insurance premiums. Although UEN did not receive new state funds or tuition revenue to provide a salary increase, it is our intention to identify sufficient savings (approximately $75,000) to increase salaries of all UEN employees by 1.5%.

3. UEN funds regional help desk and regional trainer positions in the four regional service centers. The level of funding in those budgets will be kept the same, and the same increased funding will be provided for benefits and salaries for these personnel as for UEN employees.

4. The new funds allocated by the legislature to upgrade the Network must be spent for the highest priority Qwest GEOMAX and rural telco projects. We will be accountable to the Higher Education Appropriations Committee next fall and winter to demonstrate how we are spending the funds, and to show that we were able to leverage state resources with federal E-rate reimbursements.

5. Last year, many department operating budgets were significantly reduced to accommodate budget cuts. For example, the Hub and End-site line item in the Field Operations budget was reduced from $297,000 to $150,000. This line item is generally used to purchase equipment used at district offices and colleges and universities to provide for circuit and feature increases. We are already over-budget in that line item, and are making adjustments in other areas to offset that budget overrun. In this instance, and a few others, budgets will need to be increased in FY 2004 to realistically reflect actual costs.

6. This year, the Technical Services Projects Account contained $1,008,000 which is being used to complete projects identified on the regional priorities spreadsheet. The amount of the FY 2004 special projects account will not be determined until the Technical Services Subcommittee develops its statewide and regional priorities, and there is a final determination of the funding that can be committed to the account.

Next Steps

A draft budget will be ready for review and feedback by the UEN Executive Committee on May 1. UEN departments have held meetings to develop preliminary goals and activities in preparation for Subcommittee retreats. The Technical Services Subcommittee will participate in a strategic planning /budget prioritization retreat on May 13th at Utah Valley State College. The Instructional Services Subcommittee is also expected to hold a retreat in mid-May. Final review and approval of the FY
2004 Strategic Plan and Budget will occur at the June meeting of the Steering Committee.

**Recommendation**

It is recommended that Steering Committee members participate in the planning retreats of their respective subcommittees to provide guidance on strategic planning and budget priorities and projects for the coming fiscal year.
Issue

As the subcommittee structure and new Steering Committee format have been established, it is apparent that significant efficiencies can be implemented regarding the preparation and distribution of the informational materials for the subcommittee and Steering Committee meetings.

Background

Since the materials for each of the subcommittees are prepared in substantial detail for each of the subcommittee meetings and then redistributed in the Steering Committee materials, there is significant duplication. In order to address this issue, a survey of Steering Committee members and those individuals who have significant interest in the activities of the subcommittees and the Steering Committee was prepared so that input could be gathered as to preferences regarding the manner by which these materials might be distributed most effectively and efficiently.

The survey options included: 1. Attaching the materials to an e-mail; 2. Posting the materials to the Network’s Web site; and 3. Utilizing the current system of providing a hard-copy via mail were necessary.

The results of the survey showed that a large majority of members and participants preferred electronic delivery of the materials over the hard-copy mail system.

As a result, the Steering Committee materials will be sent via e-mail with an attached Adobe PDF, they will also be posted to the Web site (as currently is the case), and hard-copies will be mailed to those who prefer that option. Lastly, a limited number of hard-copies will be available the day of the meeting.

A very similar result was determined regarding the distribution of subcommittee materials.

Recommendation

It is recommended that the Steering Committee approve this method and procedure of distributing subcommittee and Steering Committee materials.
Selection of new Co-Chair of the Instructional Services Subcommittee

A vacancy existed in the position of Instructional Services Subcommittee Co-Chair since Vicky Dahn resigned from the Steering Committee. The Internal Procedures of the Steering Committee provide that one Co-Chair should come from the higher education members (Dave Eisler), and the other should be a public education member.

Appointment of a new Co-Chair representing public education was discussed at a meeting of the Instructional Services subcommittee. The final appointment of Subcommittee Co-Chairs is made by the Steering Committee Co-Chairs.

It is recommended that the steering committee review and approve the Instructional Services Subcommittee recommendation for Co-Chair.
Both the Instructional and Technical Services Subcommittees reviewed the priorities for the IP Video project during their April subcommittee meetings. Several recommendations from the subcommittees are indicated below.

At the time this project was initiated, it was assumed that CVDS would go away, and that the existing EDNET system would need to be replaced. Over the last three months some viable alternatives for continued EDNET video service have been identified.

As a result, UEN has changed this project from being a replacement of EDNET services to being an opportunity to enhance video services through H.323 protocols. Realizing that H.323 options are still more cost effective and efficient than the existing EDNET system, movement toward a statewide H.323 system still exists as a long term goal, but the short term goals have changed.

At a meeting of the project steering team on March 3, the following priorities were agreed upon:

1. **Policies.** Establish policies for the use of H.323 devices on the UEN network. Policies would guide current use and anticipated use. Policies would include technical standards, funding scenarios, instructional implications, and other administrative functions. Policies would be developed by the Instructional and Technical subteams for this project during the next 1 – 6 months.

2. **Combined Events.** Determine the administrative procedures for events that combine EDNET and H.323 devices. This would occur during the next year.

3. **New Sites.** Discontinue installation of existing EDNET sites, opting for less costly H.323 solutions instead. This would take effect immediately.

4. **Migration.** The long term goal would be to migrate completely to H.323 during the next 2-3 years. Effort would be made to build out parts of the video network that support this long term goal and refrain from expensive engineering which does not support this goal.
After their meeting on March 3, the project team has conducted several important steps to move forward with these new priorities. Currently, the project team is engaged with:

1. Revising the existing project documentation to reflect these changes.
2. Expanding on the existing policy recommendations from the subcommittees and creating rough draft documents addressing these issues.
3. Completing an asset inventory of existing H.323 equipment.
4. Developing a more comprehensive budget and timeline associated to the four priorities.

To facilitate communication with stakeholders and planning team members, a Web site for the IP Video project has been established at www.uen.org/projects/html/ip_video/

**Recommendation**

Recommendations from the subcommittees include:

1. Differentiate between administrative processes, which are more the purview of UEN staff and project participants, and policy level guidance to be provided by the subcommittees and steering committee. Bring forward policy level actions, and continue to move forward on administrative or staff level functions.

2. Provide an outline of technical specifications recommended by UEN for future systems.

3. Schedule a demonstration of H.323 at an upcoming Instructional Services meeting.

4. Continue to provide updates to the Sub Committees as the project progresses.

This is an information item. No further action is required of the committee at this time.
Data indicates that uen.org contains extensive content and is highly used, yet user feedback indicates a desire for more individualized experiences and a streamlined interface. UEN staff are seeking additional feedback regarding this changes.

Background

The Utah Education Network Web site services 13,500 visitors per day and 380,000 per month. There are 830 published Lesson Plans that support K-12 Core Curriculum, 325 curriculum hotlists, and 360 virtual tours created by Utah teachers and published on the site. According to HotBot search reports, 10,000 other Web sites link to resources on the UEN Web site. More than 39,400 educators, administrators, and pre service teachers are registered users of the my.uen interface.

The Utah Education Network developed its first comprehensive Web site in 1994. This site was known as UtahLINK and contained the Utah Core Curriculum and lesson plans. EDNET and KULC had separate Web sites that served their constituents.

Reflecting an organizational move toward horizontal services rather than vertical units, the Instructional Services department created a new Web site in 2000 that incorporated all of UEN’s departments and entities. UEN’s current Web site and is organized into 6 major areas: Curriculum Resources, Professional Development, Learning Projects and Tools, Today on UEN, Community Connections and About UEN.

As part of our ongoing evaluation and planning, UEN staff are conducting a thorough assessment of the services on UEN.org. In analyzing Web site use, research has indicated that top visited pages are under the Learning Projects and Tools section of the Web site. In addition, analysis of web statistics data indicate most visitors are finding UEN content through a commercial search engine or link on an outside Web site. User feedback indicates that UEN online resources and content are useful, but often difficult to locate.

To address these issues, a two tiered solution is proposed. First, the many resources available from the UEN Web site and partner Web sites need to be catalogued using a standard system. This process of digital asset management will provide a robust system for cataloging and indexing the back-end data on the site. Second, the front-end user interface should provide a more personal experience that’s very easy to use. Because UEN serves such a diverse clientele, creating audience specific pages,
supported by a robust data indexing system, will provide greater ability to access the material needed.

Recommendations

It is recommended that Committee Members become familiar with uen.org so that they can provide input and feedback as we establish goals and priorities for the coming year. Two attachments are included for review:

1. Tab 5 Attachment A shows the top 50 uen.org directories visited during 2002.
2. Tab 5 Attachment B shows preliminary mock-up of a Student-specific page.
## Tab 5 Attachment A
### Top 50 UEN Web Services

<table>
<thead>
<tr>
<th>Directory</th>
<th>Description</th>
<th>2002 Visitors</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 2002</td>
<td>2002 Olympic education pages</td>
<td>601368</td>
</tr>
<tr>
<td>2 activities</td>
<td>Utahlink/activities - UEN tours directory visits would also be counted</td>
<td>498040</td>
</tr>
<tr>
<td></td>
<td>in Utahlink numbers</td>
<td></td>
</tr>
<tr>
<td>3 News</td>
<td>newsletters for uen, ucet, ednet and various other</td>
<td>487155</td>
</tr>
<tr>
<td></td>
<td>groups</td>
<td></td>
</tr>
<tr>
<td>4 Pioneer k-12</td>
<td>pioneer.uen.org</td>
<td>339240</td>
</tr>
<tr>
<td>5 Lessonplan</td>
<td>Lesson plans and grade level LP pages</td>
<td>337977</td>
</tr>
<tr>
<td></td>
<td>(lessons)</td>
<td></td>
</tr>
<tr>
<td>6 tours</td>
<td>Utahlink/tours - UEN tours directory visits would also be counted in</td>
<td>285392</td>
</tr>
<tr>
<td></td>
<td>Utahlink numbers</td>
<td></td>
</tr>
<tr>
<td>7 Thempark</td>
<td>Thempark pages</td>
<td>235900</td>
</tr>
<tr>
<td>8 my.uen</td>
<td>my.uen.org</td>
<td>187569</td>
</tr>
<tr>
<td>9 Weather</td>
<td>Utahlink/weather - UEN tours directory visits would also be counted in</td>
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</tr>
<tr>
<td></td>
<td>Utahlink numbers</td>
<td></td>
</tr>
<tr>
<td>10 Curriculum</td>
<td>Curriculum Resources Section</td>
<td>118478</td>
</tr>
<tr>
<td>11 Heritage</td>
<td>heritage.uen.org</td>
<td>107144</td>
</tr>
<tr>
<td>12 core</td>
<td>Utah Core pages</td>
<td>75722</td>
</tr>
<tr>
<td>13 Districts</td>
<td>Individual school info</td>
<td>69518</td>
</tr>
<tr>
<td>14 ucme</td>
<td>Utah Collections Multimedia Encyclopedia</td>
<td>68890</td>
</tr>
<tr>
<td>15 Centennial</td>
<td>Utah centennial pages</td>
<td>63312</td>
</tr>
<tr>
<td>16 search</td>
<td>UEN site index</td>
<td>44974</td>
</tr>
<tr>
<td>17 Ednet</td>
<td>EDNET info pages and CME access</td>
<td>44104</td>
</tr>
<tr>
<td>18 development</td>
<td>Professional Development section (training redirects included)</td>
<td>39281</td>
</tr>
<tr>
<td>19 projects</td>
<td>Projects and Tools Section pages</td>
<td>38411</td>
</tr>
<tr>
<td>20 Curriculum search</td>
<td>UEN curriculum search tool (redirected uensearch included)</td>
<td>37275</td>
</tr>
<tr>
<td>21 kulc</td>
<td>KULC website pages</td>
<td>34013</td>
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<tr>
<td>22 educator</td>
<td>Find an educator search</td>
<td>28895</td>
</tr>
<tr>
<td>23 community</td>
<td>Community Connection section</td>
<td>23684</td>
</tr>
<tr>
<td>24 CACTUS</td>
<td>Access to the CACTUS site</td>
<td>25719</td>
</tr>
<tr>
<td>25 Swan</td>
<td>Shadow a Swan Project</td>
<td>23291</td>
</tr>
<tr>
<td>26 k12student</td>
<td>Student friendly search</td>
<td>17366</td>
</tr>
<tr>
<td>27 services</td>
<td>About UEN section</td>
<td>16532</td>
</tr>
<tr>
<td>28 tutorial</td>
<td>various site tutorials</td>
<td>16506</td>
</tr>
<tr>
<td>29 technical</td>
<td>UEN Technical Services pages</td>
<td>15112</td>
</tr>
<tr>
<td>30 utap</td>
<td>wwwj/utap - UEN Access to Utah Technology Awareness Project part of wwwj</td>
<td>14445</td>
</tr>
<tr>
<td></td>
<td>numbers</td>
<td></td>
</tr>
<tr>
<td>31 ate</td>
<td>Applied Technology Lesson Plan access</td>
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</tr>
<tr>
<td>32 treecology</td>
<td>Tree Ecology Project</td>
<td>11760</td>
</tr>
<tr>
<td>33 stream</td>
<td>Utah Stream Connections project</td>
<td>11688</td>
</tr>
<tr>
<td>34 today</td>
<td>Today on UEN section</td>
<td>11467</td>
</tr>
<tr>
<td>35 rubric</td>
<td>Rubric Tool</td>
<td>10178</td>
</tr>
<tr>
<td>36 Utahmap</td>
<td>Find Utah schools via a graphic map</td>
<td>9047</td>
</tr>
<tr>
<td>37 umaf</td>
<td>Utah Multimedia Arts Festival website</td>
<td>8878</td>
</tr>
<tr>
<td>38 administration</td>
<td>UEN administration pages</td>
<td>8356</td>
</tr>
<tr>
<td>39 toolkit</td>
<td>Courseware toolkit</td>
<td>7919</td>
</tr>
<tr>
<td>40 seop</td>
<td>Student Education Occupation Plan website</td>
<td>6977</td>
</tr>
<tr>
<td>41 itc</td>
<td>Integrating Technology &amp; Curriculum workshop pages (under Prof Dev.)</td>
<td>5652</td>
</tr>
<tr>
<td>42 steering</td>
<td>Steering Committee materials and info</td>
<td>5123</td>
</tr>
<tr>
<td>43 Ednetcontacts</td>
<td>Ednet contact info center</td>
<td>3753</td>
</tr>
<tr>
<td>44 Schools</td>
<td>?</td>
<td>3412</td>
</tr>
<tr>
<td>45 iss</td>
<td>UEN Instructional Services pages</td>
<td>3339</td>
</tr>
<tr>
<td>46 Ulimo</td>
<td>Utah Instructional Media Catalog website</td>
<td>3060</td>
</tr>
<tr>
<td>47 UENcatalog</td>
<td>?</td>
<td>2852</td>
</tr>
<tr>
<td>48 soar</td>
<td>frontpage to Applied Technology SOAR website</td>
<td>2549</td>
</tr>
<tr>
<td>49 policy</td>
<td>UEN policies (under about UEN)</td>
<td>2411</td>
</tr>
<tr>
<td>50 proposal</td>
<td>Distance Ed Course proposal access</td>
<td>2156</td>
</tr>
</tbody>
</table>
Preliminary Mockup of Student Center

- Select a Different Center -

K-12 Students
Paragraph about student resources on UEN written in a style personalized to student visitors. Use the green i buttons to get more information about an item.

Use News for Homework
EBSCO, part of Pioneer Library, contains articles from hundreds of newspapers and journals.

Just When You Thought You’d Seen Everything
Courses from all over Utah publish interesting tours and activities. Use the Learning Search to find one you like.

Exploring Shakespeare - Romeo and Juliet
You can understand and enjoy this classic play. Jan 4 - 11:00am KULC Channel 9

Find Your Teacher
my.uen web pages
Teacher's First Name:
Teacher's Last Name:

Pioneer Library
Utah's Online Library
Log-in Name:
Password:
Go

Learning Search
Find internet activities and educational TV shows
Keyword(s) Search:

Search by keyword, core area and/or grade level. Select multiple list items by holding down the SHIFT key. Click Go to run your search.

Limit Search By:

Core Area
Educational Technology
Fine Arts - Dance
Fine Arts - Music
Fine Arts - Theatre
Fine Arts - Visual Art

Grade Level
Kindergarten
First
Second
Third
Fourth

Limit Search Results to:
- Web sites and links
- Television Shows
Go

Jump Center
Jump to learning with these links

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resources@uen.org

SEARCH UEN

5-5
Background

UENSS staff conducted a survey and site visits the first two weeks of January. Fifteen UENSS sites were visited. Twenty six site facilitators or coordinators participated in filling out a questionnaire and interviews. Informal interviews were also conducted with students at the sites. The evaluation was conducted by Claire Gardner, Charice Black, Sheryl Hulmston, Rick Cline, and Kevin Reeve.

The purpose of this evaluation was to:

- Assess the ability and attitudes of facilitators
- Evaluate current training efforts
- Determine future training needs and modifications to current training
- Find things that are working well (best practices)
- Find areas that need improvement
- Foster good customer relations

Survey Results

Students reported great appreciation that courses and degree programs are available in their area. The majority felt that the system works very well and there were no real serious concerns.

Equipment and TOC

- 80% Agree or Strongly agreed that equipment is in good working condition. 15% were neutral and 4% disagreed.
- 88% say the TOC is helpful in resolving equipment problems.
- 80% say they can set up and operate the receive site equipment.

Facilitators rely on the TOC

- 46% call the TOC several times per semester.
- 15% call several times per month.
- 27% never call the TOC.
We have a large number of veteran facilitators

- 58% have been a facilitator 2 years or more.
- 12% have been a facilitator for 1 – 2 years.

Facilitator to class ratio is too high in many places

- 100% facilitate more than one class at the same time.
- 19% facilitate 4 classes at the same time.
- 23% facilitate 3 classes at the same time.
- 31% facilitate 2 classes at the same time.
- 8% facilitate 5 or more classes at the same time.
- However 96% (69.2% SA, 26.9% A) are able to always be in the room or an adjacent monitoring room when tests and quizzes are given.

Current Training

- 39% attend the monthly satellite training session every month.
- 19% attend 2 or 3 times during the semester.
- 12% attend only once during the semester.
- 15% have not attended them but do know about them.
- 15% did not know there were monthly training sessions.
- Only 50% of facilitators say their supervisor expresses the importance of attending the training sessions.

Other Duties of Facilitators

- 100% Agree that it is their responsibility to report cheaters.
- 88% are comfortable with reporting students who cheat.
- 92% feel they understand what faculty expects of them as a facilitator.
- 92% feel they are comfortable with maintaining order.
- 25% where neutral or not aware of upcoming quizzes or exams in classes they facilitate.

Comments

There were many comments about equipment problems. It appears that in some cases equipment takes a long time to be fixed. Old equipment including fax machines are sometimes a problem. We can not pinpoint any single reason for this. The number one frustration mentioned by facilitators was equipment problems. We should explore this more.

Facilitators would like more computer training. They are often called upon to assist students with a variety of computer tasks. Veteran facilitators do not need the same training over and over again. They need new information. Facilitators observe faculty talking over their time and getting cut off. Other problems reported included teaching to their local class with mic off sometimes, latency in assignments getting
back in a timely fashion, and students expecting facilitators to resolve problems with the faculty.

**Recommendations**

Our recommendations are for minor changes based on our survey results and interviews with facilitators. Although we were able to pinpoint a large number of issues, there are certainly others that need further exploration. This section provides a brief summary of problems and some recommendations.

**Change the way training is done.** We have done a great job doing training. However we need to change it to meet the needs of both veteran and new facilitators. We recommend that new information that everyone needs should be presented first, and review information be presented at the end. Those who have done this for awhile will not have to sit through review material. A published consistent semester training schedule would help. TOC staff should be introduced during training sessions so facilitators know who they are.

**Add more facilitators in the field.** Some facilitators are overloaded. They are monitoring and facilitating too many classes at the same time. Although facilitators say they can monitor exams and be in the room, we feel there are instances when they are called away to the other class. There may need to be additional support on testing nights. Our recommendation is more facilitators at some centers.

**Highlight things that work.** Brigham City has processes down! They could share and serve as an example to others. We should do a short video tape segment on their procedure for calendaring all exams and quizzes and then show it during training. This way they know when all the exams are going to be given so they can be sure they have enough staff on hand to monitor and facilitate them. Training segments should cover and provide discussion for how to handle cheating, how to maintain order in the classroom, etc. Let centers share with each other. They are in the field, we are not.

**Resolve equipment problems in a timely manner.** Facilitators complained that sometimes receive site equipment problems take a long time to fix. Service Reps would like to know of reported equipment problems so they can follow-up and provide customer service and resolution assistance if needed. We can not pinpoint any particular fault here. How do we follow-up on this? We recommend that the TOC look into this problem and provide recommendations and procedures for equipment problems, reporting, follow-up, resolution, etc.

This is an information item. No further action is required of the committee at this time.
ISSUANAL SERVICES COMMITTEE

TAB 7

KULC AND DATACASTING

Issue
KULC conversion to digital television takes place on April 18, 2003. UEN staff is in the process of planning new educational applications for the digital bandwidth, including broadcast of digital educational content to institutions, and eventually to students’ homes. The following report outlines some of the possibilities for committee consideration and discussion.

Background

About KULC
KULC is a public broadcast station licensed by the Utah Board of Regents and managed by Utah Education Network. KULC programming supports education needs of the following audiences:

- Higher education telecourses from four institutions. Telecourses average 5000 student enrollments per year.
- Public education K-12 instructional television programs from 9:00 – 3:00 each weekday. Programs are selected by the Utah Instructional Media Consortium representing all 40 school districts.
- Adult learners receiving GED and Workplace Essential Skills programs in coordination with USOE Adult Learning and Division of Workforce Services
- Teacher Professional Development programs from Annenberg/CPB
- Parents, seniors, early learners, after school care providers, and life long learners

Digital Broadcasting
In the Telecommunications act of 1996, the Federal Communications Commission allocated spectrum to 1,544 TV stations and issued a mandate for conversion to digital broadcasting by May 2003. The FCC mandate launched a lengthy process of planning, attaining funds, and a great deal of research.

With support of the Utah State Legislature, federal Community Service Grant, and other grant sources, funding for KULC conversion was successfully attained over a multi-year period. KULC also joined with seven other Utah broadcasters in the DTV Utah partnership, a unique effort to share joint operating costs and expertise.
Governor Leavitt launched DTV Utah in 1999 at the Farnsworth Peak transmission site.

The digital revolution will not only dramatically improve the quality of the television picture, but also make possible the over-the-air delivery of several simultaneous services to viewers, such as high definition television, multicasting in standard definition television, and data transmission. The table below outlines some of the applications KULC and other broadcasters have considered for their signal.

Table 0.1  Digital Broadcasting Applications

<table>
<thead>
<tr>
<th>High Definition</th>
<th>HDTV – utilizes full bandwidth to provide theater quality picture and sound. KULC typically does not license programs in this category.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Multicasting</td>
<td>Multiple channels broadcast to different audiences at the same time. This is attractive to commercial providers wishing to gain audience niche.</td>
</tr>
<tr>
<td>Datacasting</td>
<td>Broadcasting data to a receive card located in a computer, server, or television where it is stored for later use.</td>
</tr>
<tr>
<td>Interactive/Enhanced</td>
<td>Broadcasting a program to viewers which includes ancillary content, much like features on a DVD.</td>
</tr>
<tr>
<td>Video on Demand</td>
<td>Same as datacasting but generally happens in “real time.” Content is broadcast to a server or TV receive box for immediate viewing.</td>
</tr>
<tr>
<td>Ancillary Services</td>
<td>TV can also be used for paging, software distribution, wireless telephony, ISP, advertising, kiosks, and other applications.</td>
</tr>
</tbody>
</table>

Digital content may be broadcast via digital terrestrial signal (over the airwaves), digital cable, or digital satellite. Digital content may be received via TV-like receivers such as digital wide screen HD TV’s or TV’s equipped with set-top boxes that include a receive card. Digital content may also be received through receive cards placed in a computer or server. Receivers can be placed on a school or community center LAN, making content available over the school wide network. Currently, the cost for a TV or computer receiver is $200-$300.

**KULC use of DTV**

The mission of KULC is to provide high quality educational resources to Utah teachers and learners, support the work of our partner agencies and institutions, maximize cost effectiveness by leveraging economies of scale, and support utilization of the resources through professional development and a solid technical infrastructure. Since the FCC mandate, KULC has carefully monitored use of digital signal by other broadcasters. Unlike commercial stations where multicasting to many audiences is attractive, or theater quality HDTV experience is needed, KULC
digital bandwidth is best utilized through data casting educational content directly to schools, community centers, institutions and students’ homes.

In considering the educational audience and mission of KULC, programming in the following areas is recommended after digital conversion this spring:

1. Continued analog channel with same programming line up

2. Multicasting
   a. Digital parallel of the analog signal (required by FCC) 24/7 and
   b. Digital Annenberg/CPB learning channel 24/7 with college and high school courses and teacher education

3. Datacasting
   a. Digital video library and GED to receive cards in network servers at schools, institutions, community centers for use on the LAN
   b. Telecourses and course material to receive cards in home PC’s or televisions

Our Progress with Datacasting

Like other broadcasters, KULC has been engaged in a great deal of research and development to inform our digital utilization. Three years ago, KULC elected not to continue our PBS membership or multicast PBS channels and instead pursue an ala carte approach to licensing programs that fit the KULC mission. In doing so, we were also able to redirect funds toward digital programming. Additional research on digital asset management, digital rights management, technical and content work structures, and equipment has been ongoing. To attain greater understanding of K-12 teachers’ use of digital media, research has been conducted with United Streaming and Digital Curriculum media libraries. Additionally, UEN joined twenty-seven other broadcasters, PBS, and CPB at part of the onCourse national consortium to develop a collaborative approach toward sharing digital educational content and services.

Last fall, UEN hosted an informational meeting for stakeholders regarding digital television applications. UEN and KUED also participated in a national PBS project comparing school use of educational content delivered via CD Rom, Internet, and datacasting. In the study, several Ken Burns’ productions and UEN content were successfully data cast to a school LAN in Granite District. Evaluation by a national team confirmed that teachers preferred video directly available on the LAN because it eliminated bandwidth concerns such as buffering and the number of students who could view video simultaneously.

Next Steps

After conversion this spring, KULC signal will be available for datacasting applications in the Wasatch Front. Regarding programming, UEN has approached both Digital Curriculum and United Streaming, providers of indexed video libraries,
regarding future tests to datacast their content to Utah schools. While Digital Curriculum is not in a position to datacast at this time, United Streaming has agreed to a datacasting test of their library over KULC signal. Through our partnership with onCourse, additional national content will also be available for this application.

UEN has identified the equipment and software required to datacast content. Equipment and software required at the broadcast center will cost approximately $50,000 and are considered part of the KULC DTV budget. Software and receive cards for a school or institution-based server are approximately $3,000.

At this time, UEN is initiating more discussion and information exchange with our partners regarding digital television initiatives. We look forward to enhanced services for student learning.

**Recommendations**

This is an informational item for consideration and discussion. No further action is required of the committee at this time.
In response to ITV survey data, KUED and UEN staff and members of the UIMC committee are recommending changes to the ITV programming beginning this summer.

Committee members may recall two conclusions from the ITV Survey reported at the last meeting. First, teachers prefer to record the programs off air rather than use them “live” during the school day. Exceptions to this are Reading Rainbow and Between the Lions. Second, many teachers are not aware of the ITV resources available to them. In response to this survey data, staff and members of the UIMC committee have reviewed and recommend the following changes to the ITV programming beginning this summer:

1. Programs that have an existing viewership (such as Reading Rainbow and Between the Lions) will not be changed.

2. Programs will be grouped by content area, series, and grade range and be offered in two hour blocks to allow teachers or library media specialists to record the programs and build their own libraries.

3. At the recommendation of the UIMC, program blocks will be staggered with three opportunities for educators to record the same block during that week.

4. UEN and KUED will publicize the block feed opportunity to educators specific to those content areas. PDF tape labels and other resources to simplify this process will be made available online or mailed to educators.

An outline of the proposed blockfeed schedule is included on the next page.

It is recommended that members of the committee endorse this proposal, and direct staff to move forward in conjunction with UIMC and KUED with publicity and scheduling plans.
### KUED Sample Week

<table>
<thead>
<tr>
<th>Time</th>
<th>Mon</th>
<th>Tues</th>
<th>Wed</th>
<th>Thurs</th>
<th>Fri</th>
</tr>
</thead>
<tbody>
<tr>
<td>9:00</td>
<td>Reading Rainbow</td>
<td>Between the Lions</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>10:00</td>
<td>Teams</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>11:00</td>
<td>Cyberchase Math</td>
<td>DragonFly</td>
<td>Elementary Math</td>
<td></td>
<td></td>
</tr>
<tr>
<td>12:00</td>
<td>Lang. Arts</td>
<td>Health</td>
<td>Science</td>
<td>Social St.</td>
<td>Arts</td>
</tr>
<tr>
<td>1:00</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### KULC Sample Week

<table>
<thead>
<tr>
<th>Time</th>
<th>Mon</th>
<th>Tues</th>
<th>Wed</th>
<th>Thurs</th>
<th>Fri</th>
</tr>
</thead>
<tbody>
<tr>
<td>9:00</td>
<td>Elementary Math</td>
<td>Single Episode Programs</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>10:00</td>
<td>Arts</td>
<td>Lang. Arts</td>
<td>Health</td>
<td>Science</td>
<td>Social St.</td>
</tr>
<tr>
<td>11:00</td>
<td>Social St.</td>
<td>Arts</td>
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<td>12:00</td>
<td></td>
<td>Social St.</td>
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</tr>
<tr>
<td>1:00</td>
<td></td>
<td>Social St.</td>
<td>Arts</td>
<td>Health</td>
<td>Science</td>
</tr>
<tr>
<td>2:00</td>
<td>Teams</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
**Issue**

The third quarter of Utah Education Network’s planning year is complete, and reports on major activities are provided for review.

**Background**

Documents in the following section outline second quarter progress on planning goals for the Instructional Delivery, Instructional Services, and Public Information departments. Network planning quarters are:

Q1 – July, August, September
Q2 – October, November, December
Q3 – January, February, March
Q4 – April, May, June

A report on the quarter 2 progress of other UEN departments will be provided in the February meeting of the UEN Steering Committee.

**Recommendation**

It is recommended that the Instructional Services committee members review the strategic plans and third quarter reports of the Instructional Services, Instructional Delivery, and Public Information departments. Questions may be directed to department managers. A full copy of the UEN Strategic Plan is available online at www.uen.org/administration/html

This item is for information/discussion. No further action is required of the committee at this time.
Four major overarching activities continued to dominate all UEN during the 3rd quarter and helped us to proceed toward achieving all our goals.

**UEN’s E-rate Program**

Coordinated efforts from staff to increase UEN and all 40 school districts’ filings for E-rate funding were frenetic during this quarter. Intense cooperative efforts between UEN and telecommunications providers culminated in the signing of numerous contracts and modifications which will increase potential E-rate funding to leverage against our state dollars in order to provide and maintain all instructional and technical services UEN delivers. School districts required consultation and review from UEN regarding filings, attachments, simple and complex directions. UEN staff visited 90% of the districts in the last month prior to the February 6th filing deadline. The remaining 10% were contacted at least minimally via telephone. The results of the massive statewide E-rate initiative will be more visible as funding commitments begin to flow from the Schools and Library Division beginning as early as April, 2003. UEN has significantly increased its E-rate funding possibilities for 2003-04 (Year 6). The entire process is extremely complicated and convoluted, but it is safe to say that all the dedicated efforts by individuals and districts, service providers, and UEN will benefit education and increase infrastructure across the state. The next step is a prioritization of projects for next year, based upon legislative funding, workforce capability, and strategic planning with UEN stakeholders.

**Change of Direction for IP Video Project**

This statewide advanced technology planning and implementation group will have a major role in the future direction of UEN video (and data) delivery. After re-examination, evaluation of time and resources, and much discussion, the focus of this project will change from “being a replacement of EDNET services to being an opportunity to enhance video services through H.323 protocols.” Changes in steering and sub-team composition, modifications to the statement of work and the overall project work plan and timeline will result from discussions and input from UEN stakeholders and committees.

**UENSS Training and Evaluation**

Training team undertook month long effort to assess and evaluate the ability and attitudes of facilitators, determine future training needs, and foster good customer relations. Training report issued.
**Technical difficulties Uintah Basin/EBC/Logan**

Concentration of efforts this quarter to delve into the recurring technical difficulties with courses originating in Vernal and Roosevelt. Cooperative efforts among all USU and UEN technical personnel and instructors to finally reach a solution to problems.

<table>
<thead>
<tr>
<th>Major Projects</th>
<th>Key Activities</th>
<th>Responsible Staff</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Goal I. Sustain and improve the effectiveness and usefulness of EDNET as a UEN service.</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1 State and non-profit educational programming</td>
<td>Successful Banner Management Information Systems Training ongoing through June 2003</td>
<td>Mike Petersen, Claire Gardner, James Hodges, Randy Scott, Dave Devey</td>
</tr>
<tr>
<td>2 Improving tools and resources</td>
<td>Research of effectiveness of Remedy System assigned to Technical Services Software Development group. Technical Operation Center OC staff providing on site HUB training for Remedy Help Desk software. Cme upgrades ongoing – new version of conference management tool release date is May 19.</td>
<td>James Hodges, Randy Scott, Dave Devey, Colleen Nordberg</td>
</tr>
</tbody>
</table>

**Goal II. Evaluate and pilot-test new instructional delivery technologies through collaborative efforts with Technical Services and Instructional Support staff**

<table>
<thead>
<tr>
<th>1 Lab and beta testing of new technologies</th>
<th>IP Video Project continues to evolve. Deployment of H.323 Video Conferencing equipment to accomplish next objective</th>
<th>Mike Petersen, James Hodges, Randy Scott, Dave Devey, Claire Gardner, Sheryl Hulmston</th>
</tr>
</thead>
<tbody>
<tr>
<td>2 Initial piloting of instruction delivered with new technologies</td>
<td>USU Special Education IP Video Project established, equipment deployed and installed, limited operational training, and live test events with instructors and 6 participating sites. Pilot testing and evaluation beginning at Tooele High School. Origination and delivery of Spanish II, AP Statistics, and Intermediate Algebra to high school students in Tooele, Dugway and Grantsville.</td>
<td>Mike Petersen, Claire Gardner, James Hodges, Dave Devey, Randy Scott, Sheryl Hulmston</td>
</tr>
</tbody>
</table>
### Goal III. Continue and enhance the value and importance of UENSS as an instructional delivery system.

<table>
<thead>
<tr>
<th></th>
<th>Cost effectiveness</th>
<th>Discussions of satellite contract options and renewal costs</th>
<th>Claire Gardner, Dave Devey, Mike Petersen</th>
</tr>
</thead>
<tbody>
<tr>
<td>2</td>
<td>Quality instruction</td>
<td>Training Team assessment and evaluation visits to numerous sites in January. Report of findings and recommendations delivered to Instructional Services Committee.</td>
<td>Rick Cline, Claire Gardner, USU’s Kevin Reeve</td>
</tr>
</tbody>
</table>

### Goal IV: Thoroughly assess the future of UENSS.

<table>
<thead>
<tr>
<th></th>
<th>Evaluation of alternatives to augment or replace satellite delivered instruction</th>
<th>IP Video Project – focus upon USU Special Ed degree program delivery via H.323 to determine strengths and weaknesses of this technology</th>
<th>Mike Petersen, James Hodges, Dave Devey, Randy Scott, and USU’s Vince Lafferty</th>
</tr>
</thead>
<tbody>
<tr>
<td>2</td>
<td>The compelling advantages of satellite delivery systems</td>
<td>Continuing to create clear and concise documents which portray UENSS strengths and weaknesses</td>
<td>Mike Petersen, Bill Kucera, Rick Cline, Claire Gardner</td>
</tr>
<tr>
<td></td>
<td>Assist with assessment of economic development impacts in local communities in order to “tell the story”</td>
<td></td>
<td>Mike Petersen, Bill Kucera</td>
</tr>
</tbody>
</table>
Critical Issues

• Developed and produced additional legislative support materials for UEN’s executive director.

• Provided upgraded UEN Legislative Briefing Paper (2-color, semi-gloss paper, simple staple binding) to Larry Smith for visit to Utah Congressional delegation.

• Planned and developed initial concept of new UEN graphics images package to replace current images (rights expiration June 30, 2003). New color palette; proposed new tagline; proposed graphics style.

Instructional Services

• Produced 60 sec Pioneer Online Library TV spot for air on KULC & KUED.
  Theme:
  • Parent answers children’s questions by going to Pioneer Library site.

• Proposed and implemented a statewide Pioneer Online Library TV media buy through Utah Advertising Federation (UAF) community outreach. Matching funds from UA: $3 for every $1 from Pioneer. Stations to air 30 sec spot for generic Pioneer Online promotion available through academic, public school, and public libraries.

• Media relations coordination of KUTV News coverage of Pioneer Library and home access. 5PM full package March 11.

• Developed and implemented a direct mail postcard reminder to K-12 educators:
  ◊ ITV Guide is an annual
  ◊ Call for a hard copy or
  ◊ Go online.

• Results – 131 phone calls; 156 guides sent; surge in Web site visits and guide downloads.

• Marbury v. Madison – Wrote promotional text regarding UEN and KULC web resources and programming information for full-page Utah Bar Association newspaper article on this landmark US Supreme Court case.

• uen.org site had feature story and extensive web resources.

• Designed and produced promotional / special events banner for Utah Tech Corps.

• KULC Web upkeep

• Research / write / update daily “News” and “Events” sections of uen.org
• Research / compile / update daily “Education Quote of the Day” section of uen.org
• Research / write / update “Awards” section of uen.org
• Added Success Stories section to UEN News Tool
• UTED Newsletter (monthly statewide teacher e-mail)

Special Events

• Utah Educational Library Media Association Conference (UELMA) March 6, Ogden – Design, setup, produce collateral materials. Booth staffed by Instructional Services and Public Communications. Theme: Pioneer Online Library.


• UEN Spring Tech Summit (direct mail postcard, signs, posters, binder designs)

General UEN Promotion & Administrative Support

• Produced Steering Committee materials (hard copy & online)
• Produced Instructional Services Sub-Committee Materials: Format, layout, and produce.
• Produced Technical Services Sub-Committee Materials: Format, layout, and produce.
• Developed Steering Committee and subcommittee format and writing style guide.
• Write and distribute UEN Employee E-newsletter
• Coordinate monthly production of online transcripts of the Governor's News Conference
• UEN Business cards
In addition to ongoing projects, accomplishments during the third quarter are summarized below.

Pioneer Use Statistics

- Each month during quarter three showed progressive growth in the K-12 Pioneer Library visitor sessions, with March ending at an all-time high (65,845) - this is nearly double the number of visitors recorded for March last year.

- Total visitors to pioneer.uen.org in quarter three were 184,142; 82,000 more than the previous quarter.

- The pioneer-library gateway page also showed a record high in March, at 17,461 visitors.

**NOTE:** Prior to March 2002 Pioneer Library web logs were combined. A separate report for the K-12 and Pioneer Portal is not possible for months prior to March 2002.
Pioneer Products

- Consistently positive feedback on the Pioneer Outreach position.
- Largest response ever to a trial product, Culture Grams, with very positive feedback.
  - “We’re hoping that UEN could find additional funds to purchase it without losing any existing product”
- Product comparison shows World Book and EBSCO are most used products.

### Pioneer Premium Services

<table>
<thead>
<tr>
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<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Sep-02</td>
<td>2,810</td>
<td>1,831</td>
<td>1,698</td>
<td>2,202</td>
<td>2,708</td>
<td>0</td>
</tr>
<tr>
<td>Oct-02</td>
<td>4,373</td>
<td>3,525</td>
<td>3,077</td>
<td>1,734</td>
<td>4,662</td>
<td>0</td>
</tr>
<tr>
<td>Nov-02</td>
<td>4,202</td>
<td>2,896</td>
<td>2,599</td>
<td>1,861</td>
<td>4,431</td>
<td>88</td>
</tr>
<tr>
<td>Dec-02</td>
<td>3,518</td>
<td>2,247</td>
<td>2,378</td>
<td>2,07</td>
<td>4,740</td>
<td>64</td>
</tr>
<tr>
<td>Jan-03</td>
<td>5,916</td>
<td>3,309</td>
<td>4,209</td>
<td>2,225</td>
<td>6,321</td>
<td>2,033</td>
</tr>
<tr>
<td>Feb-03</td>
<td>6,530</td>
<td>3,412</td>
<td>4,121</td>
<td>2,238</td>
<td>7,611</td>
<td>1,786</td>
</tr>
<tr>
<td>Mar-03</td>
<td>6,979</td>
<td>4,104</td>
<td>3,899</td>
<td>2,218</td>
<td>7,301</td>
<td>2,109</td>
</tr>
</tbody>
</table>

- Significant progress on the Core Curriculum interface tool was completed this quarter, allowing USOE specialists to update their own curricula.
- Project plans for audience-specific Web pages were developed.
- UEN.org was up more than 52,000 visitors over March of last year. March 2003 was the first time since the Olympics (Feb. 2002) that the UEN Web site has topped more than 400,000 visitors in a month.
- UtahITV.org experienced a big jump in visitors after March 17 when the What's On schedule and search were implemented. March visitors were nearly double the usual traffic.
- KULC.org continues to hold steady with over 4,000 visitors each of the last 3 months. This shows not only an increase in visitors, but that visitors are returning month to month.
Lesson Plan display continued as the top visited service on uen.org followed by Tours.

After a drop off in the traffic to my.uen during quarter two, quarter three began to show an increase.

Staff participated in professional development with ETV Cookbook and Triveni Digital; further planning for digital signal was conducted.

Developed Web site and broadcast program in conjunction with Utah Bar Association marking anniversary of Marbury v. Madison decision.

Conducted programming inventory, identified need areas and programming for these areas, obtained rights to new programming, and developed preliminary schedule of programs for quarter four.

Developed block feed schedule in response to ITV teacher survey, approved by UIMC committee.
**Tech Corps**

- Refurbished and distributed 13 pallets of equipment, logging 66 volunteer hours.
- Planned distribution of Digital Movie Creators to schools and community centers.

**Professional Development**

- Launched Technology Integration Academy offering a technology endorsement to certified teachers in coordination with USOE, U of U, and EDAC. This option will be open to teacher education programs at institutions statewide and is the first to utilize PBS Teacherline and Intel Teach to the Future curricula.
- Began to develop an online course for the Pioneer Library.
- 61% of professional development courses were field-based this quarter. Ninety classes on UEN resources, 5 sessions for teacher education programs, 5 conferences, and 13 ITC workshops were conducted.
- 125 additional teachers completed the Intel Teach to the Future workshops, bringing the total number of participant teachers to 4,250 in quarter three.
- Highest enrollment ever in PBS Teacherline workshops - 31.
The purpose of this report is to provide a priority list of network projects that UEN is considering in FY 2003/04.

Efforts to increase reliability and capacity to rural school districts have been a major priority for UEN. In concert with these efforts, UEN has endeavored to better incorporate E-Rate opportunities into these new designs. Working with Qwest, Frontier Telephone, Manti Telephone, Central Utah Telephone, South Central Telephone, and Uintah Basin Telephone, UEN has developed broadband Ethernet solutions that provide increased reliability and sufficient capacity to accommodate virtually any application that the districts can present.

While E-Rate funding has yet to be secured for these projects, the Utah State Legislature has approved $400,000 of new, ongoing money for these projects. Contingent upon E-Rate commitment, UEN is presenting to the Technical Services Committee the attached list of recommended priorities for E-Rate related projects.

It should be noted that the number one priority, Qwest GeoMax, does not rely on any portion of the $400,000 new money. Funding for this project has been encumbered elsewhere in UEN’s budget.

The Subcommittee should discuss this priority list and give input.
**TAB 10 ATTACHMENT A**

**YEAR 6 E-RATE PRIORITIES**

<table>
<thead>
<tr>
<th>Priority</th>
<th>Vendor</th>
<th>Project Name</th>
<th>Summary Justification</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Qwest</td>
<td>GeoMax</td>
<td>The GeoMax project is UEN’s number one priority. GeoMax will replace our current backbone solution (CVDS).</td>
</tr>
<tr>
<td>2</td>
<td>Frontier/Citizens</td>
<td>Millard School District</td>
<td>The Millard School District GigE project is the pioneer project of “finished services. Commitments have been made to Frontier Telephone and Millard School District that, if funding is provided, this project will be our first. In addition, Millard School District has made the commitment to include their elementary schools in the project.</td>
</tr>
<tr>
<td>3</td>
<td>Manti Telephone</td>
<td>South Sanpete School District</td>
<td>Paul Cox, President of Manti Telephone has been an active partner in designing GigE services in rural Utah. GigE service in Manti will be an essential component in extending high bandwidth services through to Snow College and the services provided by Snow.</td>
</tr>
<tr>
<td>4</td>
<td>Central Utah Telephone</td>
<td>North Sanpete, Tintic, Juab, and Tooele School Districts</td>
<td>Eddie Cox and Steve Clark of South Central Telephone have been valuable advocates of UEN in communicating the necessity of these services to their community, legislators and even to the Commission for Higher Education. In addition, similar to Manti, it is essential that GigE services be deployed in Fairview, Mt. Pleasant, and Ephraim to secure service to Snow College.</td>
</tr>
<tr>
<td></td>
<td>South Central</td>
<td></td>
<td>South Central Telephone, in anticipation of moving forward with GigE services, has installed fiber optics in Panguitch, and in some cases has even allowed UEN and the School District to use the fiber free of charge while we wait for approval to move forward on these projects.</td>
</tr>
<tr>
<td>---</td>
<td>---------------</td>
<td>---</td>
<td>----------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>5</td>
<td>South Central</td>
<td>Panguitch</td>
<td>South Central Telephone, in anticipation of moving forward with GigE services, has installed fiber optics in Kane County, and in some cases has even allowed UEN and the School District to use the fiber free of charge while we wait for approval to move forward on these projects.</td>
</tr>
<tr>
<td>6</td>
<td>South Central</td>
<td>Kanab</td>
<td>South Central Telephone, in anticipation of moving forward with GigE services, has installed fiber optics in Kane County, and in some cases has even allowed UEN and the School District to use the fiber free of charge while we wait for approval to move forward on these projects.</td>
</tr>
<tr>
<td>7</td>
<td>South Central</td>
<td>Circleville</td>
<td>This area is currently served by radio. The distances are well in excess of prescribed ranges, thus the service in this area is sporadic.</td>
</tr>
<tr>
<td>8</td>
<td>South Central</td>
<td>Antimony</td>
<td>Antimony Elementary will be used as a hub site to terminate a DS3 back to SUU for the entire region.</td>
</tr>
<tr>
<td>9</td>
<td>Uintah Basin Telephone Duchesne and Uintah School Districts</td>
<td></td>
<td>This is phase two of a GigE project in the Uintah Basin. Phase one installed 9 GigE sites, phase two will complete the project with an additional 7 sites.</td>
</tr>
</tbody>
</table>
The Regional Priorities Spreadsheet was established over one year ago. Most of the top priorities have been completed. It is time to develop a new list and reprioritize regional projects.

**Background**

**Advocates**
UEN Technical Services has established Advocates to represent each of eight areas in the State.

**Regional Technical Forums**
These Forums meet regularly throughout the state to discuss technical issues and suggest steps to address regional needs. UEN has a part in these forums, but does not carry this responsibility alone. These Technical Forums are organized and conducted by local representatives of both Higher and Public Education. It is in these Forums where items on the Regional Priorities Spreadsheet are initiated.

**Subcommittee**
The Subcommittee has a central role in coordinating the Regional Priorities and prioritizing them on a statewide basis.

**Next Steps**
The Advocates should work together with the Co-chairs of each Region to review the existing regional priorities spreadsheet and develop a current list. These priorities should be brought together with direction from the subcommittee.

**Recommendation**
The Subcommittee members should have a discussion with the intent of providing direction to the UEN staff on this important matter.
The current 5 year UENSS Space Segment Contract expires at the end of the 2003-2004 academic year. UEN and USU staff members are considering the possibility of renewing the contract now, instead of waiting until next year. In addition, opportunities are being evaluated to lease transponder time during off-hours.

**Background**

**Early Renewal of the Contract**

There are two reasons for renewing the current five-year contract with SES Americom, one year prior to its expiration.

1. The current five-year UENSS Space Segment Contract with SES Americom was negotiated in 1999. This was a difficult time for the satellite industry because there were numerous launch failures and unexplained in-orbit failures. As a result, costs were higher because of the shortage of transponders. Transponder costs in the first quarter of 2003 are lower due to the down economy and business failures of WorldCom and other premier satellite users. Contract renewal now will leverage the best pricing for the next five years.

2. Anticipated longer rollout times for H.323 and its supporting network infrastructure in Utah will delay the transition from satellite; therefore, continuation of the satellite contract will be needed to cover this longer transition period.

SES Americom has recently quoted a price of $4,000.00/MHz./month for the current UENSS allocated bandwidth of 15 MHz. This pricing results in a calculated annual cost of $4,000 x 15 x 12 = $720,000.00. USU Purchasing Services suggests a new contract can be signed without the need for an RFP if equivalent pricing is less than or equal to the current contract. Staying with the current carrier, SES Americom, precludes the need to re-point receive dishes in the field. However, it is also likely that costs might be reduced by re-bidding the contract.

To assure that there is sufficient flexibility to adjust our satellite needs in the future, it is anticipated that two provisions will need to be included in the contract:

1. Capability to reduce the bandwidth, in case substantial portions of coursework are shifted during the period of the contract from satellite to land-based networks.
2 An early termination provision, in case a decision is made to shift fully to a land-based network.

**Commercial Opportunities for UENSS**

A number of educational satellite networks similar to UENSS have found commercial opportunities to help offset system costs. Unsolicited offers have been received to purchase excess overnight and weekend bandwidth for the purpose of transferring video and data files to servers located within the UENSS footprint.

A commercial partner would install the required system components to enable data transmission. The system would also include video servers connected to the Commodity Internet via the USU/UEN infrastructure. The commercial partner would download to the video servers at low speeds (T1 or less) during the day, manage the individual channel bandwidth on the encoding system after UENSS programming ends and upload the video files to the various remote servers around the country. UENSS would also have access to the data transmission equipment during the day, thus enabling transmission of HTML, MPEG or other non-real-time data to various centers. This would provide an additional, potentially useful capability to the Network.

One commercial entity that has expressed an interest in using UENSS bandwidth is primarily advertising oriented and would typically feed video to shopping malls and cable head-ends. Known as “The Board Channel”, it is a Southern California based startup company whose programming is directed to the surf board, skate board and snowboard communities. “The Board Channel” has interest in brokering any additional capacity that might be available.

Revenues to UENSS would be calculated on a per/Megabyte transferred arrangement. Preliminary discussions suggest that rates could range from $0.08 to $0.50/Megabyte. All data traffic would be metered to determine file sizes transmitted and associated costs.

Appropriate safeguards would be taken to satisfy state and university procedures: (1) to award a contract to sublease the bandwidth, and (2) competition with private enterprises.

**Recommendation**

It is recommended that the Technical Services Subcommittee and the Steering Committee endorse efforts to re-negotiate the UENSS Space Segment Contract, and support exploration of opportunities to lease bandwidth to commercial entities.
This report summarizes continuing efforts to address security on the UEN Network.

Security-related incidents continue to cause a significant impact to the UEN network. We are still working primarily in a reactive mode to security issues. This requires a considerable amount of time to respond to an average of 10-15 hosts per day that are compromised through various methods.

The Security Subcommittee, created three months ago and chaired by Barbara White of USU, has begun to identify the scope of the problems and to propose possible solutions to improve security on the UEN Network.

A significant step has also been taken by adding an additional staff position in the UEN Security Office. The position of Security Analyst will soon be filled. The new security staff member will provide significant support to UEN staff members, and to public education and higher education technical employees.

The major roles for the UEN Security Office will continue to be increasing awareness and educating UEN, public education, and higher education staff members regarding the security threats on the UEN network. The Security Subcommittee will continue to develop strategies and policies that will strengthen the security of all Network resources.

This is a discussion item, and no actions are required at this time.
Issue
UEN has applied for a Community Impact Board (CIB) grant. These funds, if received, would be used to provide increased data transmission capabilities between Vernal and Manila. Additionally, signal for KUED and KULC television would be enhanced in the Uintah Basin area.

Background
Last year UEN began a search to find additional revenue sources to offset lost state revenue from budget cuts and to address several outstanding issues. The Community Impact Board (CIB) was identified as a potential source of funding rural infrastructure projects because of their past support of UEN projects.

Two grant applications were prepared last fall. The first addressed pressing needs in the San Juan County area. The second application was developed to meet needs in the Uintah Basin, including service to Manila, Utah.

Meetings with CIB staff led us to conclude that the Uintah Basin project would be placed before the CIB board first. That proposal was submitted to the CIB board in December for initial consideration at the January 2003 meeting. At that meeting the request was received favorably and referred for further consideration, and at the March 2003 meeting it was placed on the CIB priority list.

Most recently, $268,250 was awarded to the Uintah Basin project at the April 3, 2003 CIB meeting. This amount represents the portion of the project needed to provide digital television signal for KUED and KULC. The CIB board also requested information regarding the San Juan application prior to funding the remainder of the Uintah Basin grant. UEN will work with CIB staff to provide the requested information prior to the May 2003 meeting.

Next Steps
We anticipate receiving approval for the remaining funding particular to the Uintah Basin Project in the May 2003 CIB meeting. There will also be additional discussions regarding the San Juan proposal. CIB board members are interested in addressing the needs in the San Juan area. We consider their requests to be a sign of their willingness to assist us in making necessary upgrades to the Southeast sector of Utah.
Assuming funding for the data portion of the Uintah Basin project is secured, UEN staff will begin to install equipment, and completion of the project is anticipated by late summer or early fall, 2003.

**Recommendation**

This item is provided for informational purposes only.
Business Steering Committee Meeting

**Members Present:** Gary Wixom, Ray Timothy, Ron Barlow, Bruce Christensen, David Eisler, Stephen Hess, Rich Kendell, Pat Lambrose, Eric Mantz, for Ryan Thomas (via EDNET), Val Oveson, Amy Owen, Mike Petersen, Larry Shumway, Richard Siddoway, Glen Taylor, Ray Walker.

**Others Present:** George Brown, Lisa Kuhn, Larry Smith, Laura Hunter, Jim Stewart, David Devey, Randy Scott, Bruce Todd, Sheryl Hulmston, Charice Black, Cory Stokes (UEN), Claire Gardner, Karen Krier, Rick Cline, Kyle Anderson, Coy Ison, Barry Bryson, Mike Elwell, Dennis Sampson, James Christensen (via EDNET), Dan Patterson (via EDNET) and Camie Janovak.

**I. Welcome and Introductions** - Gary Wixom

Gary welcomed everyone to the meeting. Ray Timothy was introduced as the new co-chair of the Steering Committee. Ron Barlow, Val Oveson, and Larry Shumway were recognized and welcomed as new committee members. Their appointments are awaiting official approval from Governor Leavitt.

**II. Legislative Activities** - Mike Petersen

The Higher Education Appropriations Committee is currently prioritizing a limited number of projects they propose to support with increased funding. The committee is seeking to protect UEN from the second of the two 2% budget cuts. UEN will almost certainly lose a quarter million in funding based on the budget reduction received during the special session in December. There is strong support from the Higher Education Appropriations Committee to provide new funding for UEN in the range of between $400,000 and $750,000 that would fund the network projects we have been planning with several telephone companies, local school districts and colleges. There are seven network projects that would significantly increase network
capacity for public and higher education throughout the state. A summary of the projects is available for those wanting more specifics.

Another bill we are monitoring is the “Internet Privacy Bill”, sponsored by Representative Wayne Harper. The bill is consistent with UEN policy. SB 151: Information Technology Amendments, is sponsored by Senator David Steele. It will have some relevance for UEN but is primarily targeted toward information technology in the Executive Branch.

III. Internal Operational Policies Modifications - Gary Wixom / George Brown

Stephen Hess’s appointment to the Steering Committee requires an internal operational policy modification to balance the committee membership with both Public and Higher Education. Please refer to Tab 9 - Attachment A for policy modifications.

Motion: It was moved and seconded that the members of the Utah Education Network Steering Committee approve proposed amendments to the UEN Internal Operational Policies. THE MOTION PASSED WITH ALL VOTING IN FAVOR.

IV. Steering Committee Member Recommendations - Gary Wixom / Ray Timothy

A letter of resignation from the Steering Committee has been received from Vicky Dahn. Ray Timothy read the letter. State Superintendent Steven Laing recommends that Richard Siddoway replace Vicky Dahn to serve for the remainder of her term.

The Society of Superintendents has recommended that Ron Barlow, Superintendent of the Tintic School District finish the unexpired term of Bonnie Morgan and Larry Shumway, Superintendent of the Tooele School District be appointed to a new term.

It was recommended by the members of the Technical Services Subcommittee that Glen Taylor become Co-Chair of the Technical Services Subcommittee, replacing Ray Timothy.

Motion: It was moved and seconded that the members of the Utah Education Network Steering Committee accept the resignation of Vicky Dahn and approve Richard Siddoway as a new committee member. THE MOTION PASSED WITH ALL VOTING IN FAVOR.

Motion: It was moved and seconded that the members of the Utah Education Network Steering Committee accept Ron Barlow and Larry Shumway as new committee members. THE MOTION PASSED WITH ALL VOTING IN FAVOR.
Motion: It was moved and seconded that the members of the Utah Education Network Steering Committee accept Glen Taylor as Co-Chair of the Technical Services Subcommittee. THE MOTION PASSED WITH ALL VOTING IN FAVOR.

VI. UEN Web Services, E-mail, and Confidentiality Policies  - David Eisler
At the December 6th meeting of the Instructional Services Committee, a need for additional policies regarding Web site use and administrative practices was expressed by UEN staff. Policies in this section have been reviewed and approved by University Legal Counsel, and approved by the Instructional Services Subcommittee.

Motion: It was moved and seconded that the members of the Utah Education Network Steering Committee adopt the UEN Web Services, E-mail, and Confidentiality policies as detailed in Tab 12, Attachment A. THE MOTION PASSED WITH ALL VOTING IN FAVOR.

VII. Instructional Services Project Account  - David Eisler
The Instructional Subcommittee approved allocation of funds from the Instructional Services project account for two pending projects: (1) adding test item data pool questions to the TIPS database for K-12 ($3,000) and (2) creating a searchable online database for the Majors guide developed by USHE ($8,000).

Motion: It was moved and seconded that the members of the Utah Education Network Steering Committee approve allocation of the Instructional Services project account as outlined in Tab 13. THE MOTION PASSED WITH ALL VOTING IN FAVOR.

VIII. Instructional Television Survey Final Report  - David Eisler
At the request of the Utah Instructional Media Consortium, UEN has completed an extensive survey of Utah K-12 teachers in regard to their knowledge, opinion, and utilization of Instructional Television. Survey data has been shared and discussed with members of the UIMC.

According to the survey, teachers preferred block feeds over the current schedule; many were not aware of ITV services; and time was cited as the number one reason for their reluctance to use ITV programming.

Please refer to Tab 14 - Attachment A for details of the survey.

IX. Video Migration Project Update  - David Eisler
The goal of the IP Video Migration Project is to design, communicate, and coordinate the migration from the existing video system (EDNET and UENSS) through the implementation of an IP Video Distance Learning and Conferencing solution (H.323) for the UEN network. Three teams have been assigned to coordinate the various aspects of the project: (1) The Project Steering Team is responsible for managing the overall direction of the work as well as resource allocation and policy issues. (2) The Technical Sub-Team will take ownership of completing the work needed to design, test and implement approved solutions. (3) The Instructional Sub-Team will be involved with identifying and addressing issues related to the successful implementation of IP video migration and services for a site.

X. KULC What’s On - Cory Stokes

The What’s On interface allows viewers to see what programs are scheduled in various time blocks on KULC. Cory Stokes presented a demonstration on how the database works. The project has been a year in the making, involving both KULC and KUED program managers. Steve Milam with UEN Technical Services provided programming and database support. This is an excellent resource for educators and the viewing public. Steering Committee members were encouraged to experiment with the new interface, in order to see first hand how useful and easy it is to use.

XI. H.323 Report - Glen Taylor

Glen Taylor, along with rural regional technical directors, toured several schools in the California Imperial Valley School District and observed their migration efforts to H.323. The information obtained was very helpful and will be used in aiding the three Utah Regional Service Centers, who have received grant money, in making their H.323 migration. This project is growing quickly with $100,000 federal matching funds already in place. Specific technical details can be found in Tab15.

XII. E-Rate Report - Glen Taylor

The E-Rate process provides federal matching funds for educational services for K-12 students. UEN staff have worked with rural telecommunication providers to develop technologies for bandwidth to rural areas. Mike Petersen acknowledged the entire UEN staff for their outstanding work, with special recognition to Louis Tonin (E-Rate Coordinator), Lisa Kuhn (Senior Accountant), and Dan Patterson (Technical Services).

Bruce Todd, of the Uintah Basin Telecommunication Association, reported it has been very gratifying to have the cooperation and support of the UEN staff, public and higher education. It is UBTA’s goal to provide educational opportunities, through technology, to rural areas of the state. Please refer to Tab 21 - Attachment A for additional information.

XIII. Security Working Group Report - Glen Taylor
Jim Stewart thanked his staff for their efforts in detecting and solving problems with hacked machines on the network, specifically the recent Internet Worm called “Slammer”. The Technical Services Subcommittee recommended that the Steering Committee acknowledge the efforts of the UEN staff to minimize the damage on the Network of the “Slammer” attack.

Barbara White reported that a security working group has been formalized to look at the scope of security issues. Awareness of the importance of security, security prevention, policy, administrative support, and training are some of the topics being discussed. This effort will evolve, over time, in order to be productive. A URL is available for those wishing to learn more about this undertaking.

XIV. IP Addressing Report - Glen Taylor
A committee has been established to look at policies and develop recommendations regarding the assignment of IP addresses to public education districts and their equipment on the network. A detailed report can be found in Tab 23.

XVIII. UEN Technical Services Retreat Report - Glen Taylor
The UEN Technical Services Retreats were established to look at a “Shared Vision”. Jim Stewart stated the staff was divided into various groups in order to deal with departmental issues and recommended actions. Forty six action items were identified and prioritized. Follow up actions and discussions will continue. It is believed these retreats will further help to define UEN’s mission and aid in developing a better working relationship with our stakeholders.

XIX. Wasatch Front Technical Forum Report - Glen Taylor
A number of Technical Forum Meetings have been held throughout the state in recent weeks. Wasatch front and rural areas are focusing on the same topics: security, online testing, filtering, video conferencing, and bandwidth issues. Detailed reports can be found in Tab 25.

XX. Rural Region Retreat Report - Glen Taylor
Vicky Dahn was the facilitator and presented a “State of the Union” address from her perspective with USOE. Issues discussed can be found on page 26-1.

XXI. Router Implementation Report - Glen Taylor
Jim Stewart reported that 53 Cisco routers have been ordered and purchased to replace obsolete routers throughout the state. Please refer to Tab 27 - Attachment A for specifics.

XXII. Internet Peering Initiative - Glen Taylor
Jim Stewart explained that this initiative was designed to reduce Internet costs and improve Internet performance. UEN's Internet demand is doubling every 18 months with increased funding in doubt. Peering increases bandwidth and reduces cost through collaboration with other education and research institutions. UEN is involved with the PAIX Palo Alto exchange, which now accommodates almost 50Mbps of our Internet traffic. UEN has been paying $250 per mbs per month; this endeavor will drop our cost down to $150. More information regarding Internet bandwidth can be found in Tab 28 - Attachment A.

**XXII. Steering Committee Meeting Minutes**

**Motion:** It was moved and seconded that the members of the Utah Education Network Steering Committee approve the Steering Committee meeting minutes of December 13, 2002. THE MOTION PASSED WITH ALL VOTING IN FAVOR.

The meeting adjourned at 10:40 a.m. The next meeting is scheduled for April 25, 2003, 9:00 a.m. at the Dolores Doré Eccles Broadcast Center.

*Please note: detailed information and discussion of the issues are included in the materials prepared for the meeting. Please refer to them for additional reference.*
TAB 15 ATTACHMENT A

STEERING COMMITTEE ROOSTER WITH MEMBERS TERMS
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Term Ends: July 31, 2005

*********************************
Executive Committee
to the UEN Steering Committee
Ray Timothy, Gary Wixom
Mike Petersen and the Co-chairs
Technical Services and Instructional Services Subcommittees

Barbara White