Committee of the Whole

Tab 30

FY 2006 Strategic Plan Goal 1 - Action

Issue

Goal 1 of the FY 2006 is now ready for final review and approval by the Steering Committee.

Background

The UEN Technical Services subcommittee, in the April meeting, authorized a Technical Services retreat with the intent of updating goal one of the UEN strategic plan. The retreat was held on August 10 and 11, 2005.

Ryan Thomas, Technical Services subcommittee chairman, offered to host the 2005 retreat in Price at the College of Eastern Utah campus. Arrangements were made for meeting rooms, meals, an outing to a Dinosaur dig, a visit to the CEU museum and several other activities. We would like to extend a special thanks to President Thomas and CEU for their hospitality.

A working group comprising nine individuals met on June 7 for half a day of preliminary planning. Using information collected during that meeting the UEN management team spent many more hours planning the retreat agenda and activities.

Many steering committee members, regional leaders and other interested parties met and worked together through the afternoon of August 10th and again through the day on August 11th.

Expectations and objectives were shared during the afternoon session on August 10th. The following presentations were given:

- Higher education and public education perspectives on expectations of UEN, opportunities to collaborate, anticipated services and applications. Each group was given 30 minutes for this presentation.
- Elementary Schools issues
- Funding issues, especially those pertaining to E-Rate
- Operational issues and concerns regarding increasing complexity of operating an Ethernet based network, accountability and management
- Research needs and concerns

Participants were divided into five groups. Each group was asked to consider one or two existing strategic objectives. Four of the groups were assigned to consider adding new objectives based on the presentations made during the first afternoon.
These groups met early on August 11th for individual discussions. Each group was then given 30 minutes to present the discussion results and make recommendations for modifications or additions to goal one strategic objectives.

Upon completion of the five group reports, President Thomas led a discussion to finalize a draft document to be presented at the August Steering Committee meeting. Assignments were given to UEN staff, as all work could not be completed prior to adjournment of the retreat. UEN staff met on August 16 and prepared a final document. This has been provided as an attachment to this report.

UEN thanks all those who took time from busy schedules to attend this retreat and give input.

**Recommendation**

It is recommended that the Steering Committee members carefully review the revised goal one and objectives. Extensive discussion is encouraged, as a number of significant policy directions are included in the draft document. After this review, and based on modifications that may be made as a result of the discussion, final approval of goal one of the FY 2006 Strategic Plan is requested.
Goal 1: Operate, maintain, and expand a reliable and secure high-speed network, connecting every public school, college, university and public library in Utah.

1.1 Objective 1: Operate and maintain the UEN network based on best practices.
   1.1.1 Incorporate operational issues in to T-forums.
   1.1.2 Create and maintain operational priority list.
   1.1.3 Create clear business objectives in Service Level Agreements (SLAs) with performance criteria.
   1.1.4 Revise Network Operational Agreements to include operational expectations that flow bi-directionally.
   1.1.5 Create knowledge-based system and share with stakeholders.
   1.1.6 Identify operational clients and their needs.
   1.1.7 Develop operational processes.
      1.1.7.1 What applications are involved?
      1.1.7.2 What groups need to be involved?
   1.1.8 Operational training at T-Forums and Summits.
   1.1.9 Increase operational staff centrally and in the field.
   1.1.10 Strengthen operational coordination between Technical and Instructional Services departments and staff members.
   1.1.11 Develop tools and reports to better manage network assets.
   1.1.12 Monitor Backbone capacity and increase as necessary.

1.2 Objective 2: Increase reliability of the network to 99.99%.
   1.2.1 Explore diverse path options and increased bandwidth for the north, south and east rings.
   1.2.2 Implement QOS on serial and Ethernet circuits where there are constrained links.

1.3 Objective 3: Increase network capacity by upgrading remaining higher education campuses and secondary schools to high speed broadband connectivity.
   1.3.1 Issue RFP, select vendors, secure funding and work with districts and vendors to complete high speed broadband projects at remaining secondary schools and district offices.
   1.3.2 Complete CUT Sevier Ethernet Project.
1.3.3 Complete South Central Garfield/Kane Ethernet Project.
1.3.4 Complete Snow Backbone Ethernet Project.
1.3.5 Complete UBTA Ethernet Project.
1.3.6 Complete installation of GP2 sites.
1.3.7 Work with Davis District to develop E-Rate filing and GeoMax contract under the UEN master agreement.
1.3.8 Complete All West, and Beehive projects.
1.3.9 Complete San Juan CIB Phase II project.
1.3.10 Explore options with regional service centers to increase bandwidth to Escalante Valley, Antimony and Koosharem.
1.3.11 Establish guidelines for UEN participation with community networks where available.

1.4 **Objective 4:** Work collaboratively with those districts desiring to increase network capacity of elementary schools and develop a cost model and plan to finish installation of Ethernet circuits to all elementary schools.

1.5 **Objective 5:** Provide support to district and higher education technology staff to ensure that the enhanced capacity and reliability of the Network is fully utilized.

1.6 **Objective 6:** Expand Internet capacity to meet growth in network traffic.
   1.6.1 Explore additional alternate Internet PoP sites.
   1.6.2 Explore, develop and implement ways to keep local traffic local.

1.7 **Objective 7:** Plan and implement funding strategies that are adequate to support Network growth plans.
   1.7.1 Continue to expand and use E-Rate funding.
      1.7.1.1 Help districts with filings.
   1.7.2 Revise and reaffirm the E-Rate position paper.
   1.7.3 Create a plan to buffer the E-Rate program.
      1.7.3.1 Establish a reserve fund equal to the prior year’s E-Rate reimbursements.
      1.7.3.2 Monitor national E-Rate policies and develop contingency plans based on changes.

1.8 **Objective 8:** Protect the Network through improved security and security practices.
   1.8.1 Continue the UtahSAINT user group.
      1.8.1.1 Keep current and publish security contacts list.
1.8.1.2 Conduct weekly and ad hoc security calls.
1.8.1.3 Plan and conduct two security conferences per year.
1.8.1.4 Support other state security activities.
1.8.1.5 Develop single-issue forums for specific needs.

1.8.2 Provide leadership role for security expertise and assistance as required by districts and higher education institutions.
1.8.2.1 Conduct and coordinate outside security assessment.
1.8.2.2 Assist with security configuration and design.
1.8.2.3 Provide security monitoring and reports.

1.8.3 Work with Steering Committee to develop security policies.

1.8.4 Continue to develop security monitoring tools.

1.9  Objective 9: Support the high capacity/high speed network needs of university researchers.
1.9.1 Participate in national and regional network partnerships (Internet 2, National Lambda Rail, The Quilt and Western Lights).
1.9.1.1 Install 10 Gigabit Connection to NLR in Denver.

1.9.2 Provide for implementation of IPV6 on the Network.
1.9.2.1 Implement IPV6 DNS resolution.
1.9.2.2 Enable IPV6 throughout the UEN Backbone.

1.9.3 Collaborate with researchers to develop grant proposals and support research projects.

1.9.4 Support U of U and USU Fiber Project.

1.9.5 Support development of Utah Fiber Infrastructure Project.

1.10  Objective 10: Support the installation and other technical requirements of the IP Video Distance Education System.
1.10.1 Complete installation of new IP video sites.
1.10.1.1 Develop and conduct IP Video site certification.
1.10.2 Technical training for IP Video at the local level.
1.10.3 Update IP Video standards as required.
1.10.4 Migrate IP video to the gigabit backbone from T-1’s and CVDS.

1.11  Objective 11: Provide technical leadership and staff/stakeholder development
1.11.1 Work with the Steering Committee to formalize Regional Technical Forums.
1.11.1.1 Define expectations (i.e. frequency of meetings, leadership roles, format, participants, etc.).
1.11.1.2 Establish annual reporting relationship between regional leaders and the UEN Steering Committee.

1.11.2 Provide leadership in technical training.
   1.11.2.1 Regional training.
   1.11.2.2 More depth of training.
   1.11.2.3 More frequent training sessions.

1.11.3 Focus on refining security training.

1.11.4 Increase opportunities for collaboration of all UEN stakeholders.

1.11.5 Strengthen the UEN working relationship with TCC.

1.11.6 Provide leadership in technical product selection.
   1.11.6.1 Develop bandwidth management best practices and recommended vendors.
   1.11.6.2 Define best practices and help choose/direct vendor selection decisions based on UEN’s knowledge and experience.

1.11.7 Provide training and leadership in the area of improving LAN reliability and speed on a local level.
Mission
Our mission is to provide Utah students and educators access to statewide electronic networks and systems for the delivery of educational services that improve the quality of student achievement, communications and efficiency of services.

Vision
High quality educational services will be delivered, regardless of location or time, through seamless, technology rich networks linking schools, colleges, universities, libraries, world-wide information networks, businesses and homes.

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

Values
- We value access to high quality education experiences, regardless of location or time, for all Utah citizens.
- We value strong educational leadership.
- We value cooperation, collaboration, and working together as partners.
- We value fiscal responsibility and providing cost effective services.
- We value accountability for the quality of service we provide, and we measure and report that accountability.
- We value innovation, and make decisions based on research.
- We value integrity, and only make promises we can keep.
- We value honest, open, and clear communication among all parties, and encourage expression of differing opinions that lead to mutually acceptable unified actions.
- We value talented educators and staff members and support training needed to maintain and increase their competence.
**Need**

Utah’s public schools, colleges, and universities depend on the UEN educational wide area network to perform their missions. The Network provides the connective links over which mission critical communications and services pass, and it must be reliable, secure, and capable of carrying a growing volume of traffic. The demand for increasing network capacity in public and higher education is proven by the fact that UEN network traffic has been doubling every 18 months to 2 years since the network was first established.

The Internet is the data and communications distribution system used to deliver hundreds of administrative, academic and student support applications affecting every student, educator, and staff member countless times each day. For thousands of Utah students and educators, it is their school, classroom, meeting place, and library. The Internet must be accessible to every educator, student, administrator, and staff member from any location and at all times. UEN must provide a single point of access for educators and students to easily and reliably gain access to those Internet resources that support educational needs identified by our stakeholders to be provided at a statewide level through www.uen.org.

Providing technologically delivered classes and programs for thousands of students and hundreds of educators every day is an increasingly important responsibility of Utah’s schools, colleges, and universities. In the Utah System of Higher Education, enrollment in online, EDNET, satellite-delivered, and KUEN classes has grown dramatically for the past several years. About one in five college students now enrolls in at least one technologically-delivered course each term. Enrollment in the Utah Electronic High School has also increased enormously. There are now approximately 30,000 enrollments in the Utah Electronic High School.

UEN is taking advantage of new, yet proven, technologies such as DTV multichannel broadcast, datacast, optical networks, digital videoconferencing, video streaming and voice services provided over the UEN backbone and wireless networks to provide greater Network capacity at lower costs.

Because of the trends described above, educators, public and higher education staff members, and UEN employees must be technologically competent. UEN must play a key role in providing training to its own staff members, and to teachers, faculty members, and technology staff members in educational organizations throughout the state.

UEN is driven by the needs of education. As it responds to more diverse needs, it grows in complexity, and supports more services at more locations. The result is increased pressure on all of us to coordinate, plan, and make decisions collaboratively for the mutual benefit of all regions of the state and all levels of education. Improved coordination of IT policies and backbone infrastructure will guarantee effective sharing of resources, lower prices through joint purchasing, and more efficient use of technical support and training as UEN staff members work collaboratively with their public and higher education colleagues. Gaps in effective coordination, planning, and governance must be identified and eliminated.

There are tremendous challenges facing us during the coming year, as we respond to growing Network bandwidth demands and meet the need for essential, technology-based educational services. The economy of Utah is sound, but state financial resources
are limited because of the numerous compelling needs that compete for modest state resources. UEN must achieve the greatest value possible from limited state resources, and continue to aggressively seek grants and other revenue sources to augment state funds. And we must carefully prioritize Network projects to gain the greatest benefit from the dollars we spend.

**Strategic Goals**

**Goal 2.** Aggregate and deliver a suite of high quality educational resources for students, educators, staff, and administrators that are determined by our stakeholders to be best provided at a statewide level.

2.1 **Objective 1.** Conduct ongoing Web design and maintenance.
   2.1.1 Expand and maintain core curriculum resource database.
   2.1.2 Coordinate lesson plan development and publishing with USOE.
   2.1.3 Support UTIPS.
   2.1.4 Collaborate to develop and host partner content.
      2.1.4.1 NewsByte.
      2.1.4.2 WWII Oral History.
      2.1.4.3 Teaching American History Grant.
   2.1.5 Support USOE Web pages in coordination with Specialists.
   2.1.6 Integrate services with my.uen log-in.
   2.1.7 Support all UEN Department Web page needs.
      2.1.7.1 Professional Development Management System.
      2.1.7.2 UEN Technical Summit.
      2.1.7.3 Security resources for effective digital citizenship.
      2.1.7.4 Adult and Community Education.
      2.1.7.5 UEN-TV Spanish programming on 9.3.
      2.1.7.6 IVC Web Page.
   2.1.8 Provide graphic and design support as requested.
   2.1.9 Conduct Web site and link clean-up.
   2.1.10 Maintain What’s On broadcast database and Utah ITV Web page.
   2.1.11 Promote new and existing UEN Web services.
   2.1.12 eMedia.
      2.1.12.1 eMedia special events.
      2.1.12.2 Statewide demos.
   1.1.13 Newsletter and uen.org news section promotion.
2.2 Objective 2. Launch new Web projects and resources.

2.2.1 Implement eMedia general release.
2.2.2 Meet with UALC to discuss eMedia project, determine complimentary ways to support DAM efforts.
2.2.3 Identify and add resources to eMedia.
   2.2.3.1 Telecourses.
   2.2.3.2 Nathan’s Story & No Safe Place.
   2.2.3.3 Utah History Encyclopedias (UCME).
2.2.4 Collaborate with UVSC on Digital Media Service for video on demand.
2.2.5 Support ePortfolio solution.
2.2.6 Rewrite my.uen into java portlets.
2.2.7 Investigate the development of a Unit Plan Tool.
2.2.8 Develop and launch WebQuest Tool.
2.2.9 Modify What’s On to automate program features for UEN-TV and KUED.
2.2.10 Investigate RSS syndication of UEN news and other UEN resources.

2.3 Objective 3. Increase awareness and use of Pioneer Online Library.

2.3.1 Increase awareness and utilization through series of events and tactics keyed to Pioneer Library 10 year anniversary.
2.3.2 Pioneer Public Relations team develop and coordinate full anniversary promotion plan with Pioneer Library Committee and partners.
2.3.3 Build the Pioneer advocate program.
2.3.4 Assist in the redesign of pioneerlibrary.org

2.4 Objective 4. Create positive impact for learners through TECH CORPS partnership.

2.4.1 Plan for sustainability.
2.4.2 Administer the Intel Utah PC Refurbishing Program.
2.4.3 Report program data and accomplishments.
Goal 3. Deliver distance learning classes and programs offered by public and higher education that use reliable, real-time, and broadcast quality videoconferencing technologies.

3.1 Objective 1. Expand IP Video.

3.1.1 Continue to support the EDNET end site migration plans and schedule.
3.1.2 Implement a remodel and redesign of the EDNET TOC to better support IP video services.
3.1.3 Promote awareness, support and a delivery of a consistent message regarding IP video services in both public and higher ed. through stakeholder forums.
3.1.4 Work towards more cooperative and cross-departmental coordination with the IP Video project.
3.1.5 Increase HUB and end site visits for both technical and administrative coordination, orientation and training for IP video services, standards and operational practices.
3.1.6 Develop and deliver faculty and site facilitator training.
3.1.7 Develop operational practices, procedures and policy to manage and efficiently utilize IP video resources on the network.
3.1.8 Further development of the IVC Web site and other tools and tactics for IP video promotion, information and stakeholder services.
3.1.9 Explore tools and tactics to effectively measure and monitor IP Video quality and reliability throughout the network.
3.1.10 Install IP Video equipment in UEN MBH Lab, and all UEN conference rooms in EBC.
3.1.11 Continue the IVC Tripperships program, evaluate educator response to this service.

3.2 Objective 2. Coordinate and support statewide Course Management System with USHE and Institutions.

3.2.1 Support participating institutions with Course Management System User Group.
3.2.2 Provide automated enrollment for participating institutions.
3.2.3 Develop consortium shared faculty and student training materials.
3.2.4 Provide institution administrator training.
3.2.5 Continue to plan for K-12 uses for Course Management System.
3.3 **Objective 3. Administer Distance Learning Delivery.**

3.3.1 Revise UEN facilitator policy.
3.3.2 Develop a plan for finalizing the IP Video Steering team role as the planning and policy stages of the project wrap up.
3.3.3 Identify stakeholder forums to better promote new Distance Learning technologies such as IP video.

3.4 **Objective 4. Support UENSS plan and associated activities.**

3.4.1 Continue to support the current 3 year plan for UENSS satellite system services and operations.
3.4.2 Explore with institutional providers better ways to effectively coordinate the scheduling and operational practices of these systems.

3.5 **Objective 5. Expand UEN outreach and promotion.**

3.5.1 Influence stakeholder use of UEN resources through electronic, print, public relations, media relations and special events.
3.5.2 Launch a branding campaign for the Utah Education Network.
3.5.3 Develop public relations/ media relations and ad campaign around 21 anniversary of UEN.
3.5.4 Conduct a comprehensive public relations campaign promoting Utah’s distance education collaboration.
3.5.5 IP Video.
   3.5.5.1 Newsletter and uen.org news section promotion.
   3.5.5.2 IP video collateral as needed.

**Goal 4. Build the vitality and scope of UEN broadcast services.**

4.1 **Objective 1. Increase programming in high need areas.**

4.1.1 Acquire and schedule for key programming blocks.
   4.1.1.1 Adult Basic Education (ABE).
   4.1.1.2 Financial Literacy.
   4.1.1.3 Workforce Education.
   4.1.1.4 Information Literacy.
4.1.5 English Language Learning.

4.1.2 Develop locally produced programs in high need areas:
   4.1.2.1 Financial aid and college advising.
   4.1.2.2 Technical Training from UEN Professional Development.
   4.1.2.3 Weekly education calendar.

4.1.3 Working with USU, multicast Spanish Language programming on 9.3.

4.2 Objective 2. Research, Branding, and Outreach.

   4.2.1 Expand UEN-TV on-air promotion campaign.
   4.2.2 Conduct targeted outreach to stakeholder groups.
   4.2.3 Conduct needs assessment and implement findings for key high need audiences.
      4.2.3.1 Adult basic education.
      4.2.3.2 Adult prisoner education.
      4.2.3.3 Community education.
   4.2.4 Provide support for Utah Association of Adult, Community, and Continuing Education.
   4.2.5 Develop printable PDF viewer listings.
   4.2.6 Coordinate and Produce hard copy and electronic versions of the Instructional Television Program Guide.

4.3 Objective 3. Administrative.

   4.3.1 Develop UEN TV / cable TV relations plan.
   4.3.2 Continue monthly management meetings.
   4.3.3 Develop convergence delivery models between broadcast and digital distribution resources.

4.4 Objective 4. Technical.

   4.4.1 Install Nave IIc Encoder for Nielsen Ratings.
   4.4.2 Purchase Harmonic DTV Encoder for 3rd DTV Channel.
   4.4.3 Install Media Server Client for Kyle Anderson.
   4.4.4 Expand Server Archive.
   4.4.5 Add DVC Pro VTR’s for air control.
   4.4.6 Begin License Renewal for KUEN.
   4.4.7 Increase Cedar City translator power to 100W.
4.4.8 Participate in the Summit county Microwave from Lewis to Woodland.
4.4.9 Purchase Hot spare boards for Analog and Digital TX.
4.4.10 Install an ISP Radio for Mt Vision Remote Control.
4.4.11 Purchase and Install Remote Control Software and Hardware Mt. Vision.
4.4.12 Monroe Peak DTV Preparation.
4.4.13 Barney top DTV Preparation.
4.4.14 Participate in the Lewis Peak DTV Booster.
4.4.15 Participate in the Pisgah Peak DTV Booster.

Goal 5. Provide professional development opportunities to improve the quality of K-20 instruction and assure effective implementation of technology in education.

5.1 Objective 1. Deliver a suite of high quality classes based on user needs, best practices, and requests.

5.1.1 Support training on new services and updates.
5.1.1.1 eMedia.
5.1.1.2 my.uen.
5.1.2 Update courses.
5.1.3 Create professional development learning objects and online tutorials.
5.1.4 Support institutions with core skills training / develop training for Course Management System.
5.1.5 Update distance learning training materials to include IP video.
5.1.6 Deliver and conduct follow-up for 30 3-day ITC workshops.
5.1.7 Develop resource material, provide outreach, and offer training for preservice teachers and teacher education faculty on UEN resources.
5.1.8 Support Technology Integration Academy program.
5.1.9 Create and implement resources for end user training on Security issues.
5.1.10 Develop online course for facilitators.
5.1.11 Working with Institutions, establish a learning community for faculty technology trainers and instructional design support staff. Conduct regular meetings and help provide resources as defined by this group.
5.1.12 Working with UALC, convene a copyright resources workshop with ongoing support materials for campus personnel. Use this as a model for other topics from the higher ed committee.
5.1.13 Conduct PBS Teacherline and Intel Teach to the Future grant activities.

5.2 Objective 2. Increase awareness and use of UEN Web Resources.
   5.2.1 Present at conferences.
   5.2.2 Promote UEN Professional Development.

5.3 Objective 3. Effectively administer and report on UEN Professional Development programs.
   5.3.1 Implement professional development management system.
   5.3.2 Investigate workshops with equipment and cost recovery model.
   5.3.3 Upgrade training lab equipment.
   5.3.4 Report stats.

5.4 Objective 4. Build skills and knowledge of UEN staff.
   5.4.1 Ensure UEN staff have the necessary training and tools to support IP video users; identify industry driven training opportunities with an emphasis on IP video networks.
   5.4.2 Participate in professional conferences and workshops to build capacity.
   5.4.3 Attend required personnel and management training from University of Utah Human Resources department.
   5.4.4 Increase knowledge of best practices and current research through memberships in professional organizations and associations.

Goal 6. Strengthen educational technology governance at the state, regional and local levels through improved coordination and cooperation among UEN’s stakeholders.

6.1 Objective 1. Improve coordination with UEN Steering Committee, subcommittee, and advisory committee members.
   6.1.1 Develop and coordinate improved Steering Committee materials announcements and RSVP.
   6.1.2 Develop e-newsletter targeted at stakeholders.
6.2 **Objective 2.** Request new state funding for the highest priority needs of the Network, and maximizing the benefits of state tax funds through increased support from external grants and other revenue sources.

6.2.1 Develop support materials, briefing papers, information and data sheets, maps, videos, and other information in support of funding requests.

6.3 **Objective 3.** Lead a statewide effort to build awareness of the importance of eRate among congressional and state leaders.

6.4 **Objective 4.** Increase revenue from grants and E-Rate reimbursement.

6.4.1 Develop support materials, briefing papers, information and data sheets, maps, videos, and other information in support of funding requests.

**Goal 7.** Be accountable to our stakeholders by measuring, tracking, and reporting performance and satisfaction with UEN-provided services.

7.1 **Objective 1.** Report on plan progress with quarterly updates to the UEN Steering Committee.

7.2 **Objective 2.** Report monthly statistical analysis of use of uen.org, my.uen, Pioneer Library, EDNET, UENSS, and other UEN programs and services.

7.3 **Objective 3.** Report on pilot-tests of new delivery systems, technical experiments, and product trials.

7.4 **Objective 4.** Solicit and report findings from informal and formal feedback on services.

7.5 **Objective 5.** Research and disseminate white papers on timely issues.

7.6 **Objective 6.** Use existing, secondary and primary research to establish baseline for PR audience awareness, usage, and perceptions.

7.6.1 Develop an employee eNewsletter.