

Utah Education Network

2007 Strategic Plan



UEN STRATEGIC PLAN FY2007	
I. WIDE AREA NETWORK	
Operate, maintain, and expand a reliable and secure high speed network, connecting every public school, college, university and public library in Utah.	
<i>To achieve this goal, UEN will pursue the following objectives:</i>	
A. Operate and maintain the UEN network based on best practices and standards.	
	1. Catalog and maintain a circuit database
	2. Catalog and maintain an IP management database
	3. Develop and support an Internet content filtering system for K-12 and Libraries
	4. Standardize how we develop and rollout future network deployments
	5. Monitor the backbone to identify bandwidth, security, and utilization issues; and to increase capacity as necessary
	6. Monitor endsites to identify bandwidth, security and reachability
	7. Continue to develop tools which provide essential information about the network
	8. Increase Network Operations and Field Operations Staff
	9. Strengthen operational coordination between Technical and Instructional Services departments and staff members
	10. Develop tools and reports to better manage network assets
B. Increase reliability of the network to 99.999%.	
	1. Provide redundancy for UEN critical services and network connections
	2. Increase network effectiveness at locations where diverse paths exist, i.e. fast re-route, efficient routing, etc.
	3. Continue to explore diverse path options throughout the backbone
	4. Develop a plan to provide a redundant handoff point for district offices
	5. Perform scheduled maintenance according to best practices and standards
	6. Monitor and respond to network outages
C. Increase network capacity by upgrading remaining higher education campuses and secondary schools to	
	1. Complete phase 3 and phase 4 ethernet projects
	2. Manage high bandwidth sites and provide additional resources allowed by UEN policy
	3. Continue to use E-Rate funds to develop broadband access throughout the state
	4. Explore additional needs for UEN Points of Presence (PoP) sites
	5. Explore options with regional service centers to increase bandwidth to Escalante Valley, Antimony and Koosharem
	6. Work with UTOPIA and other community networks to leverage network resources
	7. Encourage cooperation between local telephone companies and community networks
D. Work with USOE and school district leaders to develop a strategy to provide high capacity network connections to remaining elementary schools.	
	1. Continue to work with Districts that have allocated funds for broadband elementary connectivity
	2. Work with the State Office of Education and Districts to evaluate statewide approaches to increase bandwidth capacity to elementary schools
E. Provide support to district and higher education technology staff to ensure that the enhanced capacity and reliability of the network is fully utilized.	
F. Expand Internet capacity to meet growth in network traffic.	
	1. Explore additional alternate Internet Point of Presence (PoP) sites

	2. Explore, develop and implement ways to keep local network traffic local
	3. Work with CENIC and FRGP to develop NLR TransitRail for national peering opportunities
G. Protect the network through improved security and security practices.	
	1. Continue UtahSAINT user group
	a. Keep current and publish security contacts list
	b. Conduct weekly and ad hoc security calls
	c. Plan and conduct two security conferences per year
	d. Support other State security activities
	e. Develop single-issue forums for specific needs
	2. Provide leadership role for security expertise and assistance as required by districts and higher education institutions
	a. Conduct and coordinate outside security assessment
	b. Assist with security configuration and design
	c. Provide security monitoring and reports
	3. Work with Steering Committee to develop security policies
	4. Continue to develop security monitoring tools
	5. Work with state CIO and institutions to support USHE security audits as required.
H. Support the high capacity/high speed network needs of university researchers.	
	1. Continue participation in national and regional network partnerships (Internet 2, National Lambda Rail, The Quilt, and Western Lights)
	2. Develop the SURIN Board as directed by the UEN Steering committee
	3. Provision network to accommodate research requirements
	4. Work with UDOT and DTS to place fiber between UofU and USU to support research
	5. Investigate UEN's role with Ustar project
	6. Support development of Utah Fiber Infrastructure Project
I. Provide technical leadership and staff/stakeholder development.	
	1. Undertake outreach and promotion efforts of Wide Area Network projects
	2. Work with the Steering Committee to formalize Regional Technical Forums
	3. Define expectations (i.e., frequency of meetings, leadership roles, format, participants, etc.) of regional technical forums
	4. Establish annual reporting relationship between regional leaders and UEN Steering Community
	5. Provide leadership in technical training: including expanded regional training, greater depth, more frequent and topic-specific training at tech summits, and refined security training
	6. Increase opportunities for collaboration of all UEN stakeholders
	7. Strengthen the UEN working relationship with TCC
	8. Provide leadership in technical product selection
	9. Define best practices and help choose/direct vendor selection based on UEN's knowledge and experience
	10. Provide training and leadership in the area of improving LAN reliability and speed on a local level
	11. Expand advocate program to libraries, USDB, Charter Schools
	12. Support USHE IT staff in efforts to increase operational expertise across all institutions and explore possibility of taking advantage of virtual staff or staff leasing.
	13. Plan with USHE institutions a coordinated effort to provide ITIL training and planning for appropriate staff, and to extend the ITIL principles to USHE institutions.
	14. Support the CIO's and TCC to research and develop a disaster recovery plan for network and planning to provide back up equipment and staffing for emergency situations.

II. EDUCATIONAL WEB RESOURCES	
Aggregate and deliver a suite of high quality Web-based educational resources to support best practices in teaching and learning.	
<i>To achieve this goal, UEN will pursue the following objectives:</i>	
A. Host, support, and maintain web projects and services.	
	1. Coordinate lesson plan development and publishing with USOE
	2. Expand and maintain core curriculum resource database
	3. Support USOE Web pages in coordination with specialists
	4. Support UTIPS in coordination with USOE
	a. Host and maintain a UTIPS Server
	b. Participate in leadership and user group meetings
	5. Redesign and update IVC/Distance Ed web page to reflect UENSS and organizational changes
	6. Update Utah ITV web page
	7. Provide graphic and design support as requested
	8. Conduct web site and link clean-up
	9. With KUED, redesign UEN-TV web site for new scheduling software, printable program schedule, digital program streams and viewer services
	10. Update Technical Services pages
	11. Complete my.uen into Java portlets project and then beta test, launch, provide training and promotion
	12. Conclude Universal Locker pilot, act on pilot results to define UEN role with ePortfolio and update plan accordingly
	13. Gather, review, and report on monthly web statistics
	14. Explore innovative web applications (blogs, wikis) and how they apply in education; post information about this
	15. Undertake communication, outreach, promotion of Web projects
B. Develop and implement new and expanded web resources.	
	1. Develop higher education monthly professional developments events registration and information page
	2. Facilitate stakeholder mailing list groups (listserv) with updated software and user training
	3. Investigate new ways to post UEN plan and updates online
	4. Update UEN.org parent pages with Internet Safety content
C. Promote new and existing UEN Web services through technology, outreach, special events and media relations.	
	1. Produce and distribute NetNews Newsletters for public education and higher education; coordinate list management and subscriptions with Web team
	2. Promote UEN services and resources with online NetNews features on UEN.org
	3. Feature uen.org at statewide conferences and exhibits
	4. Promote revised my.uen personalization features
	5. Explore partner contribution channels through photos, blogs
	6. Evaluate newsletter metrics and make decisions based on data
	7. Investigate RSS Syndication and other technologies for delivery of UEN NetNews and other information services
D. Support administrative activities for the uen.org site.	
	1. Update the Acceptable Use Policy
	2. Formalize the web "sunset policy" for retiring web applications
	3. Gather, review, and post monthly web statistics

	4. Conduct UEN.org usability focus group testing; develop strategy based on this evaluation
III. ENTERPRISE SOLUTIONS	
License, host and maintain statewide enterprise solutions supporting public education, higher education, and libraries.	
<i>To achieve this goal, UEN will pursue the following objectives:</i>	
A. Host, support and maintain existing enterprise solutions and train managing personnel.	
	1. Service: WebCT Vista Course Management System
	a. Act as support escalation agent between Vista institutions and WebCT support and Respondus support
	b. Conduct regular Vista administrator coordination meetings
	c. Provide scripted enrollment service for participating institutions
	d. Provide institution administrator training
	e. Coordinate shared faculty and student training materials development
	2. Service: BlackBoard Course Management System
	a. Act as support escalation agent between UEHS and Blackboard support
	3. Service: Pioneer Library
	a. Maintain and update Pioneer Library access IP address listings
	4. Service: Digital Media Service
	a. Upgrade TeleScope software
	b. Add UIMC licensed video titles
	c. Add licensed PBS video titles
	d. Add KUED productions
	e. Add Telecourses where rights permit
	f. Migrate UCME legacy database and media into Digital Media Service
	g. Identify, license and add media items in high need areas (math, language arts)
	5. Service: Infrastructure Foundation
	a. Update SAN Storage Domain Servers to latest software version
	b. Upgrade and patch server OS
	c. Extend enterprise/backup recovery system to all servers and DMZs
	d. Cycle out server hardware older than 5-6 years
B. Implement new enterprise solutions, services, and expand existing functionality to meet stakeholder needs	
	1. Service: WebCT Vista Course Management System
	a. Upgrade production environment software to Vista 4
	b. Migrate Utah State University to the UEN hosted WebCT Vista instance
	c. Migrate Utah Valley State College to the UEN hosted WebCT Vista instance
	d. Develop a central 24/7 WebCT helpdesk/ searchable knowledge base capability for USHE students and faculty
	e. Develop Service Agreements and service documentation with hosted institutions
	f. Develop automated weekly section backup process
	g. Conduct CMS needs analysis with K-12 stakeholders
	2. Service: BlackBoard Course Management System
	a. Implement Blackboard Enterprise Software supporting the Utah Electronic High School
	3. Service: Pioneer Library
	a. Investigate and prototype a solution to search across multiple Pioneer databases
	4. Service: Digital Media Service
	a. Connect DMS to KUEN datacasting systems sending media to youth-in-custody facilities
	b. Enable DMS based Video-on-demand capability for KUED
	c. Create access for USHE telecourse students

	d. Pilot test and develop workflows for Codian to DMS digital course repository; make recommendations for ongoing service
	e. Investigate using DMS to support UVSC Shadow Pages functionality for CMS systems
	f. Conduct needs analysis examining user submissions to eMedia
	g. Support U.S. Department of Education captioning grant, if funded
	5. Service: Infrastructure Foundation
	a. Mirror all SAN storage for completely redundant systems
	b. Upgrade remaining data center racks to support managed power, four post server hardware, system lights-out management, and cable management
	c. Extend enterprise backup/recovery systems, tape drives and fabric bandwidth
	d. Explore possible co-location of storage area network mirrors
	e. Explore and implement VPN, and/or encrypted tunnel methods in support of Full SIS integration and SIS Batch enrollment to CMS
	C. Increase awareness and use of enterprise services. Provide usage reports.
	1. Service: WebCT Vista Course Management System
	a. Build Vista resource and information page on UEN.org
	b. Collaborate with participating UCAT Vista institutions to develop and deliver Vista faculty training workshops
	c. Co-sponsor Teaching with Technology Idea Exchange conference with UVSC
	d. Develop system usage reports with input from hosted institutions
	2. Service: Pioneer Library
	a. Continue Pioneer advocate program
	b. Work with Pioneer Library committee and PR team to develop and implement promotion tactics; create collateral material for PR
	c. Participate in conferences to promote Pioneer (UELMA, UCET, ULA)
	d. Publish Pioneer product usage reports
	3. Service: Digital Media Service
	a. Promote eMedia with K-12 stakeholders through conferences, print collateral, outreach events, and other tactics determined to be effective
	b. Create DMS media usage reports
	D. With USHE CIO's and the TCC, investigate other services or IT functions that might be centrally hosted by UEN
	1. Explore USHE-requested web-based collaboration and communication tools (e.g., Macromedia Breeze and Horizon Wimba)
	2. Support the ongoing evaluation of open source alternatives in course management systems.
	3. Explore single sign-on technologies and standards and what roles UEN could serve in identity management
	4. Assist USHE CIO's and TCC to evaluate centrally managed disaster recovery services and the role UEN should perform in providing that service
	5. Evaluate with USHE CIO, the feasibility of setting aside server space at UEN for a technology research lab environment.
	IV. DISTANCE EDUCATION
	Deliver Distance Education classes and programs offered by public and higher education that use real time and on demand, reliable, high quality video conferencing technologies.
	<i>To achieve this goal, UEN will pursue the following objectives:</i>
	A. Continue EDNET IVC migration plan
	1. Relocate and upgrade TOC to better support IVC
	2. Strengthen cross-departmental capabilities of TOC, NOC, Scheduling, and Distance Ed Specialists in supporting IVC

	3. Working with USOE, conduct IVC Adult Basic Education needs assessment and recommendations
	4. Coordinate with USHE institutions and appropriate state agencies to conduct needs assessment for state corrections education services
	5. Conduct communication, outreach, promotion of Distance Education
	6. Support development of community access sites beyond high schools which are compatible with UEN connectivity standards
B. Convert UENSS to IVC technology	
	1. Partner closely with USU in planning and implementing conversion
	a. Provide joint UEN/USU project management via administrative group
	b. Staff specialized teams and participate in project work groups
	2. Develop plans to meet funding and staffing needs
	a. Prepare preliminary budgets in anticipation of 2007-2008 legislative requests
Q1	b. Evaluate current UENSS staffing at USU and UEN in order to more effectively utilize staffing patterns and existing funding resources
C. Develop operational practices, procedures, and policy to manage and efficiently utilize IVC resources on the network	
	1. Plan and pilot manual switching capabilities as the iView product and UEN experience matures to enable independent scheduling ability
	2. Revitalize the Instructional and Technical IP Subteams of the UEN Steering Committee
	a. Further develop IVC web site
	b. Create other tools and resources to disseminate distance learning info
	3. Create a combined distance learning catalog
	a. Combine program proposal process with developments in programming technology to capture needed information
	b. Integrate scheduling and billing software with interactive database
	4. Provide outreach to stakeholder forums
	a. Identify more stakeholder forums to promote new distance learning technologies
	b. Promote awareness, support, and delivery of a consistent message regarding IVC services in both public and higher ed through various stakeholder forums
	c. Develop information sheets for IVC
	d. Include IVC stories in public and higher education e-newsletters
	5. Develop comprehensive training program for IVC, statewide support for facilitators.
	a. Provide single point of contact or personal liaison (personal face of UEN) for regional training needs
	b. Continue to develop easy access, online communication tools for training materials
	c. Create list serve for groups for updated backup training information
	d. Provide essential IVC updates for newsletters
	e. Conduct regional IVC meetings to address specific site issues
	6. Continue to work with public education and higher education to assure equitable distance learning services including concurrent enrollment for rural students.
	7. Begin to research costs of closed captioning services for IVC programming
V. BROADCAST SERVICES	
Educate, engage, and enrich the lives of Utah citizens through broadcast programs and services with UEN-TV.	
	<i>To achieve this goal, UEN will pursue the following objectives:</i>
A. Continue programming and outreach for education stakeholder groups	
	1. Program blocks for targeted areas:

	a. ITV for K-12 with UIMC (also on KUED)
	b. Post secondary with USHE
	c. Adult Basic Education with USOE
	d. Teacher professional development with USOE
	e. Seniors programming and outreach with Commission on Aging
	f. Career and Technical Education with DWS, CTE and UCAT
	g. National programming as available with NETA, APT
	2. Program interstitials and PSA's
	3. Complete NCO Adult Basic Education and Library outreach grant requirements
	4. Continue outreach to research community and general viewers for SciFi Friday
	5. Support outreach and communications needs of UEN-TV through print, design, conference materials, and other tactics determined to be effective.
B. Implement new projects to support educational programming and outreach	
	1. Internet Safety Program for Parents and Teens
	2. Back to School resources for K-12 Teachers with KUED
	3. Program specific promotion; Signing Time, Everyday Edisons
	4. Develop on-air campaign to promote post-secondary education opportunities, programs and USHE institutions
	5. Develop and program on-air education calendar of events.
	6. Implement new scheduling software, training
C. Support broadcast engineering infrastructure.	
	1. Renew station FCC license.
	2. Investigate server archive replacement.
	3. Expand digital translator capabilities.
	a. Conduct RUS Grant activities if funded.
	b. Acquire companion digital translator licenses.
	4. Plan for replacement of UENSS Cable feeds.
	5. Implement Next Generation Interconnection System (NGIS)
	6. Support satellite link and engineering for 9.2 switched feed.
	7. Perform analog maintenance as needed.
D. Manage station administrative projects; document and report on results.	
	1. Implement Digital Services Fund activities with Youth in Custody
	a.. Install and support Triveni datacasting hardware/software.
	b. Expand SAN to support eMedia and UCME content.
	c. Support engineering and feeds to YIC end sites.
	2. Redesign viewer call log.
	3. Coordinate with national programming consortia and affinity groups
	a. BETA Station Group
	b. University Licensee Association
	c. Rural Telecommunications Association/Education Coalition/APTS
	4. Support PNL Water Wise grant, if funded.
	5. Continue cable relations for carriage of UEN-TV digital channels.
	6. Feed monthly Comcast video on demand service and metadata.
	7. Produce and disseminate quarterly broadcast station activities report.
	8. Continue to research and support convergence models for broadcast, online, and digital service.
	9. Revisit TV program schedule with telecourse providers, determine effective ways to promote higher education via broadcast

VI. PROFESSIONAL DEVELOPMENT	
Provide professional development opportunities to improve the quality of K-20 instruction and assure effective implementation of technology in education.	
	<i>To achieve this goal, UEN will pursue the following objectives:</i>
A. Continue development of ongoing courses and training materials.	
	1. Update Web Academy and WebQuests courses.
	2. Continue delivering variety of classes including in-person, broadcast and online opportunities, targeted for K-12 educators.
	3. Continue to support a variety of educational organizations and provide information about UEN resources by presenting at conferences throughout the year.
	4. Continue delivering ITC workshops.
	5. Continue meeting Intel Leadership and Teaching Thinking professional development grant requirements.
	6. Continue administering the ETEP (endorsement) project
	7. PBS Teacherline
B. Complete new class development and delivery projects.	
	1. Provide WebCT training for faculty in UCAT institutions.
	2. Coordinate a monthly professional development meeting for Higher Education, delivered via UEN's distance delivery systems which incorporates expert presenters from UEN, Utah colleges and universities and national specialists.
	3. Provide training on new UEN web products and services.
	4. Develop Internet safety resources for outreach activities.
	5. Develop new courses on iLife, digital storytelling, Google tools, and visual learning/technology survey course.
	6. Obtain and implement a new "lab" of Mac laptop computers.
	7. Conduct video objects training for Youth in Custody teachers
	8. Provide technology staff development for Adult Basic Education and Corrections staff as requested by stakeholders
C. Provide documentation and outreach for UEN professional development services.	
	1. Provide online materials for all full-day and longer classes.
	2. Support Professional Development conference participation and post conference session handouts as appropriate.
	3. Create video tutorials for UEN products and update them as needed.
	4. Make video tutorials for UEN products available through eMedia.
	5. Continue to highlight teachers, classes and resources on the web site.
	6. Support UEN Professional Development through electronic, special events, and print promotion
	7. Produce and distribute monthly e-newsletter, postcards, flyers, handouts, and home page features that promote Professional Development
	8. Provide promotional items to Professional Development department
D. Administer the projects and services provided by UEN Professional Development department, and report	
	1. Prepare annual summary report to steering committee including statistics regarding number of sessions, participation, districts served, etc.
	2. Report the number of sessions and number of participants per month.
	3. Working with USOE and districts, conduct a K-12 teacher technology professional development needs assessment. Share results.
	4. Maintain computer classroom.
	5. Prepare for and maintain Internet connectivity for new Mac lab.
	6. Investigate participant liability issues and recommended policy

VII. GOVERNANCE AND ACCOUNTABILITY	
Coordinate educational technology governance across the state, and be accountable to our stakeholders through communication, measurement, and reporting on UEN services.	
	<i>To achieve this goal, UEN will pursue the following objectives:</i>
A. Coordinate UEN Steering Committee, subcommittee, advisory committee, and constituent meeting	
	1. Develop meeting structure and schedule that meets needs of Steering Committee and Subcommittee members
	2. Propose to Steering Committee that representative from research community be added
	3. Participate in USHE and USOE focus groups and dialogs
B. Request new funding for UEN priorities and maximize state funds through external grants, eRate, and	
	1. Develop briefing papers and documents in support of funding requests.
	2. Seek grant and foundation funds; coordinate these projects with stakeholders as appropriate.
	3. Coordinate eRate process with SLD, K-12 Districts, Libraries, and telecommunications providers.
	4. Support 21st Century ETI as determined by the Steering Committee
C. Track UEN performance, projects, and services and communicate with stakeholders regarding our work.	
	1. Develop Service Report process, tied to Crystal Reports, and other tools as appropriate.
	2. Develop Service Level Agreements with stakeholder groups.
	3. Create NetNews for higher education; gather input and story ideas from institutions
	4. Communicate about UEN organizationally; NetNews, legislative publications, Steering Committee reports, etc.
	5. Tailor communications to specific user groups
	6. Revisit Annual Strategic plan with Steering Committee and Subcommittees each quarter; provide quarterly updates and opportunity for discussion.
	7. Develop UEN Service Catalog, communicate this information through SLA's.
	8. Report monthly statistics on use of UEN Web Services, Enterprise Applications, Professional Development and WAN metrics.
D. Increase internal communication, project management and coordination of services.	
	1. Continue development of Information Technology Infrastructure Library (ITIL) process and training.
	2. Hold bi-monthly managers meetings and weekly executive meetings for cross-department communication
	3. Working with Steering Committee and Subcommittees, develop annual strategic plan and budget that crosses all UEN departments.
	4. Build skills and knowledge of UEN staff through professional development, industry publications, conferences, workshops and membership in professional organizations.