



# Utah Education Network

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In Partnership with  
**Utah State Office of Education ■ Utah System of Higher Education**

**UTAH EDUCATION NETWORK  
STEERING COMMITTEE**

**A G E N D A**

JUNE 14, 2002 – 9:00AM

9:00 am -  
12:00pm

**Business Steering Committee Meeting**

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**Welcome and Introductions..... Gary Wixom**

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**Next meeting - August 16, 2002 (Proposed)**

*Please place these materials in your Steering Committee Binder*



# STEERING COMMITTEE

## ITEM **1**

# EXECUTIVE MEETING MINUTES

## THE UTAH EDUCATION NETWORK

### Executive Steering Committee

Friday, March 22, 2002

### THE MINUTES

**Present:** Bonnie Morgan, Gary Wixom, Stephen Hess, Mike Petersen, Vicky Dahn, Ray Timothy, Ryan Thomas, George Brown, Ed Ridges, Laura Hunter, Jim Stewart, Larry Smith, and Lisa Kuhn.

I **Welcome** - Bonnie welcomed all attendees to the meeting.

### **II Review and Approval of Minutes – January 25, 2002 (Item 23, Information/Action)**

- Within Mike Petersen's comment on the top of page 23-4, SCDC was changed to SEDC.
- \$262 million within Vicky Dahn's comment on the top of page 23-2 was changed to \$262 thousand.
- Within Louise Tonin's comment on the bottom of page 23-3, 1.9 billion was changed to 1.9 million.
- On page 23-5, USAB was changed to USABO within Ray Timothy's comment in the middle of the page.

**Motion:** It was moved and seconded that the members of the Utah Education Network Executive Steering Committee approve the January 25, 2002 Executive Committee minutes as amended. THE MOTION PASSED WITH ALL VOTING IN FAVOR.

**III FY 2002 Budget Reductions & UEN Holdbacks - Budget Reduction Summary (Items 24 & 25, Information/Action)** – Steve Hess presented.

The Legislative hold-backs discussed in previous meetings were moved to official cuts—\$388,900 ongoing and \$150,000 one time for FY 2002. He reviewed the Item 24 cover sheet with the committee outlining the reductions and the programs they were reduced from.

Lisa Kuhn created a document outlining the UEN Holdbacks for each area within UEN. *For detailed information, please refer to the spreadsheet within Item 25.* This was reviewed with the Committee.

\*Ray Timothy - Inquired how the \$53,400 cut within USU Satellite Telecommunications would affect its operation.

\*Ed Ridges - Responded that this reduction was taken from the funding reserved for new site equipment and that this endeavor will be moved forward in another year. Other than that, the budget cut will have no effect on the satellite operation system.

**Motion: It was moved and seconded that the members of the Utah Education Network Executive Steering Committee approve the FY 2002 Budget Reductions as noted. THE MOTION PASSED WITH ALL VOTING IN FAVOR.**

**IV FY 2003 Appropriations (Item 26, Information/Action)** – Steve Hess presented.

Due to the recent announcement of an anticipated shortfall of an additional \$30 million for FY2003 (\$260,600 for UEN), UEN was unable to bring any specific recommendations to the committee at this time but plan to present recommendations in the next meeting. It was decided that areas that hold the highest priority for FY 2003 include capacity, reliability, and access to the network, Pioneer (which includes the previous three), a Video Streaming RVP, Digital TV, and an effort to not make cuts to rural areas.

\*Mike Petersen - In an effort to cut back budget expenditures, he suggested re-analyzing vacant and retirement positions within UEN and cutting back or reorganizing personnel in a way that will allow major priorities to continue to be met and costs to be scaled back without being hurtful to employees.

\*Laura Hunter - Suggested that the staff be made aware that one of UEN's priorities will be to maintain personnel without sacrificing services as the two are related to one another.

\*Bonnie Morgan - Noted that if there is per chance another budget cut, UEN might not be able to hold on so strongly to personnel and so it might not be wise to give employees false hopes. She suggested that this not be as high of a priority.

**Motion: It was moved and seconded that the members of the Utah Education Network Executive Committee approve and support the**

**continuation of the direction UEN is moving in relation to the FY 2003 budget and that a budget recommendation be brought to the Committee in the next meeting. THE MOTION PASSED WITH ALL VOTING IN FAVOR.**

\*Steve Hess - Regarding the \$30 million cut, generally the fiscal analysts don't put a lot of heed into these particular revenue reports and so the legislature is not planning to address these until needed. There will be a special session in April where this will be discussed.

**V Planning Issues and Process (Items 27-28, Information)** – George Brown presented.

The process for putting together the UEN plans for FY 2003 needs to begin soon in order to present the plan to the Steering Committee in the next meeting. Within Item 28 is an preliminary list of projected planning priorities and statements. George noted that this list is not prioritized and he welcomed any additions, changes, or comments.

\*Ryan Thomas - The Technical Services Subcommittee developed a document in their last retreat of specific issues and priorities by region that might be a useful addendum to the goals. (Ryan gave George a copy of this document).

**VI Peer-to-Peer Considerations (Item 29, Information)** – George Brown presented.

George reviewed the Peer-to-Peer background with the Committee. For detailed information, please refer to the Item 29 cover sheet. He noted that one of the biggest issues of concern regarding this matter is that UEN's network resources are now and will become very stressed in the near term—largely due to the high recreational use of Peer-to-Peer software—and as UEN was not given any funding this year to add to these resources, it is likely that the present circuits will be filled to capacity by this fall. Because more than 90% of Peer-to-Peer use is purely recreational, there is a great need for it to be reduced. What is unknown to most users is that regardless of the amount of personal use of the software, anyone in the world who also has the software can access their machine, exponentially increasing the amount of bandwidth being used. This problem is the most serious in higher ed institutions as they have expansive bandwidths and many users and therefore often become a heavy target.

Although public education has an acceptable use policy, higher ed as a whole does not and so it is recommended that a policy be created that deals with the establishment of a relationship between UEN and the acceptable use policies that exist on each campus. The two biggest issues that need to be addressed involve excessive appropriation of network resources and copyright violation. This policy also needs to state that if by chance the Peer-to-Peer problem does not become resolvable, possible technical solutions come into place to reduce traffic such as restricting traffic out of (not into) dorms.

George welcomed any suggestions or comments for the Executive and Steering Committees regarding what should be included in this policy and any possible solutions to this problem. Ryan Thomas noted that individuals from the Technical Services Subcommittee that would be interested and willing to work on this policy include: Wayne Peay, Mark Spencer, Jim Stewart, Barbara White, Vern Wilson, and himself.

**Action: It was requested that the draft be distributed to the Steering Committee members prior to the next meeting so that any comments and changes can be incorporated and that it then can be approved in June.**

**Action: It was recommended that this issue be presented to the Steering Committee for a resolution for UEN to move forward in creating a draft policy that will be presented to and approved by the Steering Committee at the next meeting.**

## **VII Other**

- Bonnie informed the Committee that Val Finlayson and Senator David Steele have submitted their resignations from the Steering Committee as Val has taken a position at Salt Lake Community College as a professor and Senator Steele is no longer able to serve due to his time commitment to other entities. Nominations will be sent to the Governor for approval to replace these Committee members.
- George noted the new format for the Steering Committee materials and asked for any comments and/or suggestions to help make the materials more user-friendly.
- Due to numerous conflicts throughout May, it was recommended that the next meeting be moved to June 14th.

**Action: It was recommended that the Executive Committee propose to the Steering Committee that the next meeting be scheduled for June 14th.**

**The meeting adjourned at 1:00 p.m. with a duration of 45 minutes.**

**The next meeting is scheduled for March 22, 2002  
prior to the Business portion of the meeting – 12:00 p.m. at the Dolores  
Doré Eccles Broadcast Center.**

# STEERING COMMITTEE

## ITEM **2**

### BUSINESS MEETING MINUTES

THE UTAH EDUCATION NETWORK

Steering Committee BUSINESS Meeting

Dolores Doré Eccles Broadcast Center & University of Utah

Friday, March 22, 2002

#### THE MINUTES

**Present:** Co-Chair Bonnie Morgan, Co-Chair Gary Wixom, and Executive Director Stephen Hess, **Members:** Vicky Dahn, David Eisler (@ Weber), Cody Spendlove (for Pat Lambrose), Kirk Sitterud (@ CEU), Mark Spencer, Glen Taylor (@ Snow South), Ryan Thomas, Ray Timothy, Barbara White, and Jeannie Watanabe (for Phil Windley), **Excused:** Bruce Christensen, Clif Drew, Reed Eborn, Val Finlayson, Brent Goodfellow, Pat Lambrose, Jeff Livingston, Amy Owen, Wayne Peay, David Steele, and Phil Windley, **Interested Persons:** Jonathan Ball, James Christensen, Jerry Fenn (for Nancy Gibbs), Rick Mandahl, Cory Stokes, Vern Wilson, and UEN Staff.

*The minutes summarize the proceedings of the Steering Committee meeting. For additional information please refer to the cover sheet and detailed information following each tab as well as [www.uen.org](http://www.uen.org).*

**I Welcome** - Bonnie welcomed those in attendance at the Eccles Broadcast Center as well as those attending at Weber, CEU, and Snow South.

#### **II Review of Agenda and Minutes – January 25, 2002 (Item 30, Information/Action)**

Section III, Item A, Vicki should be spelled Vicky Dahn.

Section III, Item A, Number 2, first bullet should be correct to state "**No** Child Left Behind"....

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



### **III Report of Subcommittees**

#### **A EXECUTIVE COMMITTEE (Items 23-29)**

**1 - FY 2002 Budget Reductions (Items 24-25, Information/Action)** - Steve Hess presented.

Steve referred the committee to the Budget Reduction Summary detailed on Item 25. He noted that UEN received an additional one-time cut of \$150,000 on top of the \$388,900 reduction discussed in the January meeting.

\*Cody Spendlove - Regarding the 5% cut in Professional Development and reduction of the Circuit Charges budget under the Technical Services Section, Pat Lambrose inquired who this cut would impact the most.

\*Jim Stewart - Replied that UEN will not be cutting any circuits but will only be delaying the installation of some circuits and driving down costs of others. The installation process for an ethernet link to connect UVSC, SLCC, and the EBC will begin May 1st.

\*Laura Hunter - Responding to the cut in Professional Development, she noted that this signifies only the Technical Services internal staff professional development and not the over all professional development budget.

**Motion:** It was moved and seconded that the members of the Utah Education Network Steering Committee approve the recommended categories and amounts for the FY 2002 budget reductions. THE MOTION PASSED WITH ALL VOTING IN FAVOR.

**2 - FY 2003 Appropriations (Item 26, Information/Action)** - Steve Hess presented.

It has recently been projected that UEN will have about a 4.5% cut for FY 2003 equaling \$649,500. As noted in the cover sheet, it is anticipated that most of the FY 2002 cuts (\$388,900) will continue on through the next fiscal year. Because information on these cuts has just recently been obtained, the FY 2003 budget recommendations have not as of yet been formalized. These will be presented to the Steering Committee in the next meeting.

Bonnie Morgan noted that UEN priorities (as discussed in previous Steering Committee meetings) include the redundancy, reliability, and access of the network, the key programs UEN provides, and the personnel to support these services.

\*Jonathan Ball - Noted that because there were also some add-backs to UEN that offset some of the \$645,500 reductions, the net impact of the FY 2003 reductions equals -\$563,500.

**Motion: It was moved and seconded that the members of the Utah Education Network Steering Committee support the UEN staff to move forward with the FY 2003 budget allocations and to present a preliminary draft to the Committee at the next meeting. THE MOTION PASSED WITH ALL VOTING IN FAVOR.**

**3 - Planning (Items 27 & 28, Information/Action)** - George Brown presented.

With the reduced allocations from the legislature this last year and low projections for the following year, the UEN planning process has become increasingly more critical for the prioritization of goals and projects. George asked that the Committee review the preliminary planning issues and goals located within Items 27 and 28, noting that they are not yet prioritized, and welcomed any input, additions, and/or deletions within this meeting or before the next. A draft of the FY 2003 Plan will be presented in the next meeting.

\*Barbara White - Inquired of the prioritization process of these objectives.

\*George Brown - Priorities have been and will be filtered to UEN staff from the Subcommittees. The Technical Services Subcommittee has already provided a list of priorities and because this is where a large majority of the allocations are spent, this list will be highly considered. The presence of Pioneer is of great importance to the Instructional Services Subcommittee and so this will be a part of their priority list.

**Motion: It was moved and seconded that the members of the Utah Education Network Steering Committee approve the FY 2003 planning direction as detailed in these Items with a motion to present the plans to the Committee at the next meeting. THE MOTION PASSED WITH ALL VOTING IN FAVOR.**

**4 - Peer-to-Peer Policy Considerations (Item 29, Information/Action)** - George Brown presented.

Peer-to-Peer file sharing has great potential if used properly but can be highly problematic when used for recreational activities due to bandwidth and copyright issues. *For detailed background information, please refer to the Item 29 cover sheet in your materials.*

Having the software on a machine allows anyone in the world who also has that software to access it and share information from and through it and this can take a considerable amount of network space. As UEN was not given any funding this year to add another OC3 line, it is projected that the present circuits will be filled to

capacity by this fall which will affect all network users. Therefore, there is a pressing need to manage the network better by reducing inappropriate Peer-to-Peer traffic in public and higher ed.

Public education as a whole has an acceptable use policy that helps to control this problem. Although higher education institutions have individual acceptable use policies, there is not a good existing relationship between UEN's network and the policies of higher ed and so there is a need to create a policy that deals with Peer-to-Peer considerations especially in these institutions and across the network.

***Under the Steering Committee's direction, it is therefore recommended that a draft policy be created that carefully ties what happens in the network with the acceptable use policies of each institution and that technical and/or other solutions can be implemented to restrict the traffic if the policy does not solve the problem.***

This issue was discussed in the Technical Services Subcommittee and individuals were identified who were interested in helping with this process. Drafts of this policy will be intermittently provided to the members of the Committee for feedback and then brought back in the next meeting for review and approval.

**Motion: It was moved and seconded that the members of the Utah Education Network Steering Committee approve the direction and approach as presented, providing feedback and assistance throughout the policy drafting process. THE MOTION PASSED WITH ALL VOTING IN FAVOR.**

**B INSTRUCTIONAL SERVICES (Items 1-8) - Vicky Dahn presented.**

**1 - Professional Development (Item 2, Information)**

*Due to time constraints, this item will be discussed by the Subcommittee at a later date. For background information, please refer to the information within Item 2.*

**2 - Web Resources (Item 3, Information)**

The majority of the Subcommittee meeting was spent on this agenda item in an effort to determine what the priorities should be in a tight fiscal year. The Committee agreed that the first and foremost priorities should be the mission critical Technical Services priorities and issues as it is necessary to have a strong backbone in order to support various resources. These priorities include capacity, reliability, and access to the network. After taking these into account, Instructional Service's priorities for Web Resources would be to: 1) at a minimum, maintain Pioneer at its current level, and 2) send out an RFP on expanding the pilot of video streaming, comparing the costs to other vendors.

**3 - EDNET (Item 4, Information)**

*Due to time constraints, this item will be discussed by the Subcommittee at a later date. For background information, please refer to the information within Item 4.*

**4 - Utah Education Network Satellite System (Item 5, Information)**

*Due to time constraints, this item will be discussed by the Subcommittee at a later date. For background information, please refer to the information within Item 5.*

**5 - KULC (Item 6, Information)**

*This item was not discussed in the Business portion of the meeting but was reviewed by the Subcommittee. For detailed information of the issues involved, please refer to information within Item 6.*

**6 - The Olympic Education Web Site (Item 7, Information)**

*This is an informational item. Please refer to the Item 7 materials for detailed information.*

**7 - uen.org Web Site Report (Item 8, Information)**

*This is an informational item. Please refer to the Item 8 materials for detailed information.*

**C TECHNICAL SERVICES (Items 9 - 22) - Ryan Thomas presented.**

**1 - Memorandum of Understanding with URTA/UEN and Independent Rural Telephone Companies (Items 9 & 10, Information/Action)**

House Bill 272, as discussed in the January meeting, involved legislation that would have required that there be a structural relationship between UEN and the Utah Rural Telecommunications Association. URTA represents rural telecommunication companies primarily serving smaller rural areas in Utah. After some consideration of this pending legislation, the Executive Committee determined that it might be wiser to meet and work with the URTA members rather than carry out this legislation. *For detailed information on the background of these discussions, please refer to the Item 9 materials.*

It was concluded by the Executive Committee that a UEN internal policy, not a legal agreement, be created to develop this association between UEN and rural telecommunication companies. The operating principles of this policy would include: 1) UEN will work closely with rural telecommunication companies within their service areas when it is economically unfeasible for UEN to receive services through local providers (this comes with the understanding that UEN can and will

pursue other alternatives); and 2) two representatives of the rural telecommunication association will serve as members of the Technical Services Subcommittee.

Ryan commented on the last sentence on page 10-1, number 5 that states, "UEN will not compete with URTA members to provide services to these government entities except to serve specific educational purposes." He noted that a lot of discussion regarding this involved whether or not this policy would limit any coordinated efforts between governmental entities and UEN and it was concluded that the language "compete" would suggest that if UEN is expanding services to additional non-educational recipients that this would occur after a discussion with URTA and that it would not limit the ability to provide service in circumstances where URTA was not able to provide the service.

\*Jonathan Ball - Commented that because UEN assets are assets of state governments, it seems counterintuitive to limit services to government entities. For Example, UEN is considering using ITS circuits and redundant circuits in certain areas of the state. If ITS were to request an exchange for this, the ability to use UEN circuits as a backup circuit in an area were rural telecommunication companies could only offer these services at a higher price than ITS could provide, under this policy, ITS would not be able to use UEN's resources and would be redirected to rural telecommunication companies at a greater cost to them.

***The Technical Services Subcommittee recommends that the Steering Committee adopt the proposed policy and operating principles with the following modifications: 1) within Number 2, "to UEN" be inserted after "unfeasible," and 2) within Number 7, "for UEN" be inserted after "economically available."***

\*Cody Spendlove - Regarding the two voting positions that would be added to the Technical Services Subcommittee, he inquired if this would set a precedence for commercial entities to serve on other subcommittees and how this would potentially affect UEN.

\*Mike Petersen - Responded that the original reorganization of the Steering Committee developed last fall anticipated that members of the subcommittees would not necessarily be members of the Steering Committee and that when appropriate, additional members can be added to the committee to strengthen the expertise as needed. The addition of these two members is consistent with this idea. Any additions to UEN related committees would be first approved by the Steering Committee.

\*Cody Spendlove - Suggested that part of the internal policy state that there be a fixed number/percentage of external representatives serving on these committees so that they would only account for a certain percentage of the vote.

\*Laura Hunter - Suggested that there be a review period specified for this policy to be brought back and re-analyzed.

\*David Eisler - This document is a work in progress as there are areas that need to be modified. There will be opportunities in the future to do this. He also noted that the rural telecommunication representatives will not have a majority vote in the subcommittee and that the character of the relationship is not antagonistic but only to bring some collaboration between the entities.

\*Gary Wixom - The purpose of the Subcommittees is to review issues and recommend actions to the Steering Committee. Any final decisions regarding UEN will be made at the Steering Committee level.

**Motion: It was moved and seconded that the members of the Utah Education Network Steering Committee approve the memorandum as noted with the understanding that it is an internal policy that can be modified and that it include an amendment that a formal report on its activities be given to the Steering Committee within the next year. THE MOTION PASSED WITH ALL VOTING IN FAVOR.**

**Motion: It was moved and seconded that the members of the Utah Education Network Steering Committee adopt the Technical Services Subcommittee recommendations for rural telecommunications representatives to the Subcommittee. The recommendations are Bruce Todd, Uinta Basin Telephone, and Vernile Prince, All West Communications. THE MOTION PASSED WITH ALL VOTING IN FAVOR.**

**2 - H.323 Video Conferencing (Item 11, Information/Action)**

UEN has acquired an MCU that is used for video conferencing and audio bridge and the potential of enhancing this to include some managerial components along with an audio bridge was discussed within the Subcommittee. This would cost approximately \$180,000. However, there is some consideration by the technical staff that it might be possible to obtain an audio bridge that would be less expensive. In any event, there are some concerns about available funding. As a consequence, ***the recommendation of the Technical Services Subcommittee is to support the staff's continual review of hardware and software in the areas of IT video and audio and that purchases be considered and brought back to the committee pending available funding.***

\*Ed Ridges - Inquired about the advancement of the satellite system

\*Jim Stewart - Replied that the audio bridge will be used to support the satellite system.

**Motion: It was moved and seconded that the members of the Utah Education Network Steering Committee approve the motion as noted above. THE MOTION PASSED WITH ALL VOTING IN FAVOR.**

**3 - Network Reliability and Disaster Recovery (Item 12, Information/Action)**

During the last eighteen months, there have been circuit outages and so as a consequence, the Technical Services staff has recommended planning objectives as noted in Item 12. *For detailed information, please refer to the objectives in Item 12.*

***The Technical Services Subcommittee recommended that the Steering Committee support the effort of the UEN technical staff to work with URTA and other providers, including ITS, to identify alternatives that fit in the current budget and are reasonable in price to provide enhanced network reliability and disaster recovery.***

**Motion: It was moved and seconded that the members of the Utah Education Network Steering Committee approve the Technical Services Subcommittee recommendation as noted above. THE MOTION PASSED WITH ALL VOTING IN FAVOR.**

**4 - Internet OC-3 Recommendations (Item 13, Information/Action)**

*The Technical Services Subcommittee has reviewed the planning objectives found on page 13-2 and recommend that the Steering Committee would approve them as outlined. These included: 1) Contract with Touch America to provide peering and transit access to UEN; 2) Install at least one OC-3 peering link preferably to PAIX in California; 3) Replace the Qwest OC-3 with transit bandwidth from TA; 4) Relocate one transit OC-3 to UVSC as funds allow; and 5) Add additional OC-3 peering lines as need and budget allow.* Ryan noted that the amounts from numbers 2 & 3 represent approximately the same cost of the current circuit.

\*Laura Hunter - Inquired if the planning objectives included the fiscal objectives as well.

\*Ryan Thomas - Answered in the affirmative noting that with e-rate considerations, these would essentially represent a replacement for an existing agreement.

**Motion: It was moved and seconded that the members of the Utah Education Network Steering Committee approve the planning objectives as noted above. THE MOTION PASSED WITH ALL VOTING IN FAVOR.**

**5 - Peering Plans at UVSC (Item 14, Information)**

*Due to the lack of adequate time, this discussion was deferred to the next meeting. For background information on the item, please refer to the Item 14 materials.*

**6 - MGX Out Status (Item 15, Information)**

In an effort to improve the reliability and increase the bandwidth, all Cisco MGX routers will be replaced with channelized T3 cards. All school districts and others that are affected have been given adequate notification on this.

**7 - Core Ring Status Report (Item 16, Information)**

Item 16 is an update to the report made to the Committee in January regarding the intent to develop some redundant rings with the state. This is an informational item only. *For detailed information, please refer to the Item 16 materials.*

**8 - Regional Technical Forum (Item 17, Information)**

*For information on this item, please refer to the spreadsheet on Item 17.*

**9 - Peer-to-Peer Policy Development (Item 18, Information)**

*Please refer to the discussion on Item 29 as well as the Item 18 cover sheet for information regarding this subject.*

**10 - Utah Education Network Security Information (Item 19, Information)**

UEN has provided a very successful Network Security Summit that provided training regarding security on the network. Additional security training sessions will take place. *For further information, please refer to the Item 19 cover sheet.*

**11 - Technical Services Retreat (Item 20, Information)**

The Technical Services Subcommittee, representatives of the T-forum, and Technical Services staff had a two day retreat which involved extensive discussions of priorities and systems for establishing them in the future. As a result of this retreat, a document was developed that includes a draft of Technical Services priorities. This is being circulated to the members of the various T-forums in the state as well as the members of the Technical Services Subcommittee for any suggested changes.

**12 - Network Operating Agreement Status (Item 21, Information)**



Work on the Network Operating Agreements is moving forward. *For detailed information on the districts that are in this process, please refer to Item 21.* The Subcommittee complimented the Technical Services staff for their efforts in this endeavor.

### **13 - Network Management Tools (Item 22, Information)**

A presentation was done on network management tools. This included an overview of the tools available in the UEN NOC that allow management across the entire UEN backbone. These allow the staff to identify problems both quickly and accurately so they can be solved efficiently. Dan Patterson and Tony Bueno were complimented for their presentations.

### **IV Executive Director's Report** - Steve Hess presented.

Steve invited Jonathan Ball to discuss the additional \$30 million shortfall projected for FY 2002. Jonathan noted that based on the TC-23, the Tax Commission is projecting an additional \$30 million cut in FY 2002. However, because year end collections are often not included in this (e.g. Olympic revenue), the legislature is waiting to act on this and is not planning on taking any action until it further develops. Steve commented that some economists have projected about a 3.5% increase by the beginning of the January 2003. It is hoped that this will provide some kind of a surplus in state revenues to help pull the state through this economic low.

UTOPIA is a consortium led by West Valley City. It has been actively working with cities and towns to have the local telecommunication companies deliver the broadband connections into homes. Funds for the infrastructure will come from municipal bonds. UEN has been in touch with this group. We are interested in the concept if it provides a less expensive option for connecting schools.

Dane Goodfellow is trying to combine networks and data centers and go forward with various initiatives that he believes will help promote economic development. He has worked with the Bureau of Economic Development who are looking at his and ideas and it is anticipated that the IT Commission may also review this. However, at this time, the Governor is not backing this initiative and has not officially responded to it. The Governor is looking at the possible consolidation of some of the state networks in the executive branch, but this has not spread out to any kind of consolidation with UEN or public and higher education..

There have been some initiatives to try to work in Cache Valley in an attempt to establish redundancy, in most part because there is a company within this district that apparently may leave if they don't get redundant connectivity and so UEN is working to help them. This would be beneficial for UEN as well as Logan, Cache Valley, and Utah State University. Steve commented that UEN is continually working to get more robust connectivity and more reliability where possible and he asked that the committee send any similar concerns and/or situations to UEN

management so that they can be resolved. It will take a continual group effort to manage the network.

***Due to various conflicts throughout the month of May and beginning of June, it was decided that the next Steering Committee meeting be held on June 14th.***

Val Finlayson and Senator David Steele have both submitted their resignations from the Steering Committee. Val has taken a teaching position at Salt Lake Community College and Senator Steele will no longer be able to serve due to his time commitment to other entities.

**Motion: It was moved and seconded that the members of the Utah Education Network Steering Committee support a motion of appreciation for the service Val Finlayson and David Steele have given on the Steering Committee and that a letter and token of appreciation be awarded to them. THE MOTION PASSED WITH ALL VOTING IN FAVOR.**

On behalf of the UEN staff, Steve extended his appreciation for the expertise and time commitment of all those involved in the Steering Committee process—particularly the co-chairs of the Subcommittees.

**The meeting adjourned at 2:10 p.m. with a duration of 1 hour 10 minutes.**

**The next meeting is scheduled for June 14, 2002 – 11:00 p.m. at the Dolores Doré Eccles Broadcast Center.**



## TENTATIVE FY 2003 STRATEGIC PLAN

JUNE 14, 2002

### Issues

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The planning for FY 2003 has been extraordinary in the sense that not in recent history have budget projections been so challenging. As will be discussed in the item on the FY 2003 Budget, the level of funding for next year is still uncertain. Apparently the legislature will meet in another somewhat unprecedented 'special session' sometime in late June in an attempt to resolve the present budget crisis for FY 2003. In addition to the very steep budget reductions for FY 2002, current revenue projections for FY 2003 are on the order of \$130 to \$150 million less than anticipated earlier.

The real challenge will be for the Legislature to determine if there are any alternatives which would permit them to 'hold education harmless' and not require that further reductions be taken in education budgets. There appears to be some momentum to attempt to maintain the funding levels for public education. There is much less certainty regarding higher education, although there are some indications that higher education budgets might also be excluded from further budget reductions.

The present budget reduction projection for FY 2003 represents approximately 4.75% of the total funding allocated by the Legislature. In the event that public education is excluded, the rest of the entities which receive state funding will experience an almost 9% reduction in their budgets. If higher education is also excluded, then the reductions for the remaining entities would be significantly higher.

This is, of course, very relevant to the budget and plans of the Utah Education Network. Since a very significant segment of the Network's mission is to service public education, we have submitted our request to be included within the potential exclusion umbrella. If both public and higher education are somehow excluded from further budget reductions, there would be a high likelihood that our budget would also enjoy that exclusion.

The Strategic Plan draft that is included with the materials is in a much different format than in past years. It includes an Executive Summary, a description of the Network's 'core enablers', and a visual color stack in which all of the projects associated with the core enablers are briefly identified with completion dates and

status. The plan also includes a narrative of the planned projects, as well as definitive project plans.

The intent is to streamline and simplify the process and to provide information that is easy to review and understand. Obviously, the plan is still in draft form because of budget uncertainties. However, it is necessary to provide the staff with a basis with which to work. The plan clearly identifies those tasks which are critical and which must continue, and/or the new initiatives which must begin to carry forward the mission of the Network to provide robust, reliable, secure, and efficient services to education in Utah.

It should also be noted that there are a few details that need to be finalized, and that effort will continue during the next few weeks. Additionally, as the budget is finalized, the plan will be immediately updated to reflect any changes which might be required. Finally, the quarterly plan review process will be continued and progress reports provided to the subcommittees.

## **Recommended Action**

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It is recommended that the Steering Committee approve the Strategic Plan in its present form and status with the understanding that a final version will be submitted as budgets are finalized.



**Utah Education Network**

[www.uen.org](http://www.uen.org)

# *Strategic Planning Document*

for the

Utah Education Network

*Fiscal Year 2003*

*June 6, 2002*

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***Special Note:*** *The Legislature has not finalized the level and amount of budget reductions that will be necessary to balance the FY 2003 budget. Currently the Utah Education Network has projected a 4.28% reduction in the appropriated funds allocated in the Appropriations Act for FY 2003. This is an early projection and may be changed when the Legislature meets in a special session later in June 2002. The plan and budget will be modified as required by any additional legislative action that affects the funding status of the Network.*



## *Utah Education Network*

### *Strategic Plan*

*FY 2003*

## *Section 1 Executive Summary*

### *It is the mission of the Utah Education Network to:*

*Provide the citizens of Utah access to the highest quality, most effective instructional experiences, educational administrative support services, and teacher/faculty resources which will assist in achieving improved student learning; more effective communications among learners, teachers/faculty, and parents; and greater efficiency in achieving statewide educational objectives.*

*These services will be delivered, regardless of location or time, through seamless, technology rich, communications networks linking schools, libraries, and world-wide information networks, as well as businesses, industries, and homes.*

### *Strategic Plan Structure and Intent*

The strategic plan of the Utah Education Network is structured to provide the scope of the Network's efforts in FY 2003. The direction of the plan is determined by the needs of the clients and stakeholders of the UEN and the changing environment of IT and education. These include:

1. The need for instruction and educational resources to be delivered asynchronously -- free of time and place. This provides the user of educational services with more choice, offers more convenience, and puts the student in control of his/her educational environment.
2. The growth of the use of the network's infrastructure and services to support and facilitate 'mission-critical' applications (including many new e-commerce services) by all of the entities that are connected to the network. Network security, reliability, and capacity have taken on a far more important role than previously. There is a much greater dependency on technology-delivered instructional materials.
3. The shift from a 'teacher/faculty-centered' environment to one that is more 'student/learner' centered. The information age and the ubiquitous availability of information and learning opportunities continue to provide impetus to a new educational paradigm and, potentially, a new educational model. Information Technology resources, infrastructure, and services are the crucial facilitators of this new environment.
4. The need to implement processes that assist entities in 'managing their identity'. As circumstances and situations become more competitive and user groups more demanding of services and information, every organization is required to assure that its identity and image is carefully managed, services defined, and mission specified. User expectations are often a direct result of how an organization presents itself or permits and/or facilitates access to its services and information.
5. The need to adjust and implement strategies in the circumstance where funding revenues are not able to keep up with student growth projections and network traffic volume increases. It will be critical to develop non-traditional approaches to solving these two issues, which are seemingly inexorably in conflict. There appears to be an almost unanimous agreement that there are no possible scenarios, which would suggest that the solution to the student growth issues would be to build additional on-campus facilities. As noted earlier, information technology may offer the only viable options to this ominous problem.



The new sub-committee and forum structures now in effect provide significant input and continued review of all of the plans developed by the Network. This input is included and aggregated with the history and inflow of information for the Network plan. This process continues to facilitate the Network's appropriate evolution in meeting the prescribed needs of all who utilize the services available via Network resources.

## ***Core Enablers***

Today information technology presents education with the unprecedented opportunity for local control of IT services, which can only be achieved with unprecedented cooperation. The UEN purpose is to bring about that cooperation through central coordination of IT services. The elements of that cooperation are contained in what we call core enablers. They are graphically represented in a color stack arrangement and summarized below. They represent a consensus of what must be done centrally in a coordinated way to "enable" districts and educational institutions more local access and control of IT services vital to their mission. The strategic goals and issues are focused on these "core enablers" and are ordered in a logical way that build upon each other. They form a model ranging from planning, policy and financial issues at the bottom; with infrastructure and security next; and followed by delivery and service issues which provide direct support to users. The model for the Utah Education Network is described in the following components that are identified below; they form the basis for the plan for FY 2003 and are graphically illustrated in color stack in the following categories.

### ***Planning, Policy, and Funding***

Strategic planning, policy, and funding are the foundation of all UEN activity as represented graphically at the bottom of the stack. The plans have provided the overall direction and vision of the Network and have defined the goals and objectives necessary to accomplish those strategic directions. The planning process has included a careful review and accountability method assuring that goals are met, activities coordinated, and obstacles resolved. The policies to be developed or refined by the network this year include connectivity agreements, security, and network monitoring indicators.

Financial considerations and funding are integral to the planning process. For the most part, the Network is funded by legislative appropriations. An appropriate and well-managed strategy to inform the Legislature, Governor's Office, and Fiscal Analyst's Office is critical to obtaining the required funding to meet the needs of the Network's users. This would include the annual Legislative Request information. Additionally, other sources of funding need to be investigated and proposals submitted to assist in maximizing the funding resources available. The goals for planning, policy, and funding are included in more detail in the full body of the strategic plan.

### ***Network Infrastructure and Services***

The network infrastructure and services include the physical facilities, circuits, switches, routers, servers, staff, and central technical services needed by the network's many users. The priority for network infrastructure is access, capacity, circuit speed, reliability/redundancy, security, and service agreements with our clients that ensure they are receiving adequate technical service. The majority of the goals in this section reflect these priorities. The other technical service goals define directions for security, replacement of equipment, and the introduction of new technologies as equipment is replaced. These new technologies are generally in the category of increased digital and video services. They include data (with a myriad of options including gigabit Ethernet, wireless, Voice over IP, H.323 video conferencing, etc.), video microwave (both analog and digital), satellite transmission, and digital and analog video broadcast and translators. As new technologies become available, they will be investigated and implemented as user needs are defined

### ***KULC***

The video services offered by KUED and KULC over the years are an important part of the services provided by the UEN. KUED and KULC will have new digital transmitters providing a number of new services that can be utilized by public and higher education. Upgrading these systems from analog to digital and identifying new services is the focus in this years KULC services plan.

### ***Instructional Delivery***

The Utah Education Network has provided special delivery services from its inception. EDNET and later, Satellite Services have provided extensive educational opportunities for students especially in areas where student populations have not justified offering the class locally. The strategic direction for instructional delivery is to improve the delivery of courses to students to better meet their needs. To accomplish this, the EDNET and UEN Satellite systems will be to enhanced and improved, but with a look forward to new more flexible technologies such as H.323, a new standard of providing interactive video over the Internet, and to more and varied locations with greater flexibility. Instructional

delivery will continue to look at ways in which instruction can be delivered more asynchronously with combined technologies such as courses delivered using the Internet and EDNET/satellite.

***Instructional Services***

With increased emphasis on student achievement and educator competency at the federal and state levels, educational resources available over UEN systems are absolutely critical to the end user. By coordinating and facilitating solutions to the needs of stakeholder groups, Instructional Services provides quality content resources and support services that support teaching and learning. Online web resources; utilizing the new digital capabilities of KULC, developing and improving partnerships with business, state agencies, and educational entities; and providing outstanding professional development opportunities will be addressed in FY 2003.

The following page is a colored depiction of the model with the major ‘core-enabler’ components in the right column, the specific issues, projects, and initiatives which will be addressed during the year in the middle column, and the projected completion dates in the left column. This chart, along with the project information found in Appendix A, will be updated at least quarterly as goals are accomplished or completion dates modified.

Ongoing	Conduct Grant Program Activities	
Ongoing	Increase Number Served	Professional Development
Sept. 2002	Develop Systemic Approach	
Ongoing	Increase Stakeholder Partnerships	Workforce Development
Ongoing	Administer Tech Corps	
Jun. 2003	Program Critical Needs Areas	KULC Programming
Jun. 2003	Expand Access to Digital Media	
Mar. 2003	Support New Web Applications	Online Resources
Mar. 2003	Increase Curriculum Accessibility	
Dec. 2002	Develop Comprehensive Satellite Plan	
Jun. 2002	Enhance UENSS Delivery System	
Jun. 2003	Evaluate and Pilot New Delivery Technologies	Instructional Delivery
Jun. 2003	Continue and Enhance the EDNET System	
	Build DTV Translator System	KULC Video Services
	Upgrade Analog System	
Mar. 2003	Provide Security Leadership & Training	
Oct. 2002	Assist in Firewall Planning & Implementation	
Dec. 2002	Implement Intrusion Detection System	
Sept. 2002	Complete Statewide Peering Project	
Sept. 2002	Complete District T-1 Re-points	
Jan. 2003	Increase Digital Video Stability	
Ongoing	Develop Video Master Plan	
Oct. 2002	Diversify Internet Access Points at UVSC	
Jan. 2003	Develop Video Streaming Infrastructure	
	Develop Relay Site Agreements	
Oct. 2002	Maintain Microwave Assets	
Ongoing	Update Routers and Switches	
Mar. 2003	Formalize Stakeholder Relationships	
Oct. 2002	Increase Rural Capacity	Network Infrastructure and Services
Mar. 2003	Increase Core Speed, Reliability, & Capacity	
	Review Needs Assessment and Evaluation	
Dec. 2002	Establish Performance Monitoring System	
Jan. 2003	Assure Data Privacy (GRAMA)	
Dec. 2002	Define a Network Security Policy	
Jun. 2003	Adopt Federal Security Process and Plan	
Ongoing	Improve Bandwidth Management	
Mar. 2003	Maximize Funding	Planning, Policy, and Financial
Jul. 2002	Implement Integrated Plan	

## ***Section 2 Situation Analysis***

### ***Background***

The Utah Education Network (UEN) Strategic Plan process determines the strategic direction of the UEN. It is not an operational plan. Each UEN department has its own operational plan. Each employee also has his or her own job description. Neither of these elements is included in the strategic plan. The UEN Plan is divided into four basic parts: 1. **The Executive Summary**, 2. **Situational Analysis**, which answers the question of **why** the UEN is taking a certain direction, 3. **Plan Recommendations**, which includes the strategic goals of the UEN, and 4. **The Project Plans**, a listing of all current projects to be accomplished in matrix form, including, time lines, budget, tasks, and the people responsible for carrying out these tasks.

The UEN Strategic Plan is developed from two areas, client needs and the current direction of technology. The combined needs of the districts and educational institutions have been derived from one-on-one discussions, meetings and forums with CIO's, technical support people, faculty, teachers, superintendents and presidents. The future direction of technology is determined from a constant review of the literature, technical meetings, and the collective knowledge of the UEN, K-12 and higher education technical staffs.

Today Information Technology presents education with the unprecedented opportunity for local control of IT services, which can only be achieved with unprecedented central coordination. UEN is built on the philosophy of local control and central coordination. The UEN provides forums, services and policies for that central coordination, to enable districts and higher education to provide local services. The UEN Plan is a consensus of UEN, K-12 and post secondary education on what services and policies are needed to bring about the central coordination needed for local control.

### ***History and Purpose of the UEN***

The UEN had its beginnings in 1978 when a special task force was convened to develop a coordinated statewide, multiple-option telecommunications and media system for the delivery of educational information and services. A proposal was drafted on how state educational entities could coordinate their efforts in the use of educational telecommunications. The result of those discussions was the formation of SETOC (State Education Telecommunication Operation Center) to be housed at the University of Utah. SETOC was eventually renamed the Utah Education Network (UEN) as it included the responsibility of data networking. The systems operated by the UEN started in 1978 with the educational services of KUED and EDNET. Channel 9 KULC TV was added in 1986, data networking in 1992 and the UEN Satellite Service in 1998. KUED and KUER continue to be licensed and operated by the University of Utah.

The purpose of the UEN has always been to provide central infrastructure and coordination of educational and information technology services to public and post secondary education. UEN provides both instructional support and technical forums which are used to determine needs and future direction. All plans are reviewed with the UEN Steering Committee and sub committees.

### ***Stakeholders***

The Network is accountable to the State Legislature, the Governor's Office, the State Board of Regents, and the State Office of Education.

The UEN has always been an active partner with: 1) the Office of the Commissioner, Utah System of Higher Education; 2) the Utah State Office of Education; 3) the state's Library system; 4) branches and agencies of state government; (5) the Utah Electronic High School and Utah Electronic College, (6) Utah's school districts and the ten universities and colleges of the USHE.; and (7) commercial telecommunication companies who all contribute to the strategic planning process and direction of UEN.

### ***The Current and Future Direction of Information Technology***

The current and future direction of information technology has a significant impact on the strategic direction of the UEN. The Network's philosophy has been to adopt and phase into current and future technologies. UEN does not implement 'bleeding-edge' technologies until they have been proven and gained greater acceptance in the market place. Equipment and systems adopted in this way are generally more affordable and problem free. The Network adopts open standards technology where possible.

In the process of planning, the Network considered the following technological trends:

1. Integration. The computing environment developed apart from the telephone and television network. For many years voice, data and video communications were transmitted as separate analog signals over distinctly different networks. With the advent of digital and packet switching communications, voice, video and data can now be transmitted over the same network. The World Wide Web provides the facility for content and service integration on web pages and portals. These include financial and e-commerce capabilities.

2. Advances in digital technologies are making possible the convergence of telecommunications technologies (e.g. telephony, video, and data). This convergence is eliminating the distinct lines that separate these different information media. Increasingly, providers can now work collectively, collaboratively, and/or competitively to distribute information. The result is an information revolution that advances the concepts of **choice, convenience, and control** for the consumer. As a consequence, the following trends are becoming evident:

***Learning:***

Asynchronous instruction will play a stronger role in the future. Video components will be required in both the synchronous and asynchronous learning environments. Urban school needs, which differ from the needs of rural schools, are emerging as significant issues of concern and require further consideration. Convenience and cost sometimes prevail over quality.

Thousands of on-line courses are now available via the Internet and the Web. Quality assurance is a continuing problem.

***Satellite and Digital Television:***

Satellite delivery by product originators, in an effort to reach rural areas, will increase in use. The removal of current legal and regulatory obstacles which are keeping Direct Broadcast Satellite (DBS) from providing local programming, and, thus, a dramatic opening to DBS marketing is pending.

The ability of digital cable TV operators to provide high-speed data transmission as an ISP, potentially placing them as serious 'players' in the data environment is in the deployment stage. The mandating of digital broadcast television by 2003, resulting in HDTV, multiplexing and data-casting capabilities is beginning to impact commercial and public stations. Satellite and DTV broadcast may have data delivery possibilities, but will rely on some other mechanism for the "upstream" data flow.

***Growth of the Use of Technology:***

The next decade will see a complete transformation of the global communications infrastructure. Cellular phones are giving way to digital devices that do everything from conferencing with your office to taking a photograph to reading you a book on the beach. Cable TV and other broadcast media will give way to Internet multimedia and interactivity. Today's hybrid fiber optics and electronic networks will give way to all-optical networks literally millions of times more efficient--with millions of channels--that allow signals to fly from origin to destination entirely on wings of light. A culture of lowest common denominators chosen in Hollywood and Madison Avenue will give way to a culture of first choices made by the customer. Gilder, George: American Spectator, May2001, Vol. 34 Issue 4, p44, 8p

Applications such as IP telephony, streaming media, unified messaging, Internet videoconferencing, and real-time whiteboard and application sharing won't work without an infrastructure that includes policy-based networking with traffic management and greater amounts of bandwidth. Covell, Andy; Network Computing, 12/11/2000, Vol. 11 Issue 25, p91

Worldwide cellular subscribers will grow at a 23 per cent rate, from 611 million in 2000 to 1.7 billion subscribers in 2005, says a report by Forward Concepts.

***National Educational Trends:***

Education is moving from a teacher-centered system to a student-centered system. This is a natural phenomenon brought about by the rapid evolution of technology and the opportunities offered by the Information/Knowledge Age. Examples of this shift include: 85% of freshmen in colleges and universities utilized the Internet in their school work,

many colleges now require incoming freshmen to have access to a PC, most now provide for on-line registration, grade access, and even fee payments. A growing number are offering wireless environments on campus.

There is an overall shift in the national priority to focus on cognitive, thinking skills in core curriculum. Americans seek unlimited access to education and life-long learning. Some 75 million people in the U.S. are participating in non-credit education opportunities. The higher education landscape is changing. Demand, low-cost technologies, and competition are leading to a *de facto* deregulation of the higher education market and geographic turf issues are rapidly becoming obsolete as the technology simply facilitates bypassing these historic barriers. One result is that most, if not all, of the institutions of higher education are demanding online courses.

Users (teachers and faculty) want fewer stand-alone resources, and more modular, tool-based resources throughout Utah's public education system. Pre-service education for teacher preparation in use of technology is becoming a necessity. Now that schools are linked to the Internet, faculty and teacher development in the use of technology have also become a top priority.

#### ***Telecommunications Deregulation and E-rate:***

The Telecommunications Act of 1996 was expected to increase competition, minimize (and possibly eliminate) regulatory barriers, and accelerate the convergence of local and long-distance phone businesses with cable operators, cellular companies, broadcast concerns, computer manufacturers, and others. Rather than increased competition, what has been occurring is increased consolidation of telecommunications into fewer and fewer providers.

The Act includes schools and libraries among the explicit beneficiaries of universal service support. It was designed to ensure that eligible schools and libraries have affordable access to modern telecommunications and information services that will enable them to provide educational services to all parts of the nation. The resultant Universal Service Fund (E-Rate) is based on need and provides 20% to 90% discounts for telecommunications services. E-rate continues to be a viable program.

#### ***Education in Utah:***

Utah's Governor and Legislature continue to support the state's educational technology initiative. This makes Utah a national leader in the area of information technologies and their use in the classroom. During the 2000 – 2001 school year, the state's k-12 student population was 475,269, which is down from the 1998-99 school year of 477,061 students statewide. Total statewide enrollment is projected to remain relatively flat over the next few years. There will be "pockets" within the state that will see increases in the student population. The districts that are most likely to see growth are Jordan, Tooele, and Washington Districts.

The state's population is predominantly located along the Wasatch Front in an area between Ogden and Provo, contributing to special challenges in the process of providing enhanced educational services to rural areas. However, technology has made it possible to offer expanded learning opportunities to students in some of the state's most remote areas, allowing students more choices in their scholastic endeavors. Utah continues to explore ways in which technology can provide new learning opportunities.

While the Utah Education Network receives considerable support from state government, additional programs also receive legislative support. They are: the Electronic High School, Utah's Electronic College, and the Western Governors University. The Utah Education Network works closely with each of these organizations to promote expanded learning opportunities through the use of telecommunications technologies.

The state has mandated 'high stakes' testing regarding a student's knowledge of the 'core curriculum'. New scholarship programs for concurrent enrollment students are being implemented.

## Section 3 -- Plan Recommendations

### OVERVIEW

The following planning goals and objective are directly aligned with the mission and benchmarks discussed earlier. They also follow the significant input received from a very broad number of stakeholders and constituencies and the priorities defined by the efforts of the subcommittees which have participated in the planning process.

Obviously, there have been significant planning efforts in previous years that have identified many long-term goals and objectives that become timely as prerequisites are accomplished and funding becomes available. Because of funding reductions and the fact that the Legislature was unable to fund several critical areas including bandwidth expansion, elementary schools connectivity, equipment replacement, and increased subscription costs for Pioneer OnLine Library resources, FY 2003 will be a year marked more by a 'maintenance of effort' environment with few new initiatives.

### PURPOSE

The purpose of the Utah Education Network Plan is to communicate the 'core enablers' which will contribute to the Network's ability to fulfill its defined mission. The plan includes those initiatives which are to be accomplished during FY 2003 and which are supported by policy and direction. Staff, funding, and timelines are assigned to each of the initiatives. It is intended that the plan will be the 'working document' upon which everyone can rely to guide the efforts of staff as well as communicate defined tasks and their status. The plan will be formally reviewed each quarter and accomplishments will be posted to the web.

### VISION

Utilizing information technology, the Utah Education Network is to provide access to the 'world of information' and facilitate 'world class' educational opportunities to all of the public schools and institutions of higher education in Utah, as well as public libraries and all entities of the Executive Branch of state government. It supports 'mission critical' applications for all of the public school districts and higher education institutions and is becoming an asset where reliability must approach 99.999%. In the evolving information age, students must be prepared and have a significant understanding of how to gather, synthesize, and draw accurate conclusions for information sources world-wide. Teachers, faculty, instructors, and parents must utilize the technology and information access facilities to provide the best possible educational opportunities for all students and learners.

### MISSION

*It is the Utah Education Network's mission to provide the citizens of Utah access to the highest quality, most effective instructional experiences, educational administrative support services, and teacher/faculty resources which will assist in achieving improved student learning; more effective communications among learners, teachers/faculty, and parents; and greater efficiency in achieving statewide educational objectives.*

*These services will be delivered, regardless of location or time, through seamless, technology rich, communications networks linking schools, libraries, and world-wide information networks, as well as businesses, industries, and homes.*

### Major Initiatives

To provide network resources which will be robust, reliable, accessible, and which possess adequate capacity to fully service its mission poses significant challenges. Because the Network serves such a diverse community of users,

constituents and stakeholders, it is often required to be 'all-things-to-all people'. It must be aware of the specific needs that are current and emerging and allocate resources to meet those needs. It is critical that the network infrastructure be maintained and, where required, upgraded. As new technologies become available and where there is evidence or potential that they might continue to enhance or improve the educational process, those technologies need to be examined and, where the potential is greatest, piloted. The Network is much more than circuits, routers, and switches. Services, which have become invaluable to the Network's many user communities, continue to receive focus and impetus to enhance and improve them. Lastly, the Network continues to be an active and positive advocate of improving the educational process. Legislators, business leaders, educators, students, learners and parents are the continued focus of the Network's efforts to enhance and improve the educational opportunities available in Utah.

For FY 2003, the Network's Strategic Plan will focus upon:

1. An integrated planning and policy process which will focus upon maximizing funding from the legislature, federal grants, and other granting and funding sources; improving the management of bandwidth; defining a network security policy and facilitating the federal security process and plan; addressing the need to assure data privacy while complying with GRAMA; establishing a network performance monitoring system; and reviewing needs assessment and evaluation.
2. Network Infrastructure and Services includes the ever-present challenge of accommodating the continuing growth of the traffic serviced by the network. There are both speed and capacity issues that must be addressed with some special emphasis on certain rural parts of the state. Secondly, wherein the services are available and to the degree that they are affordable, Giga-bit Ethernet services will be implemented to improve core redundancy. Other areas of focus will include: maintaining the microwave assets, improving disaster recovery, diversifying an Internet access point at UVSC, completing the district T-1 re-point project, and completing the state-wide 'peering' project. Video services will be improved and enhanced by developing a video streaming infrastructure, increasing digital video stability, and developing a video master plan.

3. KULC Video Services

As KULC evolves to a digital environment, increased video broadcast capabilities will be implemented. Special focus will be placed on upgrading the present analog system to insure a reasonable transition over time, and building a digital translator system to support digital broadcast statewide.

4. Instructional Delivery provides vital two-way interactive instruction and conferencing in support of both higher and public education. Through the use of interactive microwave television and satellite transmission with phone line support for the audio back to the instructor, classes are provided throughout the state especially to areas that are disadvantaged because of location and distances. Even though many learning opportunities are moving to an asynchronous mode, there are still a number of circumstances and instances where real-time, two-way interactive communication is the best solution and alternative. New classes to meet stated needs will be offered; new technologies such as IP based video conferencing (H.323) will be piloted; and the satellite delivery system will be enhanced, evaluated, and focused on specific student and system needs.
5. Instructional Services is to coordinate, administer, and advance quality content resources that support teaching and learning. UEN Instructional Support personnel collaborate, support, facilitate, and participate with stakeholders in the analysis, design, development, implementation, and evaluation of content resources and best practices in teaching and learning. Major areas of focus will include improving and increasing online resources, expanding KULC programming through the increased capacity of the conversion to a digital environment and examining areas of critical need, facilitating workforce development programs, strengthening professional development services by developing a systemic approach increasing the number served by the programs, and supporting professional development grant programs

These identified major initiatives are the areas where the Network's efforts for FY 2003 will be focused. In the following section, specific planning statements will identify in more detail and specificity, what will be required to accomplish those goals as defined above.



Strategic vision and leadership provide the overall and long-range view of the mission of the Network. The development of a strategic plan places the vision into perspective and facilitates the assignment of staff, timelines, and funding. Policies provide the framework which enables and supports the mission.

1. A Strategic Planning, Management, and Support process will be implemented to assure the development, documentation, review, and progress reporting for and to all managers and, where applicable, staff, users, stake holders, and constituents. The process will include the development of an Executive Summary of the Strategic Plan which will be succinct, informative, and made timely by quarterly reviews and updates which will posted to the web. The process also will include direct support and management of the Planning Task Force (PTF) to assure strategic plan development, review, and coordination.
2. A strategy to maximize the funding needed to support the Network facilities and services will be defined. Strategies to increase Legislative funding will be developed; E-rate funding needs to be significantly increased to levels to take advantage of all possible and practical funding opportunities available; and new sources for grant funding will be identified and applications prepared and submitted.
3. One of the network's most valuable and costly resources is the bandwidth that carries the user traffic. Bandwidth needs have grown exponentially since the inception of the consolidated and integrated network serving education, libraries, and the Executive branch of state government. The Network will establish policies and procedures focused upon insuring that bandwidth resources are used for the purposes for which they are funded; and that they are allocated in a fair and equitable manner to service the needs of all educational users and entities.
4. As an overall security profile, the Network needs to understand and adopt security measures which have been identified and about which legislation has been passed or proposed at the federal level. The issues include homeland security, the protection of critical infrastructures, cyberspace security, fighting cyber-crime, the protection of content, and the protection of personal information. Federal legislation and Executive Orders are in place including: the Patriot Act, Identity Theft, SSN Protection, Anti-Spam Measures, Security Standards, and Cyberspace Security (H.R. 3482).
5. Hackers, viruses, worms, and denial of service attacks have become so prevalent that it is absolutely imperative that the Network do everything that is possible to protect network applications, service levels, and data. To facilitate this critical issue, the Network will define and implement a Network Security Policy.
6. The network is the repository for a substantial amount of data. Many applications, which are intended to assist teachers and administrators, capture many data elements. One of the challenges is that this data can be useful to others even though it was not intended for their purposes. It is imperative that the data acquired by the network's applications and which resides in network databases be protected from inappropriate uses (politics, advertising, soliciting, etc.). The Network will define policies which will assure data privacy and access while remaining in compliance with GRAMA.
7. The network has matured over the past number of years and there is a direct and defined need to better measure its effectiveness, efficiency, and usefulness. The Network will develop and implement a Network Performance Monitoring System to measure how well the network is serving its users.
8. Review Needs Assessment and Evaluation.

1. **Increase Core Speed, Reliability and Capacity:** A great majority of Utah Education Network traffic traverses paths between Utah Valley and the Eccles Broadcast Center. More traffic will move along these routes as UEN diversifies its Internet Access Points by adding an OC-3 to Utah Valley State College.

A Gigabit Ethernet Ring has been planned and will be installed in Summer, 2002 to address the increased traffic requirement between Utah Valley State College, Salt Lake Community College and the Eccles Broadcast Center. All areas of the State will receive benefit from the completion of this project.

2. **Increased Rural Capacity:** Communities and Public Schools in rural Utah are heavily reliant on classes delivered via the EDNET Video system. Growing data needs place further demands on Network bandwidth resources

The UEN Steering Committee has identified provision of initial network services to the new Eskdale school as its highest priority. Additionally, the Millard School District is in need of greater network capacity. This can be rectified in conjunction with the Eskdale and southeast Utah projects.

Backbone network equipment used to provide classes in southeast Utah is obsolete, inefficient and expensive to maintain. In addition, the bandwidth is insufficient to meet the present and future demands. In response to these issues UEN will replace the backbone network equipment and significantly increase the bandwidth in this area.

Schools in the Uintah basin currently lack sufficient network capacity to accommodate their diverse needs. The Uintah Basin Telephone Association (UBTA) has proposed a high speed Ethernet solution to meet the capacity needs of these schools at extremely reasonable monthly rates.

3. **Formalize Stakeholder Relationships:** UEN will implement Network Operating Agreements (NOA), Service Level Agreements (SLA) and Network Connections Agreements with all Districts, Universities, Colleges and Regions. This has been directed by the UEN Steering Committee.
4. **Update Routers and Switches:** There are nearly 400 Cisco 2500 routers currently in use throughout the Utah Education. These routers are anywhere from 4 to 9 years old and are no longer produced by the manufacturer. Also, many other routers and switches in the network are also aging and could potentially cause problems as failures become more frequent. UEN will be diligent in finding ways to replace this equipment and will make progress in identifying and replacing the most vulnerable equipment this year. This is a continuing issue for UEN to address in years to come.
5. **Maintain Microwave Assets:** UEN will ensure that the microwave system remains intact as a viable delivery system for areas where no other options exist. Aging equipment is nearly 20 years old and most is at least 11 years old. Qualified staff members have left UEN or retired. The microwave equipment and the expertise required to operate this system will be maintained by UEN.
6. **Develop Relay Site Agreements:** Replace handshake agreements with formalized Memoranda of Understanding (MOU's) at all systems relay sites. The priorities are sites in partnership with ITS, other UEN microwave sites, and then broadcast translator equipment for all three broadcast services, KUED, KULC and KUER.
7. **Develop Video Streaming Infrastructure:** The network will be prepared to deliver real time (i.e. video streaming, live video and voice) services that are being deployed. Design and implement network capacity to accommodate the rollout of the H.323 video and voice over IP (VoIP) services. Address issues of many-to-many connectivity through implementing the video bridge equipment. Explore the ability to integrate H.323 equipment to the current EDNET and satellite systems. Plan and implement a new audio conference bridge. QoS/CoS (Quality of Service / Class of Service) will be planned, piloted and implemented in the UEN infrastructure to support these real time services. Cme scheduling software will be updated.
8. **Diversity Internet Access Points:** UEN will relocate one OC-3 Internet circuit to Utah Valley State College in response to stakeholder input. This change will add reliability of equipment, bring geographic diversity and maintain a separation of Internet vendors.
9. **Develop/Implement Video Master Plan:** UEN has identified 7 components of the Video Master Plan. This plan will provide a blueprint for the future of video in the UEN network over the next three to five years. This plan will help define the roles and responsibilities for UEN.
10. **Increase Digital Video Stability:** Most hub locations are equipped with MGX ATM gear. This has produced unstable video quality and has been problematic for students. UEN is in process of replacing this equipment with proven technology that will stabilize the video environment and significantly improve the learning and teaching experiences.

11. **Complete District T-1 Re-points:** Most UEN traffic is now moved through the Hub locations. This causes several difficult problems for school districts. The Hub location configuration makes it necessary for the duplication of caching, filtering, proxy and firewall servers. Also, much of the traffic across these T-1 circuits is bound for the district office. For these and other reasons UEN is working at the request of Districts to re-point T-1 circuits away from the hubs and centralize them at the District Office.
12. **Complete Statewide Peering Project:** In the last two years the cost of Internet bandwidth has dropped from \$415.00 per megabit per month to \$125.00 per megabit per month by using a peering methodology. Using peering will allow the cost of Internet access to drop further in the near future.

Communities throughout Utah are looking for ways to share data among themselves while maintaining a manageable network cost. The Utah Valley Community Network (UVCN) is working with UEN on a peering project for communities in Utah County. This project will allow UEN and these communities to efficiently move data between all entities, reducing cost and increasing the speed that information is delivered.

13. **Implement Intrusion Detection System:** Security continues to be a major concern. UEN networks are being scanned many times each day. Our network resources are vulnerable to being attacked and exploited. Intrusion detection is an effective way to see these scans and to develop strategies to deal with malicious attacks on the network.

Initial testing of Intrusion Detection software has been completed at the UEN core with promising results. This software will be installed at each of the Hub locations to help analyze network traffic and better provide the best security available.

14. **Assist with Firewall Planning and Implementation:** Firewalls are difficult to install and maintain. UEN will assist Districts and Institutions in understanding, planning and implementing firewalls throughout the state. Several efforts are already underway in the SESC and SEDC regions.
15. **Provide Security Leadership and Training:** The March UEN Security Summit was very successful. 112 people participated and 8 individuals provided presentations. Feedback regarding the effectiveness of this conference has been extremely positive. UEN will plan and host two security summits during the year. Also, a technical summit will be combined with these security meetings. Stakeholder input will be sought and used to develop the core issues for these meetings.

## ***KULC Video Services***

***Strategic Plan FY 2003 May 9, 2002***

Three major goals will be pursued by KULC in the coming year:

1. KULC will begin broadcasting a digital signal at its originating transmitter in the Wasatch Front during the first quarter of the year.
2. The potential uses of KULC DTV will be evaluated and assessed with UEN stakeholders. Uses may include expanded programming in many areas, such as an Annenberg Channel; professional development programs for educators; and use of a portion of the DTV bandwidth to distribute a digital media library to be used by teachers and students throughout Utah.
3. Depending on grant applications currently being reviewed for funding, planning and initial steps will begin to upgrade and extend the KULC translator system. FCC issues will be considered and resolved.

## ***Instructional Delivery***

***Strategic Plan FY 2003 May 9, 2002***

Instructional Delivery Services provides direct instructional services via EDNET (two-way video and audio) and UEN Satellite System (one-way video and two-way audio). These classes and services are 'real-time' and provide extensive services to student, teachers and faculty across the state. The following four goals will receive the highest priority for EDNET and UENSS:

1. New classes and programs will be supported for delivery on the EDNET system. Needs assessments of UEN clients and program assessments will determine areas to be targeted.

2. The effectiveness of new technologies to deliver live, fully interactive distance-delivered instruction will be evaluated and field-tested. IP-based video conferencing equipment will be evaluated in a lab environment, after which the technology will be field-tested with a limited number of teachers and students.
3. The value and importance of UENSS as an instructional delivery system will be enhanced, and its future will be evaluated and planned.

## **Instructional Services**

**Strategic Plan FY 2003 May 9, 2002**

Instructional Services works directly with stakeholders and users of UEN services to better facilitate and support the educational process in the classroom. The major role of Instructional Services is to support, collaborate, and facilitate. In FY 2003, Instructional Services will continue its efforts to provide and improve online resources that directly support stakeholder's needs.

### **I. Web-based Online Resources**

The promotion, review and evaluation of present online resources including Pioneer, Utah's Online Library will be undertaken to improve present services and assure that the highest quality services and products will be provided to all segments of the educational community. To make access to curriculum resources easier for our users, four projects are slated in this area:

#### **Increase Curriculum Accessibility**

1. *Core Curriculum Display* -The Core Curriculum is housed in a UEN database. As new curricula are developed, it is necessary to have an easier interface to upload and update the standards and objectives. This tool will be primarily used internally by UEN and USOE personnel. The eventual result is an easier interface for educators to access the curriculum and corresponding support materials, lesson plans, links, videos and video clips.
2. *Easier Interface for Curriculum Search and Audience Specific Pages* - Educators have requested an easier interface for accessing curriculum resources in addition to the text-based curriculum search. Specific designs based on the particular audience, including teachers, students, adult learners, and other UEN stakeholder groups are will be included in this project. For the first time, UEN will also be able to feature tools specific to a certain audience such as test-preparation resources for high school students or literacy programs for primary grade students.
3. *Universal Accessibility* - UEN intends to test and redesign all pages to assure they meet universal accessibility requirements.
4. *Annual Review Process* - This project goal also includes a process for conducting annual review and refresh of online projects.

**New web applications.** Each request will go through a process to conduct a needs assessment, develop a statement of work, and consult with our respective committees as we make decisions on developing or outsourcing these new web applications. Three projects slated for this process in the coming year are:

1. *Electronic Portfolio Tool* – This would provide an online interface for preservice teachers in teacher education programs and for practicing teachers in districts. This tool would interface with my.uen to allow data to be transferred from preparation to practice.
2. *Management Tool for Professional Development* – This tool would assist educators, faculty, and administrators in locating Professional Development offerings, registering online, requesting field-based workshops and programs, evaluating the effectiveness of professional development programs and creating data reports on professional development activities.
3. *Online Assessment Support* – In order to meet requests of the legislature and new federal education initiatives, USOE is implementing online testing tools for students and teachers alike. UEN will support this effort through use of online tools, simplified log-in, and other features that become evident through the needs assessment process.

## **II. KULC Programming**

**Access to Digital Media via KULC.** The new facilities and resources that will become available as KULC's new digital transmitter is brought on-line will provide increased and enhanced opportunities to provide substantially more programming to wider audiences as multicasting is utilized. Specific objectives will include:

1. *Digital Annenberg Channel* – This will provide 24/7 adult learning programming for higher education and professional development programming. This resource will allow expanded programming in critical needs areas, greater access to the resources of Annenberg currently unable to fit on the existing analog channel, increased access to professional development programs, and the ability to test DTV applications with institutions and students.
2. *Streamed Media Library Expansion* - Licensing a streamed media library will allow greater access to video as an educational resource, and will result in increased use of video by Utah teachers.
3. *Streamed Media Research and Development* – With license to a library of content, technical tests on the use of DTV bandwidth to supply a distributed video-server system are slated for the coming year. This is the first use of this type for digital signal in the nation, and puts Utah in a leadership position, able to negotiate better partnerships and pricing nationwide.
4. *OnCourse National Partnership* - A workforce model on ingesting, encoding, indexing, and developing learning objects with digital media is planned for this year. Through participation in this work, and the national OnCourse project, leadership in these areas can be shared with other stations and states on a trade basis for expanded programming and content resources at the local level.
5. *Hybrid Course Development* – By assembling courses and course materials in new ways that take advantage of the best delivery mechanisms for particular learning objectives, educators will be able to differentiate instruction for students. They will no longer be tied to a single mode of “delivery” but be able to design learning environments based on the best match between the objectives, material available, and delivery mode. This project includes identifying several courses and learning environments, working with faculty to create new delivery mechanisms and methods, and conducting research to guide further developments in this area.

**Growth Opportunities for KULC.** KULC is a valuable resource licensed by the Utah Board of Regents and administered by UEN. In order to take advantage of this resource, particularly as it converts to digital, seven projects are slated for the coming year:

1. *Expanded Service in Gap Areas* - Careful examination of the telecourses and programs currently on KULC, as well as a needs assessment (see #2 below) with each institution and ITV use for public education will allow for more concrete programming objectives and expansion of the KULC scope for the coming years.
2. *Needs Assessment* – Conducting a needs-assessment with each of the higher education institutions will provide greater understanding and insight. This assessment will form the basis for further projects and developments.
3. *Support KUED Projects* – Partnership with KUED for educational projects, local productions, additional program sources, and program-specific promotion helps maximize the benefit and minimize the cost to both stations.
4. *Local Productions* – KULC provides opportunity for institutions to broadcast local productions, such as student-produced news programs, key lectures and symposia, student recruitment programs, and others. With the cooperation of the institutions, this is an area of programming KULC would like to expand in the coming year.
5. *Additional Programming* – With institutions and other broadcast partners, KULC is always looking for free or low cost programming resources that support the mission.
6. *Promotion* – By tying promotion tools to specific programs, greater audience reach and buy in is created. With this project, KULC intends to create institution-specific announcements to be aired at the beginning and end of each telecourse directing viewers to the respective institution's distance education web site. This is a valuable marketing resource for the institutions.
7. *KULC Web Site* - Further expansion of the KULC web site as a valuable supplement to the on-air programming will increase the vitality of the broadcast service.

## **III. Workforce Development.**

Mutually beneficial partnerships will be facilitated and supported with businesses, state agencies, workforce, and education partners. These relationships provide a substantial level of synergy and bring valuable resources that can be implemented to benefit all of education. Strong partnerships with business, workforce, adult

learning, applied technology and career development stakeholders will be increased through the following projects:

1. *Internships* – An internship program with the Davis Applied Technology Center will enable connections between student’s class experiences and the IT field.
2. *Board Participation* – Through active participation on several state boards, UEN can enhance the board’s mission and bring added attention and benefit to UEN in a mutually beneficial relationship. Board participation in this area includes the Utah Association of Adult Continuing and Community Education, Utah Information Technology Association, Utah’s Access to Community Technology Integration Outreach Network, and Utah Career Resource Network.
3. *Multimedia Education* – This project encompasses hosting a multimedia educators retreat to gain new skills, and a multimedia arts festival for students in both secondary and applied technology settings to showcase their work.
4. *Internet 2* – Work in this project entails creating liaisons between Internet 2 research institutions, other institutions, and secondary schools to take advantage of bandwidth and additional content available on Internet 2.

#### **IV. Professional Development.**

Providing high quality, sustainable professional development programs is a priority for UEN. This role is viewed in a leadership capacity – helping to build skills and knowledge of technical resources among a critical mass of educators in each school and institution in the state. This allows for greater strength at the local level and provides a more sustainable model. To meet this need, UEN’s first goal area includes planning for a systemic approach, while at the same time offering programs for high need areas that are not currently served. Four projects are included in this area:

1. *Basic Skills* – In order to address the national minimum technology competency requirements called for in the No Child Left Behind legislation, UEN intends to develop and implement a basic skills series that can be implemented at the local level through effective field-based programs.
2. *Web Academy* – Sustained professional development models are best attained by building an ongoing learning community and support system. Development of this academy will include in person and online supports and provide a prototype model for development of other sustained programs. This is a deviation from the usual one or two day workshop model, and has great potential for professional development in other areas.
3. *Lab Managers* – In many K-12 settings, a paraprofessional or volunteer is tasked with maintaining the lab equipment and assisting teachers and students. Our research indicates that the level of knowledge these personnel have on UEN resources like Pioneer and the Curriculum Search tools is very limited. In order to fill this gap, plans include development of brief modules and support materials that can be used to assist the lab managers as they assist teachers and students.
4. *Hybrid Professional Development* – New licenses for Blackboard and testing on H.323 mean that professional development can now expand beyond the face-to-face model. Plans in this area include designing several ‘hybrid’ models and assessing their effectiveness.

Although UEN Professional Development has moved to a very field-based approach, it is felt that implementation of the projects described above will expand this service even more. Six projects are planned to meet this goal:

1. *Field Trainings* – Staff will be assigned to field-based trainings, particularly with identified field-based trainers in the schools and districts.
2. *UEN Resources* – Staff will promote web-based UEN resources such as Pioneer, Curriculum Search, Core Links and Lesson Plans, MarcoPolo, Streaming, and online projects.
3. *Web Tools* – By improving users’ ability to access professional development materials, handouts, tutorials, and personnel, the number served will be increased.
4. *Teacher Education Programs* – In addition to the Portfolio Tool described above, greater partnerships with Teacher Education Programs will assist in building a knowledgeable and skilled teacher workforce in the districts. The lesson plan tool, in particular, has great application for Teacher Education programs, and encourages preservice teachers to utilize technology resources for instruction from the outset.
5. *Faculty Assistance Centers* – Service for faculty in the colleges of arts and sciences will be coordinated through the faculty centers at various institutions. In this way, specialized help from UEN and local, ongoing support will be achieved.

6. *Development Clearinghouse* – Through “No Child Left Behind,” school districts are becoming increasingly accountable to be sure that teachers hold specialized endorsements and qualifications for every course they teach. UEN intends to work with the teacher education programs and USOE licensure office to identify these courses, as well as state and national resources, and develop a clearinghouse listing to assist districts in locating distance education sources for these programs.

Many professional development activities occur through grant programs administered by UEN. Our goal in this area is to continue to meet the grant requirements for each program and identify further opportunities for grant partnerships that support professional development. Goals in this area include grants for:

1. *Intel Teach to the Future* – UEN will conduct year 2 activities and plan expansion.
2. *PBS TeacherLine* – Offer online professional development particularly in math and technology.
3. *Integrating Technology with Curriculum (ITC)* – This is an overview workshop introducing educators to the concepts, tools and resources for technology and curriculum integration. UEN and its funding partners intend to support 40 ITC workshops in the coming year.
4. *MarcoPolo* – UEN will support increased utilization of these national curriculum resources through curriculum alignment and field-based professional development.

## Appendix A - Project Plans

### Planning, Policy, and Financial

Objectives Funding, Lead Responsibility	Tasks	Completion Date:
<p>1 Strategic Planning, Management, and Support process will be implemented to assure the development, documentation, review, and progress reporting for and to all managers and, where applicable, staff, users, stakeholders, and constituents.</p> <p>Funding: \$ _____</p> <p>Project Leader: <u>George Brown</u></p>	<ol style="list-style-type: none"> <li>1. Manage and facilitate the Network's strategic planning process.</li> <li>2. Coordinate the process in the Planning Task Force of quarterly reporting and accountability.</li> <li>3. Assure that all stakeholders have opportunity for input into plan and budget.</li> <li>4. Assure that the plan, budget and quarterly updates are posted to the web in a timely manner.</li> </ol>	<p style="text-align: right;"><i>April - June 2003</i></p> <p style="text-align: right;"><i>Quarterly October 2002, January 2003, April 2003 July 2003.</i></p> <p style="text-align: right;"><i>April - June 2003</i></p> <p style="text-align: right;"><i>Quarterly (see above)</i></p>
<p>2. Develop a strategy to maximize the funding needed to support the Network facilities and services.</p> <p>Funding:</p> <p>Project Leaders: <u>Steve Hess</u> <u>Mike Petersen</u> <u>George Brown</u> <u>Lisa Kuhn</u></p>	<ol style="list-style-type: none"> <li>1. Prepare the Annual Legislative Appropriation Request.</li> <li>2. Prepare reports for Interim Committees and Appropriations Subcommittees.</li> <li>3. Respond to requests for information from the Legislative Analyst's Office, the Governor's Office, and Office of Legislative Research and General Counsel.</li> <li>4. Identify new grant sources and develop and submit grant applications to acquire grants from federal, business, and private sources.</li> <li>5. Maximize E-Rate funding.</li> </ol>	<p style="text-align: right;"><i>November 15, 2002</i></p> <p style="text-align: right;"><i>Ongoing</i></p> <p style="text-align: right;"><i>Ongoing</i></p> <p style="text-align: right;"><i>Ongoing</i></p> <p style="text-align: right;"><i>Sept. 2002, Mar. 2003</i></p>
<p>3. Implement Bandwidth Management processes and policies.</p> <p>Funding</p> <p>Project Leader</p>	<ol style="list-style-type: none"> <li>1. Assess current bandwidth management tools, procedures and policies.</li> <li>2. Investigate and define procedures and tools that will improve the management process.</li> <li>3. Generate policies that may be required to facilitate proper management procedures.</li> <li>4. Assess performance measures and update as appropriate.</li> </ol>	<p style="text-align: right;"><i>Sept. 2002</i></p> <p style="text-align: right;"><i>Sept. 2002</i></p> <p style="text-align: right;"><i>Nov. 2002</i></p> <p style="text-align: right;"><i>Ongoing</i></p>
<p>4. Adopt Federal Security Process and Plan</p> <p>Funding</p> <p>Project Leader <u>George Brown</u></p>	<ol style="list-style-type: none"> <li>1. Review federal legislation and Executive Orders.</li> <li>2. Define implications to Network.</li> <li>3. Implement policies, standards, protocols, and processes aligned with the legislation to protect network infrastructure, resources, and data.</li> </ol>	<p style="text-align: right;"><i>Sept. 2002</i></p> <p style="text-align: right;"><i>Jan. 2003</i></p> <p style="text-align: right;"><i>Jun. 2003</i></p>
<p>5 Define Network Security Policy</p>	<ol style="list-style-type: none"> <li>1 Identify issues addressed by other states.</li> <li>2. Review federal and state legislation for implications.</li> </ol>	<p style="text-align: right;"><i>Sept. 2002</i></p> <p style="text-align: right;"><i>Sept. 2002</i></p>



Funding: Project Leaders: <u>George Brown</u> <u>Troy Jessup</u>	3. Generate policy proposal 4. Review with appropriate entities and individuals 5. Present to Steering Committee for approval	<i>Oct. 2002</i> <i>Oct. 2002</i> <i>Nov. 2002</i>
6. Assure Data Privacy and Access in compliance with GRAMA Funding Project Leader: <u>George Brown</u>	1. Address appropriate data retention schedules and data designations. 2. Work with school district and other data owners to include data privacy in their retention schedules. 3. Generate appropriate data designations through the State Records Committee process to assure data privacy.	<i>Sept. 2002</i> <i>Dec. 2002</i> <i>Mar. 2003</i>
7. Establish a Network Performance Monitoring System Project Leader <u>Rick Cline</u>	1. Propose and request Steering Committee approval of performance indicators. 2. Develop data collection procedures. 3. Develop formats for reporting results. 4. Pilot-test reports. 5. Prepare and distribute reports	<i>Sept. 2002</i> <i>Sept. 2002</i> <i>Sept. 2002</i> <i>Dec. 2002</i> <i>Dec. 2002</i>
8. Review Needs Assessment and Evaluation Funding Project Leader Mike Petersen	1.	<i>On-going</i>

### Network Infrastructure and Services

#### Goal I. Core Speed, Reliability and Capacity

Objectives Funding, Lead Responsibility	Tasks	Completion Date
1. Finish Ethernet first phase (Core Ring) Funding Project Leader Pete Kruckenberg Dan Patterson	1. Determine hardware vendor 2. Install Circuits 3. Install Hardware 4. Test traffic 5. Go live	<i>Summer, 2002</i> <i>Summer, 2002</i> <i>Summer, 2002</i> <i>Summer, 2002</i> <i>Summer, 2002</i>
2. Plan and communicate the Ethernet Phase 2 Project Funding Project Leader Barry Bryson	1. Barry to lead 2. Develop draft plan	<i>Spring 2002</i>

<p>3. Assist Weber State University in planning and implementation of a campus alternate path and Davis Campus connectivity</p> <p>Funding</p> <p>Project Leader Pete Kruckenberg</p>	<p>1. Vendor walkthrough and bidding process 2. SHARPS implementation 3. Installation of alternate path</p>	<p>Summer 2002 Summer 2002 Fall 2002</p>
<p>4. Assist Utah State University in pursuing alternate path options to Cache Valley</p> <p>Funding</p> <p>Project Leader Barry Bryson</p>	<p>1. Conduct talks with ATT BNS 2. Participate in Cache Valley initiative; Barry 3. Pursue opportunities with ITS</p>	<p>Summer 2002 Ongoing Summer 2002</p>

**Goal II. Increased Rural Capacity**

Objectives, Funding, Lead Responsibility	Tasks	Completion Date
<p>1. Complete Eskdale Connectivity</p> <p>Funding</p> <p>Project Leader Jeff Egly</p>	<p>1. Establish microwave path 2. Use microwave radios decommissioned from SE 3. Install and test equipment for use by Fall Term 2002</p>	<p>Summer 2002 Summer, 2002 Summer, 2002</p>
<p>2. Implement GigE circuits in the Uintah Basin</p> <p>Funding</p> <p>Project Leader Jeff Egly</p>	<p>1. Sign Contract 2. Upgrade Routers 3. Install Circuits 4. Connectivity Testing 5. Go Live</p>	<p>May, 2002 Summer 2002 Summer &amp; Fall 2002 Fall 2002 Fall 2002</p>
<p>3. Make decisions about move from Mossback to Clay Hills site</p> <p>Funding</p> <p>Project Leader Jeff Egly</p>	<p>1. Determine costs 2. Make recommendations to Steering Committee</p>	<p>Summer, 2002 Summer, 2002</p>
<p>4. SE Bandwidth and video project</p> <p>Funding</p> <p>Project Leader Jeff Egly</p>	<p>1. Increase bandwidth from Moab to Blanding 2. Increase bandwidth from Price to Moab 3. Replace Nortel Equipment and upgrade routers in the southeast</p>	<p>Summer, 2002 Summer, 2002 Summer, 2002</p>
<p>5. Find a home for the OC-3 microwave radios</p>	<p>1. List options</p>	<p>Summer, 2002</p>

Funding Project Leader Jim Stewart	2. Make recommendations to Steering Committee	Summer, 2002
6. Increase capacity in Millard County Funding Project leader Jeff Egly	1. Add T-1 Circuits to the DO in Delta	Summer 2002
7. Increase capacity in Emery County Funding Project Leader Jeff Egly	1. Add T-1 circuits at Green River HS and Castledale	Dependent on E-rate funding
8. Assist Grand county in reorganizing and improving access Funding Project Leader Tony Bueno	1. Tony working with Jeremy Winder to determine timeframe and steps	Summer 2002

**Goal III. Formalize Stakeholder Relationships**

<b>Objectives Funding, Lead Responsibility</b>	<b>Tasks</b>	<b>Completion Date</b>
1. Fully implement NOA, SLA and Network Connection agreements Funding Project Leader Jim Stewart	1. UBATC, NUES and nine districts, Tony 2. SLCC, Granite, Jordan, Murray & SLC; Jim 3. UVSC, Nebo, Alpine & Provo; Mike/Pete 4. SEDC & 6 Districts; Dan 5. SESC, Grand, Carbon, Emery, San Juan & CEU; Jim 6. USU, Box Elder, Cache & Logan; Barry 7. WSU, DATC, Davis, Weber & Ogden; Barry 8. CUES, Snow, Snow South and Districts; Dan	August, 2002 August, 2002 August, 2002 August, 2002 August, 2002 July, 2002 August, 2002 August, 2002
2. Provide the NOA/SLA/Connection agreements on line Funding Project Leader <u>Jim Stewert</u>	1. Shellie, Dan and Jim to coordinate	TBD
3. Provide an effective Scorecard and publish this regularly	1. Dan establishing prototype 2. Develop subset of districts to beta	Summer 2002 Fall 2002

Funding Project Leader <u>Dan Patterson</u>	3. Full implementation to all districts	Spring 2003
4. Develop methods to track UEN performance on the NOA/SLA Funding Project Leader Dan Patterson	1. Dan & Tony to determine steps	Summer, 2002; ongoing
5. Provide training for the use of Network Management Tools Funding Project Leader Dan Patterson	1. Regional T Forum meetings 2. Individual and districts	As requested As requested
6. Regular T Forum Meetings Funding Project Leader Jim Stewart	1. Determined by regional co-chairs, supported by the advocates	Ongoing
7. Develop process to effectively use the Remedy Help Desk software Funding Project Leader Dan Patterson	1. Dan & Tony to determine steps 2. Coordinate with TS Management 3. Communicate to Stakeholders	Ongoing Ongoing Ongoing

**Goal IV. Update Routers and Switches**

<b>Objectives Funding, Lead Responsibility</b>	<b>Tasks</b>	<b>Completion Date</b>
1. Develop Replacement Priorities list Funding Project Leader Jim Stewart	1. Work with Regional Leaders 2. Publish list on Web site 3. Determine cost and develop plan	Ongoing
2. Support increased E-rate reimbursement Funding Project Leader Jim Stewart	1. Louise Tonin to regularly attend Tech Services Management Meeting 2. Advocates to discuss support with region contacts	Every 2 weeks Summer 2002; Ongoing

**Goal V. Maintain Microwave Assets**

<b>Objectives Funding, Lead Responsibility</b>	<b>Tasks</b>	<b>Completion Date</b>
1. Make decisions about move from Mossback to Clay Hills site  Funding  Project Leader Jeff Egly	1. Determine costs  2. Make recommendations to Steering Committee	Summer, 2002  Summer, 2002
2. Find a home for the OC-3 microwave radios  Funding  Project Leader Jim Stewart	1. List options  2. Make recommendations to Steering Committee	Summer, 2002  Summer, 2002
3. Develop replacement plan  Funding  Project Leader Jim Stewart	1. Inventory all assets 2. Determine spare equipment needs/costs 3. Write and distribute replacement plan	Summer 2002 Summer 2002 Fall 2002

**Goal VI. Develop Relay Site Agreements**

<b>Objectives Funding, Lead Responsibility</b>	<b>Tasks</b>	<b>Completion Date</b>
1. Establish Written Agreements  Funding  Project Leader Ed Ridges Jeff Egly	1. Ed Ridges to define scope and tasks 2. Identify all site components. 3. Determine site ownership. 4. Develop access policy. 5. Complete written agreement for each site. 6. Begin with sites co-located with ITS. 7. Complete balance of microwave sites. 8. Complete translator sites. 9. Identify sites for which formal agreements will not be adequate.	June 2002 On-going  June – July 2002 Fall 2002 July 2002 - June 2003

**Goal VII. Develop Video Streaming Infrastructure**

<b>Objectives Funding, Lead Responsibility</b>	<b>Tasks</b>	<b>Completion</b>
1. Develop VoIP plan  Funding  Project Leader Jim Stewart	1. QoS model and implementation 2. Cooperative Trunking 3. Call Management development	Summer 2002 Summer 2002 January, 2003
2. Complete the H.323 pilot project  Funding	1. Evaluate the training project in the SESC region and develop a written report	Winter 2003

Project Leader Dan Patterson	2. Install, test and use the MCU	Summer 2002
	3. Install a new Audio conference bridge	Summer/Fall 2002
	4. Install, test and demonstrate an analog gateway to H.323 EDNET capability	Fall 2002
	5. Assist Rural Regions in adding matching funds to successful grant applications	Fall 2002
3. Implement and Test Video Bridge	1. Dave Devey and Randy Scott	Summer 2002
4. Implement Audio Bridge	1.. Dave Devey and Randy Scott	Fall 2002
5. Configure Router for Multicast	1.. Mike Downie to develop plan	Fall 2002
6. Develop Analog to H.323 Gateway	1.. Randy to determine steps	Fall 2002

**Goal VIII. Diversity Internet Access Points**

Objectives Funding, Lead Responsibility	Tasks	Completion Date
1. Complete the Internet Peering and Bandwidth expansion Project	1. Core Ring dependent	
Funding	2. Establish GigE connection from UVSC to EBC	Summer 2002
Project Leader Pete Kruckenberg	3. Install Touch America transit OC-3 at UVSC	Summer 2002
	4. Install Touch America peering circuit PAIX to EBC	Summer 2002
	5. Disconnect Qwest Internet OC-3	July 1, 2002
	6. Work with Davis District for minimal impact of Qwest circuit deletion	Summer 2002

**Goal IX. Develop/Implement Video Master Plan**

Objectives Funding, Lead Responsibility	Tasks	Completion
1. Develop the elements of the Technical Services Tactical and video master plans	1. IMA Removal	Summer 2002
Funding	2. Microwave upgrade and maintenance	Ongoing
Project Leader Jim Stewart	3. Resources	Ongoing
	4. Digital Video	Ongoing
	5. New Endsite upgrade and maintenance	Ongoing
	6. Public Communication and continuation	Ongoing
	7. QoS pilot and implementation	Ongoing

**Goal X. Increase Digital Video Stability**

<b>Objectives Funding, Lead Responsibility</b>	<b>Tasks</b>	<b>Completion</b>
1. Finish MGX out project  Funding  Project Leader Mike Downie	1. USU 2. DATC 3. SLCC	Summer, 2002 Summer, 2002 Summer, 2002
2. Plan and Communicate the ATM out project  Funding  Project Leader Jim Stewart	1. Jim to lead 2. Develop draft plan	January, 2002

**Goal XI. Complete District T-1 Re-points**

<b>Objectives Funding, Lead Responsibility</b>	<b>Tasks</b>	<b>Completion Date</b>
1. Complete District T-1 Re-points  Funding  Project Leader Jim Stewart	1. Davis District 2. Salt Lake City District 3. Granite District 4. Jordan District 5. Logan District 6. Cache District 7. Weber District 8. Ogden District 9. Others	Summer, 2002 Summer, 2002 Summer, 2002 Summer, 2002 Summer, 2002 Summer, 2002 Summer, 2002 Summer, 2002 TBD

**Goal XII. Complete Statewide Peering Project**

<b>Objectives Funding, Lead Responsibility</b>	<b>Tasks</b>	<b>Completion Date</b>
1. Cooperate with State CIO and Smart Utah CEO to develop understanding of Community Networks  Funding  Project Leader Jim Stewart	1. Pete and Jim to determine tasks.	Ongoing
2. Complete the Internet Peering and Bandwidth expansion Project  Funding  Project Leader Pete Kruckerberg	1. Core Ring dependent 2. Establish GigE connection from UVSC to EBC 3. Install Touch America transit OC-3 at UVSC 4. Install Touch America peering circuit PAIX to EBC 5. Disconnect Qwest Internet OC-3 6. Work with Davis District for minimal	Summer 2002 Summer 2002 Summer 2002 July 1, 2002 Summer 2002

	impact of Qwest circuit deletion	
3. Assist the Utah Valley Community Network group in establishing a Community Network exchange  Funding  Project Leader Pete Kruckerberg	1. Pete to work with UVSC and Utah Valley communities to determine steps	Ongoing

**Goal XIII. Implement Intrusion Detection System**

Objectives Funding, Lead Responsibility	Tasks	Completion Date
1. Install IDS Software  Funding  Project Leader <u>Troy Jessup</u>	1. EBC Installation 2. Analyze data 3. Demonstrate utilization  4. Plan Hub Implementation 5. Implement Software at Hubs 6. Analyze Core and Hub Data	Summer 2002 Summer 2002 Summer 2002  Summer 2002 Fall 2002/ Winter 2003 Ongoing

**Goal XIV. Assist with Firewall Planning and Implementation**

Objectives Funding, Lead Responsibility	Tasks	Completion Date
1. Regional Firewall Training and Implementation  Funding  Project Leader <u>Troy Jessup</u>	1. Emery implementation  2. Communicate with regions 3. As requested by the regions	Summer, 2002  Summer, 2002 meetings Ongoing
2. Fully implement Firewall for UEN.ORG and UEN.NET  Funding  Project Leader Bryan Peterson	1. Bryan & Troy to determine steps	Ongoing

**Goal XV. Provide Security Leadership and Training**

Objectives Funding, Lead Responsibility	Tasks	Completion
1. Statewide Technical/Security Summit  Funding  Project Leader <u>Troy Jessup</u>	1. Operations developing October conference  2. Engineering developing March conference	October and March



**KULC Video Services**

Near Term Objective Funding, Lead Responsibility	Tasks	Completion Date:
1. Upgrade Analog System  Funding \$ _____  Project Leader _____	1.	
2. Build DTV Translator System  Funding  Project Leader	1.	

**Instructional Delivery Services**

**Goal I. Continue and improve the effectiveness and usefulness of EDNET.**

Objectives Funding, Lead Responsibility	Tasks	Completion Date
1. Concurrent Enrollment  Funding UEN Budget  Project Leader <u>Steve Hess</u>  Project Leader Mike Petersen	1. Work with key stakeholders to assure financial viability of the program  2. Support increased cooperation between higher ed and public ed to improve effectiveness of the program for students in Utah high schools	Q1 - Q2  Q1 - Q4
2. Teacher Training  Project Leader Bill Kucera Project Leaders Claire Gardner Rick Cline	1. Work with colleges of education and public school officials to develop and conduct needs Assessment  2. Assist public and higher ed to identify, develop programs for delivery on EDNET	Q1 - Q2  Q3 - Q4
3. ATE  Funding UEN Budget  Project Leader Bill Kucera Project Leader Claire Gardner	1. Work with UCAT officials to develop and conduct needs assessment  2. Assist ATC's to identify and develop programs for delivery on EDNET	Q1 - Q2  Q3 - Q4
4. New intra and Inter-district public ed courses  Funding UEN Budget	1. Assist public ed staff at high schools and districts to identify and develop classes for delivery on EDNET	Q2 - Q4

Project Leader Claire Gardner		
5. New higher ed degree programs to be delivered on EDNET Funding UEN Budget Project Leader Rick Cline	1. Assist continuing ed. Deans to identify, develop, and implement new programs and classes for delivery on EDNET	Q1 - Q4
6. State government and non-profit educational programs Funding UEN Budget Project Leader Mike Petersen	1. Identify appropriate staff at state government agencies and non-profit organizations who have educational training responsibilities	Q1
Funding UEN Budget Project Leader Claire Gardner	2. Assist state government and non-profit staff to identify, develop, and implement programs and classes for delivery on EDNET	Q2 - Q4
7. Refine, Improve EDNET tools, resources Funding UEN Budget Project Leader James Hodges	1. Refine and improve EDNET web pages, web-based reports; Evaluate and upgrade end sites; improve Cme and Remedy help desk software	Q1 - Q4

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

1. Lab and beta testing of new technologies Funding Technical Services Budget Project Leader James Hodges	1. Work with technical services staff to evaluate and test H.323 video conferencing equipment in a lab environment	Q1 - Q2
Funding Technical Services Budget Project Leader James Hodges	2. Work with technical services staff to evaluate and test MPEG 2 based codecs	Q1 - Q2
Funding UEN Budget Project Leader James Hodges	3. Work with Instructional Support and Technical Services staff to implement streamed media services for use by public and higher ed. Teachers throughout the state	Q1 - Q4
2. Initial piloting of instruction delivered with new technologies Funding UEN Budget Project Leader Mike Petersen	1. Assist public ed and higher ed officials to identify instructors and support their preparation of courses that could be delivered with the new technologies	Q1 - Q3

Funding	UEN Budget	2. Pilot test in the field a small number of higher ed and public ed courses to be offered with new technologies	Q3 - Q4
Project Leaders	Claire Gardner Rick Cline		
Funding	UEN Budget	3. Initiate evaluations of H.323 equipment as part of EDNET system (blending EDNET & H.323 in a single event)	Q1 - Q4
Project Leader	James Hodges		
3. DTV		1. Work with KUED/KULC to explore and evaluate possibilities for instructional delivery	Q1 - Q4
Funding	KULC. KUED, UEN Budgets		
Project Leaders	Laura Hunter Phil Titus		

**Goal III. Continue and enhance the value and importance of UENSS as an instructional delivery system.**

1. Cost Effectiveness		1. Assist ATC and higher ed to identify, develop, and implement new programs and classes for delivery on UENSS	Q1 - Q4
Funding	UENSS Budget		
Project Leader	Rick Cline Claire Gardner		
Funding	UENSS Budget	2. Work with stakeholders to increase channel utilization, widen audiences, increase flexibility; thus increasing cost effectiveness	Q1 - Q4
Project Leaders	Claire Gardner Rick Cline Bill Kucera		
2. Quality instruction		1. Work with instructors to improve instruction through training in instructional design and incorporation of new technologies	Q1 - Q4
Funding	UENSS Budget		
Project Leaders	Rick Cline Claire Gardner		
3. Ease of access		1. Work on development of updated web pages for UENSS	Q3
Funding	UENSS Budget		
Project Leader	Claire Gardner		

**Goal IV: Evaluate and plan for the future of UENSS.**

1. What should the system look like in 3-5 years?		1. Work with stakeholders to create 3 realistic scenarios for the future of UENSS	Q1 - Q2
Funding	UENSS Budget		

Project Leader Mike Petersen UENSS Future Committee		
2. Evaluation of alternatives to augment or replace satellite delivered instruction	1. H.323 video conferencing 2. DTV 3. Satellite contract renewal	Q1 - Q2
Funding KULC, KUED, UEN Budgets		
Project Leader James Hodges Dave Devey		
3. Assess advantages of satellite delivery systems	1. Work with stakeholders to create clear and concise documents which portray UENSS strengths and weaknesses	Q1 - Q2
Funding UENSS Budget		
Project Leaders Bill Kucera Claire Gardner		
Funding UENSS Budget	2. Assist with assessment of economic development impacts in local communities	Q1
Project Leader Bill Kucera		

### Instructional Services

#### Goal 1 – Provide web-based resources and services that support UEN stakeholder needs.

Objectives Funding; Project Lead	Tasks	Completion Date
1. Increase accessibility to curriculum resources.  Project Leader: Karen Krier	1. Refine the Core Curriculum authoring and display interfaces.	Q2
	2. Design and implement an easier interface for accessing the curriculum resources. Target specific audiences (students, teachers, adult learners).	Q3
	3. Ensure all uen.org pages meet universal accessibility requirements.	Q4
	4. Establish an annual review process for online projects and tools. Act on review.	Q2
2. Support new web applications as requested by stakeholder groups.  Project Leader: Karen Krier	1. Support the electronic portfolio project.	Q4
	2. Build an online professional development course management tool.	Q3
	3. Support development of online assessment tools and processes with USOE.	Q4

#### Goal 2 – Increase the vitality and scope of KULC.

Objectives Funding, Project Lead	Tasks	Completion Date
1. Expand access to digital media.  Project Leader: Laura Hunter	1. Establish 'Annenberg Channel', promote with stakeholders.	Q2
	2. Distribute content library with locally licensed media.	Q3
	3. Facilitate demo projects with DTV and	Q3

	streamed media. 4. Maintain national partnership with OnCourse. 5. Develop workflow models for digital service. 6. Facilitate hybrid course development using digital media.	Ongoing Q3 Q3
2. Identify and act on growth opportunities for KULC programming in critical needs areas.  Project Leader: Laura Hunter	1. Identify program gaps and expand service to these areas. 2. Conduct institution-based needs assessment. 3. Support KUED projects. 4. Implement local productions with institutions. 5. Identify program sources for expanded service in critical need areas. 6. Identify and implement program-specific promotion strategies. 7. Expand KULC website.	Q3 Q1 Ongoing Ongoing Q2 Ongoing Q2

**Goal 3 –Support workforce and career development programs.**

Objectives Funding, Project Lead	Tasks	Completion Date
1. Increase partnerships with business, workforce, adult learning, applied technology, and career development stakeholders.  Project Lead: Dennis Sampson	1. Implement UEN internship program with DATC. 2. Support the Board of Directors and Annual Conference of the Utah Association of Adult Continuing and Community Education (UAACCE) 3. Support multimedia education and ATE workforce development 4. Participate in the Utah Information Technology Association (UITA) Skilled Workforce Subcommittee 5. Participate in the U of U AOCE UACTION Grant (Utah's Access to Community Technology Integration Outreach Network) 6. Support the Utah Career Resource Network 7. Expand Internet2 to USHE and secondary schools.	Q1 Q1 and Q3 Q1 Q1 and Q3 Ongoing Ongoing Q3
2. Administer Utah Tech CORPS  Project Lead: Dennis Sampson Funding: \$15,500	1. Administer the Intel Utah PC Recycling Program 2. Obtain grant from the national Intel Foundation for the Intel PC Recycling Program 3. Support AmeriCorps* VISTA program 4. Hire new AmeriCORPS* VISTA replacement interns 5. Implement PC-to-TV classroom converter project and post-project evaluation 6. Secure additional funding sources and partnerships for the PC-to-TV Converter project (with KUED TV, etc.)	Ongoing Q2 Ongoing Q1 Q4 Ongoing

**Goal 4 – Provide high quality, sustainable professional development programs.**

Objective Funding, Project Lead	Tasks	Completion Date
1. Develop a systemic approach for providing high quality, sustainable professional development programs and services.  Project Leader: Victoria Rasmussen	1. Develop and implement of basic skills courses which address national minimum technology competency requirements for teachers. 2. Develop and deliver a web academy program for education web site administrators 3. Develop a course and/or materials to support needs of K-12 school lab managers. 4. Implement hybrid models for professional development offerings.	Q1  Q2  Q2  Ongoing
2. Increase the number of teachers and faculty served.  Project Leader: Victoria Rasmussen	1. Increase number of field-based trainings 2. Support and promote UEN web resources 3. Improve and expand internal web tools and external web presence 4. Increase service to higher education teacher education programs. 5. Coordinate service to faculty through campus assistance centers. 6. Serve as a clearinghouse for licensure and endorsement programs delivered to practicing teachers.	Ongoing Ongoing Q2  Ongoing  Ongoing  Ongoing
3. Conduct activities of grant-funded programs in accordance with grant requirements and commitments.  Project Leader: Renee Willemsen; Doug Jones	1. Complete Intel Teach to the Future project and plan expansion. 2. Implement PBS TeacherLine online professional development project. 3. Update and conduct 40 ITC workshops in school districts. 4. Increase utilization of MarcoPolo resources and professional development programs.	Ongoing  Q1  Q4  Ongoing

### Funding Summary

Planning, Policy, and Financial	\$
Network Infrastructure and Services	\$
KULC Video Services	\$
Instructional Delivery	\$
Instructional Support	\$
Total	\$

## ***Appendix B.***

### **BENCHMARKS**

*June 4, 2002*

***Preface:*** *The following benchmarks are intended to establish ultimate outcomes for the partnership represented by the Utah Education Network. Their successful accomplishment will require the 'best efforts' of all partnership entities. As 'ultimate goals', these benchmarks represent and describe those outcomes that will eventually result from the year-to-year efforts which are identified in the annual strategic planning process undertaken by the Network staff.*

#### ***General:***

*The Utah Education Network will:*

- ▶ provide students, teachers, and faculty access to quality, technology-rich, learning resources (including the Internet) in such a way that they can become an integral part of the instructional process in both public and higher education. Public libraries will also be connected, as appropriate, as part of the overall partnership facilitated by the Network, thereby permitted broad citizen access to these resources.

#### ***Student Services:***

*The Network will provide services which will:*

- ▶ assist students in experiencing an enhanced and personalized education characterized by an improved and more productive educational process.
- ▶ provide students with learning opportunities to assist them in developing the information technology and problem-solving skills necessary to be competent, functional, and competitive in the information age.

#### ***Teacher/Faculty Services:***

*The Network will provide or facilitate:*

- ▶ Professional development for Utah's public and higher education teachers and faculty in the use of computers, the World Wide Web, and instructional television to enable them to enhance student learning opportunities.
- ▶ Utah's public and higher education teachers and faculty with the support necessary to permit them to successfully use technology to enrich the educational experiences for their students.

#### ***School/Institution Services:***

*The Network will:*

- ▶ Assist every public school and higher education institution in the process of developing and implementing technology plans to help teachers and faculty be more effective in providing enhanced learning opportunities for students.
- ▶ Work with Utah's public schools and institutions of higher education in developing and/or providing access to learning resources and educational materials that will promote and encourage lifelong learning opportunities.

#### ***Utah's Telecommunications Infrastructure:***

- ▶ The Utah Education Network will contribute to and assist in building Utah's telecommunications infrastructure and will foster an environment that responds to the state's evolving educational telecommunication's needs. To achieve this, the Network will encourage partnerships and facilitate collaboration among all the education stakeholders (e.g., public schools, institutions of higher education institutions, libraries, business, industry, and government).

# Appendix C.

## Utah Education Network February 2002

### **Planning Implications**

#### *Customer Needs and Assessment -*

*In order to fulfill its mission, the Utah Education Network must base all its activities on the fundamental premise of customer service. Both summative and formative research must be conducted.*

#### *Partnership Coordination -*

*The success of the Network will depend on its ability to assist all interested parties to work toward the common goal of using telecommunications technology in the service of education. The Network must empower both its employees and partners, and avoid being territorial. It is critical that services be 'out-sourced' to educational and private enterprise partners where appropriate.*

*In order to ensure that the state's educational-technology needs are met, it is essential that the Network maintain effective partnerships with the State Board of Regents, the State Office of Education, the Governor's Office, the State Legislature, the state's institutions of higher education, the state's school districts, public libraries, and private industry.*

#### *Funding Issues -*

*The Network staff will continue to pursue various funding opportunities and mechanisms. This includes finding more efficient ways to utilize present funding in current prioritizing activities and reallocating existing funds, seeding new ventures, and continually examining the relationship among all Network services. The Network staff should also seek new business partnerships and grant opportunities as alternative sources of revenue.*

#### *Training -*

*Technology is only as effective as the people who use it. To realize the maximum benefits offered by new information services, it is imperative that teachers, administrators, and students receive adequate training. Network staff will be aggressive in educating the learning community in the benefits of utilizing technology to teach and learn.*

*The Network will train all staff to be conversant in the services offered by the Network. The staff will be able to represent the Network's mission, principles and objectives to any and all constituencies and audiences.*

#### Additional implications include:

1. There is significant potential to utilize some channel capacity of digital television to provide, in a broadcast mode, video-on-demand and data to schools and homes.
2. Both pre-service and in-service will continue to be critical issues for the Network. Higher education institutions must focus on the pre-service training of prospective teachers. This pre-service training should concentrate on utilizing the technology in presenting and supporting curriculum.
3. Cooperative planning, collaboration, and the encouragement to adopt standards and guidelines in hardware, software, and curriculum development activities are critical. The better the coordination, the more likely the development of useful educational services and infrastructure across an open, non-proprietary architecture.
4. Traditional institutional boundaries are disappearing. The trend is toward inclusive rather than preclusive environments, especially associated with 'lifelong' learning.
5. The definition of 'resident' for students needs to be changed to accommodate a credible, flexible, and inclusive approach.



6. Among the challenges the Network faces is to provide disadvantaged students with direct and adequate network access. The Network should encourage schools, libraries, and communities to provide Internet access to disadvantaged students and citizens.
7. Library patrons are increasingly requesting improved access to the Internet at their public libraries.
8. There is an immediate need for 'community networks' as a way to extend broadband networking facilities to homes and local governments, particularly in rural areas where many local telephone companies find it unprofitable to provide broadband services. Also, acceptable standards, guidelines, templates, etc., must be developed which focus upon the physical network as well as the applications and content available via these networks. Educational leaders in Utah must be key players in the development and deployment of these networks.
9. Parental involvement must be enhanced and questions regarding how to meet the problems of assuring that there will be pervasive access from the home must be addressed.
10. Every aspect of citizen access to educational services should be evaluated to permit access from homes, local or regional kiosks, community (after-hour) school programs, public libraries, and other easily accessible facilities.
11. All educational processes will be affected by telecommunications technology. The most successful models will include the total and systematic integration of technology into all aspects of the educational process.
12. Educational institutions will see increased competition from business and the private sector in the delivery of educational services.
13. There is an increasing need for universities to seek broadly based alliances in order to meet the ever rising student demands for the best possible educational opportunities.
14. There is increasing tension within educational institutions between those who support the use of new technologies and those who support traditional methods. The tension is focused on how they perceive technology impacting education (e.g., replacement versus transformation).
15. Satellite services are growing as a delivery option for education.
16. Educational policies continue to 'lag' behind technological advances. Issues like articulation, credit, and tuition still need to be resolved. It is likely there will be less money for traditional education which will place a premium on technologically-supported solutions.
17. E-Rate income (discounts) may help lower the on-going costs to school districts and allow for greater financial flexibility in information delivery and school connectivity.
18. There is a great need for 'scalable band-width' to facilitate more flexibility in implementing solutions to the diverse needs of users. The strategic directions of the service providers in the deployment of new and/or enhanced services (i.e., XDSL, ATM, packet over SONET, broad-band ISDN, etc.) may not correlate with the strategic long-term needs of the Network.
20. The Governor's guiding principles, especially regarding the issue that the state should not own the network, continue to be viable.

## FY 2003 BUDGET RECOMMENDATIONS

(INCLUDES A 4.75 % REDUCTION)

JUNE 14, 2002

### Issues

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As discussed previously, final budget numbers are still uncertain. The issues of the shortfall in revenue projections and attendant budget reductions are still to be resolved in a special session of the Legislature. Currently, the Network has been asked by the Governor's Office to prepare documentation regarding budget reductions totaling 4.75% and 9.00%.

The two different levels are related to whether or not public education will be held harmless from further budget reductions for FY 2003. (See Strategic Plan item for further details.)

The amount currently projected at the 4.75 level is \$711,897. When this amount is aggregated with the FY 2002 budget reductions of \$388,700 on-going and \$150,000 one-time funding, the total becomes a staggering amount exceeding \$1.25 million. The categorical budget reductions required to reach these levels are devastating in their impact.

Many hours have been expended in defining the projected and proposed budget for FY 2003. Because of the uncertainty of how and when the Legislature might take formal action on both the FY 2002 and FY 2003 appropriations levels, the budget review meeting scheduled for May 23, 2002, was cancelled.

During the interim, the staff has consulted with the Governor's Office of Planning and Budget, as well as with the Legislative Analyst's Office in an attempt to determine a reasonable course of action. As noted earlier, there are many conditions which remain unresolved, but which will have a significant impact on the Network's budget and attendant plans.

It was concluded that the budget process has to continue and that certain assumptions would need to be made in order for the budget to be presented to the Steering Committee as required by statute. This would, at least, permit the Network to move forward at the beginning of the fiscal year with ongoing financial obligations and to continue those projects deemed critical to the maintenance of the network's resources.

The summary budget included with this item has been prepared at the present appropriations level. Some work has been done for the Governor's Office showing where reductions might be made if a budget reduction of 4.75% were to be implemented. This is not the most dire scenario possible, nor is it the most optimistic. It reflects a middle course of action that can be defended, and yet can be easily restored in the event that circumstances permit. It must be noted that deeper reductions could affect the very viability of the network itself. Detail budgets have not been adjusted awaiting the outcome of the Legislative session.

Prefacing the budget information is a 2003 Budget Highlights page which provides a brief summary of appropriations, budget reduction consequences, key budget actions, and considerations to increase revenue.

As will be noted, there are reductions throughout the budget and all areas have been affected. There has been a significant effort to protect critical services and infrastructure. Further budget reductions would cut deeply into these areas.

## **Recommended Action**

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It is recommended that the Steering Committee approve the FY 2003 budget with the understanding that there will be significant modifications as the Legislature determines how funds (and reductions) will be allocated. Budget modifications will be presented to the Steering Committee in subsequent meetings as required.

# 2003 Budget Highlights

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## 1 State appropriations were reduced by \$3,282,144

- |   |                       |
|---|-----------------------|
| • Loss of one time money (Equipment and Router Replacement) | <b>1,000,000</b>      |
| • DTV Legislative Funding (One-time)                        | <b>1,715,444</b>      |
| • State appropriation base budget reduction (on-going)      | <b><u>566,700</u></b> |
| <b>Total overall reduction in state funds</b>               | <b>3,282,144</b>      |

## 2 Budget reflects possible 4.75% holdback

## 3 Consequences of loss of income

- 10 FTE positions will be lost at UEN by not replacing staff or not filling vacant positions. The full dollar impact of these lost positions will not be seen until next fiscal year.
- No salary increases will be given to UEN staff in FY 2003
- Major reductions in operating budgets will be applied through-out the organization.

## 4 Key FY2003 Budget Actions

- A FY03 project budget of about \$900,00 has been established by pooling savings from throughout the budget. This money will be used to priorities expenditures based upon the recommendations made by the UEN staff managers to the Steering Committee.
- A new Operations & Maintenance budget has been established.
- Reviewing funding sources for all departments. Assuring funds are spent as intended.
- Staff budget recommendations will be reviewed by the Exec. Committee in May, and finalized by the Steering Committee in June.

## 5 Major steps being taken to increase revenue

- Applying for grants: NTIA, Digital Distribution Grant, Teacher line grant, Gates foundation, CPB Future funds etc.
- Maximizing e-rate
- Projects will be more carefully prioritized and planned, to assure that UEN funds are used as efficiently as possible.

# 2003 Budget

## Budget Summary by Departments

**A.**

TECHNICAL SERVICES	Budget FY 2002	Budget FY 2003	Balance
Personnel	3,254,846	3,102,952	(151,894)
Circuit charges / Internet access	5,408,636	5,427,000	18,364
IT Supplies	147,820	147,532	(288)
Travel / Professional Development	167,736	132,349	(35,387)
Instate Travel	85,000	74,100	(10,900)
Capital Equipment	145,510	39,261	(106,249)
Software and maintenance	808,677	740,874	(67,803)
IT Capital Equipment	261,291	183,300	(77,991)
Equipment -- Hub and End Site Development	329,657	165,000	(164,657)
Replacement Routers	150,000	0	(150,000)
Network reliability and capacity project (one-time money)	605,681	0	(605,681)
UEN Project Account	-	899,288	899,288
<b>TOTAL</b>	<b>11,364,854</b>	<b>10,911,656</b>	<b>(453,198)</b>

## Source of Funding

State Approp.	Community Serv. Grant	Grants / Foundations	E-rate	Other	Total
3,006,097				96,855	3,102,952
3,478,500			1,850,000	98,500	5,427,000
147,532					147,532
132,349					132,349
74,100					74,100
38,261				1,000	39,261
740,874					740,874
183,300					183,300
165,000					165,000
0					0
0					0
795,403				103,885	899,288
8,761,416	0	0	1,850,000	300,240	10,911,656

**B.**

INSTRUCTIONAL SERVICES	Budget FY 2002	Budget FY 2003	Balance
Personnel	1,000,398	881,203	(119,195)
Supplies	22,100	23,000	900
Travel / Professional Development	37,000	28,000	(9,000)
Instate Travel	34,800	23,179	(11,621)
Capital Equipment	6,800	5,408	(1,392)
Instructional Services			
Pioneer Library	486,267	465,209	(21,058)
Regional Training and Teacher Training Institute	66,800	143,356	76,556
Partnerships : MarcoPolo / Intel / Teacher line / Gates	262,919	265,920	3,001
Web Design , lesson plans and work shops	152,580	84,640	(67,940)
KULC Programming	263,775	159,000	(104,775)
<b>TOTAL</b>	<b>2,333,439</b>	<b>2,078,915</b>	<b>(254,524)</b>

State Approp.	Community Serv. Grant	Grants / Foundations	E-rate	Other	Total
378,732	460,471			42,000	881,203
23,000					23,000
28,000					28,000
23,179					23,179
5,408					5,408
465,209					465,209
7,769		83,831		51,756	143,356
84,640		265,920			265,920
159,000					159,000
1,174,937	460,471	349,751	0	93,756	2,078,915

INSTRUCTIONAL DELIVERY	Budget FY 2002	Budget FY 2003	BALANCE
Personnel	672,033	537,819	(134,214)
Circuit charges / dial in/ Internet access	34,000	27,000	(7,000)
Supplies	8,100	14,950	6,850
Travel / Professional development	19,500	14,625	(4,875)
Instate Travel	16,000	16,000	-
Capital Equipment	6,500	8,496	1,996
<b>TOTAL</b>	<b>756,133</b>	<b>618,890</b>	<b>(137,243)</b>

State Approp.	Community Serv. Grant	Grants / Foundations	E-rate	Other	Total
537,819					537,819
15,000			12,000		27,000
14,950					14,950
14,625					14,625
16,000					16,000
8,496					8,496
<b>606,890</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>12,000</b>	<b>618,890</b>

C.

UENSS (Satellite System)	Budget FY 2002	Budget FY 2003	Balance
Personnel	471,488	471,488	-
Supplies	111,793	10,305	(101,488)
Instate Travel	4,200	4,200	-
Space Segment	746,169	746,169	-
1-800 phone line / backhaul	98,000	98,000	-
IT Equipment	86,911	88,600	1,689
<b>TOTAL</b>	<b>1,518,561</b>	<b>1,418,762</b>	<b>(99,799)</b>

State Approp.	Community Serv. Grant	Grants / Foundations	E-rate	Other	Total
471,488					471,488
10,305					10,305
4,200					4,200
746,169					746,169
98,000					98,000
88,600					88,600
<b>1,418,762</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>1,418,762</b>

D.

State Approp.	Community Serv. Grant	Grants / Foundations	E-rate	Other	Total
	242,041				242,041
	5,398				5,398
	2,000				2,000
12,803					12,803
	253,660				253,660
				2,000,000	2,000,000
12,803	503,099	0	0	2,000,000	2,515,902

E.

KULC	Budget FY 2002	Budget FY 2003	Balance
Personnel	253,508	242,041	(11,467)
Travel / Professional development	6,500	5,398	(1,102)
Instate Travel	2,000	2,000	-
Capital Equipment	15,000	12,803	(2,197)
Broadcast Engineering			
Transmission and operation of KULC signal	246,974	253,660	6,686
DTV conversion	2,822,748	2,000,000	(822,748)
<b>TOTAL</b>	<b>3,346,730</b>	<b>2,515,902</b>	<b>(830,828)</b>

State Approp.	Community Serv. Grant	Grants / Foundations	E-rate	Other	Total
124,365	342,872				467,237
56,494	50,000			500	106,994
1,020	10,000				11,020
2,500					2,500
4,268					4,268
300,000					300,000
488,647	402,872	0	0	500	892,019

F.

ADMINISTRATION	Budget FY 2002	Budget FY 2003	BALANCE
Personnel	507,769	467,237	(40,532)
Supplies	147,000	106,994	(40,006)
Travel / Professional development	17,500	11,020	(6,480)
Instate Travel	500	2,500	2,000
Capital Equipment	26,500	4,268	(22,232)
Office of Information Technology	321,888	300,000	(21,888)
<b>TOTAL</b>	<b>1,021,157</b>	<b>892,019</b>	<b>(129,138)</b>

PUBLIC INFORMATION	Budget FY 2002	Budget FY 2003	BALANCE
Personnel	173,561	147,372	(26,189)
Supplies	31,000	26,000	(5,000)
Travel / Professional development	9,500	9,500	-
Instate Travel	2,500		(2,500)
Capital Equipment	3,000	2,561	(439)
Projects			
ITV Guide	69,000	48,000	(21,000)
Public relations	142,000	143,125	1,125
<b>TOTAL</b>	<b>430,561</b>	<b>376,558</b>	<b>(54,003)</b>

G.

State Approp.	Community Serv. Grant	Grants / Foundations	E-rate	Other	Total
	147,372				147,372
	26,000				26,000
	9,500				9,500
	2,561				2,561
	24,000			24,000	48,000
	119,125			24,000	143,125
<b>0</b>	<b>328,558</b>	<b>0</b>	<b>0</b>	<b>48,000</b>	<b>376,558</b>

PASS THROUGH	Budget FY 2002	Budget FY 2003	BALANCE
CEU System Support	280,300	257,200	(23,100)
EDNET Site Support			
SUU, DATC, USU, CEU, UVSC, SLCC, UBATC	305,000	291,946	(13,054)
Regional Help Desk Support			
NUES, CUES, SESC, SEDC	219,779	210,372	(9,407)
Regional Training Specialist			
NUES, CUES, SESC, SEDC	257,088	246,085	(11,003)
State Office of Education	222,716	108,533	(114,183)
<b>TOTAL</b>	<b>1,284,883</b>	<b>1,114,136</b>	<b>(170,747)</b>

H.

State Approp.	Community Serv. Grant	Grants / Foundations	E-rate	Other	Total
257,200					257,200
291,946					291,946
210,372					210,372
246,085					246,085
108,533					108,533
<b>1,114,136</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>1,114,136</b>

Operations , Maintenance and Contingency	Budget FY 2002	Budget FY 2003	BALANCE
Building Expansion	840,000	-	(840,000)
Contingency	718,297	516,253	(202,044)
Univ. of Utah Building Maintenance	-	180,000	180,000
Building Maintenance	101,723	61,000	(40,723)
EBC Computer Support	111,630	86,000	(25,630)
<b>TOTAL</b>	<b>1,771,650</b>	<b>843,253</b>	<b>(928,397)</b>

I.

State Approp.	Community Serv. Grant	Grants / Foundations	E-rate	Other	Total
516,253					516,253
105,000				75,000	180,000
61,000					61,000
86,000					86,000
<b>768,253</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>75,000</b>	<b>843,253</b>



DATE: June 6, 2002

**Summary: UEN Budget**

I. REVENUES	Budget FY 2002	Budget FY 2003	Change in Budgets
State appropriations	18,269,444	14,987,300	(3,282,144)
Interest Income	150,000	75,000	(75,000)
Community Service Grant	1,654,126	1,695,000	40,874
Grant / Foundation Support	108,000	248,220	140,220
E-rate	1,860,444	1,850,000	(10,444)
Inner fund transfers	162,115	186,855	24,740
Other	170,371	163,756	(6,615)
Carry Forward			
KULC funds held for DTV	1,071,304	2,000,000	928,696
Grants	170,979	101,531	(69,448)
UEN operating cash	211,185	103,885	(107,300)
<b>TOTAL REVENUES</b>	<b>23,827,968</b>	<b>21,411,547</b>	<b>(2,416,421)</b>

II. SUMMARY OF EXPENDITURES	Budget FY 2002	Budget FY 2003	Change in Budgets
Personnel	5,862,115	5,578,624	(283,491)
Supplies	208,200	195,950	(12,250)
IT Supplies	147,820	147,532	(288)
Travel / Professional Development	257,736	263,405	5,669
Instate travel	140,800	117,779	(23,021)
Capital Equipment	57,800	85,300	27,500
IT Capital Equipment	406,801	183,300	(223,501)
Circuit charges / Internet access	5,442,636	5,454,000	11,364
Software and maintenance	808,677	740,874	(67,803)
Pass through money	1,294,883	1,178,953	(115,930)
UENSS (Satellite System)	1,508,561	1,482,200	(26,361)
UEN overhead	535,241	722,000	186,759
UEN project account	-	899,288	899,288
Building Expansion	840,000	-	(840,000)
Replacement Routers	150,000	-	(150,000)
Contingency	718,297	609,432	(108,865)
Projects	5,448,401	3,752,910	(1,695,491)
<b>TOTAL EXPENSES</b>	<b>23,827,968</b>	<b>21,411,547</b>	<b>(2,416,421)</b>

Table 1 Revenues

## A FORMATIVE EVALUATION INSTRUMENT AND PROCESS FOR EDNET VIDEOCONFERENCING

### Background

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In 2000, the Public Education Curriculum Coordinating Committee was asked by the UEN Steering Committee to streamline and enhance the course approval process for EDNET classes. Today, the Public Education Instructional Content Committee and the Joint Concurrent Enrollment Committee review all EDNET courses. That process has many facets involving public and higher education, UEN, and USOE staff. The EDNET/Satellite teacher evaluation serves several purposes: 1, It is an ongoing formative evaluation, providing teachers with needed feedback on instructional pedagogy. And 2, it serves as a student evaluation of the class, providing a ready assessment of the quality of instruction and program to the course approval committees.

#### **Rationale for a New Instrument**

An extensive review of current literature produced no satisfactory evaluation instrument that was suited to Utah's unique EDNET delivery system and style of delivery. It was decided to create our own instrument. The instrument was created by professional distance learning instructors (within Utah). The instrument was reviewed by a regional polling organization and has been validated by distance learning professionals.

#### **The Instrument**

The EDNET/Satellite Course Evaluation Form exists as a formative evaluation tool, administered by local EDNET Facilitators. Students, with the permission of the teacher and the teacher's administrator, fill out the form. The form is not kept as part of the instructor's personal records. It is returned to USOE for statistical recording, analysis, and appropriate dissemination. The form is currently available at the EDNET Faculty Training Website: <http://www.usoe.k12.ut.us/curr/ednet/training/training/info.html> . Instructions on administering the form are posted on the website as well as included on the simple, one-page form.

#### **Availability of Results**

There are four documents and a PowerPoint presentation that make up this executive summary. Due to the sensitive nature of teacher evaluations, the student forms and the analysis are not widely distributed. The evaluation summaries have been returned to the teacher (only) for their use. Teachers were promised that these

evaluations would not go into their personal folders kept by administration. Jordan School District has requested that EDNET evaluations not be done in their district so as not to compromise their J-PASS evaluation system. Colleges and Universities often do their own evaluations of their distance learning teachers.

### **Summary of First Evaluation**

A mailing to selected EDNET sites in November, 2001 and a follow-up electronic mailing to those sites, produced 1350 responses from high school students from 48 different schools. 57 different instructors were evaluated for 55 courses; many of which are concurrent enrollment classes. Generally, comments were quite favorable for the classes and students would recommend the class to others. Technical problems were minor and have been passed on to EDNET engineering for correction. The evaluations record a quantitative value for each student responding about a teacher. Anecdotal comments (qualitative) are recorded as well. Averages for each teacher and each of ten areas of teaching pedagogy are statistically analyzed. A second evaluation phase is currently underway with almost 500 additional students responding.

### **Evaluations Results**

Separate documents are prepared to illustrate the evaluation and the results. The complete evaluation form is kept at the USOE and is not widely distributed. The following are for your review:

- 1 EDNET/Satellite Course Evaluation Form
- 2 Site Graph (2 pages—Graph and Table)
- 3 Evaluations Received
- 4 Sample Comments from EDNET/Satellite Course Evaluation Form

## **Summary (What We Might Learn From This Evaluation)**

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Evaluations, filled out by students at remote videoconferencing sites, tend to be subjective, especially as we assign arbitrary values to questions and then rank order them into levels or values. The purpose of this type of assessment tool should be kept in perspective when reading these evaluations. The evaluation was done to give teachers an ongoing formative evaluation and to provide needed feedback on instructional pedagogy. The second purpose was to create a student evaluation, which provides a ready assessment of the quality of instruction and content to the course approval committees.

We have observed through analysis of this data:

- That almost all students are satisfied with the quality of instruction they are receiving and the opportunity to receive it.

- That teachers are learning that they must be well prepared and that curriculum and pedagogy must be "reworked" to be presented over EDNET videoconferencing to be effective. EDNET Teacher training is an absolute necessity.
- That minor technical problems do interfere with teaching but can easily be resolved.
- That good teaching techniques in any classroom translate to good teaching via EDNET. Enthusiastic, motivating teachers can capture the attention of their students and valuable learning can take place in a distance learning environment. Distance learning is as good as traditional face-to-face instruction.
- That EDNET technology truly "Bridges Geography to Bring People Together."

### **Readings of Interest (Evaluation in Distance Learning)**

- Cyr, Thomas E. (1997) Teaching At a Distance With Merging Technologies: An Instructional Systems Approach. Center for Educational Development, New Mexico State University, Las Cruces, New Mexico. 418.
- Mantyla, Karen, (2000). The 2000/2001 ASTD Distance Learning Yearbook. McGraw Hill. 168.
- Willis, Barry, (1994). Distance Education: Strategies and Tools. Educational Technology Publications, Englewood Cliffs, New Jersey, 07632. 82-99.





## Guidelines for Administering the *EDNET/Satellite* *Course Evaluation Form*



Utah Education Network  
[www.uen.org](http://www.uen.org)

The Utah State Office of Education has the responsibility of ensuring the programming quality and content of all EDNET/Satellite courses that are delivered to Utah's high school students. The primary purpose of the *EDNET/Satellite Course Evaluation Form* is to help instructors improve their teaching skills as distance educators. This evaluation is completely separate from a school district's evaluation process, and the information gathered would be shared only with the instructor and the Public Education Review Committee. (This committee reviews all public education courses to be delivered over EDNET/Satellite.)

This evaluation form is also replacing the videotape demos that have been requested in the past. However, high school instructors who have not taught over the EDNET/Satellite system must complete a 20-hour training workshop 30 days prior to the beginning of class. Instructors teaching courses at a distance for a second, third, or fourth time need only submit copies of the completed *Course Evaluation Form* from the previous term that the course was taught. These forms should be sent to the USOE at the time of the Course Scheduling Process each year. If you have administered the evaluation this school year for your class, please do not do it a second time.

### Steps for Administering the *Course Evaluation Form*:

#### Before getting started:

**This procedure should be administered by the EDNET/Satellite facilitator at the origination site UNDER THE DIRECTION AND WITH THE PERMISSION OF THE INSTITUTION'S EDNET COORDINATOR, with permission of the course instructor. The evaluation should be administered within the last weeks of the course. Be sure that there are enough copies of the *Course Evaluation Form* for each student at each site.**

A copy of this *Course Evaluation Form* can be found at following Web site:

<http://www.usoe.k12.ut.us/curr/ednet/training/training/info.html>

1. Ask site facilitators to distribute a copy of the *Course Evaluation Form* to each student. Assist students in filling out the top portion of the evaluation form (Term, Class, Originating Teacher, Originating Site, Receiving Site, etc.).
2. Ask site facilitators to indicate via the microphone when the students have completed the evaluation.
3. Ask site facilitators to collect the evaluation forms.
4. Ask site facilitators to make a copy of the *Course Evaluation Forms*.
  - A copy of the evaluations should be given to the instructor.
  - The original evaluation forms should be returned to:

George T. W. Miller, Jr.  
EDNET Faculty Training Specialist  
Utah State Office of Education  
250 East 500 South  
P.O. Box 144200  
Salt Lake City, UT 84114-4200

If you have questions or concerns, contact George Miller: [gtmiller@usoe.k12.ut.us](mailto:gtmiller@usoe.k12.ut.us) or call 801-538-7790.



**Utah State Office of Education/Utah Education Network  
EDNET/Satellite  
Course Evaluation Form**



Please take a few minutes to complete this evaluation. Participation is voluntary and anonymous; candid responses are appreciated.

**EDUCATION**

Term/Semester \_\_\_\_\_ Course Title \_\_\_\_\_ Originating Site/College/School \_\_\_\_\_  
 Originating Instructor's Name \_\_\_\_\_ Your Site \_\_\_\_\_ Your Facilitator \_\_\_\_\_  
Where you are right now!  
 Class Time or Period \_\_\_\_\_

1. What have you liked most about this course?

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

2. What have you liked least about this course?

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

Mark an "x" in the box on the right that best represents your level of agreement or disagreement with the statement. Mark only one box per statement.	1	2	3	4	5	6
	Strongly Disagree	Disagree	Somewhat Disagree	Somewhat Agree	Agree	Strongly Agree
3. I feel like I learned the content of this course.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4. Materials (syllabus, textbook, handouts) provided the necessary information needed to successfully complete this course.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5. Tests and quizzes were a fair measure of the content taught in the course.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6. Homework and classroom assignments were helpful in learning the content of the course.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7. Instructor's expectations for this course were clear.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
8. The instructor provided activities that involved the students so they could learn the content of the course.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
9. The instructor encouraged students in all of the other EDNET classrooms in your class to participate.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
10. The instructor used the technology (overhead document camera, computer presentation, video) well when teaching.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
11. The instructor was available to students for additional help when needed (EDNET, e-mail, phone).	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
12. The site facilitator was professional and helpful.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

13. I would recommend this course to other students:  Yes  No  
 Why? \_\_\_\_\_

\_\_\_\_\_

14. I would take another EDNET class:  Yes  No  
 Why? \_\_\_\_\_

\_\_\_\_\_

We welcome additional comments and suggestions:

\_\_\_\_\_

\_\_\_\_\_

Thank you for your cooperation! Please return this form to the site facilitator.

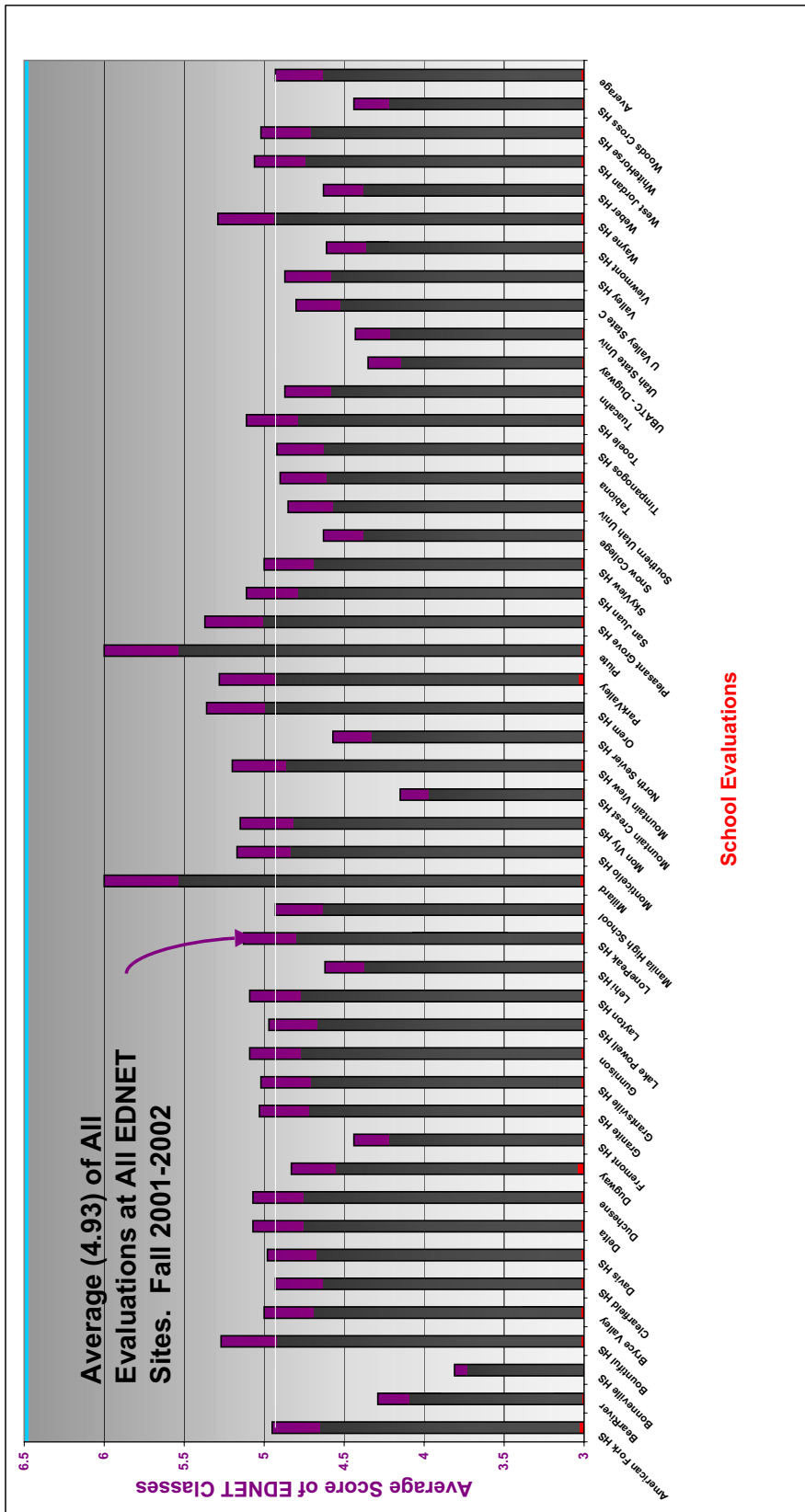


Table 1 Site Evaluations



<b>Evaluations Received:</b>	<b>Average Evaluation:</b>
American Fork HS	4.95
BearRiver	4.29
Bonneville HS	3.81
Bountiful HS	5.27
Bryce Valley	5
Clearfield HS	4.93
Davis HS	4.98
Delta	5.07
Duchesne	5.07
Dugway	4.83
Fremont HS	4.44
Granite HS	5.03
Grantsville HS	5.02
Gunnison	5.09
Lake Powell HS	4.97
Layton HS	5.09
Lehi HS	4.62
LonePeak HS	5.13
Manila High School	4.93
Millard	6
Monticello HS	5.17
Mon Vly HS	5.15
Mountain Crest HS	4.15
Mountain View HS	5.2
North Sevier HS	4.57
Orem HS	5.36
ParkValley	5.28
Piute	6
Pleasant Grove HS	5.37
San Juan HS	5.11
SkyView HS	5
Snow College	4.63
Southern Utah Univ	4.85
Tabiona	4.9
Timpanogos HS	4.92
Tooele HS	5.11
Tuacahn	4.87
UBATC - Dugway	4.35
Utah State Univ	4.43
U Valley State C	4.8
Valley HS	4.87
Viewmont HS	4.61
Wayne HS	5.29
Weber HS	4.63
West Jordan HS	5.06
WhiteHorse HS	5.02
Woods Cross HS	4.44
<b>Average</b>	<b>4.93</b>

Table 2 Site Evaluation Data

Receive Site	Originate Site	Instructor	Class	# ST	AVG	T AVG
American Fork HS	UVSC	instructor names have	Fall01 - Medical Anatomy & Physiology 1315	15	4.79	
	UVSC	been left out for	Fall01 - Advance Health Science - Med Term	6	5.1	
		confidentially concerns.				4.95
BearRiver	WSU		Fall01 - Tech Enhanced Anatomy & Physiology	8	4.29	
						4.29
Bonneville HS	WSU		Fall01 - Tech Enhanced Anatomy & Physiology	7	3.81	
						3.81
Bountiful HS	Davis SD		Fall01 - German I 4720	12	5.4	
	Layton HS		Fall01 - ASL I 4850	12	5.23	
	Davis SD		Fall01 - Japanese I 4860	17	5.18	
						5.27
Bryce Valley	SUU		Fall01 - CAD	4	5	
						5.00
Clearfield HS	Layton HS		Fall01 - ASL I 4850	5	5	
	Davis ATC		Fall01 - Sports Medicine #1 D001	10	5.59	
	Davis SD		Fall01 - Russian I 4800	2	4.55	
	Davis SD		Fall01 - Japanese I 4860	23	4.66	
						4.95
Davis HS	Davis SD		Fall01 - Russian I 4800	9	4.23	
	Layton HS		Fall01 - ASL I 4850	18	5.37	
	Davis SD		Fall01 - Japanese I 4860	46	5.34	
						4.98
Delta	Snow College		Fall01 - English 1500	11	5.07	
						5.07
Duchesne	USU		Fall01 - Math1210	4	5.38	
	USU		Fall01 - Math1050	4	5.06	
	USU		Fall01 - Biology1010	8	4.78	
						5.07
Dugway	CEU		Fall01 - Criminal Justice 1010	3	5.03	
	SUU		Fall01 - Humanities1010	1	4.7	
	Tooele HS		Fall01 - Spanish I 4800	6	4.75	
						4.83
Fremont HS	WSU		Fall01 - Tech Enhanced Anatomy & Physiology	26	4.44	
						4.44
Granite HS	Jordan SD		Fall01 - AP German	2	5.65	
	SLCC		Fall01 - French 1010	1	5.7	
	Kearns HS		Fall01 - AP Spanish 34600	7	3.74	
						5.03
Grantsville HS	UVSC		Fall01 - AVSC1010	2	4.6	
	Tooele HS		Fall01 - Spanish I 4800	9	4.68	
	SLCC		Fall01 - Spanish 1010	7	4.76	
	Davis SD		Fall01 - Russian I 4800	2	5.25	
	DATC		Fall01 - Dental Ast I D001	5	5.11	
	Tooele HS		Fall01 - Algebra 5350	7	5.46	
	Jordan SD		Fall01 - ASL 1	13	5.28	
						5.28

Table 3 Evaluations Received

Receive Site	Originate Site	Instructor	Class	# ST	AVG	T AVG
Gunnison	SUU	instructor names have	Fall01 - CAD	9	5.09	
		been left out for				5.09
Lake Powell HS	USU	confidentialiy concerns.	Fall01 - Inter Algebra Math1050	1	4.9	
	USU		Fall01 - English1010	1	5	
	USU		Fall01 - Chemistry 1010	1	5	
						4.97
Layton HS	Davis SD		Fall01 - Japanese I 4860	33	4.95	
	Davis SD		Fall01 - Russian I 4800	4	4.9	
	Layton HS		Fall01 - ASL I 4850	24	5.41	
						5.09
Lehi HS	UVSC		Fall01 - Medical Anatomy & Physiology 1315	14	4.62	
						4.62
LonePeak HS	UVSC		Fall01 - Medical Anatomy & Physiology 1315	37	5.06	
	UVSC		Fall01 - Advance Health Science - Med Term	15	5.2	
						5.13
Manila High School	USU		Fall01 - Math1210	1	3.9	
	USU		Fall01 - Inter Algebra Math1050	4	4.9	
	USU		Fall01 - English1010	1	4.9	
	USU		Fall01 - Psychology 1010	1	5.6	
						4.83
Millard	Snow College		Fall01 - Psychology 1010	1	6	
						6.00
Monticello HS	CEU		Fall01 - C Algebra 5410	4	5.3	
	CEU		Fall01 - Calculus 5401	5	4.44	
	San Juan SD		Fall01 - Commercial Art / Imaging Art1220	3	5.23	
	San Juan SD		Fall01 - Psychology 6320	5	5.48	
	San Juan SD		Fall01 - Medical Anatomy & Physiology 8563	3	5.93	
	San Juan SD		Fall01 - Spanish I 4704	5	4.86	
	San Juan SD		Fall01 - French I 53	7	4.66	
	San Juan SD		Fall01 - Business English 0	25	5.43	
						5.17
Mon Vly HS	San Juan SD		Fall01 - Business English 0	2	5	
	San Juan SD		Fall01 - Commercial Art / Imaging Art1220	2	4.8	
	San Juan SD		Fall01 - Psychology 6320	9	5.2	
	San Juan SD		Fall01 - Medical Anatomy & Physiology 8563	1	5.6	
						5.15
Mountain Crest HS	WSU		Fall01 - Tech Enhanced Anatomy & Physiology	15	4.07	
	Ogden HS		Fall01 - LatinI 4900	6	4.23	
						4.15
Mountain View HS	UVSC		Fall01 - Medical Anatomy & Physiology 1315	30	5.09	
	UVSC		Fall01 - Advance Health Science - Med Term	72	5.31	
						5.20
North Sevier HS	Ogden HS		Fall01 - LatinI 4900	4	4.57	
						4.57
Orem HS	UVSC		Fall01 - Medical Anatomy & Physiology 1315	1	5	
	UVSC		Fall01 - Advance Health Science - Med Term	14	5.72	
						5.36
ParkValley	Bear River HS		Fall01 - World History 6010	6	5.27	
	Bear River HS		Fall01 - KeyboardingI 8100	9	5.3	
						5.29

Table 4 Evaluations Received Continued

Receive Site	Originate Site	Instructor	Class	# ST	AVG	T AVG
Piute	UVSC	instructor names have been left out for	Fall01 - Advance Health Science - Med Term	1	6	
						6.00
Pleasant Grove HS	UVSC	confidentially concerns.	Fall01 - Medical Anatomy & Physiology 1315	19	5.24	
	UVSC		Fall01 - Advance Health Science - Med Term	56	5.49	
						5.37
San Juan HS	CEU		Fall01 - C Algebra 5410	13	4.59	
	San Juan SD		Fall01 - Business English 0	9	4.7	
	San Juan SD		Fall01 - Commercial Art / Imaging Art1220	5	4.38	
	San Juan SD		Fall01 - Psychology 6320	17	5.32	
	San Juan SD		Fall01 - Drivers Ed 9104	12	5.08	
	San Juan SD		Fall01 - Medical Anatomy & Physiology 8563	18	5.63	
	San Juan SD		Fall01 - French I 53	4	5.58	
						5.04
SkyView HS	Ogden HS		Fall01 - Latin I 4900	8	5	
						5.00
Snow College			Fall01 - English 1500	8	4.63	
						4.63
SUU			Fall01 - CAD	2	4.85	
						4.85
Tabiona	USU		Fall01 - Inter Algebra Math1050	4	5.08	
	USU		Fall01 - English1010	1	4.3	
	USU		Fall01 - History 1300	3	4.93	
	USU		Fall01 - Psychology 1010	4	5.28	
						4.90
Timpanogos HS	UVSC		Fall01 - Medical Anatomy & Physiology 1315	5	4.74	
	UVSC		Fall01 - Advance Health Science - Med Term	22	5.1	
						4.92
Tooele HS			Fall01 - Advance Placement Statistic 5600	10	5.22	
			Fall01- Algebra 5350	10	5.06	
			Fall01 - Spanish I 4800	10	5.06	
						5.11
Tuacahn	UVSC		Fall01 - Sociology 1010	3	4.87	
						4.87
UBATC - Dugway	UVSC		Fall01 - Chemistry 1010	4	4.35	
						4.35
USU			Fall01 - Inter Algebra Math1050	3	5.07	
			Fall01 - Chemistry 1010	3	4.7	
			Fall01 - Human Development FHD1500	7	3.52	
						4.43
UVSC			Fall01 - Psychology 1010	4	4.8	
						4.80

Table 5 Evaluations Received Continued

Receive Site	Originate Site	Instructor	Class	# ST	AVG	T AVG
Valley HS	CEU	instructor names have been left out for confidentiality concerns.	Fall01 - English1010	7	4.36	
	SLCC		Fall01 - Spanish 1010	3	4.7	
	SUU		Fall01 - Humanities1010	11	5.1	
	SUU		Fall01 - Human Development ECD1500	1	5.3	
	SUU		Fall01 - Criminal Justice 1010	10	4.74	
	SUU		Fall01 - English 2110	8	5.09	
	UVSC		Fall01 - Psychology 1010	11	4.95	
	UVSC		Fall01 - Intro to Films TASP1170	1	4.1	
	UVSC		Fall01 - History1700	5	5.1	
	UVSC		Fall01 - Sociology 1010	7	5.23	
						4.87
Viewmont HS	Layton HS		Fall01 - ASL I 4850	17	3.96	
	DATC		Fall01 - Sports Medicine #1 D001	4	5.83	
	Davis SD		Fall01 - Japanese I 4860	23	4.06	
						4.62
Wayne HS	SUU		Fall01 - Humanities1010	10	5.29	
						5.29
Weber HS	WS		Fall01 - Tech Enhanced Anatomy & Physiology	31	4.3	
	Roy HS		Fall01 - ASL	17	4.95	
						4.63
West Jordan HS	Jordan SD		Fall01 - ASL 1	103	5.06	
						5.06
WhiteHorse HS	San Juan SD		Fall01 - Business English 0	4	5.25	
	San Juan SD		Fall01 - Commercial Art / Imaging Art1220	4	5	
	San Juan SD		Fall01 - Psychology 6320	7	4.89	
	San Juan SD		Fall01 - Drivers Ed 9104	9	4.88	
	San Juan SD		Fall01 - Medical Anatomy & Physiology 8563	7	5.49	
	San Juan SD		Fall01 - Spanish I 4704	16	4.63	
						5.02
Woods Cross HS	Davis SD		Fall01 - German I 4720	12	4.48	
	Layton HS		Fall01 - ASL I 4850	15	3.36	
	Davis SD		Fall01 - Japanese I 4860	12	5.49	
	Davis SD		Fall01 - Russian I 4800	12	5.45	
						4.70
<b>Total Number of Students</b>				<b>1319</b>		
<b>Total Evaluation Scores</b>						<b>4.94</b>

Table 6 Evaluations Received Continued

Course Info	Stdf #	CONT3	MAT4	TEST5	ASSIG6	EXPE7	ACT8	PART9	VIS10	ASS11	FAC12	AVE	Other Comments of note.
Snow College	1	6	6	6	6	6	6	6	6	6	6	6.00	Info that I learned very helpful, Prof XXX is a great instructor.
Fail01 - Hu1010	W2	5	5	5	5	5	5	5	5	5	5	5.00	Liked the stories and the teacher. It was a great course and insightful.
Fail01 - Eng1210	3	5	5	2	4	5	5	6	6	6	6	5.00	I learned exactly what I wanted. He made the class fun.
	4	4	5	5	5	5	5	5	5	5	5	4.90	Professor XXX did well at explaining the plays, a good class to learn about Shakespeare.
	5	5	5	3	4	5	5	5	4	4	6	4.60	Disliked not getting our papers back, the instructor sent them and for some reason they would take over a week to get to us. Worthwhile.
Lake Powell HS	D3	1	5	4	5	3	3	4	4	4	6	3.90	Liked the idea of own book. Uncomfortable asking questions due to microphone and delay in response.
Fail01 - Criminal Justice	3	6	6	6	6	6	5	4	5	5	6	5.50	Professor makes the subject so interesting, fun and I learned a lot.
Fail01 - Spanish I 4800	D4	5	5	6	4	4	6	6	6	2	6	5.00	1. Senor XXX is really nice & interacts w/all of the students. 2. Delay when we are talking to the teacher, sometimes it's hard to ask a question bc they have already moved on by the time they hear us. 13. Y. Taking Spanish gives many opportunities. 14. Y. I want to take as many college courses as I can. O. I think our school needs more classes on EDNET that can't be provided at school.
Fail01 - English 1500	D3	5	4	4	5	5	4	4	5	3	5	4.40	EDNET is faster, yet, harder.
Jeanette Anderson	D5	5	5	5	6	5	4	5	6	5	5	5.10	The grades are harder to earn on EDNET.
Tuacahn HS	T2	4	6	3	2	6	6	6	6	6	6	5.10	EDNET is hard to interact with teacher.
Lewis Jones/L Hawks	4	6	6	6	6	6	6	6	6	5	6	5.90	Teacher made class interesting and fun. Also visited the site and made sincere effort to help the class.
Fail01 - Keyboardingl	3	5	5	6	5	6	5	5	5	5	6	5.30	Working over the EDNET was fun and easier then being taught in person.
N.R. Granducci	MC6	5	6	3	5	3	4	4	4	5	6	4.50	Enjoyed seeing people from other schools and the advantage of having classes that are not offered at MCHS.
Fail01 - Latin I 4900	SV6	5	5	5	4	5	5	5	5	4	5	5.00	1. Over the EDNET system, learning a new language. 2. A lot of homework. 13. Y. It was interesting. 14. N. I don't like EDNET.
Fail01 - Business	WH4	5	5	5	6	5	5	5	5	5	6	5.20	It's a wonderful opportunity to learn and express your thoughts. It changes your life.

Table 7 Sample Comments from EDNET/Satellite Course Evaluation Form

Course Info	Stat #	CONT3	MAT4	TEST5	ASSIG6	EXPE7	ACT8	PART9	VIS10	ASS11	FAC12	AVE	Other Comments of note.
Joel Palmer	M2	4	5	5	5	5	5	6	6	5	5	5.10	Liked how it's a very easy environment to learn and you can go at your own pace.
	M5	6	5	6	6	6	6	6	6	6	6	5.90	<i>Finding me! Really looking deeper than my surface, finding where I stand. I look forward to coming to class because of constant encouragement.</i>
Commercial Art / Imaging	M1	6	6	6	6	6	6	6	6	6	6	6.00	1. Some of the assignments are fun, it is easy. 13. Y it is fun and easy A and learn about computers. 14. Y to get a class that the school doesn't have.
Fall01 - Psychology6320	MV6	5	5	4	5	4	6	6	6	5	5	5.10	Course is fun and you get to learn things you never knew. Have fun, be a kid, not like adults.
	WH3	4	4	5	5	4	5	4	4	1	3	3.90	It is all good.
	WH4	6	6	6	6	6	6	6	6	4	5	5.70	Liked that the instructor explains and goes in detail about a subject. I can benefit of a different teaching style and how to communicate.
Fall01 - Psychology6320	M7	5	5	6	6	6	6	6	6	6	6	5.80	In this class you can learn more than you ever knew.
Fall01 - Math1210	D4	4	5	4	5	5	4	5	5	4	6	4.70	EDNET offers more knowledge and harder classes than any high school classes. Challenges you to work harder.
Fall01 - Biology 1010	3	4	3	4	5	5	5	6	5	6	6	4.90	I liked the lecture outline and being available over the internet. Disliked the book used for the course.
Fall01 - Math1050	3	5	5	5	5	5	5	5	5	5	5	5.00	EDNET made it easy to learn and get things done.
Fall01 - Math1050	6	5	4	6	6	6	4	6	6	4	6	5.30	I would take EDNET classes again fro college credit and variety of teachers.
Tabiona HS	LP1	5	5	5	5	5	5	5	5	5	5	5.00	Liked the progress that I have made and not having to pay tuition by taking EDNET classes.
Fall01 - History 1300	3	5	5	4	4	6	4	4	4	3	6	4.50	The teacher is a good at explaining and helping us understand.
Fall01 - Psychology1010	UVS3	5	5	5	4	5	5	5	5	4	5	4.80	XXX is a good teacher. The class was very interesting. Liked EDNET for the college credit.
Cameron John	UVS4	4	5	5	4	4	4	3	6	4	5	4.40	Liked EDNET for the college credit and extra time.
	V1	4	4	2	4	3	4	2	4	4	5	3.80	Hated the test felt as it not enough info was given to best prepare for them. Did enjoy the course subject.

Table 8 Sample Comments from EDNET/Satellite Course Evaluation Form Continued

Course Info	Std#	CONT3	MAT4	TEST5	ASSIG6	EXPE7	ACT8	PART9	VIS10	ASS11	FAC12	AVE	Other Comments of note.
Human Development	3	2	5	2	2	2	2	4	5	3	4	3.10	Liked the homework we didn't have. Disliked the entire course.
SUU	1	5	5	4	6	6	5	6	6	6	4	5.30	My concern is that colleges & universities accept credits from distant learning for us that are trying to work & get a degree. (non-traditional)
UVSC	1	5	4	1	2	4	5	6	5	4	5	4.10	It was fun, the instructor knew what he was talking about and was open for questions.
Fall01 - History 1700	V3	6	6	5	5	6	5	6	6	5	5	5.50	EDNET is a great opportunity and start for college. Like the way Payne teaches and helps us learn.
Christine Gonzales	G2	5	5	5	4	4	3	5	6	5	6	4.80	1. Learning a lot of Spanish. 2. Having to e-mail all of our work & tests. Not playing any games. 13. Y. You learn a lot of Spanish in a short period of time. 14. Y. Small classes & more 1-on-1 help.
	G7	4	5	5	3	4	5	3	5	5	5	4.40	1. I'm learning a different language & to sing in a different language. 2. That I have to be in class 10min before school starts. 13. It was really hard, but if you really wanted to learn then I would recommend. 14. Y. You can't judge the class by the teacher.
SUU	1	5	4	3	4	3	4	5	5	4	5	4.20	EDNET classes help prepare students for college. Things are a lot different between high school and college.
Valley HS	2	4	5	5	4	5	3	3	3	4	5	4.10	I liked the info about the Criminal Justice system.
CEU	1	5	5	4	5	2	3	4	4	5	5	4.20	Disliked the way she teaches and also the way she grades. She is not a very helpful teacher.
Valley HS	2	5	4	4	5	5	4	5	6	6	6	5.00	I would recommend this because it prepares you for college and teaches you a lot. Disliked the grading system.
Tracy Johnson	WH5	5	6	6	6	6	6	4	6	6	6	5.70	Thanks for helping me learn to drive carefully.
	SJ5	6	6	6	6	6	6	6	6	6	6	6.00	1. Get to drive. 13. Y. Because Mr. XXX makes it fun learning. 14. Y. If its from XXX. O. This class is my funniest class of the day.
	SJ6	5	5	6	6	6	5	6	6	6	6	5.70	1. Learning how to follow certain laws and rules that I was not sure about. 13. Y. Good things to learn. 14. Y. You can learn a lot.
Anatomy & Physiology	WH7	6	6	6	6	6	6	6	6	5	6	5.90	The Instructor explains everything and makes things easily understood.
Whitehorse HS	WH2	5	5	6	4	5	4	5	4	5	5	4.80	What I like most about this course is the fact that the instructor is here at our school. If we have questions, we have easy access.
Monticello HS	WH3	1	5	6	3	6	4	4	4	1	4	3.80	I don't like anything about this course because I already know most of the stuff we are doing.
	MT1	6	6	5	6	6	6	5	6	6	6	5.80	1. The teacher is the best one I have had. I really like this class because I learn really easy and the teacher speaks on our level. 2.No personal help from our teacher.

Table 9 Sample Comments from EDNET/Satellite Course Evaluation Form Continued



Course Info	Staff #	CONT3	MAT4	TEST5	ASSIG6	EXPE7	ACT8	PART9	VIS10	ASS11	FAC12	AVE	Other Comments of note.
Fall01 - French I 53	SJ4	6	6	6	6	6	6	6	6	6	6	6.00	I like Mr. XXX'S passion for French and the way he teaches it.
Fall01 - C Algebra 5410	IM4	5	5	5	6	6	6	6	6	6	6	5.70	1. Teacher is very accommodating. He will understand circumstances. 2. Its only an hour long. 14. Getting Associates Degree through CEU.
Fall01 - Calculus 5401	3	5	6	6	5	5	5	5	6	5	5	5.30	1. It is challenging. 2. Teacher not in the class, over EDNET. 13. Challenging good course to know. 14. They're alright.
Dennis Dalton	4	2	2	2	2	2	2	2	2	2	2	2.00	1. Goofing off. 2. Nothing. 13. It is cool. 14. Can't talk to teacher for extra help.
	5	5	5	5	5	6	6	6	6	6	6	5.60	13. Fun class, learn a lot. 14. I am an EDNET addict. I take college classes from CEU.
SUU	SUU1	5	5	3	5	5	3	4	5	4	5	4.40	1. Using the computer was fun & challenging. O. The instructor should be available mostly for question answering. He talks too much and has at times distracting rather than helpful.
Fall01 - CAD	G2	4	5	5	5	5	4	6	4	3	5	4.60	1. Learning new drafting skills. Becoming more familiar with them. 13. Y. Because it's fun and a good learning experience.
Jordan SD	WJ1	5	6	4	5	6	6	6	6	3	5	5.20	1. I have learned a lot about the deaf community. 2. How she signs so fast. I can't understand it. 13. Y. It is fun. 14. Y. I want to take ASL#2.
West Jordan HS	WJ2	5	6	6	5	6	5	6	6	6	6	5.70	1. Learning sign language & being able to communicate w/others using it. 2. I wish the teacher was at our school. 13. Y. It has been such a great experience for me.
Grantsville HS	WJ3	5	6	6	6	6	6	6	6	5	6	5.80	1. Hard, challenging and the teacher knows the material. 2. Hard work. 13. Y. Fun and you can learn a lot. 14. Y. Good experience.
Fall01 - ASL I	WJ4	5	5	5	5	5	5	4	5	5	6	5.00	1. The way she teaches that she keeps going over the info so that we can get even if we miss a day. 2. The test, they are sometimes hard to understand.
Jordan SD	WJ76	4	5	6	6	3	5	4	5	1	6	4.50	1. The teacher's & how they teach, also how helpful they are & just the course itself. 2. Not having the teacher in the classrooms. 13&14. Y.
WSU	W1	3	3	3	5	3	5	2	5	4	4	3.70	1. I have lots of friends in the class. 13. N. It is a lot more studying that I think should be necessary. 14. Y. You can learn from it.
Weber HS	W2	4	4	4	3	4	2	5	5	2	5	3.80	1. It has been very interesting learning abt the human body. I like & love the things that pertain to the body. 2. It's real hard & frustrating when the same & all other technical difficulties occur.
Mountain Crest HS	W3	5	4	3	2	5	4	3	5	3	4	3.80	1. I'm learned a lot. 13. Y. Cause you learn a lot & it is probably a lot easier than taking it in college. 14. N. Cause I like it better when the teacher is right in front of you.

Table 10 Sample Comments from EDNET/Satellite Course Evaluation Form Continued

Course Info	Staff #	CONT3	MAT4	TEST5	ASSIG6	EXPE7	ACT8	PART9	VIS10	ASS11	FAC12	AVE	Other Comments of note.
Fall01 - SPMD001	V4	6	5	4	6	5	6	5	6	6	5	5.40	1. The teacher & learning abt what I'm interested in. 2. Not understanding all on the test. 13. Y. Very helpful & I love learning abt this & being able to discuss hard topics. 14. Y. Wide range of classes.
Fall01 - Japanese I 4860	B2	5	6	6	6	6	5	6	6	6	6	5.80	1. I liked learning abt a foreign culture & a rare language. 2. A lot of students are disruptive in my class & make fun of the teacher. I thing that the class should be more strictly enforced. 13&14. Y.
Davis SD	C15	6	6	6	4	6	6	6	6	6	6	5.80	1. Learning the culture of Japan. 2. The people in my class are very disrespectful & annoying. 13&14. Y. Small classes, informative, more personal.
Viewmont HS	C16	6	5	6	6	6	5	6	6	5	5	5.60	1. It's fairly easy challenging. 13. Y. it's fun & very cool. I enjoy being in this class. 14. Y. It's an opportunity to learn things I otherwise wouldn't be able to learn.
Woods Cross HS	C17	3	4	1	6	6	6	6	6	6	6	5.00	1. Learning abt new things. 2. The hard stuff. 13. Y. It would be fun. 14. Y. To catch up on all the things I miss.
Fall01 - German I 4720	WX4	4	2	6	6	6	6	6	6	6	5	5.30	1. The teacher. 13. Y. It was a fun class & I learned quite a bit. 14. Y. If Plank taught yes.
Grantville	WX6	6	6	6	6	6	6	6	6	6	6	6.00	1. I like the way Mr. XXX teaches. 13. Y. I love to learn new languages & this EDNET gives more classes. 14. Y. It's interesting & I could learn more.
Fall01 - Russian I 4800	WX7	3	5	3	4	6	6	6	4	4	6	4.70	2. it's harder if your more of a one on one student. 13. Y. It's fun. 14. N. I struggle enough as is.
Grantville HS Fall01 - AVSC1010	2	4	5	4	5	4	3	4	6	4	5	4.40	1. It was interesting & like the subject. 2. Test, time difference between school & UVSC. 13. Y. Good course to take if you want to become a pilot, mostly the history of aviation. 14. Y. If it was the only way to take the subject. It is a good way to teach at many schools at once.
Fall01 - Algebra 5350	3	4	5	5	5	4	4	5	6	6	6	5.00	1. I learn a lot & she's a good teacher better then the ones in GHS. 13. Y. I like the teacher. 14. Y. I already am.
Fall01 - APS 5600	2	4	5	5	5	5	5	4	6	6	6	5.10	1. I liked how small the class is. It's much easier to work. 13&14. Y.
Advance Placement	3	4	6	6	5	5	6	6	6	6	6	5.60	1. The social interaction, small class. 2. the lack of focus & constant interruption. Comfortable environment but not for learning. 13. Y. Teaches you to interact w/others & learn how to work w/numbers. 14. N. Not interested in other courses provided by EDNET.
Statistic	4	5	5	5	5	5	5	5	5	5	5	5.00	1. The learning environment. 13. Y. You learn a lot. 14. Y.

Table 11 Sample Comments from EDNET/Satellite Course Evaluation Form Continued

Course Info	Staff#	CONT3	MAT4	TEST5	ASSIG6	EXPE7	ACT8	PART9	VIS10	ASS11	FAC12	AVE	Other Comments of note.
Granite HS	2	5	6	6	6	6	6	6	6	5	5	5.70	1. Speaking in German & watching movies. 2. Homework. 13. Y. It's fun. 14. Y. O. More movies.
SLCC	1	5	5	5	6	6	6	6	6	6	6	5.70	1. Being able to take French even though my schedule @ GHS wouldn't allow it. 2. Not being able to meet personally w/ the teacher. 13. Y. They can take this course if they can't take French @ GHS. 14. Y. I am already taking another.
Fall01 - AP Spanish 34600	3	5	4	5	5	5	6	5	6	5	3	4.90	1. That it something I can do w/ friends. 13. Y. If this is something that they can do then they should bc this class can even give you college credit in the end. 14. Y. I think that some times they can get fun. 4
UVSC	L1	3	5	5	5	5	6	6	6	6	6	5.30	1. Liked all of the labs & movies, bc I'm a visual person. 2. The worst was too many test, but it was kind of nice to have a challenge. 13. Y. It was fun & interesting & liked my teacher. 14. Y. They are not as boring as normal class & more interesting.
Fall01 - Medical Anatomy	MV22	4	4	5	4	4	5	6	6	5	4	4.70	1. Doing labs. 2. Doing the packets. 13. Y. A good way to learn abt the body. 14. Y. I don't mind them.
& Physiology 1315	MV23	6	6	6	6	6	6	6	6	6	6	6.00	1. I have been able to learn things better. 13. Y. It's a good class & you can learn a lot of good stuff. 14. Y. Things are cleaner bc, there are more people to ask questions.
Fall01 - Medical Anatomy	LP32	5	6	5	5	5	5	5	6	5	6	5.30	1. Learning from a teacher from another school. 2. Bone test. 13. Y. Fun something different - learning from an instructor from a different school. 14. Y. I like it a lot more. O. Easier bone test.
& Physiology 1315	LP33	5	6	6	4	4	5	6	6	5	6	5.30	1. I have loved to learn abt the skeletal test. 2. Learning abt the chemistry level of the body. 13. Y. I have learned a bunch. 14. Y. Need an actual teacher, you learn more. O. Get a teacher for every site.
Science - Med Term	PG45	5	5	5	6	5	5	5	6	5	6	5.30	1. Interesting facts. 2. That we are over the TV. 13. Y. If you like to learn abt health, it's fun. 14. Y. Why not. O. A textbook would help.
Rod Jackman	PG46	5	6	4	6	6	6	6	6	5	6	5.60	1. It's interesting. 2. He has the hardest tests I've ever taken. Hard to talk to him through a mic that doesn't work. 13. Y. The things you learn & credit you earn. 14. Y.
Rod Jackman	PG47	6	6	6	6	6	6	6	6	6	6	6.00	1. It's fun. 13&14. Y.
Rod Jackman	O72	6	6	6	6	6	6	6	6	6	6	6.00	1. I love this class so much! It's so much fun. I can't pick just one thing I like. 2. Not having a teacher here in class. 13. Y. I learn so much & it's the funniest! 14. Y. If it's anything like this class, I would love it. O. ?XXX is the coolest & so is YYYY.

Table 12 Sample Comments from EDNET/Satellite Course Evaluation Form Continued

School:	Instructor	Course:	Evaluation comments and concerns:
Bear River HS	Lewis Jones	Fall01 - WH (6010)	Good Teacher comments
Davis ATC	Kevin Karician	Fall01 - Sports Med	Kevin is the new instructor for this course.
Davis SD	Atsuyo Wright	Fall01 - Japanese I	Davis HS technical problems - a lot of dropouts. Old facilitator???
Davis SD	Louis Plank	Fall01 - Russian I	Technical Problems at Clearfield HS.
Layton HS	Shelia Okal	Fall01 - ASL I	Mic problems at Bountiful HS, Davis HS?.
San Juan SD	Tony Wojcik	Fall01 - Art (1220)	"Make sure that teacher doesn't leave for weeks on end." Follow up on this!
San Juan SD	Monty Lee	Fall01 - Psy (6320)	Lets send an EDNET Certification to Monty Lee. Add to D ? Barr?. See George.
San Juan SD	Lyle Nielsen	Fall01 - French I	Bad copies and unreadable. Bad fax transmissions - mail.
Tooele HS	Richard Kroff	Fall01 - Spanish	Teacher Organization, Microphone use
Tooele HS	Palma Cook	Fall01 - Algebra 5350	Tooele HS facilitator is exceptionally good!
USU - Vernal	David Law	Fall01 - FHD (1500)	Low Score.
USU - Vernal	Perry Maxfield	Fall01 - Chem1010	Technical Problems - Microphones
USU - Vernal	Greg Wheeler	Fall01 - Math(1050)	Follow up - Does this class interact w/Duchesne HS?
USU - Vernal	Dave Woolstenhume	Fall01 - Psyc (1220)	Follow up video from Vernal to Manila.
UVSC	Rich Crandall	Fall01 - AVSC1010	Layton HS breakdown, technical problems. UVSC - AVSC1010 schedule difference.
UVSC	Steve Revelli	Fall01 - Med A&P	Lone Peak HS can't talk? Mic problem. Who is Mrs. Young at Lone Peak? Facilitator
UVSC	Steve Revelli	Fall01 - Med A&P	American Fork HS has problems w/mic.
UVSC	Steve Revelli	Fall01 - Med A&P	Pleasant Grove HS video dropouts.
UVSC	Rod Jackman	Fall01 - AD Health Sci	Pleasant Grove HS mic problems.
UVSC	Rod Jackman	Fall01 - AD Health Sci	Mt View HS video dropout.
UVSC	Rod Jackman	Fall01 - AD Health Sci	American Fork HS has problems w/mic.
Weber State University	Richardson/Jacobson	Fall01-Hthsc1105	"Very frustrating w/problems." Technical problems.

Table 13 Evaluation Notes for LSR's



## PROFESSIONAL DEVELOPMENT REPORT

### Issue:

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Evolving role of UEN Professional Development department and prioritizing projects.

### Background:

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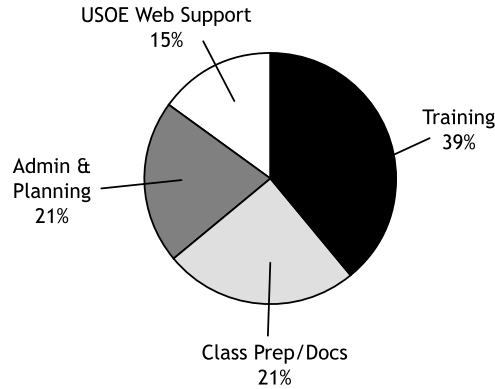
#### Department Overview

The UEN Professional Development department includes one manager, three full-time instructors, one three-quarter time instructor and an administrative assistant. The Intel Teach to the Future project has utilized an additional manager, part-time secretary and up to half the time of one of our regular instructors as a co-manager. The data in the tables does not include the Intel project manager or secretary, and does not deduct any time from our regular instructor for his participation in the Intel project.

During this fiscal year, the majority of our time – 64% -- has been spent on training and directly related activities. 39% of our person days were in training, and 25% spent on class design, preparation, documentation and follow up. Roughly 20% of our time has been devoted to administrative activities such as management responsibilities, scheduling, human networking, planning, professional development, personal leave, meetings, etc. 15% of our total person hours have been devoted to USOE curriculum specialists' web page development and maintenance.

Activity	Days	Total Days	Sub Total %	Total %
<b>Training</b>		<b>438</b>		<b>39%</b>
Field-based (K-12)	230		20%	
Field-based (Higher Education)	32		3%	
At MBH lab in SLC	99		9%	
Conferences	77		7%	
<b>Class Preparation &amp; Documentation</b>	284	<b>284</b>	25%	<b>25%</b>
<b>Administration &amp; Planning</b>	241	<b>241</b>	21%	<b>21%</b>
<b>USOE Web Support</b>	164	<b>164</b>	15%	<b>15%</b>
<b>Totals</b>	<b>1127</b>	<b>1127</b>	<b>100%</b>	<b>100%</b>

Table 1 UEN Professional Development Task Distribution



**Figure 1** Professional Development Activities

UEN Professional Development department services can roughly be grouped into the following categories: provide training resources, conduct training, provide website support, assist with professional development and technology planning.

Our current audiences include: technology trainers, content specialists, school and district administrators, district professional development specialists, individual teachers, groups of teachers at the same school, higher education students, higher education faculty and other government employees. Our informational efforts are spread across all organizational levels: individual teachers, schools, districts, regions and the state level. Assistance from the committee in prioritizing our audiences, or focusing our informational efforts, might improve our effectiveness.

**July 2001 - June 2002 Training Activities**

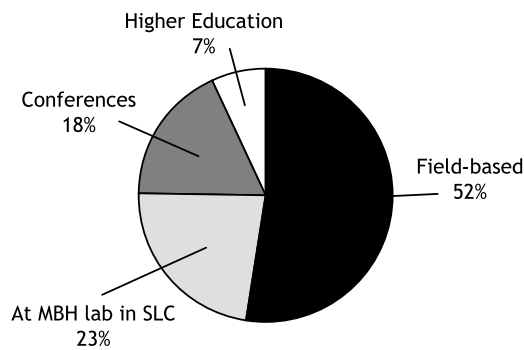
UEN has made the decision in the last two years, based on input from a variety of sources, to move away from networking and system administration training. We refer these requests to other organizations, including UEN Technical Services. (We have had only 3 requests for this type of training since September of 2001.)

Professional Development refocused on creating technology projects using Macromedia software, PowerPoint, digital cameras and video, training on the use of UEN online resources such as Pioneer and various UEN hosted projects and tools. All of our classes now emphasize applying technology tools in the classroom.

Of the classes scheduled on site, all but one of the technology projects classes had five or more participants. On site classes on online resources and strategies for using technology have virtually all cancelled due to enrollments of less than four.

We have emphasized training by request during this year, and as a result about 75% of our training days have been off site. Many of the requested classes include online

resources and strategies, and filled successfully when requested at a school or district level.



**Figure 2** Training Activity and Location

In twelve months, we have served 29 school districts in the state, 20 of which received training in addition to ITC classes. The school districts we did not serve were all located in three of our four rural regions, where UEN supports a regional trainer who utilizes our office only in cases where they need additional assistance.

Although only 3% of our total time was spent delivering training in the higher education arena, this is an increase over last year, and represents in-roads to increasing our services for higher education. We provided training for technology support staff and faculty at CEU, SUU and LDS Business College, and in-class presentations for pre-service teachers at U of U, UVSC, BYU and Westminster. We have established contacts at all of these schools and anticipate them requesting our services more in the future.

### **Evolution**

We have already begun to move away from scheduled one and two day classes at our facility, and emphasized field-based training. One departmental goal for the next year involves more contact with state office curriculum specialists and district level curriculum directors in an effort to support the integration of our technology training through subject areas. This goal is now a greater priority as a result of new federal legislation which defines "high-quality professional development" activities as NOT including short term classes and conferences, but rather "sustained, intensive and classroom focused" along with a variety of other new criteria.

## **Policy Issues or Recommendations:**

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We would appreciate input from the committee on these questions and potential growth areas. Please review the following and plan to participate in a discussion on this during our August Instructional Services committee meeting.

- 1 Since districts all must develop a professional development plan, how can we raise their awareness of UEN Professional Development services and ensure that our service is integrated in their district plans?



- 2 Prioritize the items below, or indicate a percentage of the work effort to be devoted to each item and eliminate those that seem inappropriate:
  - Promote the Test Item Pool, and engage in other U-Pass related activities such as training on COGNOS.
  - Serve as a clearinghouse for materials, ideas and information so that district technology trainers can share resources in a central location (beef up support of C-Forum, for example).
  - Design and maintain websites for USOE curriculum specialists.
  - Determine how to package classes and model technology integration standards, sharing this information with other trainers.
  - Collaborate with district professional development specialists to create online courses on district specific programs such as PowerSchool and PDAs.
  - Train curriculum directors and content specialists in the use of technology, so that they can provide training in their schools and subject areas.
  - Provide training opportunities, recommendations or online resources and support for K-12 school computer lab managers.
  - Focus on technology training for administrators such as principals – if the principal doesn't take a strong lead, many teachers will not use technology in their classroom.
  - Train district technology specialists to help them train teachers on integrating the technology core.
  - Provide web master training and support for teachers and others who are creating and maintaining school and district websites.
  - Spend time modeling for or supporting teachers individually in their classrooms.
  - Assign and evaluate projects or products resulting from our classes – be sure every training experience includes follow up based on in-class application.
  - Deliver informative presentations for pre-service teachers at higher education institutions throughout the state.
  - Arrange training by request for faculty and staff at higher education institutions around the state.
  - Continue to deliver ITC two-day workshops (35 for the 2002 – 2003 fiscal year).
  - Provide instructor(s) to facilitate PBS Teacherline fully online professional development in mathematics and technology.
- 3 Should we participate in the classroom setting with individual teachers? If so, how could this be managed in a fair way? – Only a small number of teachers could be served this way.
- 4 Is there still a place for one and two-day classes for which participants do not receive USOE credit?
- 5 Should we create a plan that allows us to focus on ten school districts per year over a four-year period and provide intensive support to those districts during their year?