Utah Education Network Steering Committee

April 21, 2006

Utah Education Network
Steering Committee

AGENDA
April 21, 2006

9:00 a.m.-
10:00 a.m.

Committee of the Whole

Welcome and Introductions

10:00 a.m.-
11:00 a.m.

Instructional Services Subcommittee

Technical Services Subcommittee Agenda

Steering Committee Business Meeting

U PCOMING M EETINGS

Steering Committee Meeting - June 21, 2006, 9:00 a.m.

Instructional Services Subcommittee Meeting - June 21, 2006, 10:00 a.m.

Technical Services Subcommittee Meeting - June 21, 2006, 10:00 a.m.

Please place these materials in your Steering Committee Binder.

TAB 12

LEGISLATIVE OUTCOMES FOR FY 2007 - DISCUSSION

Issue

UEN's major goals during the recently completed legislative session were to: 1) acquire additional resources to retain key staff members, 2) replace last year's one time allocation used to pay for multi-year telecommunication provider contracts with ongoing funds, 3) continue progress toward increasing network infrastructure at public schools that do not yet have Ethernet connectivity, 4) acquire additional funding to convert the EDNET system from analog to IP-based digital videoconferencing and 5) secure funding for an enterprise-level learning management system in collaboration with the Utah System of Higher Education.

Background

The State Legislature provided excellent support to make progress in two of three areas.

1. Network Infrastructure

Contracts with telecommunications providers to complete Ethernet projects at approximately 85 schools were funded in FY 2006 with one-time allocations. In the FY 2007 budget, one-time funds will be replaced with $1.3 million in ongoing allocations. New network infrastructure projects in FY 2007 will be funded with a one-time allocation of $1.5 million. The one-time funds will allow UEN to initiate contracts to provide high speed Ethernet connectivity to the last group of secondary schools. The final step to complete this project will be obtaining ongoing funds of approximately $1.3 million to pay the multi-year contracts.

2. Conversion of EDNET to IP-based Videoconferencing Technology

UEN will continue the conversion of EDNET to IP-based videoconferencing technology with an additional allocation of $1.0 million in one-time funds. By the end of FY 2007, all EDNET classrooms except for those in the Wasatch front counties will be converted to IP video equipment. Based on our progress, one final allocation of one-time funding will be needed in FY 2008 to finish this project.

This year, we will use one-time funds to pay maintenance contracts for the classroom equipment, MCU's, and management software that have been purchased to this point in the project. The long-term solution will be to acquire ongoing revenue to pay those contracts.

3. Enterprise-level hosting of Course Management System for USHE Institutions

UEN received excellent support from the fiscal analyst's office, the Higher Education Appropriations Subcommittee and the Governor's Office to provide a statewide perpetual license and UEN-provided hosting and technical support for WebCT Vista. Although that request was not funded by the legislature, UEN will be able to support the migration of USU and UVSC to WebCT Vista during the coming year. A more detailed discussion of our FY 2007 plans is provided in Tab 16.

4. Other non-appropriations Legislative Actions

House Bill 289, sponsored by Representative Kory Holdaway, was adopted by the Legislature and signed by Governor Huntsman. HB 289 amended current state laws related to UEN by modifying the definition of UEN, and its duties and authority related to the provision of broadcasting and telecommunication services to ensure that UEN's statutory authority included providing telecommunications services to public education and higher education that meet federal E-Rate regulatory requirements; adds state government and other public entities as entities to which UEN may provide support; and removes references to KULC Channel 9, EDNET, and UtahLink; and licenses KUEN-TV to the State Board of Regents.

Appreciation is expressed to Representative Holdaway for his diligence and effectiveness in shepherding this important bill to UEN through the legislative process. We also appreciate Senator Carlene Walker for her willingness to sponsor the bill in the Senate. It is a reflection of their efforts that throughout the entire legislative process, there was not a single negative vote cast in a committee hearing or during floor debate.

The final, enrolled version of HB 289 is included as Attachment A.

Recommendation

This is an discussion item requiring no further Steering Committee action.

TAB 12 ATTACHMENT A
HB 289: UEN AMENDMENTS

1   **UTAH EDUCATION NETWORK AMENDMENTS**

2   2006 GENERAL SESSION

3   STATE OF UTAH

4   **Chief Sponsor: Kory M. Holdaway**

5   Senate Sponsor: Carlene M. Walker

6

7   **LONG TITLE**

8   **General Description:**

9   This bill modifies provisions related to the Utah Education Network (UEN).

10   **Highlighted Provisions:**

11   This bill:

12   ▸ modifies the definition of UEN, including modified duties and authority related to

13   the provision of broadcasting and telecommunication services;

14   ▸ requires the Legislature to make certain annual appropriations;

15   ▸ adjusts State Board of Education duties relative to UEN;

16   ▸ adds state government and other public entities as entities to which UEN may

17   provide support;

18   ▸ licenses KUEN - TV to the State Board of Regents;

19   ▸ removes references to KULC Channel 9, EDNET, and UtahLink; and

20   ▸ makes other technical changes.

21   **Monies Appropriated in this Bill:**

22   None

23   **Other Special Clauses:**

24   None

25   **Utah Code Sections Affected:**

26   AMENDS:

27   **53B-17-101**, as last amended by Chapter 33, Laws of Utah 1995

28   **53B-17-102**, as last amended by Chapter 243, Laws of Utah 1996

29   **53B-17-103**, as last amended by Chapter 33, Laws of Utah 1995

30   **53B-17-104**, as last amended by Chapter 301, Laws of Utah 2002

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32 *Be it enacted by the Legislature of the state of Utah:*

33   Section 1. Section **53B-17-101** is amended to read:

34   **53B-17-101. Legislative findings on public broadcasting and telecommunications**

35 **for education.**

36   The Legislature finds and determines the following:

37   (1) The University of Utah's Dolores Dore' Eccles Broadcast Center is the statewide

38 public broadcasting and telecommunications facility for education in Utah.

39   (2) The center shall provide services to citizens of the state in cooperation with higher

40 and public education, state and local government, and private industry.

41   (3) Distribution services provided through the center shall include KUED [Channel 7,

42 KULC Channel 9] - TV, KUER - FM [90, the statewide two-way interactive system for video

43 and audio, hereafter referred to as EDNET, Instructional Television Fixed Service, hereafter

44 referred to as ITFS, educational data communications network facilities, hereafter referred to as

45 UtahLink, and satellite uplink and downlink services], and KUEN - TV.

46   (4) KUED - TV and KUER - FM are licensed [and accountable] to the University of

47 Utah.

48   (5) [KULC] The Utah Education Network's broadcast entity, KUEN - TV, is licensed

49 to the Utah State Board of Regents [and, together with EDNET, UtahLink, and the satellite

50 services, is operated by the University of Utah on behalf of the state's systems of public and

51 higher education] and, together with UEN, is operated on behalf of the state's systems of public

52 and higher education.

53   (6) All the entities referred to in Subsection (3) are under the administrative

54 supervision of the University of Utah, subject to the authority [of] and governance [by] of the

55 State Board of Regents.

56   (7) This section neither regulates nor restricts a privately owned company in the

57 distribution or dissemination of educational programs.

58   Section 2. Section **53B-17-102** is amended to read:

59   **53B-17-102.   Utah Education Network.**

60   (1) (a) [The Utah Education Network, hereafter referred to as UEN, is] As used in this

61   part, "Utah Education Network" and "UEN" mean a consortium and partnership between public

62   and higher education established to:

63   [(a)] (i) coordinate and support the telecommunications needs of public and higher

64   education; [and]

65   [(b)] (ii) coordinate the various telecommunications technology initiatives of public

66   and higher education[.];

67   (iii) provide high-quality, cost-effective Internet access and appropriate interface

68   equipment for schools and school systems;

69   (iv) procure, install, and maintain telecommunication services and equipment on behalf

70   of public and higher education;

71   (v) develop or implement other programs or services for the delivery of distance

72   learning as directed by law; and

73   (vi) apply for state and federal funding on behalf of public and higher education.

74   (b) In performing the duties under this Subsection (1), UEN shall:

75   (i) provide services to schools, school districts, and the public and higher education

76   systems through an open and competitive bidding process;

77   (ii) work with the private sector to deliver high-quality, cost-effective services; and

78   (iii) avoid duplicating facilities, equipment or services of private providers of public

79   telecommunications service, as defined under Section 54-8b-2.

80   (2) The University of Utah shall provide administrative management for UEN.

81   (3) (a) The governor shall appoint a statewide steering committee of representatives

82   from public and higher education, state government, and private industry to advise UEN in the

83   development and operation of a coordinated, statewide, multi-option telecommunications

84   system to assist in the delivery of educational services throughout the state.

85   [(4) (a)] (b) Except as required by Subsection [(b)] (3)(c), members shall be appointed

86   to four-year terms.

87   [(b)] (c) Notwithstanding the requirements of Subsection [(a)] (3)(b), the governor

88   shall, at the time of appointment or reappointment, adjust the length of terms to ensure that the

89   terms of committee members are staggered so that approximately half of the committee is

90   appointed every two years.

91   [(c)] (d) When a vacancy occurs in the membership for any reason, the replacement

92   shall be appointed for the unexpired term.

93   [(i)] (e) (i) (A) Members who are not government employees shall receive no

94   compensation or benefits for their services, but may receive per diem and expenses incurred in

95   the performance of the member's official duties at the rates established by the Division of

96   Finance under Sections 63A-3-106 and 63A-3-107.

97   (B) Members who are not government employees may decline to receive per diem and

98   expenses for their service.

99   (ii) (A) State government officer and employee members who do not receive salary, per

100   diem, or expenses from their agency for their service may receive per diem and expenses

101   incurred in the performance of their official duties from the committee at the rates established

102   by the Division of Finance under Sections 63A-3-106 and 63A-3-107.

103   (B) State government officer and employee members may decline to receive per diem

104   and expenses for their service.

105   [(d) (i)] (iii) (A) Higher education members who do not receive salary, per diem, or

106   expenses from the entity that they represent for their service may receive per diem and

107   expenses incurred in the performance of their official duties from the committee at the rates

108   established by the Division of Finance under Sections 63A-3-106 and 63A-3-107.

109   [(ii)] (B) Higher education members may decline to receive per diem and expenses for

110   their service.

111   [(5) (a)] (4) UEN shall locate [EDNET receive and transmit sites and UtahLink data

112   connection sites at various institutions and public schools] and maintain educational

113   telecommunication infrastructure throughout the state.

114   [(b) The] (5) Educational institutions [and other identified public education sites at

115 which hub sites are located] shall manage site operations under policy established by UEN.

116   (6) [(a) The] Subject to future budget constraints, the Legislature shall provide an

117 annual appropriation to operate UEN [to pay for ongoing maintenance and operation costs of

118 EDNET sites serving the state's public education system].

119   [(b) The Legislature shall provide an annual appropriation to fund the ongoing

120 line-costs, maintenance, and operation of the UtahLink sites serving the state's public and

121 higher education systems.]

122   Section 3. Section **53B-17-103** is amended to read:

123   **53B-17-103. General powers of University of Utah related to public broadcasting**

124 **and telecommunication for education.**

125   (1) Subject to applicable rules of the Federal Communications Commission and the

126 State Board of Regents, the University of Utah shall:

127   (a) serve as the state's provider of public television services, with programming from

128 the Public Broadcasting Service and other syndicated and locally produced programs;

129   (b) serve as the state's primary provider of public radio services, with programming

130 from National Public Radio and other syndicated and locally produced programs; and

131   (c) subject to Section 53B-7-103, accept and use gifts and apply for and receive funds

132 from federal and other sources to carry out the purposes of this part.

133   (2) Subject to future budget constraints, the Legislature shall provide an annual

134 appropriation to operate KUED - TV.

135   [(2)] (3) This section neither regulates nor restricts a privately owned company in the

136 distribution or dissemination of educational programs.

137   Section 4. Section **53B-17-104** is amended to read:

138   **53B-17-104. Responsibilities of KUED - TV, KUER - FM, and UEN related to**

139 **public broadcasting and telecommunication for education.**

140   (1) Subject to applicable rules of the Federal Communications Commission and

141 Section 53B-17-102, the State Board of Regents, the State Board of Education, and the

142 University of Utah, <u>KUED - TV, KUER - FM, and</u> UEN shall:

143   (a) coordinate statewide services of public radio and television;

144   (b) develop, maintain, and operate statewide distribution systems for KUED<u> - TV,</u>

145 KUER<u> - FM</u>, [KULC, EDNET, and UtahLink including radio and television translator systems,]

146 an educational microwave distribution system,] <u>and KUEN, the statewide distance learning</u>

147 <u>service, the educational</u> data network<u>, connections to the Internet,</u> and other

148 telecommunications services [distribution systems] appropriate for providing video, audio, and

149 data telecommunication services in support of public and higher education<u>, state government,</u>

150 <u>and public libraries;</u>

151   <u>(c) support the delivery of these services</u> to as many communities as may be

152 economically and technically feasible and lawfully permissible under the various operating

153 licenses[, and, in conjunction with these operations,]<u>;</u>

154   <u>(d)</u> cooperate with state and local governmental and educational agencies and provide

155 leadership and consulting service [in regards to signal distribution] <u>for telecommunication for</u>

156 <u>education;</u>

157   [(c)] <u>(e)</u> represent the state with privately owned telecommunications systems to gain

158 access to their networks for the delivery of programs and services sponsored or produced by

159 public and higher education;

160   [(d)] <u>(f)</u> acquire, produce, coordinate, and distribute a variety of programs and services

161 of an educational, cultural, informative, and entertaining nature designed to promote the public

162 interest and welfare of the state;

163   [(e)] <u>(g)</u> coordinate with the state system of higher education to acquire, produce, and

164 distribute broadcast and nonbroadcast college credit telecourses, teleconferences, and other

165 instructional and training services;

166   [(f)] <u>(h)</u> coordinate with the State [Office] <u>Board</u> of Education and school districts to

167 acquire, produce, and distribute broadcast and nonbroadcast telecourses, teleconferences, and

168 other instructional and training services to the public schools;

169   [(g)] <u>(i)</u> act as a clearing house for the materials, courses, publications, media,

170   software, and other applicable information related to the items addressed in Subsections (1)[(e)

171   and (f)] (g) and (h);

172   [(h)] (j) coordinate with the State [Office] Board of Education to assist in providing the

173   public schools of Utah with the following services:

174   (i) broadcast, during school hours, of educational and administrative programs

175   [approved and scheduled] recommended by the State Board of Education;

176   [(ii) studio production and technical assistance for the creation of educational

177   programs;]

178   [(iii)] (ii) duplication and encoding of program masters for broadcast purposes; and

179   [(iv) nonstudio production services for the compilation of various production elements

180   into completed programs;]

181   [(v)] (iii) program previewing; [and]

182   [(vi) shared] (k) share responsibility with the [Utah] State [Office] Board of Education

183   for [ITV] Instructional Television (ITV) awareness and utilization; and

184   [(i)] (l) [cooperate with] provide teleconference and training services for state and local

185   governmental agencies [to provide teleconference and training services;].

186   (2) UEN shall:

187   [(j)] (a) consult with the UEN steering committee authorized in Section 53B-17-102

188   and other technology coordinating committees established by the State Board of Education and

189   State Board of Regents in acquiring, producing, and distributing instructional [services on all

190   media, and with public advisory committees in acquiring, producing, and distributing public

191   radio and television programs on KUER and KUED] content;

192   [(k)] (b) coordinate the statewide development and implementation of the [electronic

193   highway] data network for education, which shall include video[;] and audio, [and data

194   interconnections] data connections, and connection to the Internet, utilizing satellite,

195   microwave, fiber-optic, and other transmission media;

196   [(l)] (c) utilize statewide economic development criteria in the design and

197   implementation of the educational telecommunications infrastructure; and

198   [(m)] (d) assure that public service entities such as educators, public service providers,

199   and public broadcasters are [granted] provided access to the telecommunications infrastructures

200   that are developed in the state.

201   [(2)] (3) This section neither regulates nor restricts a privately owned company in the

202   distribution or dissemination of education programs.

FY 2007 STRATEGIC PLANNING AND RETREATS – ACTION

Issue

Strategic Planning retreats are scheduled for the coming weeks.

Background

Input to the annual UEN Strategic Plan comes from a variety of groups, such as the regional T Forum meetings, TCC, C Forum, Pioneer Library Committee and others. Members of the UEN Steering Committee, Instructional and Technical Services Subcommittees are invited to participate in annual strategic planning retreats to develop the FY 2007 Strategic Plan.

Rick Gaisford and Cyd Grua are planning the Instructional Services Retreat for May 8 and 9, 2006. It will be held at the Board of Regents office at The Gateway.

The Technical Services Retreat has been scheduled for May 24 and 25 at Utah Valley State College. The agenda will be finalized subject to Steering Committee and other input. A few agenda items have been suggested already. These are:

- Technical priorities presented by region
- State of Utah Registry of Internet Numbering (SURIN) planning
- Review and updating of the strategic plan

UEN Technical Services management will be working with the Subcommittee co-chairs, Ryan Thomas and Glen Taylor, to finalize the agenda and plan the retreat activities. Details will be forwarded. Please schedule these dates and plan on joining us for this important event.

Recommendation

Members of the Steering Committee are encouraged to participate in one or both of the planning retreats. No further action is required of the Steering Committee at this time.

UEN SATELLITE SYSTEM – ACTION

Issue

UEN and Utah State University (USU) are facing critical deadlines over the next year with the satellite system. Consequently, we have mutually concluded that the wisest choice is to convert from satellite to an IP-based videoconferencing system during the summer and early fall of 2007.

Background

An essential component of the satellite delivery system is uplink equipment located at USU. It sends the video signal to the satellite from which it is broadcast to receiving dishes at about 200 classroom locations throughout the state. The useful life of that equipment has now been passed, and we are dependent upon spare parts which we purchase from a broker to keep the uplink equipment operating. New parts have not been manufactured for approximately 5 years. The combination of aging equipment and an increasingly unreliable source of replacement parts make continuing to use the uplink equipment an unacceptable risk beyond next summer.

For the past several months staff from UEN and USU have been researching and evaluating our options. Option 1 is to upgrade the satellite system and use it for the next several years as the primary distance learning system for USU. To re-establish the viability of the satellite system, new uplink equipment using a more advanced compression technology (MPEG 4) and receivers capable of receiving MPEG 4 signals would need to be purchased. Based on preliminary pricing estimates, we anticipate the cost of that upgrade would be approximately $780,000.

The second option we have explored is to replace the satellite system with IP-based videoconferencing technology. The initial cost to convert satellite classrooms to IP video equipment would be about $2 million, but within 2 to 3 years the savings from eliminating the annual space segment lease cost would offset that difference.

Based on our research and evaluation, we have concluded that the second option is preferred. Attachment A provides a summary of the advantages and disadvantages of our existing satellite delivery system and transition to IP-based videoconferencing. We have found that the satellite system is reliable and that the video quality is very good. However, it has inherent limitations that are summarized in Attachment A. As USU and UEN staff have become more knowledgeable about IP video, we are confident that it is a better long-term distance learning system.

Based on Steering Committee support for our recommendation, we propose to initiate a year-long effort to phase out the satellite system and replace it with IP video. The

major activities would be undertaken during the summer and early fall of 2007. A steering team with co-leaders from USU and UEN will guide our efforts, and regular status reports will be provided to the Steering Committee.

Recommendation

It is recommended that the Steering Committee review and discuss considerations associated with replacement of the UEN satellite system with an IP-based videoconferencing delivery system. If the Steering Committee is satisfied, it is recommended that UEN and USU staff be authorized to initiate planning to convert the system from satellite to IP video technology according to a timeline aimed at finishing the work by early fall of 2007.

TAB 14 ATTACHMENT A
UENSS FUTURE DIRECTIONS

1. July 1, 2007 is critical date for either continuing the satellite or replacing it with an IP-based videoconferencing system.

   a. Existing Uplink system will no longer be viable beyond that date.

2. What would be the cost to upgrade the satellite system to an MPEG 4-based Uplink system? (Note: pricing is estimated, because MPEG 4 equipment is quite new and receivers are not yet available).

   a. Replace current Uplink with MPEG 4, Cost:

      i. Uplink: $503,000.

      ii. Replace receivers at all receive sites: $132,000.

   b. With miscellaneous additional items, total cost of $780,000.

3. What would be the initial cost to convert the satellite system to an IP-based videoconferencing system?

   a. One-time room costs @ 165 rooms: $1.86 million.

   b. One-time infrastructure cost: $150,000.

   c. Total one-time conversion cost: $2.0 million.

4. Advantages and disadvantages of upgrading the satellite system.

   a. Advantages

      i. Lower initial upgrade cost.

      ii. Lower cost per room for equipment.

      iii. Marginally better quality video.

      iv. Reliability is outstanding.

      v. MPEG 4 technology would allow more channels for the same cost.

      vi. Ubiquitous satellite signal allows for expansion to Utah, western regional, and national locations at minimal additional marginal cost.

   b. Disadvantages

      i. Significantly higher on-going cost, because of annual lease of space segment.

      ii. Limited expansion of channels.

      iii. Inflexible program origination and distribution:

         1. must backhaul all originating programs to Logan uplink.

2. a full channel is required for each program regardless of the number of sites involved.

　　iv. Limited instructional quality.

　　　　1. minimal interactivity because of one-way video.

　　　　2. degraded quality of supplemental graphical materials.

5. Advantages and disadvantages of converting UENSS to an IP-based videoconferencing system.

　a. Advantages

　　i. Because the space segment lease cost will be eliminated, it is likely that ongoing maintenance costs will be lower.

　　ii. Marginally higher room costs produce significant payoff in enhanced instruction/learning results.

　　iii. Greater flexibility in tailoring system to specific site requirements of individual classes and programs (regionality).

　　iv. Creates potential for one university, one faculty, one studentbody with regional campuses and community education centers throughout the state.

　　v. Expansion capability is virtually unlimited at network backbone level, and limited only by number of rooms and circuit capacity at site level.

　　vi. Ubiquitous by using Internet 2 and commodity Internet throughout US and internationally.

　　vii. Instructional quality is enhanced.

　　　　1. Fully interactive with 2-way video and audio.

　　　　2. Dual streaming capability provides higher quality supplemental instructional materials.

　　viii. Network improvements will benefit all aspects of site programs, not just instruction.

　　ix. quality is good, and can be made superior to satellite as network capacity is expanded.

　b. Disadvantages

　　i. Marginally higher initial conversion cost (could be offset by using 1st year space segment savings).

　　ii. Reliability is not yet equal to satellite performance, but is improving.

　　iii. Out of state connectivity will be challenging, but will be possible particularly in nearby out-of-state centers, and where partnerships involve universities with Internet 2.

T A B 15

INTERNET FILTERING – ACTION

Issue

On June 30, 2006 the Utah Education Network's contract with Secure Computing (formerly N2H2) for Internet filtering is up. An evaluation committee was assembled to discuss the districts', regions' and public libraries' needs and to review the various vendor solutions that are currently available. A filtering solution was selected by the committee and UEN is currently waiting for pricing quotes.

Background

The Children's Internet Protection Act (CIPA) mandates schools and libraries receiving certain types of federal funding to:

- Monitor the online activities of minors.

- Use a technology protection measure that blocks or filters Internet access.

For over ten years UEN has helped districts, regional service centers and libraries make the Internet a safe and productive tool for research, teaching and learning by providing a baseline filtering solution.

Currently, UEN has a licensing agreement with Secure Computing. Overall, UEN and most of the school districts and libraries are satisfied with Secure Computing's solution, but it is becoming more apparent that methods for getting content from the Internet have changed and the Secure Computing solution falls short.

Secure Computing only provides filtering for content obtained over http. It does not filter ftp, https, peer-to-peer clients, instant messaging, etc... Also, many districts have a need for LDAP authentication and Secure Computing only supports Windows Active Directory.

In February 2006 UEN assembled a filtering evaluation committee that has representation from each of the T-Forums and from UEN's Technical Services and UEN's Instructional Services staff. Committee members piloted three different filtering solutions and then completed an evaluation matrix.

The committee selected one filtering solution over the others based on the following criteria:

- Provides a comprehensive filtering list that is updated on a daily basis.

- Blocks a variety of protocols (e.g. ftp, instant messaging, peer-to-peer .

- Offers centralized management.

- Authenticates with various LDAP-based directory services.

- Contains extensive reporting functionality.

- Offers increased override capabilities so libraries can easily remove filtering for patrons.

- Allows admin to set limits on students attempting to access "unacceptable sites" (X-Strike).

At this point UEN is waiting for pricing quotes for two different scenarios:

- Plan A - one filtering appliance per district and one at the EBC pop and one at the Dixie pop for redundancy. This plan includes a total of 56 appliances, some are filtering appliances and the others are reporting appliances.

- Plan B - filtering appliances only at pops to cover the exit points. UEN will then use the unused budget allocation to buy down the cost for districts who want to purchase their own reporting appliances.

If the pricing for Plan A exceeds UEN's filtering budget, UEN will need to go with Plan B.

Both of these plans will cover charter schools and the public libraries that rely on UEN for filtering.

It should be noted that a small number of districts have previously purchased and implemented different filtering solutions and will not be using the statewide solution. However, they will still be covered under the UEN licensing agreement if they choose to use the statewide solution in the future.

Recommendation

It is recommended that the Steering Committee approve the filtering plan as outlined.

UEN C OURSE M ANAGEMENT S YSTEM E XPANSION – D ISCUSSION

Issue

Over the next 15 to 18 months, Utah State University and Utah Valley State College will transition from their local WebCT Campus Edition systems to the UEN hosted WebCT Vista service. The University of Utah is also planning to move to UEN's hosted service, probably the following year.

Background

Current UEN Course Management System (CMS) Service

UEN currently hosts all online courses for The College of Eastern Utah, Dixie State College, Snow College and several campuses of the Utah College of Applied Technology. These institutions are all served under an existing license for WebCT Vista (currently version 3.0.6). UEN provides the hardware, software, system administrators, project management, institution administrator training and acts as the support escalation agent to WebCT. UEN also arranged and pays consortium licensing for the Respondus test building software used by many higher education faculty members. Consortium pricing for WebCT training materials is also available through UEN.

Impact of the 2006 Legislative Session

The statewide course management system initiative was prioritized at the top of the higher education appropriations subcommittee recommendations. However, the project did not receive funding in the final appropriations. As a result, UEN has prioritized support for Utah State University and Utah Valley State College for next year, rather than the proposed perpetual license to cover all of Utah's higher education institutions. These two institutions currently use WebCT Campus Edition 4, which will no longer be supported by the vendor after the summer of 2007. It is therefore essential that the migration of USU and UVSC be initiated this year.

Based on our negotiations with administrators at USU and UVSC, the two institutions will continue paying their WebCT Campus Edition license during the migration period. UEN will pay the marginal additional cost required to upgrade their licensing and basic support costs for WebCT Vista. The University of Utah will run their own Campus Edition 6 WebCT servers until they are prepared to migrate to UEN's Vista service.

Planned Changes to Accommodate Service Expansion

UEN is currently installing new hardware to support a more robust development and testing environment for WebCT Vista. In May 2006 UEN will upgrade the development environment from Vista 3 to Vista 4. This will give the institutions the opportunity to practice with Vista 4 and train faculty before UEN upgrades the live production environment from Vista 3 to Vista 4 in either August 2006 or late-December 2006 (dates dependent on feedback from the hosted institutions).

UEN has contracted Rene Weston Eborn, formerly the Vista project manager at WSU, to consult with USU and UVSC on their Vista migration. Major tasks include planning and coordinating student enrollments for each institution, course migration from WebCT Campus Edition, faculty training and defining UEN hosting services (backups, reporting, etc.).

As UEN hosts more institutions, effectively handling support calls from students and faculty will be a critical part of a successful service. UEN will work with institutions to develop a viable user support system.

Recommendation

This is an discussion item requiring no further Steering Committee action.

TAB **17**

HIGHER EDUCATION ADVISORY COMMITTEE
REPORT – DISCUSSION

Issue

The Higher Education Advisory Committee met on March 22, 2006.

Background

Cyd Grua conducted the advisory meeting where Wayne Peay reported on higher education focus group meetings that have been occurring throughout the state.

A report will be shared during the meeting and is Attachment A.

During its January 24 meeting, the USHE/UEN Higher Education Advisory Committee decided to conduct a series of campus dialogues on higher education's uses and needs in the area of technology. Committee members arranged campus meetings involving technology administrators, faculty from different disciplines with varying degrees of proficiency with technology, librarians, technical support staff including faculty support and distance learning administrators. This series of discussions explored the larger issues of higher education's priorities with the Utah Education Network as well as higher education technology needs and opportunities in general. Participants shared what technologies are commonly used in teaching and in other campus activities, as well as identified technology and technology-related needs.

Today's presentation outlines 20 hours of dialogue involving 115 higher education representatives. The presentation will lay out common themes and specific topics of discussion. It is expected the data gathered will inform strategic plans both for UEN and for the Utah System of Higher Education. It is further expected this "temperature taking" activity shall become an annual event.

The committee has not scheduled its next meeting yet, but is meeting via phone bridge in the coming weeks. Contact Cyd for more information.

Recommendation

This is an discussion item requiring no further Steering Committee action.

TAB 17 ATTACHMENT A
USHE/UEN HIGHER EDUCATION COMMUNITY DIALOGUES

USHE/UEN
Higher Education Community Dialogues

Wayne J. Peay
Director, Eccles Health Sciences Library
University of Utah

Cynthia M. Grua
Director, Utah Electronic College Consortium
Office of the Commissioner
Utah System of Higher Education

April 21, 2006

USHE/UEN
Higher Education Community Dialogues

Goal – Provide contributions to the UEN and USHE planning process, reflecting issues and opportunities from the USHE community

Process – Visits to each USHE institution

Participation – 115 faculty & Staff

Utah Education Network

The Consensus

The Utah Education Network constitutes essential infrastructure for the Utah System of Higher Education.

Utah Education Network
Overview
Issues & Opportunities

• **Alignment to USHE Goals & Objectives**
• **Communication**
  – **Increase communication between Technical and Instructional Services**
  – **Restructure steering committee meetings**
  – **Publish electronic newsletter**
  – **Revive "Ed Ridges" role**
• **Collaborative Project Development**
• **Environment that Encourages Innovation**

Utah Education Network
Instructional Services
Issues & Opportunities

• **Network Related Instruction Focus**
• **24/7 WebCT Help Desk**
• **Web Tutorials for Distance Ed Basic Skills**
• **User-Driven Scheduling**
• **KUEN programming**
• **Statewide Training**
• **Facilitator Services at Receive Sites**
• **Ongoing Evaluation of Open Source Alternatives to WebCT**
• **Web Conferencing Services**

Utah Education Network
Technical Services
Issues & Opportunities

• **Quality of Service**
  – **Be responsive to difficulties in IPV transition**
  – **Assure curriculum has network priority**
  – **Uncertain infrastructure at public ed sites**
  – **Develop community access sites**
  – **Enhance redundant network connections**
  – **Establish service thresholds**
  – **Publish network metrics**
  – **Provide IPV local switching by instructors**
  – **Provide back-up equipment and staffing**

Utah Education Network
Technical Services
Issues & Opportunities

- Research Infrastructure & Representation
- Collaboration & Training of USHE IT Staff
- Close Captioning Services
- Satellite Services
- Secure Network Services for Prisons, Jails
- Network Leadership in Emerging Technologies (VOIP, web conferencing, high quality video)

Utah System of Higher Education
Issues & Opportunities

- Technology Vision for the USHE
  - Update technology strategic plan
  - Invite presidents from exemplar institutions to come to Utah
  - Promote collaboration & innovation
  - Conduct annual system-wide assessment
  - Establish baselines for infrastructure

Utah System of Higher Education
Issues & Opportunities

- Infrastructure Maintenance/Upgrade
  - Review IT staffing and compensation
  - Utilize classroom technologies
  - Plan for network infrastructure upgrades
  - Plan for distance education facilities upgrades
  - Expand system software licensing efforts

Utah System of Higher Education
Issues & Opportunities

- 24/7 Programs with 8-5 Services
- Security Management & Authentication
- Single Sign-On
- eCommerce Services
- Accessibility Guidelines
- Best Practices for Student Services
- OCHE Use of Advanced Technologies

USHE/UEN
Higher Education Community Dialogues

"The system is on the cutting edge of today's technology and is serving thousands. Our challenge is to move to the 21-speed, all-terrain model by keeping pace with new technologies, and rather than thousands, we must serve hundreds of thousands…. A system that literally reaches every home, business and public building in the state for that matter, in the nation."

– Mike Leavitt, July 14, 1993
from Gearing up with Technology: A Centennial Challenge to Educators

T A B 18

PUBLIC EDUCATION ADVISORY COMMITTEE
REPORT – DISCUSSION

Issue

The Public Education Advisory Committee met on March 24, 2006.

Background

Rick Gaisford conducted the advisory meeting where the following topics were discussed:

- UEN-TV public service announcements for Internet Safety
- eMedia update
- Survey results from public educators

The committee divided into working groups to synthesize survey results from two public education Internet surveys. A report will be shared during the meeting and is included in Attachment A.

The next committee meeting is scheduled for May 8 and 9 during the planning retreat. Contact Rick for more information.

Recommendation

This is an discussion item requiring no further Steering Committee action.

TAB 18 ATTACHMENT A
PUBLIC EDUCATION FOCUS DIALOGUES

Public Education/UEN
Public Education Focus Dialogues

Richard Siddoway
Pat Lambrose
Rick Gaisford
Kathy Webb

April 21, 2006

Public Education/UEN
Public Education Focus Dialogues

Goal: Provide recommendations to the UEN Instructional Services strategic planning process, reflecting issues and opportunities from the public education community

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Public Education/UEN
Public Education Focus Dialogues

Goal: Provide recommendations to the UEN Instructional Services strategic planning process, reflecting issues and opportunities from the public education community

Process: Inventory and needs surveys, focus groups, PECC, and TCC meetings

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Public Education/UEN
Public Education Focus Dialogues

Goal: Provide recommendations to the UEN Instructional Services strategic planning process, reflecting issues and opportunities from the public education community

Process: Inventory and needs surveys, focus groups, PECC, and TCC meetings

Participation:

Inventory survey- 310 responses,

Needs assessment survey- 70 responses,

Focus groups/PECC/TCC meetings- 40 educators

Public Education

The Utah Education Network provides essential infrastructure and services for Public Education in Utah.

Public Education
Overview
Issues & Opportunities

- Alignment

Public Education
Overview
Issues & Opportunities

- Alignment
- Communication

Public Education
Overview
Issues & Opportunities

- Alignment
- Communication
- Project Planning and Development

Public Education
Overview
Issues & Opportunities

- Alignment
- Communication
- Project Planning and Development
- Awareness and Future-Visioning

Public Education
Overview
Issues & Opportunities

- Alignment
- Communication
- Project Planning and Development
- Awareness and Future-Visioning
- Professional Development & Training

Public Education
Overview
Issues & Opportunities

- Alignment
- Communication
- Project Planning and Development
- Awareness and Future-Visioning
- Professional Development & Training
- Web Resources

Public Education
Issues & Opportunities

- Alignment with Public Education Needs & Objectives
  □ Facilitate ongoing stakeholder input
  □ Strengthen accountability and evaluation
  □ Coordinate with USOE departments and 40 districts

Public Education
Issues & Opportunities

- Alignment with Public Education Needs & Objectives
  - □ Facilitate ongoing stakeholder input
  - □ Strengthen accountability and evaluation
  - □ Coordinate with USOE departments and 40 districts

- Communication
  - □ There are two UENs
    - Technical Services (TS) and Instructional Services (IS) are not well integrated
  - □ Restructure UEN Steering Committee meetings
  - □ Listen

Public Education
Project Planning and Development
Issues & Opportunities

- Involve stakeholders in the identification, initiation, communication, and consensus building for new project and tools

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Public Education
Project Planning and Development
Issues & Opportunities

- Involve stakeholders in the identification, initiation, communication, and consensus building for new projects and tools
- Advisory committees function as the gatekeeper for the identification, initiation, communication, and consensus building for new projects and tools

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Public Education
Project Planning and Development
Issues & Opportunities

- Involve stakeholders in the identification, initiation, communication, and consensus building for new projects and tools
- Advisory committees function as the gatekeeper for the identification, initiation, communication, and consensus building for new projects and tools
- Steering committee actively steers the identification, initiation, communication, and consensus building for new projects and tools

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Public Education
Issues & Opportunities

- Awareness and Future-Visioning
  - □ Investigate new trends
  - □ Seek and promote innovation
  - □ Share with stakeholders

Public Education
Issues & Opportunities

- Awareness and Future-Visioning
  - □ Investigate new trends
  - □ Seek and promote innovation
  - □ Share with stakeholders

- Professional Development & Training
  - □ Support existing successful models (ITC, Train the Trainers, etc.)
  - □ Emphasize your gems (PIONEER, Technical Summits, etc.)
  - □ Assist districts and charter schools with PD events (new trends, tools, CCNA, UTIPS, etc.)

Public Education
Web Resources
Issues & Opportunities

- Ease of use for stakeholders
  - Provide one-click broad search engine for Pioneer databases
  - Integrate other resources into UEN "Smart Tools"
  - Personalize experience based on needs
  - Facilitate single sign-on

Public Education
Web Resources
Issues & Opportunities

- Ease of use for stakeholders
  - Provide one-click broad search engine for Pioneer databases
  - Integrate other resources into UEN "Smart Tools"
  - Personalize experience based on needs
  - Facilitate single sign-on

- eMedia
  - Expand awareness and capacity
  - Provide necessary personnel
    - Segment acquired videos as allowed
    - Add remaining UIMC titles for 2004, 2005, and 2006
    - Develop process for adding artifacts from other sources

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Public Education
Web Resources
Issues & Opportunities

- Ease of use for stakeholders
  - Provide one-click broad search engine for Pioneer databases
  - Integrate other resources into UEN "Smart Tools"
  - Personalize experience based on needs
  - Facilitate single sign-on

- eMedia
  - Expand awareness and capacity
  - Provide necessary personnel
    - Segment acquired videos as allowed
    - Add remaining UIMC titles for 2004, 2005, and 2006
    - Develop process for adding artifacts from other sources

- Sunset clause for retiring old applications, tools, resources, etc.

Public Education
Summary
Issues & Opportunities

- Alignment
- Communication
- Project Planning and Development
- Awareness and Future-Visioning
- Professional Development & Training
- Web Resources

Public Education/UEN Partnership

"For teachers and students to utilize technology in an efficient and effective manner and to fully take advantage of the benefits of using technology to improve the education of students, three components must be present. These are:
- Access to technology, i.e., the hardware, software, and infrastructure
- Professional development opportunities for teachers in the use of the technology
- On-going technical support to maintain the systems"

February 2005 - BEST PRACTICES IN USING TECHNOLOGY IN PUBLIC EDUCATION

PIONEER LIBRARY 10TH ANNIVERSARY REPORT - DISCUSSION

Issue

Pioneer, Utah's Online Library, celebrated 10 Years of Service to Utahns on April 10, 2006. The Pioneer Library Committee invited service founders and key stakeholders to a birthday celebration at the Utah State Library Division. UEN Professional Development also provided onsite training at Hillcrest High School on April 10th. A statewide outreach effort, a media campaign and a Pioneer Library essay contest preceded the anniversary event.

Background

Here is the text of the congratulatory letter the Pioneer Library Subcommittee received from Governor Huntsman:

April 2006

Greetings,

It is my pleasure to congratulate to PIONEER, Utah's Online Library as you celebrate your 10th Anniversary. Utahns can access this tremendous statewide service free of charge through their public libraries, public schools and other approved locations. Thousands do every day. The Pioneer Library's decade-long success is an example of why Utah is known as a highly recognized technology leader.

Congratulations to the collaborative team of public libraries, academic institutions and Utah schools that envisioned, and brought to fruition this world-class resource for students, teachers, parents and citizens. The Pioneer Library's growing collection of credible resources and statewide access would not be possible without the partnership of dedicated members of the Pioneer subcommittee. I applaud the efforts of the Utah State Library Division, the Utah Academic Library Consortium, the Utah State Office of Education, the Independent School Librarians of Utah and the Utah Education Network.

Educated citizens with access to credible information are fundamental to the growth and well-being of Utah's urban and rural communities. Your ten years of statewide service is a significant milestone in Utah's quest for quality education and economic development. Once again, congratulations to the Pioneer Subcommittee and all Utahns

as we celebrate the 10th Anniversary of PIONEER, Utah's Online Library.

Sincerely,

[Governor's Signature]

Jon M. Huntsman, Jr.

Governor

UEN staff attended the event and have prepared a brief video presentation about the celebration.

Recommendation

This is an discussion item requiring no further Steering Committee action.

Utah Electronic High School Report - Discussion

Issue

Richard Siddoway, Principal of the Electronic High School will give an update on the Utah Electronic High School activities.

Background

More information about Utah Electronic High School is located on the Web at *http://ehs.uen.org*

Recommendation

This is an discussion item requiring no further Subcommittee action.

TAB **21**

QUARTER THREE PROGRESS REPORT ON FY 2006 STRATEGIC PLAN - DISCUSSION

Issue

This is a quarterly progress report for the FY 2006 Strategic Plan conducted during January, February and March 2006, including goals two through six assigned to Instructional Services, Instructional Delivery and Public Information departments.

Background

The UEN Strategic Plan is organized into seven goals:

Goal 1. Operate, maintain and expand a reliable and secure high-speed network, connecting every public school, college, university and public library in Utah. (Technical Infrastructure)

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

Goal 3. Deliver distance learning classes and programs offered by public and higher education that use reliable, real-time and broadcast quality videoconferencing technologies. (Distance Education Systems)

Goal 4. Build the vitality and scope of UEN broadcast services. (Broadcast Services)

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

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

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

Quarter Three FY 2006 Strategic Plan Highlights

Goal 2

1. Added 3rd, 4th, 5th and 6th grade core academy lesson plans and updates to database.

2. Participated in user's group and leadership meetings for UTIPS.

3. Supported USOE curriculum Web sites with 1 new site, 11 updated sites and 3 site designs.

4. Tested and launched new professional development management system for registration and tracking.

5. Added UIMC content to eMedia service. Tracked increased growth in eMedia.

6. Licensed 538 PBS Video titles for eMedia.

7. Updated Web site links and database

8. Created "What's New at UEN" on Web site.

9. Completed district Pioneer Library advocate training.

10. Utah TECH CORPS PC Recycling moved to City Academy Charter School.

11. Eliminated IVC Tripperships and NewsByte due to low educator interest.

12. Launched "Ask a 10 Year Old" media campaign for Pioneer Library, ran spots on KSL, KUED and UEN-TV.

Goal 3

1. Completed WebCT Vista institution administrator training.

2. Discussed phase out for UENSS in conjunction with USU.

3. Continued installations and upgrades of IP Video classrooms.

4. Preliminary planning for remodel of UEN TOC and conversion to IP Video.

Goal 4

1. Licensed digital rights for GED Connection, Workplace Essential Skills and TV411 GED preparation programs

2. Continued planning for CPB Digital Services Fund grant for Youth in Custody Centers.

3. Completed 13 site engineering survey and recommendations to USOE YIC office.

4. Completed technical scoping engagement with Triveni Digital for datacasting service.

5. Significant progress on Utah Collections Multimedia Encyclopedia migration in to eMedia.

6. Produced program breaks and highlights for spring, Women's History and Holocaust Remembrance months.

7. Launched UEN SciFi Friday podcasts, first animated bug and related promotion.

8. Distributed UEN SciFi Friday press release, follow up meetings with PR offices on two campuses. Outlined additional outreach activities for project.

9. Distributed GED/Workplace DVD sets to 45 rural libraries and 5 corrections institutions through NCO grant.

10. Joined state Commission on Aging board, presented at 5 senior and caregiver centers.

11. Added DTV information page to Web site.

12. Expanded Comcast Video on Demand service and monthly feeds, redesigned navigation structure, collaborated with Comcast on PR materials and logo placement.

Goal 5

1. Published and distributed 12 additional e-newsletters for K-12 teachers.

2. Continued work on Professional Development learning objects and online tutorials.

3. Completed 11 three day ITC workshops.

4. Continued the Technology Endorsement program with 10 course enrollments.

5. Conference presentations at UELMA, UACTE and UCET.

6. Conducted 233 workshop sessions for 3507 participants resulting in 46% increase in sessions and 35% increase in participation from previous year.

7. Completed market analysis for professional development positions with University Human Resources resulting in classification upgrades for staff to be current with market.

8. Intel grant reports show as of January 1, 2006 that 65% of Utah LEA's have been impacted by this grant, the highest in the nation. 24.4% of teachers in Utah have been impacted, again highest in nation, and 8.8% of administrators impacted in 2004-2005.

Goal 6

1. Added Adult Basic Education representative to Instructional Services Subcommittee.

Goal 7

1. Continued to post Web results and quarterly updates on the UEN.org page.

Recommendation

This is an discussion item requiring no further Subcommittee action.

TAB 22

STATE OF UTAH REGISTRY FOR INTERNET NUMBERS (SURIN) – ACTION

Issue

The Technology Coordinator Council (TCC) and UEN have been working together to create a process for managing IP Addresses. This effort was initiated as a result of a request made by the Steering Committee last year.

Background

The continuing growth of Internet activity and addition of hardware that requires new IP addresses mandates the need to manage IP numbers and addresses more efficiently than we have in the past. At the request of the Steering Committee, a small investigatory committee has been formed with members from UEN, TCC leadership, regional service centers, and school districts throughout the state. The objectives of the committee are to:

1. Devise a comprehensive plan to manage and allocate IPv4 and IPv6 addresses within the State of Utah.

2. Ensure that addresses are distributed equitably.

3. Give stakeholders a voice in developing and managing these processes.

The committee has adopted the name State of Utah Registry for Internet Numbers (SURIN). It is intended that SURIN will represent Higher Education, Public Education, State Government and Utah Libraries and representatives from each organization will be invited to serve on SURIN. Ten members will make up the SURIN board of trustees. They will govern SURIN with UEN retaining the "start of authority." Two members will serve on the board of trustees from each of the organizations, and UEN and TCC will have one member on the board. SURIN will meet a minimum of 4 times per year concurrently with the TCC general meetings.

In addition to the board of trustees, SURIN will be directed through an advisory process. Members from Higher Education, Public Education, State Government and Utah Libraries will form advisory committees to provide a forum to discuss needs specific to their institutions. The advisory committees would propose policies that will be sent to the board of trustees for review and final approval.

It is proposed that the Steering Committee designate SURIN as a policy-making body with the authority to perform the 3 objectives identified above. The SURIN Board of

Trustees proposes to enact policy and mission critical decisions identified by the Board and its advisory councils. The board also proposes that its decisions be binding, subject to being overturned by a ¾ majority vote by the UEN Steering Committee

Policy Issues

As the Steering Committee reviews this item, the following issues should be considered:

1. The method of selecting members of the board should be clarified. Are the members to be chosen by SURIN itself, by a procedure specified by the Steering Committee, or will the members be determined by the four organizations that will comprise the board?

2. Does the Steering Committee agree to grant the level of autonomy to SURIN that is requested? It proposes to be independent of the Steering Committee, unless a decision is overturned by a super majority (3/4) vote. This further implies that policy decisions would not routinely be brought to the Steering Committee for approval, but if a review of a policy decision was undertaken it would require a ¾ vote to be overturned.

3. Is there a need to clarify the relationship of UEN to the SURIN board. Specifically, what is meant by "start of authority?"

Recommendation

It is recommended that the State of Utah Registry of Internet Numbers (SURIN) be organized and chartered under the direction of the UEN Steering Committee. It is further recommended that the Steering Committee indicate its preferences in relation to the policy issues that require further clarification.

TAB 23

ETHERNET PHASE 2 AND 3 INSTALLATION UPDATE - DISCUSSION

Issue

Update of Phase 2 and Phase 3 Ethernet Installations

Background

GL3 Phase 2 Update

In a report to the Technical Services Subcommittee in December 2005 Jeff Egly, project manager, reported that UEN intended to have 99% of Phase 2 of the GL3 project completed by the end of the first quarter. The following is the current status of this project as of April 10th.

Total number of Phase 2 sites = 145

Total number of Phase 2 sites cut over = 110

Total number of Phase 2 sites on hold = 21

Total number of Phase 2 sites pending cuts = 14

While not reaching 99% by the end of March this project has been a huge success, and this is entirely due to the coordinated efforts and hard work by many district, Qwest, and UEN staff. Improvements to 13 of the 20 participating school districts have been completed and new schools are coming on line each week.

The site turn-up of remaining Phase 2 sites should be completed over the next few months. These sites will be dove-tailed into the GL3 Phase 3 project which is currently getting underway.

GL3 Phase 3 Update

UEN and Qwest staff met on Monday, April 10th to kick-off GL3 Phase 3. UEN will begin to schedule planning meetings with each of the school districts participating in Phase 3.

Additional planning is required before an implementation timeline can be provided.

58 sites are currently in Phase 3.

Recommendation

This is an discussion item requiring no further Subcommittee action.

TAB 24

UTAH NAVAJO HEALTH SYSTEM PROGRESS UPDATE - DISCUSSION

Issue

Update on the Utah Navajo Health Clinic MOU

Background

The Utah Education Network was approved by the Technical Services Subcommittee during its December 2005 subcommittee meeting to "explore issues related to a possible memorandum of understanding" between UEN, the Utah Navajo Health Clinics, the San Juan School District, Utah Telehealth Network and the College of Eastern Utah regarding UEN provided network bandwidth to each of the Utah Navajo Health Clinics located within San Juan County.

In January a meeting was held in Blanding, Utah to discuss the terms of an MOU and consensus was reached between all parties.

UEN agreed to draft the MOU and then reconvene with each member of the group to finalize the details, however, in February UEN was informed by Allen Anderson from the Utah Navajo Health Clinics that UNHC will be going a different direction for it's network needs and will not be moving forward with formalizing an MOU.

Recommendation

This is an discussion item requiring no further Subcommittee action.

TAB 25

COMCAST SLCC/USU DIVERSE PATH – DISCUSSION

Issue

Comcast redundant fiber path to USU.

Background

Several years ago UEN installed a Gigabit Ethernet ring connecting the Dolores Doré Eccles Broadcast Center, Salt Lake Community College (SLCC) and Utah Valley State College (UVSC). This ring has been serving our stakeholders well during that time. Comcast and XO Communication provide these circuits.

With the installation of GL3, the Comcast circuit connecting EBC to SLCC is no longer required. Fortunately, Comcast has recently built a fiber route connecting Logan to the Wasatch Front. Comcast, USU and UEN have been negotiating the use of this fiber over the past few weeks and Comcast has agreed to move the existing circuit. This move will connect SLCC to the USU Innovation Campus, creating a completely diverse path from Salt Lake to Logan. This is being provided at no additional cost to UEN.

The new circuit will likely be provisioned and working by the end of May. UEN, Comcast and USU are working together to plan a ribbon cutting/fiber splicing ceremony to celebrate this accomplishment.

Many people have worked on providing a diverse route to Cache Valley over many years. This new capacity solves problems, not only for Utah education, but for many businesses and other organizations operating in Cache County. UEN may be the first to take advantage of this new capacity, but there will certainly be others to follow.

Recommendation

This is an discussion item requiring no further Subcommittee action. Steering Committee and Subcommittee members may wish to participate in the celebration that is being planned when the project is completed early this summer.

TAB 26

QUARTER THREE PROGRESS REPORT ON FY 2006
STRATEGIC PLAN – DISCUSSION

Issue

UEN Technical Services has been extremely busy during the first three quarters of this year. This report outlines a few of the high-level accomplishments.

Background

Following are highlights of accomplishments for the first nine months of the fiscal year:

- Completed the second phase of the UEN core redesign.
- Nearing completion of the Ethernet phase 2 project.
- Completion of the Video project phase 2 and planning for phase 3.
- Process improvements to better serve the UEN technical stakeholders.
- Installation of the state DTS OC-48 connecting the State Office Building to the State of Utah Richfield site.
- Connection of the Broadwing Internet PoP in St. George and refinement of the routing capabilities enabling the optimal usage of that resource.
- Major progress in bringing the NLR circuit on line. The local fiber IRU is completed and the fiber is in place and tested. UEN has ordered and received the terminating interface equipment.
- Collaborative work and progress in implementing a new filtering solution.
- Continued refinements and support to the WebCT Vista project.
- Spring Technical training in cooperating with SEDC and SUU.

We have made major advances in the installation of GeoMax and other Ethernet circuits. This has provided greater speed and capacity in network access to these locations. Well over 100 new sites have been turned up this year. UEN is now waiting on vendors and others to complete the remaining phase 2 sites. Phase 3 implementation will begin this summer.

The NLR connection is nearing completion. UEN has tested the local loop fiber and

it is working as expected. We are in possession of the EBC terminating equipment. We are now waiting for our NLR partners in Colorado and California to complete the project.

Some refinements have been made to phase 2 video sites and conversations have begun in the southwest part of the state to begin planning for phase 3. This has been a busy year for video upgrades and there is still more to do in the next few months.

Our RFP and E-Rate planning went so well last fall that we were able to complete two phases of RFP work. This has resulted in contracts to provide Ethernet connectivity to most remaining sites. We will be upgrading the connection from UVSC to Price and extending GeoMax to CEU and the four districts served by that connection.

Recommendation

This is an discussion item requiring no further Subcommittee action.

TAB 26 ATTACHMENT A
UEN TECHNICAL SERVICES PROGRESS REPORT

Goal 1 Objective 1. Operate and maintain the UEN network based on best practices.

Quarter 3

- WebCT Patch before Spring Semester 3.0.4 to 3.0.6
- UEN Mail server upgrade to new hardware and server OS and Mail Services Software
- EBC Building Groupwise to UMail Conversion
- Server Maintenance and patching
- Install and start converting www.uen.org to new hardware and software (still in progress)
- Development Sybase Server Upgrade to new hardware and server software (still in progress)
- Production Sybase Server Upgrade to new hardware and server software
- Data Center rack upgrade (first 4 racks done, 13 to go!)
- Evaluation and purchase Data Center Power Management Units (now installing)
- Evaluation and purchase Data Center Server Console Servers (now installing)
- Backbone Optimization and Tweaking (Phase I)
    - ◊ To accommodate some of the new technologies and get ready for NLR etc, we have upgraded code and implemented new standards for Backbone equipment as a continuation of Phase I.
    - ◊ Multicast deployment and monitoring
    - ◊ IPv6 Addressing Plan and backbone support
    - ◊ Capacity upgrades for major pops (Some planned for FYQ4 as well)
- Considerable Cost savings in overall Circuits and consolidation of resources.
    - ◊ Partially due to GL3 implementations, but also dealing with re-structuring DS3 resources.
    - ◊ Initial review of SmartNet and other Maintenance indicating savings possibilities.
        - • Removing legacy equipment from support.
            - - 2924's, 1750's, 2500's, 1900's
        - • New Ideas including changing many devices which we have spares for to non-supported and we use spares to back our own network up.

- Documentation, and Process for Operations
    - ◇ The Operations Department has re-designed their process of handling tasks to better accommodate the vast number of projects and changes continually occurring on the network.
    - ◇ This is the Red, Yellow, Green, Pink, etc.-Sheet processes
    - ◇ Production Wiki for Advanced Documentation
- Service Level Agreements (SLA)
    - ◇ Charter School Definition for Support
- We have worked through Claire and City Academy to provide LAN and end-site support.
    - ◇ Process for Turning up new Charter Schools and requirements is nearly finished.
- Improvement of Customer Service by restructuring process and personnel in the NOC
    - ◇ Through restructuring network operations, we have made the process of handling customer service in the NOC much more streamlined to provide quicker and more effective resolution of customer issues.
    - ◇ This was accomplished without adding new positions into the NOC
- Re-designed and Implemented CEU/Blanding/Moab/UVSC/UVSC Heber Links
    - ◇ Routing policies now match backbone standards
- Development of next generation Service Level Agreements (SLA) with San Juan, Wasatch and Jordan Districts

Quarter 1 and 2
- WebCT Patch before Fall Semester 3.0.3 to 3.0.4
- ITIL training and process assessments

Looking Ahead
- Continued upgrades to Data Center resources (this also supports objective 2, see below)
- Development of ITIL processes
- Pilot testing of next generation SLAs with selected Districts

<u>Goal 1 Objective 2.</u> Increase reliability of the network to 99.99%.

Quarter 3

- Arranged with Comcast to provide a diverse Ethernet path to Logan
- Network Monitoring
    - ◇ We have completed Phase I of a three phase project to monitor and change the way we administrate the new GL3 based UEN Network. Phase I concluded the design and evaluation stage of future needs. Tools and resources were picked which will facilitate future monitoring needs.
- New Fault Management System
- Arbor CP Upgrade
    - ◇ Phase II includes the purchasing and installation of monitoring tools beyond our current set of useful tools. This process is expected to complete early in FYQ4.
    - ◇ Phase III will be the relocation of the UEN Network Operations center to better accommodate the needs of our new monitoring requirements. This process is expected to complete mid FYQ4

Quarter 1 and 2

- Completed Internet Point of Presence (PoP) in St. George
- Point-to-Point Ethernet from Dixie State College to Salt Lake Community College. May need to verify with Troy this was done in Q1
- Point-to-Point Ethernet from Utah State University to Salt Lake Community College (using GeoMax)

Looking Ahead

- Installation of Comcast Gbps circuit to Logan
- Continued refinement of routing protocol to the St. George Internet Pop

<u>Goal 1 Objective 3.</u> Increase network capacity by upgrading remaining higher education campuses and secondary schools to high speed broadband connectivity.

Quarter 3

- GL3 Phase 2 nearing completion. As of April 12th 110 of 145 sites have been completed, 14 sites currently pending and 21 on temporary hold due to Qwest or district improvements.
- RFP for phases 4 and 4.5 completed, contracts signed, e-rate filing submitted

- Conterra 100 MB Ethernet to Lava Ridge Intermediate School completed.
- Payson Junior High School to Payson High School fiber improvements completed.

Quarter 1 and 2

- Gigabit Ethernet upgrade between CEU/San Juan Campus and San Juan Media Center/UEN POP completed.
- Conterra 100 MB circuit to Lehi High School completed.
- 45 MB/DS-3 connectivity Montezuma Creek Higher Ed, White Horse High School, Mexican Hat Elementary, and Bluff Elementary completed.
- GL3 Phase 2 District office upgrade to include upgrade to Cisco 6500 switches completed.
- As of December 2005, 46 of 145 GL3 Phase 2 end sites had been completed
- Eastern backbone upgrade from a 45 MB/DS-3 to 155 Ethernet between Heber and Roosevelt completed.

Looking Ahead

- 45 MB/DS-3 connectivity to Monticello High School, LaSal Elementary School and the Monticello Higher Ed Center. Q1/06
- Snow College/Ephraim GigE POP upgrade scheduled for May 06.
- Kane and Garfield School District, Phase 2 upgrade in progress.
- Grand District Office Ethernet upgrade pending easements will be completed in June 06.
- Hurricane Middle and Snow Canyon Middle fiber improvements completed in May 06
- Lake View Middle School fiber improvements scheduled for completion in June 06.
- Southeast Applied Technology Center/Blanding fiber and network improvements scheduled for completion by end of May 06.
- Grantsville Middle School fiber and network improvements scheduled for completion end of June 06.
- Gigabit Ethernet backbone connectivity from UVSC Orem to UVSC Heber currently scheduled for completion by the end of April 06.
- Gigabit Ethernet between UVSC/Orem and the College of Eastern Utah scheduled for completion in August, 06.

Goal 1 Objective 4. **Work collaboratively with those districts desiring to increase network capacity of elementary schools and develop a cost model and plan to finish installation of Ethernet circuits to all elementary schools.**

Quarter 3

- RFP process for phase 4 and 4.5 was changed to involve districts that intended to move elementary school connections to high-speed circuits
- Participated in T-forum and directly with districts to formulate plans

Quarter 1 and 2

- 45 MB/DS-3 improvements to Bluff and Mexican Hat Elementary.

Looking Ahead

- 45 MB/DS-3 to LaSal Elementary School is scheduled for completion by August 06.

Goal 1 Objective 5. **Provide support to district and higher education technology staff to ensure that the enhanced capacity and reliability of the Network is fully utilized.**

Quarter 3

- New Asterisk Server for UEN Satellite
- Participation in T-forums and planning directly with districts and higher education technology
- WSU Network redesign
    - ◇ Turned up GL3
    - ◇ BGP and routing Policy standardization
- ITS Redundancy Design is complete (Richfield Link)

Quarter 1 and 2

- Increased capacity from 1.2Gig to 2.2 Gig, with small decrease in cost. (Since June 2005).

Looking Ahead

- Continued participation in T Forum and work by advocates to identify opportunities in this area

Goal 1 Objective 6. **Expand Internet capacity to meet growth in network traffic.**

Quarter 3

- Expanded rate limit on the 360Networks link to the full Gbps speed, increasing the overall Internet capacity to 2.2 Gbps.

Quarter 1 and 2

- Broadwing connection (Aug. 2005)

Looking Ahead

- Late summer/early fall RFP process to renew all Internet contracts

Goal 1 Objective 7. **Plan and implement funding strategies that are adequate to support Network growth plans.**

Quarter 3

- UEN secured new funding to support ongoing costs of phases two and three and one-time costs for phases 4 and 4.5

Quarter 1 and 2

- Participation in legislative planning process

Looking Ahead

- Identify new needs and opportunities to continue to build the network
- Collaborate with state DTS to leverage network expertise and resources

Goal 1 Objective 8. **Protect the Network through improved security and security practices.**

Quarter 3

- New filtering solution determined through committee and evaluation process (March 2006). Provides much more flexibility, capacity, capabilities than the current N2H2/SC proxy HTTP filtering solution.
- Engineering and Implementation support of the Network Filtering solution.
    - ◇ UEN Operations is on track for FY06-07 deployment of the new Filtering system.

        ◇ This is currently in the final Bid Process and should be complete FYQ4

- Major decline in Network Security Incidents through customer awareness and training programs. UtahSAINT, UEN Technical Summit

        ◇ 94% of connected entities have Firewalls in place for protection

        ◇ No significant outbreak of virus or worms in nearly 12 Months

        ◇ No security related outages logged for FYQ3

- Hardened the User Authentication System.

Looking Ahead

- Collaborative engineering and summer implementation of filtering solution
- Upgrade of the UtahSAINT server
- Summer/Fall Security summit

Goal 1 Objective 9. **Support the high capacity/high speed network needs of university researchers.**

Quarter 3

- NLR Metro fiber in place and tested clean (Feb. 2006)
- Participation in Quilt, FRGP, Internet2 and various NLR meetings.

Quarter 1 and 2

- UEN staff members attended the Super Computing conference in November

Looking Ahead

- NLR go-live and testing
- Comcast circuit installation between SLCC and USU

<u>Goal 1 Objective 10.</u> Support the installation and other technical requirements of the IP Video Distance Education System.

Quarter 3

- Planning and kick-off of the Dixie Video plan

- IP Video Phase 3 is underway.

- Begin design improvements to IP Video classrooms

- Performance improvements to IVIEW

- Major RFPs awarded and purchases nearly complete for IP Video Phase 3.

- Video QOS Design for future deployments as needed

Quarter 1 and 2

- Completion of IP Video Phase 2 – Installation of 55 IP Video classrooms which includes the complete conversion of southeastern and eastern Utah to IP Video.

- Installation of four additional RADVision Conference Bridges Statewide.

  ◇ Davis Applied Technology Center

  ◇ Salt Lake Community College

  ◇ Uinta Basin Applied Technology Center

  ◇ San Juan Media Center – San Juan School District

- Implemented IVIEW, RADVision's IP Video scheduling and management system

- Implemented new gatekeeper

- SIP /Sepura project begins – VOIP replacement to UENSS classrooms

- Begin Codian IPVCR pilot project

- Engineering/Planning for UENSS to MPEG 4

- Engineering and design for CPB Datacasting project in process

- Datacasting site surveys completed

Looking Ahead

- IP Video Phase 3 consists of 44 sites scheduled for completion in August 06 plus the addition of approximately 13 classroom upgrades and moves scheduled for completion by the end of the 2nd Qtr of 06. With the completion of Phase 3 all classrooms in central, southwestern and northern Utah will have been converted to IP Video.

- IP Video Phase 4 (2007) will be the conversion of all Wasatch Front classrooms.

Goal 1 Objective 11. Provide technical leadership and staff/stakeholder development.

Quarter 3

• Spring Technical Summit in partnership with SUU and SEDC

Quarter 1 and 2

• Summer Security Summit in partnership with Wasatch District
• RADVision Configuration and Management Training – UEN/USU/San Juan School District

Looking Ahead

• Cisco CCNA training in June 06 (Price, UT)
• Cisco CCNA training in October 06 (Richfield, UT)

T AB 27

REPORT OF THE INSTRUCTIONAL SERVICES SUBCOMMITTEE - DISCUSSION

The Instructional Services Subcommittee will report to the Steering Committee on items covered in the subcommittee agenda.

TAB 28

REPORT OF THE TECHNICAL SERVICES SUBCOMMITTEE – DISCUSSION

The Technical Services Subcommittee will report to the Steering Committee on items covered in the subcommittee agenda.

TAB **29**

STEERING COMMITTEE MEETING MINUTES

UTAH EDUCATION NETWORK STEERING COMMITTEE

February 17, 2006 – 9:00 am

Members Present: Jon Crawford, Steve Fletcher, Stephen Hess, M.K. Jeppesen, Pat Lambrose, Craig Neilson, Wayne Peay, Mike Petersen, Dick Siddoway, Weldon Sleight, Kirt Sitterud, Ryan Thomas, Ray Walker and Gary Wixom.

Others Present: Charice Black, Barry Bryson, Rick Cline, Dave Devey, Jeff Egly, Denise Elwood, Rich Finlinson, Rick Gaisford, Claire Gardner, Boyd Garriott, Nancy Gibbs, Cyd Grua, Eric Hawley, James Hodges, Laura Hunter, Troy Jessup, Marty Kelly, Bill Kucera, Lisa Kuhn, Kim Marshall, George Miller, Bryan Peterson, Dennis Sampson, Larry Smith, Nate Southerland, Jim Stewart, Cory Stokes and Bruce Todd.

Welcome and Introductions

Gary Wixom welcomed everyone to the February meeting. He noted that Ray Timothy was unable to make the meeting and was excused.

Committee of the Whole

Tab 28 – Legislative Update

The Legislature is now at the last two weeks of its annual session, which ends on March 1st. Several important issues that relate to UEN are being decided at this time.

Mike Petersen reported that there are several issues not yet resolved. The Higher Education Appropriations Subcommittee strongly supported UEN's budget request this year. The second priority for new ongoing funding, after salary retention funds for all entities including UEN, was ongoing funds for phase 3 of the UEN network infrastructure project and the ongoing maintenance and staff support for the course Management System with which UEN would support USHE institutions.

A total of $23 million in one-time funding was recommended by the Higher Education Appropriations Subcommittee. The committee's highest priority was the one-time funds in the amount of $2.2 million which UEN would use to purchase a statewide perpetual license for WebCT Vista and the equipment required to house USHE institutions.

HB 289: UEN Amendments

HB 289 is sponsored by Representative Kory Holdaway. It was drafted to address two primary issues: (1) assuring that UEN's statutory authority included providing telecommunications services to public education and higher education in a clear and definitive way to meet federal E-Rate regulatory requirements, and, (2) undertaking a housecleaning effort to remove such obsolete references as UtahLink, KULC, and technological terms that are no longer appropriate. We discovered that one amendment that should have been included was inadvertently excluded when the bill was approved in the House. On line 45 it should have replaced the words, Utah Education Network, with KUEN-TV. We have pointed out that error and will require the bill to be amended in the Senate with a concurrence in the amendment by the House.

No final actions have been taken on the three other budget requests that would enhance educational technology for public and higher education, but are not part of the UEN budget request. The Higher Education Appropriations Subcommittee ranked IT security and licensing for USHE institutions as its 5th priority. The ongoing funding for additional Utah Academic Library Consortium resources has ranked as the 11th priority for ongoing support. These two areas also received strong support for one-time funding.

For a detailed Higher Education Joint Appropriations Subcommittee Prioritization List, please see Tab 28, Attachment A. Tab 28, Attachment B contains the current version of HB 289: UEN Amendments.

Mike Petersen reported that HB 151 Concurrent Enrollment bill was passed out of the House Education Committee but has not been debated on the House floor. Gary Wixom explained that this bill was asking for an increase in the concurrent enrollment fees.

Tab 29 – UEN Project Process

Members of the Public and Higher Education Advisory Committees have recommended a policy to further address how projects are assessed and prioritized based on their scope, level of risk, cost, and change and time constraints. For a closer look at this policy please see Tab 29, Statement of Work is listed in Tab 29, Attachment A.

During the spring planning process, some projects are further in their definition and implementation, while others are not yet fully defined. Updates to the Strategic Plan are captured and reported in quarterly reports to the Instructional and Technical Services subcommittees throughout the year. UEN staff have received project management training and follow organizational guidelines outlined in the UEN Strategic Plan. Projects are analyzed for their priority in relation to the mission, resources required and scalability. Project managers create a Statement of Work (SOW) document for projects that are listed in the Strategic Plan.

Tab 30 – Pioneer Library 10th Anniversary Contest

Rick Cline reported that the plans are moving forward for this celebration. The deadline is approaching for the 10th Anniversary contest. The three grand prize winners will be announced on April 10th and each will be the recipient of an Apple iPod Nano.

Steering Committee Business Meeting

Instructional Services Subcommittee Report

Tab 31 – IP Video Project Update

Dick Siddoway reported that UEN is just completing phase two of the IP Video Project, the midpoint in a four phase project. One of the biggest problems they've had in implementing this project are the associates sites wishing to participate in events. These sites may have firewall issues or inadequate bandwidth and they interfere with the quality of events. The Instructional Services Subcommittee recommended that the IP video committee reconvene so they can solidify the process for certification and improve communication of information required by EDNET sites as they prepare for the conversion.

Tab 1 – Instructional Services Grant Updates

Dick Siddoway recapped Laura Hunter's report on grants that have been awarded. A detailed breakdown of projects and money amounts awarded can be found behind Tab 1.

Tab 2 – Public Education Advisory Committee

Rick Gaisford summarized the topics listed behind this tab. Question arose as to where the projects come from that make up this list. Further discussion occurred regarding the role of the Public Education Advisory Committee. The next meeting will be held March 24, 2006. For more information regarding this committee, please contact Rick Gaisford.

Tab 3 – Higher Education Advisory Board

The Higher Education Advisory Board has committed to hold campus meetings to explore higher education priorities involving UEN. Several meetings have taken place and they are providing much data regarding technology needs. A report will be provided at the next Steering Committee so that the information will be available for the UEN strategic planning retreat and to support strategic planning for the Utah System of Higher Education.

Utah Education Network Instructional Services Subcommittee Meeting Minutes

Attendees: Rick Cline, Jon Crawford, David Devey, Jeff Egly, Rich Finlinson, Rick Gaisford, Claire Gardner, Cynthia Grua, Eric Hawley, James Hodges, Laura Hunter, Marty Kelly, Bill Kucera, Pat Lambrose, George Miller, Craig Neilson, Wayne Peay, Dick Siddoway, Kirk Sitterud, Weldon Sleight, Nate Southerland, Cory Stokes and Gary Wixom.

Compiled by Leah Bryner

Tab 31 – IP Video Project Update - Discussion

Jeff Egly and other IP Video project staff discussed traffic and bandwidth concerns with the subcommittee. Phase two of four of the IP conversion of all EDNET classrooms to the new H.323 standard is almost complete. Quality issues are being addressed now and the project staff appreciates feedback on any issues that any users have with the system.

The subcommittee discussed the need to reconvene the IP Video Sub Team in order to incorporate improvements to the Site Selection and Certification process and to improve communication tactics with future and associate sites.

In addition to the classroom conversion project, UEN has installed six RADvision 48 port conference bridges at rural and urban sites to accommodate large-scale needs across the entire state. With the completion of the conversion and the completion of the GL3 project in August 2007, smaller communities will have the same increased bandwidth as many urban communities.

Action - This is an information item requiring no further Instructional Services Subcommittee action.

Tab 1 – Instructional Services Grant Updates - Discussion

Laura Hunter discussed grants awarded and those in process in Instructional Services. Grants awarded include:

- Utah Partnership for Adult Literacy—provides adult basic education DVD's to 47 of 50 rural libraries in the state.

- CPB's Digital Services Fund—to deliver educational broadcasts to Youth in Custody (YIC) and correction programs in Utah. This grant also provides continued development of UEN's digital signal.

Two broadcast technical grants were also awarded. Additional pending grants include:

- Inventing America: Democracy News Network from the Corporation for Public Broadcasting, Partnership for a Nation of Learners, eMedia Closed Captioning Project and National Telecommunications and Information Administration.

Details of these pending grants are available in February 2005 Steering Committee materials.

Action - This is an information item requiring no further Instructional Services Subcommittee action.

Tab 2 – Public Education Advisory Committee - Discussion

The Public Education Advisory Committee met on February 2, 2006.

Attachment A contains Jim Stewart's notes from a meeting with SLCSD on January 30, 2006 where SLCDO My EDesk service requirements and UEPP were discussed.

The next meeting for the Public Education Advisory Committee is March 24, 2006.

Contact Rick Gaisford for more information.

Action - This is an information item requiring no further Instructional Services Subcommittee action.

Tab 3 – Higher Education Advisory Committee - Discussion

Cyd Grua reported that the Higher Education Advisory Committee met on January 24, 2006. Higher Education's technology needs and priorities were discussed. The committee has been holding meetings on campuses to gather information about higher ed needs in technology. This information will appear in a report at the next Steering Committee and will be used for strategic planning.

The next Higher Education Advisory meeting is scheduled for March 22, 2006. A preliminary report of the findings of the campus dialogues will be discussed. Contact Cyd Grua if you have questions or suggestions for this committee.

Action – This is an information item requiring no further Instructional Services Subcommittee action.

Technical Services Subcommittee Report

Tab 4 – Utah Navajo Health System

Ryan Thomas reported that UEN conducted several meetings in Blanding at the end of January. The purpose of these meetings was to assess the networking needs of UNHS, determine the impact on wide area network resources and reach an agreement between all organizations to provide these needed services. Agreements were reached, understood and accepted by all participants. UEN has agreed to develop a draft MOU based on these agreements. UEN is taking care to ensure that all principals have adequate input into the MOU development process. We anticipate that this MOU will be ready for final review and approval at the April 2006 Steering Committee meeting.

Tab 5 – Secondary School Wide-Area-Network Ethernet RFP

UEN issued a Request for Proposal in mid-September for procurement of services for Phase Four of the Ethernet project. This was the last major step to provide Ethernet connectivity to the remaining public secondary schools and district offices in the state. After extensive analysis, the UEN evaluation team issued awards in December and February to several vendors. The Steering Committee would like to commend the efforts by UEN staff in working with school districts in the evaluations and awarding of the RFPs and subsequent contract negotiations and E-Rate filings with successful vendors to supply additional bandwidth with competitive industry solutions.

Tab 6 – E-Rate Update

Ryan Thomas reported that February 16, 2006 was the deadline for filing applications for E-Rate funding for Year 2006. E-Rate filings for the Qwest ongoing Phases I, II, and III GeoMax application totaled just over $5 million. For all telecommunications

providers, UEN has filed for approximately $10 million in E-Rate dollars for fiscal Year 2007.

Tab 7 – IP Video Project Update

UEN is implementing the IP Video project on a regional basis. Currently the entire Uintah Basin including Daggett, Uintah, and Duchesne School Districts, Utah State University Roosevelt and Vernal and the Uintah Basin Applied Technology College have been converted. Central Utah is also progressing well with the addition in December of three IP Video classrooms at Snow College.

Ryan Thomas highlighted three challenges with IP Video bandwidth allocation that need to be addressed: 1) current problems affecting video quality, 2) firewall transversal issues, and 3) the complete transition to IP Video.

For a more detailed breakdown on these challenges please refer to Tab 7.

Utah Education Network Technical Services Subcommittee Meeting Minutes

Attendees: Barry Bryson, Jeff Egly, Boyd Garriott, Nancy Gibbs, Stephen Hess, M. K. Jeppesen, Troy Jessup, Kim Marshall, Mike Petersen, Bryan Peterson, Dennis Sampson, Jim Stewart, Ray Walker, Dennis Sampson, Ryan Thomas and Bruce Todd.

Compiled by Cindy Najarro

Tab 4 – Utah Navajo Health System Progress Report – Action

An update was given on the development of a memorandum of understanding (MOU) among Utah Navajo Health Systems (UNHS) clinics, the San Juan School District, College of Eastern Utah and UEN. Agreements were reached that were understood and accepted by all participants. UEN has agreed to develop a draft MOU for review and will arrange to meet with each participant. The MOU should be ready for final review at the April, 2006 Steering Committee meeting. The Steering Committee will approve the MOU before it is signed and implemented.

Tab 5 – Secondary School Wide-Area-Network Ethernet RFP – Action

A Request for Proposal (RFP) was issued by UEN in mid-September for procurement of services for Phase Four of the Wide-Area-Network Ethernet project. After evaluating the proposals closely with the stakeholders, UEN discovered a need to issue a second RFP which was published in December, 2005. UEN moved rapidly into the contract negotiation process in order to meet the E-Rate filing deadline of February 16, 2006.

Based on the contract awards we expect to make and those we have already made, the amount of money going to URTA members will increase by $2 million next year.

UEN invited personnel from the districts involved in the elementary and big secondary projects to provide input into the RFP process and evaluation. We worked very closely

with the districts. UEN's E-Rate staff provided valuable consultation and work to ensure that UEN contracts met the federal E-Rate standards and regulations. We executed nine separate contracts in a period of ten days with all the providers who submitted bids.

Through the RFP process we were also able to address several regional needs. One of the most important needs is the connection between Price and Orem. Our lease expires with Qwest in December, 2006. We needed to get a viable E-Rate solution. Qwest and Emery Telephone were able to work together to give us a competitive proposal that we have awarded and filed through the E-Rate process. This will extend our GeoMax backbone from Orem out to Price and provide an OC3 down to Blanding.

We were able to contract with Qwest to get GeoMax services to several Applied Technology campuses and charter schools.

This RFP will complete the Ethernet services to all remaining secondary schools and district offices in the state.

Tab 6 – E-Rate Update – Discussion

The deadline for this year's E-Rate filing was February 16, 2006. The total filing for E-Rate dollars for this year was approximately $10 million.

In some cases we had to submit duplicate filings on a particular district and area to protect ourselves. We weren't certain that the contract was going to be finalized. The duplicated number of the total value of the contracts was over $19 million and the discount on that is about $13 million.

We are already under initial review for many of those contracts. The Schools and Library Division (SLD) has already started investigating the contracts in order for us to get approved. This year it appears the contracts will be approved well in advance of July, 2006.

Tab 7 – IP Video Project Update – Discussion

UEN is now mid-point in the analog to IP Video conversion project. There will be people who will mix problems associated with the new IP system with problems that are unrelated with the new system. There have been a couple of issues with connecting on the bridge. UEN personnel are aware of these problems and are working with the RAD.

There are some concerns with the quality, including sync problems, and the automatic switching versus the manual switching. We need to make certain there are protected segments on the Ethernet links for video. There are some firewall issues that need to get resolved. The automatic switching can be turned off and changed, but this is more of a training issue. We may have to make changes to the control pad.

It is essential we get detail from everybody who participates in the IP Video conversions, from the technical side to the teacher/student side. We are trying to get a lot of feedback. We have gleaned good information from the teachers and facilitators around the state who have begun using IP Video. Distance Education Specialists (new name for Local Service Reps) have been gathering information from the instructor/facilitator student perspective to get the information. There is another video teleconference coming up in two weeks that will resume this discussion. The conferences have not included all the

technical staff, but if the details are provided, we can usually solve the problem. We want to proactively solve these problems, make improvements, and create a classroom equipment package that really does work for the students and teachers.

At this mid-point we have quality based on the least common denominator between the EDNET classrooms and the IP classrooms. At this junction, one does not receive the best benefits of either of the designs. We are aggressively working to convert as quickly as possible. Between now and August we are looking at 60+ sites to convert. Many of the colleges will be adding their own additional IP classrooms. This transition does create some other challenges also. The firewall transversal is an ongoing issue that we work with in each district, college, and university. We need to work with the unique campuses on a case by case basis and figure out how each has secured their network and the firewall they have implemented.

Other Items

CVDS should be completely out by December, 2006. The last segment removed will be between Salt Lake City and Logan.

An update on Communications Assistance for Law Enforcement Act (CALEA) was requested. Jim suggested from the discussions at Westnet and the Statenets meetings that there will be a comprise put into play at colleges, universities, and districts for some kind of contact. If law enforcement calls, there will be a single point of contact that technically, and from an evidentiary legal standpoint, will have some understanding that you will have to have some kind of device in place (a sniffer with spanning tree capabilities). There will be certain bits of information required. There will have to be some processes put into play. The compromise that will follow up on this is that during a normal life cycle of replacing equipment, we will have to install equipment that will be CALEA compliant. Vendors will need to step up to this and be more forthcoming about what is technically possible and work through what the needs of the law enforcement community are to make a better product and give us a more viable process.

There are some questions that haven't been answered, such as what the obligations of the university and colleges will be and what standards will be necessary to meet these needs.

Tab 10 – Steering Committee Meeting Minutes

A motion was made and seconded to approve the minutes from the previous meeting. **THIS MOTION PASSED WITH ALL VOTING IN FAVOR.**

The Steering Committee meeting was adjourned at 12:00 noon, with a reminder that the next meeting will be held on April 21, 2006, at the Dolores Doré Eccles Broadcast Center.

Please note: detailed information and discussion of the issues are included in the materials prepared for the meeting. These materials are available online at www.uen.org/steering/html/materials.html. Please refer to them for additional reference.

T AB **30**

OTHER