2010

Network Nebraska Market Survey Report, Conclusions and Recommendations

Nebraska Information Technology Commission

Education Council

Prepared by: Marketing Task Group

January 7, 2010

NITC Education Council Marketing Task Group Members

Arnold Bateman, Chair University of Nebraska

Chuck Lenosky Creighton University

Ed Hoffman Nebraska State Colleges

Mike Kozak Nebraska Department of Education

Rick Golden...... University of Nebraska

Steve Stortz Lutheran Schools of Nebraska

SuAnn Witt Nebraska Department of Education

Tom Rolfes Nebraska Information Technology Commission

About the Nebraska Information Technology Commission and the Education Council...

The Nebraska Information Technology Commission (NITC) was formed by the Nebraska Legislature in 1998 to "determine a broad strategy and objectives for developing and sustaining information technology development in Nebraska, including long-range funding strategies, research and development investment, support and maintenance requirements, and system usage and assessment guidelines; and to establish ad hoc technical advisory groups to study and make recommendations on specific topics, including workgroups to establish, coordinate, and prioritize needs for education, local communities, intergovernmental data communications, and state agencies." (Neb. Rev. Stat. 86-516)

The Education Council of the NITC is one of the Commission's six advisory workgroups. The Education Council is composed of 16 members, 8 from K-12 and 8 from Higher Education, to represent the educational technology interests of public and private education. By its charter, the Education Council may convene task groups to carry out its responsibilities. The Marketing Task Group is one of five such task groups to carry out the Statewide Technology Plan, which includes the strategic initiative called Network Nebraska.

Network Nebraska Market Survey

Report and Recommendations

Table of Contents

ı.	Introdi	uction	4
	a.	Executive Summary	5
	b.	Existing Network Nebraska Partners	5
	c.	Potential Network Nebraska Partners	6
II.	Conclu	sions and Recommendations	7
III.	Metho	dology	9
IV.	Study I	Limitations / Biases	. 10
V.	Survey	2008 vs. Survey 2009—What's different?	. 10
VI.	Survey	Results and Analysis	. 11
	a.	SWOT Analysis	. 11
	b.	2008 vs. 2009 Trends	. 11
	c.	Data graphs and charts	. 14
		i. Demographics	. 14
		ii. Existing Partner Results	. 20
		iii. Potential Partner Results	. 22
VII.	Appen	dices	
	a.	Appendix A: NITC Education Council Network Nebraska Survey Instrument	. 25
	b.	Appendix B: Invitation to Participate	. 31
	c.	Appendix C: Survey Responses Grouped by Common Theme	. 33
	d.	Appendix D: Unprocessed Survey Responses	. 50
	e.	Appendix E: Work Group Action Plans	. 58

Network Nebraska Market Survey

• Report, Conclusions, and Recommendations •

Introduction

Network Nebraska is the term used to describe the statewide multipurpose, high-bandwidth, telecommunications backbone and all of its associated service offerings and support. Network Nebraska-Education, serving public and private K-12 and higher education, offers network management, interregional transport, Internet access and Intranet routing for distance education, and provides access to the nationwide Internet 2 research and education network. Network Nebraska-Education is a collaborative initiative coordinated by the State Office of the CIO, University of Nebraska, and Nebraska Educational Telecommunications, and is funded by the participating public and private education entities of Nebraska.

This survey, conducted via Internet among current and potential K-12 and higher education public and private users, was designed to provide quantifiable baseline data to guide the Education Council's communications and marketing strategies by providing data on the following:

- General information on strengths and weaknesses of Network Nebraska services.
- Specific perceptions about Network Nebraska services by current and potential users.
- Motivational drivers in choosing Network Nebraska services.
- Current awareness level and perceptions toward Network Nebraska.
- Differences in perceptions between current users and potential users of Network Nebraska.

See Appendix A: NITC Education Council Network Nebraska Survey Instrument

Executive Summary

This is the second year in which the Network Nebraska market survey has been conducted. In December 2008, 364 survey participants started the survey while 178 or 48.9% completed the survey compared to 335 starting the survey in December 2009 with 236 or 70.4% completing the survey. This is a 32% increase in the total number of surveys completed in 2009 over 2008. The largest increase was in the interested party and potential Network Nebraska partner responses. December 2009 survey results suggest that existing users are shifting their attention more toward student learning opportunities, followed by increased bandwidth and cost sharing as being most important to their institution. In December 2008 lower cost was defined as the single most important strength and compelling competitive advantage of the network services. As the network environment grows and matures, it is logical that constituents' interests and concerns migrate from network stability to more applications and teaching and learning opportunities; and the 2009 survey data begins to demonstrate that trend.

Existing Network Nebraska Partners

- Among current partners of Network Nebraska the network is becoming increasingly important as a vehicle for providing student learning opportunities. Of the 172 who rated network attributes based on relative importance to their institutions, 97.6% said student learning opportunities were either very important or important. This was followed by increased bandwidth and cost sharing as being very important or important.
- Among current partners of Network Nebraska other attributes considered to be important to their institutions are distance learning and video conferencing, shared services, technical support services, communication and collaboration, and Internet 2.
- Among current partners of Network Nebraska, student learning opportunities was identified as the number one strength followed by reduced costs/cost sharing.
- When Network Nebraska partners were asked about their top concerns, they identified increasing costs, reliability of the network and network speed.
- Existing Network Nebraska partners indentified distance education coordination and connectivity concerns as the biggest weaknesses followed by communications and collaboration.
- The single most compelling competitive advantage that makes Network Nebraska's services distinctive and motivates educational entities to partner with Network Nebraska is reduced costs, followed by student learning opportunities and statewide Intranet.
- Current Network Nebraska partners responding to the survey identified enhanced educational opportunities, improved connectivity, and overarching principles as

- guiding principles or slogan that they believe Network Nebraska's services should stand for in the hearts and minds of its partners.
- When current users were asked what services or modifications to existing services they would like Network Nebraska-Education to provide, the largest number of respondents did not identify any followed by new services and more information related to Renovo scheduling/distance learning issues.

Potential Network Nebraska Partners:

- Potential users responding to the survey indentified student learning opportunities and cost sharing as the two most important attributes for their institutions if they were to become a Network Nebraska partner.
- Potential users identified reliability, membership/participation fees, network speed and technical support as their biggest concerns if their institution was to become a member of Network Nebraska.
- When potential users were asked what they know or have heard about Network Nebraska-Education the majority stated that they had limited or no knowledge. When asked about what questions they have about Network Nebraska-Education many responded with none/not enough information followed by questions about benefits and related services.
- Potential users responding to the survey said that educational partnerships should be the most compelling competitive advantage that makes Network Nebraska-Education services distinctive and motivates educational entities to partner with Network Nebraska. The same number of potential users responded by saying that more information was needed in order to respond to the question.
- Learner focused followed by network focused are the two short phases defined by potential partners for the guiding principle or slogan that Network Nebraska-Education services should stand for in the hearts and minds of its partners.

Conclusions

The survey highlights both challenges and opportunities for Network Nebraska to better serve existing partners and adding new partners to the network.

- 1. With the maturing of Network Nebraska and Network Nebraska-Education as a service provider for public and private K-12 and higher education, existing partner interests are shifting more to student learning opportunities and coordination of distance learning opportunities. However, this doesn't diminish the importance of network reliability, reduced cost/cost sharing, and continuing to improve the governance structure.
- 2. For both existing partners and potential new partners there continues to be limited knowledge of network benefits, costs and services.
- Existing partner public relations initiatives and new partner marketing campaigns should focus on reduced costs, shared resources, student learning opportunities and statewide access. Each of these initiatives should be customized for the intended target audience.

Recommendations

- Marketing Task Group should use the findings from the 2009 and 2010 Market Survey Reports and update the Network Nebraska marketing plan by April 1, 2010.
- 2. Network Nebraska–Education Advisory Group to utilize the 2009 and 2010 Market Survey Report data to guide development of network leadership, services and support.
- 3. Continue to annually reissue the survey to evaluate the success of the recommended Action Plan(s) and ensure the future of Network Nebraska values. Add survey branching or more sophisticated database analyses to better identify the opinions of: K-12 vs. higher education, public vs. private education, technological respondents vs. administrative respondents, partners vs. potential partners, and perceptions of the various geographic regions, to determine if responses are different for each of the subgroups.
- 4. Put in place a more aggressive communications plan for existing partners and potential new partners.

See Appendix E: Work Group Action Plans

Methodology

The survey was developed using an online survey tool, *Survey Monkey*, and an invitation to participate was distributed by members of the Education Council Marketing task group to administrative and technical staff of the following public and non-public education entities around the State. A reminder was sent midway through the 18-day survey period.

- Community Colleges
- State Colleges
- University of Nebraska
- Independent Colleges and Universities of Nebraska
- Educational Service Units
- K-12 public and nonpublic schools

See Appendix B: Invitation to Participate

Results of the survey were evaluated in two processes. The first process categorized the data into themes by sorting the responses to each question with specific topics listed in highest to lowest significance for each question. Pie charts were created from the demographic data and bar graphs created from the categorized data to provide a graphical interpretation of the results.

The second process reviewed the questions and responses using a SWOT Analysis (Strengths, Weaknesses, Opportunities, and Threats). Each category determined in the first process was tagged as a strength, weakness, threat, or opportunity referring to the specific responses when needed to verify the validity of the tag. These tags were then sorted with the top four concentrations presented for each element. It should be noted that strengths and weaknesses are considered *internal* elements, and opportunities and threats *external* elements of a SWOT analysis from which action plans are determined.

See Appendix C: Survey Responses

Study Limitations/Biases

The reader should keep in mind the response rate when interpreting the results. The total number of survey log-ins from current and interested Network Nebraska partners was 335. Approximately 332 individuals completed the demographic questions, of which 236 (70.4%) of the respondents completed one or more textual responses originating from existing and potential Network Nebraska partner elements of the survey.

While the study provides useful information in understanding motivations and perceptions of current and potential users of Network Nebraska—Education, further research is necessary to address items listed under both opportunities and threats in the SWOT Analysis section of the survey. As with any web-based survey, each respondent was motivated enough to open the survey link which may indicate biases, either positive or negative, towards Network Nebraska—Education. The thematic categorization of textual responses for each question was the opinion of two researchers and could be categorized differently by different reviewers.

Survey 2009 vs. Survey 2010—What's different?

Although the basic survey and survey methodology remained the same from December 2008 to December 2009, some questions for prospective users were modified slightly to better gauge their perceptions of Network Nebraska—Education. If a respondent checked "Other" (i.e. job role), a comment box was included to have them identify their particular job role. Survey participants were asked to rate particular attributes of the network based on the relative importance or level of concern to them or their institution.

Survey Results and Analysis

SWOT Analysis from Survey Data

STRENGTHS Characteristics important to the execution and ultimate success of the project	WEAKNESSES Internal factors that could prevent the achievement of a successful project result
 Student Learning Opportunities Partnering/Equity (includes shared services, costs, and technical support) Improved Connectivity (includes Intra/Internet, I-2, bandwidth, and reliability) Shared Costs 	 Communication Limited or no knowledge of benefits, costs, and services DL Coordination
OPPORTUNITIES External elements helpful in achieving the goals of the project	THREATS External factors that threaten project success
 New / Shared Services (includes applications as well as network support and infrastructure) DL and IVC (includes course offerings and quality, coordination, and Renovo improvements) Leadership / Governance Membership 	 Membership (includes adding new members and retention of existing members) Increases in costs Technical Support Network concerns (includes speed, reliability, equity)

2008 vs. 2009 Trends—What Network Nebraska entities are telling us

After having administered the survey for two consecutive years, it affords the opportunity to compare data and begin to assess whether the perception of the network environment has changed, based on the responses of the participants and potential participants. Certainly, there have been changes in perceptions, as evidenced by the following table. As with any uncontrolled survey sample, longitudinal data has some intrinsic variability due to the fact that different individuals take the survey each year.

Comparisons of 2008 and 2009 Survey Results

Key Indicator	2008 Survey Response	2009 Survey Response
Strengths	Reduced/shared costs Bandwidth/Speed/Capacity/I- 2Statewide connectivity Technical experience & support	Student Learning Opportunities Partnering/Equity Improved connectivity Shared costs
Weaknesses	Leadership/Governance Membership Communication Help Desk/Support	Communication (limited or no knowledge of benefits, costs, and services) DL Coordination
Opportunities	IVC/Dist Learning & Collaboration Shared Resources Advanced Services Training/Professional Development	New/Shared Services DL and IVC Leadership/Governance Membership
Threats	Cost/Funding Loss of control at local level Redundancy/Reliability Equity	Membership Increases in costs Technical support Network concerns (speed, reliability, equity)
Existing Network Partners	2008 Survey Response	2009 Survey Response
Strengths of NN Services	Lower costs Statewide Access/Geographical Network Services/Internet 2 Distance learning &IVC	Student learning opportunities Reduced cost/cost sharing Reliability Communication/collaboration
Weakness of NN Services	Governance leadership Reliability Slow network Communication/collaboration	Distance education coordination Connectivity concerns No known weaknesses Communication and collaboration
Most Compelling Competitive Advantage of NN	Lower cost Shared resources	Reduced costs Student learning opportunities
Guiding Principle/Slogan of NN	Shared resources Advanced Technology/Bandwidth	Enhanced educational opportunities Improved connectivity
Services or Modification to Existing Services Desired	Help Desk/Support Faster/More Internet Leadership/Governance	None expressed New Services Renovo/Distance Learning Issues
Potential Network Partners	2008 Survey Response	2009 Survey Response
Most Compelling Competitive Advantage of NN	Don't know Cost Shared resources	More information needed Professional/educational partnerships Bandwidth/connectivity
Guiding Principle/Slogan of NN	Cost over bandwidth Equity and accessibility Student centered	Learner focused Network focused Unknown
What Services Would Benefit your Organization	Access Specific Services Profession Development/Training	More student learning opportunities Services and support Internet and transport

Survey Results and Analysis

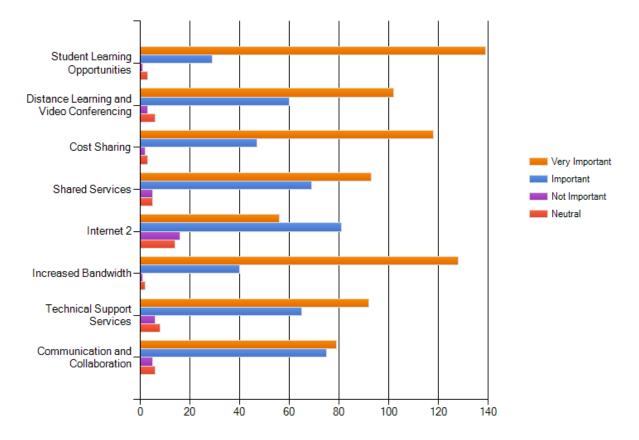
NITC Education Council Market Survey • Dec 2009

Total Surveys Started 335
Total Surveys Completed 236 70.4%

1. Please choose one for each of the following that best describes you:

1a	Percent	Responses	
	79.2% 9.9% 5.7% 5.1% ed question ed question	263 33 19 17 332 3	K-12Higher EducationESUOther (please specify)
1b			
	84.9% 15.1% and question and question	282 50 332 3	■ Public Entity ■ Private Entity
1c			
	68.10% 23.50% 5.10% 3.30% If questions and question	226 78 17 11 332 3	AdministratorInstructorTechnicalOther (please specify)
1d			
	61.8% 22.1% 16.1% ad question ad question	207 74 54 335 0	Existing NN PartnerPotential NN PartnerInterested Party

2a. Reflecting on your experience as a Network Nebraska-Education partner please rate the following attributes based on their relative important to your institution:

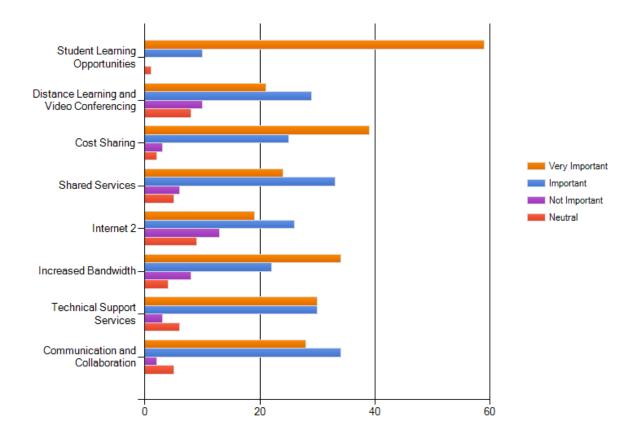


N = 170

Comments:

- 1. Need to continue to increase student use and principal knowledge of the system
- 2. So far we have not benefited a whole lot for what we are spending.
- 3. faster faster faster

2b. If you were to become a Network Nebraska-Education partner, rate the following attributes based on their relative importance to your institution:

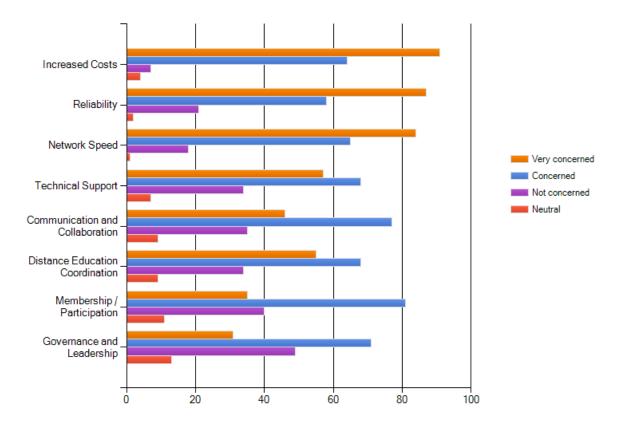


N= 69

Comments:

1. Using Network Nebraska would be decrease in bandwidth for us.

3a. Reflecting on your experience as a Network Nebraska-Education partner, please rate the following attributes based on the level of concern to your institution:

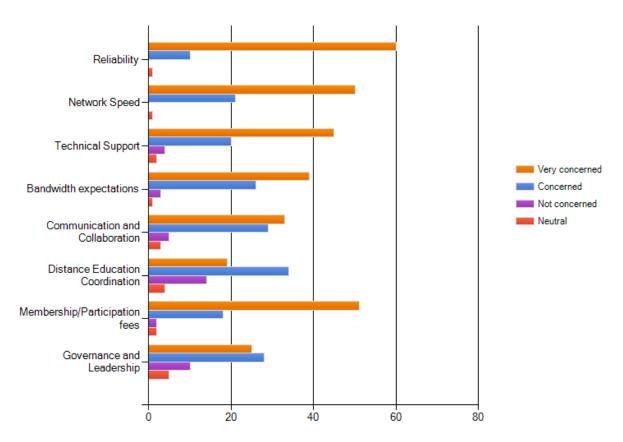


N = 167

Comments:

- 1. This network needs daily attention and leadership--like an Executive Director
- 2. What's wrong with the southeast schools--why haven't they joined the network?
- 3. Quality of courses, based on teacher effectiveness, is critical. Also, increasing dual credit courses is needed.
- 4. We need someone that has technical and excellent communication skills to advocate and provide trainings.
- 5. Money is a driving factor for us in everything we do. More for less is the mantra!
- 6. The one on the first page about being an existing, potential, or interested NN partner was unknown to me--I put existing even though I don't know.
- 7. I checked "Not concerned" for all these areas because I understood this as an evaluation of the services we have received. We are happy with the services we have received over the last year. We are especially pleased that the costs have been moving down, especially the declines in cost for Internet 1 access.

3b. If you were to become a Network Nebraska-Education partner, what would be your institution's level of concern with the following attributes?



N = 71

Comments:

1. For us the primary issues would be technical, especially any issue surrounding the transition from our current ISP.

Count responses for questions 2 and 3:

2. Please rate the following attributes based on their relative importance to your institution:

2a: Existing Network Nebraska-Education partner:					
Answer Options	Very Important	Important	Not Important	Neutral	Response Count
Student Learning Opportunities	139	29	1	3	172
Distance Learning and Video Conf	102	60	3	6	171
Cost Sharing	118	47	2	3	170
Shared Services	93	69	5	5	172
Internet 2	56	81	16	14	167
Increased Bandwidth	128	40	1	2	171
Technical Support Services	92	65	6	8	171
Communication and Collaboration	79	75	5	6	165

2b: Potential Partner / Interest party					
Student Learning Opportunities	59	10	0	1	70
Distance Learning and Video Conf	21	29	10	8	68
Cost Sharing	39	25	3	2	69
Shared Services	24	33	6	5	68
Internet 2	19	26	13	9	67
Increased Bandwidth	34	22	8	4	68
Technical Support Services	30	30	3	6	69
Communication and Collaboration	28	34	2	5	69

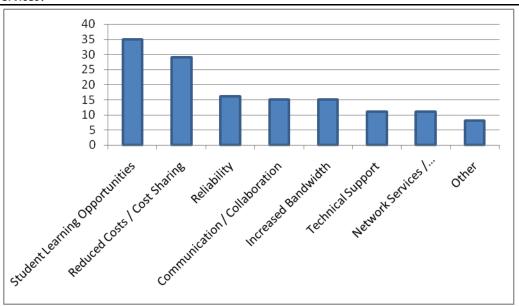
3. Please rate the following attributes based on the level of concern to your institution:

3a: Network Nebraska-Education partner:					
Answer Options	Very concerned	Concerned	Not concerned	Neutral	Response Count
Increased Costs	91	64	7	4	166
Reliability	87	58	21	2	168
Network Speed	84	65	18	1	168
Technical Support	57	68	34	7	166
Communication and Collaboration	46	77	35	9	167
Distance Education Coordination	55	68	34	9	166
Membership / Participation	35	81	40	11	167
Governance and Leadership	31	71	49	13	164
3b: Potential Partner / Interest party	1				
Reliability	60	10	0	1	71
Network Speed	50	21	0	1	72
Technical Support	45	20	4	2	71
Bandwidth expectations	39	26	3	1	69
Communication and Collaboration	33	29	5	3	70
Distance Education Coordination	19	34	14	4	71
Membership/Participation fees	51	18	2	2	73
Governance and Leadership	25	28	10	5	68

Pareto Charts of Survey Results from EXISTING Partners of Network Nebraska

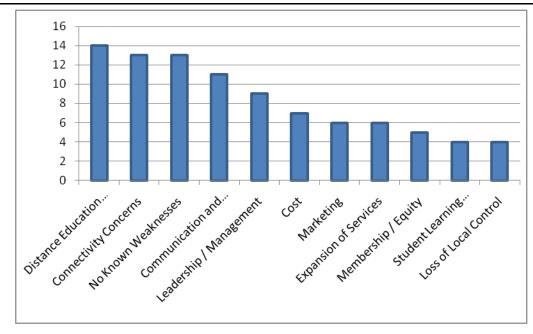
4. What are the strengths of Network Nebraska-Education services?

	140
Other	8
Network Services / Responsiveness	11
Technical Support	11
Increased Bandwidth	15
Communication / Collaboration	15
Reliability	16
Reduced Costs / Cost Sharing	29
Student Learning Opportunities	35



5. What are the weaknesses of Network Nebraska-Education services?

	92
Loss of Local Control	4
Student Learning Opportunities	4
Membership / Equity	5
Expansion of Services	6
Marketing	6
Cost	7
Leadership / Management	9
Communication and Collaboration	11
No Known Weaknesses	13
Connectivity Concerns	13
Distance Education Coordination	14



6. What is the single most compelling competitive advantage that makes Network Nebraska's services distinctive and motivates Educational entities (Educational Service Units, public and private colleges, and public and private K-12 schools) to partner with Network Nebraska?

Reduced Costs

Student Learning Opportunities

Statewide Intranet

Partnering and Collaboration

Affordable Internet Access

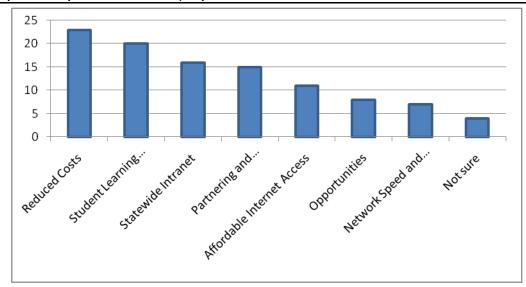
Unique Opportunities

Network Speed and Reliability

Not sure

4

104



7. In a short phrase, what is the guiding principle or slogan that you believe Network Nebraska-Education services should stand for in the hearts and minds of its partners?

Enhanced Educational Opportunities

Improved Connectivity

Overarching Principles

No Opinion

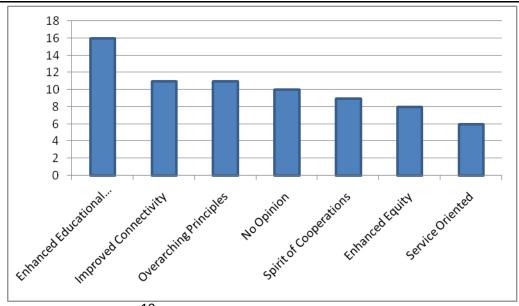
Spirit of Cooperation

Enhanced Equity

Service-Oriented

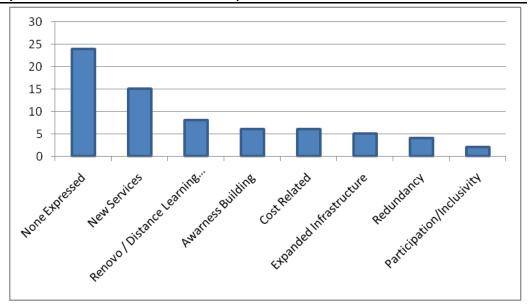
6

71



8. What services or modifications to existing services would you like Network Nebraska-Education to provide?

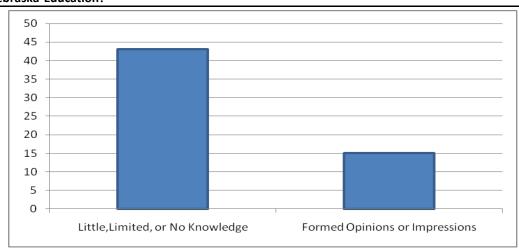
None Expressed	24
New Services	15
Renovo / Distance Learning Issues	8
Awareness Building	6
Cost-Related	6
Expanded Infrastructure	5
Redundancy	4
Participation/Inclusivity	2
	70



Pareto Charts of Survey Results from POTENTIAL Partners of Network Nebraska

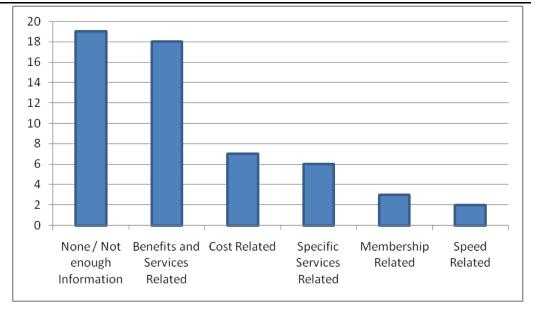
9. What do you know or have you heard about Network Nebraska-Education?

	58
Formed Opinions or Impressions	15
Little, Limited, or No Knowledge	43



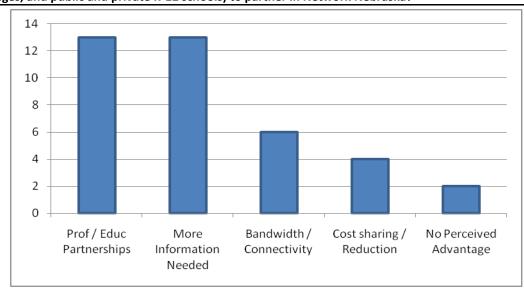
10. What questions do you have about Network Nebraska-Education?

	55
Speed Related	2
Membership Related	3
Specific Services Related	6
Cost Related	7
Benefits and Services Related	18
None / Not enough Information	19



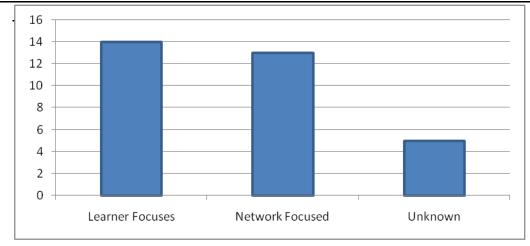
11. What is the single most compelling competitive advantage that makes Network Nebraska-Education services distinctive and motivates Educational entities (Educational Service Units, public and private colleges, and public and private K-12 schools) to partner in Network Nebraska?

Prof / Educ Partnerships	13
More Information Needed	13
Bandwidth / Connectivity	6
Cost sharing / Reduction	4
No Perceived Advantage	2
	38



12. In a short phrase, what do you think should be the guiding principle or slogan that you believe Network Nebraska-Education services should stand for in the hearts and minds of its partners?

Learner Focused 14
Network Focused 13
Unknown 5
32



13. What services would benefit your organization as a partner in Network Nebraska-Education?

More Student Learning Opportunities

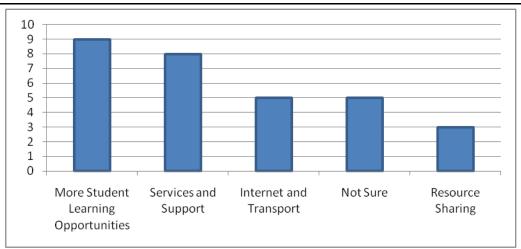
Services and Support

Internet and Transport

Not Sure

Resource Sharing

30



* APPENDIX: A – Survey Instrument *



Exit this survey

2009 NITC Education Council Survey

Thank you for participating in the Network Nebraska-Education Market Survey. Its goal is to provide the Education Council with information to assist in developing a strategic plan that improves the visibility, awareness, and services associated with Network Nebraska-Education.

Network Nebraska is the term used to describe the statewide multipurpose telecommunications backbone and associated service offerings and support. It is comprised of several subnetworks that includes Telehealth, Government, and K-20 Education.

Network Nebraska-Education offers network management, interregional transport, Internet access and Intranet routing for distance education, and provides access to the nationwide Internet2 research and education network. Network Nebraska-Education is a collaborative initiative coordinated by the State Office of the CIO, University of Nebraska, and Nebraska Educational Telecommunications, and is made possible by the public and private education entities of Nebraska.

All responses to this short survey will be kept confidential. Comments will be compiled and synthesized by members of the Education Council Marketing Task Group. Information will help improve both the quality and types of services provided by Network Nebraska-Education. Results will be posted on the NITC website.

More information can be found at: NITC Education Council (www.nitc.nebraska.gov/ec) Network Nebraska (www.networknebraska.net)

[Demographics for all survey respondents of Network Nebraska—Education]

Please choose one for each of the following that best describes you:

ESU
K-12
Higher Education
Other (please specify)
choose one:
Private Entity
Public Entity
choose one:
Administrator
Instructor
Technical
Other (please specify)

* And choose one:

_)	Existing NN Partner
ز	Potential NN Partner
ز	Interested Party

*At this point in the survey, respondents are directed to questions specific for existing partners or to questions specific for potential/interested partners.

[Questions for existing partners of Network Nebraska—Education]

Reflecting on your experience as a Network Nebraska-Education partner, please rate the following attributes based on their relative importance to your institution:

	Very Important	Important	Not Important	Neutral
Student Learning Opportunities	0	0	0	0
Distance Learning and Video Conferencing	J	J	J	J
Cost Sharing	0	0	0)
Shared Services	3	3	3	3
Internet 2	0	0	0	0
Increased Bandwidth	J	Ĵ	J	J
Technical Support Services	0	0	0	0
Communication and Collaboration	J	J	j	J
Other/Comments:				

Reflecting on your experience as a Network Nebraska-Education partner, please rate the following attributes based on the level of concern to your institution:

	Very concerned	Concerned	Not concerned	Neutral		
Increased Costs	0	<u></u>	0	0		
Reliability	J	3	J	3		
Network Speed	0	0	0	0		
Technical Support	J	3	J	J		
Communication and Collaboration	0	0	J	0		
Distance Education Coordination	J	J	J	J		
Membership / Participation	0	0	0	0		
Governance and Leadership	J	J	J	J		
Other/Comments:						
				N		

What are the strengths of Network Nebraska-Education services?	
	₩
What are the weaknesses of Network Nebraska-Education services?	
	<u>-</u>
What is the single most compelling competitive advantage that makes in Education services distinctive and motivates educational entities (Educational entities) to public and private K-12 institutions) to public and private K-12 institutions.	ational Service Units,
neoraska.	×
In a short phrase, what is the guiding principle or slogan that you believe Education services stands for in the hearts and minds of its partners?	e Network Nebraska-
	<u>~</u>
	₩
What services or modifications to existing services would you like Netw to provide?	ork Nebraska-Education
	^

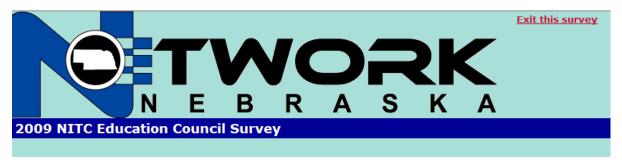
[Next, questions specific to Potential or Interested partners of Network Nebraska—Education]

Network Nebraska-Education is a collaborative initiative coordinated by the State Office of the CIO, University of Nebraska, and Nebraska Educational Telecommunications, and is made possible by the public and private education entities of Nebraska. It offers its partners network management, interregional transport, Internet access and Intranet routing for distance education, and provides access to the nationwide Internet2 research and education network. LB1208 (2006) tasked the Office of the CIO with providing access to every education entity (public and private, K-20 institutions) by July 1, 2012.

				<u>~</u>	
What questions do you have about Network Nebraska-Education? If you were to become a Network Nebraska-Education partner, rate the following attributes					
based on their relative i			Not Important	Neutral	
Student Learning	Very Important	Important	Not Important	Neutral	
Opportunities))))	
Distance Learning and Video Conferencing	J	J	J	J	
Cost Sharing	0	0	0	0	
Shared Services	5	J	J	J	
Internet 2	5	0	0		
Increased Bandwidth	J	J	J	J	
Technical Support Services	0	0	0	0	
Communication and Collaboration	J	J	J	J	
Other/Comments:					

If you were to become a Network Nebraska-Education partner, what would be your institution's level of concern with the following attributes?

Reliability Network Speed Technical Support Bandwidth expectations Communication and Collaboration	
Technical Support Bandwidth expectations Communication and	
Bandwidth expectations Communication and	
Communication and	
Collaboration	
Distance Education	
Coordination	
Membership/Participatio	
fees	
Governance and	
Leadership	
Other/Comments:	
w	
What is the single most compelling competitive advantage that makes Network Nebraska's	
services distinctive and motivates Educational entities (Educational Service Units, public and	
private colleges, and public and private K-12 schools) to partner in Network Nebraska?	
In a short phrase, what do you think should be the guiding principle or slogan that you believe	
Network Nebraska's services should stand for in the hearts and minds of its partners?	
What services would benefit your organization as a partner in Network Nebraska?	
Prev Next	



If you have questions or would like to know more about Network Nebraska, contact: Tom Rolfes (402.471.7969 or tom.rolfes@nebraska.gov)

You may share link to this survey with others in your organization.

NITC EDUCATION COUNCIL MARKETING TASK GROUP

* * *

You will now be connected to the 2008 Network Nebraska Market Survey Report, Conclusions and Recommendations that resulted from last year's NITC Education Council survey. We welcome your comments and feedback.

Prev Done

[After completing the survey, respondents were connected to a URL displaying a PDF copy of the 2008 Network Nebraska Survey Report to reveal how their input directed decisions and changes in NN services.]

* APPENDIX: B – Invitation to Participate *

From: Arnold J Bateman [mailto:abateman@unlnotes.unl.edu]

To: Witt, SuAnn; Chuck Lenosky (clenosky@creighton.edu); Hoffman, Ed; Kozak, Mike; Golden, Rick;

Steven Stortz (sstortz@clnorfolk.org); Rolfes, Tom **Subject:** Re: FW: DRAFT Survey and Cover Letter

Colleagues:

Thank you for meeting by conference call to work out final details on the survey. If I missed something of importance in the meeting summary let me know.

To maximize completion of the survey the task force members are asking that the following people forward the e-mail inviting individuals to complete the online survey. The following individuals will send out the e-mail invitation on Monday, November 30, 2009 or shortly thereafter:

Rick Golden --- University of Nebraska

Ed Hoffman --- State Colleges

Tom Rolfes --- Community Colleges

Tip O'Neill --- Independent Colleges and Universities

Mike Kozak --- Public K-12 schools and administrators

Mike Dulaney --- Public K-12 school administrators

Tom Rolfes --- ESU-Network Operations Committee, ESU-Technology Affiliate Group

Tom Rolfes --- NETA Technology Coordinators

Tom Rolfes --- NEHEIT (Nebraska Higher Education Information Technology group)

Steve Stortz --- Lutheran Schools of Nebraska

Jeremy Murphy --- Catholic Schools of Nebraska

Schedule:

- ♦Survey will be finalized and posted to Survey Monkey, November 25, 2009
- ♦First e-mail invitations will be sent Monday, November 30, 2009
- ◆Reminder e-mail should be sent on or about Friday, December 11, 2009
- ♦Last day to complete the survey is December 18, 2009
- ◆Data analysis to be performed December 21-30, 2009
- ♦Marketing group conference call the week of January 4 to discuss survey data and make assignments for conclusions, recommendations, SWOT analysis
- ♦Preliminary survey data will be presented at the Education Council meeting, January 7, 2010
- ♦Follow up meeting late January 2010 to complete the report and prepare presentation for the CAP, Technical Panel, Education Council, and Network Nebraska Advisory Group meetings in February 2010

Arnold Bateman

Associate Vice Chancellor for Extended Education & Outreach and Director Extended Education & Outreach University of Nebraska-Lincoln

Copy of Introductory email sent by NITC Education Council members to respective constituents

Dear Education Partner,

The Nebraska Information Technology Commission--Education Council has undertaken an important survey process to help the Network Nebraska statewide network enhance its position as a service provider and to better serve the needs of its partners.

This survey is designed to collect input from Network Nebraska's current and future partners in order to assist staff in improving the number, variety, and quality of services on the network.

As a result of responses from last year's survey

- A network advisory group was formed, providing a direct voice from partners to Network Nebraska operations.
- Services were expanded (e.g. traffic shaping, automatic notification system, and a 24/7 helpdesk).
- While increasing bandwidth, Network Nebraska participation fees and interregional transport costs remained level.
- Membership increased by 49 new entities due to increased outreach and communication.

The link below will take you to the short online survey (estimated time for completion is 5-10 minutes).

We would appreciate the participation of both the administrator and technology and distance learning coordinator most closely associated with Network Nebraska services. You may also forward this email and survey link to others within your organization or outside of your organization who have interest in Network Nebraska services. All input is appreciated.

If you have any questions about this survey, please contact SuAnn Witt suann.witt@nebraska.gov

Please complete no later than December 18, 2009.

Upon completion of the survey, you will be provided a link to view a copy of last year's survey report and recommendations. Your thoughtful feedback is appreciated.

The survey is available at: http://www.surveymonkey.com/s/NDYJC2P

Sincerely,

Marketing Task Group Members

NITC Education Council Network Nebraska

http://www.nitc.nebraska.gov/ec http://www.networknebraska.net

* APPENDIX: C – Survey Responses *

Survey Responses Grouped by Common Theme

Numbers next to responses only indicate the order in which the response was listed in the text file and cannot be used to identify individual respondents. Repeated numbers indicate multiple categories implied.

[Responses to questions 1-3 are included in the analysis beginning on Page 10 of this report]

Responses from Existing Network Nebraska—Education Partners

4. What are the strengths of Network Nebraska-Education services?

- Communication and collaboration
- 2. The potential to share services
- 4. Collaboration and coordination.
- 5. We are becoming a larger group
- 6. Wonderful collaborative effort between K-12 and higher ed, public and private. The sky's the limit (eventually) with this self-funded network!
- 11. Having all K12 and education institutions on the same network. Having the tech support of Ben M.
- 15. The support and ability to collaborate with other schools.
- 21. standards across the state, cost sharing, collaboration among partners
- 36. Potential for Statewide increased communication
- 38. The ability to communicate throughout the state.
- 46. Distance Education Coordination and Communication
- 56. Increased education collaboration
- 58. Collaboration among members
- 76. Bandwidth and reliability provides potential for much greater sharing of resources and collaboration.
- 86. coordination, collaboration, cost effectiveness
- 92. Standing together for staff and students
- Reduced Costs / Cost Sharing
- 1. The basics are covered by Network Nebraska in a cost effective manner.
- 3. Lower costs
- 9. Lower costs
- 17. Cost sharing has reduced the impact on our institution.
- 18. Good bandwidth at an affordable price.
- 21. cost sharing
- 22. Cost effective solution for distance education
- 25. Cost is excellent
- 28. Good cost-sharing
- 29. Acquiring cost effective contracts with service providers
- 31. cost sharing
- 41. growth potential, cost effectiveness
- 45. Lower cost for bandwidth
- 51. At this point I would say shared cost and the possible ability to receive discounts for being part of a group.
- 55. Affordability,
- 56. Reduced costs
- 53. I believe the "strength in numbers" possibilities associated with Network Nebraska will allow us lower prices
- 63. Large group costs
- 72. Low price

- 75. Large entity thereby spreading costs & services.
- 77. Cost control
- 80. Costs
- 86. Cost effectiveness
- 88. Economies of scale in a state where this is difficult to achieve.
- 91. Cost-effective, coordinated, enterprise-class
- 93. Avoidance of Internet 1 bandwidth costs. Cost of Internet 1 access being pushed down through collaborative purchasing
- 94. The ability to purchase large amounts of bandwidth below normal prices those individual organizations would expect to pay.
- 95. The NN opportunities have greatly reduced our ongoing operating costs for internet bandwidth.
- 96. The potential to save costs to its members

• Increased Bandwidth

- 3. High speed access between sites
- 7. Band width
- 9. Bigger pipeline
- 17. Flexibility to add bandwidth
- 18. Good bandwidth to central NE.
- 36. Speed of IP services
- 40. Great connections between partners
- 45. Provides statewide backbone
- 48. More speed than we had before
- 54. Increased access/faster internet
- 55. Increased bandwidth
- 57. The speeds so far is awesome so hope that will continue
- 60. Internet access
- 77. Speed and reliability especially compared to schools in other states
- 80. Bandwidth

Reliability

- 8. It has been a very dependable system
- 10. reliability
- 13. To this point it has been very stable & reliable.
- 16. Reliability
- 19. Very little downtime
- 22. Very reliable services
- 25. The reliability is great
- 27. For the most part it thinks NN is a solid reliable network
- 35. Our bandwidth and connection has been good so far this year. In the past, with other providers, we've lost connection on a regular basis and none of that has gone on this year.
- 41. Dependability
- 44. Reliability
- 50. Smooth connections from one school to the next... flexibility, connectivity
- 74. Reliability
- 78. This is the first year I have had comments that the internet seems to be faster. That is because we purchased extra bandwidth.
- 78. We haven't had any major issues with our DL or internet connection. Reliability is the biggest strength.
- 80. Reliability

• Technical Support

- 7. Technical service
- 11. Having the tech support of Ben M.
- 25. Support is very good
- 26. Ben Mientka does a good job of providing support for entities.
- 31. Technical support

- 60. Guidance
- 88. Professional management of a large network where finding that experience can be difficult
- 62. Quality assistance as needed.
- 80. Network support
- 83. Availability and response to problems.
- Network Services / Responsiveness
- 2. The ability to control traffic and provide reliable services.
- 19. Efficient, comprehensive service; consistent service;
- 39. Statewide services
- 52. Great service!!!!
- 57. Also the added level of Security to the network.
- 64. Depth of services
- 72. Ability to purchase gear like the packet shaper for services
- 93. Connection to Internet 2
- 93. Opportunities to improve disaster recovery and business continuity
- 93. Options through placing servers/services at the core nodes of the network.
- 96. Sharing services that drain resources at the local level.

• Other

- 2. Local Ownership
- 22. Telehealth delivery
- 30. First Year
- 49. We are a new member and have only used NN for our connections for about 4 months for video and 2 months for data (Intranet) I can't say what the strengths, weaknesses are at this time. We would need more time to evaluate this.
- 59. Its strength is its potential.
- 70. The overall goal is the strength.
- 71. It is still too early to tell...I believe we are still in the infancy stage, therefore, I am not sure we have been at it long enough to identify strengths.
- 79. Unknown
- Student Learning Opportunities
- 8. Provided excellent opportunities for our rural area.
- 12. Ability to meet educational needs of students and staff.
- 14. Gives all school equal opportunities
- 16. Shared resources with institutions of similar interest
- 20. Providing quality education throughout Nebraska
- 23. Availability of resources/classes.
- 24. Potential for options for students.
- 32. Ability to reach more students with added efficiency
- 33. opens rural NE students to the world; we are desperately in need of foreign languages.
- 34. Possibility for increased offering in small rural schools.
- 36. Increased access to classes for student
- 36. Increased information available to students, faculty and staff
- 37. Wide range of opportunities for class offerings
- 42. Allowing rural areas, especially those in western Nebraska, the opportunity to access a wider variety of courses via distance learning
- 43. Expanded choices for our students.
- 47. The many opportunities for students.
- 53. I believe the "strength in numbers" possibilities associated with Network Nebraska will allow increased opportunities in the future. I am more concerned with the increased in educational opportunities and services however.
- 55. More technology services are available to students and staff
- 56. Education opportunities.
- 57. DL I think is the most.

- 58. Collaboration among members.
- 60. Distance learning access
- 61. The ability to go statewide for DL courses
- 65. Increased offerings to our students of smaller schools
- 66. Rural schools with limited resources can access quality educational opportunities for students via Network Nebraska
- 67. We just have to have technology with our rural situation.
- 68. Able to receive classes from other districts. This gives a broader variety of classes for your students.
- 69. Opportunities for students.
- 73. More opportunities
- 81. Opportunity to share with other schools across the state.
- 82. Able to find classes for a variety of students across the state. Helps with accreditation issues and teacher shortage in certain areas.
- 84. The service is always available providing classes or educational opportunities for all of our students.
- 85. Increased course offerings. Dual credit classes
- 89. Our school has grown its capacity in 21st century learning which would not have been possible without NN.
- 90. Access to the internet and many distance learning offerings that our school would not have.

5. What are the weaknesses of Network Nebraska-Education services?

• Distance Education Coordination

- 19. Still not enough information about classes outside of our esu area.
- 29. Limited scheduling availability.
- 34. Class times do not always match school times
- 35. Scheduling
- 36. The Distance Learning system Renovo does not work well. It needs to be updated or get a new partner.
- 38. Scheduling issues for DL classes from one time zone to another and from one school district's bell schedule to ours
- 39. Need greater communication as to what is available for students k-12.
- 56. School agreements with other schools do not allow for any other institution to take the class.
- 60. Don't always hear about classes until there is no space left.
- 75. Coordinating class times.
- 76. Renovo scheduler
- 77. Distance Education Coordination
- 79. Assisting schools generate relevant, collaborative experiences for student learning would be very valuable.
- 80. Distance learning is a concern since not all schools are not on the lifesize system. It creates connection problems and sound and video problems.
- 82. Not able to match more schools across the state with offerings

• Student Learning Opportunities

- 1. Not much thinking about "last mile" or curb to household connection. As we move to 1:1 models in our schools, we'll need to be able to guarantee access to our digital resources from our students' homes. What should this look like? What will this mean for NN?
- 43. Lack of dual credit classes.
- 49. The need for virtual learning/High School
- 72. If you open up the curriculum for all students in NN then the concern is paying for all the classes. I would hope we can all work together when we share teachers.

• Connectivity Concerns

- 3. No redundancy or alternative infrastructure available if a network outage occurs
- 11. Easy of access to the CCC college locations.
- 12. Large network possible breakdowns
- 13. The reliability of the network is low.
- 21. Use by school districts.

- 23. Redundancy
- 24. A "statewide" network that stops at Grand Island; lack of redundancy
- 28. The speed and the glitches experienced periodically.
- 51. At the present time, Network Nebraska has focused one educational needs. As we grow in educational needs, more bandwidth will be needed to expand our resources.
- 55. It doesn't always work the way we want it to (connections)
- 64. Tech issues
- 68. Lack of lower-end options for schools not needing to take full advantage of distance education services. We have an elementary school in a different city (through school merger), but it is cost prohibitive to bring them on Network Nebraska. We have a residential DSL connection, which means none of their traffic can see the benefits of the closed NN network.
- 80. Network speed is very much an issue.

Marketing

- 7. Student and principal knowledge of how to best use the system to expand student learning opportunities 47. I believe the current weakness of Network Nebraska is the angle we're currently using to sell the viability
- of this union of educational institutions. We need to get out and show people how we're using the capabilities that NN has brought about instead of just telling them.
- 58. Not a lot of participation and not very well advertised for the benefits to educators
- 67. Not enough publicity to techs/admins about what it is and what it is for, how it can be leveraged for the future, etc.
- 83. Marketing of the advantages that Network Nebraska-Education offers.
- 85. Awareness of opportunities.

• Expansion of Services

- 2. Lack of value added services beyond collaborative
- 15. Technical training
- 41. Do not duplicate services that ESU's can provide, such as Tech support.
- 53. Services aren't really anything more than we received prior to Network Nebraska except for additional costs for the Network.
- 69. The coordinators for the DL system rely on the local school technician to fix issues with the DL system. If they are going to rely on that then they need to have some sort of training on the equipment.
- 81. Limited number of application services. The mantra, "if you build it, they will come" definitely applies. I might add, "If you don't increase the application services they may leave" as vendor pricing in large metros will rival NN. The differentiation comes in the application services. NDE needs to become a player and figure out how they can provide services including statewide learning management, statewide content management, statewide student information, statewide ERP. The vision should be toward a service-optimized cloud connected to NN and offering better applications at lower prices than individual entities could possibly afford.

Cost

- 2. The threat of increased costs for k12.
- 9. Cost
- 30. Cost of the equipment and services.
- 40. Cost
- 49. Always concerned about costs.
- 61. Cost is still high.
- 83. High connectivity costs for some locations to get on the network (conduit).
- Communication and Collaboration
- 15. Transparency of connection and cost information
- 16. We feel pretty removed from the process out here in central/western NE. The service has gotten better and I know you try and inform us about what is going on, our remoteness just limits the contact and personal attention.
- 17. MAKING NETWORK CHANGES THAT AFFECT US and OUR PARTNER INSTITUTIONS AND FAILING TO NOTIFY THOSE INVOLVED...this happens frequently and causes havoc with our events/classes.
- 20. Lack of communication statewide.
- 22. More updates of future directions would be nice.

- 32. Need more/better communication about how to access some of the Net 2 services
- -Could use more communication about how higher education can benefit from Net Neb since there is no E-rate benefits or financial reimbursements.
- 39. Need greater communication as to what is available for students k-12.
- 54. Not much is known by administrators in districts with technology director or solely utilizes ESUs
- 63. Communication had previously been low until Ben was hired
- 66. Overall size results in sometimes delayed services and communication.
- 78. Lack of communication regarding network services and offerings as the network grows. Unknown channel of communication other than through my ESU. (maybe that is preferred. It would be good to know that.)

• Membership / Equity

- 4. Voluntary option rather than mandatory.
- 5. Too many are not in the group.
- 8. Far Western NE not as well served as the Eastern half
- 33. Seems some districts are looked out for over other districts.
- 59. We are concerned with distances involved with communication, infrastructure issues, and equity of educational opportunities.

• Loss of Local Control

- 2. Local Ownership
- 10. Not having more control of the NET Ne costs to schools for services.
- 41. Loss of local control is a concern
- 42. Increased levels of state involvement and accountability

Leadership / Management

- 2. Lack of clear cut policies that are enforceable!
- 2. Too much administrative overhead; lack of direction.
- 6. That it cannot grow as fast as other networks, given that it is self-funded.
- 14. The organization should have an "elected" board that represents ALL levels of institutions.
- 25. No one in the current leadership has the pulse of all Education sector needs and vision to provide those needed services; NN response to needs is often delayed because of purchasing rules, requirements, or other political hurdles
- 37. Over sold connections to the internet. We also potentially have some configuration needs and issues.
- 83. Still dealing with a lack of trust and therefore cooperation from some potential participants.
- 84. Doesn't have the ability to act in a quick manner due to needs of users because of bidding requirements.
- 86. Lack of go-to leadership directly responsible for achieving NN-Education goals on behalf of its members. Continuing to grow the network so its benefits extend beyond LB1208 for K-12

• No Known Weaknesses

- 18. None come to mind.
- 27. None
- 31. None I can see.
- 45. None
- 46. None so far for us.
- 48. NA
- 50. I have not found any as of yet. This is a great system that allows us to be connected and reduce travel time in this remote area
- 52. None
- 65. None.
- 70. Unknown
- 71. None
- 73. None that I can think of at this time.
- 74. I have not found any at this point.
- ??????
- 26. First Year
- 44. See above answer
- 57. Only as strong as its members

62. Not there yet.

6. What is the single most compelling competitive advantage that makes Network Nebraska-Education services distinctive and motivates educational entities (Educational Service Units, public and private colleges, and public and private K-12 institutions) to partner with Network Nebraska?

Network Speed and Reliability

- 1. Comprehensive service at value.
- 28. Large network with adequate bandwidth at cost effective prices
- 31. Technical support services
- 51. However, I believe that when we begin to look at the future implications of building the net work we're going to find that increases in bandwidth and speed
- 70. More classes and network speed
- 71. Reliability
- 84. Reliability

Unique Opportunities

- 17. Only game in town
- 23. Uniqueness of options.
- 39. We also need NDE to be more flexible and willing to not tie funding to traditional classroom attendance.
- 52. Ease of use/accessibility
- 65. We are all trying to manage a small number of students into a broad market.
- 73. State aid incentives
- 89. Ultimately, it will need to be about the application services.
- 93. Administration and service management coordination of the complex elements including RFPs, Erate, billing, troubleshooting, etc.

Affordable Internet Access

- 3. increased bandwidth and connectivity for all
- 7. Cheap and reliable Internet
- 18. Strength of being able to purchase bandwidth at a more competitive price.
- 21. Provides statewide network reach at an affordable price. Provides internet 1 and 2 services as a very reasonable price.
- 40. Cost per meg of bandwidth
- 49. For us the huge increase in bandwidth.
- 63. Safe internet usage by students
- 69. Cheap internet access
- 86. Inexpensive Internet services.
- 90. From a private college perspective it is Internet1/Internet2 access at comparatively low prices.
- 91. Amount of bandwidth that we have been able to purchase at a reasonable cost.

• Statewide Intranet

- 2. The ability to tie all institutions together via a reliable and effective network.
- High speed connections to various office locations across the state to allow video-conferencing, collaboration, etc.
- 5. Leveraging buying power of the educational group.
- 11. All on the same network, before hitting the internet.
- 13. The opportunity to access the entire state
- 24. The connections to other educational institutions is very helpful. This helps us save cost and complications on any collaboration.
- 25. Network connectivity/close proximity to other educational entities within Nebraska.
- 27. Plus once you are a NN member you can video conference, etc. with other NN members without major concern of bandwidth limitations
- 34. All based on same system.
- 47. Inter-connectivity with all other schools belonging to NN as well as overall speed of connections.
- 50. Everybody has the same capabilities, such as speed of internet, etc.

- 54. Connectivity with the all institutions to enhance video conferencing without travel time.
- 62. State wide access and coordination between schools
- 64. Common communication network.
- 74. It is a closed, controlled network with many levels of network protection from outside intruders.
- 81. Statewide link.
- Student Learning Opportunities
- 8. Expanded academic opportunities for students
- 9. Online courses
- 10. The ability to connect over high bandwidth to other schools in the state for distance learning opportunities.
- 19. I thought we had to join to gain access to classes outside of our area.
- 32. Increased opportunities for our students.
- 35. Potential for offering more courses to more students.
- 39. The continuing ed opportunities are endless.
- 41. Being able to offer courses to our students (dual credit, college level, etc.) that we would not be able to otherwise due to staff limitations
- 42. Dual credit classes.
- 45. Statewide distance education opportunities
- 46. Scheduling and ease of scheduling
- 48. It expands the learning opportunity for students.
- 51. Will allow us to make better use of DL possibilities such as collaborations, virtual field trips, and shared resources.
- 56. Ability to provide services to a wide variety of students and communities.
- 57. The whole concept of DL and what you can do with it. Also purchasing power on internet speeds.
- 60. Make distance learning available to districts who must have it to survive
- 70. More Classes
- 79. The curriculum opportunities for all students.
- 82. Schools can offer services or classes for their students that they would not be able to have monetarily without it.
- 88. Distance Learning Opportunities.

Reduced Costs

- 14. I think the cost sharing...with today's budgets we have to cut costs wherever we can!
- 15. Cost reduction thru cost sharing
- 16. Cost savings! and grant money available.
- 20. Cost
- 26. Cost
- 27. The cost is probably the biggest advantage,
- 30. Cost
- 31. Cost sharing and
- 33. Shared costs for the services
- 36. Shared cost
- 38. Opportunities and cost of those opportunities with fast internet
- 51. I believe the overall current belief is cost effectiveness.
- 53. Low cost Bandwidth
- 55. Reduced costs
- 57. Also purchasing power on internet speed
- 60. Keep internet cost reasonable for educational purposes
- 66. It does decrease the cost involved.
- 71. Cost reduction
- 75. Keeps the costs down.
- 80. Relatively low costs.
- 83. Cost
- 89. At this time it is the coordination and pricing.

- 92. Cost
- Partnering and Collaboration (Collegiality)
- 6. One group, one voice is the most power we can have.
- 12. Ability to share costs and service coordination.
- 22. Having all entities working together in one organization.
- 33. Shared costs for the services
- 37. Communication
- 43. Who's involved (schools)
- 44. Statewide network and having everyone on board
- 58. People working together for the same mission, educating kids.
- 61. Potential sources and resources.
- 68. Network Nebraska involves more partners which may provide more opportunities for students in the state of Nebraska.
- 72. Strength in numbers supports cost efficiencies & services.
- 77. Collaborative efforts
- 78. Collaboration.
- 85. It is available to schools of all sizes.
- 87. Consortium participation
- Unknown
- 29. First Year Member
- 59. Don't know.
- 67. No opinion.
- 76. Unknown

7. Provide in a short phrase, what is the guiding principle or slogan that you believe Network Nebraska-Education services stands for in the hearts and minds of its partners?

Enhanced Equity

- 20. Reaching out to more students in rural/remote areas
- 28. Bringing bandwidth equality to Nebraska education entities.
- 32. Hopefully a State wide effort for cooperation in providing this service to all the schools in the state
- 38. Equal access to all entities
- 47. Equitable opportunities for all students in Nebraska.
- 53. "Outstate" entities benefit more, collectively, instead of being "2nd" to eastern competitors.
- 68. Equalized access for all entities.
- 70. Equitable access to network resources for the importance of educating future generations.
- Improved Connectivity
- 1. Our digital backbone!
- 4. Increase bandwidth and opportunities across the state of Nebraska
- 12. Increased infrastructure, bandwidth, and service.
- 15. Statewide network!
- 16. Remove the distance barriers!
- 17. Connecting K-20 entities in Nebraska
- 27. Many connections
- 30. Connecting students through technology.
- 35. Connecting Nebraskans in Learning
- 40. Connectivity today and tomorrow around the state.
- 54. Provide high quality bandwidth for educational use.
- Enhanced Educational Opportunities
- 6. Network Nebraska--delivering educational opportunities at the speed of light
- 7. Making a difference in student learning
- 9. Not sure perhaps educational opportunities for all Nebraskans
- 21. Opening schools' doors to the world...

- 22. Offering more learning to more students.
- 24. Increased opportunity for statewide academic partnerships and expanding information horizons.
- 29. Equal educational opportunity for all
- 33. Statewide distance education opportunities
- 34. Increased opportunities for students
- 39. 21st Century Learning opportunities
- 45. The ability to go statewide for assistance in obtaining courses.
- 46. Providing educational opportunities for all Nebraska schools
- 49. Working to improve student learning in Nebraska.
- 58. Enhance educational opportunities for students throughout our state.
- 61. The ability to expand opportunities for students.
- 63. Variety of educational opportunities

Service Oriented

- 5. Quality of service
- 10. Network Nebraska is focused on providing cost effective technology service and support to all its partners.
- 41. Providing strong partner support and quality of service
- 60. Offering a wide-range of highly useful services at a low cost.
- 65. Service providers for all schools in the state.
- 67. Access to services through intelligent cooperation.

• Spirit of Cooperation

- 2. The ability to communicate reliably with any institution in the state.
- 3. Connecting and collaboration for Nebraska's youth and citizens
- 11. A shared resource with reduced costs that users guide.
- 13. Collaboration
- 14. Partnering for best use of Nebraska resources and to provide educational opportunities for all Nebraskans
- 19. Partner in cost sharing
- 25. Communication and collaboration
- 43. All educational institutions working together.
- 62. Communication

• Overarching Principles

- 8. Technology Innovation in education
- 23. network-internet-schools-education
- 26. We are there for you
- 26. many cities, one community Network Nebraska
- 31. Network built for Education with student in mind
- 37. Education Today for the Needs of Tomorrow
- 44. Electronic access to knowledge is an educational right
- 52. Always there when you need them.
- 57. Providing technical solutions for online education efforts
- 66. Value conscious, learning focused
- 69. One network, endless potential.

• No Opinion

- 18. First Year Member
- 36. I hate slogans. Don't try to describe an experience with a cheap quip.
- 42. Don't have one.
- 48. ???
- 50. No opinion.
- 51. n/a
- 55. This isn't my bag.
- 56. Unknown
- 59. NA
- 64. Not familiar with one

8. What services or modifications to existing services would you like Network Nebraska-Education to provide?

Participation and Inclusivity

- 6. Increased participation in the service
- 42. More participation from other educational institutions

• Redundancy

- 4. Redundancy is critical for minimal downtime in the event that part of the system fails.
- 16. I would like to see a fault tolerant links established so that if a fiber line is cut between Omaha, Lincoln, Gl, Kearney, there is an alternate route for traffic to flow, if not already in place.
- 17. I feel that a redundant connection to commodity internet possibly out of Grand Island would be beneficial
- 18. Redundant backbone and ISP's

Awareness Building

- 4. Provide better understanding of the existing system setup and provide updates on growth/changes to the network.
- 10. Enhanced technical training for network staff
- 12. Don't make infrastructure changes without notifying customers
- 14. Counseling and direct work with school districts to utilize.
- 33. I would like information on what services are available.
- 48. Outreach and education to administrators and technical workers about what Network Nebraska is and how it can be useful.

Cost Related

- 41. Find various funding resources to help lessen the costs schools have to endure.
- 45. Costs that are equal throughout the state.
- 47. As usual, greater variety of services at a decreased cost.
- 49. I would like to see a lower-cost option (and lower bandwidth option as well) to bring on elementary schools who will not be taking advantage of dist NCE education services.
- 63. Transport cost negotiation for Rural areas is the biggest cost hindrance for small schools compared to their counterparts in the Metro and larger cities.
- 64. Find ways to help make partner fees more worthwhile how can we invest in the network to take full advantage of its capabilities?

• Expanded Infrastructure

- 11. Continue increasing bandwidth and reliability to remote areas in central and western Nebraska.
- 17. I think NN needs to maintain a circuit west of GI, probably to Scottsbluff or Sidney;
- 18. Backbone extended to western Nebraska
- 35. Increased bandwidth
- 43. I am not qualified enough to answer that. I do have rural sites that have to use satellite for service that are not able to communicate as effectively as we need.

• Renovo / DL Issues

- 21. Continued refining the RENOVO software.
- 25. Improve Renovo.
- 27. Statewide scheduling of all DL classes with a consistent schedule and course offering
- 36. Continue to expand learning opportunities for students and training for teachers/administrators.
- 44. More email updates on schedules of course offerings.
- 57. Replace Renovo
- 59. Assisting schools generate relevant, collaborative experiences for student learning would be very valuable.
- 62. Provision/coordination of teacher/faculty training in effective online instruction.

• New Services

- 1. As I said above, we need to have a variety of "last mile" or curb to home solutions being developed before too many more of our students face the digital divide.
- 2. Security. Would like to see some of the organizational structure modeled after the 10 domains as taught in a university data assurance curriculum. The model can easily be adopted by all if formalized.
- 5. More shared services and enterprise services, like a statewide digital content repository.

- 8. Improving diagnostics to the end users
- 15. Packet shaping
- 18. Traffic shaping at the ISP edge(s)
- 29. VOIP
- 30. Internet 2
- 34. I would like to look at the services that network Nebraska could provide in the area of Learning Management Systems. We currently have Moodle and Angel/Blackboard being used across the state. With the combined efforts of the NN partners I could see us getting a uniform package deal and making these accounts available to all students and teachers.
- 38. A firewall and more security between internet and schools. My biggest worry with my network and I know would be hard to put in for the whole network Nebraska.
- 40. Robust desktop video conferencing for meetings and conferences. (i.e. NDE meetings)
- 58. If there is an affordable way to do it, collocation services for disaster recovery, ability to create a private cloud. Links into such services as might be needed by many schools (state testing system, etc.)
- 62. Hosting of services on their servers/equipment.
- 62. Provision of or coordinating the low-cost purchase of technical training -- examples include ITIL service management, COMPTIA Network+ or A+ certification.
- 62. Options to cost-effectively attach to the intranet a gigabit speeds.
- None expressed
- 3. not sure
- 7. None
- 9. Not aware of any at this time
- 13. Not sure.
- 19. First Year Member
- 20. continue what they are already doing
- 22. None
- 23. I believe we will have more answers to this question as more and more members experience the system, and begin to discover the potential(s). I don t have any recommendations at the moment.
- 24. N/A
- 28. ?
- 31. None to think of at this time.
- 32. none
- 37. At this time, I cannot come up with anything but I may at a later date.
- 39. None
- 46. None.
- 50. Seems to working.
- 51. Unknown
- 52. None
- 53. NA
- 54. None that I can think of at this time.
- 55. None.
- 56. Nothing.
- 60. I can't think of anything right now.
- 61. See above

Responses from Potential Partners / Interested Parties

9. What do you know, or have you heard, about Network Nebraska-Education?

• Formed Opinions / Impressions

7. NN is the potential opportunity to get reasonably priced internet access and opportunities for distance learning and significant bandwidth between member institutions.

- 11. I was kindly visited by the folks directly involved, and the Network was explained to me at that time.
- 12. Not much. Costly.
- 17. It's optional.
- 18. What I know is through my administrative professional organization and being involved with the NETA organization. I have also gained knowledge of this initiative through being involved with E-Rate.
- 28. Educational resource via Internet
- 31. As I understand it, this was started as a way for western schools to access the internet more efficiently??
- 32. I've heard pricing is more than I currently pay for network access.
- 38. Network Nebraska is a state wide network that supports on-line education.
- 40. Good in Panhandle. Haven't seen a lot of use in our system.
- 43. I believe that Network Nebraska-Education has done an outstanding job as a lobbying agency to get support to provide schools with high-speed internet access.
- 44. Cost is high, Limited bandwidth. It would be a step backward for those of us in the Southeast Consortitum.
- 47. It has linked many of the public educational facilities across the state.
- 52. I have heard of Network Nebraska-Education. From my understanding, it is a backbone for internet traffic for educational institutions. That is about all I know about it.
- 56. Attended a NETA session on Network Nebraska last year, this was the first I'd heard about it. High speed network connecting most ESUs in the state. I've heard conflicting information about whether we can participate as a private school.
- Little, Limited, or No Knowledge
- 1. Nothing or very little
- 2. I really do not know anything about this group.
- 3. Only what I have read today on your website.
- 4. I do not know anything about Network Nebraska-Education.
- 5. I have not heard of it.
- 6. Very Little
- 8. I am new to the state of Nebraska, so I am not aware of your program or offerings.
- 9. I don't know about Network Nebraska-Education.
- 10. Never heard of it.
- 13. Nothing
- 14. I had not heard of this until Msgr. Gilg sent the survey.
- 15. Only what I read in the above paragraph
- 16. Nothing
- 19. Nothing
- 20. Very little as a school administrator.
- 21. no have not heard of this.
- 22. I know very little about Network Nebraska-Education.
- 23. Not much
- 24. nothing.
- 25. Very little, beyond reading through your website.
- 26. nothing, I'm sorry.
- 27. Nothing
- 29. I am not familiar with your organization
- 30. Just what I have read above
- 33. nothing
- 34. only heard of this through this survey
- 35. Virtually nothing.
- 36. Have heard about it.
- 37. Have not heard about NN.
- 39. Just the information listed here.
- 41. I know only a little about NN beyond the details provided in the description above. We are in the process of considering a partnership with NN.
- 42. I Have not heard about this before but i am a new administrator

- 45. Nothing.
- 46. Very limited information received at this time.
- 48. Nothing
- 49. I am familiar with NN.
- 50. No.
- 51. Very little.
- 53. Nothing
- 54. Nothing until I received this survey
- 55. Not very much.
- 57. Nothing
- 58. Nothing

10. What questions do you have about Network Nebraska-Education?

Cost Related

- 2. Is there a membership fee?
- 5. What is it? How expensive is it?
- 20. The cost?
- 25. What are the costs of providing Internet services to k-12 schools?
- 26. Will this increase the cost to us?
- 27. Cost to my district
- 33. Is there a cost?
- 45. What would the costs be?
- Speed Related
- 26. Will this change the way we are connected to the internet?
- 26. Will this increase the speed or decrease it?
- Membership Related
- 2. Can parochial schools get help?
- 38. How can a private college join the mix?
- 45. How would we participate as a private school? Would we work through an ESU?
- Related to Specific Services
- 6. How would this impact what we are currently doing with our current Parent Information System (Sycamore), or like other schools are doing with a program like Powerschool?
- 21. How will this improve the Education process in Nebraska?
- 22. Are you involving tech directors across the state? Have you asked those people to share with the administrators in the district?
- 25. What is the possibility of providing school information services state-wide for every K-12 school? Schools would have access only to their data. For example, having a State-wide PowerSchool or Infinite Campus and each school seeing only their data. NDE would have superuser access so that when they needed a report they could pull the data they needed in the way they needed it. It would also be a huge cost savings and time savings for each school district.
- 31. Are web based asynchronous courses supported?
- 34. We would be interested in knowing the NN schedule for supporting IPv6 traffic, as well as the opportunities for participation in Internet2. We are also interested in learning more about potential educational content available through NN.
- Related to Benefits and Services
- 1. Could opportunities be provided for our teachers to have access to educational ideas for their classrooms?
- 2. What services or help do they offer schools?
- 3. What benefit would there be for us to be a member?
- 4. How would it help a k-6 school?
- 5. What are the benefits to it for small private schools?
- 8. Applications for public schools.
- 14. What benefits are available to me if my school becomes a partner?

- 24. How can being a member benefit small schools in Nebraska
- 27. benefit to my district
- 28. How can it help Rule 18 providers and Special Purpose Rule 10 schools
- 30. How will it enhance the educational process in my building?
- 33. What are the benefits that we don't already have?
- 35. What services do you offer?
- 37. How will it work for me?
- 42. What can NN do for the OPS Career Center and what can we do for NN?
- 43. How can it benefit my teachers and families?
- 44. What do you do and how can you benefit my school?
- 46. Is this something that would benefit our school?
- None / Not enough Information
- 7. I would need to learn all about your program and the services that it offers to public schools.
- 9. What is it?
- 10. No questions at this time. Our problem at the present is fiscal. We do not have the money to invest. If we can get that issue resolved we will be wanting to join.
- 11. None
- 12. Do not know enough about it to question it
- 13. How can I receive more information about this program?
- 15. None
- 16. None.
- 17. None at this time.
- 18. I need more information before asking questions.
- 19. Don't know what to ask given how little I even know about what this resource is...(other than what I just read in the intro to this survey)
- 21. What will the information be used for?
- 23. None
- 29. Since I know virtually nothing about it, I have no basis to form questions.
- 32. More details
- 39. None
- 40. None
- 41. Why would we be interested in it?
- 47. I wouldn't know what to ask
- 11. What is the single most compelling competitive advantage that makes Network Nebraska's services distinctive and motivates Educational entities (Educational Service Units, public and private colleges, and public and private K-12 schools) to partner in Network Nebraska?
 - Cost sharing / Reduction
 - 3. The price of internet access.
 - 15. Easy and affordable access
 - 17. Costs
 - 34. Cost sharing
 - Bandwidth / Connectivity
 - 5. Bandwidth and support are the things that would make it attractive to us.
 - 21. Improved bandwidth
 - 24. The opportunity to gain additional bandwidth at lower costs is the most compelling short term advantage.
 - 26. State wide connectivity
 - 31. Bandwidth availability.
 - 35. Increased bandwidth
 - Professional and Educational Partnerships
 - 1. Pooling resources saves money and just makes sense.
 - 2. Increased communication
 - 8. Communication and collaboration between educational entities across the state of Nebraska.

- 11. To make a bridge for our state and build strong relationships across the state
- 12. Sharing information that will help students learn in a 21st Century world.
- 16. Having access to experts in an every changing technology landscape.
- 19. To level the playing field for all Nebraska K-12 schools.
- 21. Increased access to resources and information
- 22. Collaboration state wide
- 25. The lobbying power of the organization to get support to provide access to students by keeping the costs low and the access superior.
- 28. To be able to reach so many audiences across the state.
- 29. The size of the network and number of partners.
- 29. The potential to share resources across many schools and other institutions

No Perceived Advantage

- 6. Currently does not compete in price and band width.
- 23. Stay with ESU 5 & 6 -- they keep us informed on new programs.

• More Information Needed

- 4. I need more information before answering.
- 7. I couldn't tell you.
- 9. I do not have enough information to answer this .
- 10. No idea...this question implies I have a more thorough understanding of NN.
- 13. We are not familiar enough with your services to comment.
- 14. Not sure
- 18. I don't know enough to answer this question.
- 20. No idea
- 27. I don't know.
- 30. Don't know.
- 32. Unknown
- 33. I don't know enough about Network Nebraska to answer this question.
- 36. Since I don't know anything about Network Nebraska, I really can't answer this question

12. In a short phrase, what do you think should be the guiding principle or slogan that you believe Network Nebraska's services should stand for in the hearts and minds of its partners?

• Learner Focused

- 1. Accountability for the Education of our Youth
- 6. Bringing together all of Nebraska under one shared vision of educating all of our students.
- 10. Creating students equipped to compete in the modern work-force.
- 12. Together we educate for the future
- 13. Network Nebraska Making Sure Technology Opportunities are Available for Every Nebraska Student
- 16. Equal Access for All
- 18. Keeping up with the present by planning for the future
- 19. Serving all educational entities in the state, formal and informal
- 20. Broad range individual student education and assistance to teachers.
- 22. Connecting all Nebraska students with 21st Century tools.
- 25. Education for everyone
- 28. Building knowledge is about building connections.
- 30. Improving opportunities to learn for students of all ages.
- 31. Technological experiences, advantages and knowledge is a must for our schools and children.

• Network Focused

- 2. Collaboration, not competition
- 3. Quality, reliable connectivity for all schools/participants.
- 4. State wide sharing of resources.
- 5. It's low-cost and optional.

- 9. Triple "N": Nebraska's Neighboring Network: From county lines to networking lines, they are all drawn in the heart of Nebraska
- 11. Reliable, cost-effective bandwidth with functionally rich services.
- 14. Making Network Nebraska work for you.
- 17. U CANS: Universally Connecting All Nebraska Schools
- 21. Reliable performance on a forward-looking technological base.
- 23. Service
- 26. Efficiency, effectiveness and reliability.
- 27. Reliability and quality of services
- 29. Providing resources to 21st century learning
- Unknown
- 7. I do not have enough information to answer this.
- 8. Given my lack of knowledge, I'm not one to say...
- 15. I don't know enough to answer this question.
- 24. ?????
- 32. ???

13. What services would benefit your organization as a partner in Network Nebraska?

Resource Sharing

- 9. Always open to collaboration and sharing resources...
- 23. Good Product at a reasonable price.
- 29. Cost sharing, funding (or assistance in securing funds), in-service on new technologies

• Internet and Transport

- 3. Internet access
- 12. Reliable, cost-effective bandwidth.
- 19. We really need better bandwidth to take advantage of the many resources that are available on the internet.
- 22. To continue to reliable high speed Internet access and technical support.
- 27. High speed, reliable internet access.
- Not Sure
- 8. I do not have enough information to answer this.
- 16. I don't know enough to answer this question.
- 18. Not sure would need to know more.
- 28. Unknown
- 31. ???

• Services and Support

- 1. Network support and availability of services
- 4. Many of these services are currently being provided through our Educational Service Unit. Seamless coordination would be valuable.
- 10. Networking, local technology assistance, internet
- 11. Technology improvements within in our school.
- 14. More in-service opportunities and technical support
- 15. Shared school information services PowerSchool, Infinite Campus, SASI, etc.
- 17. Completing e-rate forms.
- 26. Expanding to share with more schools.
- More Student Learning Opportunities
- 2. Distance Learning
- 5. Distance education would be our first interest. I personally would like to see it become possible for Catholic schools around the state to all afford to be involved so that we could share resources that might not otherwise be available to us from both public and non-public schools.
- 6. Increased courses for credit.
- 7. Distance Learning, Communication services, and sharing information.

- 20. Web based asynchronous courses
- 21. Receiving courses of study that is of interest to our students that are not currently available.
- 24. Having access to programs, learning opportunities for students, and easy to navigate and use for students and staff.
- 25. Providing us access to all of the affiliates so that we can offer educational programs to students (both traditional and non-traditional) and faculty across the state.
- 30. Online courses.

* APPENDIX: D – Unprocessed Survey Responses *

Raw Data from the NITC Ed Council / Mktg Survey of December, 2009 [Responses from Existing members of Network Nebraska: numbers next to responses only indicate the order in which the response was listed in the text file and cannot be used to identify individual respondents.]

2. Reflecting on your experience as a Network Nebraska-Education partner, please rate the following attributes based on their relative importance to your institution (comments received):

Need to continue to increase student use and principal knowledge of the system

So far we have not benefited a whole lot for what we are spending.

Faster, faster, faster

3. Reflecting on your experience as a Network Nebraska-Education partner, please rate the following attributes based on the level of concern to your institution (comments received):

This network needs daily attention and leadership--like an Executive Director

What's wrong with the southeast schools--why haven't they joined the network?

Quality of courses, based on teacher effectiveness, is critical. Also, increasing dual credit courses is needed.

We need someone that has technical and excellent communication skills to advocate and provide trainings.

Money is a driving factor for us in everything we do. More for less is the mantra!

I don't know enough to answer these questions. The one on the first page about being an existing, potential, or interested NN partner was unknown to me--I put existing even though I don't know.

I checked "Not concerned" for all these areas because I understood this as an evaluation of the services we have received.

We are happy with the services we have received over the last year. We are especially pleased that the costs have been moving down, especially the declines in cost for Internet 1 access.

4. What are the strengths of Network Nebraska-Education services?

- 1. The basics are covered by Network Nebraska in a cost effective manner.
- 2. The ability to control traffic and provide reliable services.

The potential to share services

Local Ownership

- 3. Lower costs, high speed access between sites
- 4. Collaboration and coordination.
- 5. We are becoming a larger group.
- 6. Wonderful collaborative effort between K-12 and higher ed, public and private. The sky's the limit (eventually) with this self-funded network!
- 7. Band width, technical service
- 8. It has been a very dependable system and provided excellent opportunities for our rural area.
- 9. Bigger pipeline, lower costs
- 10. reliability
- 11. Having all K12 and education institutions on the same network. Having the tech support of Ben M.
- 12. Ability to meet educational needs of students and staff.
- 13. To this point it has been very stable & reliable.
- 14. Gives all school equal opportunities
- 15. The support and ability to collaborate with other schools.
- 16. Shared resources with institutions of similar interest
- 17. Cost sharing has reduced the impact on our institution.

Reliability

Flexibility to add bandwidth

18. Good bandwidith to central NE at an affordable price.

- 19. Efficient, comprehensive service; consistent service; very little downtime
- 20. Providing quality education throughout Nebraska
- 21. Standards across the state, cost sharing, collaboration among partners
- 22. Very reliable services. Cost effective solution for distance education, tele-health delivery
- 23. Availability of resources/classes.
- 24. Potential for options for students.
- 25. Support is very good. Cost is excellent. The reliability is great.
- 26. Ben Mientka does a good job of providing support for entities.
- 27. For the most part it think NN is a solid reliable network.
- 28. Good cost-sharing
- 29. Acquiring cost effective contracts with service providers
- 30. First Year
- 31. cost sharing and technical support
- 32. Ability to reach more students with added efficiency
- 33. Opens rural NE students to the world; we are desperately in need of foreign languages.
- 34. Possibility for increased offering in small rural schools.
- 35. Our bandwidth and connection has been good so far this year. In the past, with other providers, we've lost connection on regular basis and none of that has gone on this year.
- 36. -Increased access to classes for student
- -Increased information available to students, faculty and staff
- -Potential for Statewide increased communication
- -Speed of IP services
- 37. Wide range of opportunities for class offerings
- 38. The ability to communicate throughout the state.
- 39. Statewide services
- 40. Great connections between partners.
- 41. Dependability, growth potential, cost effectiveness,
- 42. Allowing rural areas, especially those in western Nebraska, the opportunity to access a wider variety of courses via dist nce learning
- 43. Expanded choices for our students.
- 44. Reliability
- 45. Provides statewide backbone

lower cost for bandwidth

- 46. Distance Education Coordination and Communication
- 47. The many opportunities for students.
- 48. More speed than we had before.
- 49. We are a new member and have only used NN for our connections for about 4 months for video and 2 months for data (Internet) I can't say what the strengths, weaknesses are at this time. We would need more time to evaluate this.
- 50. Smooth connections from one school to the next.. flexibility, connectivity
- 51. At this point I would say shared cost and the possible ability to receive discounts for being part of a group.
- 52. Great service!!!!
- 53. I believe the "strength in numbers" possibilities associated with Network Nebraska will allow us lower prices and increased opportunities in the future. I am more concerned with the increased in educational opportunities and services however.
- 54. Increased access/faster internet.
- 55. Affordability, increased bandwidth, more technology services are available to students and staff
- 56. The strengths are: reduced costs, increased education collaboration and education opportunities.
- 57. DL I think is the most. Also the added level of Security to the network. The speeds so far is awesome so hope that will continue.
- 58. Collaboration among members.
- 59. Its strength is its potential.
- 60. Internet access

Distance learning access

Guidance

- 61. The ability to go statewide for DL courses
- 62. Quality assistance as needed.
- 63. Large group costs
- 64. depth of services

- 65. Increased offerings to our students of smaller schools
- 66. Rural schools with limited resources can access quality educational opportunities for students via Network Nebraska
- 67. We just have to have technology with our rural situation.
- 68. Able to receive classes from other districts. This gives a broader variety of classes for your students.
- 69. Opportunities for students.
- 70. The overall goal is the strength.
- 71. It is still too early to tell...I believe we are still in the infancy stage, therefore, I am not sure we have been at it long enough to identify strengths.
- 72. Low price, ability to purchase gear like the packetshaper for services
- 73. More opportunities
- 74. Reliability.
- 75. Large entity thereby spreading costs & services.
- 76. Bandwidth and reliability provides potential for much greater sharing of resources and collaboration.
- 77. Cost control, speed and reliability, especially compared to schools in other states.
- 78. We haven't had any major issues with our DL or internet connection. Reliability is the biggest strength. This is the first year I have had comments that the internet seems to be faster. That is because we purchased extra bandwidth.
- 79. Unknown
- 80. Network support; reliability; costs; bandwidth
- 81. Opportunity to share with other schools across the state.
- 82. Able to find classes for a variety of students across the state. Helps with accreditation issues and teacher shortage in certain areas.
- 83. Availability and response to problems.
- 84. The service is always available providing classes or educational opportunities for all of our students.
- 85. Increased course offerings. duel credit classes
- 86. Coordination, collaboration, cost effectiveness
- 87. Tech support
- 88. Economies of scale in a state where this is difficult to achieve.

Professional management of a large network where finding that experience can be difficult.

- 89. Our school has grown its capacity in 21st century learning which would not have been possible without NN.
- 90. Access to the internet and many distance learning offerings that our school would not have.
- 91. Cost-effective, coordinated, enterprise-class
- 92. Standing together for staff and students
- 93. Cost of Internet 1 access being pushed down through collaborative purchasing.

Connection to Internet 2 and avoidance of Internet 1 bandwidth costs.

Opportunities to improve disaster recovery and business continuity options through placing servers/services at the core nodes of the network.

- 94. The ability to purchase large amounts of bandwidth below normal prices that individual organizations would expect to pay.
- 95. The NN opportunities have greatly reduced our ongoing operating costs for internet bandwidth.
- 96. The potential to save costs to its members through sharing services that drain resources at the local level.

5. What are the weaknesses of Network Nebraska-Education services?

- 1. Not much thinking about "last mile" or curb to household connection. As we move to 1:1 models in our schools, we'll need to be able to guarantee access to our digital resources from our students homes. What should this look like? What will this mean for NN?
- 2. lack of clear cut policies that are enforceable!

Local Ownership

To much administrative overhead; lack of direction.

The threat of increased costs for k12.

lack of value added services beyond colaborativ

- 3. no redundancy or alternative infrastructure available if a network outage occurs
- 4. Voluntary option rather than mandatory.
- 5. To many are not in the group.
- 6. That it cannot grow as fast as other networks, given that it is self-funded.
- 7. Student and principal knowledge of how to best use the system to expand student learning opportunities
- 8. Far Western NE not as well served as the Eastern half
- 9. cost
- 10. Not having more control of the NET Ne costs to schools for services.
- 11. Easy of access to the CCC college locations.

- 12. Large network possible breakdowns
- 13. The reliability of the network is low.
- 14. the organization should have an "elected" board that represents ALL levels of institutions.
- 15. Technical training

Transparency of connection and cost information

- 16. We feel pretty removed from the process out here in central/western NE. The service has gotten better and I know you try and inform us about what is going on, our remoteness just limits the contact and personal attention.
- 17. MAKING NETWORK CHANGES THAT AFFECT US and OUR PARTNER INSTITUTIONS AND FAILING TO NOTIFY THOSE INVOLVED...this happens frequently and causes havoc with our events/classes.
- 18. None come to mind.
- 19. Still not enough information about classes outside of our esu area.
- 20. Lack of communication statewide.
- 21. Use by school districts.
- 22. More updates of future directions would be nice.
- 23. Redundancy
- 24. A "statewide" network that stops at Grand Island; lack of redundancy
- 25. no one in the current leadership has the pulse of all Education sector needs and vision to provide those needed services; NN response to needs is often delayed because of purchasing rules, requirements, or other political hurdles
- 26. First Year
- 27. none
- 28. Teh speed and the glitches experienced periodically.
- 29. Limited scheduling availability.
- 30. Cost of the equipment and services.
- 31. None I can see.
- 32. Need more/better communication about how to access some of the Net 2 services
- -Could use more communication about how higher education can benefit from Net Neb since there is no E-rate benefits or financial reimbursements.
- 33. Seems some districts are looked out for over other districts.
- 34. Class times do not always match school times
- 35. Scheduling
- 36. The Distance Learning system Renovo does not work well. It needs to be updated or get a new partner.
- 37. Over sold connections to the internet. We also potentially have some configuration needs and issues.
- 38. Scheduling issues for DL classes from one time zone to another and from one school district's bell schedule to ours
- 39. Need greater communication as to what is available for students k-12.
- 40. Cost
- 41. do not duplicate services that ESU's can provide, such as Tech support.

Loss of local control is a concern

- 42. Increased levels of state involvement and accountability
- 43. Lack of dual credit classes.
- 44. see above answer
- 45. none
- 46. None so far for us.
- 47. I believe the current weakness of Network Nebraska is the angle we're currently using to sell the viability of this union of educational institutions. We need to get out and show people how we're using the capabilities that NN has brought about instead of just telling them.
- 48. NA
- 49. Always concerned about costs.

The need for virtual learning/High School

- 50. I have not found any as of yet. This is a great system that allows us to be connected and reduce travel time in this remote area
- 51. At the present time, Network Nebraska has focused one educational needs. As we grow in educational needs, more bandwidth will be needed to expand our resources.
- 52. None
- 53. Services aren't really anything more than we received prior to Network Nebraska except for additional costs for the Network.
- 54. Not much is known by administrators in districts with technology director or solely utilize ESUs
- 55. It doesn't always work the way we want it to (connections)
- 56. School agreements with other schools do not allow for any other institution to take the class.

- 57. Only as strong as its members
- 58. Not alot of participation and not very well advertised for the benefits to educators
- 59. We are concerned with distances involved with communication, infrastructure issues, and equity of educational opportunities.
- 60. Don't always hear about classes until there is no space left.
- 61. Cost is still high.
- 62. Not there yet.
- 63. Communication had previously been low until Ben was hired
- 64. Tech issues
- 65. None.
- 66. Overall size results in sometimes delayed services and communication.
- 67. Not enough publicity to techs/admins about what it is and what it is for, how it can be leveraged for the future, etc.
- 68. Lack of lower-end options for schools not needing to take full advantage of distance education services. We have an elementary school in a different city (through school merge), but it is cost prohibative to bring them on Network Nebraska. We have a residential DSL connection, which means none of their traffic can see the benefits of the closed NN network.
- 69. The coordinators for the DL system rely on the local school technician to fix issues with the DL system. If they are going to rely on that then they need to have some sort of training on the equipment.
- 70. unknown
- 71. None
- 72. If you open up the curriculum for all students in NN then the concern is paying for all the classes. I would hope we can all work together when we share teachers.
- 73. None that I can think of at this time.
- 74. I have not found any at this point.
- 75. coordinating class times.
- 76. Renvo scheduler
- 77. Distance Education Coordination
- 78. Lack of communication regarding network services and offerings as the network grows. Unknown channel of communication other than through my ESU. (maybe that is preferred. It would be good to know that.)
- 79. Assisting schools generate relevant, collaborative experiences for student learning would be very valuable.
- 80. Network speed is very much an issue. Distancde learning is a concern since not all schools are not on the lifesize system. It creates connection probelms and sound and video problems.
- 81. Limited number of application services. The mantra, "if you build it, they will come" definitely applies. I might add, "if you don't increase the application services they may leave" as vendor pricing in large metros will rival NN. The differentiation comes in the application services. NDE needs to become a player and figure out how they can provide services including statewide learning management, statewide content management, statewide student information, statewide ERP. The vision should be toward a service-optimized cloud connected to NN and offering better applications at lower prices than individual entities could possibly afford.
- 82. Not able to match more schools across the state with offerings
- 83. Still dealing with a lack of trust and therefore cooperation from some potential participants.

Marketing of the advantages that Network Nebraska-Education offers.

High connectivity costs for some locations to get on the network (conduit).

- 84. Doesn't have the ability to act in a quick manner due to needs of users because of bidding requirements.
- 85. Awareness of opportunities.
- 86. Lack of go-to leadership directly responsible for achieving NN-Education goals on behalf of its members. Continuing to grow the network so its benefits extend beyond LB1208 for K-12
- 6. What is the single most compelling competitive advantage that makes Network Nebraska-Education services distinctive and motivates educational entities (Educational Service Units, public and private colleges, and public and private K-12 institutions) to partner with Network Nebraska?
 - 1. Comprehensive service at value.
 - 2. The ability to tie all institutions together via a reliable and effective network.
 - 3. increased bandwidth and connectivity for all
 - $4.\ high\ speed\ connections\ to\ various\ of fice\ locations\ across\ the\ state\ to\ allow\ video\ -conferencing,\ collaboration,\ etc.$
 - 5. Leveraging buying power of the educational group.
 - 6. One group, one boice is the most power we can have.
 - 7. Cheap and reliable Internet
 - 8. Expanded academic opportunities for students
 - 9. Online courses
 - 10. Th ability to connect over high bandwidth to other schools in the state for distance learning opportunities.

- 11. All on the same network, before hitting the internet.
- 12. Ability to share costs and service coordination.
- 13. The opportunity to access the entire state
- 14. I think the cost sharing...with today's budgets we have to cut costs wherever we can!
- 15. Cost reduction thru cost sharing
- 16. Cost savings! and grant money available.
- 17. Only game in town
- 18. Strength of being able to purchase bandwidth at a more competitive price.
- 19. I thought we had to join to gain access to classes outside of our area.
- 20. Cost
- 21. Provides statewide network reach at an affordable price. Provides internet 1 and 2 services as a very reasonable price.
- 22. Having all entities working together in one organization.
- 23. Uniqueness of options.
- 24. The connections to other educational institutions is very helpful. This helps us save cost and complications on any collaboration.
- 25. Network connectivity/close proximity to other educational entities within Nebraska.
- 26 Cost
- 27. The cost is probably the biggest advantage, plus once you are a NN member you can video conference, etc. with other NN members without major concern of bandwidth limitations
- 28. large network with adequate bandwidth at cost effective prices
- 29. First Year Member
- 30. cost
- 31. cost sharing and technical support services
- 32. Increased opportunities for our students.
- 33. Shared costs for the services
- 34. All based on same system.
- 35. Potential for offering more courses to more students.
- 36. Shared cost
- 37. Communication
- 38. Opportunities and cost of those opportunities with fast internet
- 39. The continuing ed oppturtunities are endless. We also need NDE to be more flexible and willing to not tie funding to traditional classroom attendance.
- 40. cost per meg of bandwidth
- 41. Being able to offer courses to our students (dual credit, college level, etc.) that we would not be able to otherwise due to staff limitations
- 42. Dual credit classes.
- 43. Who's involved (schools)
- 44. Statewide network and having everyone on board
- 45. Statewide distance education opportunities
- 46. Scheduling and ease of scheduling
- 47. Inter-connectivity with all other schools belonging to NN as well as overall speed of connections.
- 48. It expands the learning opportunity for students.
- 49. For us the huge increase in bandwidth.
- 50. Everybody has the same capabilities, such as speed of internet, etc.
- 51. I believe the overall current belief is cost effectiveness. However, I believe that when we begin to look at the future implications of building the net work we're going to find that increases in bandwith and speed will allow us to make better use of DL possibilities such as collaborations, virtual field trips, and shared resources.
- 52. Ease of use/accessibility
- 53. Low cost Bandwidth
- 54. Connectivity with the all institutions to enhance video conferencing without travel time.
- 55. reduced costs
- 56. Ability to provide services to a wide variety of students and communities.
- 57. The whole concept of DL and what you can do with it. Also purchasing power on internet speeds.
- 58. People working together for the same mission, educating kids.
- 59. Don't know.
- 60. Keep internet cost reasonable for educational purposes
- Make distance learning available to districts who must have it to survive
- 61. Potential sources and resources.

- 62. State wide access and coordination between schools
- 63. Safe internet usage by students
- 64. Common communication network.
- 65. We are all trying to manage a small number of students into a broad market.
- 66. It does decrease the cost involved.
- 67. No opinion.
- 68. Network Nebraksa involves more partners which may provide more opportunities for students in the state of Nebraska.
- 69. Cheap internet access
- 70. more classes and network speed
- 71. Reliablility and cost reduction.
- 72. Strength in numbers supports cost efficiencies & services.
- 73. State aid incentives
- 74. It is a closed, controlled network with many levels of network protection from outside intruders.
- 75. Keeps the costs down.
- 76. unknown
- 77. Collabortive efforts
- 78. Collaboration.
- 79. The curriculum opportunities for all students.
- 80. Relatively low costs.
- 81. Statewide link.
- 82. Schools can offer services or classes for their students that they would not be able to have monetarily without it.
- 83. cost
- 84. reliability
- 85. It is available to schools of all sizes.
- 86. Inexpensive Internet services.
- 87. Consortium participation
- 88. Distance Leaarning Opportunities.
- 89. At this time it is the coordination and pricing. Ultimately, it will need to be about the application services.
- 90. From a private college perspective it is Internet1/Internet2 access at comparatively low prices.
- 91. Amount of bandwidth that we have been able to purchase at a reasonable cost.
- 92. Cost
- 93. Administration and service management coordination of the complex elements including RFPs, Erate, billing, troublshooting, etc.

7. In a short phrase, what is the guiding principle or slogan that you believe Network Nebraska-Education services stands for in the hearts and minds of its partners?

- 1. Our digital backbone!
- 2. The ability to communicate reliably with any institution in the state.
- 3. connecting and collaboration for Nebraska's youth and citizens
- 4. increase bandwidth and opportunities across the state of Nebrask
- 5. quality of service
- 6. Network Nebraska--delivering educational opportunities at the speed of light
- 7. Making a difference in student learning
- 8. Technology Innovation in education
- 9. not sure perhaps educational opportunities for all Nebraskans
- 10. Network Nebraska is focused on providing cost effective technology service and support to all its partners.
- 11. A shared resource with reduced costs, that users guide.
- 12. Increased infrastructure, bandwidth, and serice.
- 13. Collaboration
- 14. partnering for best use of Nebraska resources and to provide educational opportunities for all Nebraskans
- 15. Statewide network!
- 16. Remove the distance barriers!
- 17. Connecting K-20 entities in Nebraska
- 18. First Year Member
- 19. partner in cost sharing
- 20. Reaching out to more students in rural/remote areas
- 21. Opening schools' doors to the world...
- 22. Offering more learning to more students.

- 23. network-internet-schools-education
- 24. ncreased opportunity for Statewide academic partnerships and expanding information horizons.
- 25. Communication and collaboration
- 26. We are there for you
- 27. many connections
- 28. Bringing bandwidth equality to Nebraska education entities.
- 29. Equal educational opportunity for all
- 30. Conecting students through technology.
- 31. Network built for Education with student in mind.
- 32. Hopefully a State wide effort for cooperation in providing this service to all the schools in the state
- 33. Statewide distance education opportunities
- 34. Increased opportunities for students
- 35. Connecting Nebraskans in Learning
- 36. I hate slogans. Don't try to describe an experience with a cheap quip.
- 37. Education Today for the Needs of Tomorrow
- 38. equal access to all entitities
- 39. 21st Century Learning opportunities
- 40. onnectivity today and tomorrow around the state.
- 41. Providing strong partner support and quality of service
- 42. Don't have one.
- 43. All educational institutions working together.
- 44. Electronic access to knowledge is an educational right
- 45. The ability to go statewide for assistance in obtaining courses.
- 46. Providing educational opportunities for all Nebraska schools
- 47. Equitable opportunities for all students in Nebraska.
- 48. ???
- 49. Working to improve student learning in Nebraska.
- 50. No opinion.
- 51. na
- 52. Always there when you need them.
- 53. "Outstate" entities benefit more, collectively, instead of being "2nd" to eastern competitors.
- 54. Provide high quality bandwidth for educational use.
- 55. this isn't my bag.
- 56. known
- 57. Providing technical solutions for online education efforts
- 58. Enhance educational opportunities for students throughout our state.
- 59. NA
- 60. Offering a wide-range of highly useful services at a low cost.
- 61. The ability to expand opportunities for students.
- 62. communication
- 63. Variety of educational opportunities
- 64.Not familiar with one
- 65. Service providers for all schools in the state.
- 66. Value conscious, learning focused
- 67. Access to services through intelligent cooperation.
- 68. Equallized access for all entities.
- 69. One network, endless potential.
- 70. Equitable access to network resources for the importance of educating future generations.

8. What services or modifications to existing services would you like Network Nebraska-Education to provide?

- 1. As I said above, we need to have a variety of "last mile" or curb to home solutions being developed before too many more of our students face the digital divide.
- 2. Security. Would like to see some of the organizational structure modeled after the 10 domains as taught in a university data assurance curriculum. The model can easily be adopted by all if formalized.
- 3.not sure
- 4. Provide better understanding of the existing system setup and provide updates on growth/changes to the network. Redundancy is critical for minimal downtime in the event that part of the system fails.
- 5. More shared services and enterprise services, like a statewide digital content repository.
- 6. Increased participation in the service

- 7. None
- 8. improving diagnostics to the end users
- 9. Not aware of any at this time
- 10 Enhanced techinical training for network staff
- 11. Continue increasing bandwidth and reliability to remote areas in central and western Nebraska.
- 12. Don't make infrastructure changes without notifying customers
- 13. Not sure.
- 14. Counseling and direct work with school districts to utilize.
- 15. Packetshaping
- 16. I would like to see a fault tolerant links established so that if a fiber line is cut between Omaha, Lincoln, GI, Kearney, there is an alternate route for traffice to flow, if not already in place.
- 17. I think NN needs to maintain a circuit west of GI, probably to Scottsbluff or Sidney; I feel that a redundant connection to commodity internet possibly out of Grand Island would be beneficial
- 18. Backbone extended to western Nebraska

Redundant backbone and ISP's

Traffic shaping at the ISP edge(s)

- 19. First Year Member
- 20. continue what they are already doing
- 21. Continued refining the RENOVO software.
- 22, none
- 23. I believe we will have more answers to this question as more and more members experience the system, and begin to discover the potential(s). I don't have any recommendations at the moment.
- 24. N/A
- 25. Improve Renovo.
- 26. many cities, one community Network Nebraska
- 27. state wide scheduling of all DL classes with a consistent schedule and course offering
- 28. ?
- 29. VOIP
- 30. Internet 2
- 31. None to think of at this time.
- 32. none
- 33. I would like information on what services are available.
- 34. I would like to look at the services that network nebraska could provide in the area of Learning Management Systems. We currently have Moodle and Angel/Blakcboard being used across the state. With the combined efforts of the NN partners I could see us getting a uniform package deal and making these accounts available to all students and teachers.
- 35. increased bandwidth
- 36. Continue to expand learning opportunities for students and training for teachers/administrators.
- 37. At this time, I cannot come up with anything but I may at a later date.
- 38. A firewall and more security between internet and schools. My biggest worry with my network and I know would be hard to put in for the whole net ork nebraska.
- 39. None
- 40. Robust desktop video conferencing for meetings and conferences. (i.e. NDE meetings)
- 41. Find various funding resources to help lessen the costs schools are having to endure.
- 42. more participation from other educational institutions
- 43. I am not qualified enough to answer that. I do have rural sites that have to use satellite for service that are not able to communicate as effectively as we need.
- 44. More email updates on schedules of course offerings.
- 45. Costs that are equal throughout the state.
- 46. None
- 47. As usual, greater variety of services at a decreased cost.
- 48. Outreach and education to administrators and technical workers about what Network Nebraska is and how it can be useful.
- 49. I would like to see a lower-cost option (and lower bandwidth option as well) to bring on elementary schools who will not be taking advantage of dist nce education services.
- 50. Seems to working.
- 51. known
- 52. None
- 53. NA

- 54. None that I can think of at this time.
- 55. None.
- 56. Nothing.
- 57. replace Renovo
- 58. If there is an affordable way to do it, colocation services for disaster recovery, ability to create a private cloud. Links into such services as might be needed by many schools (state testing system, etc.)
- 59. Assisting schools generate relevant, collaborative experiences for student learning would be very valuable.
- 60. I can't think of anything right now.
- 61. See above
- 62. Hosting of services on their servers/equipment.

Provision of or coordinating the low-cost purchase of technical training -- examples include ITIL service management, COMPTIA Network+ or A+ certification.

Provision/coordination of teacher/faculty training in effective online instruction.

Options to cost-effectively attach to the intranet a gigabit speeds.

- 63. Transport cost negotiation for Rural areas is the biggest cost hinderance for small schools compared to their counterparts in the Metro and larger cities.
- 64. Find ways to help make partner fees more worthwhile how can we invest in the network to take full advantage of its capabilities?

* APPENDIX: E – Work Group Action Plans *

ACTION PLAN(s)

To be completed by task groups (see *Recommendations* section of this report).