Project #	Agency	Project Title
ESUCC- 01*	ESUCC	Nebraska's BlendEd eLearning System

<sup>\*</sup>A voluntary review requested by the submitting entity. Not submitted as an agency budget request.

### **SUMMARY OF REQUEST** (Executive Summary from the Proposal)

[Full text of all proposals are posted at: http://nitc.ne.gov/nitc/documents/fy2013-15/index.html]

The goal of Nebraska's BlendEd eLearning System is to implement instructional and content technologies to enhance teaching and learning to support all modes of blended instruction. Blended education has been promoted by educational researchers as a one of the most promising recent innovations in education because it calls for making strategic choices about when face-to-face (synchronous) instruction is needed and when and how online (asynchronous) instruction can be best used to provide elements of student control over time, place, path and pace and provide more equity, efficiency and flexibility. Heather Staker and Michael B. Horn of the Innosight Institute offer this definition of Blended Learning-

"Blended learning is any time a student learns at least in part at a supervised brick-and-mortar location away from home and at least in part through online delivery with some element of student control over time, place, path, and/or pace."-http://www.innosightinstitute.org

Full text of the proposal: <a href="http://nitc.ne.gov/nitc/documents/fy2013-15/ppf/ESUCC-01.pdf">http://nitc.ne.gov/nitc/documents/fy2013-15/ppf/ESUCC-01.pdf</a>

#### **FUNDING SUMMARY**

	Estimated Prior Expended	Request for FY2013-14 (Yea 1)	F	Request for Y2014-15 (Year 2)		Request for '2015-16 (Year 3)		Request for 2016-17 (Year 4)		Future		Total
Personnel Costs		\$ 255,000.00	\$	155,000.00	\$	50,000.00	\$	50,000.00	Ş	50,000.00	\$	560,000.00
Contractual Services												
2.1 Design											v,	-
2.2 Programming											\$	
2.3 Project Management											v,	-
2.4 Other		\$ 40,000.00	\$	10,000.00							\$	50,000.00
<ol><li>Supplies and Materials</li></ol>			Т								s	-
4. Telecommunications											v,	-
5. Training			Т								\$	
6. Travel			Т								s	-
7. Other Operating Costs			Т		П						\$	
8. Capital Expenditures												
8.1 Hardware		\$ 430,000.00	5	225,000.00	ş	120,000.00	s	95,000.00	s	75,000.00	5	945,000.00
8.2 Software		\$ 645,000.00	\$	875,000.00	\$	1,140,000.00	\$	1,420,000.00	\$	1,500,000.00	\$	5,580,000.00
8.3 Network			Т								s	-
8.4 Other			Т		П						\$	
TOTAL COSTS	\$ -	\$ 1,370,000.00	\$	1,265,000.00	\$	1,310,000.00	\$	1,565,000.00	\$	1,625,000.00	\$	7,135,000.00
General Funds			Т								5	
Cash Funds			Т		Γ						\$	
Federal Funds			Т								\$	-
Revolving Funds											\$	-
Other Funds			Т								\$	-
TOTAL FUNDS	\$ -	\$ -	\$	-	\$	-	\$	-	\$	-	\$	

# **PROJECT SCORE**

Section	Review er 1	Review er 2	Review er 3	Mean	Maximum Possible
Goals, Objectives, and Projected Outcomes	12	14	11	12	15
Project Justification / Business Case	25	23	21	23	25
Technical Impact	20	19	16	18	20
Preliminary Plan for Implementation	8	9	8	8	10
Risk Assessment	8	10	8	9	10
Financial Analysis and Budget	15	18	16	16	20
			TOTAL	87	100

# **REVIEWER COMMENTS**

Section	Strengths	Weaknesses
Goals, Objectives, and Projected Outcomes	- The project concept is clearly articulated and the goals are aligned with increasing student achievement.  - The stated goals are clear, concise, and challenging but certainly attainable. The core components of the technology needed to support BlendEd are clearly identified and are proven technologies used by educators for several years in the on-line community. The goal of providing face-to-face and on-line instruction to districts facing the challenge of certified teachers especially in the STEM subjects seems an effort deserving support.  - Conceptually the right thing to do.	- The scope of the project is very broad and ambitious. The adoption of key components of the approach, including the unique identifier for the statewide directory and incentives for use of the Learning Content Repository, are premised upon conditions that either don't exist or may be very difficult to sustain.  - Limited Scope: Objectives 2 & 3 pg 6 of 34. Consider including higher education entities from the start on the LMS and LDAP implementations or at the very least consult with higher ed when selecting of tools.
Project Justification / Business Case	- The project outcomes are aligned with statewide and P-16 efforts to meet the needs associated with increasing student diversity, declining budgets, limited access to instructors in rural locations and increasing demand for technology-centric methods to engage learners.  - The tangible benefits listed on pages 11 & 12 would certainly help the small districts and those that have not made investment in LMS and content management systems to provide learning opportunities of the same quality and rigor statewide. The initiative would utilize the recent investment of high-bandwidth network provided by Network Nebraska, facilitate learning opportunities with Higher Education in Academy and dual-credit classes, and share educational content and expertise of technology champions that currently exist in many districts throughout Nebraska. The intangible are equally important such as student success, sharing resources and experience of educators, improved student engagement, and utilizing proven technologies.	- The project vulnerability is the high degree of cooperation required of very geographically disparate K12 entities. The desired outcomes are clear and the methods to achieve them are appropriate. The same could be said for the development of Network Nebraska. In the end it was the cost-effectiveness of Network Nebraska that resulted in its broad adoption. The same will need to be true here.  - Cost Effectiveness: Can we show a break-even analysis to add impact to the proposal?
Technical Impact	The technology components are aligned with and support the articulated outcomes. As stated there are many exemplars of this approach in other states. The approach combines IT best	- This is a very strong proposal from a conceptual perspective but there are a vast number of details that need to be addressed for the project to be successful. Among the possible impediments is

Section	Strengths	Weaknesses
	practices with adherence to NITC standards and a clear focus on the usability of the components.  - The technologies required of the BlendEd proposal are clearly identified and proven technologies that have been used by larger districts and higher education for a number of years. Single sign-on, reliability and availability, virtualization, disaster recovery, servers, software, integrating existing technologies owned and supported through the state to a statewide managed service, security, scalability, NITC standards, etc., all seem to be addressed. The proposal does not seem to require at this point one particular LMS system or content repository/database, but it would be worthy of consideration for maximizing investment and efficiencies down the road.	funding Service and Support: Will service levels be improved to provide desired levels while classes are in session? Will extended hours and weekend support be available for the LMS to support online learning?
Preliminary Plan for Implementation	- Project timelines and milestones are clearly articulated and responsible parties are identified Many of the stakeholders identified are already working together to better serve the students and educators throughout the state. The timelines and deliverables are complete and feasible. The training, staffing investment, and management commitment are integral to the success of the proposal.	- The coordination of a project with this many moving technical parts and variety of entities involved is enormous. It is not clear that ESUCC has the project management resources and governance to provide the level of coordination required.  - The statement, "However, it is acknowledged that there will necessarily be some new, additional support resources required." should be stronger!  - Staffing for system administration, maintenance and ongoing training appears to be limited. In year 3+ there is only \$50k allocated. Depending on number of entities involved this may be inadequate.
Risk Assessment	The proposal identifies key risk factors including cooperation of disparate entities and overall project coordination. The success of "local" efforts and, more importantly, the commitment of those that lead those efforts is significant in mitigating these risks.  I agree totally with the statement "The greatest risk for Nebraska education is to do nothing." The cost of each school and district going their own way will be much greater for the taxpayers of Nebraska than the BlendEd proposal of a statewide eLearning system. Building and growing trust and developing effective channels of communication as noted must be addressed.  Project Leadership	There will need to be a financial incentive for entities to abandon local efforts to which they are already dedicated. Cost savings are possible, but an investment of capital will be required for the success of the project.      Limited scope: Should consider including higher ed with LMS and LDAP offering.
Financial Analysis and Budget	The project budget indicates the significant investment required in hardware and software. It also recognizes that additional personnel costs will be incurred.     Budget numbers and plan seem reasonable and clear. It would have been nice to compare individual school investment in the same technologies as compared to the Statewide plan.	- There is insufficient information to tie expenditures directly to hardware/software components. Personnel costs decline over time and it is not clear how the project will be sustained without personnel over and above what is currently available.  - The savings/cost avoidance indicated seems logical and I believe is real. It would have been a good exercise to calculate the cost of provisioning the identified technologies for a single school and extrapolate cost to show potential savings of a Statewide approach as presented.  - Staffing levels appear to be inadequate to support systems administration, maintenance and upgrades as well as extended hours support needed for online learning.

#### **TECHNICAL PANEL COMMENTS**

Technical Panel Checklist				Comments
reclinical Pallel Checklist	Yes	No	Unknown	Comments
1. The project is technically feasible?				
2. The proposed technology is appropriate for the project?				
The technical elements can be accomplished within the proposed timeframe and budget?				

#### **EDUCATION COUNCIL COMMENTS**

- The Education Council recommends this project be categorized as Tier 1.
- If this project is successfully implemented, the Education Council predicts a significant cost savings for the education entities of Nebraska due to better software licensing and aggregated support services.
- The technologies described in the ESUCC project proposal have matured to the point where
  ongoing support services will be much more assumable than at any previous point in the history
  of these applications. EDUCAUSE has found that although the software products are improving
  and becoming more user friendly, more advanced training will be required for faculty and students
  in order to use the software systems to their fullest potential (e.g. instructional design training,
  advanced collaborative tools training).
- Nebraska is in a unique position to implement these technologies by virtue of the existence of the NSSRS unique identifier for every teacher, student, and staff member, currently being managed by the Nebraska Department of Education.
- The Education Council recommends that the project team focus on implementation of agreedupon interoperability standards rather than trying to achieve a single, specific software solution.
   By remaining vendor agnostic, the entire system will be less vulnerable to the unpredictable changes within the market environment.

# **APPENDIX: RESPONSE TO REVIEWER COMMENTS**

NITC Project Proposal Technical Review Responses Project: Nebraska's BlendEd eLearning System NITC Education Council meeting October 24, 2012

Section	Strengths	Weaknesses	Response
Goals, Objectives, and Projected Outcomes	- The stated goals are clear, concise, and challenging but certainly attainable. The core components of the technology needed to support BlendEd are clearly identified and are proven technologies used by educators for several years in the on-line community. The goal of providing face-to-face and online instruction to districts facing the challenge of certified teachers especially in the STEM subjects seems an effort deserving support.  - Conceptually the right thing to do.	- Limited Scope: Objectives 2 & 3 pg 6 of 34. Consider including higher education entities from the start on the LMS and LDAP implementations or at the very least consult with higher ed when selecting of tools.	This proposal was submitted by the ESUCC and is therefore K-12 centric. However, as is noted in the proposal, it references and recommends collaboration with Nebraska's institutions of Higher Ed. These institutions can provide assistance in proper instructional design and pedagogical techniques to properly utilize the eLearning tools. K-12 can provide HEd with feedback concerning effectiveness.
Project Justification / Business Case	- The tangible benefits listed on pages 11 & 12 would certainly help the small districts and those that have not made investment in LMS and content management systems to provide learning opportunities of the same quality and rigor statewide. The initiative would utilize the recent investment of high-bandwidth network provided by Network Nebraska, facilitate learning opportunities with Higher Education in Academy and dual-credit classes, and share educational content and expertise of technology champions that currently exist in many districts throughout Nebraska. The intangible are equally important such as student success, sharing resources and experience of educators, improved student engagement, and utilizing proven technologies.	- Cost Effectiveness: Can we show a break-even analysis to add impact to the proposal?	No attempt to develop a cost effective analysis was attempted for a number of reasons.  This proposal encompasses a wide variety of functionality, features, services and technical components. There are existing initiatives that offer some of the proposed features and functionality to segments of our K-12 population (e.g. myelearning, NEVA). However, there are no statewide initiatives that offer all of the proposed functionality and features that could be utilized for any meaningful comparisons.  It is felt it is undeniable that implementing the array of proposed functionality and services on a statewide basis utilizing an integrated and coordinated approach would provide the highest levels of availability, reliability, consistency, usability, and cost effectiveness possible.

NITC Project Proposal Technical Review Responses Project: Nebraska's BlendEd eLearning System NITC Education Council meeting October 24, 2012

Technical Impact	- The technologies required of the BlendEd proposal are clearly identified and proven technologies that have been used by larger districts and higher education for a number of years. Single sign-on, reliability and availability, virtualization, disaster recovery, servers, software, integrating existing technologies owned and supported through the state to a statewide managed service, security, scalability, NITC standards, etc., all seem to be addressed. The proposal does not seem to require at this point one particular LMS system or content repository/database, but it would be worthy of consideration for maximizing investment and efficiencies down the road.	- Service and Support: Will service levels be improved to provide desired levels while classes are in session? Will extended hours and weekend support be available for the LMS to support online learning?	As the proposal notes the architecture of the statewide BlendEd system must address the issues of availability, reliability, scalability, and extensibility. The proposed architecture/framework addresses these issues.  Network Nebraska will serve as the backbone/foundation for the BlendEd system deployment and it is a 24x7x365 operation. It is anticipated BlendEd will utilize a similar service and support model and also capitalize on existing support systems. Further detail to service and support would need to be developed.
Preliminary Plan for Implementation	- Many of the stakeholders identified are already working together to better serve the students and educators throughout the state. The timelines and deliverables are complete and feasible. The training, staffing investment, and management commitment are integral to the success of the proposal.	- The statement, "However, it is acknowledged that there will necessarily be some new, additional support resources required." should be stronger! - Staffing for system administration, maintenance and ongoing training appears to be limited. In year 3+ there is only \$50k allocated. Depending on number of entities involved this may be inadequate.	The proposal anticipates leveraging existing technical and support resources to the maximum extent possible. It is acknowledged that support and system administration will be challenging. As schools come online they will be able to provide some additional technical expertise. It is also anticipated that given the phased implementation over a period of 4+ years the experience of the early adopters can be leveraged to assist those that adopt later. Therefore, as the number of users increases over time the knowledge base and ability to support should also increase to better meet the required support demands. However, inevitably some additional support staff will be required for any premises based deployment.

NITC Project Proposal Technical Review Responses Project: Nebraska's BlendEd eLearning System NITC Education Council meeting October 24, 2012

Risk Assessment	- I agree totally with the statement "The greatest risk for Nebraska education is to do nothing." The cost of each school and district going their own way will be much greater for the taxpayers of Nebraska than the BlendEd proposal of a statewide eLearning system. Building and growing trust and developing effective channels of communication as noted must be addressed.  - Project Leadership	- Limited scope: Should consider including higher ed with LMS and LDAP offering.	This proposal was submitted by the ESUCC and is therefore K-12 centric. However, as is noted in the proposal, it references and recommends collaboration with Nebraska's institutions of Higher Ed . HEd's experience with LMS and LDAP/authentication will benefit the K-12 community as they deploy the BlendEd system.
Financial Analysis and Budget	- Budget numbers and plan seem reasonable and clear. It would have been nice to compare individual school investment in the same technologies as compared to the Statewide plan.	- The savings/cost avoidance indicated seems logical and I believe is real. It would have been a good exercise to calculate the cost of provisioning the identified technologies for a single school and extrapolate cost to show potential savings of a Statewide approach as presented.  - Staffing levels appear to be inadequate to support systems administration, maintenance and upgrades as well as extended hours support needed for online learning.	This proposal is based on the assumption that once the basic hardware and software is in place the centralized nature of the deployment will simplify system maintenance and upgrades compared to that required for a more distributed and differentiated deployment.  The proposal anticipates a distributed administrative model in which the individual schools will assume a level of responsibility for direct teacher and student support as they adopt and deploy the eLearning technologies. Finally, it must be acknowledged that effective support and administration will require coordination, cooperation and collaboration on the part of many entities.