

ESUCC

Technology Committee Meeting

Tuesday, November 17, 2015, 10:00 AM

Educational Service Unit No. 3 6949 So. 110th Street LaVista, NE 68128, 6949 South 110th Street, LaVista, NE 68128

Attendance Taken at 10:00 AM.

Bell ESU 10:	Present
Fisher ESU 04:	Present
Gegg ESU 05:	Absent
Jeff West (NE):	Present
Dr Kraig Lofquist:	Present
Shoemake ESU 06:	Present
Uhing ESU 01:	Present
Ted DeTurk (ESU 02):	Present

1. Call to Order

2. Roll call

3. Agenda Item

3.1. Tech Plan

3.1.1. Cloud Deployment Model

3.1.2. Progress Update

3.1.3. Single Sign On Update

3.2. Amendment to Server Hardware Purchase

3.3. Statewide Backup System

3.4. NITC Updated Action Plans

3.5. BlendEd Pilot

3.6. Staff Reports

3.6.1. Scott Isaacson

3.6.2. Beth Kabes

3.6.3. Rhonda Eis

4. Next Meeting Agenda Items

5. Executive Session

6. Adjournment

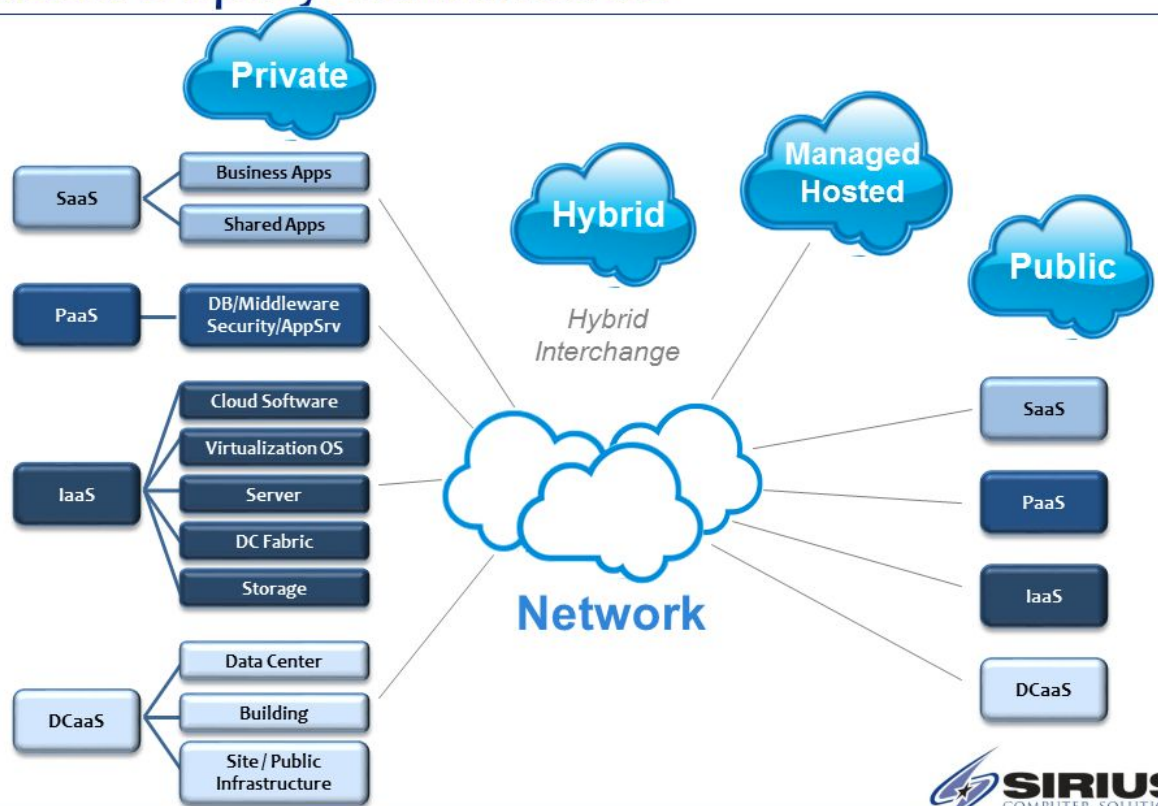
{{Name: Agenda Item Name}}

{{Discussion: Agenda Item Discussion}}

{{Comments: Agenda Item Comments}}

{{Actions: Agenda Item Actions}}

## Cloud Deployment Models



Private Cloud  
Hybrid Cloud  
Managed Hosted Cloud  
Public Cloud

**SaaS** - Software as a Service [Applications]

People trained and focused on the application only. Provide application Management. (LMS, Email, SIS)

**PaaS** - Platform as a Service

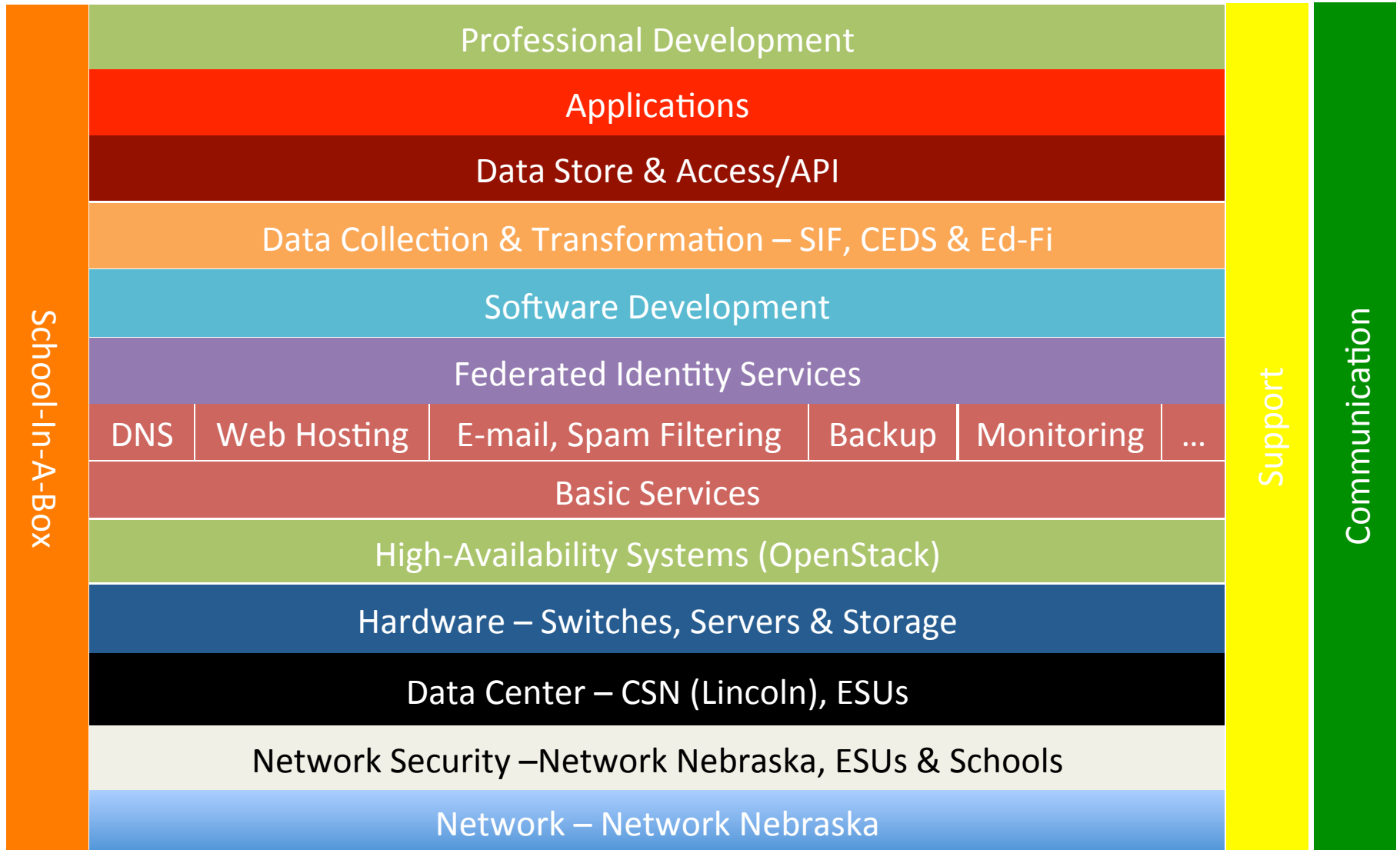
System admins focused. Provide OS and platform management (Windows System, LAMP Stack, RoR environment, Java VM platform)

**IaaS** - Infrastructure as a Service

Key techs training in OpenStack working with multi-tenant interface. Provide management of the virtualized resources (Compute, Storage, Network)

**DCaaS** - Data Center as a Service [locations with rooms, racks of equipment]

# Infrastructure Layers



# THINKMATE

159 Overland Road, Waltham, Massachusetts, 02451

Phone: 800-371-1212

Fax: 781-688-2260

## QUOTATION

Quote # **151105-33A**

Date **11/05/2015**

Expires **11/20/2015**

### Billing Information

Educational Service Unit Coordinating Council

6949 S 110th St

La Vista, NE 68128

sisaacson@esucc.org

402-597-4866

### Shipping Information

ESU COORDINATING COUNCIL

1292 EAST 4th STREET

ACCOUNTS PAYABLE DEPT

AINSWORTH, NE 69210

Ship Via: FedEx Ground

### Account Manager

Pete Donohue

peterd@thinkmate.com

800-371-1212 x4236

SKU	Description	Unit Price	Qty	Ext. Price
<b>RAX-NX XS8-2260</b>		\$30,570.95	1	\$30,570.95
	<ul style="list-style-type: none"><li>- 2 x Quad-Core Intel Xeon Processor E5-2609 v2 2.50GHz 10MB Cache (80W)</li><li>- Intel C602J Chipset - 8x SATA/SAS - LSI 2308 SAS - Quad 1-Gigabit Ethernet (RJ45)</li><li>- 8 x 16GB PC3-14900 1866MHz DDR3 ECC Registered DIMM</li><li>- Thinkmate STX-2312 2U Chassis - 12x Hot-Swap 3.5" SATA/SAS - 6Gb/s SAS Single Expander - 920W Redundant Power</li><li>- 2 x 1.0TB SAS 2.0 6.0Gb/s 7200RPM - 2.5" - Seagate Constellation.2</li><li>- 8GB STEC ZeusRAM 3.5" SAS 6.0Gb/s Solid State Drive (DRAM)</li><li>- 400GB SAS 3.0 12.0Gb/s - 2.5" - Hitachi UltraStar SSD1600MR Series</li><li>- 8 x 6.0TB SAS 3.0 12.0Gb/s 7200RPM - 3.5" - Hitachi Ultrastar He8 (512e)</li><li>- Integrated LSI 2308 SAS 2.0 6Gb/s 8-port Host Bus Adapter</li><li>- Intel 10-Gigabit Ethernet Converged Network Adapter X520-DA2 (2x SFP+)</li><li>- NexentaStor Gold Base license: Manage up to 16TB of storage - One Year of Gold-level Support</li><li>- Additional 2 years Gold-level support for 32 TB Gold license</li><li>- Additional 2 years Gold-level support for 16 TB Gold license</li><li>- NexentaStor Gold Base license: Manage up to 32TB of storage - One Year of Gold-level Support</li><li>- NEXENTA SVC: REMOTE SINGLE NOD</li><li>- 3 Year Advanced Parts Replacement Warranty and NBD Onsite Service</li></ul>			

Sub Total: \$30,570.95  
FedEx Ground Freight: \$188.00  
**Quote Total: \$30,758.95**

# Network Nebraska Initiative

1. Prepare for the future of Network Nebraska as a statewide, multipurpose, high capacity, scalable telecommunications network that shall meet the demand of state agencies, local governments, and educational entities as defined in section 79-1201.01.
  - 1.1. Challenge the NNAG Participant Criteria subcommittee to develop a strategy for community affiliate connections into Network Nebraska
  - 1.2. Use automated tools to monitor network utilization and uptime, notify operators of outages and concerns, and guide decisions regarding growth and reliability.
2. Serve as the communication hub for existing and potential new Network Nebraska members.
  - 2.1. Develop and implement communications strategy.
  - 2.2. Conduct annual survey of existing members to guide direction and service development.

## POTENTIAL MEASURABLES:

- Network Nebraska uptime
- Network Nebraska backbone bandwidth utilization (actual)
- Network Nebraska membership growth
- Network Nebraska Internet growth (purchased and actual)
- Network Nebraska Unit cost of Internet
- Number of public, non-education entities (e.g., libraries) connected to Network Nebraska

## Digital Education Initiative

1. Create Professional development opportunities for all Nebraska educators to maximize student success through the innovative uses of technology in teaching.
  - 1.1. Establish a virtual community of practice for curriculum development, effective pedagogical practices and shared experiences across all levels of education in Nebraska.
2. Address technical challenges for students in the transition from secondary to post-secondary education..
  - 2.1. Conduct a collaborative research project to identify existing infrastructure and pedagogical efforts in both secondary and post-secondary institutions.
  - 2.2. Identify targets for voluntary collaboration to ease transition for students.
  - 2.3. Identify key challenges for students and conduct an environmental scan to identify successful approaches to mitigate those challenges.
  - 2.4. Create a guide for best practices in the use of flexible learning technologies.
3. Expand awareness of the need to address poverty as it relates to digital education.
  - 3.1. Education Council will work in collaboration with the Community Council Broadband Initiative to find solutions for available, accessible, reliable, secure and affordable Internet access as related to academic success.
  - 3.2. Recognize technologies that can be used to aid schools in communicating with families in poverty conditions.

## POTENTIAL MEASURABLES:

- Number of professional development opportunities provided
- Number of educators impacted by professional development opportunities
- Published research regarding infrastructure, pedagogy, poverty, and impact on learning.



November 2, 2015

ESU Administrators

On behalf of the Blended Learning Pilot Project Team, I want to invite you to join in the blended learning movement. This project will provide leadership and guidance for schools in your region to enrich their progress in reaching goals for all students. To quote Commissioner Blomstedt, "The fact of the matter is, we're improving education for every student, every day."

The documents included in the enclosed packet include information for a two-year pilot. This pilot has been developed with the cooperation and collaboration of ESUCC and NCSA. The team of ESU Technology Affiliate Group (TAG) members Nick Ziegler and Dawn Ferreyra as well as Executive Director, David Ludwig have worked along side with NCSA representatives Mike Dulaney, Megan Hillabrand and Ryan Ricenbaw from Waverly. This team has spent numerous hours reviewing and learning what are the best practices to implement a systemic blended learning environment in schools.

Take a look at the timeline of the project. The first steps will include bringing in school teams to work with national leaders in blended learning from Highlander Institute. At that time, a school plan will be developed by the team members and their ESU partner that will define the process to implement a systemic blended learning plan.

The second page identifies criteria of readiness for schools. Review that list to ensure the foundational systems are in place for a positive experience. Please review this rubric with your staff to identify potential schools that would benefit by applying for the pilot. Notice this page can also be used as an application for the pilot project. Applications will be accepted until January 15 where ESU TAG members will be evaluating the received applications and identify those districts/schools that will be selected for the pilot project at the January ESUPDO meeting.

For questions regarding the Blended Pilot Project, please contact your TAG representative or contact Nick, Dawn or myself. This project will bring much-needed support for the statewide initiative and implementation of strategies to enhance district achievement goals.

Sincerely

Beth Kabes  
Director of Blended and Distance Education  
Educational Service Unit Coordinating Council

**ESU Blended Contact Representatives**  
**November 9, 2015**

The following is a list of ESU Blended Contact Representatives for the Blended Pilot Project:

ESU 1	Chris Good	<a href="mailto:cgood@esu1.org">cgood@esu1.org</a>
ESU 2	Eileen Barks	<a href="mailto:ebarks@esu2.org">ebarks@esu2.org</a>
ESU 3	Robbie Jensen	<a href="mailto:rjensen@esu3.org">rjensen@esu3.org</a>
ESU 4	Gregg Robke	<a href="mailto:grobke@esu4.net">grobke@esu4.net</a>
ESU 5	Nick Ziegler	<a href="mailto:nziegler@esu5.org">nziegler@esu5.org</a>
ESU 6	Lynne Herr	<a href="mailto:lynne.herr@esu6.org">lynne.herr@esu6.org</a>
ESU 7	Otis Pierce	<a href="mailto:opierce@esu7.org">opierce@esu7.org</a>
ESU 8	Molly Ashoff	<a href="mailto:mashoff@esu8.org">mashoff@esu8.org</a>
ESU 9	Lois Hafer	<a href="mailto:lois.hafer@esu9.us">lois.hafer@esu9.us</a>
ESU 10	Jason Evertt	<a href="mailto:jeverett@esu10.org">jeverett@esu10.org</a>
ESU 11	Jody Bauer	<a href="mailto:jody.bauer@esu11.org">jody.bauer@esu11.org</a>
ESU 13	Craig Hicks	<a href="mailto:CHicks@esu13.org">CHicks@esu13.org</a>
ESU 15	Todd Weimer	<a href="mailto:tweimer@esu15.org">tweimer@esu15.org</a>
ESU 16	Melissa Engel	<a href="mailto:mengel@esusixteen.org">mengel@esusixteen.org</a>
ESU 17	Patty Finney	<a href="mailto:pfinney@esu17.org">pfinney@esu17.org</a>
ESU 18	Linda Dickeson	<a href="mailto:ldickes@lps.org">ldickes@lps.org</a>
ESU 19	Dawn Ferreyra	<a href="mailto:dawn.ferreyra@ops.org">dawn.ferreyra@ops.org</a>



## ESUCC NCSA BlendEd Pilot Project

The Nebraska Department of Education (NDE) and the Educational Service Unit Coordinating Council (ESUCC) established three state-wide initiatives in the Spring of 2013. One of these is supporting and promoting BlendEd. BlendEd enhances best practices associated with face to face classrooms with technology to empower students with control over time, place, path and/or pace of learning.

Much work has been done across the state to provide professional learning opportunities for teachers promoting BlendEd. While across the state there are pockets of teachers doing great things, there are few examples of school-wide implementation of BlendEd. To build district capacity for BlendEd, ESUCC and the Nebraska Council of School Administrators (NCSA) are partnering to provide districts the opportunity to participate in the ESUCC NCSA BlendEd Pilot Project.

### **Kick Off: Spring 2016**

Participating schools will send teams (up to five: including administrators, tech coordinators, and teacher leaders) to a one day seminar organized by the Highlander Institute, a global leader in BlendEd implementation. The purpose of this seminar will be to help participating schools establish a systems approach for supporting BlendEd. School leadership teams will walk away with a clearer understanding of BlendEd at a systems level and a rough draft of a two year plan for implementation.

### **Plan: Summer 2016**

After districts have had time to return to their local tech committees to revise their two year plans over the spring semester, district teams will meet for a regional, 1 day event to share and revise their two year plans and further explore BlendEd practices.

### **Support: 2016-17 Academic Year**

Throughout the year each pilot school's administrators will participate in regular meetings to support the continued implementation of their BlendEd plan. Participating teachers will also collaborate within their schools and across their project designated region.

### **Reflect: Summer 2017**

During the summer of 2017 pilot schools will meet regionally at one day events to discuss progress and revise their BlendEd plans.

### **Expand: 2017-18 Academic Year**

Input from the pilot schools 2016-17 will be used to develop an ongoing program of support during the 2017-18 academic year for pilot schools, as well as establish procedures for expanding the BlendEd Pilot Project.



## ESUCC NCSA BlendEd Pilot Project

The ESUCC NCSA BlendEd Pilot Project is an opportunity for Nebraska schools to develop a systems approach to enhancing education through BlendEd practices. Participation will be limited to 1-2 schools per Educational Service Unit (ESU). Participating schools will be selected based on their readiness for implementing a school-wide BlendEd project (see the readiness rubric below).

**Applications are being accepted now through January 15, 2016.**

Applications are accepted online: <https://sites.google.com/a/esucc.org/ne-blended/pilot-project>

<b>Faculty</b>	<b>Ready</b>	<b>Almost</b>	<b>Beginning</b>	<b>Not Ready</b>
Faculty regularly collaborates on learning experiences.				
School administrators support teachers in trying new instructional methods.				
Time for professional development is regularly built into the academic year.				
Faculty uses data to inform instruction.				
Instructional staff differentiates for student needs.				
Instructional staff values student-centered instructional practices.				
Staff is skilled in the use of technology tools.				

<b>Technology and Facilities</b>	<b>Ready</b>	<b>Almost</b>	<b>Beginning</b>	<b>Not Ready</b>
Network can support streaming media on multiple devices.				
Devices (computers or tablets) are available in every classroom- with a minimum of five devices per classroom. Sufficient devices in every classroom available for student use.				
A sustainable plan for updating classroom technology and student devices exists				
Classroom can be redesigned for collaborative learning (small group and individual learning spaces).				
Instructional staff has a school/district assigned device (computer or tablet) that can be used for designing online lessons and learning activities.				
Devices are up-to-date and regularly maintained.				
One common learning management system is in place for all staff and students.				

# Technology Committee Update

*Scott Isaacson*

November 17, 2015

## Statewide Technology Plan

### Nebraska Cloud Learning Environment

NOC members discussed a model of support and have designated a sub-group to examine the model, common language, and needs assessment for sustainable technology project support and development work. The main idea is to map out a transition plan from current individual, best-effort work to cooperative and aligned work. There is agreement around the idea of the model, and that these functions need to be provided. The work at this stage is not focused on HOW to best provide them, but when the model is widely agreed-upon, the discussion will move in that direction. The model discussed initially grouped the levels of support into 4 service areas:

- Data Center - physical locations, facilities and environments which host server & network equipment
- Infrastructure - server, storage and network equipment, virtualization environment
- Platform - operating systems, service applications, databases -- components that software applications need to operate
- Software - applications that users interact with to perform the work of teaching, learning and administration

The new server hardware has mostly arrived. Three servers have been installed at the Nebraska Hall data center. The fourth server and Ethernet switch arrived yesterday and will be installed this week. This equipment will provide the production environment for the single sign-on, app launch portal, ADVISER dashboard application and SRS.

We are evaluating a backup framework that will be able to serve statewide needs for off-site backup at school districts and ESUs. The IlliniCloud has offered one solution that would allow a low-cost model to provide an easy start to offering this service statewide. This was discussed at the NOC meeting in Hastings last week. NOC members asked for additional information and comparison with alternative solutions. I will prepare the additional information for NOC and bring their recommendation to the technology committee at a future meeting.

Unicon continues to assist us in expanding the single sign-on environment. Ten districts, 1 ESU and the ESUCC are connected to the single sign-on environment. The remaining 27 early adopter districts are in the process of connecting. The uPortal system staging environment installation is in progress and expected to be available to connected districts and ESUs later this month. The development version is available for viewing at [dev-portal.nebraskacloud.org](http://dev-portal.nebraskacloud.org).

## **IlliniCloud**

We continue weekly technical and strategy discussions with IlliniCloud representatives and technology leaders from a New York regional information center and the Clark County, Nevada school district. This collaborative group has received grant funding from the Gates foundation to meet and explore a model of open and sustainable software for K-12 educational needs. This begins with a meeting later this week in Nebraska.

## **LOR**

The BlendEd LOR sub-committee continues to meet, discussing LOR solutions and evaluation criteria. The interim streaming solution, utilizing the Learn360 index system to allow users to find and stream the state titles is working in the test environment. I am installing the streaming system in the production environment and am working with Rhonda to make the first Nebraska titles available for Learn360 users this month.

## **LMS**

Conversion work continues for districts onto the Canvas and Schoology systems. Canvas, Schoology, Blackboard Learn and Moodle (hosted by Blackboard) are all available through the COOP purchasing program. Districts representing just over 19,000 users have elected to continue using the ANGEL system this year. ANGEL support ends in 2016, and the ESUCC will be discontinuing ANGEL service as of August 31, 2016. Technical problems with ANGEL exports have been resolved with the help of ANGEL support. Districts or users continuing to experience export problems should open a ticket with our Helpdesk at [help@esucc.org](mailto:help@esucc.org).

## **ADVISER Ed-Fi Dashboard**

Six PowerSchool districts and one ESU 3 SIMS district are connected to the staging environment, allowing data stewards and other key users to begin publishing and validating live data. The PowerSchool pilot districts plan to roll the system out to some of their users in 2nd semester 2015-16. 30 additional early adopter districts are on track to begin data staging activities in early 2016 with a planned summer, 2016 beginning rollout to their users.

## **SRS**

The hardware purchase mentioned above will provide resources to the SRS hosting environment and allow better separation of the development, staging and production environments. Mike Danahy is working on three areas: converting legacy pages of the application to the Zend framework, developing data import and export processes for district data exchange, and responding to problem reports and application changes as needed.



## **Committee Report**

**PROJECT NAME:** BlendEd and Distance Ed

**PROJECT DIRECTOR:** Beth Kabes

**REPORT PERIOD:** November, 2015

**COMMITTEE REPORT:**

BlendEd continues to meet every Friday morning at 9 a.m. over zoom. Discussion items include since October:

Spring NETA Presentations and NDLA Presentations

iMAT OER Session

National Distance Learning Week sponsored by NE Distance Learning Association

LOR Sub-Committee meetings

uPortal

BlendEd Pilot Project

EdReady/NROC Resources

Michael Horn Presentation in Omaha

**DEAC REPORT:**

DEAC met on October 27

Reports from

Network NE Advisory Group

NE Department of Educational Service Unit Coordinating Council

OCIO/NITC (new contracts for networks across the state)

Erate

Edready/NROC

Coop Purchasing

NVIS

Virtual Field Trip Content Provider Training held on October 28

LMS

Online Courses and meeting Rule 10

LOR Sub-Committee

NDLA

Combining BlendEd, DEAC and IMat

Next meeting December 15, 2015 from 1-4

**NEW BUSINESS:**

### NROCEnglish

This course is available under the current NE contract. It must be installed into an LMS. Craig Hicks has agreed to take the lead on the answering questions for implementation. Meeting with Terri Rowenhorst and Dave L about NROC scheduled for October 22 was postponed. Waiting to have a more defined Instructional Delivery Plan coordinated by NDE.

### BlendEd

Visited with teachers and Principal from ElkrIDGE Middle School in Elkhorn. They are interested in the Blended pilot.

LOR Sub-Committee heard from Amazon as a possible LOR. Will be hearing from Learn360 on December 11.

### **OLD BUSINESS:**

NVIS - Nate has started the work on the NVIS contract.



## Committee Report

### IMat Projects Update – November 2015

*Rhonda Eis*

#### **Preview Resources**

IMat has been previewing resources throughout the fall with focuses on eBooks, Open Educational Resources (OER), online databases, digital tools, and standards based resources. Members have been meeting once a month via Zoom to discuss and evaluate resources that are being used by ESUs or school districts with the goal to identify products that may be beneficial statewide. This has been the direction of preview this fall, rather than the previewing of individual video titles. Discussion about use of IMat project funds continue and recommendations will be made in the spring.

#### **Learn360 Update:**

Learn360 has shared with us that they will be relaunching in January 2016 with a brand-new, state-of-the-art platform featuring improved performance and speed. This complete redesign is promised to have improved browsing and searching capabilities with new features to include custom segment tools and new ways to share content. The Admin portal has been redesigned with customization tools and improved reporting. State or local content can be added as “channels” and would be searchable as part of Learn360 search. A full demonstration is scheduled for the December 11<sup>th</sup> LOR Sub-Committee meeting to see if it could be a contender for a LOR solution with or without the subscription content. More information will be available after the full launch of the new platform.

#### **Nebraska Licensed Titles**

Scott continues to make progress with LOR interim solution (Learn360) for streaming Nebraska titles. We expect to have the Bill Nye Disney titles ready by the end of November. More titles to be added as they become ready. This will provide a good test of the how the new platform will handle the state titles when it launches in January.

#### **Future IMat meeting dates:**

January 28 – Joint meeting with DEAC/BlendEd/TAG  
March 17 – ESU 8 – All day