

# Digital Education

## Objective

- To promote the effective and efficient integration of technology into the instructional, learning, and administrative processes and to utilize technology to deliver enhanced digital educational opportunities to students at all levels throughout Nebraska on an equitable and affordable basis.

## Description

This initiative will involve the coordination and promotion of several major systems and applications that heretofore have either been developed mostly at the local level or have not been replicated statewide.

The initiative will be dependent upon adequate Internet connectivity and transport bandwidth for learners, instructors, administrators, and for educational attendance sites. A minimum acceptable level of classroom technology will have to be established for the initiative to be successful.

The Digital Education Initiative will recognize that many standalone and disparate software applications are needing to undergo integration and convergence so that an instructor can: 1) research digital content, 2) construct a lesson or unit on a computer in a series of virtual or face-to-face or videoconferencing activities using rich multimedia, 3) assess the learners electronically, and then 4) move the student data to a database or data warehouse, 5) export relevant achievement and attendance data to a web-based student information system so parents, or the students themselves, can view it from home; 6) export data to a statewide student information system; and then finally 7) make “real-time” instructional decisions based upon the recently documented progress of the learners.

The primary components of the Digital Education Initiative would include:

- A statewide telecommunications network with ample bandwidth capable of transporting voice, video, and data between and among all education entities [see Network Nebraska];
- Distance insensitive Internet pricing for all Nebraska education entities;
- Development of a statewide eLearning environment so that every teacher and every learner has access to a web-based, digital curriculum [and learning management system](#);
- Development of a statewide digital resource library so that any teacher or learner will be able to retrieve digital media for use in instructional and student projects;
- Synchronous videoconferencing interconnections between all schools and colleges;
- The means to coordinate and facilitate essential education opportunities for all students through a statewide student information system; and
- Regional PreK-20 education cooperatives that vertically articulate educational programs and opportunities.

## Benefits

Establishing a Digital Education Initiative is critical to Nebraska's future. Internet has gone from a "nice to have" educational application of the 1990's to the "must have" mission critical application of the source of information for the 2000's 21st Century. So much of what teachers, students, and administrators do today is tied to Internet-based information and communication. Nebraska's ranking of 2.8 students per high speed, Internet-connected computer in the classroom seems to compare favorably with the U.S. average of 3.7 students per high speed, Internet-connected computer. (Technology Counts 2007 Report) However, it still makes it challenging for students to complete their digital assignments when they are expected to share two or three students to a computer, or to wait their turn to be able to use a computer. Educators and administrators everywhere should continue to make technology investments until 1:1 computer or Internet-connected device use is attained.

The benefits of the Digital Education Initiative would include:

- Greater technical capacity for schools and colleges to meet the increasing demands of a more diverse customer base;
- More equitable and affordable Internet access for Nebraska schools and colleges;
- A comprehensive Web-based approach to curriculum mapping and organization and automation of student assessment data gathering and depiction;
- The availability of rich, digital media to the desktop that is indexed to Nebraska standards, catalogued, and searchable by the educator or student;
- A more systematic approach to synchronous video distance learning that enables Nebraska schools and colleges to exchange more courses, staff development and training, and ad hoc learning opportunities.

Each of the components of the Digital Education Initiative is vital to future student success in Nebraska. The components are especially pertinent in that these applications and services provide the foundation for capacity building in our schools and colleges.

## Action Plan

### Current Action Items

**D1. Set a deadline, and establish standard(s) related to the administration and maintenance of learning management systems and content management systems by K-12 schools.**

**Lead:** NITC Technical Panel

**Participating Entities:** Learning Management Systems Work Group, [NITC Education Council](#), [myeLearning.org](#), ESU [Coordinating Council](#), Distance Education Council, [UNL Independent Study High School](#)

**Timeframe:** ~~2008~~ [2010-2011](#)

**Funding:** No funding is required for this action item.

**Status:** [Continuation with minor revisions](#)

**D2. Promote the availability, distribution, and use of digital media throughout the Nebraska educational community.**

**D2a Action:** Negotiate a statewide purchase of the National Repository for Online Courses

**Lead:** Distance Education Council

**Participating Entities:** NITC Education Council

**Timeframe:** 2008-09

**Funding:** No funding is required for this action item.

**Status:** ~~Continuation~~ Completed

**D2b Action:** Promote the usage of the National Repository for Online Courses (NROC) content by Nebraska educators

**Lead:** Partnership For Innovation (PFI)

**Participating Entities:** Distance Education Council, NITC Education Council

**Timeframe:** 2010-2011

**Funding:** No funding is required for this action item.

**Status:** New

**D3. Develop an affordable plan to provide access to learning management system software and a digital content management system for every teacher and learner ~~who uses synchronous video distance learning~~ and to also train teachers in effective instructional design to integrate synchronous and asynchronous technologies.**

**Lead:** Distance Education Council

**Participating Entities:** Technical Panel's Learning Management System Work Group, NITC Education Council, ESU Technology Affiliate Group

**Timeframe:** 2010-2011

**Funding:** No funding is required for this action item.

**Status:** Continuation with minor revisions

**D4. Provide training and encourage higher-all education entities-providers to list all dual enrollment and concurrent enrollment courses, and all enrichment opportunities on the statewide clearinghouse and scheduling software system.**

**Lead:** Distance Education Council

**Participating Entities:** NITC Education Council, Higher education entities

**Timeframe:** ~~2008-09~~2010-2011

**Funding:** No funding required for this action item

**Status:** ~~New~~Continuation with minor revisions

**D5. Develop a governance and leadership structure for the administration of online, virtual schools in Nebraska.**

**Lead:** Nebraska Department of Education

**Participating Entities:** NITC Education Council, Distance Education Council, UNL Independent Study High School

**Timeframe:** 2010-2011

**Funding:** No funding required for this action item

**Status:** New

**D6. Develop and deploy a statewide digital content repository that allows the assignment of digital property rights and the uploading, cataloguing, metatagging, searching, and downloading of digital learning objects by Nebraska educators.**

**Lead:** Nebraska Educational Telecommunications (NET)

**Participating Entities:** Nebraska Department of Education, Education Council, ESU Instructional Materials Committee, Distance Education Council, Partnership for Innovation (PFI)

**Timeframe:** 2010-2011

**Funding:** Considerable funding required for this action item

**Status:** New

**D7. Monitor the Nebraska Statewide Assessment System (NeSAS) and develop strategies that will assure its continued success and use of the most efficient and scalable technology infrastructure.**

**Lead:** Technical Panel

**Participating Entities:** NITC Education Council, ESU-NOC

**Timeframe:** 2010-2011

**Funding:** No funding required for this action item

**Status:** New