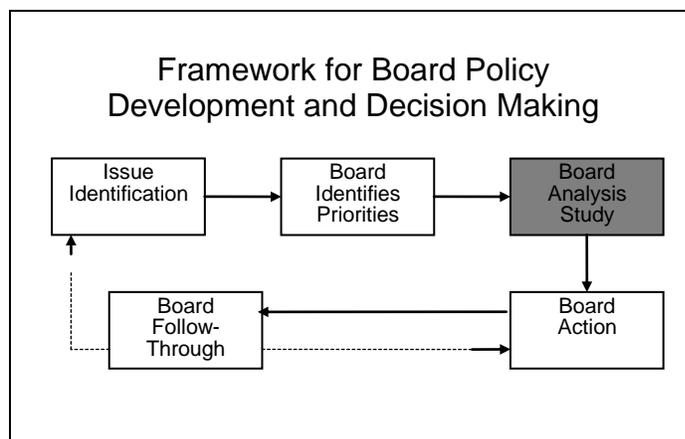


# Iowa State Board of Education

## Executive Summary

September 15, 2011



**Agenda Item:** Online Learning

**Iowa Goals:** All K-12 students will achieve at a high level.

**Equity Impact Statement:** Online learning increases equity by providing access to quality instruction and learning resources for students across the state.

**Presenters:** Gwen Wallace Nagel, Consultant  
Iowa Learning Online  
Division of Learning and Results

Jennifer Sigrist, Director of Teaching and Learning  
Van Meter Community School District

Nancy Movall, Grant Manager  
Area Education Agency/Urban Education Network  
Educational Technology American Recovery and Reinvestment Act Grant

**Attachments:** 2

**Recommendation:** It is recommended that the State Board hear and discuss this information.

**Background:** One of the policy development priorities identified by the State Board of Education is "Online Learning." The State Board directed the Department to study other states' virtual schools and develop a plan to scale up Iowa's existing virtual school. During this session, recommendations regarding plans for the scaling-up of Iowa Learning Online and the development of a PK-20 Portal of Iowa Online Learning Opportunities will be shared.

# **Iowa Learning Online: A Plan for Growth**

**Presented to the Iowa State Board of Education**

**Thursday, September 15, 2011**

## Iowa Learning Online Planning Group Members

Bryan	Bauer	Instructional Designer/ Manager, New Media & Education Iowa Public Television
Shannon	C'deBaca	Iowa Learning Online Teacher
Kevin	Fangman	Deputy Director Iowa Department of Education
Eric	Goranson	State Board of Education
Mary	Herring	Interim Associate Dean & Associate Professor University of Northern Iowa College of Education
Jeff	Herzberg	Chief Administrator Prairie Lakes Area Education Agency
Diane	Jackson	Administrator of Staff/Support Services Prairie Lakes Area Education Agency
Nancy	Movall	Ed Tech Grant Manager American Recovery and Reinvestment Act (ARRA) Grant
Gwen	Nagel	Director Iowa Learning Online Iowa Department of Education
Todd	Prusha	Dean of Distance Learning Kirkwood Community College
Randy	Richardson	Associate Executive Director Iowa State Education Association
Bryan	Setser	Former CEO North Carolina Virtual Public School
Mark	Schneider	Superintendent Mid Prairie Community School District Keota Community School District
Jennifer	Sigrist	Director of Teaching and Learning Van Meter Community School District
Cindy	Slauson	Director of Curriculum and Instruction Administration Indianola Community School District
Elliott	Smith	Executive Director Iowa Business Council

*“Online learning is emerging as an essential part of the K-12 education landscape. To meet their educational goals and secure their future as active and productive citizens, K-12 students must have access to quality online learning opportunities in a variety of forms that meet their needs. This imperative is reflected in the U.S. Department of Education’s National Education Technology Plan as well in policy discussions in statehouses across the nation.”* iNACOL, Every Student’s Right to Online Learning Opportunity

## Landscape

The iNACOL (International Association for K-12 Online Learning) publication, *Fast Facts About Online Learning*, reports that 67 percent of children in nursery school were computer users, as were 80 percent of those in kindergarten. By high school, 97 percent used computers and 80 percent used the Internet. The publication cites the disturbing national statistics, that every day 6,000 young people will drop out of school; that 47 percent will report it was because their classes were not interesting and they were bored; and that 88 percent of them will have dropped out while having passing grades.

State education leaders and policy makers have the exciting opportunity to transform education through innovative policy agendas. Bold discussions and decisions regarding the use of online course content to enrich and customize learning, competency-based learning approaches, and changes in school scheduling and structure are taking place throughout the nation. Though not without controversy, these conversations should lead us to informed decisions regarding college and career readiness, student retention and performance, and equity of education opportunities.

One strategy states are adopting to address some of these issues is providing the availability of online learning opportunities. *iNACOL’s Fast Facts About Online Learning* also reports that 48 of the 50 states, plus Washington, D.C., have made supplemental or full-time online opportunities available to at least some of their students, 39 have state virtual schools or state-lead online initiatives, and 27 have statewide full-time online schools. As a result, 75 percent of school districts nation-wide have one or more students enrolled in online or blended learning courses. The National Education Technology Plan supports these actions by recommending that every student have access to online learning opportunities and that every teacher have access to online training.

In addition, the recent bi-partisan effort to look at the pivot to personal digital learning for every child took place in December 2010 with the release of the *Digital Learning Now!* report. The key architects of the report remarked,

*“Our vision is an education that maximizes every child’s potential for learning, prepares every child with the knowledge and skills to succeed in college and careers, and launches every child into the world with the ability to pursue his or her dreams. By unleashing the power of digital learning, America has the ability to realize that vision today.”* Jeb Bush and Bob Wise, *Digital Learning Now!*

## Background

Iowa Learning Online (ILO) is the Iowa Department of Education's high school distance learning\* initiative. In an effort to assist in preparing Iowa students for their future in today's global economy, ILO offers access to highly qualified teachers and rigorous core-aligned content to address increasing teacher shortages, particularly in rural regions and hard to fill subject areas, and a wider variety of engaging courses to all students. ILO supports students, schools, and parents by providing core, elective, credit or credit recovery, and credit advancement courses that would otherwise not be available. The support systems and staffing requirements for each category of options are unique and require complex planning at ILO's administrative level.

Currently, ILO is supplementary in nature and all of ILO's developed or licensed courses are offered tuition-free to Iowa accredited school districts, on a semester basis, with home schooled students enrolling through their district of residence. These courses operate under defined start and end dates, with some situational flexibility.

Additionally, ILO offers a "clearinghouse of distance learning resources", enabling it to act as a partner and broker by providing free marketing services, via our website, for other online opportunities throughout the state, such as the Iowa Online Advanced Placement Academy and Kirkwood Community College High School Distance Learning Program courses, as well as "homegrown" local education agency (LEA) or private school courses. These courses may have defined or flexible start and end dates and may be offered free-of-charge or on a tuition basis. Additionally, the ILO website provides links to Post-Secondary Enrollment Options (PSEO), higher education, and Area Education Agency (AEA) professional development online courses.

ILO launched in the summer semester of 2004 with 40 students enrolled in three online courses. ILO now serves an average of 625 students a year\*\* and offers 13 developed or licensed courses delivered via the Internet and/or the Iowa Communications Network, sometimes with the assistance of desk-top video conferencing. Some courses are offered synchronously, where the teacher and students are present at the same time, either virtually or in a blended classroom environment. Others are offered asynchronously, where the teacher and students are not present at the same time.

*\*Distance learning is also referred to as online learning, digital learning, e-learning, cyber learning, or virtual learning.*

*\*\*This number does not include the enrollments from the efforts of other clearinghouse partners either supported or not supported financially by ILO. The Iowa Online Advance Placement Academy averages about 600 enrollments per year and has been financially supported by ILO for the last two years. LEA regional consortium enrollments, for which ILO has historically financially supported the hourly use of the Iowa Communications Network averages around 1600 per year. The Kirkwood Community College High School Distance Learning Program averages around 500 enrollments per year and receives no financial support from ILO, other than marketing on the ILO website.*

After steady increases in enrollment, growth has been held relatively flat in recent years due to ILO's financial inability to hire additional teachers and expand its curriculum. ILO has implemented a maximum enrollment per-class, per-district and a "wait list" system, but still turns away many students each semester, particularly in math and science courses. For these reasons, ILO has maintained a very low-profile within the state. This self-imposed low profile has resulted in many administrators, teachers, guidance counselors, parents, and students being unaware of the seven-year existence and operation of a formal state-led high school online learning program in Iowa. Due to our Web presence, ILO also receives search engine-related requests for enrollment from schools, parents, and students outside the state of Iowa, but even if seats were available, enrollment is currently limited to Iowa students.

At its summer retreat in 2010, Iowa's State Board of Education identified online learning as one of its yearly priorities. As part of that commitment, they have requested a plan from the ILO administrative staff to expand the capacity of ILO to meet the demand of Iowa school districts and students, which would include both supplementary and full-time online opportunities.

Currently, Iowa's education system is beginning a process of transition and transformation at all levels. There is great interest in increasing student achievement, providing global learning and career-ready opportunities, and moving towards competency-based models of learning. The proposed scaling model would expand the current traditional course offerings and infrastructure, while building the foundation to support the growing needs and changing landscape of Iowa students and their "classrooms." At the end of the first phase of scaling (supporting 5,000 enrollments in a year), ILO will have the administrative staff, highly-qualified teachers, technical platforms, policies, and strategic partnerships to support next-generation models of teaching and learning.

This document will address the initial scaling up of ILO and provide recommendations for additional transformational features of Iowa's online environment.

## Scaling Model

*"There is a remarkable consensus among educators and business and policy leaders on one key conclusion: We need to bring what we teach and how we teach into the 21st century."* Time Magazine

The goal for ILO is to scale to a capacity to be able to serve any student in Iowa who wishes to participate in an online course, be it of a supplemental nature or in a full-time capacity. On the learned advice of other state-led virtual school administrators, especially that of Dr. Bryan Setser, the former CEO of the North Carolina Virtual Public School, we will approach this leap through piloting to scale. We will begin with an initial tier of 5,000 student enrollments, focusing on offering a full curriculum with teacher-directed classes, followed by opportunities to extend and innovate further after the initial scale-up.

This expansion of services will require attention to policies, resources and infrastructure in the following categories:

- Governance
- Access and Equity
- Curriculum
- Teachers
- Students
- Administrative and Technical Systems
- Funding
- Budget and Staffing

## ***Governance Recommendations***

- ILO's supplemental and full-time online learning options and activities will be managed within the Iowa Department of Education. However, the Iowa Department of Education must ensure ILO is able to be responsive to the ever-changing needs of students and parents. Scenarios in which a statewide virtual school is operated as an independent entity have been successful in other states and may need to be considered in Iowa. Legislation giving the Iowa Department of Education more latitude in hiring and purchasing for ILO may enable the state to be responsive enough to manage it. (Requires legislation.)
- An advisory council of stakeholders representing PK-20 education, business and industry, professional education organizations, parents, and students will be appointed to provide regular guidance, insight, and opinions to the ILO management team.\*\*\*

## ***Access and Equity Recommendations***

- Participation in ILO supplementary and full-time online options will be available to all high school students enrolled in an accredited Iowa public or private school. ILO supplementary and full-time online options will also be available to home school students through their district of residence or AEA home school liaison. The Iowa Department of Education and the Board of Education need to explore options and implications for direct enrollment of students by parents. (Requires legislation.)
- ILO does not offer courses to out-of-state students in order to provide capacity services within Iowa. After the initial infrastructure is in place the Department of Education will explore options and implications for offering services outside of Iowa.

\*\*\*It is recommended that the current members of the ILO Planning Group be invited to remain in corresponding stakeholder positions retained on the advisory council and that all vacated or additional positions be filled immediately.

- ILO will continue to act as a partner to local school districts by hiring high quality teachers, delivering rigorous and engaging content and instruction, and awarding student's percentage scores and grades. Local school districts will record student ILO grades on the student's district transcript and continue to award the credit and diploma.
- Schools with students participating in ILO supplementary and full-time options will continue to ensure that all students have access to the technology and bandwidth necessary for participation.
- Schools with students participating in ILO supplementary and full-time options will identify a Site Coordinator (previously referred to as a student coach) to be assigned as a support and advocate for each student and as a regular contact for the ILO teacher. The Site Coordinator must be a school employee, but need not be a licensed teacher. The Site Coordinator must take part in an initial ILO orientation session and must be available to the student for the duration of his or her participation in the ILO course. In the case of home schooled students, the AEA or LEA home school liaison will serve as the Site Coordinator.
- The student's district of residence will be required to identify and communicate any necessary accommodations to ILO faculty.

## ***Curriculum Recommendations***

### **Sources of Courses: Develop, License, and Purchase**

ILO will continue to offer a variety of custom-built, licensed, locally developed, and partner-provided online courses in its organizational scale-up.

- In order to immediately offer a full, broad and rich curriculum as part of an initial expansion, ILO would need to look to vendors such as the Florida Virtual School, Apex Learning, or Aventa Learning to provide the necessary diversity of courseware. Initially, the virtual school may select a single vendor for all courses, or may choose specific courses from multiple providers based on course quality and other factors, such as the need to provide districts with a variety of options, to meeting a variety of learner needs and allow students, parents, and teachers the opportunity to customize the student's curriculum.
- An evaluation team composed of highly qualified teachers, education consultants and instructional designers will evaluate vendor courses using rubrics derived from the iNACOL National Standards of Quality for Online Courses and the Iowa Core/Common Core. Where possible, opportunities for purchasing courses in perpetuity will be explored, enabling the customization and "localization" of these nationally distributed courses.

- The virtual school design team and content area teachers will continue to evaluate and include Open Educational Resource content in ILO’s curriculum. This would include many of the free resources identified by former Education Director at the Hewlett Foundation, Mike Smith, such as SAS Curriculum Pathways, MIT Open Courseware, and the Free Education Government open portal. ILO will also migrate away from its few remaining textbooks to open source materials.
- ILO will update its existing custom courses and based upon identified gaps in available courseware, particular needs of Iowa schools, and available resources to support production, ILO will also begin creation of additional custom modular courses, at the rate of two per year, following the initial scale-up. Currently, ILO has under development a U. S. History course that may be delivered in modules.
- When possible, ILO will leverage other sources of courses and content modules developed by Iowa educators. Collaboration with Iowa’s higher-education community will be explored for the creation of courses or modules and supporting materials, including gaming and learning applications creation. Partnerships with business and industry will be investigated, particularly to help fund courses that meet targeted needs in highly valued content areas, such as Science, Technology, Engineering, and Mathematics (STEM), which in turn will fuel Iowa’s economic development.
- ILO will explore opportunities for sharing custom courses and content modules with other states or regional consortiums. Content created by Iowa teachers through the recent AEA/UEN EdTech ARRA Grant “Communities of Practice” and similar efforts will be utilized.
- Regardless of the source, all content considered for inclusion in ILO will be evaluated using state and national guidelines and standards. Quality and rigor at all levels will remain our top priority.

**Possible Options for “Full Curriculum” Course Offerings List:**

- Art/Visual Arts
  - Art Appreciation
  - Music Appreciation
- Business Technology / Computer Science
  - Web Design I
  - Web Design II
  - Computer Programming/Applications
  - Computing for College and Careers
  - Game Design

- English/Language Arts
  - English I
  - English II
  - English III
  - English IV
  - Reading for College Success
  - Journalism
  - Creative Writing
  - Introduction to English Literature and Composition
  - Critical Reading and Effective Writing
  - Reading Skills and Strategies
  - Writing Skills and Strategies
  - American Literature
  - Writing and Grammar
  - British and World Literature
  
- Language
  - Chinese I
  - Chinese II
  - Chinese III
  - Spanish I
  - Spanish II
  - Spanish III
  - Arabic I
  - Arabic II
  - German I
  - German II
  
- Additional Languages (Added based on interest and availability.)
  - Japanese I
  - Japanese II
  - Hindi/Urdu I
  - Hindi/Urdu II
  - Portuguese I
  - Portuguese II
  - Bengali I
  - Bengali II
  - Russian I
  - Russian II
  - French I
  - French II
  - Latin I
  - Latin II
  - Latin III

- Health / Physical Education
  - Physical Education
  - Skills for Health
  
- Mathematics
  - Introductory Algebra
  - Algebra I
  - Algebra II
  - Pre-Calculus
  - Calculus
  - Geometry
  - Statistics
  - Consumer Math
  - Fundamental Math
  - Math Foundations I
  - Math Foundations II
  - Accounting
  
- Science
  - Biology
  - Anatomy and Physiology
  - Chemistry
  - Earth Science
  - Marine Science
  - Physical Science
  - Physics
  
- Social Studies
  - American Government and Politics
  - U.S. History to Civil War
  - U.S. History Civil War to Present
  - Economics
  - Global Studies
  - Psychology
  - Sociology
  - World History
  - Geography and World Cultures

- Advanced Placement and Exam Review
  - AP Biology
  - AP Calculus
  - AP Chemistry
  - AP English Language and Composition
  - AP English Literature and Composition
  - AP Macroeconomics
  - AP Microeconomics
  - AP Statistics
  - AP Physics
  - AP U. S. History
  - AP Exam Review
  - ACT/SAT Prep (Added based on interest and availability.)

## **Delivery and Pacing Options**

Although there are a variety of approaches to the delivery and pacing for online courses, ILO will employ the following characteristics for the scale-up period.

- ILO courses will be delivered at a distance, by Iowa licensed (or reciprocally licensed) teachers who are certified in the content area of the course. (Requires legislation.)
- ILO courses will be semester-length, with full-year courses divided into two semesters, although in some cases, students may opt to obtain both semester credits during one semester. We will also investigate piloting additional delivery options.
- Current ILO courses and many vendor courses are designed as generally synchronous experiences, with students working in cohorts to set a common schedule. Flexible options will be provided for students who wish to work individually and at their own pace, moving through the course and obtaining their credits at a slower or faster pace.
- Component-based solutions are needed in many cases when a student has missed or failed only a portion of the course content. ILO will continue to offer this type of solution on a case-by-case basis.
- ILO will further explore delivery and pacing options after the initial scale-up, assisting districts in the move to competency-based delivery.
- Although most courses will be delivered primarily in an online format, ILO will continue to offer high school courses at a distance via the ICN as long there is a need and a capacity. For those ICN courses that continue, a plan will be established to transition the courses to a fully online or blended learning format.

- As resources allow, portions of custom courses developed by ILO can be modularized and made available for use in blended settings through statewide curriculum repositories.

## **Course Quality**

- Courses offered by ILO will be developed and/or licensed based on their adherence to best practices in online instruction and general pedagogy.
- ILO courses will be aligned with the Iowa Core and Common Core, iNACOL National Standards of Quality for Online Courses, and other applicable national content standards, such as those developed by the Southern Regional Education Board (SREB).
- All course selections will be made after a rigorous evaluation process by Iowa educators, content area experts, instructional designers, and educational technologists.

## **Course Re-evaluation and Re-working**

Changes in curriculum needs, learning strategies, content updates, and the evolution of technical capabilities require that courses be part of a continuous improvement process.

- All courses will be evaluated by the teacher and student at the end of each term to identify any issues that need to be addressed and to incorporate minor to moderate changes for the following term.
- All courses will undergo a formal evaluation and revision process on a three-year cycle.

## **Course Policies**

- Class size will be determined by the ILO administration and will have a minimum and maximum number of participants which will vary, depending on course content, student population, teacher experience, and semester length.
- Awarding of credit may be based upon successful completion of the course content, not seat time. Course length may be extended or modified to meet the needs of the individual student, upon agreement between the student, teacher, district of residence/home school liaison, parent, and ILO administration.

## ***Teacher Recommendations***

ILO will continue to employ a combination of full-time, part-time, and adjunct contracted employees teaching one or more courses, serving as lead teachers and/or teacher mentors. As needed in the scale-up period, and possibly beyond, ILO may rely on vendor-provided, lowa-licensed teachers for some courses. Other courses may require opportunities for reciprocal licensure agreements, alternate paths to licensure, or special exceptions. (Requires legislation.)

## **Teacher Recruitment, Training and Retention**

Activities in the first year of the scale-up would include recruiting, selecting and training qualified content-area teachers. Special attention will be given to teachers participating in distance learning-related professional development courses offered through the AEAs and graduates having pre-service online teaching experiences.

All new ILO teachers will be required to have completed at least some coursework within the Online Learning for Iowa Educators (OLLIE) professional development project\*\*\*\*, a new initiative by Iowa's AEAs. Its central aim is to deliver quality professional development in online pedagogy to Iowa teachers, and do so in a systemic way. It is a five-course sequence built around best practices in online teaching:

- Introduction to the Online Learner
- Technology for Online Instruction
- Instructional Design in an Online Course
- Facilitation in an Online Course
- Assessment and Evaluation in Online Courses

In order to support ILO teachers in their ongoing professional development, ILO will assign each new teacher a mentor, offer regular just-in-time training sessions, end-of-year collaborative events, and other efforts based on the needs identified from mentor reports and course evaluations. ILO teachers will receive regular e-newsletters and be encouraged to participate in professional learning networks and communities of practice.

*\*\*\*\*Or comparable coursework from another institution.*

## **Teacher Policies**

- ILO teachers must be licensed Iowa teachers and must be highly qualified and have appropriate certifications in their course content area(s). Reciprocal licensure, alternate routes to licensure and special situations will be considered. (Requires legislation.)
- In hard-to-fill or high-need content areas (such as additional languages); non-resident highly qualified ILO teachers may be granted Iowa licensure, an alternate route to licensure, or temporary licensure for their course content area(s). (Requires legislation.)
- The possibility of teacher licensure reciprocity with other states or alternative routes to certification will be pursued in conversations between the Director of the Iowa Department of Education and the Iowa Board of Educational Examiners.
- All teachers will be formally evaluated by an Iowa evaluator, using the *i*NACOL National Standards for Quality Online Teaching and the Iowa Teaching Standards.

## ***Student Recommendations***

### **Student Awareness Efforts**

Student participation in the virtual school will result from awareness efforts, personal outreach visits, and the assistance of educational partners statewide. These efforts will inform superintendents, principals, counselors, curriculum directors, students, and parents regarding the educational opportunities and benefits of online learning.

Awareness activities may include digital media, association publications and email lists, social networking tools, etc. Direct outreach will include school on-site visits, conference presentations, and personal contacts with educational organizations and associations.

In all communications, ILO would continue to maintain its supporting role as a partner to local schools and districts, able to provide the following benefits:

- Courses and opportunities not available locally
- High quality, rigorous courses, including languages and Advance Placement
- Highly qualified teachers and content area experts
- Anytime, anywhere learning

Parents will contact their local school, AEA, or district home school liaison if they are interested in having their students take an online course through the service. Through the enrollment process, the school's supporting role will be emphasized, including responsibilities such as providing a site coordinator, access to technology, and supporting the student throughout the online learning process. Critical characteristics for being a successful distance learner will be emphasized to students and parents, as well as the parent's supporting role.

## **Student Policies**

- ILO will adopt an Acceptable Use Policy related to student use of technology.
- ILO will adopt an Academic Integrity Policy for participating students and implement tools to assist in detecting instances of integrity violations.

## ***Administrative and Technical Systems Recommendations***

### **Learning Management System**

*The Learning Management System (LMS) is the core technology piece for operating an online learning program. The LMS is the set of tools that houses course content and provides the framework for communication between students, teachers, and parents.*

iNACOL, *How to Start an Online Learning Program: A Practical Guide to Key Issues and Policies*, [www.onlineprogramhowto.org](http://www.onlineprogramhowto.org)

ILO will continue to rely on the open-source Moodle application as the primary LMS. Depending on the source for licensed courses, some solutions may involve courses hosted by an external vendor or a third-party LMS.

### **Learning Content Management System**

A Learning Content Management System (LCMS) offers a mechanism to store and organize specific chunks of content used within (and outside of) an online course. These learning objects can include lessons, pictures, video clips, interactive elements, etc. The LCMS serves as a repository of all of the learning objects, can connect with the LMS, and offers various administrative and management features to enable many different entities to publish materials into the system.

Through a 2011 Iowa ARRA EdTech Grant, the Pearson EQUELLA learning content management system was licensed for Iowa schools for a three-year period ending September 2014. Statewide support for this repository should continue, allowing ILO to utilize this service for managing digital content used for online courses.

Teacher-created video content will continue to be published via the EduVision video management system licensed by the AEA and the DE, as well as YouTube and other social publishing systems as they are available to ILO students.

In addition to the Equella system, ILO will leverage a variety of content repositories offered by its statewide partners and other entities, including AEA Online services (e.g. Learn360), Iowa Public Television's PBS LearningMedia, and other third-party and open source solutions.

## **Student Information System**

*A Student Information System (SIS) stores and manages all the basic information about students such as demographic information, student schedule, and student performance data. A SIS is a familiar administrative component for brick-and-mortar schools and is also critical for an online learning program. Typically the SIS will manage the registration process and may also be responsible for providing reports related to student progress (e.g. progress reports, report cards, completion reports, etc.).*

iNACOL, *How to Start an Online Learning Program: A Practical Guide to Key Issues and Policies*, [www.onlineprogramhowto.org](http://www.onlineprogramhowto.org)

ILO currently uses a custom, rudimentary web-based administrative system for tracking registrations and student enrollment. Reports are generated via manual database exports as needed. Although this has been a low cost solution for the pilot phase of ILO, the current system is not well suited for an expanded service.

To support an increase in enrollment, a more comprehensive SIS will need to be purchased or licensed. Both commercial and open-source solutions will be considered, including both locally-hosted and Software as a Server hosted models.

## **Web Conferencing Tools**

*Synchronous web conferencing tools are an essential communication component for most online learning programs. This is especially true for full-time programs although many supplemental online programs also utilize these systems. The virtual classroom made possible by these systems simply works better as an instructional approach for some portions of online classes and also allows for an opportunity for social interaction.*

iNACOL, *How to Start an Online Learning Program: A Practical Guide to Key Issues and Policies*, [www.onlineprogramhowto.org](http://www.onlineprogramhowto.org)

ILO has successfully used videoconferencing to support distance learning since its inception. Examples of effective use of videoconferencing in ILO courses include:

- Teacher office hours
- Student reports and demonstrations
- Oral component for language courses
- Individual or small group tutoring sessions
- Instructor professional development, mentoring, and collaboration

ILO has successfully used Adobe Connect Pro as its web videoconferencing solution for several years, and will continue to use this as the primary solution for an initial scale-up.

ILO teachers continue to use the ICN for videoconferencing where it is available and when it is convenient for students. Some courses are still delivered exclusively through this format. The rapid growth of videoconferencing tools such as Skype, Elluminate, and Go-To Meeting have made videoconferencing a ubiquitous tool for online educators. The capability of many of these systems to connect with mobile devices is another important consideration. As technology, industry solutions, and the needs of ILO change, the ILO management team will continue to evaluate alternative Web videoconferencing solutions.

## **Technical Support**

On occasion, students or instructors will need assistance with technical issues that may arise, such as trouble logging in or difficulties using the CMS. ILO will continue with its current model of teacher-provided end-user support and ILO staff support available during traditional work hours.

## ***Funding Recommendations***

State virtual schools are rarely able to survive solely on either a legislative appropriation or on a tuition basis. We recommend that ILO receive an initial three-year scale-up appropriation, followed by an annual line-item amount in the Department of Education budget.

- School districts will be charged a set fee per student, per semester credit for participation in an ILO class, during the fall and spring semesters. ILO will investigate the possibility of a reduced tuition for summer semester. These tuition charges will not be able to support the operation of the virtual school, but will instead go toward the creation, development and maintenance of virtual school courses and will scale directly with the number of students served.
- The Department of Education should consult with stakeholders, particularly superintendents to determine a reasonable fee structure. (Requires legislation.)

## ***Staffing Recommendations***

ILO has managed to operate for the past eight years with a small, and in most cases, part-time staff. To support the initial scale-up, ILO's operational staffing will include the following areas:

- Program Leadership and Direction Support
- Registration, Financial, and Program Support
- Technology and Design Support
- Instruction and Learning Support
- Student Services Support

This operational staffing will include duty additions to three existing or contracted positions/functions and three new positions.

The current ILO teaching staff includes 4 full-time teachers and 9 part-time teachers. To support the initial scale-up, ILO would hire an estimated additional 25-30 full-time and/or part-time teachers. Hiring additional science lab assistants and/or extended duties for current lab assistants will also be required.

## ***Budget Recommendations***

Budget recommendations are for a quick start and custom development approach over a three-year period. The budget was created based on estimates in many cases and will be adjusted based on future structural and operational decisions, as well as actual costs.

Budget areas include:

- Administrative Staff
- Technical Systems
- Curriculum
- Teachers
- Awareness Activities
- Evaluation

**Budget Areas for Quick Start/Custom Development Over Three Years**

	Year 1	Year 2	Year 3
Expected # of students	2,000	3,500	5,000
<b>Administrative Staff</b>			
Administrative Salaries and Benefits	500,000	515,000	530,450
Travel, Conferences and Training	10,000	10,000	10,000
Software and Supplies	25,000	20,000	20,000
<b>Technical Systems</b>			
LMS (ARRA Grant Subsidized)	20,000	20,000	20,000
CMS (ARRA Grant Subsidized)	0	0	0
SIMS	30,000	50,000	50,000
Videoconferencing	3,000	4,725	6,075
Technical Support, Ticketing System	1,200	1,200	1,200
ILO Website Design, Support, Hosting	18,000	10,000	10,000
<b>Curriculum</b>			
Course Licensing	250,000	468,750	312,500
Course Purchasing	296,000	296,000	0
Custom Course Development and Revision	60,000	120,000	120,000
Curriculum Review and Core Alignment	30,000	30,000	30,000
<b>Teachers</b>			
Teaching Staff	400,000	650,000	975,000
Teacher Recruitment and Professional Development	10,000	10,000	10,000
<b>Marketing and Awareness</b>			
Materials and Publicity	20,000	15,000	15,000

<b>Program Evaluation</b>			
External Evaluation	10,000	10,000	10,000
	<b>\$1,683,200</b>	<b>\$2,230,675</b>	<b>\$2,120,225</b>
		Total Cost 3 Years	\$6,034,100*

\*Includes current operating budget.

## Timeline

Lessons learned from other state virtual schools have suggested that initial planning and implementation for 5,000 students take place over a three-year period. In order to simultaneously maintain current virtual school operations and efficiently manage scaling-up seven-fold, ILO will execute a mixed approach with the following activities:

0-6 Months:

- Recruit, hire, and contract ILO administrative team
- Develop policies and procedures for staff, teachers, and students
- Purchase and implement SIMS, LMS and supporting technical infrastructure
- Design and build new ILO website
- Review vendor courses with stakeholder group
- Develop and execute RFPs and contracts for hosted vendor courses
- Develop and execute RFPs and contracts for purchasing additional courses in perpetuity to be revised by Iowa teachers
- Recruit and train new teachers
- Plan process for creating new custom courses

#### 6-12 Months:

- Begin marketing online opportunities
- Launch full hosted curriculum
- Work with teacher group to modify purchased courses as needed
- Continue to recruit and train new teachers
- Train teachers/writers on development of new custom courses
- Begin design and development of new custom courses

#### Year 2:

- Continue offering vendor-hosted online courses with Iowa licensed teachers
- Purchase additional courses in perpetuity to be revised by Iowa teachers
- Continue activities with teacher group to modify purchased courses as needed
- Advocate for the training of Iowa's existing and pre-service teachers to support development and delivery of locally developed, ILO-owned, and vendor courses
- Continue design and development process for new custom online course
- Continue to recruit and train new teachers
- Continue marketing online opportunities
- Refine ILO's curriculum offerings
- Refine ILO's operational procedures

#### Year 3+:

- Begin planning for next stage of ILO's growth
- Begin phase-out of vendor-hosted online courses with Iowa licensed teachers
- Continue activities with teacher group to modify purchased courses as needed
- Continue design and development process for new custom online course
- Continue to recruit and train new teachers
- Continue marketing online opportunities
- Refine ILO's curriculum offerings
- Refine ILO's operational procedures

With sufficient staffing, planning, and marketing, ILO would expect to meet and surpass this initial three-year goal; but in order to fully realize this goal, the virtual school will need the valuable enthusiastic support of policy makers, the State Board of Education, the Department of Education Director and senior staff, and the Department's communications unit. Also, the continued input, leadership, and support of the virtual school partners (AEA, Community College, Higher Education, LEA, private school, home school, education organizations, business, and community), as well as parents and students will play a key role in future growth and continued success.

## Conclusion

Technology has transformed the way we live, work, and play. Yet our school system remains virtually the same as it was fifty years ago. Students are often bored and disengaged. Science and math scores are slipping. Millions are spent each year on college remediation.

Digital learning can help us transform learning by extending access to rigorous high quality and engaging instruction to all students, regardless of location, social class, or special needs. Students will learn more, teachers will be provided with new tools and skills, and schools will be more productive.

We are aware that state and federal budgets are shrinking, but this potential obstacle to reform can also present a great opportunity for innovation. Building a high quality education system is an investment in Iowa's future economy. However, spending more money without changing the system or simply adding a layer of digital learning over the current system is not the answer. Instead, education needs to transition into the digital age, which means adopting a new way of operating. The shift to digital learning and the blending of digital and traditional learning environments allows for personalization of learning, as well as differentiated and distributed staffing, allowing us to extend the reach of highly effective teachers in a cost effective manner.

Offering every student and educator in our state the opportunity to participate in and benefit from high-quality online learning can provide a significant step and continued support for innovation in Iowa's educational system.



Iowa Learning Online  
High School Distance Education

## **PK-20 Portal of Iowa Online Learning Resources and Opportunities**

**Presented to the Iowa State Board of Education**

**Thursday, September 15, 2011**

## Iowa Learning Online Planning Group Members

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Bryan	Setser	Former CEO North Carolina Virtual Public School
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A PK-20 system incorporates all facets of education from early learning opportunities through higher education and beyond to provide an educational system of ongoing student support. This thinking develops a connected and integrated approach for learners and providers that promotes smooth and successful student transition from PreK-12 to their further education, training, and participation in the global workforce. The outcome should reflect an educated, prepared, and marketable workforce for all employment fields, which would enhance our state's economic competitiveness.

In support of a PK-20 approach, the establishment and marketing of a PK-20 Portal of Iowa Online Learning Resources and Opportunities as the state's online learning portal provides the vehicle to consolidate offerings of established and proven educational courses, trainings, and activities aligned with community and workplace needs.

The PK-20 portal will include the following elements:

- A "clearinghouse" database and supporting infrastructure for course-based online learning opportunities for PK-12, post-secondary, and continuing education from a variety of providers.
- Links to repositories of learning objects for PK-12, post-secondary, and continuing education.
- Links to PK-20 online resources and educational services available statewide.
- News, updates, and features regarding Iowa's PK-20 online resources and providers.

## **Distance Learning Clearinghouse**

The Distance Learning Clearinghouse will be a database and supporting infrastructure for course-based online learning opportunities for PK-12, post-secondary and continuing education from a variety of providers.

Currently, Iowa Learning Online (ILO) offers a "clearinghouse of distance learning resources", enabling it to act as a partner and broker by providing free marketing services, via the ILO website, for other online opportunities throughout the state, such as the Iowa Online Advanced Placement Academy (IOAPA) and Kirkwood Community College High School Distance Learning Program courses, as well as locally-developed local education agency (LEA) or private school courses. These courses may have defined or flexible start and end dates and may be offered free-of-charge or on a tuition basis. Additionally, the ILO website provides links to Post-Secondary Enrollment Options (PSEO), higher education, and area education agency (AEA) professional development online courses.

The PK-20 portal's clearinghouse concept will emerge as an evolution of two current models: The Iowa Learning Online Clearinghouse and Iowa Public Television's Iowa Learns website. The second model currently falls under the guidance of the Iowa Coordinating Council for Post High School Education (CCPHSE).

Background from the IowaLearns website:

*“Several years ago the Iowa Coordinating Council for Post High School Education (CCPHSE) established the Advisory Committee on Distance Learning. In a general sense, the Advisory Committee's mission is to look at distance learning in Iowa from a broad, future-oriented perspective. They are also charged with assessing, evaluating, and communicating to the education community, through the CCPHSE, the needs of groups in Iowa that represent the greatest markets for distance learning. Specifically, the Advisory Committee was given the task to oversee the development of a central, Web-based catalog of Iowa distance learning resources.*

*Early in the process, Iowa Public Television (IPTV) was identified as an organization that had the capabilities to develop this Web-based catalog. Currently IPTV hosts and works on the design of the site. The Advisory Committee is also fostering collaboration on this site with other groups addressing related issues in Iowa. These groups include, but are not limited to, the Iowa Workforce Development and the Iowa Department of Economic Development.*

*Educational Institutions participating in this catalog include public and independent colleges and universities in Iowa.”*

## **Repositories of Learning Objects**

There are a number of collections of high quality learning resources available to learners in Iowa. A learning repository offers a mechanism to store and organize specific chunks of content used within (and outside of) an online course. These learning objects can include lessons, pictures, video clips, interactive elements, etc. Links to these collections for PK-12, post-secondary and continuing education will be provided on the PK-20 Portal, including:

- The Pearson EQUELLA learning content management system was licensed for use by Iowa schools with 2011 AEA/UEN ARRA EdTech Grant funds. Currently in the pilot stage of a three-year licensing period, this repository is expected to contain videos, lesson plans, course modules, and more, as well as link to content within other repositories.
- Many Iowa teacher-created video clips are published in the EduVision video management system licensed by the AEAs and the Department of Education (DE).
- The Iowa AEA Online website includes links to a variety of educational resources funded and provided by Iowa's AEAs, including AccuWeather, AP Images, Atomic Learning, BookFLIX (PreK-3), Britannica Online, Learn360 video collection, and more.
- Iowa Public Television's PBS Learning Media service is a dynamic platform offering the best of public media content and produced specifically for PK-16 teachers. With free access to over 14,000 high-quality resources tied to national standards, teachers can download, save and share exactly what they need for an inspired classroom experience.

## Featured Online Resources and Educational Services

The portal features links to PK-20 online resources and educational services available statewide.

## News and Announcements Regarding PK-20 Online Resources in Iowa

The portal will feature news, updates, and articles regarding current and developing PK-20 online resources in Iowa.

## Recommendations for Development and Sustainability of Portal

- It is recommended that oversight and hosting of the portal be determined by the DE Director.
- It is recommended that the DE or designee initiate a comprehensive design and planning process for the portal involving all stakeholders. The planning process would determine specific features, technical requirements, staffing, marketing and resulting costs necessary to enable the site to attain specified goals.
- It is recommended that the portal be a featured link on the Department of Education website.

## Budget Estimate

Actual costs will depend on specific needs and requirements resulting from the design and planning process. Estimated costs for creating and supporting a portal may include the following:

	Year 1	Year 2+
Staff to support initial design, planning, development and implementation of site. Ongoing administrative and technical support year 2+.	\$40,000	\$25,000
Website Hosting and Support	\$5,000	\$5,000
Marketing	\$10,000	\$10,000
Total Cost Estimate	\$55,000	\$40,000

## **Additional Recommendation**

It is recommended that the DE, AEA's and other statewide educational institutions consider creating and/or continuing various technical infrastructure components that enable various online educational systems to interoperate. Examples of these technologies include a statewide Lightweight Directory Access Protocol (LDAP) system enabling student user account information to be linked across different systems, and continuing staff support to administer the statewide Moodle online course management system and the statewide EQUELLA content repository system. *Costs for these supporting technologies are beyond the scope of estimated budget outlined previously.*