BACKGROUND PAPER 01-4

DISTANCE EDUCATION AT THE ELEMENTARY AND SECONDARY SCHOOL LEVELS

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I. BACKGROUND

Distance education is not a new phenomenon. Offering instruction by a teacher physically removed from the student began in the mid-19th Century through correspondence courses by mail. With the advent of technology, distance education providers took advantage of new methods of long-distance communication, such as radio, television, audiotapes, videotapes, and satellite communication. The Internet and World Wide Web form the bases of the new generation of correspondence courses. When people speak of distance education in the 21st Century, they think of online courses, CD ROMs, and virtual or cyber schools.

As with correspondence courses of old, distance education today is primarily focused on higher education or adult learners. Businesses use distance education to deliver training to employees to save on instructor and travel costs, as well as lost time. Universities and community colleges use distance education to reach a larger audience and to provide more scheduling options for their students. Independent study is another form of distance education and, as the oldest form of distance education, still enrolls more K-12 students than any other forms. Yet, just as correspondence courses and independent study have been viewed skeptically by the academic community over the years, so are the newest forms of distance education. Still, it seems that distance education, in its many forms, is here to stay.

A. Definitions of Distance Education

Distance education can be described in different ways. A recent article in *The Chronicle of Higher Education*, titled "It's Education Online. It's Someplace You Aren't. What's It Called?" notes that the concept of distance education has many names. Reflecting the emphasis on the individual inherent in distance education, many people refer to "e-learning," "distributed learning," or "distance learning." Other terms used are "computer-based training" or "online training."

WestEd, a regional educational laboratory for the Western United States, identifies three elements of distance education:

- Separation of teacher and learner during at least a majority of each instructional process;
- Use of educational media to unite teacher and learner and carry course content; and
- Provision of two-way communication between teacher and learner.

The United States Distance Learning Association (USDLA), a nonprofit organization in Massachusetts, defines distance learning as: "The delivery of education or training through electronically mediated instruction including satellite, video, audio graphic, computer, multimedia technology, and other forms of learning at a distance." The USDLA notes that distance education involves teaching and learning situations in which the student and instructor are geographically separated and rely on electronic devices or printed matter for delivery.

Distance education can be delivered in any number of ways – CD-ROMs, television, radio, video, audio graphics, chat rooms, e-mail, or telephone communications, Web-based resources, or a combination. The one constant is the physical absence of the teacher while the majority of the learning is taking place, or the course content is being delivered.

A critical differentiation in the forms of distance education is the timing of communication. Communication can be asynchronous or synchronous. Synchronous instruction is the simultaneous participation of teacher and students via interactive video/TV, computer conferencing, and similar technologies. This is also referred to as "real time" interaction. This form of distance education requires a higher level of technology and creates a learning environment most similar to the traditional classroom. Asynchronous instruction is one-way communication delivering instruction via an online or Web-based course or CD ROM, with responses via e-mail, facsimile or telephone. Asynchronous instruction has the benefits of allowing time for response preparation and learning to take place at any time of the day or night.

B. Benefits of Distance Education

According to the USDLA, research has found that distance education is just as effective as traditional classroom learning. The benefits of distance education may be disputed, but advocates often cite the slogan of "any time, any place, any path, any pace."

- **ANY TIME** – Flexible schedules allow students to study whenever they choose, day or night, for long or short periods. "Any time" makes it possible for high school students to schedule needed classes around a work schedule or their other academic courses. Students at risk of dropping out have the opportunity to continue their education at a slower pace or while they hold down a job.

- **ANY PLACE** – Multiple locations for learning are possible using laptops, or computers at home, in the library, or at school. "Any place" allows a school district to offer distance education courses to students at home via home computers or laptops, or to students in a computer lab or in a traditional classroom setting.

- **ANY PATH** – Many delivery options are possible using the Internet, the World Wide Web, satellites, or CD-ROMs, to name a few. "Any path" permits the selection or combination of delivery technology to suit the course or student. Lower technology options include CD-ROMs or Web-based classes over a home computer and asynchronous communication with the teacher using the phone or e-mail. Higher technology options would be synchronous classes with a teacher in one location and students scattered around the state or nation. "Any path" also encompasses the concept of tailoring the delivery mode to the student's learning style.

- **ANY PACE** – Individualized instruction allows students to set the pace of learning. "Any pace" means the student can accelerate a course or slow it down, depending on

her learning style or other needs. Computer programs can test students and determine which topics have been learned, which topics require more work, and then tailor the instructional program to meet those specific needs.

C. Drawbacks of Distance Education

Opponents of distance education cite the isolation and lack of human interaction as the two biggest drawbacks. Others say it is an educational fad without substantive merit and point to the lack of any data supporting the benefits of distance education over a traditional educational setting. They argue that sitting in front of a computer monitor reading the screen is no substitute for the learning which takes place during the interaction of other students and a teacher in a live classroom. Synchronous distance education can overcome this criticism to some degree. Critics of distance education are especially concerned about its spread to K-12 education. While most people agree that distance education has a valid place in adult learning, its acceptance for the K-12 learner is less widespread. The view that socialization is a critical aspect of K-12 education is widely held and socialization is generally absent from distance education. Although some perceive distance education as a less expensive method of delivering instruction, early indications from some models are that the addition of technology offsets any infrastructure savings and the individualization of instruction and the 24-7 nature of the medium results in more demands on teachers rather than less.

II. DISTANCE EDUCATION POLICIES AND MODELS

There are many examples of distance education programs at the postsecondary level, but the scope of this background paper is limited to K-12 distance education. At the federal level, there are several initiatives and funding programs related to distance education. At the statewide level, some states have created online or "virtual" high schools. Distance education at the elementary school level is less common, but some private and public models are emerging. In Nevada, Clark County and White Pine County School Districts, among others, are implementing distance education programs.

A. Federal Programs and Policies

As part of the reauthorization of the Higher Education Act in 1998 (P.L. 105-244), Congress created the Web-Based Education Commission (WBEC). The WBEC was later expanded in size and duration by an appropriations bill (P.L. 106-113). The WBEC was chaired by Senator Bob Kerrey of Nebraska and charged with preparing a report with specific recommendations on maximizing the educational promise of the Internet for pre-K through postsecondary learners. After a year of public input and study, the report - *The Power of the Internet for Learning: Moving from Promise to Practice*, December 2000, (*WBEC 2000 Report*) was released. Noting that web-based education is in its earliest phase, the WBEC concluded that it holds great promise. As a caution, the *WBEC 2000 Report* also notes that the Internet is not a panacea for all the problems in education. With a nod to funding

issues, the *WBEC 2000 Report* states, "Technology is expensive and web-based learning is no exception." The promise of the Internet includes:

- Centering learning around the student instead of the classroom;
- Focusing on the strengths and needs of individual learners; and
- Making lifelong learning a practical reality.

The calls to action in the *WBEC 2000 Report* are directed at all levels of government as follows:

- Call upon federal and state governments to make the extension of broadband access for all learners a central goal of telecommunications policy (to make Internet access widely and equitably available).
- Call upon policymakers at all levels to work with educational institutions and private sector to provide continuous and relevant training and support for educators and administrators through the use of technology.
- Call upon the federal government to create a comprehensive research, development, and innovation framework for learning technology (or how do people learn in the Internet age).
- Call upon the public and private sectors to join forces in developing high quality online educational content that meets the highest standards of educational excellence.
- Call upon Congress, the U.S. Department of Education and state and regional education authorities to remove barriers and revise outdated regulations that impede innovation and block full access to online learning resources and replace them with approaches that embrace anytime, anywhere, any pace learning while ensuring accountability of taxpayer dollars.
- Call upon parents, the education community, and the private sector to develop and adopt privacy and protection safeguards to assure that online learners are not exploited while participating in online learning.
- Call upon the federal government, states, localities, and the private sector to expand funding initiatives and to develop new models to make these policies a reality.

The WBEC hopes that the report will be used to incorporate web-based education policies and initiatives into the reauthorization of the Elementary and Secondary Education Act (ESEA), which will be considered by the 107th Congress in 2001.

Other federal programs support distance education. The federal E-rate program provides discounts to schools on the costs of telecommunications services and internal access and networking. The third year of the program (2001) will be funded at $2.25 billion. Other federal initiatives in the area of distance learning include the Star Schools Program from the U.S. Department of Education. Star Schools' grants, funded through the Office of Educational Research Improvement (OERI), provide access to telecommunications equipment and instructional programs, and provide professional development activities for teachers and administrators. Over 12 years, the program has awarded over $275 million in grants to

48 projects. The Distance Learning Resource Network (DLRN) run by WestEd, a regional educational laboratory, is the Web site resource for the Star Schools Program.

Fiscal Year 2000 appropriations supporting distance education included money for the Technology Literacy Challenge Fund ($425 million), Technology Innovation Challenge Grants ($146 million), Star Schools ($50.5 million), teacher training in technology ($75 million), community-based technology centers ($32.5 million), and a variety of other technology-based programs ($36.5 million). President Bush's proposed education plan called "No Child Left Behind" does not include any technology specific policies or programs so it is unclear as to the priority of technology in the new administration. Other federal educational initiatives, such as the Advanced Placement (AP) incentive program ($15 million) and technology and media services for special education ($35.9 million), also include technology funding.

B. Distance Education in Other States

Although many states have passed or are considering distance education bills, the majority of the state legislation is directed at the postsecondary level. Another common subject of distance education legislation is the creation of a telecommunications network or consortia within a state or the improvement of an existing network. The subject of telecommunications networks is beyond the scope of this background paper but states such as Iowa, Kentucky, South Dakota, and Utah have developed successful statewide telecommunications networks that work in tandem with distance education efforts at all levels of education.

Several states have created statewide virtual public high schools, including Florida, Illinois, Kentucky, Michigan, New Mexico, and Utah. Other states, including Alabama, California, Louisiana, and Maryland are in the planning or early implementation phase of creating a statewide virtual school. Virtual high schools are defined as "state-approved or regionally accredited schools that offer secondary credit courses through distance learning methods that include Internet-based delivery." Most of the information in this paper on the current statewide virtual school models was derived from *Virtual High Schools, State of the States*, by Tom Clark, Ph.D., Center for the Application of Information Technologies, March 2000.

1. Florida Online High School (FOHS)

Started initially as a partnership of two school districts, FOHS was the first virtual high school to be directly state-funded. In-state students enroll free of charge through their school district under an affiliation agreement between the district and FOHS. Home school and private school students may also take courses free of charge provided they also sign an affiliation agreement. Out-of-state students pay tuition of $300 per course. School districts provide a district coordinator, collaboration on testing and awarding of credits, and other support services as set forth in the affiliation agreement. Students must keep up with the pace chosen (accelerated, standard, or extended), or be dropped from the class. Diplomas are awarded by the affiliated school although FOHS is trying to gain accreditation and become an independent school. FOHS initially focused on providing access to AP courses and, therefore, many FOHS

students are high achievers. Efforts are being made to recruit students from low-performing schools and course offerings are growing. Courses must meet the Florida Sunshine State Standards and many of the courses are developed by FOHS staff. Appendix A is a fact sheet with more information on FOHS.

2. Kentucky Virtual High School (KVHS)

In Kentucky, the statewide virtual high school was created through a gubernatorial initiative within the Kentucky Department of Education. Funding is provided in the amount of $750,000 per year for the 2000-2002 biennium. Opening in January 2000, KVHS targets all Kentucky students and uses the Kentucky Education Technology System to access schools in the state. Like FOHS, credits and diplomas are awarded by the student's school, but KVHS has no plans to become an independent school. Currently KVHS is not open to out-of-state students. Courses cost $300, which is usually paid by the school district. However, funding is a concern because not all school districts are willing to pay and access is not equal. Kentucky uses *eCollege.com* as the primary vendor of online courses and also uses the University of Nebraska's *class.com* (as a content provider). In Kentucky, surveys showed a large demand for high school programming for alternative schools. Equity in course availability in the state's rural and small schools is a priority and AP courses are available through KVHS. The state seeks to expand the AP courses using federal AP incentive funds. Home and private school students will be permitted to enroll in KVHS through a local school and the school will receive partial funding for such students. Appendix B is a fact sheet with more information on KVHS.

3. Illinois Virtual High School (IVHS)

The newest statewide virtual high school opened its "doors" in January 2001. State start-up funding of $370,000 was provided in the gubernatorial budget, including some additional support from technology funding. Courses cost $300 and the program is run by the state department of education. The course cost is paid by either the school or the student, depending on the circumstances. The primary vendor is Apex Learning which delivers AP courses as well as some other higher level coursework. The IVHS also uses online courses from the Florida and Kentucky virtual schools. Credits and diplomas are granted by the local school districts. Students from public, private, or home schools are admitted.

4. New Mexico Virtual School (NMVS)

Although unsuccessful in passing legislation to create a virtual high school, funding in the amount of $1 million over a two-year period was appropriated and the New Mexico Virtual School is now open. Students have a choice of several vendors, including Apex and Achieva.com. Courses range from AP courses to general coursework. Enrollment is free to students within the state. The NMVS is geared toward providing equitable access to rural and isolated students for AP courses, as well as general coursework and study courses.

5. Utah Electronic High School (UEHS)

Started in 1994 by the Utah Department of Education after a challenge by Governor Mike Leavitt to offer access via technology to every core course in high school, Utah's model is more of a clearinghouse than a school. Using the Utah Education Network (UEN), a telecommunications consortium at the University of Utah, the UEHS offers nearly 400 courses. Tuition is $100 per course for home school students, non-residents, and summer school students. Credits and diplomas are the responsibility of the local school districts, but UEHS hopes to become a diploma-granting institution.

Table A – Statewide Virtual School Models – summarizes the funding, governance, source of the initiative, and students served for the current statewide virtual high schools. Table B – Statewide Virtual School Models – summarizes the curriculum, target group, delivery method, teacher training, and accreditation for the same statewide virtual high schools. (See pages 8 and 9 for Tables A and B).

There are also examples of school district based online programs which have expanded beyond the borders of the school district. The Eugene Public School has created CyberSchool, an online public school offering high school level courses, with partner schools in Idaho, Kansas, Michigan, Ohio, Oregon, Pennsylvania, and Wisconsin. CyberSchool courses cost from between $300 to $350 depending on the number of students enrolled. CyberSchool is accredited by the Northwest Association of Schools and Colleges.

6. Private Vendors

Commercial vendors also provide distance education courses for use by public schools. According to the WBEC, the K-12 online educational market is estimated at a current $1.3 billion and expected to grow to $6.9 billion by 2003.

STATEWIDE VIRTUAL HIGH SCHOOL MODELS

	Funding	Governance	Started By	Students Served
Florida (Florida Online High School)	State funding – $3.8 million in 1999; $6.2 million in 2000; in-state students attend free; out-of-state tuition is $300 per semester course	Department of Education affiliated with school districts for registration and other functions; separate principal and 30 teachers; evaluation by Florida State University; legislation in 2000 created separate entity.	Partnership of two school districts in 1997-1998	5,000 students from public, private, home, and charter schools; 17 percent minorities
Kentucky (Kentucky Virtual High School)	Special state appropriation of $1.5 million annually; tuition is $300 per one-half credit (paid by school district); no out-of-state students	Department of Education	Governor in 1999	300 students
Illinois (Illinois Virtual High School)	State funding for start-up of $370,000; tuition is $300 per student (cost may be paid by school or by student); federal grant for scholarships	State Board of Education	Governor in 2000	No enrollment figures, first enrollment in January 2001
Michigan (Michigan Advanced Placement Academy)	State funding – $15 million in start-up funding, with $1.5 million annually	Governor appointed President of Michigan Virtual University (MVU) to create Advanced Placement Academy	Governor in 2000	No enrollment figures, enrollment starting fall of 2000
Nebraska (Independent Study High School)	Self-funded by student tuition, affiliation with University of Nebraska	University of Nebraska (UON)	Started by UON in 1929 – as an independent study program	6,000 students
New Mexico (New Mexico Virtual School)	State funding – $1 million ($500,000 in 2000; $500,000 in 2001)	Department of Education oversees 14-member design and implementation team as advisory committee; State Board of Education is policy board	Appropriation in 2000 (despite failure of enabling legislation)	No enrollment figures; first enrollment in 2001
Utah (Utah Electronic High School)	State funded; only direct cost for administrators is $140,000; Utah Education Network (UEN) costs funded separately	Department of Education oversees Electronic High School; partners with Utah Education Network (UEN) – a separate consortium at University of Utah that also acts as administration	Department of Education in 1994	1998-1999 approximately 190 full-time online students; and 4,600 total students
Concord Virtual High School (Multi-state)	Five-year federal grant for $7.5 million; affiliating schools pay $5,000 for first year training of teacher and coordinator; $6,000 per year for 20 students thereafter	Administered by Hudson Public Schools (Massachusetts) and share functions with Concord Consortium	Hudson Public School in 1997	220 affiliated high schools in 28 states and 6 nations (estimated 2500 - 3000 students)

Source: *Virtual High Schools, State of the States*, by Tom Clark, Ph.D., March 2000; and Illinois Virtual High School, www.ivhs.k12.il.us, and WBEC 2000 Report.
Prepared by: Legislative Counsel Bureau, Research Division, March 9, 2001

STATEWIDE VIRTUAL HIGH SCHOOL MODELS

	Curriculum	Target Group	Delivery	Teacher Training	Accreditation
Florida	Complete core curriculum by fall 2000; plus five advanced placement (AP) courses and college prep	Public rural and low-performing schools (levels D-F)	Vendor based (Lotus Learning Space and Server)	"Teach first, develop later" motto; includes mentoring	Seeking accreditation, diplomas, and credits granted through affiliated schools
Kentucky	Complement to existing curriculum, including AP; only at high school now; expand to lower grades and non-public later	AP classes; new survey shows alternative education; middle school, and home school options	Vendor based (eCollege/ CLASS); Partnership with Commonwealth Virtual University (CVU)	Four-day onsite and continuing online training (eCollege) and 1½-day (CLASS)	Diplomas and credits granted through affiliated schools.
Illinois	AP courses, core curriculum and higher level courses	Public, private, and home school students	Vendor based (Apex Learning, class.com) Links to FOHS and KVHS	Face-to-face and online training to be available	Diplomas and credits granted through affiliated schools, class.com courses accredited by NCACS
Michigan	Provide AP courses and other college courses; also considering remediation courses	To provide AP courses and a virtual university; also target at-risk youth	Vendor based (Apex Learning)	Developing online teacher training	Diplomas and credits granted through affiliated schools
Nebraska	Core courses, electives, AP, basic courses for special needs students, advanced courses	Isolated students, adults, homebound, or home school students	class.com, (affiliation with University of Nebraska)	Not applicable	North Central Association of Colleges and Schools (NCACS), diplomas may be granted
New Mexico	Complementary to school curriculum; AP courses, core curriculum, study courses	To offer complete K-12 curriculum (45 plus school districts have less than 1,000 students)	Vendor based (Apex Learning, Achieva.com, Intelligent Education)	Unknown	Diplomas and credits granted through affiliated schools
Utah	Focus on complementary course offerings but seeking to offer all core high school courses; Electronic High School is clearinghouse for course offerings	To let students finish early, take classes not offered, summer school, also home school students and dropouts	UEN; via EDNET and Utahlink (developing their own courses)	Grants for teachers to develop online courses to qualify for training	Diplomas and credits granted through affiliated schools
Concord Virtual High School (Multi-state)	Barter model of "teach a class, enroll your students" resulted in wide course offerings, including AP, core, and elective courses	Multi-state audience with target on innovation	Self-developed (Netcourses©)	Minimal at start-up	Diplomas and credits granted through affiliated schools

Source: *Virtual High Schools, State of the States*, by Tom Clark, Ph.D., March 2000 and Illinois Virtual High School, www.ivhs.k12.il.us, and WBEC 2000 Report.
Prepared by: Legislative Counsel Bureau, Research Division, March 9, 2001

Denver-based *eCollege.com* is one of the vendors for the Kentucky Virtual High School and also provides online courses for grades K-12. Schools are required to pay a start-up fee and then an annual per-student fee. Customers of *eColleg.com* include schools from Georgia to Alaska. Apex Learning, started by Microsoft co-founder Paul Allen, is a one of the several vendors of Advanced Placement (AP) courses and is currently working with the Michigan Advanced Placement Academy (an online state school), and the New Mexico Virtual School, among others, to provide AP courses online. Apex Learning reports 2000 students enrolled in AP courses and 8000 students enrolled in online courses and exam review. Credit for Apex classes is earned by obtaining a qualifying score on the AP examinations. Another leading provider of online courses is *class.com*, a privately-owned, for-profit corporation formed by the University of Nebraska to market their online courses developed in part for their affiliated Lincoln Independent Study High School. *Class.com* provides a menu of 48 courses and is the primary vendor for the Illinois Virtual High School.

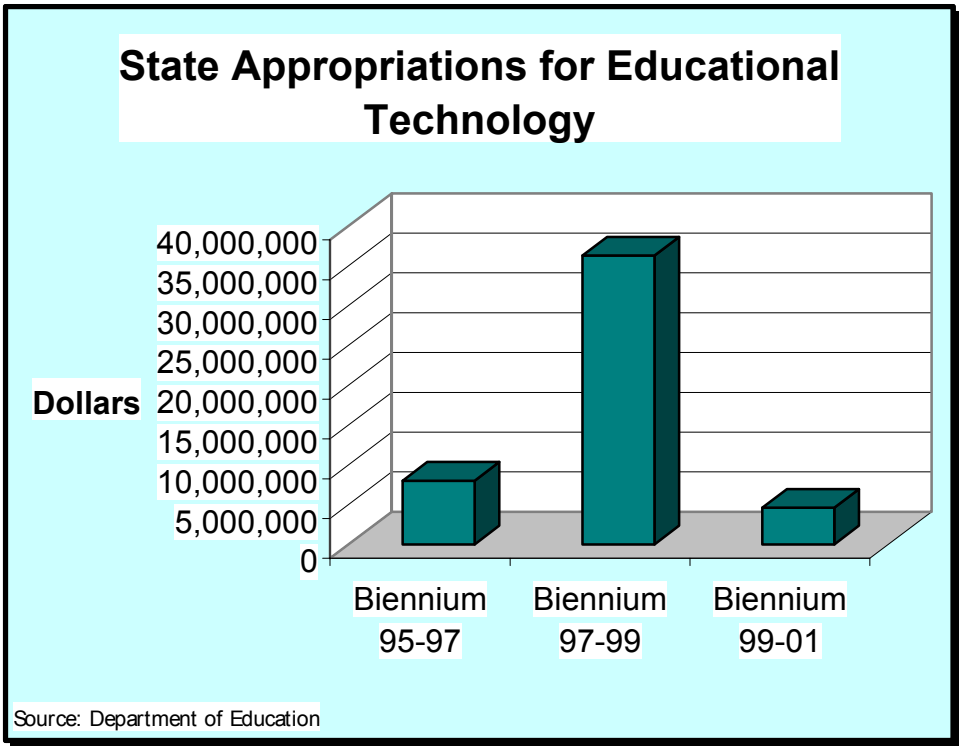
7. Public and Private Elementary Level

Although distance education is generally aimed at high school students, online programs are beginning to be directed to the elementary level. Laurel Springs School advertises itself as an "international K-12 school offering independent study and distance learning options." Single course costs range from $350 to $600 depending upon the level of teacher involvement. In Kansas, a charter school in the Basehor-Linwood School District is providing online education in an attempt to bring home school students back into the public school system. Started in 1997 with 60 students, enrollment is now almost 350 students with approximately 150 elementary students, 50 middle school students, and the remainder in the high school program. Parents are charged a one-time $20 deposit for an iMac and $40 for an annual textbook fee. As a public charter school, it receives state funds for enrolled students in the same manner as if they were enrolled in a traditional public school.

C. Distance Education in Nevada

The subject of distance education is not new in Nevada. Assembly Bill 606 (Chapter 411, *Statutes of Nevada*) in the 1997 Session, appropriated $3.5 million to the University and Community College System of Nevada (UCCSN) for "the purchase of computer hardware and software, communication services, and related nonrecurring services necessary to enhance the System's educational information network to improve access for students of the UCCSN, pupils in public schools, and residents of the state to information and educational programs through the use of the Internet and interactive video." A report from UCCSN on AB 606 and distance education was published in January 1999. According to the report, AB 606 funds were used to enhance the state's technical infrastructure and to increase enrollments in distance education courses for both high school and postsecondary students.

Since 1995, Nevada has been working to provide its public schools with the hardware, software, and network systems needed to incorporate educational technology into the school day. Beginning with a multi-million dollar appropriation in 1995 and the creation of the Commission on Educational Technology in 1997 in Senate Bill 482 (Chapter 473, *Statutes of Nevada*), Nevada has continued its commitment to improving technology in the public schools. The 11-member Commission on Educational Technology is charged with developing a statewide plan for the use of educational technology within the state. That plan is currently being updated.



Nevada's most visible models of distance education can be found in the Clark County School District and the White Pine County School District. In Clark County, a web-based education program dubbed "Cyber Schoolhouse" currently enrolls 50 high school students in three courses (English, Geopolitical Economics AP, and Health). Enrollment is projected to increase to 100. Additional courses to be offered in the future include mathematics, American Government, and two additional AP courses. Cyber Schoolhouse allows students to learn in an synchronous environment and reports a 80 percent completion rate.

White Pine County School District began operating a pilot program called Nova Center in 1998 using NovaNet, an online provider of instruction geared toward dropouts and adult learners. Instruction is asynchronous and the program includes face-to-face meetings with teachers and 12-hour online teacher support. Due to statutory limitations on per-pupil funding for students in non-contiguous counties, Nova Center was deemed not eligible for state funds for certain students. Beginning in late 2000, Nova Center was converted into the Nevada

Virtual High School and has begun actively advertising for out-of-state students at a tuition rate of $3,400 per year. Nevada Virtual High School also charges tuition for in-state students who reside in other counties within Nevada.

Odyssey Charter School, opened in 1999 and enrolling over 300 students in its K-8 program, provides instruction through a mix of at-home study using a computer program (A+ Learning System) and face-to-face instruction in group class settings twice a month and on field trips.

III. KEY POLICY ISSUES

A. Funding

Funding for statewide virtual schools is usually accomplished by combining state education funds or state appropriations with tuition fees. Tuition for state-run virtual schools is generally set around $300 per course. There are no studies available on the actual cost of providing K-12 online courses. According to Dr. Clark in *Virtual High Schools*, some statewide virtual schools are experimenting with marketing their programs out-of-state (Florida) to boost tuition revenues, and selling online courses to generate revenue (University of Nebraska, Independent Study High School). Other funding mechanisms include private funding from corporate partners or foundations (Michigan), or linkages with higher education to offset costs (Kentucky and Michigan).

Current statutory schemes for funding traditional public schools usually include regulations on seat time, a minimum number of days of instruction, and monitoring attendance. Distance education does not necessarily lend itself to these measures and those involved in distance education say statutory changes that do not sacrifice accountability are needed. Statewide virtual school models solve these problems through a variety of means, including affiliation agreements, end-of-course tests, and limitations on the number of distance education courses taken. Distance education may allow students to enroll in schools outside of their district of residence, which can cause funding disputes between school districts.

B. Governance

Three of the existing statewide virtual high schools were started through a gubernatorial initiative, one through a partnership of local school districts, one through a legislative appropriation, and one by the state department of education. Most of the existing virtual schools are overseen by the state departments of education, although the Michigan and Nebraska models are offshoots of a postsecondary institution and the Utah model has a shared governance by the education department and state university. School districts play a major role in all the statewide virtual schools and are generally still responsible for testing, credits, and diplomas. A future governance-related issue is the ability of distance education programs to enroll students from out-of-state and the related problems which may arise.

C. Curriculum

Access to AP courses is a common driver among all the statewide virtual schools. Equity is also a pivotal driver in the expansion of distance education to the K-12 level. Statewide virtual schools offer a mix of coursework, including advanced coursework to provide equity to students, and general coursework to provide options for alternative schools and at-risk students. Aligning vendor-based courses with state standards is an issue and may limit the portability of courses developed by statewide virtual schools. Likewise, assuring the quality of content and instruction is a concern. Issues related to the licensing of teachers also affect the importability of vendor-based or out-of-state courses. For the most part, distance education curricula is meant to supplement, not supplant, existing school curricula. Florida and Utah are the only two models which currently aspire to become diploma-granting institutions. Distance education has certain inherent curricula limitations and cannot always provide a full range of courses, such as physical education or band.

D. Target Students

Although distance education is spreading to all students, many programs are developed to address a target student audience. Programs currently in place generally target:

- Home school students;
- Students lacking access to higher level course work;
- At-risk students; and
- Disabled or special education students.

1. Home School Students

Distance education is increasingly used by home school students to provide a professional curriculum and more sophisticated courses. At the Florida Online High School, approximately 40 percent of the students are home school students. The Internet Academy, an online education program started by the Federal Way, Washington public schools, reports that 60 percent of its students are home-schooled.

2. Students Lacking Access to Higher Level Course Work

Small, rural or inner city schools or school districts may have difficulty offering a full range of AP or higher level courses or other specialized courses due to the high per-pupil costs associated with hiring teachers for courses with small enrollments. Numerous educational professionals note that the lack of advanced or specialized courses at the high school level can hamper a student's chances for college admission and cite as a prime example the availability of AP courses. The disparity of course offerings between larger, suburban schools, small or rural schools, and inner city schools is often referred to as an "equity" issue. Online courses or other distance education programs can be a solution since AP and similar courses can be offered to students at those types of schools in a cost-effective manner.

Advanced Placement courses are available online through several commercial providers. Several states, including Kentucky, Michigan, and New Mexico have premised their statewide distance education programs, in part, on the need to provide AP courses to a greater range of high school students.

3. At-risk Students

At-risk students, either in alternative schools or as dropouts, are another target group for distance education. The flexible schedules and "go at your own pace" attributes of distance education are considered well-suited to students having problems in traditional high schools, or who have dropped out and are working or have a family. Another attribute of distance education cited by distance education advocates is the relative anonymity of the student; a factor which can work in favor of at-risk students. In distance education, students who might be subject to stereotyping in a face-to-face encounter, can receive instruction without any predisposition or negative assumptions on the part of the instructor. Furthermore, some studies have shown a willingness for such students to express themselves in a distance education context despite their inability or unwillingness to do so in a traditional classroom. However, research shows that distance education requires self-motivation and self-discipline, traits that are often lacking in at-risk students. Still, for a segment of the at-risk population, distance education can offer a chance to complete school and earn a diploma.

4. Disabled or Special Education Students

Disabled or special education students are seen by educators as another potential target group for distance education. As with at-risk students, the anonymity of distance education and the ability to mix and match technologies to a particular student's needs, make distance education a promising method of delivering instruction to special education or disabled students. In addition, the portability of distance education makes it well-suited to home-bound or students for whom travel is difficult. Yet, the WBEC reports that 60 percent of persons with disabilities have never used a computer as compared to 25 percent of persons without disabilities. Accessibility of the Internet is a prime concern of advocates for the disabled. Navigating Web sites and other skills required for online learning can be difficult for disabled or special education students. Adaptive technology to make Web sites more accessible is an ongoing effort and equity in the availability of distance education will be an ongoing concern.

E. Delivery

There is no standard model for delivery. Asynchronous environments are more common than synchronous models, due primarily to the limited availability of the more sophisticated and expensive programs needed for synchronous courses. While some statewide virtual schools use vendor-based programs over the Internet, other states are developing their own state-based courses and using a statewide telecommunications system.

F. Accreditation

Since the student's resident school is usually the institution that grants credits and the diploma, accreditation is not a concern for most virtual schools. Accreditation institutions for online courses have been formed and national accreditation organizations are beginning to address online course or virtual school accreditation. Private and some public online schools have been able to receive accreditation from either the regional associations or individual state departments of education.

G. Training

In 42 states, teachers are required to demonstrate proficiency in technology in order to receive certification. However, most teachers have received little if any training in college on instructional technology or the pedagogy of distance education. Teachers of distance education courses are usually selected from those who volunteer to teach online. Despite the unusual demands of online teaching, it offers flexibility to the teachers as well as the students. States using vendor-based courses typically have access to vendor training for their teachers. Florida has adopted a "teach first, develop later" motto and continues to work on mentoring its teachers and developing its own in-house brand of training. Finding and training teachers to deliver instruction through distance education and maintaining quality instruction will be an ongoing challenge. Schools of education will have to adapt to this new demand.

IV. CONCLUSION

Distance education is perceived as a means to address equity issues in curriculum and to provide greater opportunities for all students. Distance education can create a personalized curriculum and pace suited to an individual's need and learning style. Distance education can also be used for alternative programs of education and at-risk students. Advocates also point to distance education's potential for access to almost unlimited educational resources.

Opponents note that distance education can be expensive and that technology needs for distance education demand more funding and infrastructure, as well as specialized training for teachers and technical support for staff and students. Typical statutory requirements for state funding of schools do not equate to the "any time, any pace" format of distance education programs, creating problems with measuring seat time and attendance. Distance education students continue to require school support services, such as counseling, and socialization needs must still be addressed. Research on the impact and efficacy of distance education is needed.

Implementation of distance education programs affects policymakers at all levels and may require adjustments to current laws, institutions, and infrastructure. Continuing questions about relative benefits of distance education and cost-effectiveness must also be addressed.

V. SELECTED REFERENCES TO MATERIALS CITED

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Clark, T. and Else, D. (1998) *Distance Learning, Electronic Networking and School Policy*. Fastback No. 441., Bloomington, IN: Phi Delta Kappa Educational Foundation.

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Mielke, Dan, *Effective Teaching in Distance Education,* Eastern Oregon University, ERIC Digest 1995-5.

Web-based Education Commission, *Power of Internet Learning*, December 2000

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VI. WEBSITES FOR ADDITIONAL INFORMATION ON DISTANCE EDUCATION

General Information Sites

Apex Learning: http://apexlearning.com/

Class.com: www.class.com

Distance Education Clearinghouse (University of Wisconsin): www.uwex.edu/disted

Distance Learning Exchange, Pennsylvania Department of Education: http://www.dle.state.pa.us/

Distance Learning Resource Network (WestEd): www.dlrn.org

eSchoolnews Online: www.eschoolnews.com

NovaNet: www.novanet.com

Star Schools: http://www.ed.gov./prog_info/StarSchools/

U.S. Department of Education, Office of Educational Research and Improvement: http://www.ed.gov/offices/OERI/

U.S. Department of Education, Office of Educational Technology: http://www.ed.gov./Technology/index.html

United States Distance Learning Association: www.usdla.org

Virtual High School Conference: http://vhs.ucsc.edu/

Virtual High School Lists: http://vhs.ucsc.edu/vhs/casestudies.htm

Web-based Education Commission: www.hpcnet.org/webcommission

Virtual School Sites

Concord Virtual High School: http://vhs.concord.org/

CyberSchool (Eugene Public Schools, Oregon): http://www.cyberschool.k12.or.us

Cyber Schoolhouse (Clark County School District): www.ccsd.net/its/cccs

Florida Online High School: www.fhs.org

Illinois Virtual High School: www.ivhs.org

Independent Study High School (University of Nebraska): www.unl.edu/ishs/

Internet Academy: www.iacademy.org

Kentucky Virtual High School: www.kvhs.org

Laurel Springs School: www.laurelsprings.com

Maryland Virtual High School: www.mvhs1.mbhs.edu

Michigan Advanced Placement Academy: www.mivu.org

Nevada Virtual High School: www.nvhs.org

New Mexico Virtual School: www.nmvs.org

VII. APPENDICES

APPENDIX A

Fact sheet on Florida High School an
Online, Statewide High School

FACT SHEET ON FLORIDA HIGH SCHOOL
AN ONLINE, STATEWIDE HIGH SCHOOL

How did the Florida High School start?

In 1996, the Orange County Public Schools introduced an experimental WebSchool that offered online courses which included SAT Preparation and Computer Programming to Orange County students. Just as Orange County was venturing into cyberspace, Alachua County was also proposing an online school to span the state. Thus after collaboration between the two counties, The Florida High School officially began in August, 1997 as a joint project between Alachua and Orange County Public Schools with fifteen educators who served in administrative, instructional, and/or developmental jobs.

The project's mission is to place a complete high school online by the year 2001 and will include those student services that will enable students to successfully transition to postsecondary educational institutions and to the workplace. To maintain high quality, course content will meet the requirements of the Florida Sunshine State Standards as well as important criteria such as the SCANS competencies that are supported by both the education and business communities.

What is the Florida High School?

With support from the Florida Department of Education, The Florida High School (FHS) officially began in 1997, for the purpose of creating high school curriculum online. To ensure high quality instruction, all courses are developed using the Florida Sunshine Standards as a basis. FHS's motto is "Any time, any place, any path, any pace," and Mission Statement "to take full advantage of current instructional technology and rapidly expanding resources of the Informational Age to provide comprehensive educational programs which will enable students to be productive, lifelong learners." reveal its intensive desire to offer students alternatives to traditional methods of learning.

Who can benefit from The Florida High School courses?

Students who:

- need to make up credits in order to graduate on schedule.
- need a different learning environment.
- want to accelerate their academic program.
- are enrolled in homebound/home school educational programs.
- are traveling.
- have scheduling conflicts.
- want to take a course(s) not offered at their school of enrollment.
-

Who provides Internet access?

If a student is taking the classes on the campus of their school of enrollment, that school will provide the necessary hardware and Internet access. If a student is taking the class off campus, the student is responsible for all hardware and Internet access. However, the school of enrollment may make arrangements on an individual basis to allow a student to access school computers and Internet providers while on campus. The Florida High School does not recommend using America OnLine as the Internet Service Provider (ISP) due to a browser issue. It is necessary to access courses using Netscape 4.06 or higher when connecting to the fhs.net home page and The Florida HighSchool courses.

When will a student be dropped from a course?

Only through continuous communication can students be successful in an online course. Each instructor outlines the expectations for work submission per week. Therefore, it is essential that the student and instructor maintain regular contact. To ensure that our students are aware of this commitment, the four part process below will be followed:

1. If the student does not submit the expected assignment(s) within seven (7) days, the student/parent(s) will receive a telephone call.
2. If the student/parent(s) does not respond to the telephone call within seven (7) days, parents will be notified by mail.
3. If the student/parent(s) does not respond, FHS will assume that the student does not intend to remain in the course, and the student will be administratively dropped from the course.
4. FHS Staff will complete a four-part Student Contact Record form, which will indicate that the student has been dropped for lack of participation. The parents, school, and district office will each receive a copy of this form.

Many districts have a no-drop policy that automatically awards a failing grade if the course is not completed. The Florida High School will abide by the home districts' policy. It is the responsibility of the student to return all course materials to The Florida High School.

How is an online course conducted?

Students are guided through their courses by their respective FHS instructors, all of whom are state certified. At any time day or night, students open the fhs.net website, log into the class, and complete work in the CourseRoom. Students progress at their own pace, but this pace is monitored by teachers and a Student Contact Form which helps to insure progress. Right now, the learning environment is asynchronous, meaning that students and teachers are not interacting at the same time. The teacher goes to the CourseRoom, evaluates student work and sends back comments and grades. Teachers also call students on the phone to check on progress or to answer questions.

What are the testing procedures?

Throughout the course, teachers have included a variety of assessments, including projects, quizzes portfolios, reading logs, etc. Teachers give students directions for each assessment. Also teachers give student grades which are entered in an online portfolio At the end of each course, students take a face-to-face final exam.

How is Florida High School funded?

Florida High School is funded through a line item allocation from the Legislature. For additional information on how affiliating districts register students, see the attached "Information for Affiliated Districts."

Can home-schooled or private school students register?

Florida High School registers home-educated and private school students regardless of the affiliation of the district in which the student resides. There are affiliation agreements designed for charter, private or home school students.

APPENDIX B

Kentucky Virtual High School Fact Sheet
For Schools and Districts

Kentucky Virtual High School
Fact Sheet For Schools and Districts

Who Is Teaching Kentucky Virtual High School Courses?

All KVHS teachers are Kentucky certified in the subject area of their course.

Who Grants The Credit For A KVHS Course?

Credit is granted and posted by the student's high school. The KVHS does not grant credit.

How Do Students Register for KVHS?

Students cannot be enrolled in a KVHS course without approval from their local high school. Students complete a request to register online which is transmitted to a designated point of contact at their high school. The high school uses a secure access code to approve the student's registration in the course.

Do We Need To Have Staff Involved With A Student Taking A KVHS Course?

The Principal, and those designated by the Principal, will be responsible for approving registration and posting the final grade. Also, a certified staff member must proctor the final exam for each KVHS class. In addition, schools are expected to provide a designated contact for each course so that the KVHS teacher has a direct line of communication in case students need special assistance or counseling.

How Do We Schedule Online Time And Supervise A Student Taking A KVHS Course?

These are local decisions.

How Do We Know A Student Has Completed His/Her Own Work?

All students are required to take their final exam with a certified proctor. The performance on the final exam should closely match the work in the remainder of the class. In addition, KVHS teachers will be trained to be alert to clues that might indicate that the student online is not the student who is registered. If the KVHS teachers suspects that there is a problem, the local high school's point of contact for the course will be informed.

Is Our School Obligated To Pay For Any Course A Student May Want To Take?

SBDM policy needs to address this issue at the school level. Generally, the school district will pay this fee because the credit earned from the course will be counted towards high school graduation as part of the regular six hours of instructional time. The student may be asked to pay the fee if the course is above and beyond the daily instructional time or if the student elects

to take the KVHS in lieu of a course already available at the high school to gain credits towards graduation.

How Will KVHS Courses Fit Into Our Schedule For Classes?

KVHS teachers will be able to manage course schedules and assignments so that students begin and end more or less within the parameters of their home school's academic calendar. However, schools should be prepared to manage time for students who may begin late or finish early.

The Kentucky Virtual High School is an educational service managed by the Kentucky Department of Education to expand student access to challenging high school curriculum. Through the KVHS, Kentucky school districts can provide students with access to a wider range of advanced coursework, with the opportunity to develop their capacities as independent learners, and with increased time and opportunity to achieve because learning online is neither time nor place dependent.

Faculty

All KVHS faculty are certified at the secondary level by the Kentucky Office of Teacher Education and Certification in the content area of their course. KVHS teachers receive special training and education to prepare them for teaching online, and are actively supported throughout the length of the course to ensure that they are successful. A brief summary of each teacher's experience and credentials are posted in the course catalog.

Enrollment

So that appropriate curriculum counseling can take place, all students enroll in the Kentucky Virtual High School through their local public school district. Interested students complete a Request to Register, which is automatically submitted to the Kentucky Virtual High School point of contact at the high school. The school reviews the Request to Register and may: approve course enrollment right away; refer the request for academic counseling; or deny the request with explanation. The student is not enrolled in the course until the local public high school approves the registration request.

Enrollment for Spring 2000 courses is limited to students already enrolled in a Kentucky public high school. Enrollment will be opened to others in Fall 2000. Interested persons are encouraged to complete the Inquiry Form so that KVHS can send notification when enrollment is expanded.

The Kentucky Virtual High School imposes no limit on the number of KVHS courses a student may be enrolled in simultaneously. This matter is determined by local board and school policy and will vary from district to district.

Credit

Credit is granted and posted by the student's high school. The Kentucky Virtual High School does not grant credit. Certain KVHS courses may be taken for Advanced Placement credit, and are designated accordingly in the Course Catalog.

Alignment with Kentucky Curriculum Standards

This course has been reviewed by the Kentucky Department of Education, Division of Curriculum Development, for alignment with the Kentucky Core Content and Program of Studies. The review has been provided to the Kentucky Virtual High School instructor. Any gaps/weaknesses in the alignment which might have been identified are addressed by the instructor through course modification or supplementation. The KDE Division of Curriculum Development consults with KVHS on a continuing basis to ensure that KVHS courses, as delivered by our teachers, are appropriate and of high quality.

Fees

A course fee of $300 per student per semester course has been established. Generally, the school district will pay this fee because for students who are enrolled full-time in the local public high school if the credit earned from the course will be counted towards high school graduation as part of the required 1,050 hours of instructional time.

The district may ask the student to pay the fee if the course is above and beyond the required instructional time or if the student elects to take the KVHS course in lieu of a course already available at the high school to gain credits towards graduation.

Students who are enrolled in the local public high school on a part-time basis for the purpose of accessing KVHS courses are expected to pay the course fee.

All course fees are paid from the district directly to the Kentucky Virtual High School. The KVHS does not collect fees directly from students or other entities.

Academic Integrity

As a condition of enrollment, all KVHS students must accept the terms of the Kentucky Virtual High School Ethics and Acceptable Use agreement. In addition, students will have signed the Acceptable Use Policy Agreement adopted by their local public school.

All KVHS students are required to take their final course exam with a certified proctor. KVHS teachers have the ability to require that students perform other tasks or undergo additional assessments in similar situations. In addition, KVHS teachers will be trained to be alert to clues that might indicate problems.

Information for Parents:

Does A Student Have To Own A Home Computer To Take A KVHS Course?

No, this is not required. It will be possible for students to do all KVHS work on school computers. However, access to a home computer or a computer in a public library will provide the student with additional study time.

What Help And Support Will Students Receive?

The KVHS will provide students a 1-800 help desk number for technical issues. Students will also have access to a virtual student center with research tools. In addition, all KVHS students will receive logins to the Kentucky Virtual library. Student's teachers will be able to be emailed or telephoned for individual help and assistance.

Will KVHS Teachers Hold Teacher Conferences?

The email address of each KVHS teacher will be posted in the Course Catalog. Each KVHS teacher will have the option of establishing a "virtual" parent conference via email or phone. However, parents may email the teacher at any time during the course and may also contact the KVHS point of contact at the school with questions about student progress.

How Do We Know A Student Has Completed His/Her Own Work?

All students are required to take their final exam with a certified proctor. The performance on the final exam should closely match the work in the remainder of the class. In addition, KVHS teachers will be trained to be alert to clues that might indicate that the student online is not the student who is registered. If the KVHS teachers suspects that there is a problem, the local high school's point of contact for the course will be informed.

What Type Of Student Should Take A KVHS Course?

Students should realize that taking a course online requires personal discipline and good time management skills. Most people agree that students spend more time taking an online course than they typically devote to a traditional high school class. Public high school students should consult their school guidance counselor to make sure that they are ready for online learning.

How Many KVHS Courses Can A Student Take In One Semester?

This decision is made between the student and their local high school.

Will The KVHS Be Open For Summer School Courses?

Yes. KVHS will be open during Summer 2000. However, students need to consult with their local high school to determine whether or not their own school will support summer enrollments.

APPENDIX C

Illinois Virtual High School
An Initiative of Governor George H. Ryan

Illinois
Virtual High School

An Initiative of Governor George H. Ryan

"Utilizing various technologies, this project (The Illinois Virtual High School) will explore new ways to deliver high school and college-level opportunities throughout Illinois." -- Governor George Ryan, State of the State Address, February 2000.

Information
Packet

January 2001

Executive Briefing

The Illinois Virtual High School is being planned as an educational service managed by the Illinois State Board of Education to expand student access to challenging high school curricula aligned to the Illinois Learning Standards. Through the IVHS, Illinois school districts, non-publics and parents of home schooled students can provide students with access to a wider range of course offerings, with the opportunity to develop their capacities as independent learners, and with increased time and opportunity to achieve because learning on-line is neither time nor place dependent.

Faculty

According to the policy framework adopted by ISBE in August, all IVHS teachers will be well-qualified in the subject or area that they are teaching and will have knowledge and skills specific to teaching on-line or through other technologies. Faculty will include Illinois teachers certified at the secondary level by ISBE, community college and higher education instructors, and qualified instructors from IVHS partners.

IVHS teachers who are full-time employees of consortium member schools, or teachers under contract to the IVHS, will receive special training and education to prepare them for teaching on-line. They will be actively supported throughout the length of the course to ensure that they are successful.

Enrollment

So that appropriate curriculum counseling can take place, all students shall enroll in the Illinois Virtual High School through their local public school district. Interested students should complete a Request to Register, which will automatically be submitted to the Illinois Virtual High School point of contact at the high school. The school will review the Request to Register and may approve course enrollment right away; refer the request for academic counseling; or deny the request with explanation. The student is not enrolled in the course until the local public high school approves the registration request.

Enrollment for Spring 2001 courses will be limited due to the number of courses initially planned to be offered; however, enrollment capacity will be increased in future semesters as curricular offerings are expanded. Interested persons are encouraged to complete the Inquiry Form so that IVHS can send notification when enrollment is expanded.

The Illinois Virtual High School imposes no limit on the number of IVHS courses a student may be enrolled in simultaneously. This matter is determined by local board and school policy and will vary from district to district.

Credit

Credit is granted and posted by the student's high school. The Illinois Virtual High School does not grant credit, nor award diplomas.

Certain IVHS courses may be taken for Advanced Placement credit and will be designated accordingly in the Course Catalog. (Because AP exams are held in May, AP credit options for students enrolling in January 2001 will be limited to 1-semester or 2-semester intensive AP courses: Microeconomics, Macroeconomics, U.S. Government and Politics, Advanced Placement American Government.)

Dual credit may also be an option for some students. Students interested in pursuing dual credit are advised to consult with their local high school and the IVHS staff.

Costs

A combination of federal and state funding, per course enrollment fees, and a low-cost barter model will be used to meet the costs associated with the development and delivery of the Illinois Virtual High School.

A course fee of $300 per student, per semester course, has been established for the pilot phase of the IVHS that will offer prepackaged proprietary courses and content. As Illinois develops its own courses and content and as the IVHS moves beyond the pilot phase, the fee structure will be re-evaluated. Local policy will govern the payment of fees for students enrolling through the schools.

For instance, the school may decide to pay this fee for students who are enrolled full-time in the local public high school when the credit earned from the course will be counted towards high school graduation, or if the course is not available at the high school, or if the student cannot be scheduled into the course at the school. Another alternative might be that a student who meets the qualifications set forth by the school board to take a class not offered at the local school may request that the school district pay the fee for an IVHS course. Similarly, the district may ask the student to pay the fee if the course is above and beyond the required instructional time or if the student elects to take the IVHS course in lieu of a course already available at the high school to gain credits towards graduation. Determination of fee payment for IVHS courses is a matter of local decision.

Students who are enrolled in the local public high school on a part-time basis for the purpose of accessing IVHS courses are generally expected to pay the course fee.

All course fees are paid from the district directly to the Illinois Virtual High School. The IVHS does not collect fees directly from students or other entities. The Illinois Virtual High School will serve as a course broker and pay all vendors for approved enrollments. A Student may drop/withdraw from an IVHS course within 10 days of receipt of a confirmed acceptance into an IVHS course without the district being assessed a $300 course fee, however a registration service fee of $30 will be assessed after beginning a course and dropping prior to tuition/fee assessment.

After the pilot phase, participation in the barter model will be an option for some districts. The IVHS barter model is based on the proposition that each participating school enrolls students in IVHS owned courses in proportion to the amount the school contributes in the form of teacher time. This model inherently supports growth and robust curriculum and instruction. Schools participating in the barter model receive "free" course enrollments for their students in

exchange for teaching an equivalent number of students from other IVHS consortium members. There may be a charge to join the IVHS consortium to cover IVHS costs beyond those associated with direct instruction. Schools may participate as IVHS Barter Members under the following criteria:

- Possess Illinois State Board of Education recognition to operate as a school serving any combination of grades 6-12.
- Contribute the minimum required teacher time (20% FTE).
- Commit to teach up to 25 students enrolled in IVHS for each teacher-section contributed.
- Possess Internet connectivity and computers to support the participating teachers and students (See Tech Specs).
- Provide an on-site coordinator. The coordinator is responsible for on-site operations and is the administrative point of contact between the IVHS and other Barter members.
- Commit to the project. The administration and teachers must fully support the IVHS goals, objectives, and plan.

Academic Integrity

As a condition of enrollment, all IVHS students must accept the terms of the Illinois Virtual High School Ethics and Acceptable Use agreement. In addition, students will have signed the Acceptable Use Policy Agreement adopted by their local public school. All IVHS students are required to take their final course exam with a certified proctor. IVHS teachers have the ability to require that students perform other tasks or undergo additional assessments in similar situations. If a high school wishes to require that other graded assessments or coursework in a proctored situation for any student or group of students, they may make those arrangements with the IVHS teacher. In addition, IVHS teachers will be trained to be alert to clues that might indicate problems. If the IVHS teacher suspects that there is a problem, the local high school will be informed.

Information for Parents

Does A Student Have To Own A Home Computer To Take an IVHS Course?

No, this is not required. It will be possible for students to do all IVHS work on school computers. However, access to a home computer or a computer in a public library will provide the student with additional study time, which early research indicates as a key factor in initial on-line learning course completion.

What Help and Support Will Students Receive?

In order to participate in on-line courses, students need adequate keyboard skills and good written communication skills. Experience using email and a web browser is highly recommended. Students also need to be self-motivated. Falling behind in an on-line course makes it very difficult to succeed. Students will need to stay on task, meet deadlines and pursue assistance for any technical problems that may occur. Students need to login several times a week to keep up with what's going on in class. Starting in the Fall of 2001, the offerings of the IVHS will include a variety of on-line orientation courses that will familiarize students with numerous aspects of on-line learning.

Students will not be completely "on their own." Each IVHS student will be enrolled in the IVHS through their local high school. Students will be assigned a mentor, but will need to maintain contact with educators at their local school if they feel that they need additional help. In turn, the student services coordinator will maintain contact with the IVHS in order to utilize services that are and will become available during and after the pilot period. In addition, students should maintain contact with other students within the same on-line course to become part of a virtual learning community and to be a more fully engaged learner. For specific problems with technology or an on-line course, there will be a 24-hour, 7-day-a-week Help Desk available at the IVHS.

Students will also be able to access services at their local community college, including library resources, proctoring services, testing services, and computer use. Illinois community colleges are actively involved in on-line education and each community college has a student service center whose primary activity is to serve learners 16 years of age and older involved in on-line education.

If a student is taking the IVHS course at a local high school, the school will provide access to the hardware and software needed for IVHS courses. If a student will be accessing the course from home, it is important that both the student and the sponsoring registrar review the Technical Requirements area for details and use the "Browser Test" on the home computer to ensure compatibility. Additionally, students may access computers at their local community colleges and public libraries. Community learning centers and local not-for-profit social service agencies may also be places where a student could have access to IVHS courses.

Will IVHS Teachers Hold Parent-Teacher Conferences?

The email address of each IVHS teacher will be made available. Each IVHS teacher will have the option of establishing a "virtual" parent conference via email, phone, or "conference room" chat over the IVHS licensed platform. However, parents may email the teacher at any time during the course and may also contact the IVHS registrar or student services coordinator at the school with questions about student progress.

How Do We Know A Student Has Completed His/Her Own Work?

All students will be required to take their final exam with a certified proctor. The performance on the final exam should closely match the work in the remainder of the class. In addition, IVHS teachers will be trained to be alert to clues that might indicate that the student on-line is not the student who is registered. If the IVHS teacher suspects that there is a problem, the local high school's registrar for the course will be informed.

What Type Of Student Should Take An IVHS Course?

Students should realize that taking a course on-line requires personal discipline and good time management skills. Students may spend more time taking an on-line course than they typically devote to a traditional high school class. Public and nonpublic high school students should consult their school guidance counselor to make sure that they are ready for on-line learning. A sample on-line assessment will be available to help a student determine readiness and aptitude.

How Many IVHS Courses Can A Student Take In One Semester?

This decision is made between the student and their local high school.

Will The IVHS Be Open For Summer School Courses?

The IVHS anticipates summer operation beginning with the Summer of 2002.

Admissions

The Illinois State Board of Education has opened IVHS courses to all Illinois residents pursuing a high school education. Students from public, non-public schools and home schools may request registration into IVHS courses through the local public high school.

The local public high school may have different options for non-public school students who want to take IVHS courses. Some may act simply as a registrar, and some may offer the option of being a part-time student to receive instructional services. Local public high schools will also have different policies about fee payment for IVHS courses.

The Illinois State Board of Education encourages all citizens to earn a high school diploma. If slots are available, taking courses over the Internet through IVHS may be a good option for adults who are working toward completion of a high school diploma, as with non-public students. Adult students must talk to the local public high school about taking courses through IVHS. Space must be available and a local public high school must approve the registration so that they can grant any credits earned.

It is important to understand that IVHS is not a school and does not offer a complete Illinois High School diploma program on-line, or courses leading to a GED. The credit earned by taking an IVHS course is granted by or accepted as transfer credit by the local public high school.

IVHS requires local public schools to maintain contact persons and mentors for virtual learners. These persons are an important link with the IVHS team and the Virtual Teacher. For non-public students, this contact person may actually be someone at home (i.e. parent or guardian), or an onsite contact at the private institution (i.e. teacher, teacher's aide, administrator, etc.). We ask that the non-public contact person maintain communication with the public school's assigned contact person. For adult students we ask that they maintain communication with the public school's contact person. This communication can be via email or telephone, and is a great way to raise issues or resolve problems that may occur.

Local Contact Persons:

Registrar: empowered to make final approval for enrollment and handle administration duties.

Student Services Coordinator: provides guidance, identifies a mentor for each student, provides and coordinates student assistance.

Technology contact: Point of contact for local network specifications, trouble shooting, pre-approval of off-site technology specs for accessing IVHS courses.

Mentor: volunteer teacher, parent, counselor or business partner who coaches and encourages on-line learners to successfully complete the IVHS course.

Those seeking high school credits through IVHS are encouraged to complete the On-line Inquiry form. Available slots will be limited to 25 students per section. We hope to offer two or more sections for each course offering. On-line review courses are not limited.

Dates to Remember

December 19, 2000	On-line Registration Opens
January 8-19, 2001	Classes Open
January 19, 2001	Last Day to Add Class*
January 19, 2001	Registration Closes
June 30, 2001	Last day to complete Spring Semester

*Some course offerings may offer open enrollment and exit. Contact IVHS staff for more information.

No fee penalty for approved student enrollee withdrawal within 10 days from first student log in. Beginning on day 11 the full semester course fee liability will be incurred.

Access to On-line Resources

IVHS staff have been working with staff from the Illinois State Library and staff from the Illinois Digital Academic Library (IDAL) in order to arrange for IVHS students to have access to on-line library resources. There is agreement in principle to provide access to these resources and we are in the process of working out the technical details to allow this access. Access to on-line library resources is intended to supplement the existing traditional library resources already available to students through their local school.

The Illinois State Library has contracted with OCLC First Search to provide access to over 75-on-line databases for all library patrons in the state of Illinois including IVHS students. The goal of the Illinois Digital Academic Library initiative is to provide a high quality collection of electronic resources to support instruction, study, and research by students, faculty and staff in all eligible Illinois higher education institutions. IDAL provides resources and services to 150 public and private academic libraries serving over 750,000 students and faculty. It is funded for the benefit of the statewide academic community by the Illinois Board of Higher Education and is extended to IVHS students through the Illinois Mathematics and Science Academy.

The Illinois Mathematics and Science Academy, as a partner of the Illinois Virtual High School, will provide IVHS students with access to IMSA's Internet Toolkit. The Internet Toolkit is an on-line resource designed to help students locate, evaluate, and use Internet information resources more effectively. IMSA's Internet Toolkit can save individuals time by searching multiple engines simultaneously and returning citations without the time-consuming downloading and distracting clutter of advertisements.

Illinois Virtual High School Book Store

Some IVHS courses require the purchase of proprietary software, text or workbooks. These item expenses are above and beyond course fees charged for content and instruction. For the pilot period the student will be directed to an IVHS cooperating partner for ordering information.

Minimum System Requirements

To take full advantage of the interactivity of the courses, the following system profiles are REQUIRED. Some courses may have additional course requirements. See the IVHS on-line course catalog for more information.

Minimum Hardware Specifications

PC	MAC
Windows 95, 98, or NT	MacOs 8.6 or Later
90 MHz Pentium Processor	Power PC Processor (604 Power PC minimum)
32 MB of RAM	32 MB of RAM or more
28.8 kbps Modem	28.8 kpbs Modem
Sound Card	Speakers
Speakers or Headphones	CD ROM Player*
CD ROM Player*	800x600 display resolution with 16 bit color
800x600 display resolution with 16 bit color	Fax Machine**
Fax Machine**	

Recommended Hardware Specifications

PC	MAC
Windows 95, 98, or NT	MacOs 8.6 or Later
233 MHz Pentium II Processor	Power PC Processor (604 Power PC minimum)
64 MB of RAM	64 MB of RAM or more
56 kbps Modem	56 kbps Modem
Sound Card	Speakers
Speakers or Headphones	CD ROM Player*
CD-ROM Player*	800x600 display resolution with 16 bit color
800x600 display resolution with 16 bit color	Fax Machine**
Fax Machine**	

*CD ROM required for certain courses. Please see course descriptions for more information.
**All AP courses require access to a fax machine.

NOTES

Courseware cannot be accessed using Web TV. Parental Control software may cause the IVHS course to function incorrectly or not to function.

You will need an Internet connection. It is possible for IVHS work to be done at school on school computers, if your school is connected to the Internet. If you intend to work from home, you will need to find an ISP (Internet Service Provider). An ISP is a company that can provide you with the software necessary for getting onto the Internet using your home telephone lines and a computer.

You will need an e-mail account. The preferred option is for the school to provide an email account for students to use for their IVHS courses. If this is not possible, students will need to obtain an email account through their ISP. Check out Yahoo! Mail or MSN Hotmail for information on these two free e-mail providers.

In addition, you will need a Java capable browser; minimally a browser version 4.0 or better. Downloads for the newest browser versions are free of charge. To upgrade your browser to the latest version, click on the appropriate link below. Wondering if your browser meets the specs? The IVHS web site will provide an on-line test for students to determine if their browser meets the basic requirements. Some courseware may require additional browser configuration.

APPENDIX D

Virtual Schools
By
David Turner, Executive Director of the
Illinois Principals Association, October 2000

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Virtual Schools

By David W. Turner

One of the primary goals of the Executive Leadership institute, the leadership development program developed jointly by Motorola and IPA, is to cause participants to "think in new terms". I attended the first ELI session in 1993, and one of the problems presented was to design a school of the future. My partner, Delores Fittanto, then the Principal of Lyons Township High School, and I designed an electronic anytime anywhere school in which students used computers and satellite receivers to take classes at home at their own pace on their own schedule. A brick and mortar school didn't serve any function in our model. The best part was that Delores and I ran the school using our laptops while sitting on the beach in the Caribbean.

The part about the beach will probably remain a fantasy, but due to tremendous advances in technology since that ELI session in 1993 and new ways of thinking, the anywhere anytime concept of schooling is upon us. It is the Virtual School. We all need to begin to "think in new terms", in order to harness the tremendous advantages that virtual schools offer to students.

The goals of this issue of Building Leadership are to familiarize you with the concept of the virtual school, relate the status of virtual schooling across the nation, inform you about the Illinois Virtual High School, provide you with ideas for policy development and give you resources from which you can further your knowledge.

> ***"E-learning provides an opportunity to address one of the most serious problems in Illinois education—equity of opportunity."***

The term "virtual school" or "virtual high school' is generally applied to any k-12 learning activity or program that uses the Internet or related technologies. For the purpose of discussing the Illinois Virtual High School, it is a state-approved service offering secondary courses through distance learning methods including the Internet. Distance learning has its roots in correspondence courses, but now generally implies real-time electronic interaction between student and teacher.

The development of virtual schools, particularly those operated by state governments is driven by a set of real and perceived needs. Key among them is equality of educational opportunity. Virtual schools can provide a depth and breath of curriculum offerings to small schools, rural schools and poor schools equal to those found in the larger, wealthier schools from metropolitan areas. Access to Advanced Placement Classes and leveling the playing field for entrance into college for all high school students is also a prime motivation for developing virtual high schools. Other factors include exposure to top quality teachers and unique educational experiences, a state's desire to maximize the use of the latest technology and developing virtual learning opportunities as part of a broader policy agenda. And, of course, there are private companies and some quasi-governmental agencies that view the virtual schools as profitable business ventures.

There are a handful of states that are ahead of the curve in terms of developing and implementing virtual schools.

Each school has some unique characteristics. Florida was the first state to fund a statewide virtual school, the Florida High School. It began in the 1997-98 school year by serving students in only two counties. This year, there are over 1900 students registered through 65 public school districts, private schools, home schools and charter schools. FHS targets students from low performing schools. In the spring of 2000, FHS offered 52 courses, including Advanced Placement and college preparation courses. The plan is to provide a complete high school curriculum by 2001 and offer the full core curriculum needed to complete a high school diploma. FHS employs a principal, an assistant principal and a counselor to whom all students have access. All FHS teachers are Florida certified. All courses must meet the content and achievement goals of the Florida Sunshine State Standards and pass a Peer Review. The school's motto is, "Anytime, anyplace, any path, any pace." Teachers have found that working online increases their workload and increases the hours they work per week. Some thirty states and a few foreign countries have visited FHS to observe the model and methodology.

Michigan has appropriated funds to develop the Michigan Advanced Placement Academy and a virtual high school with the goal of reaching all high school students in the state. Michigan also has established the Michigan Virtual University with the initial focus of training workers for specific core industries in the state, including the automobile, health care and financial service industries. Michigan State University has its own virtual university, which offers courses online. A unique feature of the Michigan Virtual High School is the development of a scholarship program offering small stipends and free but required training for educators who will serve as on-site monitors in their schools. The monitors will receive weekly reports, coach students and serve as on-site links to the online instructors. There is a budget proposal to provide training to all teachers on effective use of computers and technology in the classroom and to provide each teacher who completes the training with a laptop computer.

When established, New Mexico's Virtual School will be offered k-12, unlike all the other models, which focus only on secondary schools. The driving factor for including k-12 is that over half of New Mexico's 89 school districts have less than 1000 students and therefore have difficulty supporting a full curriculum. The state views the virtual school as a solution to this problem.

Utah's Electronic High School has been in existence since 1994. It currently enrolls students from all 40 Utah public school districts, 50 states and 14 foreign countries. They provide credit for 54 courses broadcast over public television, 117 high school courses offered via EDNET, the state's internet system, and over 300 Internet courses from various out-of-state providers. The Electronic High School charges $100 per course for all non-residents, home-schoolers, summer school students and course repeaters. Awarding credits and counseling are functions of the local high school but the awarding of a diploma from the Electronic High School is in the works. Utah sees home-schoolers as an important audience as well as dropouts who take courses to complete their diplomas from their local high schools. Utah is also facing a 25 percent increase in its school population in the next decade and views the virtual school as a way to avoid overcrowded school buildings. An interesting sidelight is that the principal of the Electronic High School also sits in the State Legislature.

The Kentucky Virtual High school is the nation's first stand-alone online high school to be directly established as part of the state education agency. Created in 1999, KVHS is described on its home page as a "statewide education service delivering high school courses and online opportunities...". It currently reaches the state's 325 high schools, plus 215 middle schools, private schools and home schoolers. KVHS targets Kentucky public schools with the focus on helping them enrich their curriculum. Toward this end, it offers general required courses, electives and Advanced Placement courses. A recent survey indicated a need to provide courses for the state's alternative schools. Tuition, normally paid by the school district, is $300 for a one-semester course. The awarding of credit toward graduation is a matter of local school policy. Kentucky has the advantage of an extensive educational technology infrastructure, which includes a number of delivery options including satellites. They also have a strong partnership with the Commonwealth Virtual University with whom they share the Kentucky Virtual Library. Kentucky teachers who teach online attend a four-day training program to learn course development and delivery skills, including pedagogy for online teaching. They are also involved in continuing educa-

> ***"We all need to begin to 'think in new terms,' in order to harness the tremendous advantages that virtual schools offer to students."***

tion and attend specific workshops for classes developed by outside providers.

Like New Mexico, a high percentage of Kentucky's high schools are small, rural and poor. KVHS works to ensure that its courses are effectively marketed to schools in urban areas with large minority populations, less affluent schools in areas such as the Appalachians, and schools with high dropout rates and significant populations of at-risk students. It is worth noting that the Kentucky Education Association has been supportive of KVHS since its inception. Since the focus of KVHS is on supplemental offerings that may help keep small schools open, fears of teacher replacement have not been a major factor in Kentucky.

There are a number of high-quality for-profit providers of online courses. Probably the largest and most widely utilized is CLASS.com, Inc. It was created in 1999 to market the courses developed by the University of Nebraska's Independent Study High School Online Diploma Program, which is an outgrowth of the University's correspondence course program that has been serving the nation's high schools for over seventy years. It supplies courses to the Kentucky Virtual High School and others. A number of major universities who have Independent Study High Schools, including the University of Indiana and the University of Missouri, are creating online diploma programs. Apex Learning is a name you will see often in the Virtual School lexicon. They are a for-profit provider that will likely become the standard for Advanced Placement courses online due to their ties with the College Board.

The genesis of the Illinois Virtual High School came from a group of educators from the Teachers Academy for Mathematics and Science, the Illinois Math and Science Academy and the Central Illinois Distance Education Network, Western Illinois University, the Association of Illinois Rural and Small Schools, and some superintendents from large suburban districts who met during the summer and fall of 1999 to discuss their mutual interests in online education at the secondary level. Their work led to a grant proposal to identify additional partners and begin planning a statewide virtual high school. In his State of the State message in February 2000, Governor Ryan presented an outline for a multi-faceted "strategic technology investment initiative" called Venture TECH. By combining education, government, information technology, health sciences, biotechnology and venture capital, the proposal was designed to avoid the pitfalls of previously unsuccessful piecemeal efforts to address the State's technology issues. This initiative fueled the planning of the Illinois Virtual High School, and in the spring of 2000, The Joint Education Committee formed a cross agency team to plan the IVHS with the State Board as the lead agency. By May, they had developed a preliminary mission statement, which read,

> "Expand the access of Illinois students to high-quality secondary learning experiences that will help them meet the Illinois Learning Standards and prepare for college and/or employment."

The initial focus and role of the Illinois Virtual High School was "to use established and emerging technology to supplement and compliment local school district curricula."

In June, the ISBE and the Virtual High School Steering Committee held a three-day strategic planning retreat to develop goals, strategies and activities for the three year phased implementation of the Illinois Virtual High School. Particular attention was paid to the role of policy implication for local schools. Ray Broderick, Principal of Elk Grove High School, represented principals at the retreat. Following the retreat, ISBE staff developed a framework for implementation.

The following statements are drawn from the framework document drafted by ISBE staff members, Lee Patton, Mary Jane Broncato and Brad Woodruff. They illustrate the key concepts of the IVHS and the breath and depth of planning undertaken to bring it about.

About principles and timelines:

> We must believe in the extraordinary potential of technology to serve important educational goals, while not expecting it to meet all of our needs or solve all of our problems.
>
> We must build on our existing educational system while acknowledging the inevitability of change and the probability of a future that looks much different from today. We must acknowledge and build on traditions, but scrupulously avoid making decisions that will inappropriately limit our options for the future.
>
> We must begin slowly and carefully, but be prepared to increase our rate of change exponentially in the relatively near future.

About the primary purpose of the Illinois Virtual High School:

> E-learning provides an opportunity to address one of the most serious problems in Illinois education—equity of opportunity.
>
> The State has a responsibility to ensure that every student has access to at least the high quality instruction/courses required to meet the Illinois Learning Standards and be eligible for college admission. Meeting the State's responsibility for equity in the core areas should be the fundamental purpose of IVHS.

The presentation of the Patton-Broncato-Woodruff paper to the Illinois State Board of Education lead to the following motion being adopted on August 24, 2000:

Illinois Principals Association, page 3

The State Board of Education hereby adopts the following policies as the framework for actions to establish the Illinois Virtual High School.

The mission of the Illinois Virtual High School is to use new and emerging technologies that expand the boundaries of space and time to provide Illinois students and their teachers with increased equity and access to the highest quality educational opportunities.

The Illinois Virtual High School (IVHS) should be designed to serve three primary purposes:

Assure equitable access to rich and varied learning opportunities for Illinois students, with emphasis on curricular areas needed to ensure that all students can meet the Illinois Learning Standards and succeed in higher education and the workplace;

Expand high-quality professional development opportunities for Illinois teachers and other educators; and

Support schools in integrating technology into teaching and learning.

The IVHS should be designed to supplement and complement local efforts. It should not be a degree-granting high school.

The IVHS should begin operation no later than January 2001, with programs and services phased-in to reflect ongoing assessment of needs and the availability of resources.

All students should have access to the IVHS curriculum, regardless of whether they attend public, private or home schools. However, students must be registered through a local public school district.

The curriculum of the IVHS should meet specified criteria and include both IVHS-designed courses and courses that are available through commercial or other sources. Partnerships and linkages should be developed to expand the resources and opportunities available to Illinois students.

Teachers for IVHS courses should be well qualified in the subject or area in which they are teaching and have knowledge and skills specific to teaching online or through other technologies.

Local school districts and IVHS should share responsibility for the success of student participants. Local school districts should provide support for the student and ensure access to technical support as needed.

The technology platform for the IVHS should meet identified criteria and provide technical assistance and support twenty-four hours a day, seven days a week.

Funding for IVHS should come from multiple sources and meet standards of adequacy, sustainability and legality.

State funding requirements for local school districts (i.e. Average Daily Attendance) should be modified to ensure that school districts are not harmed by student participation in the IVHS.

The Board requested that staff provide monthly progress reports on the development of the IVHS and present policy, legislative and budget recommendations as additional decisions are needed.

ISBE is now carefully studying what other states have done in order to choose from among their best practices and avoid their mistakes. During the three year phased implementation, a number of things need to be done. Obviously, gearing up the infrastructure through the Illinois Century Network is paramount. So is gathering existing online courses and designing new ones specific to the Illinois Learning Standards.

Teachers need to be schooled in the techniques and strategies of online instruction. ISBE is reaching out to bring the various distance learning technologies and expertise to the IVHS in order that it be shared and all students have access. Examples are the extensive dual credit program from Lewis and Clark College, the Central Illinois Distance Education Network at Lakeland College, and the distance learning programs at Western Illinois University and Southern Illinois University. There is a wealth of online programs that have already been implemented by Illinois schools ranging from college prep classes at Maine Township High School to the Virtual Preschool of Dallas City Elementary. A menu of what is available is on the drawing board. Also planned are CD-ROM or DVD disks containing courses that would be used in concert with a teacher in a regular classroom. Immediate goals are to address the equity issues, insure the delivery of high-quality courses across the state, provide curriculum resources to existing teachers and design courses.

The initial set of IVHS courses will be drawn from among the following areas:

- Advanced Placement
- World Languages
- English as a Second Language
- Math
- Reading
- Career and Technical Education

Grant monies have insured the availability of Advanced Placement courses and an ISBE priority is the enhancement of reading and math curricula.

A long-range goal of IVHS is to serve as a model for quality teaching and

course content. It will become a visible example that will serve to raise the bar for brick and mortar schools and be a meaningful model for changing the way teaching and learning will take place in Illinois.

The State Board staff will be highly visible throughout the fall and winter at major educational conferences (including IPA's) to present information on IVHS. They have developed a speaker's bureau, have current information posted on their web site and will utilize various publications, particularly the Superintendents Administrative Bulletin from State Superintendent Max McGee.

The start up date of January 2000- *the beginning of next semester* - is rapidly approaching. A great deal of responsibility for making the IVHS work lies with the local school. First, all students must register for courses through their local public school—even homeschoolers. Comments from other states indicate that counselors' attitudes are very important. If they buy into the merit and worth of IVHS then their students will be directed there. If they do not, they won't. For principals, that may well be the first challenge. All schools have policies dealing with attendance, transfers and class rank. Those need to be revisited in terms of the impact of IVHS courses. The following is a list of issues that schools need to work through in terms of reviewing, modifying or developing policy.

Who can take IVHS courses? Are IVHS goals, your students' needs and your school's mission compatible? The school retains the right to decide what courses they give credit for and who enrolls.

How many courses can a student take? Can a student take a full load of regular classes and then add an IVHS class? Can they take all of their courses in any given semester from IVHS?

When and where? It remains to be seen how far the "anytime anywhere" concept will be taken by IVHS, but schools need to plan for how requests for not being at school full-time will be handled.

What are staff needs? What impact will IVHS courses have on staff? Will you need to add course monitors? Will demand for certain courses and teachers drop? This may become a contract issue.

What policies are in place for appropriate Internet usage? How do you avoid games, porno, and violent content?

What electronic security measures are in place?

How will records be kept?

Will the school pay for tuition costs? Keep in mind there will likely be a sliding scale for fees.

Should parents sign off on an Internet authorization for their students?

Will you need to modify attendance policies? The state is wrestling with the issue of ADA so that schools will not be penalized for students who enroll in IVHS. .

How will grades be recorded? Could someone tell from a student's permanent record whether "Astronomy" was taught by the local school or IVHS. Is a distinction necessary?

How do e-grades fit into G.P.A. and class rank?

How do you monitor work for extra-curricular eligibility?

What e-courses will you accept from transfer students? Homeschooled students?

What electronic vendors will you allow credit for besides IVHS?

How long will you allow a student to remain in a course? One state reported students dragging out a one-semester course over a period of two years.

This list is no doubt much longer. We will all have to discover and learn together. We need to share our experiences as we work into IVHS so that we can all be successful. The Illinois Virtual High School gives you a very powerful tool for improving your school. It provides your teachers and students with tremendous resources for enhancing the teaching/learning process. Who knows how it will unfold. It may soon bring the day when CD's replace textbooks and the ability to modify online courses may lead teachers to design individual curricula for each student. It truly presents the opportunity for students to learn anywhere anytime on their own path at their own pace. Be Ready! Accept the challenge! Besides, maybe you will get to run it from that seat on the beach after all.

RESOURCES

• The Florida High School www.FHS.NET/FHSWeb.NSF/Home?

• Kentucky Virtual High School www.KVHS.ORG/

• Concord Consortium HTTP://VHS.CONCORD.ORG/PAGESABOUT+US+WHAT+IS+VHS Southeast Kansas Service Center

• Center for Application of Information Technologies-Western Illinois University www.CAIT.ORG/2000/

• Illinois Community Colleges Online www.ICCB.STATE.IL.US/ILCCO/INDEX.HTM

• Illinois Digital Academic Library
HTTP://ILCSO.AISS.UIUC.EDU/WEB/SERVICES/IDAL/IDAL.HTML

• Illinois Virtual Campus
www.IVC.Illinois.EDU

• Web-Based Education Commission
www.HPCNET.ORG/CGI-BIN/GLOBAL/A_BUS_CARD.CGI?SITE ID=154797

• CEO Forum on Education and Technology
www.CEOFORUM.ORG/

• Lakeland Community College-View a sample course
www.LAKELAND.CC.IL.US/'MSTTERW/

• Civics in Cyberspace-an actual course
www.LAKELAND.CC.IL.US/'CIVICS/

• APEX LEARNING
www.APEXLEARNING.com/

• Class.com
www.class.com

• Illinois Virtual High School
www.IVHS.K12.IL.US (soon to be online)

• Illinois Board of Higher Education-Technology Section
www.ibhe.skate.il.us/tech/index.htm

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• Brad Woodruff, ISBE, Personal Interviews

• Policy Suggestions were drawn from conversations with Terry Hudson, Principal of Windsor Jr/Sr High School; Ed DeYoung, Principal of Barrington High School and Ray Broderick, Principal of Elk Grove High School