

# **Study of Statewide Virtual Learning Initiatives**

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## **Introduction**

This document provides examples of statewide virtual learning projects to the Washington State Governor's Task Force on Virtual Education. It includes information about rationale, leadership and funding models, approaches to student and teacher learning, and the technologies employed by virtual schools. General program characteristics are described, followed by some unique innovations and detailed information, examples, and resources from each state. The level of detail varies depending upon the amount of information available. Lastly, several alternative models to virtual education are described.

## **Widespread Program Characteristics**

- All of the virtual high schools studied align course content to meet the lowest common bandwidth denominator; despite the fact most students access the online courses from schools enjoying T-1 connections. A small number of students access Internet courses primarily from home over a 28.8 Kbps dial-up connection. Concern about excluding this group of students has prevented most virtual high schools from developing high bandwidth enriched courses.
- All of the virtual high schools studied are fully accredited institutions, but none award credit or diplomas directly. The virtual high schools recommend a grade to the local schools who then grant the student credit.
- Virtual high schools generally offer a few AP and honors courses. However, the majority are high-school courses required for graduation. None of virtual high schools studied offer college-level courses. Virtual high-school courses are developed and taught mainly by certificated high-school teachers working in the state education system.
- Generally students are enrolled in 1–3 virtual courses as full-time students in their local high schools.
- The courses are usually delivered to students on the Web via a proprietary software delivery platform provided by Jones Knowledge Inc., Blackboard.com, or eCollege.
- About 90 percent of students access virtual courses primarily at their local schools. Ten percent of the students access courses primarily from home. Public libraries and community technology centers serve as additional access sites.
- Initial funding for virtual education initiatives comes largely from grants and corporate sponsorship, and then shifts to ongoing state support.

## Notable Program Features

- The Florida Virtual School has a comprehensive marketing and assessment program. Their course curriculum, teacher training, and online instruction methods have resulted in Florida Virtual School students scoring above the national average on the SAT and AP national exams<sup>1</sup>.
- The Concord Virtual High School leads the cooperative approach to virtual high schools. In order for a school to participate in the online teaching cooperative it must pay a \$6,000 annual membership fee and create and teach one course. In exchange, the school is given 20 seats per year in courses offered at the virtual school. This model has led to a wide variety of innovative high-school core and AP courses being developed for the Virtual High School.
- Communities in New Mexico have demonstrated creativity in providing access for virtual students by adding a virtual class period to student's daily school schedule each semester, and designating time slots in local community computer labs for virtual students during all open hours. □
- The State of Michigan has allocated large amounts of funding for teacher technology training and professional development. In the last year, over \$116 million has been devoted to the professional development of K–12 instructors. □
- In Alberta, Canada, the provincial government is developing unique partnerships with public institutions and private companies to provide broadband access to information resources making Alberta the "the most wired jurisdiction in the world."

## **FLORIDA** **Florida Virtual School** <http://www.flvs.net>

### Basic Program Facts:

# students in class: **25**  
# total students in program: **8200**  
# home-school students : **2624**  
# teachers: **75 FT**  
#classes offered: **200**  
#AP classes: **8**  
#program administrators: **40**

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<sup>1</sup> Test scores provided on pg. 8 of this report

### **Basic Program Facts (cont.):**

annual budget: **6 million**

current funding source: **state legislature**

future funding source: **move to a self-sustaining model**

### **Why was the program started?**

The Florida Virtual School (FLVS) started in August 1997 with the goal of empowering Florida families and students with educational choice, the choice being online courses allowing students to learn “anytime, any place, any path, and any pace.” The FLVS offers a choice for students who want to take courses not offered at their schools of enrollment, have scheduling conflicts at their traditional high-schools or workplaces, need to make up credits in order to graduate on schedule, need a different learning environment, want to accelerate their academic program, or are enrolled in homebound/home-school educational programs.

### **Who does the program serve?**

FLVS was designed to serve any high-school student in the state of Florida. From 1997 to 2001 the FLVS has grown from 70 students to over 8000. Fifty-four percent of students come from traditional public schools, while 37 percent are home schooled and 8 percent are private school students. Florida students, both public and home-school, do not pay a course fee. Non-Florida students may take a course for a per-course tuition fee of \$150. In order to maintain a student’s full time student funding status, Florida school districts allow a student enrolled in a public high school to take only one class per term via virtual education. The remaining courses must be taken at their local public high schools. In 2001, 79.11 percent of students were white, 7.2 percent black, 6.8 percent Hispanic, 3.52 percent Asian, 2.9 percent multiracial, and .49 percent Native American.

### **What does the program offer?**

In 2001, the FLVS offered about 60 high-school courses. The majority of these courses were core courses required for graduation, although about 10 percent were Advanced Placement (AP) or honors classes. AP courses are scheduled to finish in time for students to take the national AP exam. The courses are designed by FLVS certified instructors in teams of two or three. Developers, instructional designers, and curriculum specialists employed by FLVS make sure that courses translate to a web-based environment. Each course undergoes a lengthy peer review process where other educators, students, and community members review it for functionality and design. All FLVS courses meet or exceed most state and national standards.

**Course Demo:** [http://www.flvs.net/learn\\_more/demos\\_lm.htm](http://www.flvs.net/learn_more/demos_lm.htm)

## **What is the program's approach to student support services?**

Students are guided through their courses by their respective FLVS instructors. At any time day or night, students can open the <http://www.flvs.net> website, log into their classes, and complete work for submission. Students progress at their own pace, but this pace is monitored by course instructors. A Student Contact Form helps to ensure progress. Most of the learning materials for the course are available on the course website. There are no textbooks. FLVS also subscribes to an online library resource provided by Jones Knowledge, Inc. which is designed to supplement the course materials. Students at public schools also have access to their school libraries. Students receive academic advising by phone and email from two counselors employed by FLVS. Public-school students also have access to their school counselors. All course content help issues are addressed to individual instructors via phone and email.

Home-school students and public-school students working on a course outside of a public school are responsible for providing and supporting their own computer and Internet connections. FLVS sets a minimum hardware/software requirement to enroll in their courses ([http://www.flvs.net/get\\_started/minimum-CPU.htm](http://www.flvs.net/get_started/minimum-CPU.htm)). Traditional public-school students enrolled in FLVS courses using computers at their schools rely on the varying technical support services offered at their individual schools. FLVS uses Jones Knowledge Inc. to provide the online course delivery platform called *e-education*<sup>™</sup> and the online library services. A 24 hours a day/7 days a week phone-based technical support line is available for students having problems with their *e-education*<sup>™</sup> course delivery software.

## **Who leads the program?**

Florida Virtual School is governed by a Board of Trustees established by the Florida Legislature and appointed by the Governor of Florida. FLVS employs 75 Florida certified teachers and 40 support staff for a total of 115 full-time employees. Each full-time employee works for the FLVS Board of Trustees on an annual contract. Besides providing the web-based course-delivery platform, Jones Knowledge Inc. also helps FLVS market its course curriculum.

FLVS realized such exponential program enrollment figures demanded a more flexible and scalable organizational model. Therefore, in 2001, FLVS began moving towards an in-state franchise model. Individual districts that wish to offer courses more specific to their student's needs can start an FLVS franchise by hiring their own teachers and licensing existing FLVS course content free of charge as well as developing new courses using the FLVS design template. The districts inherit the FLVS brand, pay FLVS to train their teachers, and use the Jones Knowledge *e-education* course delivery platform. Currently there are four Florida school districts, located in urban areas, that have a FLVS franchise in operation.

### **Who teaches the courses, and how are they selected and trained?**

The Florida Virtual School instructional staff consists of 75 teachers who live throughout the state. All FLVS teachers possess valid Florida teaching certificates and are certified in the subjects they teach. New teachers are put through a FLVS-designed program to orient them to the best practices of teaching online. Jones Knowledge provides two days of training on how to use the *e*-education platform.

### **How is credit awarded?**

FLVS is not allowed to grant credit or diplomas directly. A Florida student attending a public high school is awarded credit for a FLVS course through that high school. Home-school students must work with the high schools closest to them to obtain credit for FLVS courses. For students taking AP courses, colleges offer credit or waiver of equivalent courses for successful completion of the national AP exam. All students enrolled in FLVS AP courses must be prepared to take the exam.

### **How do students access the courses?**

FLVS courses are completely web-based and therefore can be accessed whenever or wherever a student has access to a computer with Internet connectivity. Some schools provide computer lab access, permit a student to leave early to work from home, or have students working in the media center. Home-school students are responsible for providing and supporting their own computer and access to the Internet. Students register for and log into FLVS courses at the FLVS website (<http://www.flvs.net/>).

### **What technologies are being used and how are they supported?**

FLVS course content is provided assuming a user Internet connection of 28.8 Kbps. Schools connected to the state's education network called FIRN (Florida Information Resource Network) have T-1 connections. However, to design courses assuming that bandwidth would leave out home-school students who make up approximately 37 percent of the FLVS student population. Schools connecting via FIRN have access to limited phone-based network support that supplements their in-house technical support services. Due to student bandwidth limitations, course communication is done by phone, email and discussion groups, etc. Advanced networking-based applications such as those developed for Internet2 are not currently being utilized in the FLVS curriculum. Course content is delivered mainly in text form with graphics, streaming media, and Macromedia Flash.

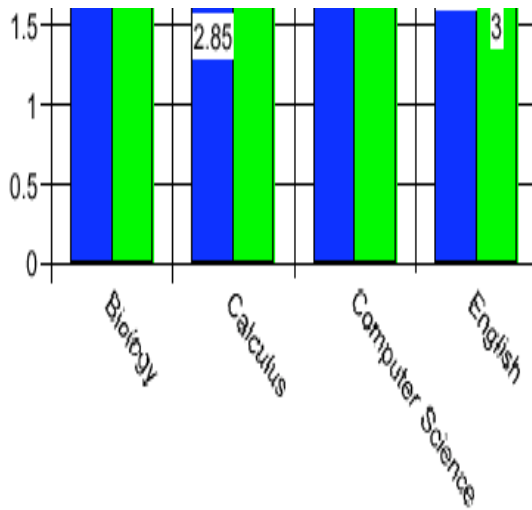
### **How is the program funded?**

A Florida Department of Education grant funded the program when it first started in 1997. Since then, the FLVS program has become a line item in the state budget, although this method of funding is changing. While the FLVS received a \$6 million appropriation in 2002-2003, the legislature is very interested in the program evolving into a more self-sustaining entity in the future. FLVS has not divined exactly how to become fiscally self-

supporting. One of their plans is to obtain funds from the following sources: licensing of course curriculum, tuition collected from non-Florida public-school students taking FLVS courses, and sharing full-time student money with schools where students are taking FLVS courses. If the FLVS moves to that model, Florida home-school students will be required to pay tuition. FLVS is confident that the legislature would be willing to make up any remaining shortfall in budget. Currently, the program expense breakdown is as follows: Approximately 60percent of budgeted expenditures are instructional (instruction and curriculum); 28percent is budgeted for program administration (guidance, staff training, central services and information systems / marketing); the remaining 10percent is spent on administration and plant operations.

**How is the program being assessed?**

In 2000, state policy makers and the FLVS commissioned the Center for the Study of Teaching and Learning at Florida State University to conduct a comprehensive evaluation of the FLVS and to provide information on the processes and outcomes related to the school. The evaluation focuses on four major components: Curriculum and Instruction, Student Access and Performance, Customer Satisfaction, and Fiscal Resources. Part 10 of the study found that FLVS students far outperformed the state and national averages on the SAT and AP national exams. Below is an excerpt from the report showing the exam results.



SAT Scores			
	FVHS 2000	Florida 1999	Nation 1999
Math	603	498	505
Verbal	575	499	511
Total	1183	997	1016

The full report can be found at [http://www.flvs.net/learn\\_more/evaluation.htm](http://www.flvs.net/learn_more/evaluation.htm)

**How is the program marketed?**

FLVS marketing happens on a number of levels. Firstly, they have partnered with Jones Knowledge Inc. to market their course curricula to school districts in Florida and other states. Secondly, they continually market their courses to out-of-state rural schools that could benefit from Internet-based classes. A chief marketing officer was hired in mid-October 2001 to work on FLVS branding and develop a comprehensive marketing plan.

Since the beginning, teachers and administrators of FLVS have been engaged in an informal lobbying campaign with the legislature, school districts, and individual schools throughout the state.

**UTAH**  
**Electronic High School**  
<http://ehs.uen.org>

**Basic Program Facts:**

# students in class: **35 average**  
# total students in program: 2001: **4500**  
# home-school students: **approx. 450**  
# teachers: **25** (FT developing courses during summer, PT teaching during school year)  
#AP classes: **2**  
#classes offered: **50**  
#program administrators: **2**  
annual budget: **\$400,000** covers administrative costs and course development  
future funding source: **state legislature**  
current funding source: **state legislature**

**Why was the program started?**

Utah's Electronic High School (EHS) began in 1994 as an initiative from the State Department of Education, in response to a challenge from Utah Governor Mike Leavitt to provide access to every high-school core course via technology.

**Who does the program serve?**

The Utah EHS serves four major groups of high school students: 1) Students who have failed a class and need to make up credit 2) Students who wish to take a class not offered at their high school 3) Students who wish to earn extra credit and accelerate graduation and 4) Students who are schooled at home. EHS students come from all 40 Utah public school districts, 50 states, and 14 countries. The vast majority of students are from Utah with a fairly even distribution between rural and urban districts. The number of students taking at least one course every year has grown remarkably from 150 students in 1995 to 4500 students in 2001. About 10 percent are home-school students and less than 1 percent are adult students. These numbers include enrollment in not only Internet-based courses but also the interactive EDNET video courses delivered to each Utah high school.

### **What does the program offer?**

During the 1999-2000 school year EHS offered 12 Internet courses. That number grew to 23 by the 2000-2001 school year. By September 2002, EHS plans to offer a total of 50 courses. There are currently 2 AP courses available. EHS has struggled with scheduling online AP courses so that they finish in time for students to take the national AP course examinations. The bulk of the courses offered online are high-school core courses. The courses are free to Utah public-school students and \$100 per course for students outside Utah.

In addition to the Internet courses, all of Utah's 108 high schools offer 168 interactive video courses taught over the over the EDNET network managed by the Utah Education Network. At least one video-conference classroom is available in every high school. Internet courses are free of charge to Utah public-school students and \$100 per course for students outside Utah.

**Internet Course listing:** <http://ehs.uen.org/bin/common/category.pl?type=COURSE>

(No course demo available)

**EDNET Curriculum Resources:** <http://www.uen.org/ednet/>

### **Who leads the program?**

EHS is part of the State Department of Education and is led by the Principal, Richard Siddoway. Besides serving as EHS Principal, Siddoway also sits in the Utah House of Representatives. His legislative tenure provides him with a unique opportunity to lobby for funds. EHS administration can remain small because of the partnerships it has formed. The Utah Education Network provides Internet access and network technical support for Utah's public schools. EHS now contracts with Blackboard.com to provide the Internet course delivery software platform.

### **Who teaches the courses, and how are they selected and trained?**

There are currently 25 fully accredited Utah high-school teachers working for EHS. EHS hires existing Utah high-school teachers on a one-year contract. They do online teaching and course development in addition to their full-time teaching positions. They are selected by the Principal of EHS based on their experience, subject mastery, interest, and technology savvy. Teachers are paid \$10,000 per course developed over the summer. They are then paid \$500 per course they teach during the school year. The Principal of EHS created the curriculum to train the selected teachers on best practices for developing and teaching online courses. The training consists of several hours on course design and how to use Blackboard. Due to the distances involved there is only a yearly faculty meeting where EHS teachers and principal meet. Funds for the training come from the EHS budget.

### **What is the program's approach to student support services?**

To register, students must complete and submit a web form located on the EHS web site. EHS creates a student account and sends the student a username by email. Students can then register for courses on the site. However, students are advised to work closely with their school counselors to be sure the courses are right for them. Adults, home-school, and out-of-state students are advised to go to their nearest high school to meet with a counselor before registering. Students working on an online course at home must provide and maintain their own Internet connections and computers. Students have access to the full suite of information sources available from Pioneer, Utah's online library developed and maintained by the Utah Education Network. Registered EHS students can log into Pioneer with their student ID numbers. The type of resources accessible in Pioneer depends upon the age of the student. All material for the classes is available from the website or through Pioneer.

### **How are students awarded credit?**

EHS does not grant credit or diplomas directly. EHS teachers submit a student course grade to the student's high school. The school then grants the student credit for the EHS course.

### **What technologies are being used, and how are they supported?**

EHS contracts with Blackboard.com to provide the web-based course delivery software platform. Home students having trouble with this software can call Blackboard's 24 hours a day/7 days a week toll-free help desk number. The Utah Education Network (UEN) provides all 108 Utah high schools with the network infrastructure and the technical support required to provide the EHS Internet courses and the two-way video conference courses offered. UEN has trained a teacher in each high school to troubleshoot the video conferencing studio. There are also regional UEN offices around the state staffed with network troubleshooters on call to service the schools and other facilities in their regions.

The UEN is located on the University of Utah campus and is associated with Internet2. Despite the advanced telecommunications infrastructure available to EHS, they are unable to take full advantage of the bandwidth available to enrich course content because of end-user constraints. Many of the home-school students only have access to a 28.8 Kbps dial-up connection to the Internet. UEN and EHS are working together to solve this problem by developing a satellite delivery system in the 30 percent of the rural homes in Utah that have only dial-up Internet options. According to the EHS administration the development of this solution could take two years.

### **How is the program funded?**

Initially, the program operated with federal grants without state funding. In 2001, the state legislature gave EHS \$200,000 in initial funding and \$200,000 to cover ongoing administrative expenses. The 2002 budget consisted of a \$400,000 ongoing line item.

This budget covers the salaries of the Principal and his assistant, pays the teachers to develop and teach the courses, and pays Blackboard.com for providing the course delivery platform. Public high-school student enrollment in EHS online courses does not affect their schools' full-time student funding. As long as the student is enrolled at the high school the school receives the entire full-time student funding, regardless of whether the student is enrolled in EHS online courses. The Utah Education Network pays all the connectivity costs associated with delivering the EDNET video conferencing and EHS online courses to the high schools. This partnership allows EHS to operate on its \$400,000 budget.

### **How is the program being assessed?**

Before a course is offered, the course is evaluated by the subject-matter specialist at the State Office of Education and, if adjustments are needed, they are made before the course is offered. Following the posting of the course, EHS alerts every teacher in the state who teaches that course in a public-school setting to review the course and send comments. The entire EHS program is assessed and evaluated annually by both the State Board of Education and the legislature (Public Education Standing Committee).

### **How is the program marketed?**

The Utah EHS has not developed a formal plan for marketing services to students and school districts. Because the Principal is also a state legislator, he is in a position to personally lobby for continued state financial support of this virtual education initiative.

## **CONCORD CONSORTIUM**

### **Virtual High School**

<http://www.govhs.org/website.nsf>

### **Basic Program Facts:**

# students in class: **20**  
# total students in program: **1700**  
# home-school students: **none**  
# teachers: **150 - 200**  
#classes offered: **156**  
#AP classes: **4**  
#program administrators: **9 FT**  
annual budget: N/A  
current funding source: **school membership and teacher training fees.**  
future funding source: **school membership and teacher training fees.**

### **Why was the program started?**

The Concord Consortium, a non-profit tax-emempt education research and development organization, was formed in 1994 by a group of educators to develop innovative ways of using technology in education. In 1997 they received a federal grant for the development of the Virtual High School (VHS). The Virtual High School's purpose is to use technology and the Internet to create a low-cost means of augmenting the range of courses a high school can offer. The first courses were offered in fall 1997.

### **Who does the program serve?**

This program serves students from the high schools that have joined the VHS cooperative and paid yearly membership and teacher training fees to VHS. It does not currently serve home-school students or adults working toward a GED. International schools are invited to participate as long as they pay the yearly membership and teacher training fees.

### **What does the program offer?**

VHS offers students a range of advanced academic courses and innovative core courses, technical courses, and specialized courses for language minority students, all for high-school credit for subjects never before offered in their particular schools. The courses are developed and taught exclusively by high-school teachers from 200 participating high schools from 25 states, based on demand. VHS limits class size to 20 students, and a student may not take more than three courses per semester. Besides core high-school courses, there are quite a few honors courses and currently four AP courses offered. The cooperative approach to developing a virtual high school has led to a steady growth in the number of schools, courses offered, and students participating. In 1997 there were 30 courses offered by teachers from 28 schools to about 340 students. During the 2001 school year, 200 schools offered 156 courses to over 1700 students.

**Course DEMO:** <http://www.govhs.org/Pages/Academics-Explore+a+Class>

**Student project showcase:** <http://www.govhs.org/Pages/Campus+Life-Showcase>

### **Who leads the program?**

The VHS project started as a cooperative of 43 founding high schools in 13 states managed by the Concord Consortium. In October, 2001 The VHS project was spun off from the Concord Consortium to become an independent non-profit cooperative. In order for a school to participate in the online teaching cooperative it must pay an annual \$6000 membership fee and create and teach one course. Each online course a school sponsors and teaches earns that school 20 student seats in both the fall and spring semesters. A school can pay VHS an additional \$4000 and create and teach a second course which earns their students an additional 20 places in VHS courses. If a school wishes to join the cooperative but not create a course and provide a teacher, it may do so by paying an \$8000 per year membership fee. This only entitles the school to 10 student seats in VHS courses for that year. About 80 percent of the schools participating do provide a teacher and develop a course. Both public and private high schools are involved in this program.

### **Who teaches the courses, and how are they selected and trained?**

Participating high schools provide online teachers for the VHS. Each school in the cooperative agrees to donate at least 20 percent FTE of a single teacher's time to develop and teach one VHS online course. There are no specific teacher certification requirements. The assumption is that teachers employed by the school system will be certified. That does not work for private schools, so there are non-certified teachers on the VHS staff. VHS has developed two graduate-level online professional development courses for teachers. The Teachers Learning Conference (TLC) is a 26-week online course that trains teachers to develop and teach an online course. Netcourse Instructional Methodologies (NIM) is a 15-week course that trains teachers to teach an existing online VHS course. Participating schools must pay for the cost of the training (\$3500 each for TLC or NIM)

### **What is the program's approach to student support services?**

Students access the courses through the VHS website. Email is the primary tool for communication between the VHS faculty and the VHS National Office. VHS prefers but does not require students to do their coursework while at school to ensure that they have the necessary computer access and technical support required. However, students can log into VHS courses anywhere and anytime they have Web access. If students work on courses away from school they are responsible for providing the necessary Internet connection and computer hardware. As an absolute minimum, VHS expects students to log in and perform work in their online VHS courses three times per week. Each course should require about 5–7 hours of coursework per week. Students who fail to meet these expectations can be dropped from the course.

Participating schools must provide one hour per day of release time for their VHS teachers to chat with students, answer course emails, and grade course work. The schools also must agree to allow a student at least 3 hours per week to work on his or her VHS course from school. A VHS site coordinator must also be provided at each participating school. The site coordinator serves as a physical contact for VHS students, providing local technical and administrative support to both VHS teachers and students. The site coordinator also registers students for VHS courses. Site coordinators are trained in an eight-week online Site Coordinators' Orientation, which gives site coordinators the necessary skills and information to assist both teachers and students.

The material for the courses is provided at the course web site. If a student is having trouble a course, he or she can talk to the site coordinator at the school or email the VHS teacher.

### **How are students awarded credit?**

All high schools in the VHS cooperative are accredited, and all have agreed to give student credit for all successfully completed VHS courses. There is a common grading system for all courses in the Virtual High School. Grades range from A+ for excellent

work to F for work that does not meet the minimum requirements of the course. Teachers report grades to the student's high school administrative office.

### **What technologies are being used, and how are they supported?**

VHS uses an IBM product called Lotus Notes to design courses and as the course delivery platform. Lotus Notes client software is provided to schools and supported by VHS staff. If instructors have trouble using the software, their first line of defense is the onsite coordinator trained by VHS. If that fails, they fill out a Web-based trouble ticket and submit it to VHS. A phone or email response is guaranteed from VHS within 24 hours. The schools are responsible for providing and supporting computers with a minimum 56 Kbps Internet connection. It is preferable that schools access the Internet through a high-speed connection, such as ISDN or T1-lines, but it is not a requirement for participation. Course content consists mainly of text, low-bandwidth streaming audio and video, images, and Macromedia Flash. There are no Internet2 advanced networking applications being used at this time.

### **How is the program funded?**

VHS, Inc. operates as a non-profit organization that charges tuition for professional development and annual membership fees to all participating schools. Students take courses free of charge. The training fees and the school's annual membership fees provide for central administration, registration, server management, and all the other operational aspects of VHS.

Before VHS switched to its current funding model, it operated on a five-year \$7.4 million grant, awarded in 1996 by the Department of Education's Technology Challenge Grant program (each school received \$9,000 per year to support a site coordinator position). Each of the founding schools also committed to give \$50,000 in matching funds over the life of the grant. In addition, there was corporate sponsorship.

### **How is the program being assessed?**

SRI Inc., a non-profit research group, is responsible for providing program evaluation. The evaluation is designed to help VHS improve and to document the program's impact on those it serves. Semi-annual surveys of all project coordinators, principals, teachers, and a sample of students and longitudinal case studies are the evaluation techniques employed. The program assessment reports can be found at <http://www.govhs.org/Content/About+Us-Project+Evaluation> .

### **How is the program marketed?**

Starting in January 2002, a full-time position was created to develop and execute a comprehensive marketing plan for VHS. Before this position was created, marketing tasks were shared by everyone on the VHS staff. VHS mainly markets itself at education technology conferences on the vendor floor or by doing panel presentations if possible.

**MICHIGAN**  
**Michigan Virtual High School**  
<http://www.mivhs.org>

**Basic Program Facts:**

# students in class: **20**  
# total students in program: **1,209 (209 regular classes, 1000 AP)**  
# home-school students: **31**  
# teachers: **92**  
#classes offered: **64**  
#AP classes: **15**  
#program administrators: **14 FT**  
annual budget: **\$1.5 million from state general fund, in addition to Federal Advanced Placement Incentive funds**  
current funding source: **state general fund**  
future funding source: **state and self-sustaining**

**Why was the program started?**

Michigan Virtual High School (MVHS) started as an extension of Michigan Virtual University (MVU). Its goal was to provide high-school students equal access to advanced placement courses, dual enrollment, information technology certification programs, and other technology courses, regardless of the size of their schools or their geographic locations. At the same time, it strives to help schools stretch tight budgets, provide staff development opportunities, and improve student performance.

**Who does the program serve?**

Currently, MVHS serves Michigan public and non-public-school students, home-school students, students who need to make up credit, and special needs, gifted, and talented students. There are also online professional development courses for Michigan educators.

**What does the program offer?**

The MVHS currently offers core high-school, Advanced Placement (AP), test-preparation, 90-day credit recovery courses, and professional teacher development courses. Of the core and elective courses offered there are various formats. The self-paced Flex 90 or credit recovery courses offer students the opportunity to earn full credit to meet high-school graduation requirements in an intensive 90-day online course with flexible course-start and assignment-due dates. There are 40 Flex-90 courses available covering all subjects. The 19 traditional semester-long courses have guidelines for due dates, communication, tests, and quizzes.

The curricula for the courses come from various sources. AP and non-AP foreign-language courses are licensed from Apex Learning Inc. and adapted to meet the Michigan Curriculum Framework. Class.com provides the basic content for MVHS Flex 90 courses. These Class.com courses are then repurposed to meet Michigan students' needs. All traditional course curricula are developed by MVU curriculum development teams in partnership with Michigan teachers (a 3–4 month process creates a one-semester course). There is one full-time staff member devoted to managing curriculum development. MVHS is also co-developing or licensing courses that meet its standards from other K-12 school projects, colleges and universities, and private sector providers.

MVHS class sizes do not exceed 20 students. In an agreement with state and schools, full-time students are allowed a maximum of two virtual courses per semester. Until demand changes, instructors only teach one class, so their maximum number of total students is 20.

MVHS is also developing a Virtual Academy that will focus on providing content in the areas of math, science, and information technology. There are also plans to merge the MVHS and MVU to be one Michigan Virtual School (MVS).

**Demo Course:**

<http://ims2.mivu.org/bin/frame.pl?item=courses&m=xbOdXvTRLcatzZgF>

1. Choose either Michigan Virtual High School or Michigan Virtual High School Flex 90.
2. Click Preview for course you wish to view.

**Who leads the program?**

MVHS is a division of Michigan Virtual University, a private, not-for-profit 501(c)(3) Michigan corporation established in 1998 to meet specific workforce development education and training needs of Michigan businesses and industries through the innovative use of electronic learning technologies.

**Who teaches the courses, and how are they selected and trained?**

MVHS has part-time contracts with certified Michigan high school teachers who are certified in the course subject area and who have received additional training in online instruction from MVHS (<http://www.mivhs.com/participation/prodevelopment/>). These teachers also work on curriculum development teams. There are currently 70 contracted teachers and an additional 22 in training.

MVHS is working with several educational organizations to develop different models for teachers in Michigan districts to participate as MVHS online instructors. These models may include contractual arrangements that could include a stipend, a bartering system, and other grant-funded possibilities. MVHS is committed to partnering with the education community to find ways to blend this new way of work into educational practice instead of adding more tasks to a teacher's already full roster. One such partnership is with the Michigan Information Technology Network (MITN), a non-profit organization whose mission is to improve access to education through distance education technologies serving the interests of Michigan businesses, schools, and citizens. A Board

of Directors comprised of individuals from education, government, and business governs MITN. MITN is a partner of MVU and provides funding for online professional development in addition to the \$110 million state Teacher Training Initiative and a \$6 million grant from the Bill & Melinda Gates Foundation.

An organization called Click On K-12 (<http://www.clickonk12.org>) is a growing information resource for Michigan's K-12 educators. It evolved from the Teacher Technology Initiative (TTI), a project that has equipped 90,000 Michigan K-12 teachers with personal computers, software, remote Internet access (dial-up), and Web-based professional development. It is a service of Michigan Virtual University and Michigan Virtual High School.

Issues with the state teacher union regarding pay, assignments, etc. have been the biggest challenges facing the MVHS administration.

### **What is the program's approach to student support services?**

An onsite mentor teacher serves as the liaison between the school, the student, and the online instructor. To comply with Michigan Department of Education Pupil Accounting Guidelines, the enrolling school's administrator must select a certified Michigan teacher to become a student's onsite mentor. This mentor does not have to be certified in the subject area of the virtual course.

Regional Education Media Center (REMC) is a state-funded project providing online education information resources to Michigan students and teachers. MVHS courses use the REMC to supplement student learning resources available on the course website. MVU is considering expanding the virtual library resources currently available.

Not all courses require textbooks, but schools must provide recommended textbooks from their choice of vendor. MVHS sold books online in its initial semester, but quickly partnered with the University of Michigan's school bookstore to handle any future sales requests from the site.

There is no financial aid for MVHS students. Advanced Placement course fees are paid by federal grants and districts pay for other course fees with their state funds.

MVHS serves as a single provider for all online student support services. Registration and student-safety and technical support are all available online or by a toll-free telephone number.

### **How are students awarded credit?**

MVHS does not offer course credit directly to students. Local and intermediate school districts award credit through their status as public and non-public schools. There is an articulation agreement with state community colleges in development.

### **What technologies are being used, and how are they supported?**

Merit Network, Inc. (<http://www.merit.edu>) is a non-profit corporation that promotes computer networking in Michigan and beyond. It is Michigan's leading Internet provider to both schools and residential customers. Merit is also a partner of MVU and working on developing Internet2 access and technologies.

MVHS is a virtual campus run on Blackboard program delivery software. MVU provides technical support 24 hours a day/7 days a week through an email address and toll-free telephone number. The primary point of access is the local public school through which the MVHS student is enrolled. MVHS requires minimum standards for a participant's computer: <http://www.mivhs.com/aboutus/help/>

### **How is the program funded?**

In June of 2000, the state legislature approved funding for the MVHS program through 2003. The funding included \$15 million for project start-up funds and an additional \$1.5 million for three fiscal years ending in Spring 2003. MVHS is moving toward a self-sustaining membership model in which local schools pay for subscriptions to MVHS services instead of per student fees.

Currently, parents/guardians of home-school students bear the full cost of MVHS courses. Students enrolled in local schools are not responsible for any fees. Their schools pay MVHS \$335 per student per semester for each MVHS Traditional and Flex 90 course and \$515 per student per semester for each French, German, and Spanish course. The tuition includes a \$10 nonrefundable application fee. The local school pays for and provides required textbooks and instructional materials to the students. A student may enroll in up to two MVHS courses per semester at that local high school, if the student also takes at least one class per semester at the school. This allows the school to count the student as at least a part-time student and obtain state aid money for his/her enrollment. The school can then pay for the MVHS tuition and materials using state aid money. The teacher of record on the transcript is the onsite mentor/teacher. Students enrolled in online courses must attend their local schools on state mandated days of instruction.

MVU has a full time fund development staff person who works with other development staff to get funding from foundations and grants for both MVU and MVHS.

### **How is the program being assessed?**

At this stage, the focus of evaluation has been on the teachers to ensure a quality level of online instruction. Teachers are closely monitored and communicated with daily in a virtual teachers' lounge. There is no formal assessment procedure at this time.

Student performance statistics are the responsibility of the individual schools and measurements of the MVHS program are difficult to obtain. According to MVHS, over 80 percent of their online AP students pass the AP tests compared to the national average of just over 50 percent.

### **How is the program marketed?**

A Director of Marketing and Sales has just been hired to create a formal marketing plan and launch the school membership subscription plan.

Although the MVHS program seems to work best in small rural schools (by increasing program offerings), there are many services MVHS could market to the larger suburban schools (test-preparation and credit-recovery courses).

CyberPioneers is the online teacher training program MVHS has used to educate Michigan teachers in the fine art of online course instruction. MVHS has found this training to be an excellent marketing tool, as teachers have become great spokespeople for the program.

Presentations and conferences formally introduced the program to principals, teachers, and parents. While these audiences are in the initial stages of awareness and understanding, there is little resistance to the idea of MVHS. A formal marketing plan will help ensure continued support.

## **KENTUCKY** **Kentucky Virtual High School** <http://www.kvhs.org>

### **Basic Program Facts:**

# students in class: **25-30 Maximum**  
# total students in program: **2000/01: 350 2001/02: 750**  
# home-school students: **N/A**  
# teachers: **approx. 25 part-time teachers**  
#classes offered: **110**  
#AP classes: **15**  
#program administrators: **4 FT**  
annual budget: **\$430,000 from state general fund, in addition to Federal AP funding.**

### **Basic Program Facts (cont.):**

current funding source: **school/districts & state general fund**

future funding source: **school/districts & state general fund**

### **Why was the program started?**

The Kentucky Virtual High School (KVHS) was started in October 1999 to offer students access to advanced courses or electives not taught at local public high schools because of teacher shortages, especially in the foreign languages. It also reduces costs to deliver specific courses to small numbers of students and secures scholarships for deserving students for online AP courses. In addition, it addresses instructional services issues to students with scheduling conflicts, individual learners in unique situations, and non-public-school students.

### **Who is the program serving?**

Currently, KVHS targets all Kentucky public high-school and middle-school students. Kentucky residents who are non-public-school students may be able to enroll through the local public high school. There are also online courses for Kentucky pre-12 educators and building level leadership (including school council members, district consolidated planning coordinators, and principals).

### **What does the program offer?**

The KVHS currently offers high-school, Advanced Placement (AP), and professional development courses. The curriculum comes from many different sources. AP courses are licensed from Apex Learning Inc. Core content courses (required by state code) are licensed from Florida Virtual School (FLVS) and Intelligent Education Inc. (IEI) and then supplemented to meet Kentucky Program of Studies integrity and applicability standards. In addition to the licensing agreements, there are three teachers in the Department of Education's Curriculum Department working on online curriculum development. At this time, KVHS does not offer GED courses, but a new partner program (Virtual Adult Education Center) with the Kentucky Virtual University is being developed and it will offer a GED certificate program.

KVHS class sizes do not exceed 25–30 students, depending upon the course. KVHS courses are based on a classroom model and differ in many ways from the structure of independent study courses. Each class has a single instructor for the duration of the course.

**Course Demo:** <http://www.kvhs.org/Demo40/index.learn>

### **Who leads the program?**

The KVHS was developed in collaboration between the Kentucky Department of Education, the Council on Postsecondary Education (a division of the Kentucky Virtual

University - KYVU), and the state's major education partners whose common interest is to secure build a world class education system for Kentucky citizens. Originally, the KYVU managed both the virtual high school and the virtual university. Now, the KVHS and the KYVU are close partners with different boards who report to the Kentucky Department of Education.

### **Who is teaching the courses and how are they selected and trained?**

All KVHS instructors hold Kentucky State teaching certificates in their fields of instruction and have part-time teaching contracts with the state Department of Education. Some instructors teach in a regular school and supplement their incomes as KVHS instructors. Many KVHS instructors are retired teachers devoted to the idea of online learning.

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 is posted in the course catalog. KVHS faculty are responsible for maintaining contact with someone at the student's school (and/or a parent) to provide updates on progress and discuss appropriate support and encouragement if a student appears to be falling behind.

### **What is the program's approach to student support services?**

KVHS requires local high schools to provide an onsite school contact for online students. KVHS instructors are available for parent conferences via email or telephone. The Kentucky Virtual Library (KYVL) provides free, unlimited access to library and information resources for all Kentuckians through the Internet. KVHS students are assigned KYVL access rights at the time they register. Registration services are provided by the KVHS site: <http://www.kvhs.org/index.real?action=PreRegistration>. Because fees are not collected from students, financial aid services are not provided. Some KVHS courses require a textbook. Schools awarding credit are responsible for purchasing the required textbooks and instructional materials. Most of the Apex Learning AP courses also require the student to have access to a FAX machine. It is the goal of KVHS to be the single provider of all student support services that are not the responsibility of local high schools.

### **How are students awarded credit?**

KVHS does not grant credit. Credit is granted and posted by the student's local high school. KVHS students often leap frog to the KYVU courses for college-level instruction. They are then enrolled with the university, not the high school. Students can achieve dual credit by enrolling through the Kentucky Virtual University. The Director of KVHS is currently working on signing articulation agreements with KY State colleges and universities. There has been some hesitation from the universities and KVHS may look to agreements with out-of-state institutions in the future.

## **What technologies are being used, and how are they supported?**

KVHS courses are delivered to public high schools through the Kentucky Education Technology System (<http://www.kde.state.ky.us/oet/>). There is a state help desk for this state K-12 education network. KVHS is a virtual campus run by eCollege program delivery software. eCollege provides technical support 24 hours a day/7 days a week through an email address and toll-free telephone number. The primary point of access is the local public school, through which the KVHS student is enrolled for at least one class per day. It is possible for students to do all KVHS work on school computers. Student email and teacher email addresses are required for participation, so access at the school is important. While nearly all students do have access to a computer in the home or public library and this provides the student with additional study time, it is only the primary point of access for very few students. The minimum standards for a student's computer require a 28.8 Kbps modem connection to the Internet and a Windows (95 or higher) or a Macintosh (OS 8.1 or higher) system with 32 MB RAM, a soundcard and speakers. A 56K connection and 64 MB RAM is recommended.

While the platform delivery vendor, eCollege, is ready to deliver Internet 2 content and technologies, Kentucky is not ready at the State level. There are goals to incorporate Internet 2 in the KVHS and KYVU in the future.

## **How is the program funded?**

\$60,000 was appropriated from the state general fund as start up money for the first 6 months of the program. The program currently receives \$430,000 from the state general fund for the annual administrative budget. The greater part of this amount covers the salaries of the four full-time staff. Tuition fees paid by school districts cover the remaining costs of the program. These fees are: \$275 per student per half-credit course taken in one semester, \$500 per student per one-credit course taken in one semester, \$275 per student per one-semester Advanced Placement course, \$500 per student per two-semester Advanced Placement course.

Local policy governs the method of payment of tuition. School districts pay KVHS tuition for students enrolled full-time in the local public high school when credit earned from the course is counted toward high school graduation and the school cannot provide the course. The Kentucky School Boards Association policy recommends that the local public school system pay the online course fees for their full-time students. All course fees are paid from the district directly to the Kentucky Virtual High School. The local school's money comes from the state, being paid to the district based on ADA (Average Daily Attendance) figures for students enrolled full-time. The districts receive \$6800 per student; \$3200 of that amount pays for teaching, not including Advanced Placement course fees. Advanced Placement courses are funded by two federal grants. Kentucky students have been able to enroll without paying fees. As demand increases, the funding will not cover all students enrolled in AP courses. In the future parents may have to bear the cost of AP courses.

### **How is the program being assessed?**

Informally, KVHS has found that the first three weeks of a course are the most important for student retention and performance. The students that remain enrolled tend to cluster at the top end of the grading scale. The primary complaint of students and parents has consistently been that the courses are too hard.

KVHS courses are viewed by the Kentucky Department of Education (KDE), Division of Curriculum Development, for alignment with the Kentucky Core Content and Program of Studies. KVHS instructors make any necessary course modifications. The KDE Division of Curriculum Development consults with KVHS on a continuing basis to ensure that KVHS courses are appropriate and of high quality.

Beyond this course evaluation, there is no formal assessment of the KVHS program. Students and teachers are invited to complete online surveys, but there are no resources to formalize the results. KVHS is looking to partner with regional services to complete assessment routinely.

### **How is the program marketed?**

KVHS is working with a state Education Equity Task Force to ensure that the KVHS effectively markets its offerings to schools in urban areas with large minority populations, less affluent schools in areas such as Appalachia, and schools with high dropout rates and other at-risk student characteristics. Kentucky is not currently focusing heavily on marketing out of state as a funding continuation strategy. Part of the reason is that they have so far focused on development of Kentucky-specific courses and curriculum resources that cannot be obtained through national vendors.

There is no formal marketing plan. KVHS does not have financial or human resources to address its marketing needs. It has requested federal money to create a marketing plan.

## **NEW MEXICO New Mexico Virtual School**

<http://sde.state.nm.us/divisions/learningservices/schoolprogram/nmvs/index.html>

### **Basic Program Facts:**

- # students in class: **8 Minimum, 15 Maximum**
- # total students in program: **2000/01: approx. 400, 2001/02: approx. 600**
- # home-school students: **unknown**
- # teachers: **approx. 20 part-time teachers**
- #classes offered: **57**
- #AP classes: **10**
- #program administrators: **3**

### **Basic Program Facts (cont.):**

annual budget: **\$800,000 from state general fund, in addition to Federal AP funding**

current funding source: **state general fund & Federal AP grants**

future funding source: **Federal AP grants & Federal grant**

### **Why was the program started?**

The New Mexico Virtual School (NMVS) was started to address the logistical and systemic issues facing New Mexico's education system. Over half of the state's 89 school districts enroll less than 1000 students, and therefore have difficulty offering a full curriculum. Eighty-four percent of public school instructional classrooms are connected to the Internet by individual agreements with local access providers. The challenge facing New Mexico Virtual School is to provide media rich challenging online courses that meet the academic interests of students in small rural schools lacking a unifying state network.

In the design and implementation process, leaders felt it was important that NMVS not become a policy-making or credit granting institution. Instead it was envisioned as an opportunity site for schools, not as a school itself.

### **Who is the program serving?**

Currently, NMVS is primarily serving New Mexico public high school students and dropout students who have re-enrolled in school to finish diploma requirements.

### **What does the program offer?**

The NMVS currently offers high school, and Advanced Placement (AP) courses. The curriculum for the 50-55 core high school level courses is licensed from Intelligent Education Inc. AP courses are licensed from Apex Learning Inc. NMVS found that developing content in-house proved to be too timely and expensive. They are developing partnerships with the State University and other public institutions to create New Mexico specific curricula (like the Chihuahuan Desert Lab & the Navajo Long Walk Seminar). NMVS describes itself as an education opportunity or enhancement, rather than as a school.

Typically students are allowed to take a maximum of two virtual classes per semester. A few exceptions to this state rule have been made for home-school students. Course access is through the State Department of Education's web site where there are links to vendors that provide complete instructional services.

<http://sde.state.nm.us/divisions/learningservices/schoolprogram/nmvs/vendors.html>

The State Department of Public Education (SDPE) has plans to increase the audience to all K-12 students as well as offer professional development classes. The SDPE has a vision for an online environment that covers Preschool to Adult Continuing Education.

They envision an information architecture to allow different levels of access (public, students, parents, teachers, administrators). Currently, they are strengthening their relationship with the local public broadcasting station to bring in PBS digital content to the virtual school when the station begins to broadcast digitally.

**Demo Course: (Apex Learning):**

[http://www.apexlearning.com/offerings/online/online\\_try.asp](http://www.apexlearning.com/offerings/online/online_try.asp)

**Demo Course: (Intelligent Education):** <http://www.iei-ec.com/>

1. User: Student
2. Password: Student

### **Who leads the program?**

There are three levels of leadership in the NMVS system. The New Mexico State Department of Public Education Department of Curriculum, Instruction and Learning Technologies has ultimate responsibility for the program. This department has contracted with the Southwest Secondary Learning Center (SWSLC), a charter school, to act as fiscal agent and to administer the NMVS. It is the SWSLC that, in addition to the vendors, provides services to the students and schools. Local school districts are in charge of setting policies and choosing the courses that they will offer to their students.

There are currently three full-time staff working at the SWSLC. Scott Glassrood is the director of the SWSLC and also serves as director of the NMVS; his salary is shared between the two institutions. There is a Program Coordinator who is also shared between the two institutions. A secretary is dedicated to the NMVS, but her position will be let go at the end of FY2001/02 to cover budget cuts.

### **Who teaches the courses, and how are they selected and trained?**

KVHS does not offer professional development. The content vendors, Apex Learning Inc, and Intelligent Education Inc., provide all instruction and platform delivery services in addition to the curriculum.

Apex Learning classes have a minimum of 5 students and a maximum of 35 students. They use 35 instructors (6 FT and 29 PT) who reside and are certified in many different states. Full-time instructors have 200–250 students and part-time instructors have 10–199 students. Instructors are very closely monitored and take continuing online training. Apex's 10 AP courses were developed in house by a content development team. Course development is now outsourced to the University of Washington and Powerglide (foreign language courses).

Intelligent Education Inc. (IEI) has part-time contracts with certified instructors to teach their online courses. If a school requests teachers with certification in a specific state, IEI will find teachers with the appropriate credentials. IEI classes have a minimum of 8 students and a maximum of 15 students. Instructors are assigned a maximum of 150 students.

### **What is the program's approach to student support services?**

NMVS requires an affiliation agreement that demands that participating districts provide students with adult supervision and support. Mentors assist students with technical issues, content questions, and textbook distribution, and proctor exams. Additionally, mentors serve as the point of contact for course vendors, district administrators, and parents for student services (attendance, work submission, grade reporting, and teacher of record). The SDPE relies on the course vendors to provide adequate online resources.

The course vendors provide registration services. All courses are free to all enrolled students, therefore financial aid services are not provided. Textbooks are included in the course vendor fees and distributed to districts by the Southwest Secondary Learning Center. The school mentors provide technical support. There is an NMVS technical support staff hired by the SWSLC.

### **How are students awarded credit?**

NMVS does not grant credit. Credit is granted and posted by the student's local high school. The awarding of AP credits is decided by school district agreements with the local community colleges or university. The SDPE is working on a program with the State Department of Higher Education to have automatic concurrent enrollment with State Universities.

### **What technologies are being used, and how are they supported?**

NMVS courses are delivered to public high schools over the Web by individual district agreements with ISPs. Administrative contacts at each school are responsible for providing technical support at this level. Southwest Secondary Learning Center has a technical support staff person available by telephone and email during business hours.

The primary point of access is the local public school, through which the NMVS student is enrolled. Schools and communities are demonstrating innovation with methods of ensuring access to the Internet for virtual students. Time slots for a virtual course are included in the daily student schedule structuring. Also, designated time in the school's computer lab (often a community lab as well) or in a separate community lab is reserved for enrolled students.

Both Apex Learning Inc. (<http://www.apexlearning.com/faq/default.asp>) and Intelligent Education Inc. (<http://www.intelligent.com/common/FAQs/QA.htm>) have minimum system requirements for their students.

### **How is the program funded?**

Monies were appropriated from the state general fund to create a virtual school. The budget for the start-up year (2000/01) was \$500,000. For the 2001/2002 school year,

\$800,000 from the state general fund was appropriated. Due to budget cuts and NMVS marketing itself as an opportunity site instead of a school, all funding for the program was cut in the 2002/2003 budget. NMVS does have a \$200,000 federal grant in addition to AP funding from the Federal AP Incentive Program, so it will continue to offer AP courses and pre-AP courses in 2002/2003. The fees that NMVS pays vendors are: \$385 per class per semester per student for IEI courses, and \$475 per class per semester per student for Apex courses.

In New Mexico, all state and federal money goes to the fiscal agent, the Southwest Secondary Learning Center. SWSLC manages the program for the State Department of Public Education. Courses are free to any student in the state and local districts are not required to do any pupil accounting for the NMVS. The SDPE intentionally removed the virtual school from under the State Department of Education as much as possible to avoid bureaucracy.

### **How is the program being assessed?**

While there is no formal evaluation process for the NMVS program as a whole, individual course data is submitted by local schools to a statewide database. Grades, scores, and evaluations from local high schools are reported by the school administration. Data for virtual courses is all submitted under the same course number. Reporting use is limited because individual virtual course data and virtual school data is not separated.

There is also a student experience survey on the SDE Web site:

<http://sde.state.nm.us/divisions/learningservices/schoolprogram/nmvs/student.html>.

Initially it was found that a major weakness of the program was the onsite mentoring. There is now a two-day summer retreat for school mentors. A professional development institute and an online course for mentors are being developed. The retention rates also caused concern in the start-up year. The role of the mentor was determined to be of importance in this statistic. This year the drop rate is only 7–10 percent. In the online AP course, 20 percent more students pass than in the onsite classes.

### **How is the program marketed?**

There is no formal marketing plan. During the first year of the program direct mail and presence at conferences were the most effective marketing methods. Teachers and principals support the program because there is no impact on their pupil accounting and they are able to offer more to their students at no cost. Relationships with parents continue to be the responsibility of the local schools. A state senator's child is enrolled in the NMVS and the school has found this to be one of its best avenues of publicity. Although there is a domain reserved for the NMVS (<http://www.nmvs.org>), it is not in use. The only access is through the SDPE's site.

## Alternative Models

The following are examples of virtual education initiatives whose missions and design models are different from the statewide models detailed above.

### **ALBERTA** **LearnAlberta.ca** <http://learnalberta.ca>

Alberta Learning believes that through leadership and collaboration with stakeholders, it will be able to build a globally recognized lifelong learning community that enables Albertans to be responsible, caring, creative, self-reliant and contributing members of a knowledge-based society. The Online Curriculum Repository (OCR) project was initiated in the summer of 2000 to support this mission. The goal of the OCR project is to support lifelong learning by providing students, parents, teachers and others in the K-12 community with access to learning resources via the LearnAlberta.ca portal. These learning resources will be in the form of multimedia learning objects that directly relate to the Alberta programs of studies and will be made accessible anywhere, anytime via linked databases and portals on the Internet.

The resources offered through the LearnAlberta.ca portal can be used to support teaching and learning in a variety of settings including: in face-to-face classrooms, in virtual or online classroom environments, for home-schooling, for distance learning, to support homework assignments and research projects. Teachers, students and parents can use these digital learning resources to supplement existing resources.

The LearnAlberta.ca portal offers digital resources to all levels of education. For K-12 Education it includes curriculum development, teacher certification, special needs students and funding guidelines; for Apprenticeship & Industry Training there are standards, counseling, funding and certificate guidelines; for Adult Learning there is information on literacy programs, ESL, degree & vocational programs, funding, and financial assistance. Alberta Learning will develop an Online Curriculum Repository Infrastructure of multimedia content in a variety of curriculum areas and grade levels. Initially, learning resources will be developed and licensed for the K-12 educational community and will be available to teachers, parents, and students.

**Course Demo:** <http://www.learnalberta.ca/GuidedTour.asp>

Alberta Learning is the provincial government department responsible for the delivery of education programs and services for people of all ages. It works with parents, educators, business, and industry to create opportunities for Albertans to learn throughout their lives <http://www.learning.gov.ab.ca/departement/about.asp> LearnAlberta.ca OCR (Online Curriculum Repository) is a division of Alberta Learning (<http://learnalberta.ca/Contacts.asp>).

LearnAlberta.ca provides access to an online reference center for teachers, parents and students (<http://www.learnalberta.ca/refcentre/login/Login.asp>), as well as a learning resource center where instructional materials can be ordered/purchased (<http://www.lrc.learning.gov.ab.ca/scripts/cgiip.exe/default.html>).

LearnAlberta.ca supports and is developing partnerships with Campus Alberta Repository of Educational Objects (CAREO), Netera Alliance Inc., Broadband Enabled Lifelong Learning (BELLE), Portal for Online Objects in Learning (POOL), and Learn Canada. An example of the potential developments of these partnerships is Video Streaming Alberta (ViStA).

Classrooms in Alberta K-12 schools are one step closer to receiving streamed digital video with the December 18, 2001 launch of the Video Streaming Alberta (ViStA) project. This research and development pilot project is being initiated by Netera Alliance and ACCESS-LTA in conjunction with Alberta Learning and builds upon the information gathered from previous vendor-specific and school jurisdiction-based pilot projects.

The purpose of ViStA is to define and deploy a prototype for the effective delivery of recently licensed and existing digital video to selected publicly funded school jurisdictions in Alberta. The information gathered during the development and deployment of this prototype will determine the short and long-term educational and technical requirements to support video streaming to schools and homes across Alberta. More globally, ViStA will inform future developments of the LearnAlberta.ca portal.

Its Learning Technologies Branch also provides information about various electronic products that will be repurposed for access online through the portal (<http://www.learnalberta.ca/ResourcesLTB.asp>).

LearnAlberta.ca is funded through the Ministry of Education. The estimated expenses for the Ministry for 2001/02 are CAD 4,806,974 for all program expenses. Support for Basic Learning only is estimated at CAD 3,573,388. This program has created a business plan, but it did not include a marketing strategy. The business plan for 2001/2002–2003/2004 can be found at (<http://learnalberta.ca/OverviewBackground.asp>).

### **AUSTRALIA Virtual Schooling Service**

<http://education.qld.gov.au/virtuelschool/html/index.htm>

The province of Queensland has some of the lowest population densities in Australia. The Department of Education in Queensland established a Virtual Schooling Service (VSS) Pilot Project in 2000 with the goal of creating a method to deliver a range of courses not normally available at more remote schools.

The Virtual Schooling Service uses a different model from that of most virtual high schools found in the United States. Students work on the virtual courses while at school. This is not an “anywhere-anytime” model. Students gather in a computer classroom equipped with audio and data conferencing technology at a scheduled time during the school day. All participants are able to hear and contribute to discussions using a conferencing telephone. The data conference enables a virtual whiteboard on a computer screen where participants and teachers can draw, annotate, and present slide shows and copy and paste from other applications. Application sharing is also available that allows the teacher to present information or procedures. Control of the application can also be given to the students. Files can also be transferred to participants during the course of a lesson. There does not appear to be any two-way video involved.

The Virtual Schooling Service is also developing a web-based repository of curriculum resources which students can access during independent work times called The Study Room. The Study Room can store digital media of many forms (documents, digital video, audio, graphics, etc). This content is structured using a scheduler that presents the content as weeks, modules, or units. Within the Study Room, students are able to join discussion groups, annotate resources, and send assignments and project work to teachers. Exams/tests can be scheduled and an online grading facility is available. Students also use their school email accounts to maintain contact with their teachers and to submit course work. Project IT support is done at the school level; however, the schools do have access to the VSS Project Team at AccessEd, the Queensland Department of Education technology unit, to provide support for hardware/software selection, computer configuration, and with networking issues.

The program is aimed at providing courses to secondary students enrolled in state schools. A limited number of more mature students were selected to participate based on their ability to work independently as well as in a group. It is not known how Queensland public school teachers were selected to participate in the program. In 2002 there are eight courses. From the limited information available it was difficult to determine the funding and marketing model and the plan for scaling up this pilot project.

## **NEW ZEALAND**

### **Te Kete Ipurangi/The Online Learning Center**

<http://www.tki.org.nz/e/tki/>

As an initiative of the New Zealand Ministry of Education, Te Kete Ipurangi (TKI), or The Online Learning Centre, is a bilingual (English and Maori) portal and web community that provides educational material for teachers, school managers, and the education community.

Communities within the site provide resources in a comprehensive list of subjects: governance, health, science, math, helpdesk, language, special education, assessment, integration, etc. Another resource in TKI is Hot Topics, collections of web sites,

databases and curriculum activities on topics specifically related to New Zealand and current events.

TKI's vision is to use information and communications technology to provide New Zealand schools with a cost-effective electronic platform to communicate curriculum and administrative materials, enhance teaching and learning, raise student achievement and advance professional development for school management and teaching staff.

The Learning Centre Trust is a non-profit organization that develops and manages TKI for the Ministry of Education. A team made up of a site manager, cyber librarian, professional managers, online editors, information coordinators, web developers, designers, and programmers has complete responsibility for the portal and is funded by the Ministry of Education.

New Zealand is also experimenting with Think.com, a free, Web-based environment for primary and secondary students and teachers developed by a division of Oracle Corporation, Oracle Service Industries. The vision of Think.com is that it will be used to facilitate the adoption of technology by schools. Think.com provides an email address and secure password access to an online learning environment that includes text, video, images, and sound. Think.com provides a platform where schools can integrate lessons from any curricular area, including writing assignments, team collaboration, homework assistance, after school programs, etc. Another resource is the Teacher Zone, a community where teachers share ideas and offer guidance to each other on how to use this educational tool. The success of Think.com in New Zealand will depend on the ability of students to access computers and the Internet.

## **HAWAII**

### **Hawaii E-Charter**

<http://echarter.k12.hi.us/index.html>

Hawaii E-Charter School is a fulltime tuition-free virtual campus offering Hawaii high-school students a complete range of courses toward the completion of a high-school diploma. Hawaii E-Charter combines Internet-based instruction, multimedia technologies, television, and real-time chats in creating standards-based, student-centered learning.

On May 17, 2001, the Hawaii Board of Education unanimously granted Hawaii E-Charter charter-school status. The school began enrolling students Fall term 2001 and currently has 55 full-time students. They expect to award diplomas to seven students in June 2002. E-Charter hopes to eventually graduate around 200 high school students per year. The school currently offers 38 core and elective courses taught by Hawaii-certified instructors. Teachers are provided with training on how to design courses and teach effectively in the online environment.

All students are required to provide and maintain their own computers and reliable Internet connections. Students log into courses via a software delivery platform provided by WebCT.com.

E-Charter also receives approximately \$4000 per student enrolled from the Hawaii Department of Education. The school's funding is augmented by grant monies.

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