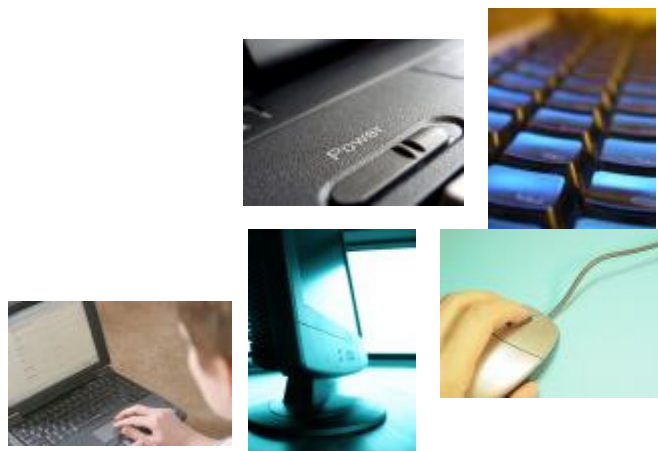


Report to the  
Michigan Department of Education  
on the Development and Growth of the  
Michigan Virtual High School  
1999-2005



April 13, 2005

**Report to the Michigan Department of Education on  
the Development and Growth of the  
Michigan Virtual High School  
1999-2005**

**Michigan Virtual University  
3101 Technology Parkway, Suite G  
Lansing, MI 49810**

**April 2005**

**[www.mivu.org](http://www.mivu.org)**

**Michigan Virtual University  
Mission Statement**

*Provide leadership in Michigan to increase student and educator access to diverse technology-based educational tools and resources that promote 21<sup>st</sup> Century learning skill for the general benefit of the K-12 community.*

**Michigan Virtual University  
Vision Statement**

*Michigan Virtual University, working in partnership with Michigan schools, is committed to providing cost-effective technology-based solutions that strengthen teaching and learning.*

*Michigan Virtual University is a private nonprofit 501(c)(3) Michigan corporation governed by a Board of Directors representing business, education leaders and state government. The Michigan Virtual High School is a division of Michigan Virtual University.*

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**Michigan Virtual University**  
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## **Introduction**

This report has been prepared at the request of the Michigan Department of Education (MDE) and it provides background information on the development and growth of the Michigan Virtual High School (MVHS). It also discusses several new challenges and priorities for the MVHS. Public Act 230 of 2000 authorized implementation of the MVHS. Since its inception, the MVHS has served more than 20,000 students with an online semester-length course and more than 125,000 students with an online MEAP, ACT, SAT or PSAT review tool. During 2003-04, MVHS provided online courses to almost 7,000 students in nearly 400 high schools in Michigan. The reorganized Michigan Virtual University (MVU) operates the MVHS, the nation's second largest virtual high school. MVU also operates an online career development service for schools and a new Web-based teacher professional development system for educators in partnership with the MDE.

## **A Catalyst for Change**

As a catalyst for change, MVU has successfully leveraged the power of the Internet to accelerate fundamental change in public education to promote 21<sup>st</sup> Century learning skills for students and educators. The MVHS is a collaborative effort involving state policy leaders, K-12 schools, representatives of key statewide professional education organizations, and individuals from higher education, business, industry, labor and the nonprofit sectors. In 2001 a broadly representative 25 member Advisory Council was established to provide guidance on the operation of the MVHS (see Appendix A). The MVHS does not grant course credit or award diplomas independently, but works in partnership with local and intermediate school districts which award credit or diplomas. The current catalog of MVHS products and services includes online courses, classroom resources, and professional development programs.

Consistent with Public Act 230 of 2000, the goals of the MVHS are:

- Expand curricular offerings for high schools across the state;
- Provide students with opportunities to develop new skills and competencies;
- Provide opportunities for teachers to learn new skills and strategies;
- Serve as a model for the use of interactive multimedia tools;
- Accelerate the state's ability to respond to current and emerging educational demands;
- Offer courses and services to both traditional and nontraditional audiences; and
- Offer college level equivalent courses and at-risk programs and services.

## Role and Mission of MVHS

It is the vision of MVU and MVHS to provide leadership in Michigan to increase student and educator access to diverse technology-based educational tools and resources that promote 21<sup>st</sup> Century learning skills for the general benefit of the K-12 community. The mission of the organization, working in partnership with Michigan schools, is the commitment to provide cost-effective technology-based solutions that strengthen teaching and learning.

In pursuit of this vision and mission, the MVHS has positioned itself since 2000 as a supplemental resource for rural, urban and suburban high schools throughout Michigan. Based on input received from educators and school administrators the MVHS has also explored opportunities to serve students in grades 6-8 with age-appropriate distributed learning programs and services. While an interest in serving middle school students continues, over the past five years the MVHS has specifically targeted the following groups of students for online courses and resources:

- All public and private students in grades 9-12;
- Students who are being schooled at home;
- Adjudicated youth enrolled in institutional facility programs;
- Expelled and homebound students receiving supervised instructional support;
- Students from special populations including those with learning disabilities; and
- Gifted and talented students.

Figure 1 provides a summary of the online courses, student enrollments, school buildings and districts served, and online instructors trained since the MVHS was launched. Since 1999-00, more than 450 urban, suburban or rural school districts have used one or more of the MVHS courses and/or online tools.

**Figure 1 Summary of MVHS Courses and Online Enrollments**

<b>MVHS Courses and Online Enrollments: 1999-2005</b>							
<b>Number of</b>	<b>99-00</b>	<b>00-01</b>	<b>01-02</b>	<b>02-03</b>	<b>03-04</b>	<b>04-05<sup>b</sup></b>	<b>Total</b>
<b>Schools Served<sup>a</sup></b>	18	101	194	281	385	345	711 <sup>c</sup>
<b>Districts Served</b>	18	95	179	221	242	263	453 <sup>c</sup>
<b>Enrollments</b>	100	676	2303	5299	6805	5277	20,460
<b>Unique Course Offerings</b>	6	17	27	128	142	141	167 <sup>c</sup>
<b>Test Preparation Users</b>	0	7657	9513	21,337	37,513	49,541	125,561
<b>Online Instructors Enrolled</b>	0	81	87	87	100	21	376

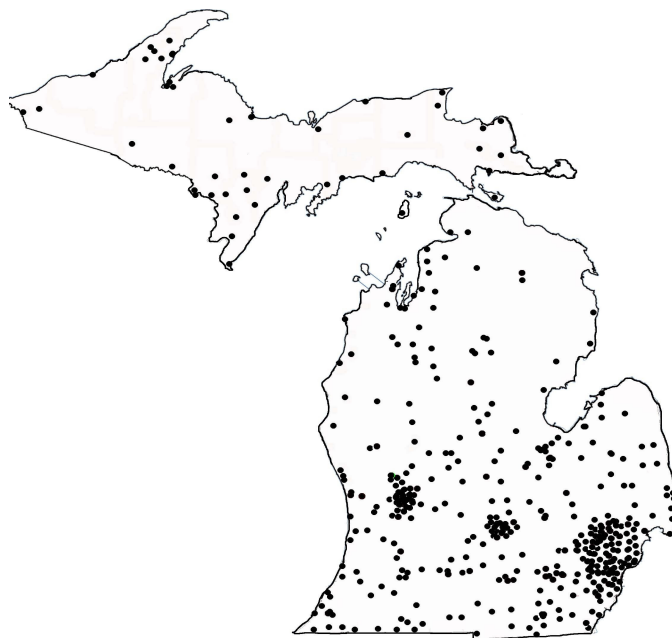
a.) represents public schools, nonpublic schools, home schools and public school academies inside and outside of Michigan

b.) does not include Summer School enrollment due to the date of this report

c.) unduplicated counts

Figure 2 provides a map of the state, indicating the approximate locations of the high schools that were utilizing MVHS courses and services during 2003-04. As this map indicates, the MVHS serves Michigan's urban core areas as well as its rural sparsely populated regions. Appendix B provides a listing of the schools served by the MVHS from 1999 – 2005.

**Figure 2 Map of Participating MVHS School Buildings (2003-04)**



Each participating school provides an onsite mentor who serves as a coach or facilitator for online students. In addition to providing online courses for students enrolled in public and nonpublic schools, the MVHS also provides courses for Michigan's home schooled students. Since 2002-03 the MVHS has served over 134 different home schools. In the home school setting, the parent or guardian serves as the onsite mentor for the MVHS student.

During the 2004-05 school year the MVHS entered into a pilot program as an online course provider to the United Star Distance Learning Consortium (USDLC), a multi-state nonprofit educational consortium. The USDLC has been a distance learning provider since 1985 and currently offers courses in computer science, language arts, mathematics, science, social studies, workforce and life skills, and world languages to its member schools.

As the MVHS has grown, the organization has been approached by international schools and education leaders from other countries to determine interest in providing online courses and products to foreign students or to develop partnerships. The priority for MVU and MVHS is to first serve Michigan students and educators. That being said, the MVHS is interested in developing online collaborative relationships with international schools and educators from other countries that will directly benefit Michigan students and schools. Developing cooperative foreign language programs, teacher-to-teacher links, or student-to-student projects that will better prepare Michigan students to participate in the global economy are possibilities for the MVHS in the future.



## Current MVHS Courses and Instructional Resources

The MVHS provides a variety of online course formats and services for Michigan's K-12 community. Below is a brief description of the current MVHS online services. Appendix C provides a list of current MVHS courses.

1. *MVHS Advanced Placement Courses* – The MVHS Advanced Placement courses offer college-level instruction to high achieving students. These courses include tutorials, multimedia simulations and online discussions. An AP Exam Review is included with all AP courses.
2. *MVHS Flex 90 Courses* – The MVHS Flex 90 courses are student-paced courses that offer learners a fast, flexible way to pick up an elective or required class and even recover credit. Instructors in these courses set pacing guidelines for completing assignments, but due dates are flexible. Instructors encourage students, monitor their progress, grade coursework and are available to students to answer questions and provide guidance.
3. *MVHS Semester Paced Courses* – The MVHS Semester Paced courses follow the traditional semester schedule. Teachers in these courses set the pace and establish due dates for assignments, quizzes and tests. Students have the opportunity to participate in collaborative group projects.
4. *MVHS Student Direct Instruction* – Student Direct instruction offers a low cost option for schools seeking to provide their students with a high quality experience combined with ease in scheduling and a self-paced approach. The interactive instruction is provided completely by the course software that also supplies students with tools such as calculators and dictionaries. Schools enrolling students in this online course format provide instructional support.
5. *MVHS Summer School* – The MVHS Summer School is designed to fill an important need for Michigan schools by offering a cost-effective alternative for students wishing to extend and enrich their learning, or to make up a credit. The flexible enrollment option allows schools to enroll students at various times in the summer.
6. *MVHS Test Tools* – The MVHS test preparation tools are a combined set of online resources that help students prepare for the Michigan Educational Assessment Program (MEAP) tests and the PSAT, SAT and ACT college entrance exams commonly taken by college bound students.
7. *Online Instructor Training* – The MVHS began to train Michigan teachers in 2001 as a way to support the implementation and integration of the virtual high school concept into Michigan's existing schools. All certified teachers in Michigan are eligible to participate in the MVHS Online Instructor Training Program, with a primary focus initially on the secondary level. To date, the MVHS has trained nearly 400 K-12 educators.

## **Overview of MVHS Revenue and Expenditures**

For the first two years of operation the MVHS provided all online products and services to Michigan's K-12 community at no cost. This included Advanced Placement (AP) courses, online AP Teacher Class Tools and AP Exam Review materials. The decision to fully subsidize and not charge Michigan schools for MVHS courses and online services was made with the intent of creating exposure to "any time, anyplace learning," and to stimulate interest and use of high quality e-learning materials. The catalog of MVHS online products and services continued to expand with the addition of Flex 90 Courses, Semester Paced Courses, and Test Tools.

For the 2002-03 school year, the MVHS continued to offer a highly subsidized subscription program but introduced a tiered pricing model for participating schools, based on the district's total student enrollment. For example, larger school districts (Class A and B) paid a higher MVHS subscription fee than smaller districts (Class C and D). This enrollment based subscription program for online courses and services was introduced as a strategy to help offset the dependency for ongoing state funding.

The subscription model was continued during 2003-04 with some adjustments made to the number of "seats" available per district. For the 2004-05 school year, reductions in state funding for the MVHS made it necessary to reduce the amount of the subsidy provided by MVHS to member schools. A new "per enrollment" pricing model has been implemented with unit pricing developed for MVHS courses and products. Typically the MVHS charges participating schools a fee of \$250 to \$350 per online course. The revenue generated from these fees has not covered the total cost of delivering an online course. Ongoing state and federal appropriations will be required if Michigan is to maintain a national leadership position in providing high quality online instructional services for Michigan students. It is unlikely that the MVHS can successfully operate exclusively with revenue generated from the sale of online courses and services to schools in Michigan. A blended funding approach that relies on sales revenue and grant support appears to be the most practical and effective long-term strategy for sustainability.

Figure 3 provides a summary of the annual State School Aid Act appropriations received by MVU from 2001-05 to support the operation of the MVHS. State funding for the MVHS first became available in October 2000. Figure 3 includes a summary of the expenses incurred in the day-to-day administration and operation of the MVHS, including instructional support, product development and course design, course licensing fees and infrastructure maintenance and security. An analysis of MVHS expenditures and enrollments reveals that MVHS has expended an average of \$154 for every student served with an online course or instructional service. The MVHS is committed to maintaining a cost-effective state supported online learning environment for Michigan's K-12 community.

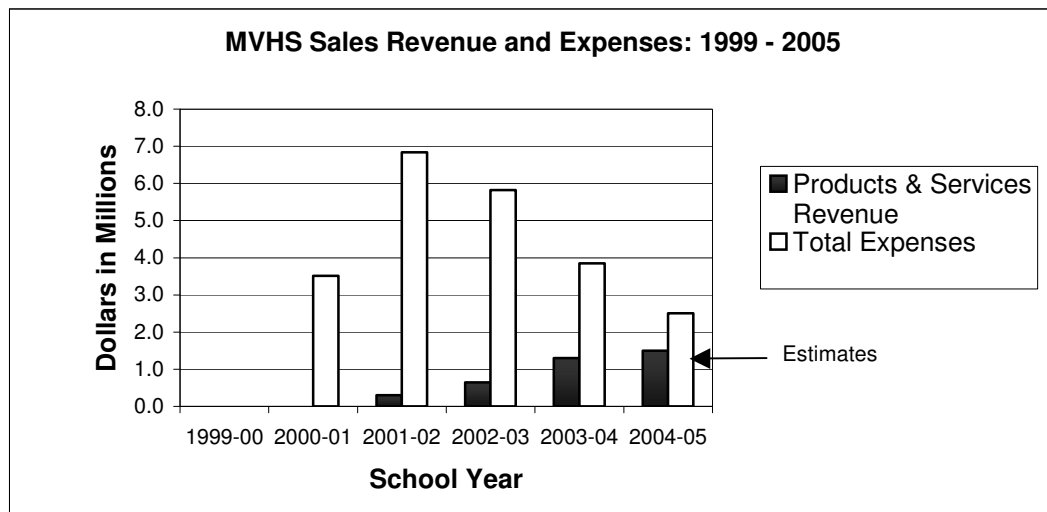
**Figure 3 MVHS State School Aid Appropriations – FY 2000-05**

State School Aid Act Appropriations: 2000 – 2005					
	2000-01	2001-02	2002-03	2003-04	2004-05 Estimated
<b>Grant Revenue</b>	\$ 15,000,000	\$ 2,091,970 <sup>a</sup>	\$ 1,754,716 <sup>a</sup>	\$ 741,500	\$ 750,000
<b>Expenses</b>					
Salaries & Benefits	450,777	965,110	1,112,632	862,656	625,465
Administrative Services	717,509	1,744,538	1,912,344	850,159	803,058
Professional Development Services	139,804	131,549	81,120	45,666	46,970
Product Development	456,445	252,147	150,950	81,680	75,000
Course & Content Licensing	1,264,600	3,166,567	1,124,436	1,088,472	556,553
Instructors & Materials	115,910	218,596	659,395	376,063	305,100
Technology Infrastructure	242,314	258,067	776,882	545,071	95,663
Web Site Development	129,046	101,274	1,000	3,500	-
<b>Total Expenses</b>	<b>\$ 3,516,404</b>	<b>\$ 6,837,849</b>	<b>\$ 5,818,759</b>	<b>\$ 3,853,268</b>	<b>\$ 2,507,809</b>

a.) These amounts include funds from a federal Advanced Placement Incentive Program grant that provided access to online AP courses for economically disadvantaged students (2001-02, \$ 591,970 and 2002-03, \$ 310,000).

Figure 4 provides a summary of the MVHS expenditures and sales revenue generated from MVHS products and services for the period 1999-2005. In 2003-04, MVHS generated approximately \$1.3 million in products, sales and services to schools. It is estimated that sales revenue for the 2004-05 school year will be approximately \$1.5 million. Revenue generated from MVHS products and service sales has helped to reduce MVU’s dependency on state and federal funding. MVU is not aware of any statewide virtual learning schools that successfully operate without significant supplemental support from state and/or federal sources.

**Figure 4 MVHS Revenue and Expenditures – FY 1999-2005**



## Cost Factors of E-Learning

During 2003-04, MVHS served nearly 7,000 students with online semester-length courses. The capacity of MVHS to serve students and educators is tied to four major cost factors:

- **Technical Infrastructure** – A highly reliable and cost effective infrastructure is essential to running a statewide education project that delivers services via the Web. MVU owns and hosts its own enterprise servers in a commercial data center in Lansing, with physical and data security, high availability, fault tolerance, and unlimited bandwidth capacity. The data center has triple Internet backbone providers (three independent routes to the Internet), and receives its power from two different electrical grids, as well as having emergency battery backup and diesel generators in cases of power grid disruption or disaster. MVU's IT infrastructure is architected to allow capacity building without disrupting services to existing students; however, some upgrades to the MVHS servers are necessary to enhance or replace servers that are now four years old and have reached the end of their product life cycle. MVU possesses significant technical capacity and capabilities and is well poised to continue to provide reliable and always available online courses and services to our students and schools.
- **Online Course Content** – Content for MVHS classes is critical and serves as the equivalent to a textbook for a traditional face-to-face course. MVHS has developed several of its own online courses and some of the content is licensed for a fee through other public and private sources. The creation and ownership of additional online courses would allow MVU to reduce its dependency on and costs to license courseware from others, which can be as high as \$50 to \$100 per course.
- **Online Instructors** – Highly qualified instructors teach the online courses for MVHS. Currently, nearly 400 certified Michigan educators have been trained to teach MVHS courses. At any one time, MVU usually employs approximately 60 instructors to teach one or more online courses. This is an area in which MVU has excess capacity. MVU pays its online instructors a fee for teaching an online course and the amount of compensation is based on the number of students enrolled and course completion rates. The average teacher cost per online student enrollment is approximately \$100.
- **General Administration** – The MVU incurs costs in managing operational activities of the organization, including leadership, general management, accounting, finance, office space, marketing, sales, instructional support, and help desk services. MVU has reduced its personnel count from 60 FTEs to less than 25, and reduced its total annual salary by 59 percent.

## Funding Models for E-learning

The growth of e-learning at the K-12 level is very promising. However, no state, region or local school district in the U.S. is currently assisting all or a large percentage of their students to become successful online learners as a targeted workforce development strategy. Typically, schools offering e-learning services provide instructional support for a limited number of

students. It is anticipated that this trend will change during the next three to five years and it will become common for Michigan high schools to require students to take at least one online course during their high school career as a strategy to develop practical 21<sup>st</sup> Century learning skills.

Of the estimated 15 state supported virtual schools in the U.S., it appears that only two have been able to scale e-learning programs to serve thousands of students in a single year. Michigan and Florida both operate large statewide virtual high schools but use different funding models. The Florida Virtual High School (FVHS) is eligible to capture a portion of the student foundation grant for every student served with an online course. The MVHS charges participating schools a fee of \$250 to \$350 per online course and also receives an annual appropriation from the state for general operations. In Michigan, local school personnel make all decisions on specific MVHS student enrollments, and in Florida, the students and parents often make decisions on enrollments. The MVHS has worked very hard to develop partnerships with local high schools that complement and support individual student needs while avoiding competition with the K-12 community.

### **Productivity Improvement Through E-Learning**

The Center on Education Policy notes in a recent report that “virtual schools are calling into question longstanding ideas about the definition of a public school, the social goals of public education, and local control of public education” (*Preserving Principles of Public Education in an Online World*, Center on Education Policy, Washington, DC, November 2002). Michigan high schools are working hard to respond to state and national policies that require greater academic rigor without dramatic increases in funding. The MVHS is uniquely positioned to assist Michigan’s educators in cost-effective ways by supplementing the efforts of local educators. For example, when the MVHS began in 2000, nearly 45 percent of all Michigan high schools did not offer a single Advanced Placement (AP) course. Today, almost 4,000 Michigan high school students have taken an online AP course and performed as well as students who took traditional face-to-face AP courses on the College Board exams. The advantage of this strategy is that it allows all Michigan high schools to help students capable of AP study without diverting resources that are required elsewhere.

As greater numbers of students participate in online courses and services offered by MVHS and other providers, new value propositions and economies of scale in public education are being tested as alternative delivery options are introduced into the instructional process. The MVHS enables Michigan’s high schools to leverage new educational options while preserving proven methods and school autonomy. The MVHS can play a key role in an emerging statewide strategy to create opportunities for productive innovation without sacrificing core functions in the schools. This is an important part of Michigan’s efforts to cope with budget problems while meeting changing expectations for schools, and providing comprehensive instructional programs for students.

### **New Policy Challenges and Expectations**

Declining enrollment in rural sparsely populated high schools has forced the elimination of several low enrollment classes or the reassignment of teachers from low demand courses.

School districts are now seeking MVHS online courses and services that address unique local needs such as classes for individual high achieving students, targeted math, science and technology curriculum support, and courses for at-risk students and students with special needs. The federal No Child Left Behind (NCLB) legislation requires all schools by 2006 to assure that 100 percent of Michigan teachers are “highly qualified.” Schools without certified and highly qualified teachers in core curriculum content areas may be sanctioned by the MDE. The MVHS is committed to working with the MDE and Michigan’s educators to provide cost-effective technology based strategies, including online supplemental services, to enhance teaching and learning in Michigan’s schools. Expanding online educational opportunities for Michigan’s K-12 students, teachers and administrators continues to be a priority of MVHS.

MVU’s leaders reaffirmed their commitment to help Michigan’s K-12 community meet the demand for innovative educational solutions in a February 2003 presentation to the State Board of Education (SBE). The MDE and MVHS are currently involved in a partnership to evaluate an innovative online writing assessment scoring tool developed by Education Testing Service (ETS). A pilot project will be conducted in spring 2005 involving several Michigan school districts to determine the utility of this computerized writing assessment system.

In 2004, Governor Granholm created the Commission on Higher Education and Economic Growth, chaired by Lieutenant Governor John D. Cherry. This broadly representative Commission was charged with the task of developing a plan to double the number of Michigan residents who obtain college degrees and other valuable credentials. In early December, the Commission issued its report that contained 19 core recommendations. Two key recommendations in the report called for changes related to Michigan’s high schools that are particularly relevant to the work of MVU and MVHS.

- *Set High Expectations for High School Students Through Rigorous Standards and Curriculum*

*“All students today must be equipped with rigorous academic preparation and high performance job skills. The long tradition of sorting students into ‘college bound’ versus ‘non-college bound’ tracks is no longer relevant.”*

*“The State Board of Education should develop by the 2006-2007 school year rigorous high school standards that reflect the competencies necessary for postsecondary success and readiness for the world of work, and that school districts require all students to take courses that will allow them to achieve these new standards and, by extension, postsecondary success.”*

- *Implement New Strategies for High School Success*

*“Before the decade is over, Michigan’s government, business, education, and civic leadership must put in place a network of newly fashioned secondary schools and learning environments. This effort must be on the scale sufficient to serve every school community where students are dropping out in large numbers or are not achieving Michigan’s high expectations for learning. Refashioned high*

*school environments must be formed around research-based models that engage and motivate students.”*

On February 10, 2005, Governor Granholm presented her Executive Budget recommendations to the Michigan Legislature for the 2006 Fiscal Year. In addition to calling for continued financial support for MVU, the Governor recommended the following amendment to the State School Aid Act:

*“...The Michigan Virtual High School shall develop options for providing the Michigan scholar curriculum identified in the Lieutenant Governor’s Commission on Higher Education and Economic Growth report issued in December 2004.”*

At the national level, in January 2005, the U.S. Department of Education published the new National Education Technology Plan that includes seven major recommendations. Recommendation #4 is to *Support E-Learning and Virtual Schools*. Strategies under this core recommendation include the following items:

- *Provide every student access to e-learning.*
- *Enable every teacher to participate in e-learning training.*
- *Encourage the use of e-learning options to meet No Child Left Behind requirements for highly qualified teachers, supplemental services and parental choice.*
- *Explore creative ways to fund e-learning opportunities.*
- *Develop quality measures and accreditation standards for e-learning that mirror those required for course credit.*

According to the National Education Technology Plan, *“Educators must embrace e-learning solutions if they want to ensure that every student has a quality educational experience. But before e-learning can achieve widespread acceptance in public schools, educators and policy makers must expand their notion of education to include online courses and digital materials used to enhance classroom instruction.”* The plan also notes that *“districts that truly suffer from lack of capacity and supply may find that virtual schools are a viable solution for meeting the choice requirements of No Child Left Behind (NCLB).”*

These policy initiatives highlight the strong connection between the current work of MVU and MVHS, and the desire of policy leaders at all levels to exploit the power of the Internet to improve teaching and learning, and expand instructional opportunities for all students.

## **Market Analysis**

Currently the MVHS sells online services to a large percentage of Michigan’s public and private high schools. Since the launch of the MVHS, interest in online learning in K-12 schools has grown significantly. According to the U.S. Department of Education, *“over the past five years there has been an explosive growth in online and multimedia instruction (e-learning) and virtual schools”* (*Toward a New Golden Age in American Education, National Education Technology Plan*, U.S. Department of Education, Washington DC, 2004).

At least 15 states now provide some form of state supported virtual schooling to supplement regular classes or provide for special needs. These states include Florida, Illinois, Kentucky, Michigan, Colorado, West Virginia, Indiana, Wisconsin, Alaska, Maryland, Massachusetts, California, Hawaii, Arkansas and Georgia. In addition, several large urban and regional school districts have established virtual schools. A September 2003 report published by Boston-based Eduventures notes that nationwide “nearly 300,000 students participated in a virtual learning program in the 2002-03 school year; this figure includes students in fully online school environments and students in brick-and-mortar educational institutions who have enrolled in online courses to supplement their traditional classroom-based courses.” The report estimates that approximately 15 percent - or 3,300 - of U.S. public high schools currently offer at least one online course (*What Can Virtual Learning Do for Your School*, Eduventures, Boston, September 2003).

An informal analysis of the MVHS target market has identified the following barriers or competitive pressures related to achieving increased school customers.

- Low-cost correspondence courses such as those available from the American School;
- Online courses available from E2020 Inc., Aventa Learning, Keystone National High School, Class.com and other for-profit companies;
- Online courses available from Indiana University, Brigham Young University and a limited number of other colleges and universities that target the K-12 market;
- Customized solutions currently available to students such as alternative high schools;
- Concern over the potential loss of teaching positions in school districts due to online instruction;
- Self-paced online instructional solutions that are “teacher-less” such as Plato and NovaNet;
- School personnel resistance to use online instructional solutions from any provider;
- District budget constraints and perceived high prices for MVHS courses; and
- Concerns that the MVHS is not accredited.

The MVHS has enjoyed success, in large part, because of the perceived value propositions that it offers K-12 customers. These include the following:

- Reputation for employing qualified and certified Michigan educators as online MVHS instructors;
- Implied endorsement from the State of Michigan as a quality source for e-learning solutions;
- Excellent technical helpdesk support available for students and educators available 7x24;
- Demonstrated staying power with continuous operational improvements each year;
- Flexible starting time of the online courses;
- Stable and secure technology hosting environment;
- High quality online curriculum content;
- Elimination of traditional textbook purchases by schools; and
- Statewide, regionally deployed ambassadors who provide support and assistance to schools.



## **Evaluation and Accreditation**

One of the priorities for the MVHS during 2004-05 is to become formally accredited by the leading national and regional K-12 education accreditation organization. The MVHS has begun the process to seek accreditation from the Commission on International and Trans-Regional Accreditation (CITA). CITA is affiliated with the North Central Association of Colleges and Schools and is the internationally recognized group that coordinates the review process for distance education schools. Becoming an accredited school is a multi-year process and involves a comprehensive program evaluation and site visitations from a CITA review panel. Earning CITA accreditation will assist the MVHS in responding to customer questions about course quality, program expectations and outcomes, alignment with standards, institutional capacity and business practices.

At the national level, educational researchers continue to evaluate the differences between traditional face-to-face instruction and online instruction. Research into the impact of online instruction on the academic achievement of students, and the levels of student engagement will provide valuable information for both educators and policy makers. Over the past three to five years, most statewide virtual high schools in the U.S. have spent considerable time and effort in developing new online delivery strategies. As a founding member of the North American Council of Online Learning (NACOL), MVHS is working with the K-12 virtual learning community to develop effective evaluation strategies that generate data that can be used to improve teaching and learning. The MVHS is actively seeking additional grant funds to expand its evaluation activities.

In November 2004, the North Central Regional Educational Laboratory awarded MVU almost \$60,000 to study the effectiveness of MVHS online courses. Using data from MVHS courses completed through June 2005, researchers will analyze variation in student achievement, attrition, and attitudes that contribute to learning with today's technology. Results from the study will be valuable for use in continuous quality improvement efforts and in predicting student success, as well as for helping the school community decide the extent to which online learning should be integrated into their curricula. Dr. Patrick Dickson, Professor of Educational Psychology in the College of Education at Michigan State University, is leading this research project.

## **Examples of Innovative MVHS Partnerships**

The MVHS has been working collaboratively with several local and intermediate school districts (ISDs) to integrate online learning into the traditional curriculum. One example of an innovative MVHS partnership is with the Dearborn Public Schools, which in 2002 launched the Dearborn Virtual Academy (DVA) within Fordson High School as an alternative education program. This "high school within a high school" demonstrates how online learning and teaching can be successfully integrated into an alternative educational pathway for students. To date, 160 Dearborn students have enrolled in the DVA. The DVA program has six distinct components:

1. Students take two online courses;
2. Students take two electives at Fordson High School or their 'base' school;
3. Students take two high school completion courses;

4. Students must be involved in some form of community service;
5. Approved work experience; and
6. Independent Study (after successful completion of a semester of work).

Another example of a MVHS strategic partnership involves the seven ISDs in the Upper Peninsula. Through a formal agreement signed in 2004, the Upper Peninsula ISD Consortia members are receiving a cost effective volume pricing opportunity for their constituent schools, and enhanced communication, technical assistance and support. This arrangement allows high schools in the region to acquire online courses and services that meet the educational needs of students in rural sparsely populated school districts.

A third partnership example involves Schoolcraft High School, located in southwest Michigan. This small Class C, grade 9-12 high school enrolls 388 students and was challenged to meet the needs of both high achieving students and those with remedial needs. The Schoolcraft Community Schools were facing financial difficulties and the high school had no program for students who were falling behind. There was also concern that several students might be in danger of not graduating due to the limited number of elective courses offered. The Schoolcraft High School partnership with the MVHS was initially developed to support seniors who were behind in required credits. The partnership has expanded to the point where the school has adopted a course schedule that offers five class periods per day for students to take MVHS courses. In 2003-04 a total of 66 students enrolled in MVHS courses (47 Flex 90, six AP, and 13 semester paced courses). In 2004-05, this number increased to 95 students (66 Flex 90, 11 AP, and 18 semester paced courses). The advantages of this partnership with MVHS to the students and community include:

- More math, English and science classes than the school could offer on its own;
- Greater variety of courses than a Class C school could typically offer;
- The number of students taking challenging AP courses has doubled;
- The ability to offer a more complete, varied course selection has positively changed the public perception of the school; and
- Greater numbers of students have been exposed to online learning.

### **MVU Strategic Plan**

As part of the Strategic Plan approved by the MVU Board of Directors on March 17, 2005, MVU will build on its strong bi-partisan support in the Michigan Legislature, and take steps to actively improve communications with key K-12 customers and stakeholders. These stakeholders include local school districts and ISDs, higher education institutions, the MDE and the Governor's Office.

MVU's new Strategic Plan also calls for adding representation on the MVU Board of Directors from the following K-12 areas:

- A high school principal or statewide professional association designee
- Michigan's Superintendent of Public Instruction (added March 17, 2005)
- A local school district superintendent

- An intermediate school district superintendent
- A nonpublic school representative or statewide professional association designee

In addition, the Strategic Plan includes a core objective of identifying existing K-12 regional alliances and collaborative working arrangements in Michigan, and exploring how MVU can join or support these alliances as a strategy to create better connections with current and prospective customers. These regional alliances could include local and intermediate school districts, community colleges, universities, human services organizations and other nonprofit groups.

## **Conclusions**

Since its inception, MVU has served as a change-agent organization. MVU was expected to be a technology innovator that created tension in the “system.” In pursuing this catalyst role and serving as an advocate for e-learning, MVU tended to act independently and was often slow to engage groups in meaningful dialogue, especially with key stakeholders in the education community.

MVU has made significant progress in the last few months to recalibrate its strategic direction and to focus all available technical, financial and human resources to serve Michigan’s K-12 community with quality online products. Significant efforts have been made to reach out to Michigan’s education community at all levels to seek input and feedback regarding the next chapter in MVU’s history. Reactions from the field have been very positive and dozens of opinion leaders and stakeholders have shared valuable ideas and recommendations on how to move forward.

As discussed in this report several current state and federal policy initiatives reflect the strong connection between the current work of MVU and MVHS, and the desire of policy leaders at all levels to exploit the power of the Internet to improve teaching and learning, and expand instructional opportunities for all students. As communities, regions and states make strategic investments in human capital greater attention needs to be focused on policies that produce larger numbers of online learners. Businesses of all sizes are becoming more dependent on a global workforce that uses the Internet everyday to plan, manage and conduct basic business functions. More than ever before, today’s high school students need 21<sup>st</sup> Century learning skills to be competitive in a global, information-based economy. Creating policies that expand the use of Internet-based instructional services can help make Michigan more competitive as a national leader in building a talented workforce. Appendix D provides a chronology of the development and growth of the MVHS from 1999 to 2005. The MVU and MVHS are poised to build on the experiences and successes described in this report in order to expand e-learning opportunities at the K-12 level.

# **Appendices**

## Appendix A

### List of MVHS Advisory Council Members

<b>Name</b>	<b>Title</b>	<b>Organization</b>
Dr. Lyn Allen	Virtual Learning Consultant	Oakland Schools
Mr. David Bouck	Principal	Portland High School
Ms. Heather Bruning	Abilene Program Manager	Internet2
Mr. Terry Campbell	Principal, Adult & Community Education	Detroit Public Schools
Ms. Lois Doniver	Secretary/Treasurer	MFTSRP
Mr. Ron Faulds	Education Consultant	MI Department of Education
Mr. Lawrence Godwin	Superintendent	Menominee ISD
Ms. Kathy Hayes	Co-Director, Leadership Development	MASB
Mr. Carl Hoffman	Technology Coordinator	Monroe Middle School
Dr. Michelle Johnston	Dean, College of Education & Human Services	Ferris State University
Mr. Samuel E. LoPresto	Associate Director	MAISA
Mr. Jay Miller	High School Counselor	Ovid-Elsie High School
Ms. Olga Moir	Executive Director	MASCD
Mr. Roland Moore	Chief Information Officer	Detroit Public Schools
Ms. Naomi Norman	Director	REMC 16
Ms. Becky Rocho	Department Director	Calhoun ISD
Ms. Patricia Thornberry	Project Manager	EDS
Mr. Mike Wahl	Executive Director	MCCVLC
Mr. Glen Walstra	Executive Director	MANS
Ms. Joanne Welihan	Executive Director	MEMSPA
Mr. Fred Williams	Superintendent	Potterville Public Schools
Mr. Ric Wiltse	Executive Director	MACUL
Mr. Luke Zelle	Accessibility Specialist	The Disability Network

## Appendix B

### List of Michigan Schools Served by MVHS 1999 – 2005\*

A.D. Johnston Jr. Sr. HS	Brandon HS
Academy for Business and Technology	Brandywine Senior HS
Academy of the Sacred Heart	Breckenridge HS
Addison Community Schools	Bridge HS
Adelante HS	Bridgman HS
Adrian Public Schools-Second Chance Academy	Brimley Area Schools
AGBU Alex-Marie Manoogian School	Britton Macon School
Akron-Fairgrove Jr. Sr. HS	Buchanan HS
Albion HS	Buckley Community School
Alcona Jr. Sr. HS	Burr Oak HS
Algonac HS	Burt Township School
All Saints HS	Byron Area HS
Allendale HS	Byron Center HS
Andover HS	Cadillac HS
Annapolis HS	Cadillac Junior HS
Ashley Community HS	Caledonia HS
Athens Area HS	Camden-Frontier HS
Atlanta Jr. Sr. HS	Capac Jr. Sr. HS
Bad Axe HS	Carman Ainsworth HS
Baldwin Senior HS	Caro Community School
Bark River Harris Jr. Sr. HS	Carrollton HS
Bath HS	Carson City-Crystal HS
Battle Creek Central HS	Carsonville-Port Sanilac JSHS
Bear Lake HS	Caseville School
Beaver Island Community School	Cedar Springs HS
Beaverton HS	Cedarville HS
Bellaire HS	Central Academy
Bellevue HS	Central HS-GR
Bendle Senior HS	Central Lake HS
Bentley HS	Central Montcalm HS
Benzie Central HS	Centreville Senior HS
Berkley HS	Chandler Woods Charter Academy
Berrien Springs HS	Charlevoix HS
Berrien Springs Middle School	Charlotte Senior HS
Big Bay De Noc School	Chassell K-12 School
Big Rapids HS	Chelsea HS
Bimaadziwin-GR	Chesaning Union HS
Bishop Gallagher HS	Chippewa Hills HS
Black River Public School	Chippewa Valley HS
Bloomington Jr. Sr. HS	Churchill Community Education Center
Boyne City HS	Churchill HS
Boyne Falls Public School	City HS
	Clare HS

\*This list represents 711 schools, including 516 Michigan high schools, nine middle schools, 134 home schools, 50 United Star Distance Learning Consortium schools and two international schools.

Clarenceville HS	Dundee HS
Clarkston HS	Durand Area HS
Clawson HS	DVA/Fordson
Climax-Scotts Jr. Sr. HS	Dwight Rich Middle School
Clinton HS	East Grand Rapids HS
16th Alternative HS	East Jackson HS
Clonlara Private School	East Jordan HS
Cody HS	East Kentwood HS
Coldwater HS	East Lansing HS
Coleman HS	Eastern HS
Coloma Senior HS	Eaton Rapids HS
Columbia Central HS	Edsel Ford HS
Community HS	Edwardsburg HS
Comstock HS	Elk Rapids HS
Comstock Park HS	Ellsworth Community School
Concord Academy Boyne	Engadine HS
Conner Creek Academy	Escanaba HS
Coopersville HS	Everett HS
Corunna HS	Fairview Area Schools
Cousino HS	Farwell HS
Covert HS	Fennville HS
Creative Technologies Academy	Fenton HS
Creston HS	Ferndale HS
Crestwood HS	Flat Rock HS
Crockett Vocational Tech. Center	Flint Southwestern Academy
Crossroads Charter Academy	Ford HS
Croswell-Lexington HS	Forest Area HS
Dansville HS	Forest Hills Central HS
Decatur HS	Forest Hills Eastern HS
Deckerville Community HS	Forest Hills Northern HS
Deerfield Public School	Forest Park School
Delton Kellogg HS	Fowler HS
Denby HS	Fr. Gabriel Richard HS
DeTour HS	Frankenmuth HS
Detroit Public Schools - Schools Center Bldg.	Frankfort HS
Detroit School Of Industrial Arts	Franklin HS
Detroit Technology HS	Freedom Baptist HS
Detroit World Outreach Christian Academy	Freeland HS
Dewitt HS	Fremont HS
Dexter Community Schools	Galien Twp Jr. Sr. HS
Divine Child HS	Garber HS
Dollar Bay HS	Gaylord HS
Dowagiac Union HS	Genesee Intermediate School District
Down River HS	George A. Dondero HS
Dryden HS	Gladstone Area HS
	Glen Lake Secondary School

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Gobles HS	Huron HS
Godwin Heights HS	Huron Valley Lutheran HS
Goodrich HS	Hutchins Middle School
Grand Blanc HS	Imlay City HS
Grand Haven HS	Inkster HS
Grand Rapids Baptist Academy	Inland Lakes HS
Grand Rapids Christian HS	Intensive Day Treatment Program-IDTP
Grand Rapids Technical HS	International Academy
Grand Traverse Academy	Ionia HS
Grandville HS	Iron Mountain HS
Grass Lake HS	Ishpeming HS
Grayling HS	Island City Academy
Greenville Senior HS	Jackson Co HS
Grosse Ile HS	Jackson Public Schools -Tomlinson School
Grosse Point North HS	Jeffers HS
Grosse Point South HS	Jewish Academy of Metropolitan Detroit
Grove Christian School	Job Corps
Gull Lake HS	Johannesburg-Lewiston HS
Hackett Catholic Central	John Glenn Senior HS
Hamilton HS	Jonesville Middle School
Hancock Central HS	Kake HS
Hanover Horton HS	Kalamazoo Central HS
Harbor Beach Jr. Sr. HS	Kalkaska HS
Harbor Springs School District	Kearsley HS
Harper Creek HS	Kelloggsville HS
Harper Woods HS	Kenowa Hills HS
Harrison HS	Kingsford HS
Hart HS	Kingston Jr. Sr. HS
Hartford HS	L C Mohr HS
Hartland HS	Ladywood HS
Haslett HS	Laingsburg HS
Hastings HS	Lake Linden Hubbell Jr. Sr. HS
Henry Ford Academy	Lake Orion HS
Hill Center-Lansing Schools	Lakeland HS
Hillman Jr. Sr. HS	Lakeshore Public Academy
Hillsdale HS	Lakeview HS
Holly HS	Lakeview HS (Montcalm)
Holt HS	Lakewood HS
Hopkins HS	L'Anse Area School Jr. Sr. HS
Horizon Alternative Learning Center	L'Anse Creuse HS
Houghton HS	L'Anse Creuse HS North
Houghton Lake HS	Lapeer Community HS
Howardsville Christian School	LaSalle HS
Howell HS	Lawrence Jr. Sr. HS
Hudson Area HS	Lee M. Thurston Sr. HS
Hudsonville HS	Leelanau School

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Lenawee Christian School	Mesick HS
Leslie HS	MI Institute Constr. & Technology
Lincoln Senior HS	MI Lutheran HS
LISD Vocational Technical Center	Midland Academy of Advanced/Creative
Litchfield HS	Studies
Livingston Technical Academy	Midland HS
18 Well HS	Mid-Peninsula School
Lloy Norrix HS	Milan Community Education
Luther L. Wright HS	Milan HS
Lutheran High East	Milford HS
Lutheran HS Northwest	Millington HS
Lutheran HS NW	Mona Shores HS
Lutheran HS Westland	Monroe HS
Lutheran High South	Montabella HS
Mackinac Island School	Morenci HS
Mackinaw City HS	Morey Charter School
Maltby Middle School	Morley Stanwood HS
Mancelona HS	Morrice HS
Manchester HS	Mt. Clemens HS
Manistee Catholic Central School	Mt. Pleasant HS
Manistee HS	Mumford HS
Manistique Middle & HS	Munising Public Schools
Manton Consolidated HS	Murray-Wright HS
Maple Valley Jr. Sr. HS	Muskegon Heights HS
Marine City HS	Muskegon Technical Academy
Marine City HS-St. Clair RESA	Napoleon HS
Marion HS	New Buffalo Jr. Sr. HS
Marlette HS	New Lothrop Jr. Sr. HS
Marquette Community Schools	Newaygo HS
Marshall HS	Newberry HS
Martin HS	Niles Senior HS
Martin Luther King HS	North Adams HS
Marysville HS-St. Clair RESA	North Dickinson HS
Mason County Eastern Schools	North Farmington HS
Mason HS	North Huron HS
Mason-Lake Oceana Math & Science Center	North Muskegon HS
Mattawan HS	North Star Academy
Mattawan Middle School	NorthPointe Christian HS
Mayville HS	Northport Public School
McBain HS	Northview HS
McBain Rural Agricultural School	Northville HS
Memphis HS-St. Clair RESA	Northwest Academy
Mendon HS	Northwest HS
Menominee Community Education Center	Northwoods Math Science & Technology
Meridian HS	Center
Merrill HS	Norway HS

\*This list represents 711 schools, including 516 Michigan high schools, nine middle schools, 134 home schools, 50 United Star Distance Learning Consortium schools and two international schools.

Notre Dame Catholic HS	Portland HS
Novi HS	Potters House School
Oak Park HS	Potterville HS
Oakland Christian School	Powers Catholic HS
Oakland International Academy	Providence Christian HS
Oakland Schools Technical Campus - NE	Quincy HS
Oakland Schools Technical Campus - NW	Reading HS
Oakland Schools Technical Campus - SE	Reed City HS
Oakland Schools Technical Campus - SW	Regina HS
Odyssey MS/HS	Renaissance HS
Ogemaw Heights HS	Richmond Community HS
Okemos HS	River Rouge HS
Olivet HS	River Valley HS
Omega HS	Riverview Community HS
Onaway Jr. Sr. HS	Riverview East HS
Onkama HS	Robichaud Sr. Jr. HS
Onsted HS	Rochester HS
Ontonagon Jr. Sr. HS	Rogers HS
Orchard Center HS	Romeo HS
Oscoda Area HS	Romeo Senior HS
Ottawa Hills HS	Roosevelt HS
Ovid-Elsie HS	Roscommon HS
Owendale-Gagetown Jr. Sr. HS	Ruben Daniels Community School
Oxford HS	Rudyard HS
Pansophia Academy	Sacred Heart Academy School
Parchment HS	Saginaw Arts & Sciences Academy
Pattengill Middle School	Saline HS
Peck HS	Sand Creek Jr. Sr. HS
Pellston HS	Sandusky HS
Pensacola Christian College	Sanilac Career Center
Pentwater HS	Sankofa Shule
Peterson-Warren Academy	Sarah G. Banks Middle School
Pewamo-Westphalia HS	Saranac HS
Pickford HS	Saugatuck HS
Pierz-Healy Jr. Sr. HS	Sault Ste. Marie Area HS
Pinckney Community HS	School to Work Academy
Pinconning Area HS	Schoolcraft HS
Pine River HS	Seaholm HS
Pioneer High & Clare Adult Ed.	Sexton HS
Plainwell HS	Shrine Catholic HS
Plymouth Canton HS	South Christian HS
Plymouth Christian Academy	South Haven HS
Pontiac Central HS	South Lake HS
Pontiac Northern HS	South Lyon HS
Port Huron South HS-St. Clair RESA	Southfield Christian School
Port Huron Northern HS-St. Clair RESA	Sparta HS

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Spring Lake HS  
 Springport HS  
 St. Alphonsus HS  
 St. Joseph HS  
 St. Louis HS  
 St. Matthew Lutheran School  
 St. Charles Community HS  
 St. Clair HS-East China  
 St. Clair HS-St. Clair RESA  
 St. Johns HS  
 St. Mary's HS  
 Standish-sterling Central HS  
 Stephenson HS  
 Stevenson HS  
 Stockbridge HS  
 Stoney Creek HS  
 Sturgis HS  
 Summit Academy HS  
 Superior Central School  
 Suttons Bay HS  
 Swan Valley HS  
 Tawas Area Jr. Sr. HS  
 TBAISD Career Tech Center  
 Tekonsha Cmty School District  
 Three Rivers HS  
 Tinkham Alternative Education  
 Traverse City Central HS  
 Traverse City West Sr. HS  
 Tri County Senior HS  
 Tri-Township School  
 Tri-Unity Christian School  
 Ubly Community HS  
 Union HS  
 Unionville-Sebewaing HS  
 Unity Christian School  
 Valley Christian Academy  
 Valley Lutheran HS  
 Vanderbilt Area School  
 Vassar Senior HS  
 Vestaburg Community HS  
 Walled Lake Central  
 Walled Lake Northern  
 Walled Lake Western  
 Walter French Academy  
 Washburn HS  
 Washtenaw Christian Academy  
 Waterford Kettering HS  
 Waterford Mott HS  
 Watervliet HS  
 Wayland Union HS  
 Wayne Memorial HS  
 Webberville HS  
 Wesleyan Christian Academy  
 West Bloomfield HS  
 West Iron County HS  
 West MI Academy of Environmental  
 Science  
 West Michigan Learning Disabilities  
 Foundation  
 West Ottawa HS  
 Western HS  
 Weston Technical Academy  
 White Cloud HS  
 White Lake Area Community. Education  
 White Pigeon Jr. Sr. HS  
 Whitefish Township School  
 Whiteford HS  
 Whitehall HS  
 Whitmore Lake HS  
 Whittemore-Prescott Alternative Education  
 Williamston HS  
 Woodhaven HS  
 Wyoming Park HS  
 Yale HS-St. Clair RESA  
 Youth Opportunity Movement-Northern  
 Youth Opportunity Movement-Western  
 Ypsilanti HS

## Appendix C

### List of MVHS Current Courses

Advanced Composition  
Algebra 1 Part 1 (PLATO)  
Algebra 1A - Flex 90  
Algebra 1A (Apex)  
Algebra 1B - Flex 90  
Algebra 1B (Apex)  
Algebra 2 Part 2 (PLATO)  
Algebra 2A - Flex 90  
Algebra 2A (Apex)  
Algebra 2B - Flex 90  
Algebra 2B (Apex)  
American Film Survey A  
American Government - Community HS  
American Government - Flex 90  
American History 1A  
American History 1B  
American Literature 1A  
American Literature 1B  
American Literature A (Apex)  
American Literature B (Apex)  
Anatomy & Physiology A  
Anatomy & Physiology B  
AP Art History Part 1  
AP Art History Part 2  
AP Biology Part 1 (Apex)  
AP Biology Part 2 (Apex)  
AP Calculus AB Part 1  
AP Calculus AB Part 2  
AP Chemistry Part 1  
AP Chemistry Part 2  
AP Computer Science A Part 1  
AP Computer Science A Part 2  
AP English Language & Composition Part 1  
AP English Language & Composition Part 2  
AP English Literature & Composition Part 1  
AP English Literature & Composition Part 2  
AP French Part 1  
AP French Part 2  
AP Macroeconomics  
AP Microeconomics  
AP Physics B Part 1  
AP Physics B Part 2  
AP Psychology  
AP Spanish Language Part 1  
AP Spanish Language Part 2  
AP Statistics Part 1  
AP Statistics Part 2  
AP U.S. Government and Politics  
AP U.S. History Part 1  
AP U.S. History Part 2  
Astronomy  
Beginning Composition  
Biology 1A  
Biology 1B  
Biology A (Apex)  
Biology B (Apex)  
Business & Personal Protocol  
Business and Consumer Math  
Business Communication  
Calculus 1A  
Calculus 1B  
Career Planning  
Chemistry 1A  
Chemistry 1B  
Chemistry A (Apex)  
Chemistry B (Apex)  
Civics  
Economics  
Employability Skills  
English 10a  
English 10b  
English 11th Grade Semester 2 (PLATO)  
English 9A  
English 9B  
English as a Second Language 1A  
Environmental Science A  
Environmental Science B  
French 1 A  
French 1 B  
French 2 A  
French 2 B  
Geography  
Geology (Apex)  
Geometry 1A  
Geometry 1B  
Geometry A (Apex)

Geometry B (Apex)	Personal Econ. & Finance
German 1 A	Physics 1A
German 1 B	Physics 1B
German 2 A	Pre-Algebra A
German 2 B	Pre-Algebra B
Global Issues	Precalculus 1A
Health Science A	Precalculus 1B
Health Science B	Psychology
HTML, Dynamic HTML, and Scripting (Apex)	Psychology II
Human Space Exploration	Reading Comprehension
Human Space Exploration - Flex 90	Sociology
Information Technology Basics 1A	Spanish 1 A
Information Technology Basics 1B	Spanish 1 B
International Business	Spanish 2 A
Intro to English Lit. & Comp. A (Apex)	Spanish 2 B
Intro to English Lit. & Comp. B (Apex)	Study Skills
Introduction to C++ Programming	Trigonometry 1A
Introduction to Technology	Trigonometry 1B
Introductory Algebra A (Apex)	Trigonometry (PLATO)
Journalism	U.S. Government and Politics (Apex)
Keyboarding	U.S. History A (Apex)
Math Fundamentals A (Apex)	U.S. History B (Apex)
Math Skills A	Web Design Basics HTML
Math Skills B	World Civilizations 1A
Microsoft Office XP	World Civilizations 1B
Oceanography - Flex 90	World History A (Apex)
Oceanography B-Flex 90	World History B (Apex)
	World Literature

## Appendix D

### A Chronology of the Development and Growth of the Michigan Virtual High School 1999 - 2005

#### 2005

MVU Board of Directors adopts the Revised Strategic Plan focused on K-12 education.

MVHS signs license agreement with Plato Learning, Inc. for a low-cost student directed course software.

MVHS provides a formal report and recommendations related to e-learning at the K-12 level to MDE's Michigan High School Redesign Team.

MVHS initiates application process to become an accredited school through The Commission on International and Trans-regional Accreditation (CITA).

#### 2004

Mr. Jamey Fitzpatrick appointed Interim President of MVU.

MVHS creates partnership with seven Upper Peninsula ISDs to provide volume pricing discounts for courses and products.

The North Central Regional Educational Laboratory (NCREL) awards MVHS a \$59,925 grant to study the effectiveness of MVHS online courses.

MVHS launches the Michigan Virtual Summer School as an affordable option for schools and parents and enrolls approximately 1,000 students.

MVHS participates in a U.S. Department of Education *Forum on Anytime, Anywhere Technology Access*, leading to the development of the *National Education Technology Plan*.

MVHS approved by the MDE as an authorized Supplemental Educational Services Provider under the federal No Child Left Behind (NCLB) legislation.

MVHS launches a new "per enrollment" pricing model for K-12 schools.

MVHS receives a \$99,410 grant from the U.S. Department of Education to support the development of the online Mathematics, Science and Technology Academy.

MVHS establishes eight part-time ambassadors to provide no cost support and informational services for schools, and account management responsibilities in regions around the state.

MVHS and the Arab-American and Chaldean Council located in Detroit developed a partnership relationship. MVHS provided six summer school classes at no cost to be used by the Council.

MVHS participates in a U.S. Department of Education Technology Conference in Florida to showcase K-12 e-learning options.

### **2003**

Mr. Robert Currie, a former Michigan school superintendent, appointed as MVHS Executive Director.

The MVHS online MEAP Smart Curriculum adds review lessons and practice tests in science and social studies for 11<sup>th</sup> grade students, available at no cost to all Michigan students.

MVHS invited to provide a policy briefing to the State Board of Education on the progress of MVHS and the impact of e-learning.

To better reflect MVU's work in K-12 education, the Executive Director of the MASA/MAISA joins the MVU Board of Directors.

MVHS provides testimony before four key Michigan House of Representatives and Michigan Senate subcommittees on the work of the MVHS and the impact of e-learning.

MVHS provides briefings for more than 40 members of the Michigan House of Representatives, Michigan Senate and the Executive Office on the role and value of MVHS.

MVHS provides a briefing for all members of the Michigan Congressional Delegation on the MVHS and the role of e-learning in Michigan.

MVHS participates in the creation of the North American Council of Online Learning (NACOL) and becomes an institutional member.

MVHS develops and deploys the online Catalog/Enrollment Management System (CEMS) to support school and student registration and enrollment information.

MVHS and MDE successfully collaborate on a three year \$300,000 U.S. Department of Education *Advanced Placement Incentive Program* grant to provide courses and review tools to 100 of the state's most economically disadvantaged school districts.

### **2002**

MVHS brings the Intel Foundation to Michigan to meet with officials from the City of Detroit and successfully develops a grant to establish four after school Intel Computer Clubhouses for middle and high school students.

MVU acquires the Michigan Occupational Information System (MOIS) and develops the myDreamExplorer career tool as a companion service for MVHS.

MVHS launches the online MEAP Smart Curriculum, with review lessons and practice tests in math, reading, and writing for all 11<sup>th</sup> grade students in Michigan.

MVHS staff invited to serve on the State Board of Education's *Embracing the Information Age Task Force* to develop policy recommendations, including items promoting e-learning.

To better reflect MVU's efforts in K-12 education, the Superintendents of Ann Arbor Public Schools and Traverse Bay Area ISD join the MVU Board of Directors.

MVHS sponsors a *Symposium on Leadership Strategies for E-Learning: High School to Higher ED* for K-12 and postsecondary educators.

Michigan's Superintendent of Public Instruction joins the MVU Board of Directors.

MVHS creates the Mathematics and Science Academy and begins development of a series of semester length courses with MVHS owned content.

MVHS develops strategic partnerships with NASA and the Shedd Aquarium in Chicago to provide high quality math and science course content and classroom resources.

MVHS staff serves on the Governor's *Declining School Enrollment Advisory Group* to examine the potential role of e-learning.

MVHS and the Michigan Association of Computer Users in Learning (MACUL) cosponsor the Intel *Teach to the Future* professional development workshops to train K-12 teachers to integrate technology into their day-to-day instruction.

## **2001**

MVHS serves 101 schools with 676 enrollments.

MVHS collaborates with MDE to develop changes in the state's Pupil Accounting Rules to accommodate online student enrollments.

A broadly representative 25 member MVHS Advisory Council was established to provide guidance on the operation of the MVHS.

To better reflect MVU's work in K-12 education, the Executive Director of the MEA joins the MVU Board of Directors.

Ms. Nancy Davis appointed MVHS Executive Director.

MVU assigned responsibility to manage the Teacher Technology Initiative (TTI), and approximately 90,000 Michigan classroom teachers apply for personal computers and training.

MVU licenses more than 800 mini-courses through the Information Technology (IT) Training Initiative for Michigan students, educators, and small businesses at no cost.

MVHS sponsors a *Symposium on the Building Blocks of Virtual High School Courses*.



MVHS and the Michigan Association of Secondary School Principals (MASSP) develop an “e-primer” on virtual high school course policies and procedures to provide leadership and guidance to high schools across the state.

MVHS begins comprehensive online instructor training for Michigan teachers and develops a cadre of MVHS instructors.

MVHS negotiated an agreement with class.com to provide online course content.

MVHS establishes partnership with Michigan State University to provide high quality online advanced placement (AP) courses.

MVHS prepares a report to the Michigan Legislature on the educational needs of Migrant children.

MVHS continues the Advanced Placement Academy to serve the needs of high achieving high school students throughout Michigan. Advanced Placement (AP) classes, AP Exam Reviews and AP Class Tools provided to schools at no cost.

MVHS conducts research to determine the online courses, resources and services most needed by Michigan’s K-12 education community.

MVHS secured a collaborative agreement with the MDE to provide MVU with approval authorization to offer Continuing Education Units (CEUs) to educators taking courses or other learning experiences through MVU that can be converted to State Board Continuing Education Units (SB-CEUs) with the approval of a sponsor.

MVHS provides seed funding to establish 14 Oracle Internet Academies across the state to advance the information technology skills of Michigan high school students.

MVU selected to serve as the fiscal agent for the \$6 million Bill and Melinda Gates Foundation *Leading the Future* school administrator professional development grant.

## **2000**

Public Act 230 of 2000 authorized the establishment of the MVHS and identified specific goals.

MVHS forges partnership with Apex Learning, Inc. to provide high quality online advanced placement (AP) courses.

MVHS conforms to the Children’s Online Privacy Protection Act (COPPA).

MVHS develops the Advanced Placement Academy to serve the needs of high achieving high school students throughout Michigan. Advanced Placement (AP) classes, AP Exam Reviews and AP Class Tools are provided to schools at no cost.

MVU selects Blackboard as the MVHS course management tool.

MVHS adopts an Onsite Mentor Model for student support and supervision.

MVHS conducts a focus group as the first of a series of research steps to determine the courses to be offered by the MVHS.

MVHS develops online courses that meet North Central Association Accreditation Standards, the Michigan Curriculum Frameworks and the Standards of Quality for Professional Development as prescribed by MDE.

MVHS receives the Michigan Association of Computer Users in Learning (MACUL) annual President's Award in recognition of efforts to advance the use of technology in education.

### **1999**

MVU develops a proposal for the Governor and Michigan Legislature calling for the creation of a Michigan Virtual High School.

MVU conducts research on the advantages and benefits of online learning.

MVU works with MDE and the Ameritech Foundation to develop and launch a \$2.8 million K-12 teacher training program to support classroom teachers in the use technology.

MVU develops an e-learning pilot study with the Michigan Association of Intermediate School Administrators (MAISA) and provides scholarship support for 100 student participants.

MVU begins educating state policy leaders and educators about online learning.