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## Why Reinvent the Wheel?

### VHS Is Already Rolling

by Bruce Droste

**V**irtual High School has passed the milestone of 200 actively participating schools, and is beginning the process of admitting an additional 150. How much has this increase in VHS participation affected smaller high schools in America? Is VHS reaching schools that could benefit from online education? And why have they chosen VHS?

**Kalida High School** in Ohio is a case in point. Kalida has 372 students. According to Principal Dale Nienberg, "I can't say enough about what VHS has done for our students." VHS allowed him to expand the number of courses, increase scheduling flexibility, and add honors and advanced placement offerings to the school's curriculum. Small schools such as Kalida have to make hard choices when it comes to expanding curriculum. If they try to do it on their own, the pricetag is prohibitive. VHS offers a cost-effective way to expand curriculum with quality courses, as well as offer teachers effective professional development. But is Kalida's experience unique? Are

small schools really taking advantage of VHS?

Statistics show that over 80% of the schools participating in VHS have enrollments of fewer than 1,500 students. Half of those schools have fewer than 800 students. As VHS has developed, some of these small schools have come up with creative ways to get involved in VHS. And VHS has supported them in order to make their participation possible. In some cases, whole districts and geographic regions have organized into "sub-cooperatives," pooling their local resources to take advantage of VHS courses. For instance, four very small schools decided to join together to support the training of one teacher who will offer one VHS NetCourse next year. According to the reciprocal VHS formula, they will then distribute the 20 available student seats in VHS

*(continued on page 2)*



### Who Are We?

**Size of schools:** 80 - 2,700 students

**Expenditures per student:** \$3,483 - \$15,175

### Diversity of schools:

school populations range from:

1% - 40% Asian

1% - 100% Black

1% - 89% Hispanic

8% - 100% White

1% - 80% eligible for free/reduced lunch

1% - 70% living below poverty line

(continued on page 8)

### LINKS ON THIS PAGE

**Virtual High School**—[vhs.concord.org](http://vhs.concord.org)

**Kalida High School**—[kalida.k12.oh.us/highschool.htm](http://kalida.k12.oh.us/highschool.htm)

## The Concord Consortium

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## Why Reinvent the Wheel?

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among the four schools. Elsewhere, a regional education center is acting as the agent for area schools, coordinating the training of teachers and the distribution of student seats.

The bottom line is that instead of schools finding an expensive solution, or no solution at all, to the challenges that many schools face, they are able to work with VHS to develop creative solutions that satisfy them beyond their expectations. All without adding a new building or hiring new staff.

There is a lesson to be learned here about the necessity of sometimes outsourcing — focusing on what one does well while seeking out experts who can contribute in other areas. Here at

## Schools are learning the lesson of outsourcing when it comes to online course instruction and training.

VHS we learned that lesson the hard way. In our first year of operation we imagined that we could do everything, including maintain the servers, manage connectivity, and handle all the other technical issues that arise from owning a lot of “heavy metal.” The result was frequent down times online and a lot of frustrated teachers and students. We

learned our lesson. There are people whose job it is to do technical maintenance. So now our school offices are in Massachusetts, but the technical services are handled by [Interliant](#) in Houston, Texas, where enormous servers are housed in a bomb-proof building with 24-hour security — something we never could have done ourselves. As a result, our technical services are much more reliable and we can concentrate on creating the best NetCourses possible.

We learned the lesson of outsourcing. Schools and districts are learning this same lesson when it comes to online course instruction and training. How else could a school so quickly and cost effectively add 200 high-quality courses taught by content experts? What professional development opportunity could have such a lasting and satisfying effect on teachers? How many courses could stimulate students to participate and excel beyond their own expectations? Being able to join a large collaboration of schools such as VHS has allowed schools to pool their efforts and come up with not just a solution, but a leap forward in the educational goals of schools, teachers and students alike.

Next year VHS will be in the fifth and final year of its original [Department of Education](#) grant.

As we continue to grow into the future, VHS will continue to be a not-for-profit organization that reaches out to all the small, rural and low-wealth schools in the country, offering them the chance to “level the playing field.” We hope you will take this journey with us. The possibilities are virtually endless. @

*Bruce Droste is director of the Virtual High School.*  
[bruce@concord.org](mailto:bruce@concord.org)

### LINKS ON THIS PAGE

[Interliant](http://www.interliant.com)—[www.interliant.com](http://www.interliant.com)

[Department of Education](http://www.ed.gov)—[www.ed.gov](http://www.ed.gov)

# Online Education

## The Internet's **Killer App**

by Liz Pape

*There are two fundamental equalizers in life – the Internet and education. E-learning eliminates the barriers of time and distance, creating universal learning-on-demand opportunities for people, companies and countries.*

John Chambers  
President and CEO, Cisco Systems

**E**-mail and e-commerce have been called the Internet's killer apps\*. Although these applications provide value to Internet customers, the real killer app of the Internet is e-ducation.

With its ability to provide anywhere, anytime learning opportunities to students beyond the classroom walls, online education is fundamentally changing the way we learn and educate. It's becoming a highly effective tool for education reform.

The Virtual High School (VHS) has become the most successful e-ducation killer app at the high school level. VHS has proven that you can successfully offer rigorous and yet innovative academic courses via the Internet. Its success in part is due to breaking new ground in online course delivery. Instead of modeling itself after corporate online training, where the emphasis is on self-paced training, online tests and quizzes, and one-way communication from instructor to student, VHS prefers learning to take place in a scheduled, asynchronous, interactive, virtual environment.

In the virtual classroom, comments are not limited to a traditional class session.

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\*"Killer app" is the term used to describe the application that makes a mass market for a promising technology.

Asynchronous communication and threaded discussion groups allow students the time to reflect on one another's discussions. Students who need more time to craft their response or who are hesitant to respond in a face-to-face classroom find the asynchronous environment more comfortable, and they are more willing to share their thoughts with their classmates. Others use the greater flexibility to synthesize materials from their course with other online resources before they post in-depth comments. In this virtual classroom environment, VHS students have demonstrated high levels of student-to-student and student-to-teacher interaction. Many times, students continue to read and post responses to other students' comments long after the virtual class bell has rung.

Because VHS NetCourses are asynchronous, students from Ohio can learn and interact in the same virtual classroom with students in Amman, Jordan (see pg 6). They can even respond to one another's discussions and work together as team members on long- and short-range scheduled assignments.

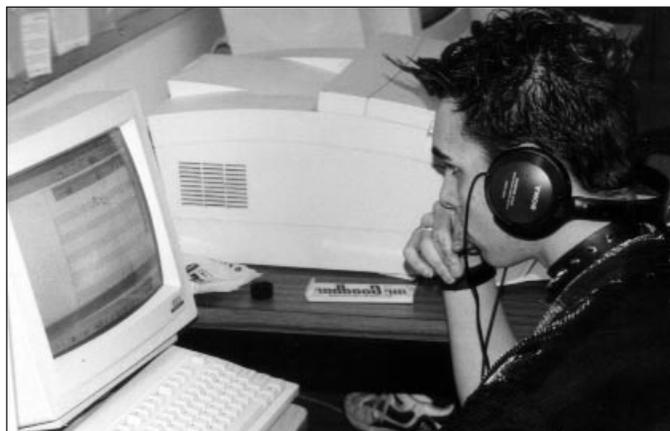
A recent evaluation by **SRI International** gave VHS high marks for the overall quality of courses it offered. But getting to this level of online course quality has required VHS to learn from its

**"In your career, knowledge is like milk. It has a shelf life stamped right on the carton. The shelf life of a degree in engineering is about three years. If you're not replacing everything you know by then, your career is going to turn sour fast."**

Louis Ross, Ford Motor Co., CTO  
to a group of engineering students

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mistakes as it ventures into the new territory of e-ducation. Not content to accept conventional wisdom which derides online courses as substandard education, VHS has placed a high priority on offering NetCourses that are at or above the quality of traditional classroom courses.



*A student at Forks High School in Washington state works on a music composition for a VHS NetCourse.*

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A major factor in providing quality courses is maintaining high standards of teacher training. VHS teachers are trained in online pedagogy. They learn to moderate online discussions, facilitate group and project-based work, and assess student learning in an online environment.

Based on SRI's evaluation of the first

*(continued on page 5)*

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#### LINKS ON THIS PAGE

Louis Ross—<http://www.cisco.com/warp/public/10/wwtraining/elearning/what/quotes.html>

SRI International—[www.sri.com](http://www.sri.com)

Concord Consortium: [www.concord.org](http://www.concord.org)



# COURSES 2000-2001

<http://vhs.concord.org/Pages/Academics-Home>

101 Ways to Write a Short Story  
A Model United Nations Simulation Using the Internet  
A People's Voice Is Their Poetry  
A Place for Modern Fiction: Reading and Writing  
A Shakespeare Who-Dun-It  
Academic Writing  
Aeronautics and Space Travel — and Record-Breaking  
with Model Airplanes  
Algebra I  
All History is Local History  
American Foreign Policy: From Cold Warrior to  
Peacekeeper  
American Legal Studies  
American Music Heritage — Song and Society  
American Popular Music  
Anatomy and Physiology  
Animal Behavior, From Cells to Society  
AP Chemistry  
AP Economics  
AP European History  
AP Statistics  
AP U.S. History  
Aquaculture Science  
Architecture of the World  
Architecture: Residential Drafting and Design  
Art History: Renaissance to Present  
Artists and the 20th Century  
Astronomy: Stars and the Cosmos  
Atlanta and Armadillos to Zimbabwe and Zebras:  
A Comparative Study of Planet Earth  
Atmospheric Interactions  
Aviation 101: Private Pilot Ground School  
Aviation History  
Beyond Today  
Bioethics Symposium  
Biology II — A Second Year Course  
Building in the New Millennium . . . Databases,  
That Is!  
Business in the 21st Century  
Calculus: An Introduction to the Derivative  
and Integral  
Calculus: A Conceptual Approach  
Calculus: Preparation for the AP Exam  
Career Awareness for the New Millennium  
Censorship in Literature  
Chemistry II  
Compelling Dilemmas: An Introduction to  
Sustainability  
Computer Design & Desktop Publishing: An  
Adventure in Graphic Creation  
Computer Programming In C  
Connecting Mathematics and Science Through  
Technology  
Contemporary Irish Literature  
Creating a Career/College Portfolio  
Creating a Virtual Museum Exhibit  
Creating Art History  
Creative Writing for People Who Mean It  
CyberReporting  
Democracy in America?  
Dickens' Tales of Expectations  
Discovering Algebra I  
Disease, Drugs and Sexuality — Challenges to  
Our Health  
DNA Technology  
Do We Still Speak English?  
Earth Dynamics  
Eastern and Western Thought  
Economics — Micro/Macro — A Compassionate Way  
to Set You Up to WIN  
Electricity and Electronics: A Survey Course  
Electronics for Everyone

Employability Skills  
Enterprising EZ-nomics  
Entrepreneurship for the Third Millennium  
Environmental Chemistry  
Environmental Ethics  
Environmental Science —The World Around Us  
Epidemics: Ecology or Evolution  
Ethics and Environmental Chemistry: Chemistry's  
Ethical Impacts on Ecological and Human Systems  
Ethnobotany  
Evolution and the Nature of Science  
Evolutionary Genetics with a Biotechnology Twist!  
Expanding Artistic Vision Through Photography  
Explorando culturas hispanas a través del Internet  
Exploring the International Business World  
Exploring the Wonderful World of Multimedia  
Exploring Themes in African-American Literature  
Family Challenges  
Folklore and Literature of Myth, Magic, and Ritual  
Fractals — What are they? What are they used for?  
Gateway Science I: Life, the Universe, and Everything  
Gateway Science II: Life, the Universe, and Everything  
German Cyber Adventure (Deutsches Cyberabenteuer)  
German History of the 20th Century  
Ghoulies, Ghosties, and Long-Legged Beasts: Why  
We Like to be Scared  
Graphic Publishing for Sci-Fi & Fantasy Advertising  
Historic Journalism  
History and the Silver Screen  
Human Anatomy and Physiology  
If You Build It, Will It Stand? Designing Structures &  
Understanding Stress  
Information Technology in a Global Society  
Integrated Mechanical Physics with Logical Reasoning  
Interdisciplinary French ThinkQuests  
Interior Design  
International Diplomacy — An Arab/Israeli Conflict  
Simulation  
Introduction to Botany  
Introduction to Computer Programming  
Introduction to HTML  
Introduction to Java Programming  
Introduction to Microbiology  
Introduction to Ornithology  
Introduction to Programming in Visual Basic  
Investing in the Stock Market  
Is It Catching? A Study of Infectious Diseases  
Is Romance Dead? Visions of Love in Literature  
Java Programming Basics for the Internet  
Jeunesse de Langue Française : Great Books of  
Antiquity with a French Twist  
Kindergarten Apprentice Teacher  
Leadership as a Force in American History  
Literary Outsiders  
Living in the USA  
Look Into the Future as a 21st Century Consumer  
Macro-Economics: A Human Approach  
Malaria: a Case Study for Understanding Biology  
Marketing With Probability  
Math You Can Use In College  
Mathematical Problem Solving  
Measuring The Earth: The Noon Shadow Project  
and Beyond  
Meeting America on the Appalachian Trail  
Military History and Theory: The American Civil War  
Modeling a Simple Rocket Propulsion System  
Modern Classics, Living Authors  
Music Appreciation and Composition  
Music Composition and Arranging  
Mythology — Stories from Around the World, from  
the Beginning of Time, to the End of the Ear  
Myths & Monuments: Origins of the Greeks

Narrating Family Histories  
Natural History: A Case Study of Your State  
Number Theory: Patterns, Puzzles and Cryptography  
Oceans: Living Space for the Future  
Our Differences, Our Humanity  
Páginas en la red en español (Spanish Web Pages)  
Paleontology: Exploring the Earth's Record of Life  
PeaceMAKING  
Pearl Harbor to the Atomic Bomb: The Pacific War,  
1941-1945  
Personal Finance  
Perspectives in Health  
Photography as Visual History  
Political Science — Honors  
Pre-Engineering and Design — A Problem Solving  
Approach  
Programming a Robot Arm Using Visual Basic  
Project Sail  
Psychology — An Introduction  
Quality Engineering  
Reading and Writing Formal Poetry  
Rising Entrepreneurs: Business Owners of the  
Third Millennium  
Russian, Soviet, and Post-Soviet Studies  
Same As It Never Was: Viewpoints on What Really  
Happened Throughout the Course of History  
Satire Through the Ages  
Screenwriting Fundamentals  
Shakespeare in Films  
Short Story  
Southern Writers  
Space Technology On-Line  
Sports In Modern America  
STS Nuclear Physics  
Survey of African-American Literature/History  
Technology to Make the Grade  
The Gods of CNN: The Power of Modern Media  
The Great Depression  
The Holocaust  
The Math Behind Events in the Natural/Modern World  
The Spark Behind Electricity  
The Sunday New York Times  
The Tenor Sounded Like Someone Dropped a Rock  
on His Toe!  
The Vietnam War  
Three Tracks To Latin  
Thrill Ride-Event Based Science  
Time, Space, and Other Things  
To Be or Not to Be: What is a Hero?  
TO KILL A MOCKINGBIRD: Maycomb — Microcosm  
to the World  
Twentieth Century American Wars and Society  
Twentieth Century Women Authors — A Reflection of  
a Changing America  
United States Government Issues  
United States History — Honors  
Visual Basic 6.0  
Visual Basic Essentials  
Walk on the Wild Side  
Web Design and Internet Research  
Web Design: Artistry and Functionality  
Web Paging the Great Scientists  
Web Writing  
WebQuest: A Literary Odyssey  
Wellness: A Lifetime of Health and Fitness  
Who Can You Believe? Emerging Topics in Health  
World Area Studies — Current Issues and Events  
World Conflict, a United Nations Introduction  
World Literature on Film: Insight into the Continental  
Experience  
Writing in Spanish

## Killer App

*continued from page 3*

round of teacher training, VHS implemented additional evaluation criteria for the [Teachers Learning Conference](#), the professional development NetCourse that prepares VHS teachers for online teaching. The more rigorous training standards were instituted in order to decrease the variability in course preparation and course difficulty. A NetCourse Evaluation Board was convened to set standards for course design and delivery. VHS faculty advisors also give assistance to VHS teachers. As a result, teachers now feel more prepared and their NetCourses are less variable in quality and expectations.

Progress has also been made in increasing the diversity of students served, with 58% coming from economically disadvantaged backgrounds in the second year of VHS. During this same period, students from a wider variety of academic backgrounds participated, due in part to an increase in the number of non-honors courses offered. VHS learned that opening more courses to any VHS student allows a greater variety of students, not just the academically superior, to participate. In the area of gender equity, VHS continues to enroll relatively equal numbers of male and female students.

Virtual High School is giving school administrators the chance to not only think outside the educational box, but to reframe the box itself. E-ducation is helping students learn in a graphical and interactive environment, on their own schedule.

Students nowadays live and play in Internet time, having access to resources anytime, anyplace. Now they can learn in Internet time too. @

*Liz Pape is the VHS administrator.  
liz@concord.org*

# The Many Faces of VHS

## Who Is VHS Helping . . . and How?

There are many VHS success stories. Some are about how individual students and teachers have been affected. A few are stories of schools mobilized to improve education. We want to tell you some of those stories.

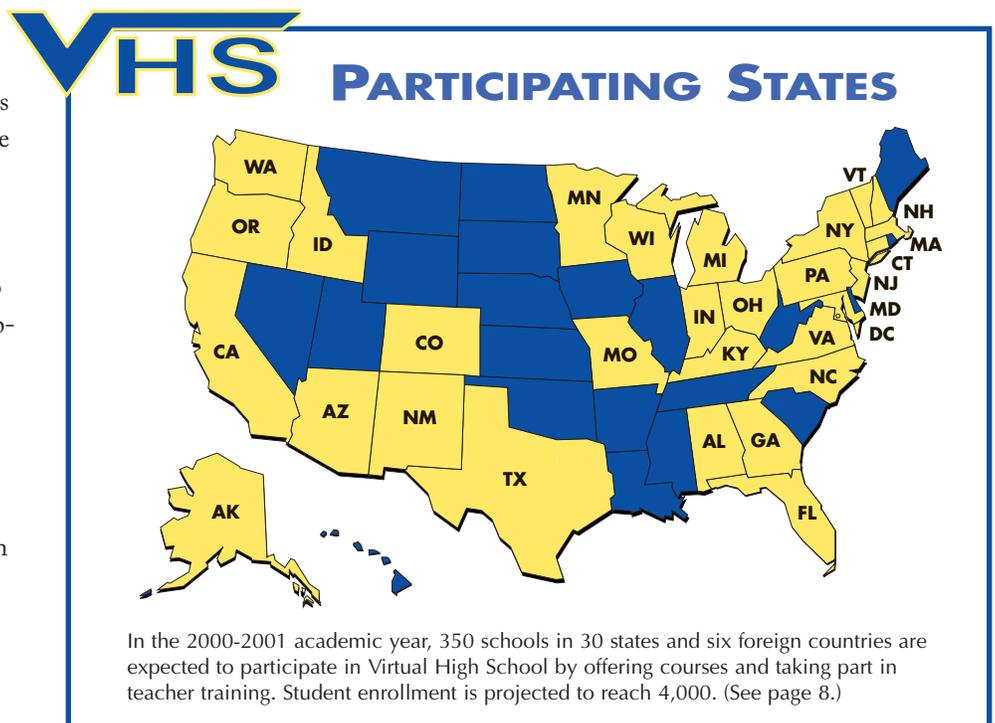
Two years ago Monroe Senior School, Alabama's smallest K-12 school, was in trouble. Budget cuts threatened the school with closure. Low test scores were close to prompting a state takeover. The local board of education gave the school three years to make good. One of the proposals was to try asynchronous instruction. After researching the possibilities, and talking with Bruce Droste, director of the [Virtual High School](#), they signed up five seniors for [Introduction to Botany](#) and then five sophomores the following semester.

Things began to change. Students were excited, and they did well in a difficult class which even the State Superin-

tendent compared to a freshman college course. As a result, Monroe students started competing for the opportunity to take VHS courses. Since students had to fulfill specific local academic requirements in order to participate, their other work improved as well. "We do not know specifically what contributed to a change in overall test scores," explains Dr. Brooks Steele, Director of Library Media/Technology/Federal Programs, "but we know that the VHS course did help."

In her address to the school, the Monroe Senior School class valedictorian thanked the administration for allowing her to take courses via the Internet. Says Steele, "The students felt that they could not compete with other students from other parts of the country, but their success showed they could."

*(continued on page 6)*



### LINKS ON THIS PAGE

[Introduction to Botany](#)—vhs.concord.org/Pages/Academics-VHS+Catalog+(00-01)  
[Teachers Learning Conference](#)—vhs.concord.org/Pages/Main+Office+FAQ

## Many Faces of VHS

*continued from page 5*

Monroe Senior has not closed, and its test scores have improved. And 40 students in two schools are now eligible to take VHS courses. The improvement is certainly not entirely due to VHS. Nevertheless, “VHS has changed the quality of education at Monroe Senior School,” says Steele. “VHS has changed the notion of education for all of us.”

VHS can also expand the horizons of individual students by providing a greater variety of courses to choose from, as we heard from Alan Seay, Principal of Iowa Park High School in Texas. “Your organization really helped out one of my students,” writes Seay. A student of his was headed towards an honors level diploma, except for one problem. Her schedule of upper level honors and AP classes, necessary in order to receive an honors diploma, left no room for a state Fine Arts requirement. In order to take one of Iowa Park’s Fine Arts classes, the student would have had to drop an AP class. But by enrolling in “American Music Heritage — Song and Society” offered by VHS, she was able to maintain her honors classes while also fulfilling the Fine Arts requirement with a high-quality course. “She will be able to satisfy her dream through VHS,” explains Seay.

VHS affected teacher Ken Sowards’ life in a very different way. Sowards teaches in a small, rural high school in west central Ohio, where course offerings are by necessity limited. As a social studies teacher, Sowards had hoped that someday he could teach a course on the Vietnam War. He would get that chance when his school joined VHS, but that would be only half the story.

One day when Sowards was about to start teaching his VHS class, he received an email from Susan Gerber, a VHS site

coordinator at the American Community School in Amman, [Jordan](#). One of Gerber’s students, an American whose parents worked at the U.S. embassy, was interested in the Vietnam class.

“I have always felt teaching to be a rather lonely profession,” says Sowards. “I can go for months without talking to another history teacher. As far as I was concerned, communicating with another teacher from an exotic teaching environment was another benefit of participating in VHS.” He also struck up a correspondence with Gerber’s husband, a Vietnam veteran, who wrote a short autobiographical sketch of his Vietnam experiences for Sowards’ students.

Three weeks into the course, a remarkable coincidence was discovered. Gerber had to leave Jordan to check her daughter into a hospital in Dayton, Ohio, 45 minutes from Sowards’ school. Gerber spent a day there — a VHS site coordinator from a private school in Amman, Jordan, visiting a VHS teacher in a rural public school in Ohio — and discovered that not only had they grown up in the same town, they had gone to the same schools. “We had even had the same inspirational math teacher who in some small way had led us both to a career in education,” explains Sowards, feeling nothing short of flabbergasted. They also discovered that Gerber’s grandfather, a doctor, had saved the life of Sowards’ grandfather in the 1940s.

“It seemed to me there was a lesson in all of this,” says Sowards. “For five months I had been communicating with a colleague halfway around the world only to find out we had grown up a half-mile from one another. As a VHS teacher, I was reaching out, making contact with other teachers and students from all over the world, and in the end, the farther out into the world I reached, the closer it brought me to home.” @

### A POEM

Some mourn that they cannot  
Hear the whispery strains of  
Crickets on a hot summer night,  
Others the waltz of the planets  
In Beethoven’s Fifth or the  
Throbbing conga of African drums.

Of those who can hear,  
Some drown themselves in sounds  
And turn their heads from the  
Former’s silent poetry of the body  
Cleaving through air and space,  
Giving birth to formless words.

The world is punctuated by  
Both sides’ angry shouts  
Of “cochlear implants!”  
“deaf president now!”  
“mainstream schools!”  
“equal opportunities!”

But by far the saddest noise  
Is a couple weeping in the  
Delivery room after they  
Learn that their little baby  
Is Deaf.

To all of them, I say  
Come with me, join our hands,  
And let us descend together  
Beyond the veil of white noise  
And see for ourselves what  
Lies beyond the silence.

Only then can we truly listen.

*Kimberley*

*Maryland School for the Deaf*

*This poem was written as an assignment  
for the VHS class “Eastern and Western  
Thought — A Comparison.”*



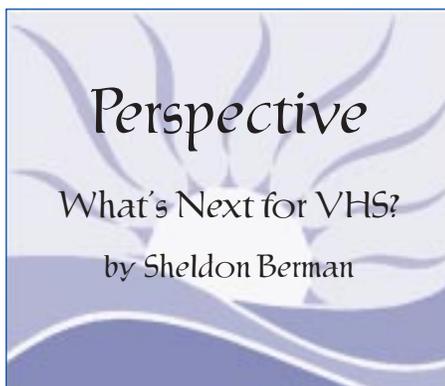
Author’s note: I was born Deaf into a fourth-generation Deaf family. I currently go to Maryland School for the Deaf, where we all use American Sign Language. I have, through summer programs at mainstream schools and everyday interaction, learned a lot about the hearing world as well.

I have to admit, sometimes I wish I could just once hear for myself why classical music is considered so wonderful. On the other hand, I’m very proud of my Deaf culture and wouldn’t give it up for the world. I find myself being torn between both worlds, and I’m not surprised if many other Deaf people feel the same way. I also have noticed that many hearing people don’t quite know what to think of Deaf people. While some are willing to learn, others are downright prejudiced against us. I decided to depict that paradox and the futility of arguing over an unresolvable issue in my poem.

#### LINKS ON THIS PAGE

[Maryland School for the Deaf](http://www.msd.edu)—[www.msd.edu](http://www.msd.edu)

[Jordan](http://www.mit.edu/activities/jordanians/jordan/history.html)—[www.mit.edu/activities/jordanians/jordan/history.html](http://www.mit.edu/activities/jordanians/jordan/history.html)



**“ Within four years we estimate that over 1,000 schools will be part of this collaborative effort. ”**

When Robert Tinker and I first created VHS five years ago, we knew it had the potential to benefit a wide range of schools and students. Our goal was to design online courses that were compelling, challenging, and personal. VHS was not meant to be just a good use of technology, but rather a new medium that merged the best in technology with the best in instructional methods. Four years into the Virtual High School Cooperative, we have exceeded all of our expectations.

This year, with 87 courses online and over 1,800 students enrolled, we have turned theory into practice and created a new educational environment that broadens curriculum and teaching practices nationwide. As a result of its success, VHS is growing rapidly. One hundred and fifty teachers are preparing to add their courses to the [2000-2001 VHS catalog](#). Next year, we anticipate 4000 students in 30 states will be enrolled in 200 VHS courses. Three hundred and fifty teachers will be in training or teaching VHS courses. Within four years we estimate that over 1,000 schools will be part of this collaborative effort.

As a result of our success, The Concord Consortium and [Hudson Public Schools](#) are planning to continue VHS beyond 2000-2001, the last year of the [U.S. Department of Education](#) grant that funded VHS as part of its farsighted Technology Innovation Challenge Grants program. We will continue to expand the VHS cooperative through a member fee that will cover operational expenses. Because VHS will remain a collaborative effort, we will be able to keep the membership fee to one that is reasonable for all schools.

We are also creating an abbreviated ver-

sion of our yearlong VHS teacher professional development course for those who want to teach existing online courses. New teachers who complete the short course during their pre-service training will be able to teach a VHS Netcourse during their first year in a high school classroom. As part of the pre-service curriculum, new teachers will receive extensive training in online pedagogy. And VHS faculty advisors will continue to mentor those teachers during their initial year of online course delivery.

We're also creating a less demanding self-paced, moderated professional development course for teachers interested in online instruction. Additional training modules will provide teachers with technology tools for their online as well as face-to-face classes. As we grow, we'll enable teachers to collaborate in teaching sections of courses that they co-create, thereby expanding the opportunities for professional development and collaborative growth.

VHS is already the largest web-based high school in the country. Given the rapid growth we're experiencing, we anticipate VHS will offer the widest range of courses available to secondary students anywhere. Most importantly, as we move from one point in our history to the next, we believe that VHS will continue to stimulate educational improvement, both technological and instructional. @

*Sheldon Berman is co-principal investigator for the Virtual High School and superintendent of the Hudson (MA) Public Schools.  
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LINKS ON THIS PAGE

[2000-2001 VHS catalog](#)—[vhs.concord.org/Pages/AcademicsHome](http://vhs.concord.org/Pages/AcademicsHome)

[Hudson Public Schools](http://www.hudson.k12.ma.us)—[www.hudson.k12.ma.us](http://www.hudson.k12.ma.us)

[US Department of Education](http://www.ed.gov)—[www.ed.gov](http://www.ed.gov)



**Join Virtual High School 2000-2001**

As the numbers below indicate, VHS has been growing by leaps and bounds over the past four years. In the fifth year of the project, 2000-2001, VHS will have grown far beyond its original projections. Its popularity, especially among small, rural, and low-wealth schools nationwide, has proven that Internet-based courses can bring unprecedented educational opportunity to everyone. Students are challenged by the demanding VHS course standards, and teachers gain new skills from superior professional development training.

In exchange for a small amount of teaching time contributed to the VHS Cooperative, each school can offer its students NetCourses ranging from advanced academic courses to technical and specialized courses. As this approach gains popularity, each school can contribute more teaching time, enroll correspondingly more students, and help to make a wider variety of courses available at an affordable price. Interested in joining?

Liz Pape, VHS Administrator  
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 <http://vhs.concord.org/Pages/Main+Office-Want+to+Join>

**Look How VHS Has Grown**

**Student Enrollment**



Projected Statistics  
2000-2001

**Students by Gender**



**Teachers Participating**



**The average VHS course has  
17 students from 14 schools  
and 7 states.**

**School Participating**



**Courses Offered**



**Other countries participating are  
Brazil, Israel, Jordan, Singapore,  
Spain and Venezuela.**

**States Participating**



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