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The Virtual High School: America's Learning Frontier

By Carol A. Clair

In this age of advancing technology, educators are challenged daily to rethink their craft. However, such soul searching is no longer reserved only for the practitioner. As K-12 school districts grapple with public demands for accountability that have resulted in assessment and accreditation tests such as Virginia's Standards of Learning (SOL) and experience the heated debate over school choice, they are motivated to employ "out of the box" thinking to improve achievement without depleting financial resources.

The development of several successful virtual high schools has caused administrators to critically assess traditional delivery models. This article explores the concept of the online high school. It describes three current iterations of this model.

1. The statewide model
2. The charter school model
3. The cooperative model

The Statewide Model

The most widely publicized statewide program to date is Florida High School http://www.flvs.net/. Founded in 1996, the Florida program enrolls 2500 students annually and employs 58 teachers. FHS is financed almost entirely by the Florida legislature and is dually viewed as a research project and a state service.

The school employs only top faculty; this is possible because there are no geographical constraints. Classes are open to all eligible Florida students.

"70 percent are from public schools, 21 percent are home-schoolers. And 9 percent are from private schools." (Trotter, 2001)

FHS combines asynchronous learning with self-directed practical learning (such as labs). Features such as learning styles assessments and student selected pacing give the courses a custom feel thus compensating somewhat for the lack of personal attention.

A student-information system keeps track of grades and progress on individual pacing charts. Parents and the traditional school, when appropriate, are emailed regular progress reports. Parents can view their child's work online when they log on with the child's password.

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Because there are a myriad of security issues surrounding examinations, teachers are encouraged to create alternative assessment tools to supplement testing. In-depth projects, essays and portfolios are utilized.

The state of Florida believes FHS is particularly important for its rural school districts. Schools in these districts are typically too small to offer a wide variety of classes, even when such classes target important curriculum areas. However, FHS allows them to offer a competitive array. Even in poorer areas where many students do not have home access to the Internet, districts can schedule enrolled students in a school-based lab. This often produces an additional advantage for such students since mentors are often assigned to the facilities, thus providing instant feedback and personal attention.

The state legislature expects to be able to cut funding to FHS within three years; it currently provides $6.17 annually. With this in mind, FHS will begin offering its services to private schools in 2002 for a fee. Additionally, it is currently leasing its courses to other states and districts and is providing both F2F (face to face) and online professional development for potential online instructors.

Following Florida's lead, other states are in the process of initiating their own virtual high school programs. In the fall of 2002 Maryland will launch the Maryland Virtual Learning Community. Illinois and West Virginia are currently testing the waters by leasing courses from FHS.

The Charter School Model

It seems inevitable that charter school proponents would discover the opportunity to create online institutions. Such schools are particularly well suited to provide home-schoolers advanced courses that parent educators are often unable to teach. Additionally, they have the potential to provide these students access to academically competitive, recognized educational experiences that are removed from the environment that caused the original disenchantment with the traditional school model.

According to the Center for Educational Reform, a school choice advocacy group based in Washington D.C., there are currently 30 cyber charter schools offering instruction in twelve states. Charters have been granted in Alaska, Arizona, California, Colorado, Florida, Kansas, Minnesota, and New Mexico. Ohio, Pennsylvania, Texas and Wisconsin (Trotter, 2001)

One of the largest, Electronic Classroom of Tomorrow Charter School (eCOT) is based in Ohio and enrolls 2,838 students in its second year of operation. eCOT was founded as a vehicle to reach out to Ohio's rural population on the Pennsylvania border. The alternative was to bus the students to Pennsylvania and pay that state for educating Ohio's students. Instead, eCOT has been attracting students from Pennsylvania.

Although the charter school legislation in most states allows charters to operate unfettered by government regulation as long as they obtain appropriate results, states are not applying those rules to cyber schools. In Ohio, for example,

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the Department of Education has decided to monitor how learning is taking place in these institutions.

Since charters are not as open to the same public scrutiny as public schools, there is less publicity concerning their methodologies. Most either are managed by for-profit management companies such as the Edison Project or are using purchased courseware and curriculum.

One definite reality about cyber charters is public school districts are taking exception to their existence. Several lawsuits have been filed by teachers' unions and school districts. The awarding of public funds to online institutions is being questioned as an equitable practice. Although state law mandates such charter school funding formulas, traditional educators maintain that this was not the legislative intent. They say they are being billed for students that were never enrolled in their districts and the attraction to virtual schools by home schoolers is creating a budget shortfall.

The Cooperative Model

The Virtual High School (http://vhs.concord.org) is composed of more than 125 cooperating high schools from across the U.S. Participating schools contribute teachers and faculty time in return for enrollment for their students.

The formula is simple. For each course offered online by a participating school, the school is awarded 20 enrollments. This allows schools to offer an expanded curriculum without incurring additional FTE expense. Funded by a Technology Innovation Challenge Grant (http://www.ed.gov/Technology/) to the Hudson Public Schools, VHS is the largest cooperative currently operating.

The Concord Consortium is the primary subcontractor for technology and pedagogy. The Consortium is a not for profit educational research and development organization whose mission is the harnessing of emerging technologies for the purpose of bringing expanded educational resources to all people regardless of circumstances.

The one-semester courses are delivered using an asynchronous, scheduled model structured around online discussion groups (Concord Consortium, 1999). This structure allows students to access lessons and discussions at any time, yet maintains a degree of consistency by scheduling topics. Therefore, students are essentially on the same page at the same time. Such consistency of process enriches discussions and allows students to learn from each other.

This centrality of the online discussion group is viewed as "the defining characteristic of the Concord model" (Concord Consortium e-Learning Group, 2000). The emphasis on "meaningful collaboration" and a strong desire to keep costs as manageable as is practical unfolds in eight major design characteristics:

- Asynchronous collaboration - the primary learning strategy that includes group problem solving between students using threaded discussion.

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- Limited enrollment - each section is limited to 25 participants. Working teams of 2-3 are formed for project work.
- Expert facilitation - facilitator (notice this term is used to replace "teacher") proficiency keeps discussions at higher levels and prompts further exploration.
- Trust - the facilitator establishes and shapes intellectual and social norms that create a safe learning environment.
- Explicit schedules - schedules seek to preserve "anytime, anywhere" flexibility while structuring content in a manner that encourages discussion and facilitates learning.
- Excellent materials - a wide array of online and traditional learning materials accommodates varied learning styles.
- Good pedagogy - courses include clearly defined objectives that are matched directly to assessment, continuous assessment, clear assignments and well-defined student expectations with regular feedback.
- Quality assurance - course preview, monitoring, and assessment are approached from four perspectives: design, content, delivery and impact. Courses are revised annually based on analysis of these areas.

As is indicated in the design elements, several of the hallmarks of the Concord Model are dependent upon teacher training. Teachers participate in a yearlong, online professional development program. The training uses action learning to simultaneously ground teachers in both the learning and teaching experience. They are trained in facilitating, moderating and structuring online discussion groups. Since each teacher is required to develop and submit an acceptable course prior to entering the training program, their courses are enriched and modified as part of the learning process.

Participation in the VHS does not reduce basic instructional costs for member schools. Because teachers are assigned to virtual rather than F2F courses, there is a loss of local instructional time. However, since that loss entitles the district to twenty enrollments at VHS, there are fewer students requiring services. Therefore, there is theoretically a net zero effect on number of sections offered and students taught. This dollar neutral feature makes it easy for schools to justify expansion of their VHS program involvement.

Additionally, the decentralized nature of VHS keeps administrative costs down, encourages creativity and is not threatening to faculty. This translates to strong union support.

The VHS vision includes the establishment of other cooperatives. Assuming all virtual high schools can agree to adhere to common standards, there could be cross enrollment. Specialized cooperatives could concentrate on particular

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disciplines or cultural needs. As has been illustrated by VHS, small schools would become increasingly attractive as they offered a large school curriculum.

Conclusions

It is tempting to think that virtual education may be a "silver bullet". It clearly has the potential to move our local schools to a world-class level. By working collaboratively, schools can leverage their strengths and minimize their weaknesses.

However, it is important to note that currently there is little substitutive research in this emerging area. In the specific topic area of virtual learning at the secondary level, this author could not identify any completed major studies. This is partially due to the newness of the model. However, the Web-based Education Commission's report, the Power of the Internet for Learning: Moving from Promise to Practice, speaks of the need to emphasize such research.

"We must establish a pedagogical base for the effective use of Internet learning. We need a vastly expanded, revitalized, and reconfigured educational research, development, and innovation program, one built on a deeper understanding of how people learn, and how new tools support and assess learning gains"

When considering these programs, there must be recognition of the fact that not all students are suited to this kind of learning. All three of the models discussed have strict policies regarding student participation requirements. The VHS has a preliminary "test drive" period during which students can drop or be dropped without penalty. Online educators expect that there will be more withdrawals and drops than there are in a traditional environment. All emphasize that students must be disciplined and self-motivated, clearly not skills all high school students possess. Therefore, virtual high schools should be viewed as a piece of the puzzle, one that when integrated into the whole creates expanded reach and richness, but may not be suitable for all students.

Teachers in virtual schools report that students who fail to flourish in environments that are more traditional frequently excel in the virtual world. One could theorize that such students are relieved to be removed from the peer pressures of high school life. In a virtual setting, they are judged only for academics. Clothes, athletic ability and friends are removed from the equation.

These dynamics raise questions regarding appropriate placement and counseling for potential students. Will schools begin assuming that those students that do not possess the cultural capital that assures success in our traditional environment are also not suitable for online learning? Could virtual learning become simply another benefit reserved for a select few, thus creating yet another layer of inequity or exclusivity in our already tracked high schools?

Will online learning create opportunity for socially and economically disadvantaged students? Alternatively, will it widen the digital divide? The Commission Report points out that virtual schools have the distinct advantage of being able to travel with migrant children. Although they are literally referring to the

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children of migrant workers, there are "migrant" children and families in our ghettos. Families in survival mode frequently move around. The poorest families have no homes. Does it make sense to assume though that simply because the virtual schools can retain seamless records of progress that these children will have reasonable access to computers? Certainly, this could be accomplished by placing systems in locations that are accessible to these populations. However, achieving this would mean making the education of our disenfranchised a national priority. Are we willing to do that?

Will we be capable of developing cooperative models of virtual delivery? Can the virtual schools agree on a set of universal standards? Without such interdependent themes, we will not reach our fullest potential. If we regress into our standard competitive mode, if for-profit, bottom-line oriented corporations manage these ventures, we will erect new barriers rather than eliminating them.

That would be a tragedy, for we have a blank slate here. This new domain is ours to develop as we see fit. It is an opportunity to re-invent education without demolishing it and starting over. It is entirely possible that virtual practices can cross-pollinate into our traditional environments enriching both rather than depleting one to benefit the other.

It is also possible that the new intellectual and social norms that arise from this medium can result in an educational environment that is more accepting of diversity, values interdependence over competition and engages students in ways that teach them to be more active participants in our democracy. It is rare that a society is presented with such an opportunity. Let us hope that we do not squander it.

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