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Are Virtual Schools More Cost-Effective Compared to Traditional, Brick-and-Mortar Schools?

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010.006B: Are Virtual Schools More Cost-Effective Compared to Traditional, Brick-and-Mortar Schools? POINT

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Over the past two decades, the growth of virtual schooling has been extensive. Virtual schooling is often described in terms of being either a supplemental or full-time program. Supplemental programs, generally associated with virtual schools, are those where a student is enrolled in a brick-and-mortar or traditional school with a physical location and the school allows the student to enroll in one or more online courses as a way to supplement their curricular offerings. This is common in schools with smaller student populations or in schools where the student demand does not warrant a wide range of elective courses. In contrast, full-time student programs, often described as cyber schools, are those where the students complete all of their courses in an online environment.

Funding and the Cost of Education

In the United States, public K-12 education is funded primarily through local property taxes, along with a variety of federal and state-level funding. These various sources of money result in a base per student amount that schools receive primarily based on student enrollment. Schools generally receive additional funding to support students who require services beyond that of a regular student (e.g. students with special needs and disabilities). Some schools also qualify for additional funding based on their location or the unique demographic characteristics of their students.

To date, there has been little published on how virtual, or online schools are funded. There are, however, specific budgetary items that policymakers, researchers, practitioners, and other educational stakeholders have been able to identify that apply specifically to brick-and-mortar schools, virtual schools, or both. Based on research conducted by Adsit (2004), Anderson, Augenblick, DeCescre and Conrad (2006), Florida TaxWatch (2007), the Southern Regional Education Board (2006), and Darrow (2008), a comparison of the cost factors associated with the operation of brick-and-mortar schools and virtual schools was created.

Table 1. A comparison of brick-and-mortar school and virtual school cost items

Brick-and-Mortar Schools	Virtual Schools	Brick-and-Mortar and Virtual Schools
Buildings and ground maintenance	Space for offices	Administration
Transportation	Course management system	Teachers
Security	Course content	Professional development
Energy	Mobile communication devices for teachers and network	Computer lab and/or computer access for students
Athletics	Technology support	Computer and Internet access for teachers
Music program	Marketing and advertizing	Courses and course outlines approved by governing bodies
Substitute teacher costs (for professional development and sick days)	Home computers or laptops and Internet access for students	Students
Medical services (e.g., nursing office, first aid)		Student information systems
		State testing system
		Textbooks
		Special education services
		Student support (e.g., counseling, library)
		Network infrastructure
		Telephone and network

Unfortunately, the actual costs associated with K-12 online learning, particularly the full-time costs of cyber schools, are difficult to determine. One of the reasons for this difficulty is due to the fact that many cyber

schools are operated by private, for-profit companies. For example, the largest cyber school operator in the U.S. is K12 Inc., a publicly traded company that offers proprietary curriculum and educational services created for online delivery to students in kindergarten through 12th grade. In September 2010, for example, K12 Inc. opened the Michigan Virtual Charter Academy (MVCA) with an initial enrollment of 400 students. Regulations in the state require that MVCA release their annual operating budget on their website. Based on the student enrollment cap, the budget reports expected revenue of $2,881,830 or $7205 per student. The budget calls for expenditures of $1,812,256 on basic instruction and additional needs instruction (presumably access to the online course content, textbooks, and other instructional materials), and $1,069,574 on support services such as the cost of the administration, teachers, learning coaches, the capital costs of the office, (it is unsure which category access to K12 Inc.'s proprietary course management system is included). Assuming the course management system costs are included in the instructional expenditures, it would mean that the MVCA has entered into an annual contract with K-12 Inc. for access to their course management system and online content for $1,812,256. Even without understanding the exact amount the cyber school's budget goes to its parent company, like MVCA and K12 Inc., clearly the cyber school business is a lucrative business.

However, in recent years there has been an increase in the number of public school districts that have been creating full-time cyber school programs. These programs have been increasingly more transparent with their financial data. Additionally, as various state governments demand greater oversight over their cyber charter schools, these schools have become more forthcoming in their release of their budgetary information.

Cost Effectiveness of Virtual Schools

The issue of cost effectiveness can be approached in a variety of ways. With reference to virtual schools or supplemental programs, students enrolled in these programs attend a brick-and-mortar school and are enrolled in one or more online courses to supplement their education. This form of K-12 student online learning is more common in rural and inner city schools, where it may be difficult to attract teachers who have specialized subject matter expertise or enrollment in a specific course may not warrant the allocation of a teacher (Barbour, 2009). The most common method for funding these supplemental virtual schools is a combination of block grants from the government, along with the use of per course fees ranging from $100 to $500 paid for by the school or school district. There are some virtual schools that do receive per student funding in a similar manner to their brick-and-mortar counterparts, however, this represents very few of the virtual schools in the U.S.

In 2007 the Florida TaxWatch Center for Educational Performance and Accountability conducted an audit of the Florida Virtual School (FLVS) "as a credible alternative to traditional schooling as regards both student achievement outcomes and cost-effectiveness" (p. 1). The FLVS is one of the few virtual schools that receive per student funding at levels similar to that of brick-and-mortar schools. Based on their examination of only the funds provided by the Florida Education Finance Program over the previous four years, the Florida TaxWatch (2007) concluded that the FLVS was $284 more cost effective in 2003-04 and this rose to $1048 more cost effective in 2006-07. The authors reported that, "capital outlay expenses make those savings even bigger" (p. 79). Simply put, "FLVS gets solid student achievement results at a reduced cost to the State" (p. 79).

This is not to suggest that supplemental virtual school funding has not been without controversy. For example, in 2010 the Governor of Idaho proposed phasing out the direct per student funding for the Idaho Digital Learning Academy (IDLA) altogether, as school districts also received funding for their students enrolled in the IDLA, resulting in double funding for each IDLA. This proposal was met with strong resistance – both inside of Idaho and nationally – however, cuts to the IDLA funding did occur and for the first time in its history the virtual school has had to implement enrollment caps. Further, the fact that the FLVS spends $1000/student less that its brick-and-mortar counterparts has allowed that program to devote additional funding to other aspects of their business model (e.g., its course development process, which is known to be one of the more comprehensive, allowing it to be one of the few statewide virtual schools able to operate as a course content provider and lease that content to other programs). Like most aspects of K-12 online learning, both of these examples are unique to the individual funding model used in that particular state.

Cost Effectiveness of Cyber Schools

The issue of how cyber schools are funded has consistently been a political issue. For example, in 2009 Ohio Governor Ted Strickland proposed that the state's cyber charter schools be funded at a rate that was approximately 25% of the funding that brick-and-mortar schools received (Candisky, 2009). More recently, two cyber school providers that had been granted charters to begin operating in the State of Georgia for the 2010-11 school year announced that they were delaying their opening because the funding model proposed by the state was insufficient. The state had proposed a funding model of $3200/per student, or approximately 60% the funds provided to brick-and-mortar schools (Dodd, 2010). Interestingly, the Georgia Cyber Academy, another cyber

charter school in the state that received $3500/student in funding, has been able to meet Annual Yearly Progress (AYP) based on their students' performance on the state's standardized exams (Dodd, 2010).

While many cyber charter schools have been reluctant to provide their actual per student cost or operation, there are some specific examples we can draw upon. In a recent webinar hosted as a part of Learn Central and *Elluminate*'s Classroom 2.0 series, Lisa Gillis from Insight Schools Inc. (a cyber charter school provider), spoke on the topic of "Virtual Schooling. During the 2008-09 school year, the average expenditure per student in the state was $9,760, yet the per student cost to Insight Schools was only $6,480. In this instance, Insight Schools was able to provide students with an online education $3,000 cheaper than their brick-and-mortar counterparts. This was consistent with an earlier study conducted by the Ohio legislature, which determined that the per student cost for its five cyber charter schools was $5382/student, compared to $7452/student in brick-and-mortar charter schools, and $8437/student in public brick-and-mortar schools (Ohio Legislative Committee on Education Oversight, 2005).

Additionally, Michigan has seen an increase in the number of school districts that have created their own full-time cyber schools in the past three years (e.g., Dearborn Heights Virtual Academy, St. Clair County Regional Education Service Agency's [RESA] Virtual Learning Academy, and Westwood Cyber High School). Over the past two years the St. Clair Virtual Learning Academy has posted its budgets on their website. According to both documents it is more cost effective to provide an education to the group of at-risk students they serve in an online environment (with students using laptops, but also being required to spend five hours in the school's distance education lab) than it would be to provide that education in the traditional brick-and-mortar environment. In fact, it cost 16% less in 2009-10 and was projected to cost 7% in 2010-11.

The Case for Equal Funding

Beyond the individual virtual school and cyber school programs, along with the school choice movement, the two main sources that have argued online schools should be funded at levels equal to brick-and-mortar schools have been proponents of cyber schooling in Colorado, the authors of a report prepared to the BellSouth Foundation and the professional association representing practitioners of K-12 online learning (i.e., International Association of K-12 Online Learning [iNACOL]). In 2004, the Join Budget Committee of the Colorado state legislature began examining its funding of full-time cyber schools in the state. Various groups made representation to the committee, including Hausner (2004), who prepared a report on behalf of the Colorado Cyberschool Association – the

professional organization representing cyber charter schools in the state. Not surprisingly, the report concluded that the "cost per student [of cyber schooling] is not enormously higher than for in-class students. Over time, cybereducation will become substantially more cost-efficient" (p. 10) – essentially arguing that, at the time, cyber schooling cost more than brick-and-mortar school.

In 2006, the BellSouth Foundation funded Augenblick, Palaich, and Associates to conduct a study on the *Costs and Funding of Virtual School*. The report concluded, "the operating costs of online programs are about the same as the operating costs of a regular brick-and-mortar program" (Anderson et al., 2006, p. 4). To reach this conclusion, the study used a professional judgment methodology, which relies upon the expertise of experienced individuals to pass opinions on a particular issue. The experienced individuals who formed the sample for this study included a group of representatives from supplemental virtual schools and a group of representatives from full-time cyber schools. Even if the opinions of these individuals were not based on the best interest of the online programs they all represented, immediately following the conclusion quoted above the authors indicated that the study did not include costs associated with capital expenses or transportation and, if it had, "the costs of operating virtual schools would have been less per pupil than brick-and-mortar schools" (p. 5).

Based upon this report, along with the work conducted as a part of iNACOL's *Promising Practices in Online Learning* series, this professional association has regularly called for the full or equal funding of K-12 online learning programs In the *Promising Practices in Online Learning* report focused on the funding of online learning, the Watson and Gemin (2009) argued "online schools should be funded within the range of brick-and-mortar school operating costs" (p. 10). They support this assertion with the Anderson et al. report, but at no point in the report do they mention the obviously methodological bias in favor of online learning or the caveat Anderson et al. offer to their overall conclusion. It is also worth noting that iNACOL is the professional association representing practitioners of online learning.

Making the Case Virtual Schools are more Cost Effective

Given the scope of K-12 student online learning in the U.S., the amount of information available associated with funding virtual and cyber schools is extremely limited. However, as the evidence clearly shows, online learning – both supplemental and full-time – is more cost effective compared to brick-and-mortar schooling. The only sources that argued the need for equal funding are either methodological questions or have questionable motives. This is not to say that virtual and cyber schools would not put additional funding to good use, in the same way that

any brick-and-mortar school with additional funding would be able to increase programming or decrease class size or any number of positive improvements upon the student learning environment. The limited research available tends to demonstrate that it is more cost effective to provide students with opportunities in supplemental virtual schools and full-time cyber schools than it is to educate a student entirely in a brick-and-mortar environment.

Unfortunately, the issue isn't quite that simple. The general lack of information does indicate that this conclusion is based upon a selective amount of data. If cyber charter schools were more forthcoming with their financial information and particularly their profit margins, we would be better able to determine if this initial conclusion would hold true. Additionally, in many instances the examples above are based upon established programs. For example, there is potentially a high investment required to start a virtual or cyber school (e.g., the cost of training of teachers to use the course management system and to teach in an online environment, along with the cost of online course content development to name just a few). After these initial start-up costs, as Watson (2004) concluded in his presentation to the Colorado Joint Budget Committee, "over time, as programs evolve, grow, and achieve some economies of scale, Colorado can fund online programs for less than the state's minimum per pupil revenue" (p. 3).

Cavalluzzo and Higgins (2001) described a model where, virtual or cyber schools need to be funded at a higher level in those initial years; but that funded should be decreased as the online learning program built capacity. This would indicate the answer to the question may be based on at what point in a virtual or cyber school's development the question is being asked.

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