

Online K-12 Schooling in the U.S.

UNCERTAIN PRIVATE VENTURES IN NEED OF PUBLIC REGULATION

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ONLINE K-12 SCHOOLING IN THE U.S.: UNCERTAIN PRIVATE VENTURES IN NEED OF PUBLIC REGULATION

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Executive Summary

Over just the past decade, online learning at the K-12 level has grown from a novelty to a movement. Often using the authority and mechanism of state charters, and in league with home schoolers and other allies, private companies and some state entities are now providing full-time online schooling to a rapidly increasing number of students in the U.S.

Little or no research is yet available on the outcomes of such full-time virtual schooling. Partial or "blended" approaches to virtual education, however, have existed for some time and have been studied fairly extensively. These approaches provide virtual courses in certain areas (math, English, and social studies, for example), and research has shown the virtual courses to produce test scores comparable to those from conventional, face-to-face courses.

While such research is useful, it tells us little about scaling up from isolated courses to fulltime virtual schooling. Some areas of the curriculum (the arts, for example) are likely beyond the successful reach of these new arrangements. And research thus far has offered little information about outcomes beyond scores on written tests. Moreover, the rapid growth of virtual schooling raises several immediate, critical questions for legislators regarding matters such as cost, funding, and quality.

Virtual education presents policy challenges to governments at all levels, from local school boards to the federal government. However, the challenges are particularly acute for states, because states bear responsibility for sanctioning and chartering online providers. Therefore, this policy brief is accompanied by model statutory code language to addresses the issues raised by research and discussed in the main body of this brief.

ONLINE K-12 SCHOOLING IN THE U.S.: UNCERTAIN PRIVATE VENTURES IN NEED OF PUBLIC REGULATION

Introduction

This policy brief has four goals: (1) to describe the current status of "online" (computer mediated) schooling in America; (2) to synthesize major research findings on the effectiveness of online instruction; (3) to analyze and discuss the political and economic forces shaping the movement toward increased use of online education at the K-12 level; and (4) to offer recommendations based on the findings. In part, this brief updates and supplements Gene Glass's April 2009 report, *The Realities of K-12 Virtual Education*.¹

Virtual or "online" schooling is a growing phenomenon, extolled by some and found troubling by others. In its contemporary form, virtual education provides asynchronous, computer-mediated interaction between a teacher and students over the Internet. In just a decade, such virtual education has grown from a novelty to a movement that is now driven by a handful of large companies. Although exact counts are elusive, online instruction provided all or part of the formal schooling for nearly one in every 50 students in the U.S. in 2007, and the sector has increased rapidly since then.

Virtual schooling can be classified either as supplemental (including credit recovery) or as full-time cyber schools, with the former currently accounting for about twice the number of students as the latter.² Students who schedule an online course to make up a failed course are engaging in credit recovery. Often, such online work allows a student to graduate on time. Supplemental courses might also include advanced courses not available at the student's usual school. Because most of these students' coursework is completed in a traditional school, they are usually well known by their teachers.

The situation with full-time virtual schooling is somewhat different, however. Students as well as their teachers may be widely separated, with little or no interaction beyond a particular course. These cyber schools exist in at least 27 states today³ and are substantially different from established public schools administering online supplemental programs. Frequently taking the form of online charter schools, they represent a convergence of home schooling, charter schools, and online content providers. These virtual schools have intrigued politicians, particularly those seeking to lower expenditures for K-12 education.⁴ As a few large, private companies lobby legislatures across the nation,⁵ full-time cyberschools have spread widely. However, virtual schools—often chartered by a state agency and supported wholly or in large part by state funds—have not been completely embraced by education professionals. Experienced educators have worried that something important may be lost when live teachers and classroom communities are replaced by laptops.⁶

Assuming virtual schooling continues to advance, as is likely, legislatures will be increasingly called on to address the important policy issues that arise in this radical transformation of K-12 public education. We offer this brief as a resource for legislators in their efforts to protect the public interest in their school systems.

Review of Research

Research on virtual K-12 schooling speaks to four issues: 1) the incidence and rate of growth of the virtual school population; 2) the effectiveness of virtual K-12 schooling in terms of student academic achievement; 3) the cost of virtual K-12 schooling, particularly in relation to the cost of conventional "brick-and-mortar" education; and 4) the quality of virtual K-12 schooling as it might be viewed by traditional accrediting agencies and the public. Each of these issues is discussed below.

The Incidence and Growth of Virtual Education

This brief focuses on privately owned and operated virtual schools, most often taking the form of charter schools. That is, the focus is on publicly funded private ventures, and this combination of public and private interests raises significant and timely questions about the need for regulatory guidance.

Our rationale for concentrating this brief on these private enterprises is simply one of numbers. While state-run virtual schools now exist in at least 39 states, only a small percentage of their enrollment is full-time.⁷

Nationally representative surveys have yet to be conducted (though they are likely at the federal level soon), but a detailed listing of online schooling programs at state and local levels is available in the annual *Keeping Pace* reports produced by Evergreen Consulting Associates.⁸ The latest *Keeping Pace* report sets forth specifics concerning the Education Management Organizations (EMOs) that tend to operate these schools:⁹

National [EMOs] are a key part of the full-time online school landscape, because they operate the schools that collectively make up more than perhaps 75% of the total enrollment in all full-time online schools. The EMOs are a mix of companies that started as online school providers (e.g., K12 Inc., Connections Academy, Insight Schools) and companies that were involved in education and have recently begun offering online schools (e.g., Edison, Kaplan).¹⁰

Looking back over the past decade, one sees only a patchwork of research studies attempting to describe the growth of virtual schools and the role of charter schools. In 2001-2002, a survey conducted by Dick Carpenter identified more than 70 virtual charter schools operating in Arizona, California, Florida, Michigan, or Texas.¹¹ Setzer and Lewis reported that in the 2002–2003 academic year, some 330,000 students were enrolled in distance education courses, with a presence in one-third of the nation's school districts.¹² Smith, Clark & Blomeyer estimated in 2005 that 1 in 100 U.S. K-12 public school students had taken at least one online course.¹³

Also in 2005, a single company (K12 Inc., a private company headquartered in Herndon, Virginia) reported having sold curriculum and distance-learning products to school districts, charter schools, and home schoolers in 13 states serving 50,000 online students, an increase from 12,000 students in 11 states just one year earlier.¹⁴

In 2007, the Sloan Consortium conducted a two-year follow-up survey of school district administrators to gauge the prevalence and rate of growth of K-12 virtual schooling.¹⁵ Consortium researchers estimated that more than a million students in the U.S. were

By the year 2011, approximately 40 states operated or authorized online schools that students may attend full or part time.

engaged in some form of virtual schooling, nearly a 50% increase over 2005-2006. The estimate of one million students represents 2% of all U.S. elementary and secondary students—or double the 2005 estimate of 1%.¹⁶

By the year 2011, approximately 40 states operated or authorized online schools that students may attend full or part time.¹⁷ About 30% of high school students and 19% of middle school students report having taken at least one course online in either a blended (online and face-to-face) or totally self-directed format.¹⁸ Nearly two dozen states *prohibit* full-time virtual schooling but allow virtual education to supplement traditional schooling for the purpose of credit recovery or access to courses not offered locally, or to serve homebound or rural students.¹⁹ Seventeen states permit virtual schooling both for credit recovery and convenience (in the case of rural or home-schooled students), or through charter schools.

In 2010, as many as 27 states had at least one full-time virtual school,²⁰ a figure up from about 20 in 2003-2004.²¹ For the 2009-2010 school year, more than 150,000 K-12 students were enrolled in full-time online schools.²² Three states—Arizona, Ohio, and Pennsylvania—were operating multi-district, full-time virtual schools with more than 24,000 students enrolled in each state. These schools are almost all charter schools. Current estimates of the number of full-time virtual school students are difficult to obtain. No single governmental body collects such data, and even state education agencies are often not forthcoming with data on numbers of full-time students in virtual schools. However, the Wikipedia entry for "virtual schools" lists more than 200 full-time virtual K-12 schools.²³ Some of these schools enroll thousands of full-time students. The Florida Virtual School currently enrolls somewhere between 30,000 and 40,000 full-time middle and high school students, most of these being home schooled.²⁴

In league with the home schooling and charter school movements, virtual schooling has become the fastest growing alternative to traditional K-12 education in the United States. As discussed below, this growth is due in large part to the entry of for-profit companies into the arena of K-12 public education.

Effectiveness of Virtual K-12 Education

Meta-analyses of studies investigating achievement outcomes of part-time virtual schooling—none looked at full-time virtual schooling—have appeared in four major publications. The studies asked whether computer-mediated, asynchronous teaching and learning via computers produces similar achievement on written tests as the same material taught in a traditional, synchronous, face-to-face setting. None of the studies synthesized in these meta-analyses looked at complete curricula (reading, math, language arts, social studies, and the like); they each looked only at a partial curriculum (e.g., reading, math, or both). Further, none examined test performance over an extended period of time or with adequate follow-ups. And as just noted, none attempted to compare outcomes for virtual and traditional full-time schooling.

In 2004, Cavanaugh, Gillan, Kromrey, Hess, and Blomeyer²⁵ published the first metaanalysis of online learning outcomes focused entirely on K-12 teaching. The authors synthesized the results of 14 studies published between 1989 and 2004 that compared online courses with face-to-face courses; each met strict inclusion criteria for internal experimental validity. Outcomes were measured by written tests of course objectives. The authors concluded that there were no statistically significant differences in achievement between online and conventional courses.

In 2005, Smith, Clark, and Blomeyer²⁶ published a meta-analysis to update the work of Cavanaugh and her colleagues; the eight experimental and quasi-experimental studies included all targeted K-12 student achievement and met similarly high standards for experimental validity. Findings supported the conclusions of the earlier meta-analysis. In 2006, Tallent-Runnels and her colleagues reviewed achievement in online courses across a wide span of ages and subjects and similarly concluded that "... learning outcomes appeared to be the same as in traditional courses." ²⁷

A final meta-analysis was conducted by SRI International and staff at the Center for Technology in Learning, U.S. Department of Education. This is the most recent review. Its approach was comprehensive, including primarily studies of higher education; as noted below, only five studies concerned K-12 education. The meta-analysis examined some 51 independent effect size measures drawn from comparative studies published between 1996 and 2008. The most general conclusion in the abstract and the executive summary of this report reads as follows: "The meta-analysis found that, on average, students in online learning conditions performed better than those receiving face-to-face instruction."²⁸ One can expect this conclusion to be widely quoted by proponents and vendors of online courses. However, several caveats, some of which appear in the USDOE report itself, will likely be ignored:

• Several of the studies integrated in the meta-analysis compared face-to-face instruction with a combination of online and face-to-face instruction (the latter often referred to as "blended" or "hybrid" instruction); hence, these results cannot be extrapolated to situations where 100% online instruction is advocated as a replacement for face-to-face instruction.

- The USDOE analysts also noted that many of these hybrid situations gave more instructional time and added instructional elements than the face-to-face condition with which they were compared. Therefore, the comparison might be between students studying in a hybrid situation for 100 hours versus students in face-to-face instruction for 75 hours. In point of fact, only five studies included in the meta-analysis were conducted at the K-12 level, and all of these involved comparisons of blended online plus face-to-face instruction versus only face-to-face instruction. Moreover, of the seven effect sizes from these five studies, two actually favored face-to-face instruction over blended instruction.
- As noted above, most of the data synthesized in the meta-analysis were from experiments performed on medical training or in a post-secondary setting. The study authors concluded, "The positive effects associated with blended learning should not be attributed to the media, per se. An unexpected finding was the small number of rigorous published studies contrasting online and face-to-face learning conditions for K-12 students. In light of this small corpus, caution is required in generalizing to the K-12 population...." (p. ix, emphasis added).

It is worth repeating here the three limitations mentioned at the outset of this section: no study examined test performance over an extended period of time, none attempted to compare outcomes for virtual and traditional *full-time* schooling, and none looked at a complete curriculum. Concerning this last point, the vast majority of research in this area has examined achievement in highly structured curricular areas such as science, math, and technical knowledge. Missing from all this research are studies that investigate less easily codified subjects, for example, art, music, interpretation of literature, and the like.²⁹

Accordingly, the question whether virtual education can substitute *in toto* for traditional face-to-face education is substantively different from the questions addressed in these studies. No reasonable person doubts that learning can take place "over a computer network." Perhaps no reasonable person likewise believes that *everything* students learn in a traditional education can be acquired working alone on a computer. Surely there are things to be learned at a deeper level that cannot survive the translation to cable, processor, and LCD screen.³⁰ While many students in a virtual school who express an interest in a particular foreign language or a laboratory science course might be able to supplement their education with offerings from a local community college, these are questions and approaches that should be considered by policymakers. Those policymakers should also have concerns in addition to academics. For instance, intergroup contact is likely to lead to improved intergroup relations,³¹ and we do not know whether or how this can be accomplished through virtual schooling. Nor do we know much about how full-time virtual school can or should serve special needs students.³²

In sum, beyond the narrow evidence focused on short-term results on standardized tests, focused overwhelmingly on reading and math, and focused exclusively on *supplemental* online education, the research in this area is extremely limited. Those making policy should be clear on this key point: there exists no evidence from research that *full-time* virtual schooling at the K-12 level is an adequate replacement for traditional face-to-face teaching and learning. Yet to

date, this lack of support appears to have exerted little or no influence on the proliferation of virtual K-12 schools. While existing research does not document harm, this evidentiary void raises cautions that should favor pilot programs and careful evaluations rather than large-scale expansion of the sector.

Expenditures for K-12 Virtual Schooling

Although profit-making providers of online courses often began business as small companies developing Advanced Placement (AP) or credit recovery courses, they are now rapidly moving into the market of full-time virtual schooling funded by states under charter school programs. Virtual charter schools have sought to be funded exactly as if they were "brick-and-mortar" charter schools. Although legislatures often supported the creation of virtual schools as a way to reduce costs, virtual education providers insist that expenses for virtual schools are comparable to those for conventional schools.³³ Providers lobby legislators vigorously for equal funding, often citing a cost analysis by the firm of Augenblick, Palaich and Associates as the basis for the claim that "...the operating costs of online programs are about the same as the costs of operating brick-and-mortar schools." The following key proviso in that report is seldom mentioned: "It is important to note, however, that APA did not look at costs related to building facilities or transportation in this study."³⁴ Size differences in virtual classes will also create economies of large-scale that greatly affect the bottom line.

State reimbursement policies vary widely. K12 Inc. claims that "On average, public virtual schools receive approximately 30% less funding than traditional schools."³⁵ It is not clear if this is a weighted average, nor is it clear whether the traditional schools referenced are traditional (brick-and-mortar) charters or other public schools. However, the various state laws do tend to fund virtual schools at (or close to) the normal charter school amount for that state.³⁶

Equity and Virtual Schooling

Most changes in the way schools operate can be thought of as tools. Used well, such tools can be beneficial; used poorly, they can be harmful. In short, the specifics matter. Online schooling, as a tool at the disposal of education policymakers, can likely be used to enhance the opportunities of less-advantaged students. It can also represent opportunities denied to such students, or it could provide opportunities but in a way that is inferior or inadequate. Each of these possibilities is considered briefly below.

In its initial incarnation as distance education, online schooling emerged as a way to provide learning opportunities to rural, inaccessible students.³⁷ Similarly, supplemental online courses today can provide advanced and diverse courses to students whose local schools are small, with limited offerings. These are clear instances of online education being used as a tool to expand and enhance education equity.

However, in a situation where online education provides new and superior opportunities, yet the policy does not ensure equal access to all students, the development of this sector can represent opportunities denied to less advantaged students. In this past, this concern has been spoken of in terms of the so-called "digital divide."³⁸ But in many ways it is just a high-tech version of the stratified access issues that have long played out in American schooling. Advantages worth having will generally be taken disproportionately by influential parents, unless the policy is deliberately designed to ensure equitable access.³⁹

But the most salient virtual-education equity issue now facing policymakers is not the denial of higher-quality opportunities—it is the imposition of lower-quality ones. Particularly in a time of shrinking budgets and a focus on so-called turnarounds of urban schools,⁴⁰ the temptation will be great for states and districts to substitute lower-cost, full-time virtual schools. We can foresee a scenario where narrow test-score measures are used to claim that these virtual schools are just as good (or even better) than the brick-and-mortar schools that formerly served the communities—even while middle-class and wealthier parents would never accept this substitution in their own neighborhoods.

Should policymakers be concerned about the possibility of virtual schooling being a cheap form of education for the "have-nots"? Should they be concerned about it being denied to those same disadvantaged students? Should they be looking for ways to enhance the quality, accountability, and usefulness of this new tool? We believe that, because online education is merely a tool and can take on a variety of forms and quality, all of these are important concerns.

This suggests an evolving dynamic between government officials on the one hand and, on the other, a coalition of virtual school companies, home schoolers, and charter school advocates. At the beginning of K-12 virtual schooling movement, few rules were in place, reflecting very little knowledge about the nature or cost of virtual schooling. Legislators and other policymakers are now taking a closer look at what is actually taking place in these arrangements and adjusting funding and rules accordingly. But the knowledge base is still incomplete and developing.

Quality of Virtual Schooling

Quality issues concerning virtual K-12 schooling reach far beyond what paper-and-pencil achievement tests might show. In addition to obvious features such as course quality and curriculum (evaluations of which are almost entirely lacking), there are concerns specific to virtual schools regarding elements such as teacher certification, authenticity of student work, and accreditation. These three issues are discussed briefly below.

Teacher certification

The matter of certification of teachers in virtual schools is complex. In addition to questions about the quality of programs designed to prepare teachers for online instruction,⁴¹ and subsequently about what it might mean for a virtual school to say it

employs only "certified" teachers, questions have arisen about who actually does the teaching in a virtual school. In Arizona, K12 Inc. actually "outsourced" instructional functions of the Arizona Virtual Academy, a virtual school, to low-paid workers in India.⁴² After the outsourcing gained national attention, the company stopped the practice. In Wisconsin, issues of teacher certification were implicated in litigation resulting in a 2007 Court of Appeals decision finding, among other things, that the Wisconsin Virtual Academy put parents in the position of teachers, in violation of the state's teacher certification law.⁴³ The legislature subsequently amended the law to provide greater regulation of virtual schools.⁴⁴

Authenticity of student work

Whenever teacher and student are not in a face-to-face relationship, suspicions are increased that all or much of the work being assessed may not be that of the students themselves. Thinking back to our own schooling days, we can recall how teachers organized and supervised the classroom environment to minimize the possibility of cheating. But in a virtual classroom, how does one—the teacher, the superintendent, the college admissions officer, the employer—know that the student who signed up for the course actually did the assignments and took the tests?

The obvious answer for conferring legitimacy on students' work in a virtual environment is relatively simple. A trusted organization must administer the most important examinations in person to the individual receiving credit. This issue is so important that it has, for example, found its way into the enabling legislation for the South Carolina Virtual School Program: "Students enrolled in an online course for a unit of credit must be administered final exams and appropriate state assessments in a proctored environment."⁴⁵ Kaplan K12 Learning Services, a subsidiary of The Washington Post Company, and Pearson VUE, a private company that administers tests in testing centers around the country, are sometimes used as proctors for various online courses and schools. But this practice is still relatively rare. The problems that can thus arise are illustrated by the following two recent examples, one from Colorado and one from Ohio.

Students at North High School in Denver, Colorado, engaged in a credit recovery online program provided by Apex Learning Inc. They were found to have devised a number of strategies for passing exams without actually having acquired the skills or knowledge being taught. Smart phones could be logged into web sites like www.answers.com, www.calculateme.com, and www.myalgebra.com. North High School's graduation rate jumped from 46% in 2008, before the online credit recovery program started, to 64% in 2010. Cheryl Vedoe, CEO of Apex Learning is quoted as saying, "... there is a relatively limited amount that Apex can do to prevent students from utilizing the web to go look up answers."⁴⁶

Further, the lack of face-to-face relationships between students and teachers can lead to abuses that threaten the legitimacy of the entire institution of cyber-schooling. In Ohio, roughly half of the students in an online K-12 school were found not even to own a

computer; only 3% of the African American students enrolled in this school ever graduated.⁴⁷ These are circumstances that would be difficult to ignore in traditional brick-and-mortar schools.

Accreditation

Several private groups have offered accreditation services to virtual schools: the Commission on International and Trans-Regional Accreditation, the Northwest Association of Accredited Schools,⁴⁸ the Southern Association of Colleges and Schools Council on Accreditation and School Improvement, and the Western Association of Schools and Colleges, to name only a few. These agencies, in part because of their rapid proliferation, have yet to acquire the legitimacy of more established agencies approved by the U. S. Department of Education, such as the Middle States Association of Colleges and Schools, the New England Association of Schools and Colleges, North Central Association of Colleges and Schools, the Southern Association of Colleges and Schools, and the Western Association of Schools and Colleges. Such traditional accrediting agencies have sought to bring virtual schools under their purview, but few of the virtual schools have requested their services.

The challenge of ensuring reliable accreditation has been demonstrated by higher education, which has long struggled with the problem of dubious accrediting agencies. The Council for Higher Education Accreditation, a private organization of 3,000 colleges and universities, lists more than two dozen accrediting agencies that it identifies as questionable. Some of these accredit several online colleges and schools.⁴⁹ There is no doubt that fraud exists, with diploma mills selling diplomas and claiming accreditation from at least one of more than 30 accrediting agencies not recognized by the Council on Higher Education Accreditation or the U.S. Department of Education.⁵⁰

Given such concerns, it is perhaps not surprising that the public remains somewhat skeptical about online schooling. The annual Phi Delta Kappa/Gallup education survey has asked parents of public school children "Would you be willing to have your child earn most high school credits online?"⁵¹ In the 2007 survey, 73% of parents said they would *not* be so willing, an increase from the 49% of parents who replied "Not willing" in the 2001 survey (the only two years when this question was asked). What exactly has caused this remarkable rise in skepticism is unclear, but it is reasonable to assume that parents in 2007 understood the nature and meaning of online education more than their counterparts did six years earlier.

Recent Developments

States continue to implement online schooling, with big legislative pushes in 2010 and 2011 seeing virtual schools laws passed in Michigan, Vermont and Montana, among others. A 2011 Florida law even requires all students to take at least one online course as a condition for earning a high-school diploma.⁵² Along with this expansion, states are currently adopting laws and regulations that touch on issues such as teacher certification

and funding as discussed above, as well as a host of related issues, including standards for online courses and professional development for online teachers.

A relatively small number of providers dominate the online schooling market. The following six large companies account for much of the content and services sold to full-time virtual schools: K12 Inc., which entered the business originally as a provider of courses for home-schooled students; Educational Options Inc., which started as a provider of courses for credit recovery; Apex Learning, originally an online course provider for Advanced Placement courses; PLATO; A+LS, originally a provider of courses for accelerated learning and credit recovery; and Connections Education, which was recently acquired by Pearson PLC for \$400 Million.⁵³ These companies are now actively marketing a full range of courses and services to full-time virtual schools.

Some companies and school districts, in their search for greater profits and funding, have been exploiting the lack of well-conceived legislation. For instance, K12 Inc. established a virtual charter school in Carroll County, Virginia, that enrolls approximately 400 students, only 5 of whom in 2011 were residents of the county. Since Carroll County is one of the poorest in the state, the state's per-pupil expenditure for many students there is more than \$3,500 above the state average. State Senator George Baker was quoted as saying, "It's a really screwed up system. Here's something that is clearly cheaper. You have a larger number of kids per teacher. There's very little overhead. And yet, we're paying more."⁵⁴

Public school districts have also become entrepreneurial. On the prairie in southeastern Colorado, a third of a mile north of the New Mexico border, sits the tiny town of Branson, Colorado. It has no grocery store and no gas station; in 2000, it had a population of 77 persons in 43 domiciles.⁵⁵ Branson is a most unlikely place to have received over \$15

Private corporations, most of which are for-profit, have recognized a huge potential market in virtual schooling.

million in state support for its 1,000 "virtual students" from around the state who attended Branson School Online in its first four years (2001-2005). Yet a 2005 *New York Times* story about Branson reported:

"Cyberschools are the 800-pound gorilla of the choice movement, although vouchers and charter schools get a lot more attention," said William Moloney, education commissioner in Colorado, where state financing for online schools has increased almost 20-fold in five years—to \$20.2 million for 3,585 students today from \$1.1 million for 166 full-time students in 2000.⁵⁶

Similarly, tiny rural Vilas School District in Colorado ran "Hope Co-Op Online Learning Academy," with just 17 online teachers hired to serve 3,800 students enrolled from around the state.⁵⁷ The Colorado state auditor in 2006 documented major problems with oversight and accreditation in these and other cyber schools, including proof that one virtual school sent enrolled children to religious academies.⁵⁸

Commercial Interests and Corporate Relationships

The rapid expansion of virtual schools operating under state charters raises several concerns meriting additional discussion and analysis. Because the K-12 virtual schooling sector is dominated by private corporations, some of these concerns arise out of the relationship that now must exist between these private businesses and government in the area of public education. Two of these concerns were discussed earlier: the function of traditional accreditation agencies in the oversight of virtual schooling, and the potential of financial incentives to distort decision making. An additional concern is discussed here: the role of private companies in the provision of K-12 public education as well as the cooperation of government and business in the creation and oversight of virtual schools.

Private corporations, most of which are for-profit,⁵⁹ have recognized a huge potential market in virtual schooling. One of the largest of these is K12 Inc., co-founded in 1999 by William J. Bennett, former Secretary of Education in the Reagan Administration.⁶⁰ Ronald Packard, CEO of K12 Inc., received annual compensation in 2010 of more than \$2.6 million dollars.⁶¹ While Bennett was still on the board of K12 Inc., the state of Arkansas was awarded a \$4 million grant from the U.S. Department of Education to establish a virtual charter school, the Arkansas Virtual Academy. The curriculum for the Academy was supplied by K12 Inc., leading to the appearance that Bennett's political influence helped bring the grant about.⁶²

Government and corporations have engaged in relationships to benefit profit-making companies for decades, if not centuries. In "crony capitalism," as these relationships are sometimes called, business uses lobbyists to cultivate close relationships with government officials. These relationships result in government favoritism in such areas as the distribution of permits, government grants, special tax breaks, and the like. When government adopts regulations or sets up regulatory agencies for a particular industry, current industry representatives may be appointed to positions that allow them to use their regulatory authority against their competitors or to minimize regulatory protection of consumers and taxpayers—a situation often referred to as "regulatory capture."

What is relatively new on the cronyism scene is the move to privatize traditional state functions and services such as prisons, parks, and public schools. The privatization of prisons is well advanced in the U.S., with lobbyists successfully prodding legislators into contracting out these "services" and even passing stiffer sentencing laws ("three strikes and you're out") and so increasing the flow of prisoners into for-profit incarceration.⁶³ The privatization of K-12 public education is a new field on which the machinations of crony capitalism can be played out, and the prize is a portion of the half-trillion dollars spent annually on public K-12 education. As Rupert Murdoch said when NewsCorp announced it had hired former New York City Chancellor Joel Klein to run its online education division and then acquired the company Wireless Generation, "When it comes to K through 12 education, we see a \$500 billion sector in the U.S. alone that is waiting desperately to be transformed by big breakthroughs that extend the reach of great teaching."⁶⁴

The case of the Arizona Virtual Academy, mentioned briefly above with regard to outsourcing to India, may become all too typical of the relationships between government, corporations, and advocacy in the area of public K-12 education. This large charter school currently enrolls approximately 5,000 full-time online students. The State of Arizona pays the school approximately \$6,000 per student, the typical rate for a charter school student (even though the Academy maintained only an office in downtown Phoenix and no other physical site). The Academy last year collected approximately \$30 million in state funding, approximately 90% of the total state funding for virtual schools. The Director of the Arizona Virtual Academy was formerly an employee of the Goldwater Institute in Phoenix—a conservative think-tank championing vouchers, charter schools, and other

For-profit virtual education businesses have started to exercise influence over elected positions that could provide them with later payoffs.

privatization proposals—and currently serves on the Arizona Charter School Board, which she once chaired. She also is employed as a Senior Vice-President of the above-mentioned K12 Inc., and approximately two-thirds of the state money going to the Arizona Virtual Academy is passed through to K12 Inc. These conflicts of interest would quickly lead to resignations—if not indictments—in most traditional public school settings.⁶⁵ But in the private realm they are apparently seen, and even valued, as mere interlocking connections.

The Arizona Virtual Academy outsourcing story is also relevant in this context. The Academy listed some of these East Indian cyber tutors as "secondary teachers" on courses. In fact, Terry Moe and John Chubb in their recent book *Liberating Learning: Technology Politics and the Future of Education* cite with approbation the outsourcing of instruction to low-paid "cyber tutors" in India. But when questioned by a local reporter, the Academy's director insisted that they were actually only "outside scorers." ⁶⁶ In any case, in pursuit of commercial interests, these sorts of corporate efficiencies are attractive and will very likely be pursued in the absence of regulation.

In Arizona and most other states, charters to run public schools are only issued to nonprofit entities. Consequently, for-profit corporations set up non-profit foundations and other organizations to obtain a charter, and then the charter school purchases a full range of services from the profit-making corporation. These services are not limited to the provision of courses on a network—increasingly via the Internet because of its much lower cost than private networks. They also extend to human resources services, student record keeping (maintaining test scores, attendance, and discipline records), and even teacher training.

Again, the Arizona Virtual Academy provides an instructive example. The charter under which the Academy operates was issued to Portable Practical Educational Preparation, Inc. (PPEP) in 2003. PPEP is listed as a non-profit organization, and yet while the company also is a long-standing provider of other services, its virtual charter operations seem indistinguishable from a subdivision of K12 Inc. Of the staff listed under PPEP, 90% of the email addresses are to someone@k12.com.⁶⁷ Even the website for the AVA is maintained on the K12 Inc. servers: http://www.k12.com/azva/

However egregious this Arizona example may seem, it is not unique. For example, in much the same way that other business interests have long influenced political races, for-profit virtual education businesses have started to exercise influence over elected positions that could eventually provide them with payoffs. Idaho Superintendent of Public Instruction Tom Luna, for instance, has been a vigorous proponent of K-12 virtual schooling since assuming that office in 2007. Luna served as a senior adviser to U.S. Secretary of Education Rod Paige from 2003 to 2005, and he currently serves as President-Elect of the Council of Chief State School Officers. He has proposed a plan called Students Come First. This plan would require that a certain number of online courses be completed by high school students and would also require laptop computers be made available to all students. Among the many accomplishments of his administration as listed on his website is the following: "Created the Division of Innovation and Choice to spur innovation and expand choices in public education through public charter schools, magnet schools, open enrollment, virtual education, dual credit and other opportunities."68 In October 2009, Luna held a re-election fundraiser in the offices of a major Washington D. C. lobbying firm. Among the sponsors and contributors were ex-Secretaries of Education William Bennett and Rod Paige. K12 Inc., which at that time was operating the Idaho Virtual Academy, spent approximately \$44,000 in support of Luna's campaign.⁶⁹ "Altogether," according to an *Idaho Statesman* article, "Luna received 19 percent of his funds from the for-profit education sector."

Recommendations

The relatively unregulated operation of virtual schools by private or public entities has caused many professionals to approach the subject of virtual schooling with caution. Increased regulation and oversight seem likely as well as valuable. The substantial variation in how states currently regulate virtual K-12 schooling speaks less to the differing circumstances across the country than it does to the alacrity with which various states have (or have not) confronted the problems posed.⁷⁰

Virtual schools operating under charters issued by states are growing at accelerating rates. In fact, it seems that regulation and oversight of these entities are lacking in precisely those locations where growth is fastest. Legislators must address a full agenda of issues if the public trust in public education is to be maintained. Accordingly, it is recommended that state legislatures turn their attention to the following four crucial areas:

Authentication of the Source of Students' Work. Teachers are well-acquainted with the parents who actually create their middle school student's science fair project. Virtual schools offer much greater opportunity for students to obtain credit for work they did not do themselves. Since an online instructor does not generally know who actually completes all those online assignments and takes the tests, sensible precautions are in order. For example, a trusted organization might administer in-person exams, as is currently the practice at some virtual schools.

Fiscal and Instructional Regulations. K-12 virtual schooling is complex; its proper regulation will also be complex. Legislators will have to address, at a minimum, four issues

concerning the costs and effectiveness of virtual schools: the level and extent of teacher involvement in the instructional process; the certification status of teachers employed by virtual schools; the role of tests in earning online credits; and reciprocity of teacher certification across state lines. They will also need to determine whether and how traditional accounting practices used to fund conventional schools, such as 100-day enrollments or average daily membership, apply to funding for virtual schooling.

Audits. States should conduct audits of private providers, to determine actual costs incurred by such companies providing courses and services to virtual schools. Pegging reimbursements at some arbitrary level (e.g., 75% of the state's average contribution), ignores the reality of actual cost savings afforded by online instruction. The funding system adopted should also deliberately include incentives to provide a high-quality as well as an efficient education; audits will inform such decision-making. Virtual education costs will depend on such things as the subject being taught, who serves as teachers, and how many students are being taught. While private companies must be allowed reasonable operating funding, audits can help determine this reasonable amount.

Accreditation. Currently, there are few agencies to turn to for help in evaluating providers of online schooling. States or other public bodies should create and maintain a list of legitimate agencies that accredit providers of K-12 online education. To avoid abuses such as those encountered with proprietary schools (truck driving, cosmetology, and the like) and online diploma mills, the traditional high school accrediting agencies or some state or federal governmental agencies must address more vigorously the accreditation of commercial online providers of both courses and full-time K-12 programs.

Notes and References

1 Glass, Gene V (2009). *The Realities of K-12 Virtual Education*. Boulder and Tempe: Education and the Public Interest Center & Education Policy Research Unit. Retrieved March 15, 2011, from http://epicpolicy.org/publication/realities-K-12-virtual-education.

2 Insightlink (2010). *K-12 Online Learning: A Literature Review*. Washington, DC: The National Association of Independent Schools. Retrieved July 3, 2011, from http://www.nais.org/files/PDFs/K-12-Online2010finalv1.pdf.

3 Watson, John; Murin, Amy; Vashaw, Lauren; Gemin, Butch & Rapp, Chris. (2010). *Keeping Pace with K-12 Online Learning: An Annual Review of State-Level Policy and Practice*. Durango, CO: Evergreen Education Group, 28. Retrieved June 1, 2011, from http://www.kpk12.com/cms/wp-content/uploads/KeepingPaceK12_2010.pdf.

4 See WCTV (2011, April 8). Lawmakers promote virtual education expansion. Retrieved July 3, 2011, from http://www.wctv.tv/home/headlines/Lawmakers_Promote__119471244.html.

See also Fernandes, Deirdre (2011, February 21). Some see inequity in Virginia 'virtual school'. *The (Norfolk) Virginian-Pilot*. Retrieved July 3, 2011, from http://www.roanoke.com/news/roanoke/wb/277743.

5 See e.g., the contributions of K12 Inc at http://www.followthemoney.org/database/topcontributor.phtml?u=7334&y=0. Retrieved September 11, 2011.

6 See WCTV (2011, April 8). Lawmakers promote virtual education expansion. Retrieved July 3, 2011, from http://www.wctv.tv/home/headlines/Lawmakers_Promote__119471244.html.

7 See particularly Watson, John; Murin, Amy; Vashaw, Lauren; Gemin, Butch & Rapp, Chris. (2010). *Keeping Pace with K – 12 Online Learning: An Annual Review of State-Level Policy and Practice*. Durango, CO: Evergreen Education Group. Retrieved June 1, 2011, from http://www.kpk12.com/wp-content/uploads/KeepingPaceK12_2010.pdf.

See also Tucker, B. (2007). *Laboratories of reform: Virtual high schools and innovation in public education*. Washington, DC: Education Sector, 9. Retrieved July 2, 2011, from http://www.educationsector.org/sites/default/files/publications/Virtual_Schools.pdf.

8 See particularly Watson, John; Murin, Amy; Vashaw, Lauren; Gemin, Butch & Rapp, Chris. (2010). *Keeping Pace with K – 12 Online Learning: An Annual Review of State-Level Policy and Practice*. Durango, CO: Evergreen Education Group. Retrieved June 1, 2011, from http://www.kpk12.com/wp-content/uploads/KeepingPaceK12_2010.pdf.

9 Watson, John; Murin, Amy; Vashaw, Lauren; Gemin, Butch & Rapp, Chris. (2010). *Keeping Pace with K – 12 Online Learning: An Annual Review of State-Level Policy and Practice*. Durango, CO: Evergreen Education Group, 30-31, Tables 4 and 5. Retrieved June 1, 2011, from http://www.kpk12.com/wp-content/uploads/KeepingPaceK12_2010.pdf.

10 Watson, John; Murin, Amy; Vashaw, Lauren; Gemin, Butch & Rapp, Chris. (2010). *Keeping Pace with K – 12 Online Learning: An Annual Review of State-Level Policy and Practice*. Durango, CO: Evergreen Education

Group, 29. Retrieved June 1, 2011, from http://www.kpk12.com/wp-content/uploads/KeepingPaceK12_2010.pdf.

11 Carpenter II, Dick M. (2006). *Playing to type? Mapping the charter school landscape*. Washington, DC: Thomas B. Fordham Institute. Appendix A.

12 Setzer, J.C. & Lewls, L. (2005, March). *Distance Education Courses for Public Elementary and Secondary School Students: 2002–03* (NCES 2005–010). Washington, DC: National Center for Education Statistics, U.S. Department of Education. Retrieved April 13, 2009, from http://nces.ed.gov/pubs2005/2005010.pdf.

13 Smith, Rosina; Clark, Tom & Blomeyer, Robert L. (2005). *A Synthesis of New Research on K-12 Online Learning*. Naperville, IL: Learning Point Associates. Retrieved November 15, 2008, from http://www.ncrel.org/tech/synthesis/synthesis.pdf.

14 Gartner, John (2004 April, 7). States rethinking virtual school. *Wired*. Retrieved February 19, 2009, from http://www.wired.com/politics/law/news/2004/04/62889.

Enrollment at K12 Inc had increased to 67,000 by 2009-2010. See Watson, John; Murin, Amy; Vashaw, Lauren; Gemin, Butch & Rapp, Chris. (2010). *Keeping Pace with K – 12 Online Learning: An Annual Review of State-Level Policy and Practice*. Durango, CO: Evergreen Education Group, 30, Table 4. Retrieved June 1, 2011, from http://www.kpk12.com/wp-content/uploads/KeepingPaceK12_2010.pdf.

The Florida Virtual School, which is a quasi-public entity, reported exceeding 120,000 course registrations in the 2007-2008 academic year, the bulk of these course credits being earned as supplements to conventional full-time schooling.

Florida Virtual School (undated). FLVS facts. Retrieved April 9, 2009, from http://www.flvs.net/educators/fact_sheet.php.

15 Picciano, Anthony G. & Seaman, Jeff. (2008). *K–12 Online Learning: A 2008 Follow-Up of the Survey of U.S. School District Administrators*. NY: The Sloan Consortium. Retrieved December 24, 2008, from http://www.sloanconsortium.org/publications/survey/k-12online2008.

16 Smith, Rosina; Clark, Tom & Blomeyer, Robert L. (2005). *A Synthesis of New Research on K-12 Online Learning*. Naperville, IL: Learning Point Associates. Retrieved November 15, 2008, from http://www.ncrel.org/tech/synthesis/synthesis.pdf.

17 Watson, John; Murin, Amy; Vashaw, Lauren; Gemin, Butch & Rapp, Chris. (2010). *Keeping Pace with K – 12 Online Learning: An Annual Review of State-Level Policy and Practice*. Durango, CO: Evergreen Education Group, 21. Retrieved June 1, 2011, from http://www.kpk12.com/wp-content/uploads/KeepingPaceK12_2010.pdf.

18 *Learning in the 21st Century: 2011 Trends Update*. Washington, D.C.: Blackboard K-12. Retrieved July 18, 2011, from http://www.blackboard.com/resources/k12/k12Trends2011_web.pdf.

19 See Watson, John; Murin, Amy; Vashaw, Lauren; Gemin, Butch & Rapp, Chris. (2010). *Keeping Pace with K – 12 Online Learning: An Annual Review of State-Level Policy and Practice*. Durango, CO: Evergreen Education Group. Retrieved June 1, 2011, from

http://www.kpk12.com/wp-content/uploads/KeepingPaceK12_2010.pdf.

20 Watson, John; Murin, Amy; Vashaw, Lauren; Gemin, Butch & Rapp, Chris. (2010). *Keeping Pace with K – 12 Online Learning: An Annual Review of State-Level Policy and Practice*. Durango, CO: Evergreen Education

Group. Retrieved June 1, 2011, from http://www.kpk12.com/wp-content/uploads/KeepingPaceK12_2010.pdf.

21 Setzer, J.C. & Lewls, L. (2005, March). *Distance Education Courses for Public Elementary and Secondary School Students: 2002–03* (NCES 2005–010). Washington, DC: National Center for Education Statistics, U.S. Department of Education. Retrieved April 13, 2009, from http://nces.ed.gov/pubs2005/2005010.pdf.

22 Watson, John; Murin, Amy; Vashaw, Lauren; Gemin, Butch & Rapp, Chris. (2010). *Keeping Pace with K – 12 Online Learning: An Annual Review of State-Level Policy and Practice*. Durango, CO: Evergreen Education Group. Retrieved June 1, 2011, from http://www.kpk12.com/wp-content/uploads/KeepingPaceK12_2010.pdf.

23 http://en.wikipedia.org/wiki/Virtual_schools. Retrieved July 18, 2011.

24 Florida TaxWatch Center for Educational Performance and Accountability. (2007, October 15). *Final Report: A Comprehensive Assessment of Florida Virtual School*. Tallahassee, FL: Author.

25 Cavanaugh, Cathy; Gillan, Kathy Jo; Kromrey, Jeff; Hess, Melinda; and Blomeyer, Robert. (2004). *The Effects of Distance Education on K–12 Student Outcomes: A Meta-Analysis*. Naperville, IL: Learning Point Associates. Retrieved October 18, 2008, from http://www.ncrel.org/tech/distance/k12distance.pdf.

26 Smith, Rosina; Clark, Tom & Blomeyer, Robert L. (2005). *A Synthesis of New Research on K-12 Online Learning*. Naperville, IL: Learning Point Associates. Retrieved November 15, 2008, from http://www.ncrel.org/tech/synthesis/synthesis.pdf.

27 Tallent-Runnels, Mary K ; Thomas, Julie A.; Lan, William Y. ; Cooper, Sandi; Ahern, Terence C. Shaw, Shana M.; and Liu, Xiaoming. (2006). Teaching courses online: A review of the research. *Review of Educational Research*, 76(1), 93-135, 93.

28 Means, B., Toyama, Y., Murphy, R., Bakia, M. & Jones, K. (2009). *Evaluation of Evidence-Based Practices in Online Learning: A Meta-Analysis and Review of Online Learning Studies*. Washington, DC: U.S. Department of Education, Office of Planning, Evaluation, and Policy Development. Retrieved June 19, 2010, from http://www2.ed.gov/rschstat/eval/tech/evidence-based-practices/finalreport.pdf.

29 This is a serious problem, and virtual schools will have to come up with ways to address it. See Russell, G (2004). Virtual Schools: A critical View. In C. Cavanaugh (Ed), *Development and Management of Virtual Schools: Issues and Trends*. Hershey: Ideas Group.

30 See discussion in Russell, G (2004). Virtual Schools: A Critical View. In C. Cavanaugh (Ed), *Development and Management of Virtual Schools: Issues and Trends*. Hershey: Ideas Group.

See also Maddux, C., Sprague, D., Ferdig, R. & Albion, P. (2007). Editorial: Online Education: Issues and Research Questions. *Journal of Technology and Teacher Education*, *15*(2), 157-166.

31 Pettigrew, T. F., & Tropp, L. R. (2006). A meta-analytic test of intergroup contact theory. *Journal of Personality* & *Social Psychology*, *90*, 751-783.

See also Stephan, W. G., & Stephan, C. W. (2001). Improving intergroup relations. Thousand Oaks, CA: Sage.

32 Muller, E. (2010). *Virtual K-12 Public School Programs and Students with Disabilities: Issues and Recommendations*. National Association of State Directors of Special Education: Alexandria, Va.

See also Rhim, L. & Kowal, J. (2008). *Demystifying special education in virtual charter schools*. Alexandria, VA: National Association of State Directors of Special Education.

33 See, e.g., the web content by K12, Inc, retrieved July 8, 2011, from http://www.k12.com/facts-about-k12-public-virtual-schools.

34 Anderson, A. H., Augenblick, J., DeCescre, D., & Conrad, N. (2006, October 2). *Costs and Funding of Virtual Schools*. Denver,: Augenblick, Palaich, and Associates, Inc. Retrieved January 30, 2011, from http://www.apaconsulting.net/uploads/reports/9.pdf.

35 Retrieved July 8, 2011, from

http://www.k12.com/facts-about-k12-public-virtual-schools.

36 Thedy, E. G. (2010). *An analysis of the legal, statutory, and governance issues of virtual charter schools*. Doctoral dissertation. Orlando: University of Central Florida, Table 2, 192-194. Retrieved July 8, 2011, from http://etd.fcla.edu/CF/CFE0003244/Thedy_Elizabeth_G_201008_EdD.pdf.

Individual state experiences illustrate differences. Florida funded two virtual pilot schools in 2003, both operated by national corporations based outside the state. It paid \$4,800 per student, only some \$700 less than the state's standard per-pupil expenditure. In 2004, the Pennsylvania Auditor General audited each of the state's virtual charter schools and lowered the per-pupil reimbursement to \$7,200, about three-quarters of the conventional per-pupil expenditure. Also in 2004, the Idaho Legislature funded the Idaho Virtual Academy, a public virtual school run by K12 Inc., at approximately half the per-pupil expenditure of conventional public schools in the state. However, principals for the K12 Inc. corporation have accused the Idaho legislature of deliberately underfunding the Academy due to "…opposition from the establishment." See

Gartner, John. (April 4, 2004). Virtual-school costs under siege. *Wired*. Retrieved February 16, 2009, from http://www.wired.com/politics/law/news/2004/04/62890.

Wisconsin also reimburses virtual charter schools at approximately half the rate of conventional schools.

In Arizona, reimbursement is much higher. The state originally had a cap on the number of virtual charter schools and on the number of students in such schools, but the state removed the cap in return for reducing the funding level to \$5,800, which is 95% of the funding level for conventional charters. The number of virtual charter schools in the state quickly jumped from 7 to 14 (Reed, David E. Personal communication. February 15, 2011). Arizona's governor is currently seeking to reduce funding for virtual charter school students to \$4,900 (or some 84% of conventional charter school funding).

California prohibits companies operating virtual charter schools from profiting from state funds; a statute requires that online charter schools be audited to enforce this law. The required annual audits, however, need to be conducted by qualified auditors approved by the California Controller. See analysis of AB 1950 (2010), retrieved July 8, 2011, from

ftp://leginfo.public.ca.gov/pub/09-10/bill/asm/ab_1901-1950/ab_1950_cfa_20100419_180908_asm_comm.html.

See also

Watson, J. (2006). *The State of Online Learning in California: A Look at Current K-12 Policies and Practices*. Oakland, CA: University of California College Prep Online. Retrieved July 8, 2011, from http://www.k12hsn.org/files/research/Online_Learning/SOLC.pdf.

The state has the discretion to adjust the allocation based on the results of such audits. See Green, Preston C. and Mead, Julie F. (2004). *Charter Schools and the Law: Chartering New Legal Relationships*. Norwood, MA: Christopher-Gordon Publishers, Inc.

37 Bates, A. W. (1995). Technology, open learning and distance education. London: Routledge.

38 Warschauer, M., Knobel, M., Stone, L., 2004. Technology and equity in schooling: deconstructing the digital divide. *Educational Policy*, *18*(4), 562–588.

39 See Welner, K. G. (2001). *Legal rights, local wrongs: When community control collides with educational equity*. Albany, New York: SUNY Press.

40 See Hassell, B. C., & Terrell, M. G. (2004). How can virtual schools be a vibrant part of meeting the choice provisions of the no child left behind act? U.S. Department of Education Secretary's No Child Left Behind Leadership Summit: Increasing Options through e-learning. Washington, DC: Author.

41 See, e.g., these rules for the state of Georgia: http://rules.sos.state.ga.us/docs/505/3/85.pdf.
See also VanderArk, T. (2010, Oct. 6). States adding mandatory cert for teaching online. *Getting Smart* (formerly *Ed Reformer*). Retrieved September 11, 2011, from
http://gettingsmart.com/news/2010/10/states-adding-mandatory-cert-for-teaching-online/.

42 Trotter, A. (2008, September 10) K12 Inc. scraps India outsourcing. *Education Week*. Retrieved October 18, 2010, from http://www.edweek.org/ew/articles/2008/09/10/03outsource.h28.html.

43 *Johnson v. Burmaster*. Retrieved July 9, 2011, from http://www.wicourts.gov/ca/opinion/DisplayDocument.html?content=html&seqNo=31069.

44 Doyle signs virtual charter school legislation (2008, April 7). Wisconsin Education Association Council. Retrieved September 11, 2011, from http://www.weac.org/news_and_publications/at_the_capitol/archives/2007-2008/bill_sign.aspx.

45 South Carolina General Assembly 117th Session, 2007-2008 A26, R48, H3097. Retrieved January 10, 2009, from

http://www.scstatehouse.gov/sess117_2007-2008/bills/3097.htm.

46 Asmar, Melanie. (2011). Passing on education: North High School students are passing at a higher rate, but at what cost? *Westword*, *34*(39), 15-19.

47 Hanauer, A. (2008). Profits and privatization: The Ohio experience. Pp. 35-52 in Dingerson, L., Miner, B., Peterson, B. & Walters, S. *Keeping the promise?: The debate over charter schools*. Milwaukee, WI: Rethinking Schools Ltd.

48 NAAS recently changed its name to the Northwest Accreditation Commission after a negative judgment by the U.S. Patent and Trademark Office. The mission of the NWAC as stated on its web site is to accredit "distance education, elementary, foreign nation, high, K 12, middle level, post secondary nondegree granting, residential, special purpose, supplementary education, and travel education schools." Retrieved September 11, 2011, from http://www.northwestaccreditation.org/.

49 Recognized Accrediting Organizations as of July 2008 (2008). Council for Higher Education Accreditation. Retrieved February 12, 2009, from

 $http://www.chea.org/pdf/CHEA_USDE_AllAccred.pdf.$

50 Unrecognized, fake and dubious online college accrediting agencies (2009, Feb. 13). Diploma Mill Police, *GetEducated.com*. Retrieved June 1, 2011, from

http://www.geteducated.com/diploma-mills-police/college-degree-mills/204-fake-agencies-for-college-accreditation.

51 Rose, Lowell C. & Gallup, Alec M. (2007). The 39th Annual Phi Delta Kappa/Gallup Poll of the Public's Attitudes Toward the Public Schools. *Phi Delta Kappan*, *89*(1), 33-45.

52 Postal, L. (2011, June 27). Gov. Rick Scott signs education choice bills. *Orlando Sentinel*. Retrieved July 9, 2011, from

http://articles.orlandosentinel.com/2011-06-27/features/os-education-bill-signing-rick-scott-20110627_1_charter-schools-school-vouchers-tuition-vouchers.

53 *Wall Street Journal*. (2011, September 15). Pearson acquires Connections Education. Retrieved September 20, 2011 from http://online.wsj.com/article/BT-CO-20110915-708357.html.

54 Fernandes, D. (2011). Some see inequity in Virginia "virtual school": Online education companies in Virginia are encouraged to partner with poor counties to boost profits. *The Virginian-Pilot*. Retrieved July 1, 2011, from http://www.roanoke.com/news/roanoke/wb/277743.

55 U.S. Census Bureau (2000). Table DP-1. Profile of General Demographic Characteristics: 2000, Geographic Area: Branson Town, Colorado. *Census 2000*. Retrieved September 11, 2011, from http://censtats.census.gov/data/CO/1600808345.pdf.

56 Dillon, S. (2005, Feb. 9). Tiny district finds bonanza of pupils and funds online. *The New York Times*. Retrieved April 9, 2009, from

http://www.nytimes.com/2005/02/09/education/09online.html.

57 Brown, J. (2006, December 11). Auditor blasts online schools. *Denver Post*. Retrieved July 9, 2011, from http://www.denverpost.com/election/ci_4819597.

58 Brown, J. (2006, December 11). Auditor blasts online schools. *Denver Post*. Retrieved July 9, 2011, from http://www.denverpost.com/election/ci_4819597.

59 See Miron, G., & Urschel, J.L. (2010). *Profiles of nonprofit education management organizations: 2009-2010*. Boulder, CO: National Education Policy Center. Retrieved May 28, 2011, from http://nepc.colorado.edu/publication/EMO-NP-09-10.

60 Bennett resigned his position on the board of K12 Inc. in 2005 after having made some controversial remarks about abortion and African Americans on his radio program, although he continues to hold stock in the company, which became publicly traded on the New York Stock Exchange in December 2007 (symbol = LRN). See Shin, Annys. (2005, October 4). Bennett quits K12 board after remarks. *Washington Post*, D04.

LRN debuted on the NYSE at \$25/share and was trading at \$15/share when the Dow Jones Industrial Average had lost more than 50% of its value in March 2009. As of July 9, 2011, it was trading at \$34.87/share.

61 Forbes.com (undated). Ronald J. Packard profile. Retrieved July 9, 2011, from http://people.forbes.com/profile/ronald-j-packard/46766.

62 eSchool News Staff. (2004, August 16). Grants to Bennett's K12 Inc. challenged. *eSchool News*. Retrieved January 20, 2009, from

http://www.eschoolnews.com/news/topnews/index.cfm?i=35921&CFID=6027970&CFTOKEN=85708358.

Sixty percent of the students attending the Arkansas Virtual Academy had previously been home schooled. The Arkansas proposal did not receive the highest ranking in the Department of Education's review. Although Department officials denied that politics played any role in their decision, one DOE employee offered the opinion that anything with Bennett's name on it was going to be funded. See

eSchool News Staff. (2004, August 16). Grants to Bennett's K12 Inc. challenged. *eSchool News*. Retrieved September 24, 2008, from

http://tinyurl.com/cwtoh7.

63 Ashton, P. & Petteruti, A. (2011). *Gaming the System*. Washington DC: Justice Policy Institute. Retrieved July 9, 2011, from

 $http://www.justicepolicy.org/uploads/justicepolicy/documents/gaming_the_system.pdf.$

64 NewsCorp Press Release (2010, November 22). *News Corporation to Acquire Education Technology Company Wireless Generation*. Retrieved July 9, 2011, from http://www.newscorp.com/news/news_464.html.

65 Reed, David E. Personal communication. February 15, 2011.

66 Trotter, A. (2008, September 10) K12 Inc. scraps India outsourcing. *Education Week*. Retrieved October 18, 2010, from http://www.edweek.org/ew/articles/2008/09/10/03outsource.h28.html.

67 See http://www.ade.az.gov/edd/NewDetails.asp?EntityID=87405&RefTypeID=1999&SchoolType=CS, retrieved July 9, 2011.

68 Idaho Superintendent of Public Instruction Tom Luna (undated). Idaho State Department of Public Instruction. Retrieved February 13, 2011, from http://www.sde.idaho.gov/site/luna/.

69 Popkey, D. (2011, February 20). Tom Luna's education reform plan was a long time in the making. *Idaho Statesman*. Retrieved March 1, 2011, from http://tinyurl.com/4323d9g.

70 Ash, Katie. (2009). Virtual approaches vary: State policies and programs for online-only education differ. *Education Week.* 28(26), 26-27.