How Can Virtual Schools Be a Vibrant Part of Meeting the Choice Provisions of the No Child Left Behind Act?

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Choice and the No Child Left Behind Act

School Choice: Requirements and Benefits

The accountability provisions of the No Child Left Behind Act of 2001 (NCLB) expand school choice opportunities for those attending public schools that are not meeting their state's expectations. Local school districts are required to provide children enrolled in low-performing Title I schools—identified as not making "adequate yearly progress (AYP)" for two or more consecutive years—the opportunity to attend an adequately performing public school while the original school is undergoing improvement. Choice must be offered to families in an eligible Title I school until the school is no longer identified for improvement.[1]

All students in a school identified for improvement must be given the opportunity to transfer to another public school, with priority given to the lowest-achieving children from low-income families. For example, if not all students can attend their first choice of schools, priority in assigning spaces would be allocated to the low-achieving low-income students. The types of educational choice options permitted by the legislation include transfers to higher-performing public schools within the district, charter schools, and virtual schools (as long as they are not Title I schools identified for improvement, corrective action or restructuring or identified by the state as persistently dangerous). If more than one eligible school is available, the LEA must offer more than one choice to eligible students.

While NCLB's requirements are one impetus for districts to offer more choices, the drive to increase options pre-dates the law. It rests on the accumulating evidence that school choice can deliver important benefits for children – especially disadvantaged children. Wealthy and middle class families have long exercised school choice, either by sending their children to private schools or buying into communities with better public schools. But the choice option is now becoming available to low-income families stuck in schools in need of improvement.

Research is beginning to show that school choice can be a very useful tool in improving educational opportunities for all, and particularly for disadvantaged public school children. One line of research focuses on gains made in choice systems that allow private school enrollment as part of the choice menu (e.g. scholarships and vouchers). Taken together, these studies suggest positive effects of choice for low-income African-American students.[2] Studies of choice among *public* school options have also shown benefits to children, including the children who "stay behind."[3] Since NCLB's choice requirements are so new, there is less research specifically on its effects. But one recent study found that students in Chicago who transferred to higher-performing public schools saw much stronger achievement gains overall during the first year in their new schools than the year before.[4]

Challenges to Meeting Requirements

While most districts are complying to some degree with the law, many districts have not been able to meet the demand for transfers. In a recent report about the early implementation of the public school choice provisions in NCLB, researchers found that while parents express a strong interest in transferring their children to better-performing schools, many districts use the lack of school capacity to deny families choices of some or all higher performing schools.[5]

Capacity issues continue to be a challenge for many districts. Though that exemption was eliminated in 2002, capacity issues continue to be a defense of many districts. Some districts simply deny NCLB transfers outright because of lack of capacity, while others put parents on notice that lack of capacity might cause their transfer requests to be denied.[6] In many cases, these capacity and supply issues are real, particularly in rural districts, districts with limited transportation options, and districts with many schools in need of improvement and few high-performing ones. As a result, it is imperative to consider new ways to supply better options for children seeking transfers.

Virtual Schools as a Solution to Capacity and Supply Challenges

Online learning grew quickly over the past decade in universities and corporations, and more recently has become increasingly available to K-12 learners. While the exact number of virtual schools that are operating is unclear, a new brief from the Education Commission of the States about cyber schools presents the following statistics:

- The Southern Regional Education Board estimates that over 100,000 students were enrolled in online courses during the 2002-03 school year.
- Fifty-seven cyber charter schools were operating during the 2002-03 school year.
- The Washington State Office of Public Instruction found that 25% of Washington secondary schools had students enrolled in online courses during the 2001-02 school year and expected that number to triple by 2008.[7]
- Almost a third of school district leaders in a 2002 survey predicted that more than one in five of their students would be receiving a "substantial portion" of their daily instruction online by 2005.[8]

The main differences between online learning and a traditional classroom are location and accessibility. Online learning—simply defined as the use of multimedia technologies and the Internet for educational content—can take on many forms. It can be purely online, with no face-to-face meetings, or provide blended learning, a combination of online and face-to-face learning. It can be synchronous (students working together and/or with instructors "live") or asynchronous (students working largely on their own). Instruction can be provided by a subject matter expert, or a teacher guide, through collaborative exploration or largely through self-directed study. Instruction can also be facilitated by a "learning coach," often the role played by lab attendants in virtual high school classes and parents in K-8 settings, who provides the face-to-face counterpart for a virtual teacher.

One subset of online learning options is the "virtual school" or "cyber school." While "online learning" could involve a single course or even a single lesson or project, a virtual school is a complete educational institution that delivers its instruction primarily through online means. To fulfill the choice requirements of NCLB, a district must allow students to enroll in other *schools*. Supplementing their current school's work with online enrichment, though potentially valuable, would not meet that requirement. As a result, the remainder of this paper focuses specifically on virtual *schools* as an approach to providing options under NCLB. Districts that truly suffer from lack of capacity and supply may find that virtual schools are a viable solution for meeting the choice requirements of NCLB.

Forms of Public Virtual Schools

Virtual schools serving K-12 public students generally fall into one of the following categories:

- **Schools operated by regional agencies and consortia of educational entities, nonprofit and for-profit organizations**
  At least eight virtual schools that serve multiple states are in operation across the nation. The Virtual High School[9] in Massachusetts allows 6,000 students from around the country to participate in high school coursework in a self-paced environment. It offers full-year and semester-length courses, summer school courses for enrichment or credit recovery, and dual credit courses. Class size is limited to no more than 25 students and and "memberships" are offered to districts, collections of schools, individual schools and individual students. Member schools offer one or more faculty members to join the network of teachers to provide instruction, and in exchange for each teacher released by the school to teach a VHS course, the school is able to register 25 students per semester to choose from VHS's catalog of courses. Each school must also identify a site coordinator who is trained to act as an advisor and administrative contact for VHS students in their school.

- **Schools operated by state education agencies**
  At least 15 states are operating virtual schools. Typically, state-run virtual schools provide advanced coursework or supplementary services to middle and high school students. An example is the Illinois Virtual High School[10] which is designed to provide Illinois students enrolled in state public high schools increased equity and access to high-quality educational opportunities no matter where they live. The IVHS courses are aligned with the Illinois Learning Standards. Any Illinois high school student enrolled in a public, nonpublic or home school can participate with approval from a local participating school IVHS Building Administrator. Students can take semester-length courses, summer term courses, Advanced Placement (AP) review courses, and ACT preparation courses.

  Nearly all virtual schools target middle and high school students. Florida, however, has embarked on a pilot program to see if full-time virtual schools are adequate for the younger population and currently is funding two virtual elementary schools. The Florida Connections Academy[11] and the Florida Virtual Academy[12] each serve approximately 500 K-8 students under contract with the state department of education. For every student enrolled, the companies providing the educational program get a $4,800 voucher. Students get a loaned computer and free Internet access, and the schools send them supplies and books. They speak with a teacher over the telephone for progress reports, but parents or guardians serve as the primary instructors.

- **Schools operated by universities**
  At least seven universities are providing online learning opportunities to K-12 students. The University of California Online College Prep Initiative (UCCP)[13] receives university and state funding to provide online college preparatory courses that are aligned to California content standards, and fulfill admission requirements to the University of California. The initiative offers AP and honors courses, plus tutoring and AP Exam Review to over 2,500 students at California high schools where college preparatory curricula are underdeveloped. One of the initiative's primary goals is to provide opportunities to rural and low-income students to help them compete effectively for admission to leading universities.

- **Schools that are operated by local public school districts and other local education agencies**
  At least 36 districts are operating virtual schools. These include the Evergreen Internet Academy (EIA)[14] which has been in operation for five years as an alternative education opportunity in the Evergreen School District. For the first three years, teachers in the 7-12 grade school provided both online and traditional classroom instruction, but now full virtual instruction is provided, with courses offered to students beyond the boundaries of the district. The school serves large numbers of students who were formerly home schooled, as well as students in need of an alternative to the traditional brick-and-mortar program. Students can receive di-

plomas issued by the district or a Washington state diploma. Those outside the state of Washington or enrolled in another school full-time can attend if they pay tuition.

- **Schools that receive a charter from a local district, state board, university or other sponsor**
  The cyber charter school model of online learning is the most prolific in the nation. At least ninety cyber charters are in operation, with Arizona, Ohio, and Pennsylvania leading other states in the number of virtual charter schools authorized. The 21st Century Cyber Charter School[15] is chartered through the West Chester Area School District in Pennsylvania (but established through the cooperative efforts of the school districts in Bucks, Chester, Delaware and Montgomery counties). This school has performed particularly well, exceeding averages on state tests in more than half of their tested grades.

Virtual Schools Are a Legitimate Option Under NCLB

In February 2004, the U.S. Department of Education issued guidance specifically defining virtual schools as a legally acceptable way to create additional capacity for students wishing to transfer.[16] The Department views virtual education as a powerful technology innovation expanding opportunities for "learning any time, any place" in support of the No Child Left Behind Act. As long as the virtual school is a public elementary or secondary school (as defined by state law) and has not been identified for school improvement, corrective action, or restructuring, a district may offer it to students eligible to transfer from schools in need of improvement. If a virtual school is not operated by the district, the legislation allows the district to enter into a cooperative agreement with the school so that its students can enroll.

Possible Benefits of Online Learning

There are numerous hypothetical benefits of online learning. Some have been researched well, while others need further exploration. Among the benefits most commonly touted by online education advocates are:

- **Enhanced communication among students and between students and teachers**
  Because of the increased anonymity and the different ways to communicate (discussion boards, instant messaging, emails, online presentations, etc), there may be increased communication between class members and teachers. Students may feel more empowered to share their ideas and less afraid to pose questions. There may be a leveling of the playing field, as students interact with less regard to others gender, race, dress, and other factors.

- **Accommodation of different learning styles**
  Materials can be presented in different ways (example: online notes and slides for the visual learner and teleconferencing for the auditory learner). Students with attention deficit disorder and anxious students can benefit from having the additional time to attend to and reflect on the subject matter before responding. Students may get more one-on-one attention and work in smaller groups than in the traditional classroom.

- **Unlimited, flexible, access to curriculum and instruction (any time, any place)**
  Students who are learning off-site can download materials and work on the curricula at any time. Continual access to course documents lets students obtain materials at any time.

- **Frequent assessment**
  Some online learning programs allow for daily assessment of how well as student has learned course content. Immediate feedback allows instructors to change their delivery of the content, as well as highlight weaknesses and strengths for students.

- **Increasing the supply of teachers**
  Online learning allows students in different locations to "share" top instructors, rather than limiting those instructors' benefits to one place. In addition, teachers who have left the traditional system may find working in an online learning situation to be particularly desirable due to scheduling, health issues, or work style.

A 2001 survey of virtual schools found that access to an expanded curriculum was one of the most

frequently stated objectives of virtual school programs.[17] Virtual schools were found to have the capability to extend equitable access to high quality education to students from high-need urban and rural districts, low-achieving students, and students with learning challenges.

Other research has produced similar findings. A 2001 cyber charter review prepared by KPMG Consulting for the Pennsylvania Department of Education suggested that virtual charter schools are able to provide an education to children who have been historically under-served by traditional school environments and programs.[18] The nation's first publicly-funded Virtual High School (originally known as the Concord Virtual High School), a national consortium of high schools offering online courses taught and designed by cooperating teachers who are accredited in their respective states, has been seen as fostering independent learning and leveling the playing field for minorities, low-income students, and those in low-income areas.[19]

Harnessing Online Learning Options to Meet Choice Requirements of NCLB: Three Models

How would a district actually offer its students virtual school options? We present three models of how this could work in practice and adequately meet the choice requirements of the legislation.

Off-site Online Learning

The first model is the more "traditional" off-site virtual school, where students access educational materials and instruction online from sites of their own choosing. This works particularly well for high school students who can work well without supervision. However, it does present problems for elementary-age school children who are from families where parents are working outside the home and cannot supervise their children, and for students who do not have ready access to the Internet or a quiet place to work.

On-site Virtual School: Distinct "School Within A School"

The second model creates a new school, which is housed within the old school building– a virtual school within a physical school. The old school could provide services such as the cafeteria, gym classes and other non-academic coursework. Students would continue to get on buses in their neighborhoods, eat lunch with their friends, and join their peers in art and music classes, etc., but core academic instruction would be provided online in a different room or structure located on the school site. This model is allowed by the NCLB legislation as long as it is a distinct school with its own governance structure.[20]

"Third Place" Virtual School

In between those ideas is a type of online learning based not at a school or at home, but at an offsite facility in conjunction with a nonprofit organization, such as a community center. A teacher or administrator would be onsite to help monitor students; however, most instruction would be online. The energy and perhaps funding of the nonprofit organization could be tapped, possibly beyond just the provision of the facility.

Any of these three models could serve as an allowable option for students under No Child Left Behind. Integrating them into a district choice program, however, could present numerous challenges for state, LEA, and federal policymakers.

Challenges and Possible Solutions for Districts and States Using Virtual Schools to Fulfill NCLB Choice Requirements

While online learning is an emerging approach for K-12 instruction, few states and districts have made the effort to develop and enforce policies that address the issues that are unique to virtual schools. States and districts interested in pursuing this option should first conduct a thorough analysis of existing policies to see if they support the implementation of virtual schools. If they do not, then new policies should be developed and adopted quickly.

District and state policymakers and planners have numerous factors to consider in creating and operating virtual schools, particularly under the framework of the NCLB legislation. These components include:

- supply and capacity;
- funding;
- housing;
- enrollment boundaries;
- teachers; and,
- accountability.

Supply and Capacity

For a virtual school to be eligible to receive students under NCLB's choice provisions, it must be a duly authorized public school under the laws and policies of the state and/or district. While the number of virtual public schools has grown in recent years, overall very few of them exist, especially those that provide a full instructional program. In addition, many existing virtual programs target secondary students. More elementary programs would be needed in order to meet the needs of younger students seeking transfers. Districts and states seeking to offer virtual school options therefore will need to attend to "supply": ensuring that there are enough spaces in virtual schools to meet the likely demand.

Broadly speaking, there are two ways supply could arise. First, virtual schools could be created new. Second, pre-existing virtual schools could be authorized as legitimate public school options within the state or district.

New Virtual Schools

A district or state could create new virtual schools itself. Alternately, it could issue a Request-for-Proposals (RFP) inviting nonprofits, universities, groups of teachers, or other potential providers to submit applications to create new virtual schools. These could be charter schools, if the state's charter law was hospitable to such schools, or they could operate under some kind of charter-like contract with the district or state. Either approach would require substantial investments on the part of the state or district. In the case of starting schools itself, the district or state would need to invest significant resources and develop the expertise necessary to create virtual schools. In the case of an RFP process, the district or state would need to develop criteria for selection and a review process. If these were already in place for a charter schools program, the challenge would be reduced, but the existing mechanisms might need to be adapted for the specific context of virtual schools.

Pre-Existing Virtual Schools

A district or state could also enact a process by which it authorizes existing virtual schools to become legitimate public school options. For example, a private virtual school could become a public school option if it contracted or chartered with a district or state, agreeing to abide by critical public school laws and regulations. Or, a public virtual school serving another district or state could become an authorized public school for a given jurisdiction. As with new-school creation, this authorization process would require the establishment of an RFP, along with selection criteria and a review process.

Recommendations to SEAs

It is addressing the supply and capacity issue where states can take on the greatest leadership role. In particular:

- States can ensure that the legal processes exist for the creation of new virtual schools and the authorization of existing virtual schools as eligible public school options. This could involve enacting a charter school law, amending a charter law to ensure that it allows virtual schools, or enacting or amending policies that allow the state and districts to contract with outside entities to manage public schools.
- Districts could benefit by state education departments' providing technical expertise in designing a program or providing guidance to district officials in choosing "ready made" programs that would work well with local student populations and within their budget. State department officials could provide assistance with grant-seeking for districts seeking start-up funds or ongoing operation funding.

Recommendations to LEAs

- Districts can begin by assessing the likely demand for virtual school spaces in their community. Such a needs assessment can then inform supply-creation efforts.

- A critical decision for the LEA is whether to provide virtual schooling directly, to rely on outside providers, or to utilize some combination of in-house and outside supply. The key factors in this decision are the district's expertise in online learning (or access to such expertise), the resources available to develop in-house capacity, and the viability of potential outside providers.

Funding

Determining who funds online learning programs and at what level is a key challenge for districts considering online learning program choices. One of the touted benefits of online learning is that it can be less expensive than providing instruction in "brick-and-mortar" structures. Virtual schools, for example, do not typically have the same costs in areas of transportation and facilities. The cost structure of virtual schooling would depend upon the particular model in use. All of the models would involve costs including computer and internet provision, instructor salaries and benefits, technology support, and per pupil licenses for any commercial products. An administrative staff, which could be headed by a lead teacher, a district or state official, or another designated individual, would need to be responsible for shaping policy, hiring/monitoring/firing teachers, ensuring that content meets local, state, and federal requirements, making sure that delivery is high-quality, managing students (registering, scheduling, ensuring that they are participating, etc), ensuring that any technological problems are remedied quickly, and making themselves available (sometimes for extended hours) to deal with day-to-day issues. The "third place" model would also involve some facility expense. The onsite "school within a school" model could involve additional facility expense, unless existing space could be reconfigured to accommodate the virtual program. The school-within-a-school would also incur additional costs, such as the resources (human and financial) required to provide food service, non-core classwork, etc.

Some educators point out that start-up costs (developing curriculum, learning the systems, and integrating the program) is the area where most virtual school planners can be overly optimistic about their capacity. Others point out that virtual learning does not necessarily decrease overall costs, rather expenses just are shifted to different areas.

It is unclear how much funding is required to run a virtual school. A 2001 study of virtual schools suggested that state-run online learning costs an average of $3,000 per student a year.[21] K12, a for-profit organization that provides a virtual curriculum to homeschoolers and cyber charters, however estimates that approximately $4,800 to $5,000 per student needs to be allocated to adequately support virtual schools.[22]

Typically, virtual schools run by states receive funding based on enrollments, but many states are still working through average daily attendance ("seat-time") issues as they relate to virtual schools. State appropriations and state grants are a common funding source for state-sanctioned, state-level virtual schools, and districts can also tap into such funds if available by state legislation. State, federal and foundation grants, and funding from districts receiving services, are also common. External funders often support virtual schools in order to promote equitable access to key curricula. "Barter" methods are used by some regional networks or consortia, where members may trade a teacher-led course for student enrollments, and share consortium costs.

Recommendation to SEAs and LEAs

- Consider funding implications early on, including the level and funding mechanisms required by each of the three models presented. Per-pupil funding levels must reflect real costs of a quality non-classroom-based model.
- Ensure that the costs of special education services to students who require them, including IEP modifications for the virtual environment and contracting expenses of any required face-to-face services are considered in the funding model.
- Seek to identify as early as possible the most sustainable funding mechanisms for the program.

Housing

A primary challenge to districts required to provide another public school choice to students is where to place them physically. The models presented in this paper offer three housing options: online instruction in the home (or other location arranged by the student's family); online instruction in an area set aside in the old school; or, online instruction in a third-party structure.

The onsite online learning program allows districts to use existing space if available. Districts do not have to rethink transportation provision and other student services. The third place online learning program, though requiring negotiation with another organization, can access additional space if facilities are limited at the old school, and can bring the added benefit of partnership with a community organization. The offsite online learning program can tap into "free" support from parents and eliminate all costs associated with a facility, but presents a major challenge to children who do not have parents or guardians at home during the school-day.

Recommendations to SEAs and LEAs

- Consider how best to deliver instruction to the specific population. Several questions must be addressed, including: If students are to receive instruction on their computers at home, how are elementary students to be cared for in families with both parents work outside the home? If students are to receive instruction at a "third place" facility, will a bus be provided to carry students there? Will the district provide virtual school students additional services, beyond core academic programs? If students go to school off-site or at a "third place," will they be free to return to school for additional programs?

Enrollment Boundaries

Virtual schools often serve students from a wide geographic area, crossing districts, spanning across the state, and even multi-state areas. This can present confusion as to who is ultimately responsible for oversight and per-pupil payment flow with the expanded enrollment boundaries.

Another issue that arises is that previously homeschooled students may want to enroll in the new virtual school. These students would not have been counted previously as students by the district and would not have received funding. If these students enroll, then the state needs to ensure that adequate funding is available to educate them.

Recommendations to SEAs and LEAs

- Determine enrollment boundaries for any virtual schools. If district-run and funded, would there be benefits in opening up the online learning program to additional students from outside the district? Could the district earn revenue (from fees and tuition) from such outside enrollment?

- Develop policies, based in law, that clearly spell out who may be enrolled in the program and who is responsible for monitoring and funding the program.

- For schools serving students in multiple states, clarify how individual state standards, accountability provisions, and teaching quality requirements will be handled.

Teachers

The delivery of the educational program online can be significantly different from teaching in a typical K-12 classroom. The instructor's role switches from presenting content and providing in-person instruction, to engaging in communication through a variety of instruments, ongoing assessment, and feedback. Critics of online learning programs for K-12 students rightly are concerned that competency and accountability of online faculty can be worrisome. The NCLB requirement that, by 2005-06, all public school teachers be "highly qualified" can help to allay those worries, as these requirements would also affect online instructors.[23] At the same time, these requirements can pose challenges of their own. State certification systems were built around the assumption of the teacher providing instruction to an identified group of students in a particular location. Do these adequately measure the competencies needed to teach in an online environment? Do they impose

restrictions that make little sense in such a setting (such as requirements that make it difficult to become certified in multiple states?)

Another challenge is that districts, particularly small or rural ones, may find difficulty in accessing local teachers to provide online instruction in any of the three models we present. Virtual schools could, however, make it easier for these districts to hire teachers from anywhere in the state and, if state law allows, from anywhere in the country or world.

Recommendations to SEAs and LEAs

- In addition, to ensuring that online instructors meet the NCLB requirements of being "highly-qualified," LEAs and SEAs should consider implementing policies that require new online teachers to complete an approved professional development curriculum ensuring their competency as online instructors prior to teaching students online and require experienced online teachers to demonstrate that they have the design and implementation knowledge necessary to deliver quality instruction to students in the new school. Personnel policies should take into account the need for administrators of virtual schools to have a specific skill set and professional development training which includes leading a teaching staff that may itself be completely virtual.
- SEAs could also inventory their teacher licensure requirements to ensure they do not impose restrictions that would constrain virtual schools in ways not related to teaching quality. For example, states could reconsider policies that make it difficult for a teacher certified in another state to teach local students, since virtual schools may want to employ out-of-state teachers.
- Use the new instructional delivery model as a way to tap into labor pools that otherwise might not be available. Sources could include retired teachers and other teachers who are out of the system, possibly because they have young children, are pregnant, or live in locations that do not have job openings in their subject areas. Consider if trained paraprofessionals could provide face-to-face supervision for students and assistance to virtual teachers in the "onsite" and "third place" models.

Accountability

Beyond meeting the requirements of NCLB, LEAs and SEAs will need to determine the accountability requirements of the virtual schools. Because the teachers, instructional delivery method, and housing of an online learning program may be completely different than the district's traditional schools, traditional accountability standards may not work smoothly. For example, a system that relies on site visits and classroom observations to gather data about schools would need to be adapted to the online context. A system of enrollment counts may need to be adjusted for the fact that a school's students will not all be sitting in the same room in a certain day in October. An online learning charter school might be freed from many rules and regulations to which district schools would adhere, but the model that stays within the district may need to adhere to many of the same rules and regulations. How would compliance accountability work in this new setting? How would state testing work? Virtual schools often have much more individual student performance data than traditional schools – easy to document time on task, lesson completion, ongoing feedback, etc. Virtual schools, however, may need to arrange for face-to-face, proctored exam settings for state assessments, until the state system is more comfortable with online administration of standardized tests.

Recommendations to SEAs and LEAs

- Develop and implement a contract that spells out all expected educational, operational, and financial expectations, and provides a specific process and consequence for failing to meet the agreed upon goals.
- Consider identifying additional assessment methods or adapting existing methods so that they are appropriate to the online learning setting.
- SEAs may choose to take on a supporting role and developing a list of goals so that all online

learning in the state is held to the same level of scrutiny.

Recommendations for Federal Policymakers

The federal government could also play important roles in making virtual schooling work as an NCLB choice option, including:

- Using non-regulatory guidance to describe what counts as a "virtual school" (for purposes of NCLB choice). This definition is especially important in the onsite online model, in which the district is offering a virtual school-within-a-school. Without clear guidance about requirements for separate faculty and separate governance of the virtual school, this model could easily degenerate into something other than a real choice for families. For example, giving students the chance to spend an hour a day in a computer lab working unsupervised on Internet research would not constitute a "virtual school." But in less extreme cases, the line would be more difficult to draw. Federal guidance would help.[24]
- Provide start-up funds for new virtual schools.[25] These new online learning programs may experience many of the same challenges experienced by start-up charter schools. The federal government should consider developing start-up grants for online learning programs that helps the school to plan and launch its inaugural year. For virtual charter schools, federal public charter school funds are already available for this purpose. Federal officials could review other existing federal programs to determine whether starting up virtual schools would be an eligible use of these funds.
- Serve as an information-clearinghouse on solutions to the challenges discussed above. As states and districts develop solutions to problems such as those related to supply, funding, housing, teaching quality, and accountability, the federal government could play an important role in gathering and disseminating promising practices, as it has already with district choice and supplemental services programs more generally.

Conclusion

Virtual schools are an acceptable, legal option for districts and states seeking to increase their capacity to meet the choice requirements of the No Child Left Behind Act. Research demonstrates that they can offer high-quality instruction to K-12 learners regardless of location, family income, background, or learning differences. While this research is too new and tentative to warrant any kind of large-scale shift to virtual schooling, it is strong enough to suggest that districts and states should be experimenting to a much greater degree with virtual schools.

If districts and states decide to use virtual schools to meet NCLB's choice requirements, however, they need to address a panoply of issues related to the implementation of this option. Ideally, virtual schools would be part of a coherent districtwide or statewide choice program. According to a U.S. Department of Education's publication, promising practices in district choice programs include: competent leaders and staff, a true partnership with parents and the community, the perspective that accountability and competition are positive, and a strong strategy with appropriate resource allocation, strong infrastructure, and proactive communication.[26]

Key Terms

Asynchronous communication: Communication in which students and instructors interact at various times (examples include e-mail, threaded online discussions, and homework message boards).

Brick-and-mortar school: An educational organization that enrolls students primarily in classroom-based courses located in a school facility.

Online learning: Instruction and content delivered primarily via the Internet.

Online learning program: An educational organization that develops and offers online instruction and content. An online learning program may be a virtual school, or it may provide only supplementary services for students enrolled in brick-and-mortar schools or virtual schools.

Supplemental online program: A part-time online learning program that offers courses or other learning opportunities to students who are otherwise enrolled in brick-and-mortar schools or virtual schools; credit for successful completion of these learning opportunities is awarded by the brick-and-mortar school or virtual school in which the student is enrolled.

Synchronous communication: Communication in which students and instructors interact at the same time (via instant message, telephone calls, face-to-face meetings, chatrooms, videoconferencing).

Virtual school or cyber school: An online learning program in which students enroll and earn credit towards academic advancement (or graduation) based on successful completion of the courses provided by the school. Credit for successful completion of these learning opportunities is awarded by the virtual school.

Online Resources

Any Time, Any Place, Any Path, Any Pace: Taking the Lead on Online Learning Policy
National Association of State Boards of Education, October 2001
www.nasbe.org/Educational_Issues/Reports/e_learning.pdf

Beyond Brick and Mortar: Cyber Charters Revolutionizing Education.
Center for Education Reform, January 2002.
www.edreform.com/index.cfm?fuseAction=document&documentID=1001

Choosing Better Schools: A Report on Student Transfers Under the No Child Left Behind Act
Citizens' Commission on Civil Rights, May 2004
www.cccr.org/ChoosingBetterSchools.pdf

Cyber and Home School Charter Schools: How States are Defining New Forms of Public Schooling
National Center for the Study of Privatization in Education
www.ncspe.org/publications_files/Cyber%20and%20Home%20Charters.pdf

Distance Learning for K-12 Students
Distance Learning Resource Network
www.dlrn.org/k12/index.html

Electronic School
www.electronic-school.com/

E-School News
www.eschoolnews.org/

Trends and Issues. A Study of Virtual Schools in the United States
Distance Learning Resource Network and The Center for the Application of Information Technologies, 2001
www.wested.org/online_pubs/virtualschools.pdf

Virtual Learning and Charter Schools: Issues and Potential Impact
Southern Regional Education Board
www.sreb.org/programs/EdTech/pubs/PDF/Virtual_Learn_Charter_School.pdf

Virtual School List
Distance Learning Resource Network
www.dlrn.org/k12/virtual_list.html

About the Authors

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Michelle Godard Terrell is an independent consultant who has been working with Public Impact since 1999. She has been involved in extensive research and writing about accountability issues and other charter school topics. She served as coordinator for the Charter Friends National Network's Accountability Initiative, managed a two-year federally-funded national project on "Building Excellence in Charter School Authorizing" for the National Association of Charter Schools, and helped to develop the application and accountability processes for charter schools authorized by the Mayor of Indianapolis. In addition to her work with Public Impact, Michelle creates the weekly Charter Schools News Connection and monthly resource updates for USCharterSchools.org. Prior to devoting her attention to charter schools, she worked as Director of Policy Research at the Public School Forum, an education think tank in North Carolina, as well as in education-related positions at the North Carolina State Department of Public Instruction and Harvard University. She holds a Masters in Public Administration from North Carolina State University and received a B.A. in political science from Guilford College.

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[1] Students whose original school is no longer identified as in need of improvement, as well as students who change schools and then move out of the attendance zone served by a school in improvement status, must be permitted to continue attending their new school until they have completed the highest grade in that school. Transportation, however, in these situations, is not required to be provided by the LEA.

[2] Brian P. Gill, P. Michael Timpane, Karen E. Ross, and Dominic J. Brewer, Rhetoric Versus Reality: What We Know and What We Need to Know About Vouchers and Charter Schools, Santa Monica, CA: RAND Education, 2001.

[3] Hoxby, Caroline Minter. School Choice and School Productivity (Or Could School Choice Be A Tide That Lifts All Boats?), National Bureau for Economic Research, February 2001

[4] Robelyn, Eric. Chicago Data Suggest Transfer Students Gain, Education Week, May 5, 2004. http://edweek.com/ew/ew_printstory.cfm?slug=34Transfer.h23 (Note: The Chicago analysis, first reported by the Chicago Sun-Times on April 25, used the Iowa Tests of Basic Skills to gauge how much academic improvement some students showed during the 2001-02 school year compared with 2002-03. In 2001-02, the transfer students studied averaged 24 percent below the expected gain in reading, and 17 percent below the expected gain in math, when compared with the national average on the Iowa tests. But, when tested a year later at the higher-performing school, those students showed gains of 8 percentage points above the national average in both subjects.)

[5] Brown, Cynthia. Choosing Better Schools: A Report on Student Transfers Under the No Child Left Behind, Citizens' Commission on Civil Rights, May 2004, page 62, http://www.cccr.org/ChoosingBetterSchools.pdf (Note: The Citizens' Commission on Civil Rights is a bipartisan organization established in 1982 to monitor the civil rights policies and practices of the federal government and to seek ways to accelerate progress in the area of race relations and on other civil rights issues. For this study, the Commission's researchers collected and analyzed transfer data from 47 states and 137 school districts to determine what effect NCLB has had on student transfers, how school districts are enforcing and implementing the provision, and the level of parental interest in the provision.)
[6] Brown, Cynthia. Choosing Better Schools: A Report on Student Transfers Under the No Child Left Behind, Citizens' Commission on Civil Rights, page 62.
[7] Long, Arika. Cyber Schools. State Notes: Technology. Education Commission of the States, April 2004. http://www.ecs.org/clearinghouse/51/01/5101.doc
[8] Are We There Yet? National School Boards Association, June 2002. *http://www.nsbf.org/thereyet/online.htm*
[9] Virtual High School website, http://www.govhs.org/website.nsf
[10] Illinois Virtual High School website, http://www.ivhs.org/index.learn?action=other
[11] Florida Connections Academy website, *http://www.connectionsacademy.com/state/home.asp?sid=fl*
[12] Florida Virtual Academy website, *http://www.flva.org/*
[13] University of California Prep Initiative website, http://www.uccp.org/
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[15] 21st Century Cyber Charter School, http://www.21stcenturycyber.org/
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[17] Clark, Tom and Zane Berge. Virtual Schools and eLearning: Planning for Success. Paper presented at the 19th Annual Conference on Distance Teaching and Learning, July 2003.
[18] Cyber Charter Schools Review. Prepared by KPMG Consulting for the Pennsylvania Department of Education, October 2003. http://www.pde.state.pa.us/charter_schools/cwp/view.asp?a=3&Q=75169
[19] Hayes, K. Paying to Take Online Classes. The Boston Globe, November 2004, p. B11
[20] Public School Choice: Draft Non-Regulatory Guidance. U.S. Department of Education, February 2004. http://www.ed.gov/policy/elsec/guid/schoolchoiceguid.pdf
[21] Clark, Thomas. Virtual Schools Trends and Issues: A Study of Virtual Schools in the United States. Distance Learning Resource Network, WestEd, October 2001.
[22] Virtual School Costs Under Siege. Wired News, April 1, 2004. http://www.wired.com/news/politics/0,1283,62890,00.html
[23] The NCLB Act requires that by 2005-06, every public school teacher in the nation who teaches a core academic subject be "highly qualified." A "highly qualified" teacher is one who: (1) has obtained full state certification as a teacher or passed the state teacher licensing examination and holds a license to teach in the state, and does not have certification or licensure requirements waived on an emergency, temporary or provisional basis; (2) holds a minimum of a bachelor's degree; (3) and, has demonstrated subject-area competence in each of the academic subjects in which the teacher teaches, in a manner determined by the state. For charter schools, including cyber charter schools, NCLB defers to state charter school legislation when it comes to certification. (If the state charter school law exempts charters from teacher certification requirements, then charter teachers do not have to be certified in order to be "highly qualified" under NCLB.) However, there is no exception for charter schools for the requirements that a teacher must hold a bachelor's degree and demonstrate subject-matter competence.
[24] Note: this concern applies more generally to any use of "schools within schools" to create choice options, not just virtual schools.
[25] The federal government may want to encourage districts and states not to reinvent the wheel. Not every virtual school will have to create all of its own curriculum from scratch-- customization may make more sense in many cases.
[26] Creating Strong District Choice Programs. Office of Innovation and Improvement, U.S. Department of Education, May 2004. http://www.ed.gov/admins/comm/choice/choiceprograms/index.html