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Enchanted Future: The Promise of Virtual Education in New Mexico

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Executive Summary

Expanding virtual learning opportunities is a critically important step toward transforming the delivery of education throughout New Mexico. Virtual schooling was a critical component of the "Florida Model" for education reform, which helped transform achievement across student subgroups there from nearly worst to first within a decade. The Florida Reform model has been adopted by Gov. Susana Martinez because academic outcomes indicate the state's traditional schooling system is not meeting the diverse needs of New Mexico students.

The state is currently ranked 49th in fourth-grade reading proficiency; 48th in eighth-grade math proficiency; and 50th in graduation rates. A lack of resources does not explain such poor performance. New Mexico ranks among the middle of the pack in 26th place when it comes to per-student education spending. Moreover, per-pupil education spending has increased 54 percent *faster* than the rate of inflation since 1991-92. With a \$400 million budget deficit, such performance is no longer tenable.

New Mexico has already taken nationally recognized strides towards transforming the provision of high-quality, cost-effective education to a diverse and growing population of students through virtual learning opportunities. The Center for Digital Education (CDE) ranked New Mexico third in its 2009 evaluation of state online learning policies. Significantly, New Mexico is the first state to create a statewide virtual learning system that encompasses all aspects of learning, including traditional public and higher education environments, teacher professional development, continuing education, and workforce education. This program, Innovative Digital Education and Learning New Mexico (IDEAL-NM), was a Council for State Governments-West Innovation Award winner in 2009, one of only eight winners nationwide that year.

Promoting a diverse online learning landscape is an especially important public policy concern given the many advantages of virtual education, including greater efficiency along with improved student achievement and graduation rates. Yet the expansion of some online learning opportunities in New Mexico appears less robust. While applications for charter schools that include virtual education are on the rise, the National Alliance for Public Charter Schools documents just six such charter schools in New Mexico. Full-time, multi-district virtual schools also have not taken strong hold in New Mexico. In fact, as of the fall of 2010, the New Mexico Public Education Department had not approved any such applications.

It will be important for policy makers to monitor this state of affairs to ensure high-quality fulltime, multi-district online schools and virtual charter schools are not being denied an opportunity to serve students who would benefit from these virtual learning opportunities. State policymakers should also draw from five of the most promising practices from other states and abroad to help realize the full promise of virtual education in New Mexico:

#1 Fund for Success. Adopting a student-centered, results-based financing structure helps support cost-effective, sustainable virtual education. Funding follows students to the virtual schools of their choice, and schools receive funding only after students successfully master their course material. Experts prefer this finance model because it provides a more rational, predictable funding stream than an "all or nothing" approach, particularly in tough budget times.

#2 Implement Expansive Enrollment Policies. Implement expansive enrollment policies that do not cap the number or type of students. Successful virtual schools give enrollment priority to students who need expanded access to courses and teachers, such as students in rural schools, in low achieving schools, and low-wealth schools; as well as students from military families and the foster-care system. Access should also be granted to non-public school students and home education students.

#3 Eliminate Rigid Teacher Certification Mandates. Eliminating rigid teacher certification mandates and enacting full teacher licensure reciprocity maximizes students' access to the teachers that are best for them. Talented individuals with advanced degrees or industry-specific skills should not be barred from teaching. Likewise, students should not be denied access to top quality educators simply because their licenses are from out of state.

#4 Remove Anachronistic Mandates. Removing class-size mandates, compulsory education codes, and seat-time requirements helps maximize the full potential of virtual education. Inflexible mandates in these areas are symptomatic of a system-centered approach to schooling that puts virtual schools at a disadvantage because they are structured around students' mastery of subject material. Since virtual schools also do not have the geographical or time constraints of bricks-and-mortar schools, such mandates are unnecessary obstacles to student-centered, individualized learning.

#5 Protect Parents' Rights as Educators. Protecting parents' rights as educators by exempting them and other persons providing educational services in students' homes from state licensing requirements is a critical consideration. A high level of parental involvement is needed for virtual education to succeed because parents oversee course assignments, check home work, and supervise their children's progress. Some national teachers union leaders consider these activities "an excess of parent involvement," and at least one state teachers union affiliate sued—unsuccessfully—to limit parents' roles as educators.

Introduction

Technological advances are providing customized learning opportunities to millions more students today. Many students struggle to keep up with subjects they find challenging. Others contend with boredom and monotony in traditional classrooms because they have more advanced skills than their peers. Meanwhile, many students cannot access the courses or teachers they need because they live in remote areas, are athletes and need more flexible schedules, or have health issues that prevent them from succeeding in regular brick-and-mortar schools. Until recently, those students' families would have to hire tutors, switch schools, or try to balance their work

schedules with before- or after-school programs—options that are beyond the reach of many families struggling to make ends meet. The expansion of virtual learning is a lifeline for such families and their school-age children.

"I really liked [taking my course online] because I could take my time...and if I couldn't do the whole thing...I could stop, and do it later on." IDEAL-NM student

Today an estimated 1.5 million students nationwide are taking one or more online courses.

¹ Experts predict that by 2014 roughly one out of every five public-school students (about 10 million) will be enrolled in online courses of some kind. The demand for customized learning requires a profound paradigm shift among education policymakers. Gregg Vanourek, former vice president at the Thomas B. Fordham Foundation, provides a helpful contrast between traditional learning environments and virtual learning environments:

One of the key differences relates to time and learning. In a traditional classroom, *time is fixed and learning is variable* (i.e., classes are held for a set period of time each day and when the bell rings the amount of actual learning that has occurred will vary, sometimes dramatically, by student). In a virtual environment, *learning is fixed and time is variable* (i.e., the lesson continues until the student achieves mastery). [Emphasis added]

Expanding virtual learning opportunities is a critically important step toward transforming the delivery of education throughout the state, and such expansion could readily serve as a mode for the rest of the country. According to the state's Phase Two Race to the Top application, submitted in May 2010, "New Mexico's unique demographics and rich intellectual assets... provide an excellent national setting for education reform"

Yet education policy makers in New Mexico face many challenges, beginning with the fact that the state has just 6.3 people per square mile, which makes building and operating traditional bricks-and-mortar schools an expensive proposition. Additionally, "New Mexico has been a majority-minority State since its inception and includes 22 distinct Indian tribes, pueblos, and nations," as the state's Phase Two Race to the Top application adds.⁵

Academic outcomes indicate the state's traditional schooling system is not meeting the diverse needs of New Mexico students. For example, *Education Week* ranked New Mexico 49th in fourth-grade reading proficiency; 48th in eighth-grade math proficiency; and 50th in graduation rates on its 2011 *Quality Counts* report. In fact, since 1997 graduation rates in New Mexico have bucked the national trend by declining 1.4 percentage points. A lack of resources does not explain such poor performance. New Mexico ranks among the middle of the pack in 26th place when it comes to per-student education spending. Moreover, per-pupil education spending has increased 54 percent *faster* than the rate of inflation since 1991-92. With a \$400 million budget deficit, such performance is no longer tenable. Political leaders in New Mexico grasp this reality.

Gordon Freedman, the Blackboard Institute's Vice President Education Strategy, observed in 2009 that "New Mexico, from the Governor down, continues to enact bold steps toward

education change... it has an online learning high school graduation requirement, a strong emphasis on K20 policy, planning and practice, and is very focused on data across the segments... New Mexico provides online learning courses to fit into the big change agenda of the state by better distributing learning opportunities." Peter Winograd, education advisor to Governor Richardson, explained, "Maps and an understanding of the terrain are crucial to winning military battles. In that very same way, a deep understanding of the terrain is crucial if we are to win the battle to educate our children." 11

A comprehensive, data-driven approach to transforming education is beginning to bear fruit. According to Brian Ormand, director of the New Mexico Learning Network Program, New Mexico's comprehensive approach "is shaking up the status quo by providing more equitable distribution of highly qualified educators, dual credit opportunities and digital resources." Importantly, such commitment spans political administrations.

Upon her appointment in late 2010, Secretary of Education Hanna Skandera explained that Gov. Susana Martinez directed her "to reform a system that has failed young New Mexicans." The Governor added that "we must focus on implementing reforms that improve student achievement here in New Mexico, rather than simply throwing more money at a failed system." In a subsequent interview, Skandera cited New Mexico's latest *Education Week* grade of 'F' on K-12 student achievement. Students, families, and taxpayers, she concluded, are not getting a return on their education investment, and that it is time for New Mexico to move from worst to first. ¹⁴

New Mexico's distinct challenges should be viewed as an impetus—not an impediment—to expanding virtual learning opportunities; and the state has already taken nationally recognized strides to transforming the provision of high-quality, cost-effective education to a diverse and growing population of students. In fact, the Center for Digital Education (CDE) ranked New Mexico third in its 2009 evaluation of state online learning policies.¹⁵

This policy brief takes a closer look at New Mexico's progress to date in expanding virtual learning options and current state policies affecting virtual learning. This brief concludes by detailing the advantages of virtual learning, recommending promising practices to enhance virtual learning opportunities, and identifying some of the leading policy pitfalls New Mexico should avoid.

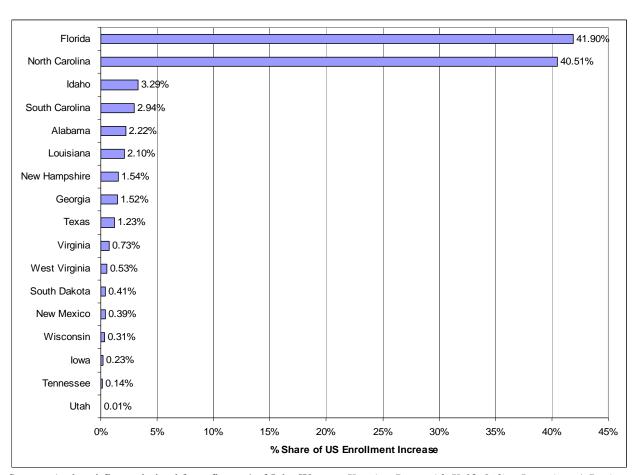
A Snapshot of Virtual Learning in New Mexico

The state's Innovative Digital Education and Learning New Mexico (IDEAL-NM) program was a Council for State Governments-West Innovation Award winner in 2009, one of only eight winners nationwide that year. ¹⁶ This state-led program is considered a national model because it incorporates learning opportunities at all levels, elementary, high school, and college—an uncommon practice among state-led online initiatives.

Ashley Levitt, a high school senior, participated in an IDEAL-NM career enrichment center course—her first-ever online course. "I love it," says Ashley, who appreciated the variety of ways she could study, from text books, to podcasts, to PowerPoint.

State virtual schools and state-led online learning initiatives are an increasingly popular vehicle for providing virtual learning opportunities. They now exist in 39 states with more than 450,000 course enrollments (one student taking one semester-long course) reported in 2009-10. This was an increase of nearly 40 percent over the previous year. As shown in Table 1, between the 2008-09 school year and the 2009-10 school year New Mexico's state-led initiative was one of 17 statewide programs posting enrollment gains. Specifically, enrollment increased over this period from 1,508 students to 2,063 students.

Figure 1. National Share of State-led Virtual Course Enrollment Increases, School Years 2008-09 and 2009-10



Source: Authors' figure derived from figure 4 of John Watson, *Keeping Pace with K-12 Online Learning: A Review of State-level Policy and Practice*, Evergreen Education Group, November 2010, p. 26.

While the IDEAL-NM enrollment increase amounts to less than 1 percent (0.39 percent) of the country's overall state-led virtual learning enrollment increase from the 2008-09 school year to

the 2009-10 school year, it should be kept in mind that the program has only recently been enacted.

In 2007, the Statewide Cyber Academy Act created IDEAL-NM.¹⁹ The program was expanded in August 2009 as part of Governor Bill Richardson's "Graduate New Mexico" initiative to make online courses available for up to 10,000 students who need to make up credits to graduate.²⁰ Significantly, New Mexico is the first state to create a statewide virtual learning system that encompasses all aspects of learning, including traditional public and higher education environments, teacher professional development, continuing education, and workforce education.²¹

IDEAL-NM also provides a statewide learning management system (LMS) that delivers elementary, high school, postsecondary, and state agency online training courses, referred to as P-20+. Thirty-eight New Mexico public school districts (42.7 percent) and 21 public charter schools (25.6 percent) used branded portals to access IDEAL-NM courses free of charge as of August 2010. Additionally, IDEAL-NM is working with local schools to form a statewide network of school-based eLearning Facilitators who connect their students to online teachers and resources including a library of online courses and web-based tools including web conferencing tools. and the state of the

"I love being on the computer...with E-Learning you get to do everything you want to do on it." IDEAL-NM student

Many provisions of the 2007 High School Redesign bill (SB0561) affected IDEAL-NM and other online learning providers as of the 2009-10 school year, including requirements that:

- At least one of the 24 units required for graduation must be an Advanced Placement, honors, dual enrollment, or distance learning course;
- Algebra must be made available to all 8th graders (either online or classroom);
- All districts must offer two years of a foreign language other than English; and
- All schools must now offer a health course.²⁴

The collaborative nature of IDEAL-NM also stands out. Thirty-one state agencies were participating in online employee training, and 13 postsecondary institutions offered online courses through IDEAL-NM shared technology as of 2009. The Blackboard Institute's Gordon Freedman observed that not only has IDEAL-NM "brought courses and resources to teachers and students; it has forced different state organizations to work together as well." Importantly, local communities are key to the success of IDEAL-NM. According to Brian Ormand, an IDEAL-NM board member, "The different sectors are collaborating in new ways for sharing content, platforms, and expertise. The key is deploying quality e-Learning solutions in partnership with local education entities in communities including public schools, public charters, colleges, universities, etc. As a result, IDEAL-NM has received strong support from its various stakeholders."

Individual school districts also offer online programs in New Mexico. These include districts in Albuquerque, Rio Rancho, Hobbs, Taos, and Roy, and some of these districts, along with an

increasing number of new districts, are using course content, web-based tools, and online teachers provided through IDEAL-NM.²⁸

Virtual charter schools are a growing and vibrant part of the virtual learning landscape. Nationwide, virtual charter schools represent more than 7 percent of all charter schools.²⁹ Virtual charter schools may offer their entire curriculum online or combine traditional teaching with online instruction, often referred to as hybrid or blended instruction.³⁰ According to the National Alliance for Public Charter Schools, there are six virtual, hybrid charter schools in New Mexico as of the 2009-10 school year, the latest year data are available.³¹ Applications for charter schools that include virtual education in their applications are also on the rise.³² Yet, in its most recent national ranking, the Center for Education Reform gave New Mexico a 'C' for its charter school law—the 18th weakest nationally.³³

"We wanted to bring education to meet kids at their need... So it isn't a function of distance. It isn't a function of where you choose to live. It isn't a function of how much money your school district has, or your family has." Thomas Ryan, Chief Information Officer, Albuquerque Public Schools, on the importance of IDEAL-NM.

To help ensure New Mexico students get the individualized learning opportunities online charter schools offer, New Mexico policy makers should remove unnecessary regulations that cap charter student enrollment and the number of charter schools that may open. Requiring case-by-case regulation waivers from state or local education authorities and restricting charter management contracts to nonprofit education service providers does little to assure academic quality. Instead, such restrictions stifle learning opportunities for students and innovation that comes from healthy competition among education providers.

Full-time, multi-district virtual schools are another virtual learning option, but they have not yet taken hold in New Mexico. Such schools are permitted, and several school districts in partnership with education management companies have applied to operate such programs. As of the fall of 2010, however, the New Mexico Public Education Department had not approved any such applications. New Mexico's Distance Learning Rule, which establishes requirements for credit-bearing distance learning programs, states that "distance learning technologies may occasionally be used as full-time educational programming for students in unusual circumstances;" however, "asynchronous distance learning shall not be used as a substitute for all direct, face-to-face student and teacher interactions unless approved by the local board of education." Optimal virtual learning policies do not limit students' opportunities to access the education that best meets their needs—especially in a state such as New Mexico with large rural populations.

It will be important for policy makers to monitor this state of affairs to ensure high-quality full-time, multi-district online schools are not being denied an opportunity to serve students who would benefit from this virtual learning opportunity. Relegating full-time online instruction to extraordinary circumstances minimizes competition among online learning programs for students and the innovation such competition inspires among education providers. Local education boards are also susceptible to political opposition from special-interest groups, including teachers

unions, which often oppose education options for students. Allowing a multiplicity of authorizers for full-time online instruction would better ensure a de-politicized approval process, while helping ensure students who need or prefer full-time options have them. Multiple authorizers would also better ensure the academic quality of online learning providers.

Current State Policies

New Mexico's Distance Learning Rule governs the implementation of statewide e-learning courses through IDEAL-NM.³⁶ School districts may not restrict student access to online courses. Additionally, an opinion from the Attorney General's Office issued in February 2008 found that New Mexico's open enrollment law does not apply to online schools and therefore does not conflict with the distance learning rules because the relevant statute "does not address distance education/virtual schools." Yet while New Mexico statutes are silent on several key components of virtual learning, other statutes applicable to bricks-and-mortar schools could undermine the promise of virtual learning in New Mexico. For example, compulsory attendance mandates require that school districts and charter schools offering programs to services outside their attendance area "must have an agreement with the district where those students are enrolled...and have written permission of the student's enrolling district, charter school, state institution, or educational program conducted in a state institution," according to former Secretary of Education Veronica C. García.³⁸

New Mexico's virtual education policy is in its early stages, and drawing from successes elsewhere would help ensure a vibrant virtual learning environment for a diverse student population at a time of diminishing budgets and growing demands for well-educated graduates. Experts recommend "a simple litmus test for evaluating online learning policy. Good policy answers two key questions affirmatively: Does the policy hold promise for increasing student educational opportunities? Does the policy hold promise for improving student educational outcomes? If the answer to both questions is yes, the policy is likely to be beneficial." The following sections explore the advantages of virtual education and promising practices New Mexico should consider for expanding and enhancing virtual learning opportunities.

Advantages of Expanding Virtual Learning Opportunities

#1 Student-Centered and Results-Based Funding is Sustainable. Actual costs of providing online education include expert teachers, curriculum licensing and development, computers, course-delivery and data systems, special services, and physical materials. Virtual schools have significant technological costs such as hardware, and bandwidth. Teachers also travel for inperson training and technical support. Available research finds that a state virtual school needs \$4 million in start-up and operational funding to serve 5,000, one-semester enrollments. Experts believe that the cost of serving full-time students in virtual schools ranges from \$7,200 to \$8,300 per student. The operating costs at Kansas virtual schools were between \$300 and \$5,000 lower than the per-student costs at traditional public schools. After reviewing the available audits and cost estimates comparing virtual and traditional public schools, researchers at Indiana University concluded that the "operating costs of virtual schools fluctuate from program to program, but are generally lower or equal to the costs of traditional education."

John Watson and Butch Gemin of Evergreen Consulting Associates, an online-learning consulting and research firm in Evergreen, Colorado, explain, "States that fund based on successful completion find that having defined benchmarks or milestones for incremental

completion (for example, 50 percent and 100 percent complete) provides a more rational and predictable approach than 'all or nothing." ⁴⁴ Student-centered, results-based financing is a cornerstone of the Florida Virtual School, which was a centerpiece of Florida's winning Phase Two Race to the Top application. ⁴⁵ "The funding includes an innovative twist in that it is based on student performance or successful completion of virtual programs or courses rather than seat time. Florida's virtual education options are not merely reforming education; they are transforming education," as state education officials explained in their successful Phase Two Race to the Top application. ⁴⁶

A results- or outputs-based financing structure represents a profound but necessary public policy shift if virtual schools are to succeed. This finance structure will require policy makers to revise "seat-time" mandates, organizing students by age-determined groupings, and mandatory attendance laws governed by school-day and school-year regulations. ⁴⁷ As Florida Virtual School CEO Julie Young explains:

In our early days of development, we were highly influenced by a 1992 SCANS report [Secretary's Commission on Achieving Necessary Skills]. One quote we've returned to over and again says, 'In our current system, time is the constant and achievement the variable. We have it backwards. Achievement should be the constant and time the variable.' As we continue to evolve, we keep this central focus on achievement as our guidepost for development.⁴⁸

Holly Sagues, the chief strategist and policy officer for the Florida Virtual School, explained that before 2003 when legislation was passed changing the funding model from an appropriations-based system to a per-pupil, performance-based model, "We would figure out how many students we would be able to serve...It really does hurt kids, because we had a waiting list a mile long, but we weren't funded appropriately. There was no way for us to grow our enrollment base with that model." Once the funding model was changed, enrollment at the Florida Virtual School more than doubled, from 14,000 to 31,000 in one school year. ⁵⁰

#2 Virtual Schools Can Achieve Greater Efficiency. Virtual schools offer many areas for cost savings. Virtual schools, including virtual charter schools, have no taxing authority, which encourages sticking to budgets because they cannot make up for any shortfalls by raising property taxes as traditional public school districts do. For example, the Arkansas Virtual Academy serves grades K-8 across the state and operates as its own school district. It is funded through the same formula as a physical school, \$5,905 per student, but it does not receive money from property taxes.⁵¹

Virtual schools also do not have the facilities, cafeteria, and transportation costs traditional public-school districts do. In fact, developing countries are turning to virtual education because they simply cannot afford the high construction and operations costs of traditional schools. In Singapore, for example, all secondary schools use online learning; and all teachers are trained to teach online. Each year it holds E-Learning Week when bricks-and-mortar schools are closed down to ensure virtual schooling is used to provide continuity in learning and enhance disaster preparedness. In fact, Singapore is also working to train its teachers to use Second Life (virtual worlds) for educating students.⁵²

"This is a mechanism that is going to save money for New Mexico." Sen. Carlos Cisneros (D- Los Alamos, Rio Arriba, Santa Fe, Taos).

In addition to construction and maintenance savings, states can realize savings through greater efficiency. Open education resources (OER) are helping make online courses more cost efficient because online courses can be reused by multiple teachers. Si Virtual education is also cost-effective because it offers students courses that meet their needs but that their school districts cannot afford to provide. It also does not require new construction to do so. Importantly for states like New Mexico with large rural communities, online education makes it affordable for schools to hire high-quality, high-demand and specialized teachers who would otherwise not have enough students to justify their salaries, as long as brick-and-mortar class size mandates do not interfere.

With virtual schools, class size and traditional roles of teachers and administrators no longer apply, so new and more efficient operational configurations can be adopted. As the Alliance for Excellent Education concludes, "Whatever the configuration, innovative technologies offer the potential to improve productivity in schools just as it has in other sectors." With a results-oriented focus and financing structure, virtual schools have strong incentives to promote attendance, curb truancy, and engage students better. Research has shown that compared to traditional curricular and instructional approaches available to teachers, online teachers have more flexibility in engaging students, their colleagues, and presenting content in innovative ways. Emerging, interactive technologies help students develop in-depth, higher-level thinking and extract significant meaning from the content. 8

#3 Virtual Schools Can Meet the Needs of a Diverse Student Population.

Students want access to a greater variety of course offerings that are not available at their schools. Students "need learning tools and processes that are not tethered to time, place and geographic boundaries." 60

"I'm taking online courses, which I started earlier this summer, because I want to graduate high school a year early. I'm also very interested in learning a foreign language, and the only thing offered [at my school] is Spanish. I'd rather take French... [more virtual learning options] would help in expanding a lot of horizons." IDEAL-NM high school student from Captain, NM.

Hawaii, for example, has a virtual school that takes a comprehensive approach to meeting the needs of a diverse student population. Hawaii's E-School partners with private virtual schools and public charter virtual schools, which provide culture-based curricula and serve high-need students. Such a comprehensive approach to virtual education helped Hawaii become a Phase Two Race to the Top winner. While Utah was not a Race to the Top finalist, its state virtual school, the Electronic High School, provides supplemental courses and grants diplomas to students who are homeschooled exclusively, those who have dropped out of school and their class has graduated, and students with district referrals.

#4 Virtual Education Improves Student Achievement and Graduation Rates. With more personalized learning and expanded course offerings, it stands to reason that student performance would improve. Empirical research about the academic achievement of K-12 students participating in online education is sparse. A recent analysis sponsored by the U.S. Department of Education, however, reviewed more than 1,000 studies comparing online learning with traditional learning. Online classes, whether completely online or hybrid, produce stronger average student achievement than traditional classes and promote more time-on-task.⁶³

Evidence from specific state-based online education programs suggests they can improve student achievement at a lower cost that traditional classroom instruction. Research also shows access to online courses increases on-time graduation rates and college/workforce readiness. For example, 2009 passing rates of Georgia Virtual School students exceeded the state average for almost all courses that require an end-of-course test. The Georgia Virtual School plans to expand on this success by implementing proficiency-based advancement rules so students can move on to more advanced work when they are ready, not arbitrary seat-time regulations. Likewise, legislation passed in 2009 in Missouri removed seat-time requirements so school districts offering virtual classes can be funded at 90 percent of the full-time amount for online students once they complete their courses.

James Gallegos is Superintendent of Cimarron Municipal Schools, serving a rural population spread over 1,400 square miles. Some of his students travel 80 miles each way to attend school. Some days, they simply cannot make it. E-Learning allows these students to keep up and not fall behind. "Our students in particular have done very well...in the 96 percent passing rate in our online courses...and our kids have taken into the hundreds, almost two-hundred or so, courses a year through IDEAL-NM." Statewide, IDEAL-NM students have a pass rate that is higher than 95 percent in credit-recovery courses and advancement courses.

Likewise, Phase Two Race to the Top winner Ohio is enhancing online learning options by increasing AP course options to underserved students and abandoning rigid seat-time requirements. "Oftentimes, credit flexibility engages students in real-world learning experiences which better prepares them for college and careers," according to Ohio education officials. Online education in Ohio empowers students to earn high school credits based on demonstrated subject area competency instead of, or in combination with, completing hours of classroom instruction. They can earn credits by completing coursework or even testing out of courses. 69

"We've seen a significant increase in high-school graduation rates in the state of New Mexico—in the last two years 11.4 percent—and phenomenal increases across Latino, underserved, and rural communities as well." Virginia Padilla, Executive Director of IDEAL-NM

Policy Recommendations for Strong Virtual Education and Successful Students

State policymakers should proceed following five of the most promising practices of virtual schools in other states and abroad that deliver high quality education through local control.

#1 Fund for Success. Adopting a student-centered, results-based financing structure helps support cost-effective, sustainable virtual education. Funding follows students to the virtual schools of their choice, and schools receive funding only after students successfully master their course material. Experts prefer this finance model because it provides a more rational, predictable funding stream than an "all or nothing" approach, particularly in tough budget times.

#2 Implement Expansive Enrollment Policies. Implement expansive enrollment policies that do not cap the number or type of students. This is a particular concern in New Mexico given the current practice of capping the number of charter schools and students, which would affect the number of virtual charter schools that may open. Successful virtual schools give enrollment priority to students who need expanded access to courses and teachers, such as students in rural schools, in low achieving schools, and low-wealth schools; as well as students from military families and the foster-care system. Access should also be granted to non-public school students and home education students.

Several state virtual schools provide strong policy models for expanding student access. Enrollment in the Florida Virtual School is not capped. Enrollment priority is also given to students who need expanded access to courses and teachers, such as students in inner-city or rural schools, home education students, and accelerated students. Moreover, school districts cannot limit or deny their students access to courses offered by the Florida Virtual School. Students at the Florida Virtual School benefit from individualized and personalized instruction and flexible pacing. They can access lessons when they want, where they want, through multiple devices and means. Other states also offer important policy guidance concerning virtual school enrollment policy.

Phase Two Race to the Top winner North Carolina, along with Phase Two finalists Colorado and South Carolina, have impressive enrollment policies to help maximize student access at their state virtual schools. The North Carolina Virtual School prioritizes online learning opportunities to students attending schools in rural and low-wealth counties. Colorado repealed its prohibition on funding online students who were not public school students in the prior year. Consequently, more than 2,000 additional students were able to enroll in online programs during the 2008-09 school year. The South Carolina Virtual School Program is open to all students under age 21, including private school and homeschool students.

While Pennsylvania is considering implementing a state virtual high school for "small, rural and low wealth school districts," this Race to the Top Phase Two finalist has 11 elementary and secondary virtual charter schools, primarily full-time, that served 22,205 students in grades K-12 during the 2008-09 school year. The state's virtual schooling law makes clear that children of deployed active-duty military parents retain their resident status and the right to enroll in virtual charter schools.⁷⁵

Missouri did not win or place in the Race to the Top grant competitions, but its virtual school enrolls public, private, or homeschool students at no cost during the fall and spring semesters on a first-come, first-served basis.⁷⁶ Mississippi, which did not participate in either Race to the Top competition, opens its virtual school to private and homeschool students, as long as they get approval from their local public school for which they are zoned.⁷⁷ Texas limits enrollment in its virtual charter school to public-school students but exempts students in foster care and certain dependents of military personnel.⁷⁸

A growing number of international examples also underscore the importance of expansive enrollment policies to ensure student access to excellent teachers and rigorous courses. With 1.3 billion people, China has set a goal to provide 100 million new students in underserved, rural areas with a quality education using technology and a digitized, online curriculum. It is already training its master teachers to provide online instruction, and as of 2004 China had put its entire K-12 curriculum online. According to Chinese University of Hong Kong president Lawrence Lau, broadband is critical to overcoming poverty; and China has increased its Internet connections from 4 million in 1999 to 250 million in 2008. China and the United Kingdom even reached an e-learning exports agreement in 2007 worth \$58 billion to give Chinese K-12 students access to English educational opportunities.

The European Union makes the International Baccalaureate (IB) Diploma Program available online to 125 countries. The IB program hires master teachers from 26 countries and trains them to teach online. "Gold standard" online IB courses are being developed to produce a world-class curriculum with an internationally-recognized high school diploma, which requires students be fluent in multiple languages. These students will interact with classmates from dozens of countries, learn from master teachers across Europe, and collaborate on an international scale. State policy makers should therefore consider developing their virtual schools with such global access in mind to ensure students statewide have access to courses throughout the world. Examples of state virtual school that offer such opportunities include the Florida Virtual School and the Michigan Virtual School.

#3 Eliminate Rigid Teacher Certification Mandates. Eliminating rigid teacher certification mandates and enacting full teacher licensure reciprocity maximizes students' access to the teachers that are best for them. Talented individuals with advanced degrees or industry-specific skills should not be barred from teaching. Likewise, students should not be denied access to top quality educators simply because their licenses are from out of state.

Without a sufficient supply of qualified teachers, rural and remote school districts with smaller student populations simply cannot afford to hire the teachers they need. To promote student access to talented teachers state policy makers should ensure full teacher licensure reciprocity. Rigid teacher certification mandates often keep talented individuals with advanced degrees or industry-specific experience and skills out of public-school classrooms—even though organizations such as Teach for America receive more applications than available positions. Most states' licensing regulations deprive students of talented teachers beyond state lines because they do not recognize out-of-state teaching licenses. One of the leading benefits of virtual education is that students, especially those in rural or underserved areas, have access to highly qualified teachers in advanced subjects or specialized fields. Watson and Gemin note that

...very few states have made the next logical observation that online teachers should not be restricted to teaching within state lines. While state content standards vary in some subjects, for many topics such as algebra there is simply not much variation by state. States could easily balance the supply of highly qualified teachers by creating reciprocity with other states—recognizing each other's certification of qualified online teachers. The result would be increased access for students who otherwise might not be able to easily take a course in a subject such as physics, chemistry, or a foreign language—online or otherwise.⁸³

Currently, only Michigan, Nevada, North Carolina, and West Virginia allow full teacher reciprocity. Oklahoma is one of only a few states that recognize the out-of-state teaching licenses of those who teach online courses. The remaining states effective cap the supply of teachers by not allowing any teacher licensure reciprocity, or allowing some reciprocity with other requirements, including additional coursework. The more autonomy virtual schools have over their day-to-day operations, including staffing, the more likely they are to be able to hire talented teachers with out-of-state, or even out-of-country, licenses to ensure students have access to high quality teachers.

Cisco CEO John Chambers once quipped, "Education over the Internet is going to be so big it is going to make e-mail look like a rounding error." With virtual education, teachers are paramount, and technology removes the socioeconomic and geographical barriers between students and the teachers they need to succeed—particularly in times of teacher shortages. In fact, some developing countries, including India and China, are turning teacher shortages into export opportunities by making their teachers available through technology not only to underserved students at home, but to students around the globe in need of top quality teachers—especially in fields of critical shortages such as math and science. "Online education is now an international export, and no longer a cottage industry," explains Susan Patrick, president and chief executive officer of the International North American Council for Online Learning (iNACOL) and former director of the U.S. Department of Education's Office of Educational Technology. "We need to take advantage of a new distribution model (global)—it is using the Internet to deliver high quality courses and instruction. We can reduce inequity, level the playing field and accelerate learning and track student performance better, too," according to Patrick."

Virtual schools have strong potential to attract and retain more teachers of top talent. Fully 75 percent of teachers who have taught online courses agree they help empower students over their own learning. Teachers who have taught online courses also report that online courses improved their effectiveness, had encouraged students to be more self-directed (67 percent), promoted collaboration among students (48 percent), and facilitated student-centered learning (47 percent). With online education, teachers help all their students master skills instead of rushing them along to keep up with arbitrary time tables.

The North Carolina Virtual School is also taking an innovative approach to meeting the need for high quality teachers in poorly-performing schools. As state education officials explained in their winning Phase Two Race to the Top application, "In addition to supporting the expansion of virtual course offerings, [Race to the Top] funds also will be dedicated to developing blended courses...to develop the talent of teachers already working in the lowest-performing schools by allowing them to work side-by-side – virtually – with more experienced teachers, while

eliminating the geographic boundaries that might otherwise prevent these partnerships from being possible."⁹²

Similarly, Louisiana's application made it a Phase Two Race to the Top finalist. Included in the state's application was a proposal to help expand AP and dual-enrollment STEM courses by using "the Louisiana Virtual School to train in-service teachers and to teach students in rural LEAs." Kentucky was also a Race to the Top Phase Two finalist, and its application included plans to maximize teacher professional development through the Kentucky Virtual School. ⁹⁴ The opportunity to mentor less experienced teachers and to learn from more experienced teachers holds great appeal for educators and highlights another benefit of virtual education.

#4 Remove Anachronistic Mandates. Removing class-size mandates, compulsory education codes, and seat-time requirements helps maximize the full potential of virtual education. Inflexible mandates in these areas are symptomatic of a system-centered approach to schooling that puts virtual schools at a disadvantage because they are structured around students' mastery of subject material. Since virtual schools also do not have the geographical or time constraints of bricks-and-mortar schools, such mandates are unnecessary obstacles to student-centered, individualized learning. New Mexico's Distance Learning Rule is a case in point because full-time virtual instruction is only allowed in exceptional cases and with the approval of local school boards, which could likely face strong opposition to virtual instruction from teachers who prefer direct, face-to-face instruction.

Statutory supervisory laws may also limit how many students any given teacher may oversee. In California, virtual charter schools can avoid class-size mandates if certain conditions are met; while Michigan provides a small number of waivers from seat-time requirements so students can take online courses full-time and their school can receive full funding. States' compulsory education laws typically stipulate the number of hours or days of attendance required for students be counted as full-time for funding purposes. Rigid rules regarding "seat time" often put virtual schools at a disadvantage because they are structured around students' mastery of subject material. Each of these policies diminishes the reach and effectiveness of virtual schools. State policy makers should ensure that rules that may apply in the brick-and-mortar school world do not encroach into the virtual school world.

#5 Protect Parents' Rights as Educators. Protecting parents' rights as educators by exempting them and other persons providing educational services in students' homes from state licensing requirements is a critical consideration. A high level of parental involvement is needed for virtual education to succeed because parents oversee course assignments, check home work, and supervise their children's progress. Some national teachers union leaders consider these activities "an excess of parent involvement," and at least one state teachers union affiliate sued—unsuccessfully—to limit parents' roles as educators.

Policy makers should not forget that parents are their children's first educators, and improving parental involvement is a common theme in public-schooling reform debates. Virtual schools have a great advantage in this regard because parents must oversee and supervise their children's education. Yet opponents have taken steps in recent years to limit this kind of involvement. In 2004, the Wisconsin Education Association Council (WEAC) sued the state-run Wisconsin Virtual Academy, alleging in part that the extensive role parents play in their children's online education violated the state's teacher certification and licensing requirements.

Although the case was initially dismissed, an appeals court found in 2007 that the virtual school was violating the state's teacher licensing law. "According to this ruling, if I want to teach my daughter to tie her shoes, I'd need a license," said Bob Reber, whose daughter attends Wisconsin Virtual Academy. WEAC president Mary Bell disagreed. "The court did not say that parents cannot teach their children—it said parents cannot teach their children at taxpayers' expense." Law makers responded in 2008 by exempting parents and other persons providing educational services in the students' homes from state licensing requirements. ⁹⁸

Showdowns between teachers union leaders and parents could soon become commonplace in other states. Barbara Stein, manager of the 21st Century Initiatives at the National Education Association, the country's largest teachers union, recently stated that her organization has concerns about "an excess of parent involvement" in virtual education and "about deputizing whoever happens to be at the kitchen table as a teacher." Policy makers should take care that parents' rights are protected to maximize the full potential of virtual education.

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- ⁸⁸ For a more extensive treatment on this topic, see the introductory chapter of Lance T. Izumi and Vicki E. Murray, Short-Circuited: The Challenges Facing the Online Learning Revolution in California (San Francisco: Pacific Research Institute, February 3, 2011), http://www.pacificresearch.org/publications/new-book-short-circuited-the-

challenges-facing-the-online-learning-revolution-in-california. See also Powell, "Online Learning: A Global Perspective," p. 23.

⁸⁹ "Online Teaching and Learning: Digital Directions Live Chat," moderated by Michelle Davis.

⁹² Ouotation from iNACOL, Online Learning in the Race to the Top Finalists' Round 2 Applications web site.

⁹³ iNACOL, Online Learning in the Race to the Top Finalists' Round 2 Applications web site.

⁹⁶ Watson and Gemin, "Promising Practices in Online Learning, p.11.

^{90 &}quot;Learning in the 21st Century: 2009 Trends Update," Blackboard K12, Project Tomorrow, July 2009, p.2, http://www.blackboard.com/resources/k12/Bb_K12_09_TrendsUpdate.pdf. 91 Ibid., p. 5.

⁹⁵ Ohio, for example, prohibits teachers from overseeing more than 125 students. See Watson, Keeping Pace with K-12 Online Learning, p. 121.

⁹⁷ Sam Dillon, "Online Schooling Grows, Setting Off a Debate." *The New York Times*. February 1, 2008, http://www.nytimes.com/2008/02/01/education/01virtual.html. Watson, *Keeping Pace with K-12 Online Learning*, p.145.

⁹⁹ Quoted in Catherine Dolinski, "Florida Parents Happy About Virtual Schools," *Tampa Tribune*, August 13, 2007, http://www.owli.org/oer/node/2396; cf. Liam Julian, "The Rise of Cyber-Schools: Online Education and Its Enemies," New Atlantis, Spring 2009, no. 24, pp. 109-112, http://www.thenewatlantis.com/publications/the-rise-ofcyber-schools.