

# ONLINE LEARNING

*A Literal New World of Possibilities for  
Minnesota K-12 Education*



Mitch Pearlstein, Ph.D.

Center of the American Experiment is a nonpartisan, tax-exempt, public policy and educational institution that brings conservative and free market ideas to bear on the hardest problems facing Minnesota and the nation.



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## *A Literal New World of Possibilities for Minnesota K-12 Education*

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**Founder & President**  
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### Executive Summary

#### (I) Introduction

When it comes to government's essential role in funding education, the holiest of grails is significantly improving quality while simultaneously constraining costs. Suffice it to say, no level of government, in or out of Minnesota, can point to many successes in melding and achieving these two imperatives in elementary and secondary schools. Yet without indulging in the kind of exaggerated expectations and claims frequently voiced in K-12 circles, the case to be made is that of all reforms on the educational table, taking greater advantage of online learning does, in fact, promise to help children learn measurably more without forcing taxpayers to spend measurably more.

Education can be customized as never before because of ongoing technological advances. This is a very big deal given how boys and girls have different types of intelligence and learning styles, as well as different starting points and pace.

#### (II) Definition

Online learning provides instruction which is teacher-led and may be synchronous

(communication in which participants interact in the same time space such as videoconferencing) or asynchronous (communication that is separated by time such as email or online discussion forums), and accessed from multiple settings (in school and/or out of school buildings). Blended learning involves combining online learning with other modes of instructional delivery.

#### (III) Minnesota Basics

Much of the discussion in the main text draws on two roundtable discussions involving a combined 14 Minnesota educational, policy and other leaders in July 2011. The section opens, though, by taking advantage of very helpful legwork by the Minnesota Office of the Legislative Auditor (OLA) in its September 2011 evaluation of K-12 online learning in the state. For example:

- Online learning opportunities have been available to some public school K-12 students in Minnesota since at least the mid-1990s. An estimated 20,000 Minnesota elementary and secondary students took at least one online course in 2010-11. About 8,000 of those took online courses offered by their own schools, and



about 12,000 took courses from state-approved “online schools.” While these numbers seem reasonably substantial, they represent less than 3 percent of K-12 students in the state.

- Minnesota’s Online Learning Option Act was first passed in 2003 and has been amended several times since. According to the law, online learning courses and programs must be rigorous, be taught by a teacher licensed in Minnesota, meet or exceed state standards, contribute to grade progression, and incorporate other more traditional teaching methods, including frequent student assessment. In general, funding for online learning is not “new” money, but rather, a redirection of funds that the state has already allocated for each student; more specifically, dollars follow students.

## (IV) Roundtables

### 1. Accountability

Early in the first roundtable it was suggested that the state’s statutory and regulatory climate was in “pretty decent order” and not in need of great change. To which one participant objected, contending that Minnesota has “incredibly tight regulations”—among the top handful of most overly restrictive protocols in the country—in regards to both teachers and anyone else who provides “any level of instruction.” To which another panelist said that Minnesota’s legal framework “puts us in a pretty good position relative to other states,” as it generally allows students to take classes at their own discretion. It also calls for funding to follow students on a credit basis, “which is not all that common, from what I understand, in other states.” This latter point, he concluded, “is probably the biggest thing.”

### 2. Teaching and Learning

Two licensing issues are particularly salient in regards to taking greater advantage of online learning in Minnesota. The first pertains to

the prohibited use of educational assistants or paraprofessionals; men and women who, while qualified for certain assignments, are not licensed teachers and, therefore, not allowed to “instruct” students. The second pertains to the requirement that for men and women who are, in fact, licensed as teachers, Minnesota-issued credentials are the *only* ones that count. Panelists unanimously agreed that online schools and programs in Minnesota should be allowed to take greater advantage of paraprofessionals. They also all agreed that schools should take greater advantage of the world’s great scholars, Nobel Laureates included—even if they don’t hold Minnesota teacher licenses.

### 3. Post-Secondary Enrollment Options

Minnesota’s Post-Secondary Enrollment Options program, which affords high school juniors and seniors opportunities for taking college classes for free, is particularly hospitable to online instruction by the simple fact that colleges and high schools can be separated by many miles. It follows, therefore, that large numbers of students—not just the most accomplished but a reasonable spectrum of them—would be educationally well-served if online learning and PSEO were joined more closely and promoted more energetically. Doing so also would constrain costs on the part of both government and families, as sizable numbers of students would wind up graduating college faster. Several participants suggested expanding participation in PSEO to include high school freshmen and sophomores.

### 4. Entrepreneurship

“I wonder,” one panelist said, “if we know the extent of entrepreneurship related to online learning going on in Minnesota. There are probably a lot of people sitting in their dens writing or doing good things. I wonder if we have an idea just how big an industry it is.” Still there was a sense among some participants that Minnesotans suffer from a “lack of urgency” when it comes to the need for “dramatic change” in matters like these.

## (V) Conclusion and Three Broad Recommendations

1. **Take far greater advantage of the huge online possibilities of Post-Secondary Enrollment Options.** For reasons of geography if none other (high schools and selected colleges are usually not particularly near each other), PSEO lends itself very well to online learning. For this to happen, though, ways need to be found to better promote the program to students and their families insofar as school districts don't see it in their best interest to do so. A necessary first step in this direction is rescinding the state prohibition against colleges and universities actively informing high school students of the academic and economic benefits of taking college classes, free of charge, as high school juniors and seniors.
2. **Review all state education laws and regulations for their fit with online learning's new possibilities for helping both teachers and students do their jobs better, while also helping to constrain costs throughout the system.** Current Minnesota education laws and regulations are the sum of decades of lawmaking and rule making, with many of those years predating desktops and laptops, not to mention iPhone models 1, 2, 3, 4, or 4S. The 2011 Legislature wisely established a sunset-type process for evaluating major state agencies and activities, with an eventual eye towards amending, streamlining, and perhaps deleting as appropriate.

When it comes to K-12 education more specifically, the precise aim is for a state task force to train an even more focused eye on making Minnesota's statutory and regulatory environment as conducive as possible to energetically and accountably expanding online learning opportunities and participation. Particular emphasis should be directed at most effectively assessing and validating student learning in this new environment, as well as expeditiously evaluating and approving proposed online courses, programs, and schools.

3. **Make it possible for Minnesota and national scholars and other experts to teach online classes.** Currently, all online instruction must be led or filtered through licensed *Minnesota* teachers. This is overly restrictive as it can suggest unattractive assumptions about the quality of teachers in Iowa, Wisconsin, the Dakotas and all the other states. But more to the germane point, the requirement closes off a portion of the nation's talent at the same exact time the Internet is opening it up. This is even more acutely the case when it comes to stellar scientists, mathematicians, historians, writers and others from around the globe. Without suggesting they routinely have the pedagogical skills to effectively engage children and teenagers, many such exceptional men and women doubtless do.



## (I) Introduction

When it comes to government's essential role in funding education, the holiest of grails is significantly improving quality while simultaneously constraining costs. Suffice it to say, no level of government, in or out of Minnesota, can point to many successes in melding and achieving these two imperatives in elementary and secondary schools. Yet without indulging in the kind of exaggerated expectations and claims frequently voiced in K-12 circles, the case to be made here is that of all reforms on the educational table, taking greater advantage of online learning does, in fact, promise to help children learn measurably more without forcing taxpayers to spend measurably more.

We'll begin focusing on Minnesota shortly, but more generally speaking, why is there solid reason to believe that American boys and girls will benefit if they are afforded expanded opportunities to learn online, with a shorthand definition conceiving it as learning made possible by technology and affording students—and their families—unprecedented control over its time, place, path and pace?

**“ Of all reforms on the educational table, taking greater advantage of online learning does, in fact, promise to help children learn measurably more without forcing taxpayers to spend measurably more. ”**

Unsophisticated as I may personally be about things high tech, it's nevertheless a truism that perpetually increasing numbers of young people, regardless of background, are equipped to take profitable advantage of digital learning. Frankly, it may very well be my own age-related lack of competence electronically that adds to my confidence. Yet given how so many teenagers and younger

children are demonstrably and expertly attracted, as if genetically endowed, to computers and other remarkable devices, my trust in their talent is not likely misplaced.

The research and advocacy literature on online learning (which I use interchangeably with “digital learning,” “virtual learning” and “technology-mediated learning”) is seemingly growing by the nanosecond. No claim is made, in other words, about the comprehensiveness of what follows, only its persuasiveness.<sup>1</sup>

I've been struck, for example, by a comment by Curt Johnson of Twin Cities-based Education Evolving about how digital learning has the potential of “opening up the world” to low-income children. If navigated well, this can be an immense gift to girls and boys who, not infrequently, are familiar with little beyond their tough neighborhoods' nearby boundaries and hard demarcations.

Johnson, not at all incidentally, is coauthor, along with Harvard's Clayton Christensen and Michael Horn, of *Disrupting Class*,<sup>2</sup> one of the two most influential recent books dissecting and highlighting connections between technology and learning. The second is Terry Moe and John Chubb's *Liberating Learning*,<sup>3</sup> with both books convincingly making the important case that, as opposed to other educational reforms which can be stymied by numerous interests and multiple chokepoints, technology is a *force*; one which opponents may well slow down if they're determined, but never halt no matter how they might try. This is a distinguishing feature, however, for another discussion at another time, as the pertinent virtue to be emphasized here is the way technology can “differentiate learning” (in Moe and Chubb's words), better enabling students at “vastly different achievement levels to master broad and demanding curricula.” Christensen and his colleagues write correspondingly of how education can be customized as never before because of ongoing technological advances. This is a very big deal given how boys and girls have different types of intelligence and learning styles, as well as different starting points and speeds.

Take reading, for instance. Moe and Chubb (both of whom earned their doctorates in political science at the University of Minnesota) claim that two-thirds of American children have difficulty with reading comprehension. Might their claim be too high? Perhaps so. They're nonetheless on target, however, when they write that reading problems for many children stem from a failure during the primary years to gain fluency, by which they mean that ability to decode letters and sounds quickly and unconsciously into words, phrases, and sentences. Without fluency, they more than plausibly argue, "students cannot comprehend complex text because of the sheer concentration to decode leaves little mental capacity to think about what is being read."

If all were right with the world, Moe and Chubb continue, schools would figure out and remediate such problems early on. But doing so requires crisp attention to a large number of individual decoding issues and "lots and lots of practice." Classroom-based instructional programs have been developed to do precisely this via very small groups, but obviously, this is an expensive approach, requiring lots of teachers and time. That's the bad news. The good news is that in recent years, according to Moe and Chubb, "technology has provided promising solutions that appear superior to teacher-led approaches."

Virtual schooling's greatest power, Frederick Hess of the American Enterprise Institute has written with similar optimism, is that it "creates the opportunity to reconsider what's feasible." It makes it possible to "deliver expertise over distances, permits instructors to specialize, allows schools to use staff in more targeted and cost-effective ways, and customizes the scope, sequence, and pacing of curriculum and instruction for particular children."<sup>4</sup>

Or as Bob Wedl, a former Minnesota education commissioner put it, "Online is the world of today's students. This is how they live and communicate. They know how to access the world through a digital platform. We need to catch up to them."

“ Virtual schooling’s greatest power is that it ‘creates the opportunity to reconsider what’s feasible.’ ”

Several important points, which we'll return to, need to be made before going on.

- Despite references above to achievement gaps and children with reading problems, online learning holds enormous promise for all students: the strongest no less than the weakest and everyone in-between. I forget whose comment it was, but somewhere along the way someone said digital learning means students are less likely to be either bored or overwhelmed.
- While this report deals mainly with online learning possibilities in Minnesota, it is not a rote lament about how we need to do better. We absolutely *do* have to improve, but we're already doing some things well and educators who have led the way deserve credit, not easy criticism.
- One area of exceptional potential has to do with better combining the advantages of online learning with those of Minnesota's Post-Secondary Enrollment Options program, as doing so would make unquestioned academic and economic sense.

Following the next two sections which provide additional, mostly Minnesota-based context, the report moves on to two roundtable conversations in which more than a dozen participants focused on a variety of online-related matters such as accountability, teaching and learning, Minnesota's Post-Secondary Enrollment Options program, and the status of educational entrepreneurship, among other matters. It concludes with Recommendations for consideration by the governor, legislators, educators and others.



## (II) Definitions and Further Backdrop

We need a fuller definition, recognizing that online learning (in the words of one observer) is “more than just providing students with a laptop.” Rather, it “requires a combination of technology, digital content and instruction.”<sup>5</sup> Here’s one of the more detailed and useful definitions:

Online learning has many definitions but is marked by being a web-based, educational delivery system. Online learning is characterized by a structured learning environment to enhance and expand educational opportunities, providing instruction that is teacher-led and may be synchronous (communication in which participants interact in the same time space such as videoconferencing) or asynchronous (communication that is separated by time such as email or online discussion forums), and accessed from multiple settings (in school and/or out of school buildings). Blended learning involves combining online learning with other modes of instructional delivery . . . .<sup>6</sup>

No need to look beyond the St. Paul-based Education Evolving for a succinct four main ways digital technology has the potential to “advance the public interest”: By (1) improving learning; (2) helping make K-12 economically sustainable; (3) improving teachers and teaching; and (4) by producing a self-improving system.<sup>7</sup>

As for the first point about learning, Harvard’s Howard Gardner has written (in the same spirit and gist of many others) of how, for the first time, it’s possible to “individualize” education; to “teach each person what he or she needs and wants to know in ways that are most comfortable and most efficient.”<sup>8</sup> Or if you will, digital learning can better customize educational options by more accurately and quickly diagnosing students’ academic strengths and weaknesses—while simultaneously affording boys and girls never-before-known opportunities to learn from the most talented teachers and other men and women from the four corners.<sup>9</sup>

“ Digital learning can better customize educational options by more accurately and quickly diagnosing students’ academic strengths and weaknesses. ”

In the matter of school finances, the idea and word “constraining” in the very first sentence of the Introduction was chosen carefully. Might the greater use of digital learning lead to actual cost reductions in many instances? That’s an absolute certainty, for no other reason than the need for fewer new buildings, fewer new buses, and less heating and air conditioning—never mind more efficient use of personnel. Then, again, might the greater use of technology occasionally lead to higher costs? That also would seem likely in some instances, as nowhere is it written that new software and hardware are cheap. “The cost of online learning is not a simple topic,” the International Association for K-12 Online Learning (iNACOL) has properly acknowledged.<sup>10</sup> Yet of all educationally sound and politically realistic avenues available for keeping costs in reasonable check, none is as promising as taking greater advantage of technology-mediated learning.

When it comes to teachers and teaching—or for our purposes here, enriching the lives of teachers and, therefore, those of their students—Ted Kolderie and his Education Evolving colleagues acutely recognize how an expansion of digital learning is conducive to “treating teaching like other white-collar professional occupations in which the worker is assumed to know *how* the job is done,” thereby increasing their motivation. “Motivation matters for teachers, too,” they write.<sup>11</sup>

In reviewing a draft of this report, one participant pointed out that “professionals” are assumed to have expertise in their jobs, but that not very many teachers are expert in online learning—not yet, anyway. Another discussant reported on interviews

he did a couple of years ago with a group of teachers from an online school. Three things impressed him in particular.

- They could teach *in* such a school from anywhere. They did not have to disrupt their families to move someplace else. “The job is a thousand miles away? No problem. I’ll start this afternoon.” This makes the recruitment of outstanding teachers, especially in rural parts of the state and world, less of a problem.
- Everything was individualized for students. That required more of teachers, but it also precluded kids from hiding in class and not producing.
- Teachers got to know students’ strengths and weaknesses as never before. Even though they never actually *saw* students, they got to know them as individuals as never before.

As in regards to how digital learning is conducive to self-improving systems, one slice of this dynamic is the way in which it can provide a daily fount of precise information about how students are doing, what kind of help they might need, and how in enveloping light, teachers might more successfully serve them.

We’ll return to themes like these as we go along, but for now we could use a more exact sense of how students are taking advantage of digital learning and how many actually are doing so. We’ll then close this section with a few key points about quality control and accountability in this new electronic world before moving on to Minnesota specifically.

The DC-area and ether-based International Association for K-12 Online Learning (with the mysteriously pronounced acronym “iNACOL”) has upwards of 4,000 charter schools, school districts, state agencies, digital learning providers and other institutional members. Here’s a sampling of ten ways it says online learning is being used successfully.<sup>12</sup>

- Expanding the range of courses available to students, especially in small, rural, or inner-city schools.

- Providing highly qualified teachers in subjects where qualified teachers are unavailable.
- Providing flexibility to students facing scheduling conflicts.
- Affording opportunities for at-risk students, elite athletes and performers, dropouts, migrant youth, pregnant or incarcerated students, and students who are homebound due to illness or injury, allowing them to continue their studies outside of classrooms.
- Providing credit recovery programs for students who have failed courses and/or dropped out of school, allowing them to get back on track to graduate.
- Helping students who are currently performing below grade-level to begin catching up.
- Addressing the needs of Millennial students. The presumed thought here is that young people born in the last two decades of the 20<sup>th</sup> Century and the early years of the current one live equally comfortably on terra firma earth and in cyberspace.
- Providing on-demand online tutoring.
- Increasing the teaching of technology skills by embedding technology literacy in academic content.
- And providing professional development opportunities for teachers, including mentoring and learning communities.

As noted, there’s an emphasis in lists like these on students who are doing poorly as opposed to students who are doing quite well; a focus on at-risk young children and teenagers instead of gifted and more talented ones. As they say diplomatically, this is “unfortunate,” as online learning can be of enormous service to all types of students. There’s also an implicit and unsurprising emphasis on public rather than private schools. Jim Field of the Minnesota Independent School Forum, at



one of the roundtables, acknowledged that private schools are “a little behind,” but as constructive coincidence would have it, he was meeting later that very afternoon with officials of a Lutheran school gearing up to open a virtual one.

About how many elementary and secondary students are enrolled across the country or are otherwise taking advantage of online offerings like these? Susan Patrick, the president of iNACOL, estimates the number of “enrollments” (which is higher than the number of discrete students, since individuals can enroll in more than one course) at 4 million in 2011. This is up from 50,000 in 2000, and reflects a current annual growth rate of about 30 percent.<sup>13</sup>

Last, before delving into Minnesota, here’s an important introductory word about what the aforementioned Frederick Hess describes as digital learning’s “immense dilemma when it comes to ensuring quality.”

One of the great advantages of online learning is that it makes “unbundling” school provision possible—that is, it allows children to be served by providers from almost anywhere, in new and more customized ways. But taking advantage of all the opportunities online learning offers means that there is no longer one conventional “school” to hold accountable. . . . To further complicate this picture (and add to its political volatility), many providers are likely to be profit-seeking ventures. Finding ways to define, monitor, and police quality in this brave new world is one of the central challenges in realizing the potential of digital learning.<sup>14</sup>

### (III) Minnesota Basics

Much of the discussion which follows draws on two roundtable discussions involving a combined 14 Minnesota educational, policy and other leaders in July 2011. We start, though, by taking advantage of very helpful legwork by the Minnesota Office of the

Legislative Auditor (OLA) in its September 2011 evaluation of K-12 online learning in the state.<sup>15</sup>

The OLA had been directed to conduct such a study by the Legislative Audit Commission in March 2010. Its final product focuses on three important sets of questions. (1) What online programs and courses are available to students in kindergarten through grade 12, and how are they offered? (2) What types of students enroll in online learning programs and courses? Why do they enroll in online programs, and are their expectations fulfilled? And (3) To what extent does the Minnesota Department of Education (MDE) ensure that online programs provide high quality and adequately rigorous courses? Plus what is known about the effectiveness of online learning?

As important as these matters are, my emphasis has less to do with past practice and more to do with future possibilities. This is another way of saying there’s no need to review or rehash the core of the OLA report—although it makes perfect sense to rely on it for basic data and rudiments regarding digital learning in the state. As you read this background, keep in mind that while some raw numbers are reasonably large, such as the number of students who are taking at least one online course, their relative proportion of all Minnesota students is not just small, but tiny, making room for enormous growth. Also keep in mind that when it comes to how the state funds such academic activities, be they fulltime or part-time, Minnesota’s ways can be exemplary, with dollars automatically following students in online programs, as is the case with students in more traditional programs.

- Partly to make online learning options more readily accessible to students statewide and to establish a funding mechanism for such courses, the 2003 Legislature adopted, and Gov. Tim Pawlenty signed, the Online Learning Option Act (amended several times since). The law defines online learning as interactive courses or programs delivered by teachers to students via computer. According to the law, online learning courses and programs must be rigorous,

be taught by a teacher licensed in Minnesota, meet or exceed state standards, contribute to grade progression, and incorporate other more traditional teaching methods, including frequent student assessment.

- Online learning opportunities have been available to some public school K-12 students in Minnesota since at least the mid-1990s. An estimated 20,000 Minnesota elementary and secondary students took at least one online course in 2010-11. About 8,000 of those took online courses offered by their own schools, and about 12,000 took courses from state-approved “online schools.” While these numbers, as just noted, seem reasonably substantial, they represent less than 3 percent of K-12 students in the state. Still, enrollments of students taking courses part-time from online schools have essentially doubled, while the number of students taking online courses fulltime in recent years has more than tripled.
- Minnesota school districts and charter schools may provide online courses to their own students with little direct state oversight. However, school districts and charter schools which want to enroll students in online courses fulltime, or enroll students from other school districts or charter schools part-time, must establish separate online schools approved by the Minnesota Department of Education (MDE).
- Students can take online courses from a variety of private schools or learning centers based both in and outside of Minnesota, but must do so at their own expense.
- During the 2010-11 school year, 24 online schools provided online courses and programs to about 12,000 K-12 students. Individual school districts administered slightly more than one-third of the online schools, while charter schools and consortia each administered slightly less than one-third. Estimates are that 35 percent of school districts and charter schools statewide were members of consortia, with districts in

Greater Minnesota more than twice as likely as districts in the Twin Cities metropolitan area to so participate. Although online schools can enroll students from any part of the state, only about one-third have a truly statewide reach. Most Minnesota online schools serve only middle or high school students.

- Approved online schools in Minnesota offered nearly 1,900 separate courses across all subject areas in 2010-11. Eight offered Advanced Placement courses. Online schools which enroll fulltime students must offer a full complement of courses which meet state graduation requirements. Online schools that enroll only part-time online students (which include all consortia) may have more limited course offerings.
- School districts and charter schools in Minnesota are primarily funded through a formula in which each student generates a legally prescribed amount of revenue for the school district or charter that he or she attends. In general and as suggested above, funding for online learning is not “new” money, but rather, a redirection of funds that the state has already allocated for each student. In the 2009-10 school year, almost three-quarters of school districts in the state had less than one percent of students living in the district enroll fulltime in online schools, and only 16 districts had more than two percent do so. In that year, online schools received slightly more than \$23.5 million in basic education revenue, a category comprising the largest part of the general education formula.
- Beyond the revenue generated by enrolling fulltime students, online schools may receive additional funds (referred to as “online learning aid”) when students enroll in and complete courses on a part-time basis. Part-time students can enroll in an online school operated by (1) their enrolling district; (2) a consortium that includes their enrolling district; or (3) another school district. The third arrangement is the only one that results in online learning aid payments.



- A part-time online student only generates online learning aid when he or she completes an online course outside of his or her enrolling school district (even with an “earned” F). The general education revenue associated with that student goes first to the enrolling district and, as online courses are completed, MDE pays the online school and makes necessary adjustments to the enrolling district’s revenue. The amount of online learning aid transferred depends on the number and length of the courses completed. For example, the aid transfer for a single semester-long course would equal one-twelfth of the students legally prescribed general education revenue times 0.88. The online school would receive 88 percent of the revenue the student generates for the course or courses completed. Because the enrolling district would still be responsible for providing administrative overhead and student services for part-time online students, it would retain 12 percent of the funds. If a student enrolls in but does not complete an online learning course, no transfer of funds takes place.
- Nationwide, states use different models for organizing and funding online learning. States which have a single state-run online school typically fund that school through direct appropriations. Similarly, some states which allow multiple school districts or charter schools to provide online education fund online learning through appropriations, fees, and grants. Some number of states with multiple online schools, however, use an approach similar to Minnesota’s, in that general education dollars follow the student. Minnesota, however, is perhaps unusual in that it makes no distinction between online and traditional schools for funding fulltime online students. Some states, such as Colorado and Arizona, have established per pupil funding levels for online students that are different than funding levels for traditional students.

## (IV) Roundtables

The two aforementioned roundtable discussions, lasting about 90 minutes each and involving a total of 14 men and women in addition to American Experiment staff, were held at the Center’s Minneapolis headquarters in July 2011. My letter of invitation cited two principal areas of interest:

- What needs to be done to strengthen online learning for all students of elementary and secondary school age throughout Minnesota?
- What needs to be done, more specifically, so that online learning makes a larger contribution in narrowing immense achievement gaps among various groups in the state?

Participants and their affiliations are listed in the endnotes.<sup>16</sup> My great thanks for their time, insight, and candor. Recommendations, shaped in part by their comments, are discussed at the Conclusion.

At the root of much of everything discussed—including who should be allowed to teach online classes, from where in the world might they be allowed to do so, and how should both teacher and student performance be measured—is Minnesota’s statutory and regulatory environment. How hospitable is it to digital learning?

### 1. Accountability

Jon Bacal, who has spent two decades working in charter school and related vineyards in Minnesota and elsewhere was perhaps most critical, focusing on the question of teacher licensure in blended learning schools. Early in the first session I suggested that the state’s statutory and regulatory climate was in “pretty decent order” and not in need of great change. To which Bacal objected, contending that Minnesota has “incredibly tight regulations”—among the top handful of most overly restrictive protocols in the country—in regards to teacher licensure and the limits on non-licensed staff in instruction. Contrasting Minnesota with

California, where blended programs such as the celebrated Rocketship Education for low-income elementary students make extensive and profitable use of paraprofessionals, regulations in Minnesota, Bacal continued, “effectively prohibit non-licensed teachers from overseeing students engaged in digital learning except under the direct, in-person supervision of licensed teachers. This is not true of many states.”

Bacal later reported that among eight top-rated charter laws, according to the National Alliance for Public Schools, seven (including Washington, DC) offer more flexibility than Minnesota on teacher licensure laws (Bacal actually said “considerably” more): California, Colorado, District of Columbia, Georgia, Louisiana, Massachusetts, and New York. As for how greater flexibility can lead to specific cost savings, he noted that Rocketship Education in California pays qualified parents \$15 an hour to oversee 60 students as part of two-hour digital learning blocs.

Karen Johnson, who has held digital learning assignments in both the Minnesota Department of Education and the district level, as well as in higher education, had a different take on the state’s overall regulatory climate, countering that relevant law in Minnesota was “pretty good,” but objected to its reliance on “seat time” in determining whether certain online programs got paid (meaning students needing to “sit” through an entire course as is conventionally case) rather than on a “competency-based model where schools are paid for student progress.”

Eugene Piccolo, who heads a statewide charter school organization, added that approval processes for curricula and courses (when required by law) needed speeding up. “You can’t use the traditional textbook approval process of taking a year’s study to figure out whether a specific course is a good idea for a kid’s customized curriculum.”

Then, again, Jon Voss, who leads online learning activities in a Twin Cities school district, is of the mind that Minnesota’s legal framework “puts us in

a pretty good position relative to other states,” as it generally allows students to take classes at their own discretion. It also calls for funding to follow students on a credit basis, “which is not all that common, from what I understand, in other states.” This latter point, he concluded, “is probably the biggest thing.”

“ **Should we be more interested in what students learn than whether they’re glued to seats for requisite periods? Needless to say, yes.** ”

Should Minnesota online schools and programs be allowed to take greater advantage of paraprofessionals? Of course. Even better, should they be allowed to take advantage of the world’s great scholars, Nobel Laureates included—even if they don’t hold Minnesota teacher licenses? Even more so.

Whether or not things digital are part of the equation, should we be more interested in what students learn than whether they’re glued to seats for requisite periods? Needless to say, yes. And given the dynamism of the field, should the Minnesota Department of Education find ways of reviewing what it’s obliged to review responsibly faster? Yes again, as the LGA report likewise argues, though it’s hard not to have empathy for MDE in light of budget and staffing cutbacks.

It’s fair to say, moreover, that animating this report throughout is a clear preference for affording educators more flexibility in doing their jobs, as well as families more options for their children, insofar as perpetual technological breakthroughs make both goals not just increasingly possible but incumbent. Yet without getting trapped in the arcane weeds of regulatory conundrums, begged here are immense questions having to do with fundamental issues of accountability that are brilliantly dissected, as

alluded to above in Rick Hess's invaluable paper, "Quality Control in K-12 Digital Learning: Three (Imperfect) Approaches."<sup>17</sup> It's again fair to consider his approach to digital accountability as congruent with conceptions and recommendations here.

"Unfortunately," Hess writes, "it is difficult to craft quality-control systems that reflect and adapt to the seismic shifts that digital learning represents." The best that public officials and educators can do is to pick from among—or meld—three basic routes, each with its own significant shortcomings: (1) input and process regulation; (2) outcome-based accountability; and/or (3) market-based quality control. "The alert reader," Hess points out, will "note that these are precisely the same choices available to policymakers seeking to hold any public service accountable."

Input regulations involve prescribing what organizations and other entities must do to qualify as legitimate digital providers. Outcome-based accountability depends on setting performance targets which providers must meet. And market-based quality controls allow users to choose their preferred providers, and then trusts that the market will reward good ones and eventually close down bad ones. These are not mutually exclusive, Hess writes, but instead comprise the "basic menu" for adequately policing online learning activities; a pivotally necessary endeavor if they are to garner and maintain sufficient public and political support. A compounding problem, obviously, is that these approaches were created for assessing less-electronic institutions, "not the more fluid networks of providers and learners created by digital instruction."

Late in the article, Hess offers a superb summary.

If the emphasis is on learning rather than mere credentialing, and especially if the aim is to encourage cost-effective learning, it's necessary to relax input regulations in exchange for a focus on accountability as measured by student outcomes and parental judgments. This step means eliminating caps on enrollment, rules that restrict class size and student-teacher ratios, geographic

and regulatory barriers to what online courses students may take, and "school site" definitions that limit blended models where a portion of student learning occurs outside of a traditional school building. It also requires clarifying outcome measures by gauging student progress based on demonstrated competency or gains rather than seat time.

In regards to this last point, a recent report, *Digital Learning Now!*, makes the case that when "competency becomes the basis for advancement," requirements for students to spend specified amounts of time in a subject "becomes unnecessary and, in fact, unproductive."<sup>18</sup> Young people "should spend as much time as it takes to master the material—no more and no less." For some students, the report goes on to say, that might entail more time than what is currently required, but for others, it will mean "significantly less time than presently mandated." In either instance, "learning will become more productive for each student and education will become more efficient as a whole."

As for teachers and teaching, Hess critically adds that "transformative improvement" also demands "stripping away conventional rules governing certification and licensure so that schools can use unconventional personnel in instructional roles, can extend the reach of effective teachers, and can tap instructional talent from far away."

Roundtable participants were uniformly of this spirit, recognizing, for instance, that in determining quality, performance indicators must increasingly take precedence over rules and regulations devised for another era.

Joe Graba, for example, who once led Minnesota's former system of technical colleges, argued how "we need to move to more efficient ways of assuring effectiveness and away from bureaucratic entanglements for the 95 percent or 98 percent of people who strive to do things well. Our ability to innovate and to realize the potential of new technologies is limited by our continual tendency to use regulatory models from the 1950s."

And Ted Kolderie, Graba's colleague at Education Evolving, similarly rejected a regulatory "mindset" in which oversight bodies interpret their mandate too broadly. Drawing on lessons gained from home schooling controversies in Minnesota years ago, he argued that "new dimensions" of education such as online learning further require measuring actual performance data instead of tallying up less informative input data.

Graba and Kolderie's comments, along with those of everyone else around the two roundtables are largely consistent with Hess's recommendations, including his last one about "stripping away conventional rules" regarding teachers and teaching. Why, more exactly, is doing so a favored goal?

## 2. Teaching and Learning

Harvard's Paul Peterson (who's also claimed by Montevideo, Minnesota, where he grew up) provides one powerful answer when he argues that, "Elementary and secondary education cannot turn the excellence corner, so long as the industry remains labor-intensive. The monies that can be reasonably anticipated in the next decade or two will hardly be enough to keep the quality of the system, as currently designed, from eroding further." If, however, Peterson critically continues, "education could become a more capital-intensive industry, one where technological innovation progresses as rapidly as in other sectors of the economy, fewer teachers and other employees would be needed, and each employee could be better compensated."<sup>19</sup>

Two licensing issues, as teased, are particularly salient in regards to taking greater advantage of online learning in Minnesota. The first pertains to the prohibited use of educational assistants or paraprofessionals; men and women who, while qualified for certain assignments, are not licensed teachers and, therefore, not allowed to "instruct" students. The second pertains to the requirement that for men and women who are, in fact, licensed as teachers, Minnesota-issued credentials are the *only* ones that count. As regulatory obstacles go, these are significant.

Recall Jon Bacal's point a few moments ago about how overly tight regulations around the use of personnel in Minnesota schools make it economically improbable to replicate the kinds of promising, digitally based programs found elsewhere in the country which make effective use of paraprofessionals, tutors and other non-licensed instructors, including parents. Two such schools showing very impressive results are the previously mentioned Rocketship Education in California as well as Carpe Diem Schools in Arizona. Rocketship, a collection of college-prep elementary schools serving boys and girls in Kindergarten through fifth grade, bills itself as the "leading hybrid charter school network dedicated to eliminating the achievement gap." Carpe Diem ("Seize the Day" in Latin), which serves children in sixth through twelfth grade, advertises how "subject mastery, not course completion" is its very "touchstone." Neither could currently operate effectively in Minnesota.

“ Our ability to innovate and to realize the potential of new technologies is limited by our continual tendency to use regulatory models from the 1950s. ”  
—Joe Graba

None of the participants suggested the State of Minnesota should be oblivious when it comes to who teaches, instructs, or otherwise comes in contact with students. Alice Seagren, a former Minnesota commissioner of education, properly warned, for example, that safeguards are needed to head off bad actors and online diploma mills. But in keeping with an encompassing theme of the two sessions, discussants put greater faith in whether or not students are actually progressing rather than in whether various checklists get filled out as prescribed. Morgan Brown, who has held a variety of policy as well as regulatory positions in both the



Minnesota and U.S. Departments of Education, predicted at one point that issues surrounding teacher licensing, in the context of blended learning, will be the “next big regulatory issue to deal with.”

Just like Minnesota districts and schools can buy textbooks from anyplace in the country or world, they can also contract with online providers anywhere on the planet—as long as courses are ultimately “taught” by a teacher with an up-to-date Minnesota teachers license. A very big problem with this restriction is that it precludes taking full advantage of the online teaching talents of the nation and world’s most remarkable men and women, both scholars and others.

At one point in our conversations, Seagren fantasized about Leonardo da Vinci and Albert Einstein leading Minnesota classes on the Internet. “Man, wouldn’t that be fun?” To which Bacal quickly countered how “they couldn’t teach because they weren’t licensed.” To which Bob Wedl later added, “A Ph.D. astronaut cannot teach students in an online school in Minnesota, but he’s just fine for students in Arizona and Iowa who are in the same class and meeting the same standards.” One need not contemplate the disqualification of two of civilization’s giants, as well as other magnificent men and women, to realize that a lot of additional talent will continue being wasted.

Not unrelated here is the restriction, spelled out in the statute itself, how teachers “must not instruct more than 40 students in any one online course or program.”<sup>20</sup> While the law says the commissioner of education can grant waivers to this prohibition, it still came up for criticism on several occasions as being out of step with the power and possibilities of the technology—with or without geniuses as a draw.

Implicit in all this, of course, are changing roles for teachers and the need to adapt their training. Several participants, including Piccolo in this instance, saw online teaching as more a matter of *facilitating* than *disseminating*, given online’s potential for

“ It’s decidedly harder (counterintuitive as it sounds) to hide in a virtual classroom than in a physical one, as every online student is *required* to have a voice by the very nature of the medium. ”

customizing learning; which is to say, teachers can no longer “stand in front of classrooms delivering the same information to everyone.” Rather, they have to be able to facilitate, almost like a physician. “A doctor may only have cardiac patients, but she’s expected to come up with different solutions for each patient. That’s the role teachers have to assume regarding online education, otherwise we’ll just continue doing what we’re doing and pretending we’re actually changing anything.” Staying with medical metaphors, Graba framed the up-until-now way of doing things as akin to a “doctor deciding to spend more time with healthy patients than with sick people.”

This is a good point to allay a concern that I trust is perfectly correlated with age, with older men and women, including educators, consistently losing more sleep over it than younger folks. More specifically, whenever digital learning is on the table, observers of certain ages are likely to doubt the richness of connections between teachers and students, as they assume there is no way electronic communication can be as full-bodied as face-to-face, in-classroom interactions. And just as likely, advocates respond by noting how teachers routinely report how online learning can help them get to know their students better than ever before. This is true in large part because it’s decidedly harder (counterintuitive as it sounds) to hide in a virtual classroom than in a physical one, as every online student is *required* to have a voice by the very nature of the medium.

In regards to teacher training, I don't presume to know the extent to which colleges of education in Minnesota have incorporated online teaching into their curricula, although the non-glib sense among participants was that no matter how many changes have been made, more are needed. As for on-the-job teachers (and notwithstanding one discussant charging that too many older faculty "just don't realize times are changing"), Voss spoke of how there is no shortage of online training opportunities, but that not enough teachers take advantage of them, if they even know about them. He also spoke of the value of teachers as *producers*, not just *users* of digital content. "One of the things we've seen is the amazing units teachers come up with when they take advantage of all the free stuff out there and get a minimal amount of training."

Two codas to this section on teaching: the first reassuring to many in the field, but the second no less jarring for a fair number.

"Although technology is important to online learning," the International Association for K-12 Online Learning acknowledges, "it is crucial not to overstate its role. In the online environment teachers and students are still the primary players; the technology plays a supporting role."<sup>21</sup>

The second kicker was raised by Bacal, who argued (implicitly relying on a lot of literature about how organizational innovation and significant change usually come from without instead of within) it's unrealistic to expect "traditional" programs such as the state and nation's schools of education to "champion the path and show us the way on online learning." Yet save for the modest escape hatch of alternative certification provisions adopted by the Legislature and signed by Gov. Mark Dayton in 2011, they have a "monopoly on all credentialing for adults in K-12." In the same way, he continued, "we took away districts' exclusive monopoly twenty years ago [which is to say charters, which were adopted first in Minnesota in 1991], it's time for Minnesota to take away the near monopoly of our traditional licensure institutions." And, in fact, he added, "there's some national funding interest" in doing so.

### 3. Post-Secondary Enrollment Options

Several panelists reported a sense in some quarters that online learning is principally intended for some students more than others. According to one presumed viewpoint (the merits of which participants emphatically rejected), digital learning is disproportionately helpful and more properly used by terrific students, as it allows them to race ahead. Paradoxically perhaps, digital learning is also often thought to be disproportionately helpful and more properly used by weak students, as it can enable them catch up, with "credit recovery," a frequently used term in this regard. Average students, in this kind of divvying up, tend to be disregarded.

Panelists, however, were of uniform and correct mind that online learning ought to be understood as serving all manner of young people, as in the comment that it shouldn't be seen just as a reward or punishment, but part of everyone's learning. This concurrence leads to one of this report's more important points and sets of recommendations, dealing with Post-Secondary Enrollment Options, Minnesota's path-breaking yet already more than quarter-century-old program allowing and funding high school students to take college courses.

Greater use of online learning can benefit a wide variety of students. PSEO, meanwhile, is particularly hospitable to online instruction by the simple fact that colleges and high schools can be separated by many miles. Does it not therefore follow that large numbers of students—again, not just the most accomplished but a reasonable spectrum of them—would be educationally well-served if online learning and PSEO were joined more closely and promoted more energetically? It would seem so, just as doing so would constrain costs on the part of both government and families, as sizable numbers of students would wind up graduating college faster.

PSEO, which was passed with bipartisan support during DFLer Rudy Perpich's administration in 1985, allows eleventh and twelfth grade Minnesota students to take college courses either in person or online, and school districts are not allowed to stand in the way of seniors and juniors wishing to



do so. But insofar as state aid attached to students get shifted from their home districts to the post-secondary institution (remember, dollars follow students in Minnesota), most school districts are not necessarily eager to see the program overflowing with participants. Books, lab equipment, and the like, moreover, are free to students and their families. (Republican Rep. Connie Levi was the major legislative force in the passage of PSEO, in what turned out to be the forerunner of Perpich's several vital school choice victories, starting with the first open enrollment breakthrough in 1986.)

Students who complete PSEO courses receive credits from the public or private university, college, or other post-secondary institution they “attend,” which may or may not transfer to other places later on. Beyond needing to be an eleventh or twelfth grader, the post-secondary institutions themselves, not the district or state, set entrance requirements. Overall, more than 100,000 students have taken PSEO classes since the mid-1980s, and it's indeed possible for truly determined young people to complete two years of college while still in high school. On an annual basis, the number of PSEO students is about 5,000, which is well less than 10 percent of juniors and seniors statewide.

Given such inviting albeit underutilized possibilities, several panelists talked enthusiastically about increasing student participation in PSEO

**“ Does it not therefore follow that large numbers of students—again, not just the most accomplished but a reasonable spectrum of them—would be educationally well-served if online learning and PSEO were joined more closely and promoted more energetically? ”**

(“online learning can really open it up”) while acknowledging the funding disincentive noted above. They also were quick to point out an inconsistency (the gentlest possible word) regarding teaching licenses: namely, how everyone in Minnesota except college professors, most of whom have never taken an “ed course” in their entire lives, needs to have one. This should not be interpreted, by the way, as a preference for licensing college faculty too, just to keep things even.

One thought for expanding participation in PSEO, offered by a few participants, was to expand eligibility to include high school freshmen and sophomores. I have doubts about the wisdom of such a policy except in exceptional situations involving exceptional young people, but it's certainly in the expansive spirit of recent comments by Joe Nathan, who has long run the Center for School Change, now at Macalester College in St. Paul. Speaking at a meeting of the Minnesota-based Civic Caucus and citing a 2007 University of Minnesota-related study, Nathan reported the following findings.

[T]here are encouraging findings regarding the influence of dual enrollment on the types of students who tend to be less successful in college. Males, low-income students, and low-achieving high school students all appear to benefit from participation in dual enrollment to a greater extent than their dual enrollment peers who enter college courses with more social, economic, and educational advantages. This indicates that dual enrollment may well be a strategy for encouraging post-secondary success among students not typically seen as college-bound. [“Dual enrollments” pertain not just to PSEO, but to “College in the Schools,” International Baccalaureate, and similar programs around the country.]<sup>22</sup>

In similar spirit, Kent Kaiser, who teaches at Northwestern College in Roseville, spoke of boys and girls younger than juniors and seniors taking courses online at his institution—although not

via PSEO because of their age—and doing so beneficially more often than not. “We have a lot of young students taking courses, although we really don’t know their age. You kind of glean from your interactions with them that they’re sometimes as young as seventh and eighth graders taking, for example, a college speech class.”

Families themselves pay for such underage enrollments, which can, in fact, give kids a head start on compiling credits if a college down the road agrees to accept them. Yet while they might be able to earn college credits ahead of time, as rules now stand, they are precluded from receiving high school credits for having successfully completed college-level courses. This does not seem to make eminent sense, especially since a fundamental and legitimate objective of taking greater advantage of online learning is to help students complete their high school degrees as reasonably quickly as possible.

Joe Graba reported trying during the 2011 legislative session in interesting Minnesota legislators, without success, in making high school freshmen and sophomores eligible for Post-Secondary Enrollment Options. This was an unsurprising result for no other reason than Members were acutely preoccupied with balancing the state’s out-of-whack books. My basic instincts are to keep grade-eligibility rules where they are so as to avoid diminishing collegiate rigor, be it in fact or simply perception. Nevertheless, based on some of the evidence and opinion here, reviewing such rules would seem to be in smart order. Nathan, for example, urges that ninth and tenth graders be allowed to take one PSEO course online, and if they earn at least a C, that they should be allowed to take more.

But what might be said about fixing funding disincentives in the system? It would seem that as long as money continues to follow students almost wherever they go (which is a terrific policy for a variety of reasons), it’s hard to see what kind of adjustment can be made to hold districts harmless, thereby encouraging them to eagerly inform students and their families about PSEO

opportunities, as opposed to trying to keep such options out of sight and mind. In more affluent days, one could imagine compensating districts, which lose a portion of funding whenever students use PSEO. But those days are long ago and even further away. So if it’s too much to expect public schools and districts to avidly promote PSEO, other groups or voices will need to step in.

Unfortunately, colleges and other post-secondary institutions currently can’t play such roles as a state prohibition, which cries out for changing, precludes them from advertising how students can take courses for free and how they might, therefore, get through college less expensively. According to one panelist, an unnamed post-secondary institution put up a billboard on I-35 on the way to Duluth saying something about free classes and unnamed school districts objected. Another panelist said the best way of doubling the number of students taking online courses in general is simply “telling and promoting the opportunities we have in Minnesota.”

What’s indisputable is the overall fiscal savings (as well as intellectual gains) to be had by both government and families if greater numbers of students took advantage of PSEO, as they would safely speed up their formal educations. The fact, furthermore, that a significant proportion of PSEO courses would be delivered online would add to the savings.

Two codas fit again in finishing off this section.

In addition to Kent Kaiser, another participant, Chuck Chalberg, also teaches at the college level: history, in his case, at Normandale Community College. Early in a conversation he said that one of the problems he faces in the online courses he teaches is an assumption on the part of some students that such classes “aren’t supposed to be as demanding as *real* classes.” A few years ago, for example, “a student said, ‘I don’t know about anybody else in this class, but I think this is too much work for an online course.’ Big red flags. I jumped in and said the class wasn’t supposed to be easier or harder, that



it was just a different form of delivery.”

To which I asked if participants sensed in various educational settings as well as governing halls in St. Paul whether online learning is assumed to be not as demanding as the “other kind” and, therefore, in need of additional regulating. To which, in turn, Jon Voss suggested that what people are often afraid of is the “sort of computer-based, lowest form of multiple choice tests.” But when online courses “are structured well with heavy teacher involvement and student-to-student interaction,” he said, “not only does quality go up but it takes more time and energy on the part of teachers and all students.” This last point is in keeping with earlier ones about the supreme difficulty of students “hiding” in digital classes.

For a final kicker and returning to the way in which K-12 faculty need to be certified in order to teach K-12 students while college faculty don’t, “bizarre” is how former state education commissioner Alice Seagren succinctly summed up “inconsistencies in determining qualified teachers and teaching.” There’s “tremendous potential,” she added, “in tapping into exciting teaching, in rigorous ways, coming from places like the Smithsonian, NASA, and other prestigious institutions.” Not for now, though.

#### 4. Entrepreneurship

American Experiment hosted an earlier roundtable on online learning in September 2010 in conjunction with a Luncheon Forum on the same subject led later in the day by Paul Peterson, who had just written a very good book that dealt with digital learning in significant part, *Saving Schools: From Horace Mann to Virtual Learning*.<sup>23</sup> As with the subsequent two roundtables in July 2011, I kept coming back to the question of what statutory and regulatory obstacles stood in the way of significantly more Minnesota students taking courses digitally. I came away from that first discussion of the mind that while some restrictions and rules clearly needed deleting or smoothing, none of them stood overwhelmingly in the way. I heard no cracks of

any bureaucratic smoking guns. Rather, my strong sense back then was what we mostly needed were one or more high-octane Minnesotans creating and running with the kind of entrepreneurial zeal Julie Young had been bringing to Florida with her leadership of the rightly acclaimed Florida Virtual School (FLVS) headquartered in Orlando. How might I size up matters this time around, after more than a year of additional conversations and research?

As you’ve read above, some people in the field (broadly defined) think Minnesota’s statutory and regulatory setup for online education is in pretty decent shape the way it stands, with refining rather than revamping called for. It may be far from perfect, they essentially argue, but it’s even further from terrible, much less crippling. On the other hand, some people get pretty agitated, arguing as they do that when the state’s wider regulatory climate in education is taken into account—for example, as it applies to the creation of charter schools—Minnesota is not as hospitable to online and other kinds of innovation as some assume.

My updated take is that online-related rules and regulations need more updating than I thought. It goes without saying that I’m convinced we should be doing much better, as the comparative number of Minnesota students studying and learning online remains closer to tiny than large. As for the amount of entrepreneurial innovation going on, I’ve come to believe there’s more of it than I originally thought, as I had been overly focused on Florida, where outsiders tend to encapsulate progress in one centralized venture, FLVS. Practice and progress in Minnesota, on the other hand, are much more decentralized, making them harder to grab hold of and itemize.

“I wonder,” Bill Blazar of the Minnesota Chamber of Commerce asked, “if we know the extent of entrepreneurship related to online learning going on in Minnesota. There are probably a lot of people sitting in their dens writing or doing good things. I wonder if we have an idea just how big an industry it is.” For most, maybe all roundtable participants,

Minnesota's variety and dispersion are viewed as great strengths.

Without sniping at Florida, which has been doing some wonderful things in education, panelists tended to see online offerings in Minnesota as stronger, as (in the words of Karen Johnson), "we've allowed a number of different models to emerge with competition among them. We have some that are homegrown, some that have been developed by Minnesota teachers, and some which have been driven by educational management organizations, which are the large national for-profits. They have good products and services."

Jon Voss spoke almost identically, albeit at a different session, when he said that *not* having a statewide virtual school had led to "a lot of growth and development in smaller arenas, either at the charter school level, or school districts, or regional consortiums. There are a lot of choices for students when they start looking at what they want to take, whether it's fulltime or part-time." Joe Graba also spoke similarly when he said that Minnesota's multiple organizations are more conducive to both quality and innovation.

Not that anyone argued Minnesota shouldn't at least investigate the wisdom of creating a statewide virtual school, as many other states have, not just Florida, and not just because (as Morgan Brown put it) Minnesota occasionally gets "dinged" in national reports and appraisals because we don't have one. Arne Carlson and Tim Pawlenty, in fact, and perhaps other governors have raised the issue a time or two.

Still there was a sense among some that Minnesotans, as a rule, suffer from a "lack of urgency" when it comes to the need for "dramatic change" in matters like these. It's a fair criticism, though I'm hard pressed to think of any statewide citizenry about which the same couldn't be said when it comes to education to one static degree or another. Drawing a surprisingly workable connection to gas taxes, Blazar noted that while we're driving more miles, cars are getting better mileage, resulting in "less

dough to take care and maintain the roads." People, he said, "just cling to the fuel tax even though you can project the numbers and it's a loser. I'm amazed how long people hang onto losers."

The kicker this time around is an expectedly perceptive comment by Ted Kolderie. Unfortunately, no state has more than small handfuls of similarly visionary innovators.

Just about all of our thinking is bounded and one of our boundaries is public education. But there are lots of important things going on outside the boundaries of public education. If you go to the airport you can go to a vending machine and stick in a credit card and get yourself a Rosetta Stone to learn Chinese or Russian or Arabic or whatever you want. All it takes for kids to learn is for somebody to assess and validate what they've learned, and then somebody in some institution they want to get into who's willing to accept that validation. One, two, three. That's beginning to come into place. What we increasingly want to say to people in the public school world is that this is going to go around and bypass you if you don't open it up.

To which Bob Wedl added, "Yes, kids have a way of figuring things like this out."

## **(V) Conclusion and Three Broad Recommendations**

A Kolderie metaphor: Thirty kids climb into a bus in St. Paul and head south on I-35, with a teacher on a mic pointing out various things out the windows as they roll along. Some kid says, "I missed that. I was looking at something else. Can we go back over it again?" "No," the teacher says, "we can't stop and do that again." Another student says, "Gee, this is interesting. Can I explore it a little bit?" "No, we can't do that," the teacher answers again. And then a third student says, "I've been down this road before. Can't we go any faster?" "No, we can't do that either."



Let's just say lessons here about several core virtues of online learning are not the hardest to decipher. "If kids need more time," Kolderie said, "they can have more time and they should learn more because of it. Or if kids can go faster, they can go faster and there should be achievement gains in that, too. It seems to me that's where *huge* potential lies." How do we make it happen?

At the risk of grandiosity, one of the first things we need to do is recognize that we really are in the early stages of a new world of how young and not-so-young people will learn. Not an entirely new world, mind you, as that would suggest that education somehow will become something less than a deeply human enterprise. It also would suggest the same kind of bloated hopes and naïve expectations that have regularly accompanied decades of "reforms." But we are, in fact, in the early midst of a fundamental departure that will change the way we teach, learn, assess, and hold all players accountable. Or, more accurately, one hopes we will be sufficiently limber and smart so as not to retard new and profitable ways of teaching, learning, assessing, and assuring that more people do their jobs well. Looking back a few millennia, yes, the invention of paper along with fire and the wheel beforehand may have changed the world more than computers have so far, but the latter do seem to be catching up.

All of which is to say, just about everything state government does in overseeing online learning needs to be reviewed from the ground and first statute-pages up. Not with any reckless intent, but with a clear appreciation for speed, flexibility, and the value of solid and quickly retrievable data in identifying success, failure and routes to improvement—on the part of all parties. Or, in other words, with a clear appreciation for the exact same traits and results that miraculous technology is making increasingly possible.

Take validating learning. Testing students at the end of a semester in which they have reliably sat in the same seat three times a week in Mr. Winthrop's early American history class is a venerated way of evaluating if they have learned enough. But also good, although not yet venerated might be

“ Looking back a few millennia, yes, the invention of paper along with fire and the wheel beforehand may have changed the world more than computers have so far, but the latter do seem to be catching up. ”

allowing students to take early American history online and then take an Advanced Placement test on the subject, possibly receiving both high school and college credit in so doing. One participant, in another context, noted that some courses, algebra for instance, lend themselves particularly well to online learning.

I'm not one, I should note here, who instinctively gravitates to unconventional ways of assessing how students perform, as I still can't shake the memory of the Profile of Learning, Minnesota's former and empty academic standards and their often vacuous measures. But it would be a mistake to allow the Profile or similarly flabby ideas in American education to preclude opportunities for rigorous evaluation of academic progress made possible by technology-mediated learning.

Implicit in the case for online learning is that it has the power to motivate significant numbers of students more than they previously have been. Joe Graba spoke more than plausibly to this point when he said, "I've long believed that we built an education system that depends on extrinsic motivation. It depends on the ability of parents and teachers to motivate students. I think technology increases our ability to move to intrinsic motivation because students find it interesting and exciting."

Also implicit is recognition of how online learning can compensate for missing experiences in the young lives of many children. Eugene Piccolo told of having taught junior high school boys and girls in both suburban and inner-city schools. "The kids in Bloomington came with all kinds of experiences.

A lot of their parents were Northwest Airlines employees and they were flying left and right. It was amazing. But the inner-city kids had never been in downtown Minneapolis, had never stayed in a hotel room. So the kind of teaching we had to do was different because of their contacts. Online learning is very good at customizing education and filling in gaps for a wide range of kids.” Recall Curt Johnson’s comment at the top about how online learning can open up the world to low-income children.

Also keep in mind that it’s essential for such boys and girls to have adequate access to the Internet outside of school, too, as this is a paramount matter of equity not yet addressed in this paper. There’s no question that, on average, more affluent homes have more desktops, laptops, and other devices per kid than less affluent ones. Then, again, one doesn’t readily get the sense that even poor kids aren’t also hooked up electronically, nearly perpetually, one way or another. I frankly don’t know how big disparities are, if big at all, when it comes to internet access in Minnesota. Likewise, I don’t know how adequate or inadequate internet opportunities at public libraries might be throughout the state. Questions like these, needless to say, need attending to perpetually.

Filtering all this down, let me suggest three broad recommendations for consideration by the governor, legislators, educators, and others. Not included in this quick list, albeit introduced above, is any suggestion that Minnesota undertake serious consideration of starting a statewide online K-12 school akin to Florida Virtual School. This is the case since our current decentralized arrangement has several advantages, starting with accentuating competition and, therefore, innovation. Still, this is not to say there is any overriding reason why such a possibility *shouldn’t* be investigated if any individuals or groups choose to do so.

Let’s start with perhaps the one thing that can be done to most substantially increase the number of students taking advantage of online learning which does not necessitate any complex change in anything the state of Minnesota does.

1. **Take far greater advantage of the huge online possibilities of Post-Secondary Enrollment Options.** For reasons of geography if none other (high schools and selected colleges are usually not particularly near each other), PSEO lends itself very well to online learning. For this to happen, though, ways need to be found to better promote the program to students and their families insofar as school districts don’t see it in their best interest to do so. A necessary first step is rescinding the state prohibition against colleges and universities actively informing high school students of the academic and economic benefits of taking college classes, free of charge, as high school juniors and seniors.

Different post-secondary institutions set their own standards for participation in PSEO. For example, students might need to be in the top one-tenth or one-third of their high school class or have certain minimum scores on college entrance exams. Without question, such decisions ought to be the institutions’ to make exclusively, as no state interference or commands are suggested in this regard. At the same time, given evidence that a wide range of students (some might say a surprisingly wide range) could benefit from taking advanced classes early, colleges and universities should review their enrollment criteria with an eye to carefully liberalizing them.

2. **Review all state education laws and regulations for their fit with online learning’s new possibilities for helping both teachers and students do their jobs better, while also helping to constrain costs throughout the system.** Current Minnesota education laws and regulations are the sum of decades of lawmaking and rule making, with many of those years predating desktops and laptops, not to mention iPhone models 1, 2, 3, 4, or 4s. The 2011 Legislature wisely established a sunset-type process for evaluating major state agencies and activities, with an eventual eye towards amending, streamlining, and perhaps deleting as appropriate.



When it comes to K-12 education more specifically, the precise aim here is for a state task force to train an even more focused eye on making Minnesota's statutory and regulatory environment as conducive as possible to energetically and accountably expanding online learning opportunities and participation. The panel should be composed of men and women deeply familiar with online learning and reflective of a wide range of assignments and perspectives, both in education and government, as well as in both public and for-profit settings. Particular emphasis should be directed at most effectively assessing and validating student learning in this new environment, as well as expeditiously evaluating and approving proposed online courses, programs, and schools.<sup>24</sup>

- 3. Make it possible for Minnesota and national scholars and other experts to teach online classes.** Currently, all online instruction must be led or filtered through a licensed *Minnesota* teacher. This is overly restrictive as it can suggest unattractive assumptions about the quality of teachers in Iowa, Wisconsin, the Dakotas and all the other states. But more to the germane point, the requirement closes off a portion of the nation's talent at the same exact time the Internet is opening it up. This is even more acutely the case when it comes to stellar scientists, mathematicians, historians, writers and others from around the globe. Without suggesting they routinely have the pedagogical skills to effectively engage children and teenagers, many such exceptional men and women doubtless do.

Current licensure requirements also make it difficult and sometimes impossible to take useful and proper advantage of educational

assistants and paraprofessionals. Programs such as Rocketship Education in California and Carpe Diem in Arizona clearly demonstrate that the prudent use of assistants makes it both fiscally and physically possible for licensed teachers to better focus on the distinctive needs of individual students.

All of these recommendations are grounded in two reinforcing understandings. The first is that bureaucratic strictures aimed at assuring accountability and the safeguarding of public dollars are working far from optimally. The second is that if online learning becomes associated in the public's mind with an arrogant or casual disregard for such legitimate concerns, it may not shrivel on vines, but it won't ripen either. Once again, Rick Hess of the American Enterprise Institute strikes the perfect balance. His advice and summation are ours.<sup>25</sup>

Quality control in education, to repeat, is an imperfect science, and every approach brings its own shortcomings. The search for the perfect quality-control mechanism is a futile one, just as a laissez-faire disregard for quality control is sure to yield practical disappointments and political backlash. The sensible course, when dealing with a public mission and billions in public funds, is to seek an arrangement that addresses concerns about malfeasance and mediocrity without stifling innovation—and that is able to grow and evolve as we learn and as technology and tools mature. A formidable task? Surely; because it is one that will ultimately determine whether the advent of digital learning revolutionizes American education or becomes just another layer of slate strapped to the roof of the nineteenth-century schoolhouse. ■

## Endnotes

- 1 A portion of what follows draws on a recent book of mine, *From Family Collapse to America's Decline: The Educational, Economic, and Social Costs of Family Fragmentation* (Lanham, MD: Rowman & Littlefield, 2011).
- 2 Clayton Christensen, Michael B. Horn, Curtis W. Johnson, *Disrupting Class: How Disruptive Innovation Will Change the Way the World Learns* (New York: McGraw Hill, 2008).
- 3 Terry M. Moe and John E. Chubb, *Liberating Learning: Technology, Politics, and the Future of American Education* (San Francisco: Jossey-Bass, 2009).
- 4 Frederick M. Hess, "Quality Control in K-12 Digital Learning: Three (Imperfect) Approaches," Thomas B. Fordham Institute, July 27, 2011, p. 1.
- 5 *Digital Learning Now!*, Foundation for Excellence in Education, December 1, 2011, p. 5.
- 6 *A National Primer on K-12 Online Learning, Version 2*, International Association for K-12 Online Learning, October 2010, p. 10.
- 7 *Strategy for Realizing the Potential of "Digital,"* Education Evolving, February 2011, p. 8.
- 8 Paul E. Peterson, *Saving Schools: From Horace Mann to Virtual Learning* (Cambridge, MA: Belknap, 2010), p. 229.
- 9 The U.S. Department of Education, in 2009, released a meta-analysis of 51 studies of online learning, most of which, it's important to note, did not focus on K-12 exclusively. With that significant caveat in mind, it's still useful to cite two key findings. "Students who took all or part of their class online performed better, on average, than those taking the same course through traditional face-to-face instruction." And, "Instruction combining online and face-to-face elements had a larger advantage relative to purely fact-to-face instruction than did purely online instruction." Suffice it to say, research in this area is not yet robust. See *A National Primer on K-12 Online Learning, Version 2*, p. 38.
- 10 *Ibid.*, p. 14.
- 11 *Strategy for Realizing the Potential of "Digital,"* p. 9.
- 12 *A National Primer on K-12 Online Learning, Version 2*, p. 10.
- 13 Susan Patrick, "An International and National Perspective of K-12 Online Learning and the Future of Education," presentation, October 2011.
- 14 Hess, p. 1.
- 15 *K-12 Online Learning: Evaluation Report*, Office of the Legislative Auditor, Minnesota, September 2011.
- 16 Roundtable participants:
  - Jon Bacal coordinates the Minneapolis District Charter Compact initiative.
  - Jim Bartholomew is education policy director for the Minnesota Business Partnership.
  - Bill Blazar is a senior vice president for the Minnesota Chamber of Commerce.
  - Chuck Chalberg teaches history at Normandale Community College in Bloomington, Minnesota.
  - Morgan Brown is with Charter School Partners in Minnesota.
  - Jim Field is president of the Minnesota Independent School Forum.
  - Joe Graba is a co-founder of Education Evolving in Minnesota.
  - Karen Johnson is the E-Learning director for a consortium of 28 Minnesota school districts.
  - Kent Kaiser is a professor at Northwestern College in Minnesota.
  - Ted Kolderie is with the Center for Policy Studies in St. Paul.
  - Peter Nelson is senior vice president for policy at Center of the American Experiment.
  - Eugene Piccolo is executive director of the Minnesota Association of Charter Schools.
  - Alice Seagren is a former Minnesota commissioner of education.
  - Bob Wedl is a former Minnesota commissioner of education.
  - Jon Voss leads online learning activities in Intermediate District 287 in Minnesota.
- 17 Hess, pp. 2; 10-11.
- 18 *Digital Learning Now!*, p. 15.
- 19 Peterson, pp. 231-32.
- 20 2011 Minnesota Statutes, 124D.095, Online Learning Option Act.
- 21 *A National Primer on Online Learning, Version 2*, p. 34.
- 22 The passage is from "The Postsecondary Achievement of Participants in Dual Enrollment: An Analysis of Student Outcomes in Two States," by M.M Karp, J.C. Calcagno, et al., National Research Center for Career and Technical Education, University of Minnesota, St. Paul, 2007. Nathan cited the study in his comments to the Civic Caucus, a Minnesota organization, on October 21, 2011; the group later e-blasted a summary of his comments on November 9, 2011.
- 23 Peterson.
- 24 The MN Online Advisory Council is currently reviewing a number of these same matters, with a first-year report due out shortly.
- 25 Hess, p. 11.

**About the author:** Mitch Pearlstein is founder and president of Center of the American Experiment. He previously served as an editorial writer for the *St. Paul Pioneer Press*; on the staffs of Minnesota Gov. Al Quie and University of Minnesota President C. Peter Magrath; and in the U.S. Department of Education during the Reagan and (first) Bush administrations. His newest book, *From Family Collapse to America's Decline: The Educational, Economic, and Social Costs of Family Fragmentation*, discusses the potential of online learning for helping all students, very much including low-income boys and girls. His Ph.D. is in educational administration from the University of Minnesota, which in 2006 named one of 100 Distinguished Alumni from the College of Education and Human Development's first 100 years.

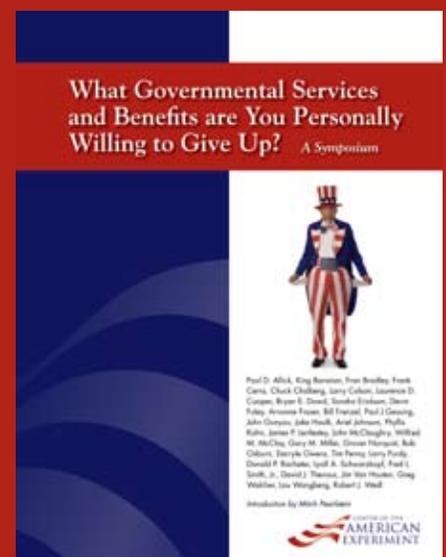
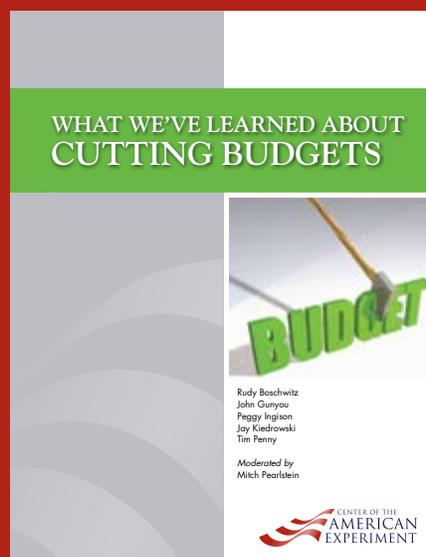
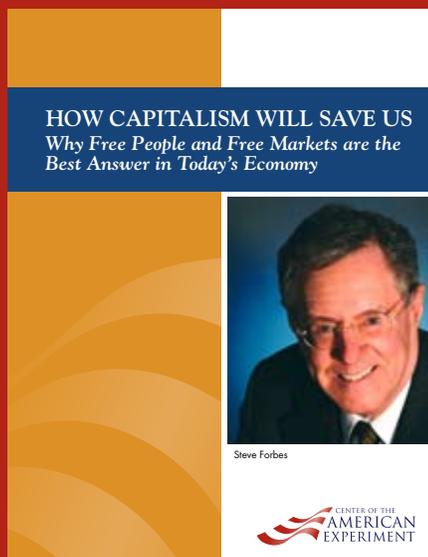


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