

Overcoming the Obstacles to Digital Learning

▪ *By Chester E. Finn, Jr. and Daniela R. Fairchild*

Digital learning is more than the latest addition to education reformers' to-do lists, filed along with teacher evaluations, charter schools, tenure reform, academic standards, and the like. It's fundamentally different: For digital learning to fulfill its enormous potential, a wholesale reshaping of the reform agenda itself is required, particularly in the realms of school finance and governance. But just as online education needs those reforms if it is to flourish, so does deep education reform need digital learning, which can provide valuable solutions to some of education's greatest challenges—beginning with the basic obsolescence of its familiar delivery system.

That system has not been dramatically altered for at least a century. Despite reformers' earnest struggles to modify and smooth its course, the obvious disrepair of the present arrangement, and the enormous resources applied to its renovation, our schools and teachers still follow an old, meandering, cobblestone pathway rather than a fast, modern superhighway. Plenty of individual stones have been replaced and in a few places the right-of-way runs straighter than it once did—think standards, accountability, school choice, teacher evaluations—but nothing has altered the essential path of our nation's education system.

Until now, that is. Today, American education has the potential to be completely rerouted and accelerated by digital learning. Indeed, truly boosting student achievement—as well as individualizing instruction and creating high-quality options for children and families among, within, and beyond schools—will depend to a considerable extent on how deftly our K–12 system can exploit this potential, both in its pure form (full-time online instruction) and in various “blended” combinations of digital and brick-and-mortar-based instruction.

Digital instruction enables the launch and scaling of major-league advances in the quality and variety of curricular content and the ways it is delivered to learners. It invites and makes possible transformative changes in the nature of a teacher's work and in the structure (and compensation) of the teaching profession. It holds unrivaled potential to transform education from a classroom-based activity confined to the hours of 8:00 to 2:30, Monday through Friday, thirty-six weeks a year, into a bona fide 24/7 opportunity that's accessible just about anywhere. Besides all that, it can help boost the productivity of our K–12 system and thus elicit more bang from ever-scarcer education bucks.

Making the most of these remarkable opportunities, however, hinges on our willingness—and capacity—to alter a host of ingrained practices. We dare not settle for patching a bumpy, twisty country lane. We need to build a new road.

Technology cannot keep its promise to accelerate the modernization and reform of K–12 education unless reformers and policymakers understand that potential, embrace it, and clear the obstacles that today block its realization.

There are more such obstacles than one might think—and each of them will prove hard to overcome, not least because they are deeply carved into our traditional K–12 system and now regarded as valuable protections or benefits by education's innumerable factions, bureaucracies, and interest groups. This is why the short history of digital learning up to this point is full of patches, detours, and work-arounds.

Such partial fixes make possible modest progress, at least in some places for some period of time, but one would be daft to view them as durable, full-bore solutions. Knocking down the real barriers to change will be a huge undertaking, however, and nothing on today's familiar reform agenda can get this job done. Which is to say, a serious effort to overcome the obstacles means reshaping that agenda, even redefining what we mean by "education reform." Indeed, the nascent revolution in digital learning is revealing the cracks and gaps in the reform agenda of the past quarter century—and pointing the way toward a new one that is apt to prove even more wrenching and challenging than what we've been working to achieve.

The barriers take three forms.

First and most familiar are self-absorbed and self-serving groups that do their utmost either to capture the potential of technology to advance their own interests or to shackle it in ways that keep it from harming those interests.

Second, also familiar but showing up here in new ways, are issues of organizational capacity within our public education system, a system that has enormous difficulty accommodating and assimilating change—and the more wrenching the change the greater the difficulty.

Third—and newest, most perplexing, most fundamental, and thus hardest to tackle—are the core governance and financing structures of our K–12 system itself. Though we’ve begun to recognize these as major impediments to important reforms within our current brick-and-mortar world, they turn out to be even more constraining—and damaging—to education in the online realm.

The five essays in this volume touch on all three kinds of obstacles. Let us take them up in turn.

Self-centered Interest Groups

The many adult interest groups that live off our public education system are already doing their best to co-opt digital learning for their own ends—and to ensure that nobody uses it to threaten their power, membership, or revenue base. Two such groups are especially powerful players in the politics and policies of public education.

First are local districts and their school boards, vigorously represented by the National School Board Association (NSBA). This crowd would stifle the openness and global reach of digital learning in the name of district empowerment and local monopoly. According to Ann Flynn, NSBA’s director of education technology, online learning “should be something that school districts can control.”²¹ Such a cramped viewpoint has even been adopted by some smart reform thinkers. Writing recently in *Education Next*, for example, veteran thought leader (and digital-learning advocate) Paul Peterson notes that “if digital learning is to advance beyond the pilot stage, it needs to work within the current system of public education, not against it. . . . Whether digital learning is blended into the classroom or offered online, or both, districts have to be part of the action.”²²

Yet leaving local districts and their boards in charge of digital instruction will retard innovation, entrepreneurship, collaboration, and smart competition, simultaneously stifling students’ ability to find—and be taught by—the very best educators in the state, region, nation, or even world. It will raise costs, undermine efficiency, block rich instructional options, restrict school choice and parental influence, and strengthen the hand of other interest groups—including but not limited to already-too-powerful teacher unions.

For wherever one finds school districts and boards, one almost always finds unions equally determined to prevent digital learning from shrinking their ranks or weakening their power bases. In many places, they have secured legislation limiting the scope of digital learning or have written clauses into their contracts to counter its growth. In California, for example, the state teacher union’s model contract requires that

no employee shall be displaced because of distance learning or other educational technology. The use of distance education technology shall not be used to reduce, eliminate, or consolidate faculty positions within the district.³

In other places—perhaps more surreptitiously—teacher unions have ensured that class-size mandates (costly and dysfunctional as they are in the brick-and-mortar world) still apply to online schools. Yet staffing arrangements—how many and what sorts of people, with what skills and training and compensation—will be dramatically different for online learning than for traditional schools. In chapter one of this volume, Bryan C. Hassel and Emily Ayscue Hassel explain why—and what needs to change to maximize digital learning’s potential in this realm. With the proliferation of high-quality online content, solid instruction in the “basics” will eventually become “flat”—available anywhere globally (and likely at no charge). Meaning that, yes, fewer teachers will be needed. But also that their effectiveness will matter even *more* than it does today, as the quality of a teacher will affect learning outcomes for many more students across schools, districts, states, and even nations. (The Hassels also explain how digital education will further professionalize teaching by limiting mindless administrative tasks, focusing teacher talent, and improving pay for the high-quality instructor.)

Those are the main interest groups, but they’re not alone. Also worthy of note are textbook publishers and the myriad other companies with which schools and districts partner to deliver transportation, food, insurance, supplies, and much, much more. They’re not evil (and some aren’t even selfish in the ordinary sense), but they are all self-interested, and—if they prevail—will smother, slow, or distort the potential of online learning.

Human and Organizational Capacity

Over the past fifty years, the student-faculty ratio in America’s K–12 schools has dropped from twenty-seven to one to fifteen to one; the student-to-staff ratio

(which includes cafeteria workers, central-office receptionists, and other non-teaching personnel) plummeted from fifty to one in the 1950s to ten to one today.⁴ When all the pay stubs are tallied, we find over 3 million teachers and umpteen more “support staff” working in what is America’s second-largest industry.⁵ Yet education’s bulked-up employment has barely touched overall student achievement, which has scarcely risen during this period. Instead, the added HR heft has contributed to the bureaucratization, lethargy, and routinization of the K–12 enterprise, buttressing its rigid procedures, internal fiefdoms, and tendency toward compliance rather than innovation—much less transformation. Reform ideas—no matter how sharp—struggle to pierce the thick bureaucracy. School-turnaround efforts offer a sobering case in point. As Andy Smarick has written, examples of failed turnaround efforts abound. National data for 2004–05 show that of the schools required to undergo restructuring under No Child Left Behind, less than 20 percent were able to exit “improvement status” two years later. State-level data mimic these dismal federal findings. Smarick writes:

In 2008, 52 Ohio schools were forced to restructure because of persistent failure. Even after several years of significant attention, fewer than one in three had been able to reach established academic goals, and less than half showed any student performance gains.⁶

Our own research on school turnarounds is equally bleak.⁷ Inertia, traditional routines, contracts, and procedural requirements dilute the potency of these turnaround efforts—and of education reform more generally.

In order to see real jumps in student achievement, results-linked quality control of curricula, educators, and programs needs to look dramatically different. Our current system is laden with input regulations like textbook mandates, certification requirements, and notches on teachers’ professional-development belts. None of which has been shown to improve student achievement (and some of which have actually been shown to hinder it). In the digital-learning era, these become even more dangerous tokens of “quality,” as they work to hamper innovation. As Rick Hess explains in chapter two:

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. Instead, students in a given

building or district may be taking courses (or just sections of courses) from a variety of providers, each with varying approaches to technology, instruction, mastery, and so forth.

His essay goes on to outline three ways to police—and improve—quality in digital learning. But it’s not just bloated personnel ranks and ineffective quality-control metrics that have held the system back. We reformers share in the blame with our habit of layering new policies upon old and shoving program after program into the current educational frame rather than replacing outmoded, ineffective, or inefficient initiatives with novel platforms and ideas. With that layering, of course, has come the education system’s addiction to cash and its assumption that nothing can be done differently without additional resources.

In fact, it should cost taxpayers *fewer dollars* to educate each pupil in the online world—though various trade-offs will need to be made. According to analyses by Tamara Butler Battaglino, Matt Haldeman, and Eleanor Laurans, described in chapter three, full-time virtual schooling currently costs, on average, about \$3,600 less per pupil than its traditional counterpart. The potential savings associated with “blended learning” are smaller but far from negligible. As digital learning evolves, its costs are apt to drop further. Once digital instruction is further vetted, innovated, and brought to scale, this bottom-line cost may drop even further. Which is not to say that the choices, priority adjustments, and trade-offs associated with it are obvious or easy, only that we face a rare opportunity and—considering our fiscal circumstances—likely need to wean American public education from its cash habit.

Fundamental Structural Flaws

Two nearly universal and deeply entrenched structural arrangements in American public education pose huge impediments to the success of digital learning. The painful truth is that this education revolution cannot occur under the customary arrangements for financing schools nor within our current governance system.

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– Consider, first, how we presently fund education: financing programs and bureaucratic structures via rigid and formulaic distribution, not paying for students or schools, much less for learning. This antiquated system stymies innovation, as Paul Hill explains in chapter four. And it doesn’t make much sense in an era when students must be able to direct resources to the education providers of their choice.

But it doesn't have to be this way. Hill shows how we can leapfrog our system of school finance to fund education, not institutions; move money as students move; and pay for unconventional forms of instruction. (This rebooted system would also be able to *defund* those programs that are found wanting.) This new model would offer parents a choice of whole-school providers while also affording them a limited amount of "pocket money," with which they could purchase any number of tutoring or enrichment programs, from advanced math classes to piano lessons. As Hill writes, "This would allow some public funds to flow to new and innovative programs. . . . Yet parents could not be led into making choices that compromised their children's core instruction."

Now consider our agricultural-era devotion to "local control" of public education and ask how this arrangement can possibly work well—indeed, what it even means—when the delivery system itself is unbound by district, municipal, or even state borders. Who is really "in charge" when students assemble their education from multiple providers based in many locations, some likely on the other side of the planet? Digital learning, like digital communications, lives on the Internet—often "in the cloud"—and knows no natural geographic or political boundaries. Sure, it can be inhibited by totalitarian regimes that fear websites or any communications that may loosen their grip. When left to flourish in the marketplace, however, digital learning will yield innovation, competition (affecting content, quality, delivery mechanisms, and price), and eventual economies of scale. And those will—and ought to—develop without regard to municipal boundaries.

To be sure, public officials have an obligation to exert curricular quality control—for which they in turn are accountable to voters and taxpayers—and must safeguard minors from "virtual menaces." But that is not the same as putting local districts in control of digital learning, as our current system expects. In chapter five, John Chubb spotlights the incapacities of our present K–12 education-governance system, calling instead for a state-based model. K–12 education controlled by local entities is rigid and change averse, Chubb concludes. What's more, few districts are large enough marketplaces to really foster innovation. States provide the scale necessary to support research and development, to allow for flexible programming, and to extend the reach of top-rate teachers. (Chubb then lays out ten concrete steps to make this new set-up a reality.)

Whew! Reshape the financing and governance of public education? On top of new HR arrangements for teachers and improved quality control of content? Yes, it's a tall order and a major reformulation of America's education-reform

agenda. It doesn't erase the need for rigorous standards, tough accountability, vastly improved data systems, better teacher evaluations (and training, etc.), stronger school leaders, and much else that reformers have been struggling to bring about. But it says, in effect, that far more than those reforms are needed in order to bring U.S. public education into the modern era.

The Charter School Warning Bell

For those still unconvinced, the charter school saga offers a cautionary tale. In the early days, antireform interest groups mangled charter legislation in myriad ways. As a consequence of their efforts, nearly half of states impose some kind of cap on the number of charters allowed in their districts.⁸ Other states force charter schools to fit under extant union contracts.⁹ Some restrict charter-authorizing powers to districts, a classic case of empowering foxes to look after chickens. Almost nowhere are charters properly funded. And in many states and communities, they remain shackled by far too many regulations.

We've seen how these co-optations and conditions weakened the realization of chartering's potential. And we can see, in retrospect, how the early promoters of charter schools failed—or neglected—to plant these schools in a salubrious policy environment.

If similar failures hamper digital learning, the loss will be still greater. For while charters (perhaps due to the constraints they've faced) remain a smallish subset of "different" schools that operate alongside the traditional system, digital learning has the potential to alter the system itself both fundamentally and irreversibly. It's no sideshow. It isn't even the center ring. It's the circus tent itself.

This volume lays out the most worrisome obstacles to smart and widespread implementation of digital learning: staffing, quality control, costs, financing structures, and school governance. It also supplies thoughtful recommendations for overcoming those obstacles—not because the nascent digital-learning movement is a public good unto itself but because of the good it can bring about for our children's education.

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Endnotes

1. Cited by Dylan Scott, "Can States and School Districts Cut Costs Through Digital Learning?" *Governing Magazine*, January 17, 2012, <http://www.governing.com/blogs/view/can-states-school-districts-cut-costs-through-digital-learning.html>.
2. Paul Peterson, "In the Digital World, Every District Can Compete With Every Other," *Education Next*, February 9, 2012, <http://educationnext.org/in-the-digital-world-every-district-can-compete-with-every-other/>.
3. Community College Council of the California Federation of Teachers, "A Framework for Contract Negotiations Related to Educational Technology Issues," http://www.cft.org/uploads/key/framework_final.pdf.
4. Thomas D. Snyder and Sally A. Dillow, *Digest of Education Statistics, 2010* (Washington, D.C.: National Center for Education Statistics, April 2011), <http://nces.ed.gov/pubs2011/2011015.pdf>; Steve Malanga, "Another Reason School Systems Are Going Broke..." *Public Sector Inc.* blog, December 6, 2011, <http://www.publicsectorinc.com/forum/2011/12/another-reason-school-systems-are-going-broke.html>.
5. C. Emily Feistritzer, *Profile of Teachers in the U.S. 2011* (Washington, D.C.: National Center on Education Information, 2011), http://www.ncei.com/Profile_Teachers_US_2011.pdf. Educational services, public and private, employed 13.5 million Americans in 2008. Information available

from the Bureau of Labor Statistics, "Career Guide to Industries, 2010–11 Edition: Education," <http://www.bls.gov/oco/cg/cgs034.htm>.

6. Andy Smarick, "The Turnaround Fallacy," *Education Next* 10, no. 1 (2010), <http://education-next.org/the-turnaround-fallacy/>.

7. David Stuit, *Are Bad Schools Immortal? The Scarcity of Turnarounds and Shutdowns in Both Charter District Sectors* (Washington, D.C.: Thomas B. Fordham Institute, December 2010), <http://www.edexcellence.net/publications/are-bad-schools-immortal.html>.

8. Julie Davis Bell, *Charter School Caps* (Washington, D.C.: National Conference of State Legislatures, December 2011), <http://www.ncsl.org/documents/educ/CharterSchoolCaps.pdf>.

9. Mitch Price, *Are Charter School Unions Worth the Bargain?* (Seattle, WA: Center on Reinventing Public Education, November 2011), http://www.crpe.org/cs/crpe/download/csr_files/CRPE_pub_Unions_Nov11-2.pdf.