

The Nation's Schools Are Stepping Up to Higher Standards

November 2012

IS YOUR DISTRICT CONSIDERING THE USE OF DIGITAL LEARNING IN ITS SCHOOLS? IF SO, STOP, READ ON, AND MAKE A PLAN THAT ADDRESSES YOUR DISTRICT'S SPECIFIC CHALLENGES AND LEARNING GOALS ...

merica's education system faces enormous challenges that need to be addressed urgently and systemically. Greater emphasis is now being placed on ensuring that every student, including low-income students and students of color, achieve their potential, but major challenges remain. Far too many public schools have not changed quickly enough to meet the growing needs of students, parents, and employers. As states have rightly moved to requiring that all students graduate from high school ready for college and a career, school district leaders must take on this challenge and make smart, far-reaching decisions that will affect the next decade of education.



Decisions That Shape the Next Decade



District leaders will need to make serious and crucial decisions that will shape education for the next decade. Effective educational technology strategies that link the "three Ts"—teaching, technology, and use of time can enhance and accelerate systemic planning efforts focused at wholeschool reform and improved student outcomes. And although some districts have made great progress, much more needs to be done to achieve the higher standards and to ensure that each child graduates ready for college and a career. After brainstorming with district leaders from varying districts large, small, rural, and urban—the Alliance for Excellent Education can contribute and support district leaders by offering an urgent national call that provides district leaders with collegial support and some room to innovate around the effective use of technology in education.

The next two years will see unprecedented developments in education as the country seeks something fundamentally different than it ever has from K-12 education in order to prepare all students for success in college and a career in the twenty-first-century global economy.

Digital Learning Is Essential for College and Career Readiness

As has been commonly observed over the past decade, technology has not revolutionized education the way it has other fields and industries. But revolutionizing education may finally be under way, fueled by the Common Core State Standards Initiative (CCSSI). At the heart of this ambitious initiative is the conviction that all students, regardless of race, income status, or zip code, deserve an education that prepares them for success in today's job market and postsecondary institutions. Through the CCSSI, states worked together to design grade-level expectations in English language arts and math to ensure that all students would be



college and career ready by the time they graduated from high school.

Forty-six states have adopted the Common Core State Standards (CCSS), and forty-four states are working as part of two consortia to design new assessment systems aligned to the CCSS. To enhance the quality of the new assessments and the timeliness of their results, both consortia are developing assessments that will be administered by computer, which will revolutionize test taking in many states. But the radical opportunity that technology affords the CCSS implementation is in its ability to support profound changes to teaching and learning.

Serious Challenges Facing District Leaders

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Increasing Needs for Higher Student Achievement

Too many students are not being prepared for college and a career. As a result, they are not competitive in a rapidly changing world, and the nation's schools are not changing fast enough to keep up. Some sobering statistics include the following:

- High school graduation rates in the U.S. remain low—around 72% overall. For minority students, the rate is closer to 50%.¹
- Of those who graduate from high school, only one in four is actually ready for college-level work.²
- Half of all students entering a community college will need remediation; 20% will need help when they enter a four-year institution.³
- Students who begin college in remedial classes are far less likely to graduate.⁴
- As the nation's economy recovers, an increasing number of jobs require some kind of training after high school.⁵



Tomorrow's essential needs include core academics and deeper learning.

Students need learning opportunities that are more hands on, experiential, project based, and aligned with student interest. These types of learning opportunities offer students the chance to produce content, analyze information, and build deeper knowledge of complex topics. Integral to this solution is the technology that can make learning more challenging and motivating. Teachers need tools that allow them to reach each child, witness "aha" moments, and help those who are struggling. Teachers need advanced resources to provide rich, relevant learning opportunities that meet each student's needs and ensure that all students have the opportunity to drive their own learning.



Deeper learning prepares students to

- know and master core academic content;
- think critically and solve complex problems;
- work collaboratively;
- ✓ communicate effectively; and
- ✓ be self-directed and able to incorporate feedback.⁶

Effective digital media combined with powerful teaching, rich content, and engaged students will take learning in the United States to a much higher level and provide all students with experiences that allow them to graduate prepared for college and a career. The conditions in which this vision of digital learning thrives are essential to meet the moral and economic imperative to change the way teachers teach and students learn in the United States. All children should graduate from high school ready for college and a career, possessing the deeper learning skills they need in order to compete in today's rapidly changing economy. Yet too many students are still not developing the tools they need to succeed in modern life.



Shrinking Budgets

States and districts are in the unenviable position of having to meet much higher standards that require improvements in teaching and learning for all students while school budgets are simultaneously declining.

The dilemma is how to push district leaders to rethink how resources are allocated in support of teachers. For example, streamlining expenses, offering online professional development, elevating media specialists as instructional leaders, and analyzing budget expenses line by line can help districts reallocate resources. Meanwhile, school leaders are constantly forced to make hard choices and budget cuts.

Challenges include the following:

- Property tax revenues remain low.
- There is likely to be no new federal funding, as Congress focuses on making cuts across the board, including education.
- In Fiscal Year (FY) 2011, when states had to make midyear general fund expenditure cuts, even the usually untouchable K–12 education funding went under the knife. Eighteen of the twenty-three states that made midyear cuts reduced funding for K–12 education.⁷
- In FY 2012, forty-two of fifty states were dealing with budget shortfalls; since 2008, thirty-four have had to make cuts to education funding.⁸





The Future of Teaching

Teachers are a school's most critical resource. Even though research continues to show that effective teaching is the most important school-related factor in student achievement, access to effective teaching remains widely uneven and inequitably distributed. The teaching profession faces multiple challenges while serving at the front line of improving outcomes for students.

- There continues to be high turnover and frequent layoffs in the field of teaching: nearly 300,000 teacher jobs have been lost since 2008.
- Today's typical teacher has just one to two years of experience, compared to fifteen years in 1987.9
- Teachers often find that they cannot differentiate or meet the needs of all of their students.¹⁰
- Many schools are forced to staff classes with teachers who do not have deep expertise in their subject areas, especially in science, technology, engineering, and mathematics (STEM) courses.¹¹



\$2.6 billion

American schools spend more than \$2.6 billion annually replacing teachers who have dropped out of the profession.

Preparing all students to succeed in today's increasingly global economy and complex world requires a shift from a teacher-centric culture to learner-centered instruction. Teachers are transitioning to facilitators of learning and educational designers. The *Culture Shift* report examines the characteristics of learner-centered instruction and the support that educators and schools will require to make such an approach work. It argues that a learner-centered approach will not succeed without a cultural shift throughout the education system that includes maximizing the potential of digital learning to meet students' needs.





Growing Technology Needs of Students and Society

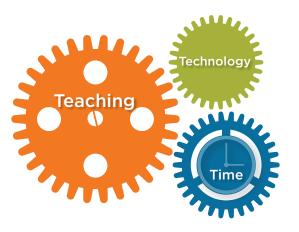
Systemic and effective use of technology and digital learning can connect middle and high school students to better teaching and learning experiences while also addressing three major challenges facing the nation's education system: access to good teaching, tight budgets, and boosting student achievement.



But simply slapping a netbook on top of a textbook will not lead to improvements. Effective educational technology strategies must link the three Ts—teaching, technology, and use of time—with overall wholeschool reform strategies and proven pedagogical practices to accelerate the pace of improvement and ensure that all students benefit from the opportunity that digital learning offers.

The Three Ts: Teaching, Technology, and Time

The use of technology and digital learning, when implemented effectively, provides opportunities to create the conditions for whole-school reform and effective instruction. This use of technology is based on a vision that includes teaching, technology, and time. Districts that fail to address these decisions will find themselves with outdated curriculum and instruction and will see continued failure to progress. However, many districts are stepping up to develop comprehensive strategies for digital learning strategies and are now poised to stand as examples for the path ahead.



TEACHING



- Pedagogy before technology
- ✓ Teachers as educational designers
- ✓ Increased professional learning for teachers
- ✓ Focus on best instruction to meet student needs

TIME

- Flipped learning strategies for more and better instructional time
- ✓ Make the most of in-class time
- Increase opportunities for project-based learning or teacher-student discussions
- Competency-based learning approaches—a shift away from seat time and toward demonstrations of mastery

TECHNOLOGY



- ✓ Access to the right devices
- ✓ Ensuring broadband access
- ✓ Helping close digital divide
- \checkmark Rich content opens doors to world
- ✓ Self-paced, meets student needs
- Interactive, engaging tools that give students opportunities to collaborate, create, and produce

What Is Digital Learning?

Digital learning is personal and flexible.

A personalized, learner-centered environment uses technology to collect and organize data to help establish learning goals and criteria for success, assess student progress constantly and informally, and provide students and teachers with a comprehensive system of academic and developmental supports. Policy and practice must offer access to technology tools and educational resources that empower and elevate school leaders and teachers to apply their pedagogical knowledge, creativity, and data analysis skills to meet the needs of individual students. Blended learning environments in K–12 public schools provide support for teachers to help all students advance at their own pace based on competency and mastery.

Digital learning is led by teachers with significant support.

Technology and digital learning can increase professional learning opportunities by expanding access to high-quality, ongoing, job-embedded resources to improve student success. Professional learning communities, peer-to-peer lesson sharing, and better use of data and formative assessment, combined with less emphasis on "sit and get" professional development sessions, eliminate the confines of geography and time. These ever-increasing resources offer teachers vast new opportunities to collaborate, learn, share, and produce best practices with colleagues in school buildings across the country.

Digital learning is collaborative and aligned to a common vision.

Administrators, teachers, students, and parents must all have a shared commitment to personalized and collaborative learning. Educators must be empowered by their leadership to use innovative approaches for learner-centered instruction. Permission to fail and regroup must be pervasive in this new learning environment. Technology encourages and supports this more agile approach to teaching by supporting a problem-solving culture with transparent student data that is used in a collegial, collaborative environment to improve student outcomes. Data should be used as a carrot, not a stick.

Digital learning provides flexible and high-quality resources.

Districts and states need to rethink how academic content is developed and obtained for their teachers and students. By designing a thorough review process for quality, states and districts should be able to employ a variety of resources aligned to rigorous standards that address differing learning styles and levels of knowledge and that support deep, project-based learning approaches. This kind of approach offers teachers more robust and adaptive tools to customize the instruction for groups of students or on a student-to-student basis to ensure relevance and deep understanding of complex issues and topics. Providing multiple sources of high-quality academic content offers students greater opportunities to reflect on their own work, think critically, and engage frequently to enable deeper understanding of complex topics.

Digital learning is data driven, transparent, and ongoing.

Good instruction can be driven by a well-designed formative assessment program with teachers using realtime response devices that capture when students master concepts, might benefit from more instruction, or need remediation. This student data is then stored so that it may be analyzed to determine progress in multiple classrooms and subjects over time. A formative assessment program that uses technology offers teachers more robust, timely data that will allow them to encourage students along pathways best suited for their learning objectives. Policy, practice, and attitudes within the school must support a collaborative, positive, and continuous improvement notion of school reform in which each child progresses adequately toward the goal of being ready for college and a career.



District-Level Systemic Planning Initiative



Join Digital Learning Day, February 6, 2013. Digital Learning Day is a national celebration of teachers that shines a spotlight on successful instructional technology practice in classrooms across the country. Add your voice and expertise to that of tens of thousands of educators representing nearly 2 million students in ongoing activities, idea sharing, and collaboration leading up to the big day. Mark your calendar and join the wave of innovation sweeping through the nation's schools. Participation is free.

http://www.digitallearningday.org



Endnotes

- ¹ Editorial Projects in Education, "Diplomas Count 2010: Graduating by the Number: Putting Data to Work for Student Success," special issue, *Education Week* 29, no. 34 (2010).
- ² ACT, "The Condition of College & Career Readiness, Based on ACT Profile Report—National: Graduating Class 2011," www.act.org/readiness/2011 (accessed December 2011). An alternative measure of college readiness, based on SAT scores in reading, mathematics, and writing, is issued by the College Board; that measure in 2011 was 43 percent.
- ³ Complete College America, *Time Is the Enemy: 2011 National Report* (Washington, DC: Author, 2011).
- ⁴ Ibid.
- ⁵ A. Carnevale, N. Smith, and J. Strohl, *Help Wanted: Projecting Jobs and Education Requirements Through 2018* (Washington, DC: Georgetown University Center on Education and the Workforce, June 2010).
- ⁶ For more information, see http://www.deeperlearning4all.org (accessed November 5, 2012).
- ⁷ National Association of State Budget Officers, *The Fiscal Survey of the States*, 2011, http://nasbo.org/LinkClick.aspx?filetick et=y%2fqdEfOcPfs%3d&tabid=38 (accessed December 2011).
- ⁸ Center for Budget and Policy Priorities, "An Update on State Budget Cuts," February 9, 2011, http://www.cbpp.org/files/3-13-08sfp.pdf (accessed December 2011).
- ⁹ R. Ingersoll and E. Merrill, University of Pennsylvania, original analyses for NCTAF of Schools and Staffing Survey.
- ¹⁰ MetLife, *The MetLife Survey of the American Teacher: Preparing Students for College and Career* (New York, NY: Author, 2011).
- ¹¹ Alliance for Excellent Education, *The Digital Learning Imperative: How Technology and Teaching Meet Today's Education Challenges* (Washington, DC: Author, 2012).