

How technology can fundamentally change teaching and learning in the U.S.

What Project RED's groundbreaking research shows us about technology's positive impact on student performance and school finances



www.ProjectRED.org

Do you want to:

- Dramatically improve academic performance for <u>all</u> students?
- Realize positive financial impact from technology?
- Prepare students to succeed in the global economy?

It's possible...

To transform education we must truly personalize learning. With technology we can.

Technology has fundamentally altered nearly every sector of society except for education. With all that technology has accomplished in other areas, we continue to struggle with how to make big gains in academic achievement, prepare our children to compete in a rapidly changing global economy, and do it all with steadily declining budgets. The answer to these challenges lies in The National Education Technology Plan's Grand Challenges – use technology to make real change in our education system in order to achieve our education goals.

Technology-transformed schools – those with properly implemented and fully integrated ubiquitous technology programs – are already successfully addressing some of the biggest challenges our nation faces. Technology-transformed schools have:

- Lower dropout rates
- Fewer disciplinary actions
- Improved high stakes test scores
- Substantial short- and long-term financial benefits

Through in-depth research with technology-transformed schools across the country Project RED has identified how technology can achieve significant, fundamental change in our education system.

The real change checklist

Here are 5 key things the Project RED research reveals about using technology in schools to improve learning performance and financial outcomes. Use this checklist as a guide to becoming a technology-transformed school.

1. Personalize learning for all students by frequent, appropriate use of technology in all classrooms and other learning places.

Technology is no longer a supplement. It's an integral part of students' lives outside of the classroom and is most effective when it becomes an integral part of the core curriculum.

2. Make professional learning and technology training a priority for administrators and teachers.

Well-trained teachers supported by a principal committed to change are key to using technology to its fullest potential. To truly transform learning educators must be able to confidently integrate technologies into their teaching and assessments.

3. Use technologies such as social media, games and simulations to engage students and encourage collaboration.

Today's students have been communicating and learning on technology platforms as long as they can remember. Leverage the extraordinary power of technology to connect with students, excite them about learning, and empower them to succeed. When properly implemented, ubiquitous technology increases education success

Pct. of respondents reporting improvement



Nine Keys to Student Achievement and Cost-Effectiveness. ©2010. Project RED

4. Use online assessments weekly to gauge student learning and then tailor instruction for personalized learning experiences.

Technology can assess each student's learning progress faster to help teachers guide students more effectively. Use this data to determine instruction, remediation, and accelerated learning strategies for each student.

5. Use technology applications daily in intervention programs such as Title I, special education (IDEA), Reading Intervention, and English Language Learner programs

Research shows that the most challenged students are the ones who respond most and achieve the most gains when technology is used daily to personalize instruction and improve skills.

For more details on the technology practices that improve learning the most, turn to Project RED's research in *The Technology Factor: Nine Keys to Student Achievement and Cost Effectiveness.* You know that technology engages students, personalizes instruction and facilitates student achievement. But... did you know that technology-transformed schools also experience financial benefits?



Return on Investment (ROI) estimates are all-inclusive including hardware, infrastructure, software, networks, telecom, tech support, and professional development.

Estimates are representative examples that may not apply to a specific school or district. See Chapter 9 in the Project RED report for complete details.

Project RED is nothing less than a blueprint for remaking American education...not through more or better testing, charter schools, longer school days, more or even better teachers, but through fundamentally altering how we do education, the first real change in the process of education itself in a thousand years."

> ~Angus King Former Governor of Maine

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Digital Conversion in action...

How technology has transformed learning, improved performance and saved a district money

In the 2006-2007 school year Mooresville Graded School District, located in a blue-collar former mill town in suburban Charlotte, NC, decided it was time to transform Mooresville from acceptable to outstanding.

In the fall of 2007 they launched a project called Digital Conversion with the aim of closing the digital divide, improving academic performance, and preparing students for the 21st century workplace.

The fact that Mooresville's funding is below average (101st out of 115 school districts in the state) did not stop them from implementing a ubiquitous computing program.

Mooresville Graded School District Before/After Digital Conversion

Category	2006-2007	2009-2010
End of Course/End of Grade pass rate	70%	86%
Graduation Rate	77%	86%
Students going to College	74%	86%
Short Term Suspensions	549	310
Dropouts	5.3%	2.3%
Attendance	94%	96%
Free/Reduced Lunch	31%	39%

The district has recognized savings in many areas, including furniture costs (students work on laptops at large tables instead of at traditional desks), textbooks, and supplemental materials like maps, dictionaries, and graphing calculators.

They have also turned repairing laptops into a technical education program for students, reducing both tech support costs and turnaround times substantially.

Mooresville is one of many examples of academic success and cost-savings that have resulted from properly implementing technology. See the Project RED report for many more examples.

We knew that our Digital Conversion was the right move...based on the need to create a relevant experience in our schools that will prepare students for their future."

> ~ Mark Edwards, Ed.D., Superintendent Mooresville Graded School District

Help revolutionize education

The Project RED mission: We named this national research and advocacy plan Project RED (Revolutionizing Education) because we believe there is the need to revolutionize the way the U.S. looks at technology as part of teaching and learning. We believe that technology can help us reengineer our educational system. Through the efforts of Project RED and our partners we believe that technology will transform learning, just as it has transformed homes and offices in almost every other segment of our society.





The Technology Factor

Project RED's research has been published in a 180-page comprehensive report, in a comprehensive report, *The Technology Factor: Nine Keys to Student Achievement and Cost Effectiveness.*

For more information about Project RED or to obtain complimentary downloads from *The Technology Factor* report, please visit www.ProjectRED.org.

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Publishing Partner: MDR ...It is not about cramming more physics or Spanish into 16-year-old heads; it is about giving them the tools and techniques to teach themselves, both in school and beyond.

In order to achieve this, we need change that is big and transformational, not gradual and incremental. It means twice the educational output, however measured, at something less than today's cost. It also means educational equity on an unprecedented scale; given the stakes, we simply cannot afford the massive waste of talent represented by failing schools and lost communities. And it means education that is at once more rigorous and more engaging, more collaborative and more inclusive.

...The computer is the necessary starting place, but alone is not sufficient to generate the transformational change we so desperately need. What we have learned is that it is all about the teachers and the leadership in the school; with great professional development and a new pedagogy, amazing things happen...."

> ~Angus King Former Governor of Maine