

# Addressing Current and Future Challenges in Education

LESSONS LEARNED FROM THE NATION'S MOST  
RAPIDLY IMPROVING AND TRANSFORMATIVE SCHOOLS

**Bill Daggett, Ed.D.**

FOUNDER AND CHAIRMAN  
INTERNATIONAL CENTER FOR LEADERSHIP IN EDUCATION

June 2014

22<sup>nd</sup> Annual  
**Model Schools Conference**

**MAKING CHANGE IN SCHOOLS IS ESSENTIAL, BUT IS ALSO FRAUGHT WITH CHALLENGES.**

Any ambitious new initiative is bound to have supporters, detractors, and obstacles to a seamless rollout. We see this scenario playing out in schools as they introduce new academic standards (the Common Core State Standards [CCSS], the Texas Essential Knowledge and Skills [TEKS], and the Virginia Standards of Learning [SOL]), assessments, and teacher evaluation programs. Last year, two states—New York and Kentucky—moved to a new testing program tied directly to CCSS, and encountered significant implementation challenges. Both states' experiences should serve as an early warning signal to other states, and an indicator that we need to introduce change differently.

From the aftermath of the 1983 *A Nation at Risk* report to the No Child Left Behind Act of 2001, to the CCSS, TEKS, and SOL, new initiatives in education have always been accompanied by strong reactions and emotionally packed debate. However, the need for continuous improvement and shifts in instructional practices is clear. If we cut through the distractions, most people agree on the urgency and the intent of these current initiatives: to prepare students to be successful in the rapidly evolving global economy. To achieve this vision, we must find a way to create an academically rigorous and relevant educational experience for all of our K–12 students. The CCSS, TEKS, and SOL initiatives are the latest in a series of valiant attempts over the past 30 years to do just that.

While our schools continue to provide a quality education to our students, the world in which students will live and work is changing and advancing at an even faster rate than improvements in our schools. In spite of our best efforts, many schools are not preparing students for success in the world they will inhabit after graduation.

Fortunately, out of the array of school improvement initiatives that have been introduced over the last three decades, a number of schools have found ways to keep pace with the rate of change in society. Their students are prepared for a world that demands higher—and arguably, different—levels of knowledge and skills than ever before.

At the International Center for Leadership in Education, we continue to find, analyze, and showcase the nation's most rapidly improving schools. We have studied how these schools have succeeded in improving student performance. I believe our findings can provide all schools and their leaders with direction in meeting the significant challenges they now face.

Five central tenets outline what these effective and rapidly improving schools and districts do differently from their counterparts across the nation:

- 1 **Address today's challenging issues within the context of emerging trends.** *While dealing with the wide array of issues that challenge school leaders daily, exemplary leaders keep a careful eye on emerging and "disruptively transformative" trends that may impact their schools, teachers, and students in the next one to three years. By doing so, they avoid making short-term decisions that will haunt them in the near future as the disruptive trends change the dynamics in and around schools.*
- 2 **Culture trumps strategy.** *Successful schools create a culture that supports improvement before they attempt to implement change. Without a strong cultural foundation, the proposed solution can be mistaken for the problem. This was the misstep that occurred with the introduction of CCSS and new teacher evaluation systems in New York and Kentucky.*
- 3 **Take control or be controlled.** *School leaders do not allow themselves to be distracted by external pressures. Within the framework of their system-wide strategic approach, these leaders put in place short-term—typically 20-day—action plans for administrators and teachers. These action plans have specific, measurable outcomes related to the improvement of student performance. School staff act upon, monitor, and revise these plans continually to inform the next short-term action plan cycles.*
- 4 **It takes a system to improve student performance.** *Actions at the organizational leadership, instructional leadership, and teaching levels are coordinated and aligned to support instruction and learning. Improving student performance to agreed-upon levels is non-negotiable in every classroom. What varies is how the schools achieve that improved performance.*
- 5 **Use data to make decisions.** *High-performance schools and districts use data to define expectations, to constantly monitor progress, and to diagnose the effectiveness of instructional practices in real time. Using such information, they adjust course immediately based upon the data.*

While each of these five tenets is powerful on its own, they are strongly connected, and the most effective schools build their transformative work around all five. In the following pages, we will explore the big ideas and details behind each key concept, and discuss how these tenets look when put into practice across schools and districts.

## TENET 1: ADDRESS TODAY'S CHALLENGING ISSUES WITHIN THE CONTEXT OF EMERGING TRENDS

Today's school and district leaders face a host of "issues"—many of them controversial—that demand immediate and ongoing attention. Among the most significant are:

- » Transitioning to higher standards
- » Aligning new assessments to the new standards
- » Implementing teacher evaluation systems
- » Managing budgets and spending with unprecedented restrictions

The challenge of implementing higher standards, new assessments, and teacher evaluation systems deprives school leaders of time to do much else, such as preparing for disruptive and transformative emerging trends that will impact students and staff for decades to come.

In the nation's most rapidly improving schools, we have found leaders who are dealing with today's challenging issues within the context of potentially disruptive, emerging trends. In the process, they have avoided making short-term decisions that will haunt them in the near future as the disruptive, emerging trends change the dynamics in and around our schools.

Leaders should consider five disruptive emerging trends as they make decisions to address today's issues:

1. IMPACT OF DIGITAL LEARNING
2. HEIGHTENED DEMAND FOR CAREER READINESS
3. INCREASED EMPHASIS ON APPLICATION-BASED LEARNING
4. USE OF DATA ANALYTICS TO IMPLEMENT GROWTH MODELS
5. DEVELOPING PERSONAL SKILLS

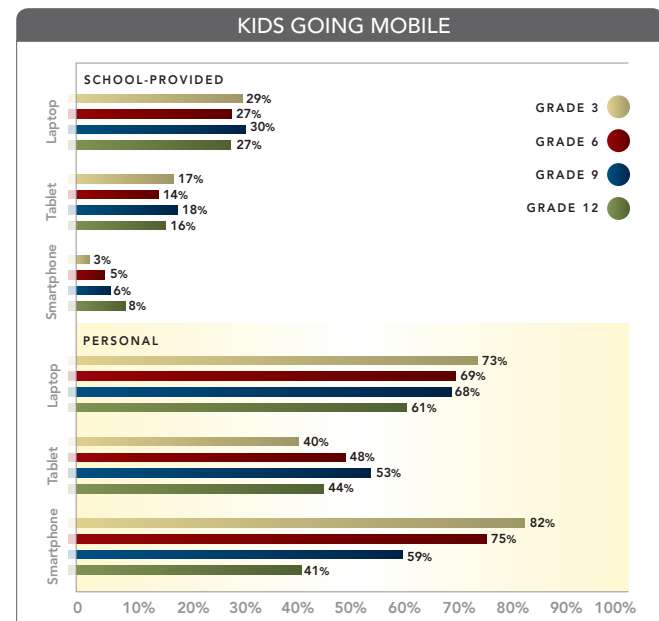
Leaders need to understand and manage the potential impact of these trends rather than wait until the trends gain momentum and then try to respond.

### EMERGING TREND #1:

## Impact of Digital Learning

Digital learning is a catalyst for college and career readiness. Today's learners are digital natives—yet they come to school and power down their devices. As educators, we need to embrace the power of technology to make learning relevant for all students and adults. Using technology effectively in everyday learning can help students to strengthen their learning experiences and build on their intuitive technology skills. Using technology thoughtfully for instructional purposes will allow us to stretch learners' thinking in ways that will lead to success in today's increasingly global economy and rapidly evolving digital environment. Blended learning and microcredentialing are key areas to consider.

Christensen, Horn and Staker describe a blended-learning taxonomy, the Station Rotation, Lab Rotation, and Flipped Classroom models as methods to blend the main features of both the traditional classroom and online learning<sup>1</sup>. In addition to implementing formal blended learning structures, we need to keep pace with students and adults who operate in an increasingly mobile world. Outside of schools, people access information and communicate using smartphones, laptops, and tablets on a regular basis. Although some schools still have a "no cell phone policy," most students still bring their mobile devices to school—especially in high school—and use them to communicate, collaborate and solve problems, even if they are not part of a teacher's lesson plan.



Adapted from: <http://www.christenseninstitute.org/publications/hybrids>

With an increase in kids going mobile, social media provides the context for digital learners to connect, collaborate and create content in ways that are especially meaningful for them. They are increasingly using a wide range of social media tools to do just that including<sup>ii</sup>:

- » **Texting:** 71% of high school students and 63% of middle school students communicate with others via text messages, an increase of 44% since 2008.
- » **Twitter:** 3 out of 10 students in grades 6-12 are using Twitter to follow others or to share 140 characters about their daily life on a regular basis.
- » **Videos:** Since 2007 the number of middle school students creating videos and posting them online has doubled from 15% to 30% today.
- » **Games:** Showing a generational shift, nearly twice as many students in grades 6-8 participate in massively multiplayer online games compared to students in high school.

The principles used to engage users with games are making their way into schools. Microcredentialing and digital badging have received much interest over the past few years. Digital badges, or credentials that may be earned by meeting established performance criteria, are images or symbols representing the acquisition of specific knowledge, skills or competencies<sup>iii</sup>. Badging is one way to recognize proficiency and generate motivation—there is an increase in adults earning badges for professional growth, as well as online resources developed for students. *The Horizon Report* suggested that augmented reality and game-based learning would gain widespread use<sup>iv</sup>, while advocates of game-based learning in higher education cite the ability of digital games to teach and reinforce professional skills such as collaboration, problem-solving, and communication.

In order for principles of gaming to be applied to education, stronger collaboration will develop between gaming companies and K-12 education publishers, which will compete directly with our traditional instructional programs. Gaming companies have mastered the ability to engage people with highly individualized, user-controlled, growth-model-based games. These games provide immediate feedback, and most can be used anytime, anyplace.

As the principles of gaming and badging are driven into the online delivery programs, I believe students will increasingly move toward them. They will be more engaging and less expensive than our traditional system. They do, however, lack what I believe is important: the personal contact often needed by many of our students. Strong teacher-student relationships help teachers make instruction relevant to their students. Without relevance, learning cannot be truly rigorous. John Hattie's meta-analysis described in *Visible Learning*<sup>v</sup> lists teacher-student relationships as among the most effective influences on student achievement—even more so than professional development, teaching strategies, or socioeconomic status.

If educational publishers join forces with the gaming organizations to create a wide variety of digital-based instructional materials, I am afraid that the products emerging from these partnerships may be regarded as so disruptive to the traditional delivery system that we will treat them as the enemy and attempt to fight that movement. This is a battle we will lose.

The schools that will flourish in this new environment are those that embrace digital learning and are willing to disrupt their traditional delivery systems by creating a new hybrid. They will embrace the best of both systems.

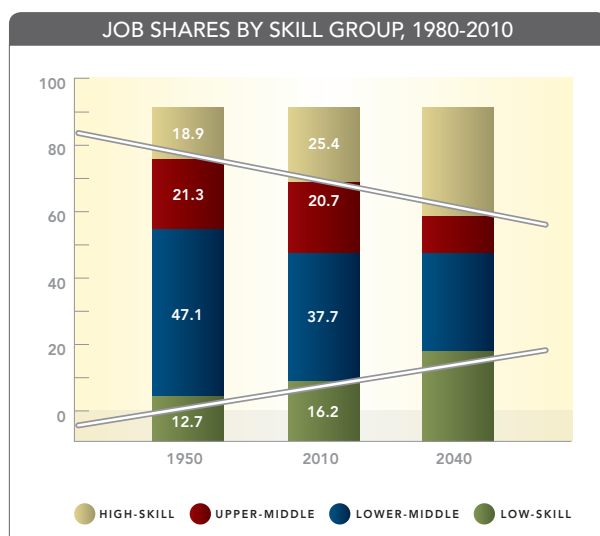
#### EMERGING TREND #2:

### Heightened Demand for Career Readiness

There is a growing realization that preparing a young person for career success requires a higher and different set of academic skills and knowledge than those needed for success in higher education. Some of the findings that have led to that conclusion include:

- » The workplace has changed in fundamental ways. Unfortunately, our education system is not preparing students for this changing work environment. Among the changes in the workplace are:
  - » *In the U.S. alone, 3.8 million jobs that pay in excess of \$50,000 a year have been unfilled for several months, despite the fact that we have 13 million people on unemployment. Why? We are facing a skills gap.*

- » *There is an increasing missing middle in our labor market. The reason is that technology is now doing to the middle-level jobs what it did in the 1970s, 1980s, and 1990s to entry-level jobs: people are being replaced by technology that can do the job better and less expensively<sup>vi</sup>. The growing tier of upper-level jobs requires increasingly sophisticated skills and the ability to be a lifelong learner in a technological, information-based environment.*



- » *There is an accelerating mismatch between college student majors and jobs. Colleges are not responding to this discrepancy<sup>vii</sup>.*

While the workplace is fundamentally changing, higher education is not. A very large percentage of students are leaving college ill-prepared for the 21st century workplace. For example:

- » 48% of employed recent four-year college graduates are in jobs that require less than a four-year degree.
- » 37% of employed recent four-year college graduates are in jobs that require less than a high school diploma.
- » The increase in college tuition and fees has been twice the rate of inflation for the past 17 years.
- » Whether or not a degree is earned, the average student leaves college having accumulated \$35,200 in debt<sup>viii</sup>.

The reading requirements for entry-level jobs, due to the need understand technical materials, are often higher than those needed for higher education<sup>ix</sup>.

Preparing our teachers to deliver the rigorous and relevant academic experiences that will prepare students to be college and career ready will require focused and sustained professional development, as well as a number of shifts in how we organize the instructional programs in our schools.

### EMERGING TREND #3:

## Increased Emphasis on Application-Based Learning

Research here at the International Center has made it clear that relevance makes rigor possible for most students<sup>x</sup>. Also clear is the fact that relevance does not occur one discipline at a time. For content to be relevant, the nation's most rapidly improving schools have found that students need to apply it to their personal areas of interest. That is why the Rigor/Relevance Framework has become for many schools the organizing framework for implementing new state standards, including the Common Core State Standards.

Knowledge, i.e., information, facts and data, no longer needs to be encapsulated, dispensed and acquired from an all-knowing authoritative source such as a textbook, an encyclopedia or, yes, a teacher. "The facts" are everywhere and are widely available from a variety of sources at the click of a mouse or tap on a screen. Most importantly, our students already know how to get it. The traditional classroom is, for many of them, an anachronistic model that's different from the world in which they live. They have intuitively figured out how to retrieve information they need, use it to solve everyday problems, and communicate and collaborate about the same information with others. How they are asked to do things in school seems increasingly disconnected from their world.

The challenges of providing a rigorous and relevant instructional program include: (1) teachers who have not been trained to teach in an application modality and (2) our traditional mass delivery system. What is relevant to one child is not relevant to another.

These schools have changed how they organize and deliver instruction to today's students, moving to much more application-based instructional programs such as:

- » Expeditionary learning (EL), a model of education powered by a growth mindset. Inspired by the exemplary work of veteran teacher Ron Berger, EL schools pledge to help students become "leaders of their own learning." Expeditionary Learning is committed to "creating classrooms where teachers can fulfill their highest aspirations and where students can achieve more than they think possible."<sup>xi</sup>
- » Project-based learning implemented school-wide. Decker Middle School, a member of the New Tech Network, engages teachers in unit planning based on projects.
- » Game-based learning, in schools such as Quest to Learn, emphasizes principles of gaming in their daily curriculum.
- » Quadrant D learning, which focuses on high rigor/high relevance lesson planning, in schools such as Burgess Elementary, Myrtle Beach, SC.
- » Industry certifications and career academies, like those found at Clearwater High School, Clearwater, FL.

#### EMERGING TREND #4:

### Use of Data Analytics to Implement Growth Models

American schools are data rich but analysis poor. We have volumes of data but, unlike our counterparts in medicine, we have not learned how to monitor, track and introduce effective interventions based upon the data we have.

As we develop more sophisticated assessments and use technology in more robust ways, we will see an explosion in the use of data for both formative and summative purposes.

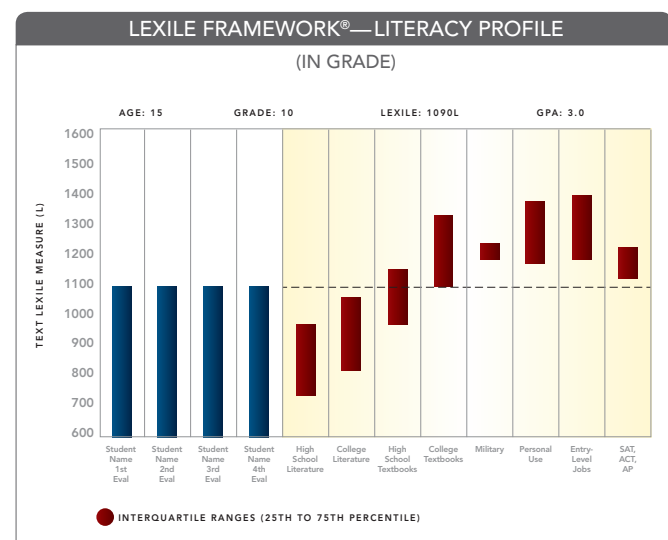
More sophisticated use of data will enable us to accelerate the movement toward implementing growth and continuous improvement models.

With an increasing amount of data on individual students, we will find our one-size-fits-all instructional delivery system ineffective. The need to individualize the organization and delivery of instruction will require focused and sustained professional development. It will also cause great discomfort for those educators who wish to maintain their 20th century instructional practices. Thus, data analytics will bring both great opportunities and great challenges.

Our present education system has been increasingly focused on tests that measure a student's degree of mastery of a set of knowledge and/or skills at a point in time. It has not typically focused on the ongoing growth in learning of a student has over a period of time. That is about to change.

By leveraging data, we will be able to better support growth models as a way to know what a student knows and is able to do. Rapidly improving schools have changed their focus to a continuous improvement model for every student. Students are, in effect, evaluated by the amount of improvement.

Out of this movement I believe we will see a change in our student's report cards. One example is a report card that tracks a student's reading ability over time and shows how prepared the student is to comprehend texts related to high school, college, the military, personal use, national assessments, and the workplace (see figure below). A student's Lexile<sup>®</sup> score immediately become actionable. The teacher can introduce texts at the appropriate level of difficulty in order to develop the literacy skills gradually over time.



## EMERGING TREND #5:

### Developing Personal Skills

If you have a son or daughter in his or her twenties, your child may start bringing a significant other home more frequently. When you realize that this person may one day be your future daughter- or son-in-law—and in some cases, the future parent of your grandchildren—you may begin to think more deeply about him or her. As you get to know this person, are you asking about his or her high school transcripts? Probably not. You are probably wondering what kind of person they are and whether or not they will be a good spouse to your child, and a good parent to your future grandchildren.

To collect information about this person, you may ask some pointed questions, pose scenarios for response, etc. You may also Google the person's name, and check out his or her Facebook status to get a sense of their digital footprint.

People carry their digital footprints with them forever, and these footprints will continue to grow as time passes, whether people post information about themselves or other people post information about them. This digital information will shape who they are. Not only will this impact your opinion as to whether a prospective in-law will be good fit with the family, but a growing number of college admissions offices and human resource departments review a person's digital footprint as part of the admissions or hiring process.

The responsibility of teaching today's students how to manage their digital identity and footprint falls to teachers, not just parents. Social media is forever documenting their experiences, pictures, posts and "likes." As educators we need to teach students the skills they need to make the right decisions online, and get them to think deeply about the consequences associated with social media interactions and how they will impact their long-term goals. While social media has allowed for increased digital collaboration and interaction with peers—an important skill needed in today's workplace—it can also reduce academic performance, if overused. Finding balance is key.

We know that there is more to life than the core subjects of math, science, English language arts and social studies. Personal and interpersonal skills, such as responsibility, self-management, integrity/honesty, collaboration and leadership, are critical in today's workplace. Adding digital identity management to this toolbox of "soft skills" or "employability" skills is now necessary to prepare our students for college and careers.

### KEEPING A FOCUS ON EMERGING TRENDS

The aforementioned are not the only trends emerging in education. Other traditional structures will need to be examined, such as the antiquated funding system for public education, which is increasingly being challenged, and a bureaucratic organizational structure designed for a time that has passed. Leaders can address any existing challenge in the context of emerging trends in several ways, including by following these five steps:

1. CREATE A CULTURE THAT SUPPORTS CHANGE.
2. CREATE A TEAM WITHIN THE SCHOOL FOCUSED ON THE IMPACT OF THE EMERGING TREND.
3. NETWORK WITH OTHERS TO SHARE BEST PRACTICES.
4. TAKE RISKS IN PROTOTYPING AND ITERATING PRACTICES TO ACCEPT EMERGING TREND.
5. PUSH TREND-ALIGNED POLICY.

### TENET 2: CULTURE TRUMPS STRATEGY

As stated previously, one of the most significant lessons we at the International Center for Leadership in Education have learned in our decades of studying schools that are succeeding in improving education is that **culture trumps strategy**. In other words, knowing *why* the school must change should always come before deciding *how* to change.



We have observed that the nation's most rapidly improving schools build understanding about the need for change before taking steps toward improvement. Schools that falter, on the other hand, often fail to gain buy-in to a culture of universal high expectations. These schools tend to dive right into changes without ensuring that stakeholders understand the need for those changes.

Although many agree that improving instruction would enhance students' academic performance and graduates' readiness for life *after* high school, there is a lot of disagreement—to say the least—about exactly *how* to accomplish that goal. As might be expected, there seems to be a mindset that “school improvement is fine as long as it doesn't impact me.” Many educators, parents, and community members will continue to resist changes to their education system unless they:

- » Understand that our present system was never designed to support the learning needed to be prepared for the 21st century and therefore...
- » Recognize **WHY** we must move to more rigorous and relevant instruction for all students.

Schools need a systematic plan to communicate to all of their stakeholders that the human and economic consequences of not improving student performance and “readiness” are far worse than the challenges and pain of bringing about needed change. To accomplish sustainable school improvement, schools must first create a shared understanding of:

- » **WHY** school improvement is essential
- » **WHAT** new/emerging skills and knowledge requirements are needed, and

- » **HOW** to bring about improvement by learning from successful practices that have worked

## WHY SCHOOLS NEED IMPROVEMENT

In communications with staff, parents, students, community members, and media, schools need to address a few critical realities:

- » **College and career readiness:** ACT's national studies of remediation required for college freshmen show that 19.9% of those entering four-year programs and 51.7% in two-year programs need remediation. The national average graduation rates in our four-year colleges after five years is 36.6%. In our two-year colleges, we graduate 29.1% after three years.

The U.S. Department of Labor statistics on unemployment rates for recent college grads and for Americans with less than a high school diploma are both near 15%—in a labor market with 3.8 million unfilled openings for jobs paying \$50,000 a year! In short, far too many of our graduates are exiting high school neither college ready nor career ready.

- » **Technology:** Advances in technology will continue to impact the workplace, home, and society. I cannot even imagine what not-yet-conceived technologies will exist by the time today's elementary students graduate from high school. Also consider how our growing demand for immediate 24/7 information, service, and feedback will be an expectation in all facets of life, including learning. Our schools are in danger of becoming museums—with us as the curators.

## A MODEL OF CULTURE

**SOUTH HEIGHTS ELEMENTARY SCHOOL**, HENDERSON, KY, WAS ONCE ONE OF THE LOWEST PERFORMING SCHOOLS IN THE STATE. BY CHANGING THE CULTURE OF THE SCHOOL TO ONE WITH STRONG, POSITIVE RELATIONSHIPS AT THE CORE, SOUTH HEIGHTS IS COMMITTED TO CREATING AN UNCOMMON SCHOOL FOR THE 21ST CENTURY.

» **Globalization:** Many former developing countries, such as Vietnam, Argentina, Brazil, Indonesia, and even Panama, are emerging as major players in the global economy. With each of these nations having higher education standards, U.S. graduates will find it increasingly difficult to compete. For example, on the 2012 Program for International Student Assessment (PISA), U.S. students did not do as well as we might have hoped. Out of 56 nations, the U.S. ranked:

- » 30th in mathematics
- » 23rd in science
- » 20th in reading

Among the nations that outperformed the U.S. in math, science, and reading were Australia, Canada, China, Estonia, Finland, Germany, Ireland, Japan, Lichtenstein, Netherlands, New Zealand, Poland, South Korea, Singapore, and Switzerland. Looking at it another way, if our education system was competing in the Olympics, we would not win any medals at all.

In our global economy, this failure—yes, failure—to improve what and how we teach does not bode well for a nation that aspires to preserve the highest standard of living in the world, yet has the largest national debt, an aging population, significant demographic changes, and increasing challenges to education funding.

## TENET 3: CONTROL OR BE CONTROLLED

Woodrow Wilson once said: “If you want to make enemies, try to change something.” Managing change in organizations—especially those with deep-seated traditions that can nurture widespread resistance to change—requires skilled leadership. Education leaders in particular must deal with ever-increasing *external* pressures to improve student performance and as well as subtle or overt *internal* resistance to change.

Successful education leaders serve their schools by building a culture that supports change. They cultivate a broad-based vision of what “student success” looks like: typically that all graduates will complete an academically rigorous and life-relevant instructional program.

But translating culture and vision into sustainable improvement involves more than just insight—it also requires strategy. For example, the external pressures driven most recently by new state standards and teacher evaluation systems have created a “victim mentality” in many schools/districts: Why change? Why now? Why me? This is no longer a hurdle in the nation’s most rapidly improving schools. These schools evaluate and respond to the externally imposed “agenda” within the context of their agreed-upon vision. In effect, they have absorbed the externally driven agendas into their own vision-driven agendas, thereby controlling the external demands, rather than *being controlled* by them. Structuring work in the context of a transformational culture and an agreed-upon vision of rigor and relevance for all students also enables leaders to deal with the *internal* resistance to change.

For example, successful school improvement leaders choose their battles. They recognize that if they wait until everyone is ready to accept badly needed improvements, things will never change. Instead, change-leaders embrace those staff members and stakeholders—typically one-third of the group—who believe in the new initiatives and are eager to participate. Change leaders empower these “early adopters” as co-leaders. (Remember: leadership is not a position, but a disposition. Teachers, as well as administrators, can provide valuable leadership and influence.) School improvement leaders encourage, support, and listen carefully to this top one-third as the teacher-leaders trail-blaze forward with effective and innovative instructional strategies, structures, and tools. As the early adopters refine these successful practices, the middle one-third of the staff watch and evaluate. When the new practices, tools, and structures prove to be working, the “new converts” are encouraged and supported to join. They are typically willing to do so, although are more cautious than the top one-third. When this middle one-third comes on board, albeit guardedly, then both the administration and teacher leaders are prepared to jointly “take on” the bottom one-third—the naysaying gatekeepers of the used-to-be. The team has assembled a critical mass to drive the changes that are needed schoolwide.

Our work with schools dedicated to improvement and transformation indicates that this process of taking control of both external and internal challenges—building the culture, creating the vision, and bringing best practices to scale—typically takes about three years. It is evolutionary change, not revolutionary; far too few radical revolutions succeed, and far too many fanatic revolutionaries are never heard from again.

Each of the schools presenting at the Model Schools Conference took control of the agenda, but none of them did it the same way. How you take control will depend on the “DNA” of your school. Whatever your DNA, you will find multiple valuable lessons from the model schools presenting at the conference.

## WHAT NEEDS TO BE DONE TO MAKE OUR STUDENTS COLLEGE AND CAREER READY

The list is long, but let me suggest two simple and high-yield ways to start:

1 **Raise the definitions of proficiency in reading and math.** Our existing expectations—especially in reading informational text and problem solving—are too low. For example, a recent study completed by the International Center for Leadership in Education found that:

- » Almost all of the reading requirements for entry-level jobs were higher than the reading ability level of about 75% of America’s 11th grade students.
- » Perhaps even more surprising, entry-level job reading requirements exceed the reading requirements of all but the most technical college coursework.

2 **Ensure that students are able to apply the skills and knowledge they have acquired.** Solving complex problems defies traditional Carnegie-unit “boundaries,” because the “real world” doesn’t come packaged in separate, water-tight containers. Instead of instructional programs that focus on accessing and using knowledge in one discipline at a time, young people need opportunities to learn and to think across subjects.

## HOW TO INCREASE RIGOR AND RELEVANCE

After there is a clear understanding of WHY we need more rigor and relevance in our educational experience for all students and WHAT that entails, schools must agree upon HOW to accomplish this change. Specific strategies will vary based on the needs of a school or district, but we know that effective schools choose approaches that are systemic and informed by data.

## TENET 4: IT TAKES A SYSTEM TO IMPROVE STUDENT PERFORMANCE

It takes a system—not just a teacher—to improve student performance. From the International Center for Leadership in Education/Successful Practices Network’s study of best practices in rapidly improving schools<sup>x</sup>, it is clear that school districts need to provide a coherent focus across the entire education organization to develop and support rigorous and relevant instruction and learning for all students.

## A MODEL OF COLLABORATIVE INSTRUCTIONAL LEADERSHIP

**BROCKTON HIGH SCHOOL**, AN URBAN SCHOOL WITH MORE THAN 4,000 STUDENTS, WENT FROM BEING A CASE STUDY IN FAILURE TO OUTPERFORMING PERFORMING 90% OF ALL OTHER MASSACHUSETTS HIGH SCHOOLS. BY TAKING AHOLD OF ITS OWN AGENDA AND SHIFTING ITS CULTURE TO HIGH STANDARDS, HIGH EXPECTATIONS, NO EXCUSES, BROCKTON HIGH HAS GARNERED NATIONAL ATTENTION THROUGHOUT ITS 10+ YEARS OF SUSTAINED SUCCESS.

In these schools, there has been an important instructional shift from a focus on teaching and on what teachers do to a focus on learning and on what students can do. The entire system is engaged in the facilitation of learning.

This shift in approach requires adjustments to curriculum, assessment, and much more, including the following:

- » Using technology to change how we teach, not merely to make traditional practices more “digital”
- » Using data via data dashboards and data diagnostics to improve and adjust instruction
- » Using formative assessments for diagnostic purposes and to customize instructional strategies
- » Reorganizing instructional programs to give students opportunities to apply their knowledge and skills across disciplines
- » Reconfiguring classrooms to focus on learning rather than teaching
- » Embracing both college *and* career readiness for all students.

Organizational leaders, instructional leaders, and teachers must make a sustained effort to address the many changes that are needed to turn 20th century teaching into 21st century learning.

Organizational leaders must create a clear understanding of *why* we need to move to more rigorous and relevant learning for all students, then assist instructional leaders to define *what* is needed in terms of higher expectations,

more application-based instruction and learner engagement. Teachers then work with their instructional leaders to determine *how* to help students achieve these higher goals.

Here are some of the successful and effective practices we have found at each level.

## ORGANIZATIONAL LEADERSHIP

The primary difference we have observed in the leaders of rapidly improving schools and districts is that they take control of the education agenda. In many other schools, the leaders feel like victims—controlled by external and internal forces and demands. To take control, the successful leaders create a culture that supports change and then generate widespread buy-in for an agreed-upon vision. This vision focuses on providing all students with a rigorous and relevant instructional program—and the support they need to succeed in it. Most people will agree with that vision. The challenge becomes how to implement it.

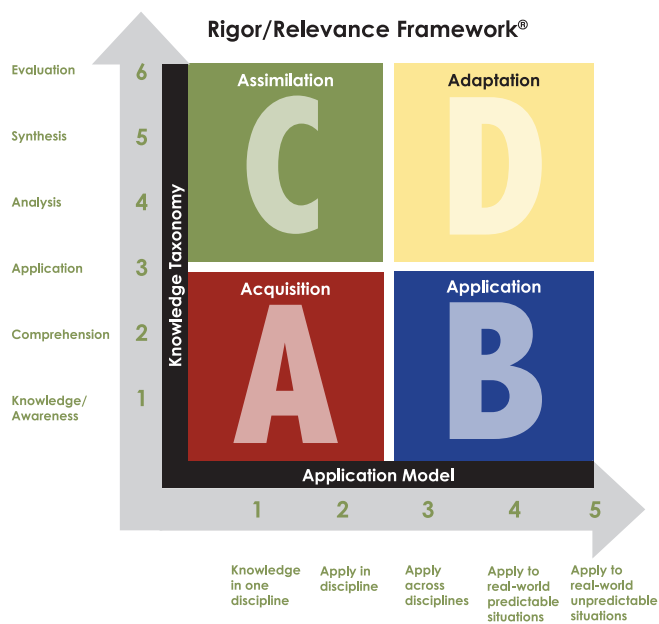
A wide range of laws, rules, regulations, certifications, tenure contracts, policies, practices, and traditions anchor our schools. All of these factors have their “protectors.” The accumulated effect is great pressure to maintain the status quo and deep resistance to change when it threatens people’s comfort zones. Social media today enables concerned groups to quickly and effectively mobilize resistance to anything they oppose. The challenge of dealing with opposition to change has never been more difficult, but the key is for leadership to take control.

## A MODEL OF 21ST CENTURY LEARNING

AT MIAMI, FL-BASED **IPREP ACADEMY**, INNOVATIVE TEACHING STRATEGIES ARE INCORPORATED INTO A TECHNOLOGY-RICH ENVIRONMENT AND HANDS-ON EXPERIENCES. STUDENTS AT IPREP DEVELOP AN UNDERSTANDING OF THE EXPECTATIONS FOR CAREERS AND POST-SECONDARY EDUCATION REQUIREMENTS.

## INSTRUCTIONAL LEADERSHIP

In the process of moving toward more rigorous and relevant learning for all students, it is easy to get bogged down in endless philosophical, pedagogical, and political debates. One way to avoid these obstacles is for instructional leaders to use an easily understood, simple, straightforward framework to describe the current state and future direction of a school's instructional program. The Rigor/Relevance Framework® is a widely respected conceptual model used to achieve this objective.



**FOR MORE ON THE FRAMEWORK,  
PLEASE VISIT [WWW.LEADERED.COM](http://WWW.LEADERED.COM)**

In general terms, instructional leaders must provide support, guidance, tools, and professional development to help teachers shift their instruction and expectations from Quadrant A (low rigor, low relevance) to Quadrant D (high rigor, high relevance). To accomplish this transition, instructional leaders must work with teachers and staff to:

- » Drive literacy across the curriculum
- » Achieve consistent use of technology applications across the curriculum
- » Focus the system on student growth models
- » Adopt data analytics to monitor student growth and the effectiveness of various instructional practices

In short, instructional leaders must deal with much more than standards, curriculum, and assessments.

## TEACHING

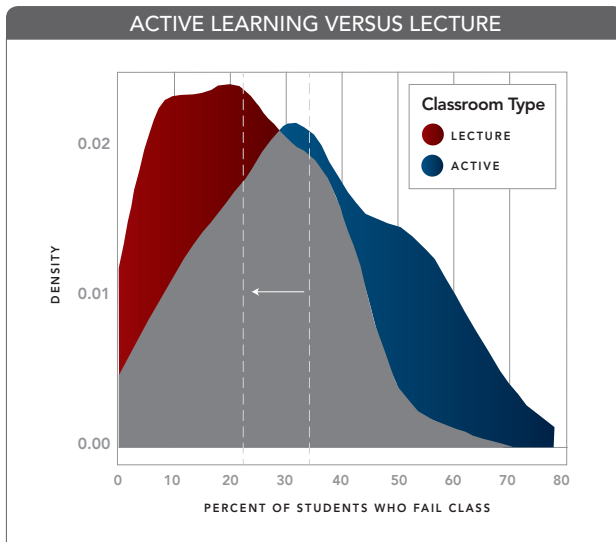
The instructional practices in many classrooms are out of step with:

- » How today's students—who are "digital natives"—learn outside of school
- » What students need to know and be able to do to succeed in the world in which they will live and work

While we know learning should be an active process, many students are not reaching their full potential in classrooms where lecture is the dominant mode of instruction. Consider the following graphic which shows the percent of students who fail, based on an active learning environment versus a lecture-based experience.

## A MODEL OF PROJECT-BASED LEARNING

AT **DECKER MIDDLE SCHOOL** IN AUSTIN, TX, PROJECTS ARE NOT CULMINATING ACTIVITIES—THEY ARE PART OF THE DAILY EXPECTATION. DECKER'S MISSION TO FULLY IMPLEMENT PROJECT-BASED LEARNING HAS RESULTED IN INCREASED FOCUS ON STATE STANDARDS AND TEACHER COLLABORATION, AS WELL AS INCREASED STUDENT COLLABORATION, ENGAGEMENT, AND ACHIEVEMENT.



Adapted from: <http://iteachem.net/wp-content/uploads/2014/05/Freeman-S-Proc-Natl-Acad-Sci-USA-2014-Active-learning-increases-student-performance-in-science-engineering-and-mathematics.pdf>

The research<sup>xii</sup> shows that more students are likely to fail when the instructional strategy is lecturing. On average, 33.8% of students are likely to fail in a classroom where lecturing is the dominant strategy in comparison to 21.8% of students where the learning is more active.

To change the level of activity on behalf of the students during class, teacher-centered, lecture-based instruction must give way to student-centered, interactive, applied, and problem-based learning in our nation’s schools.

The changing nature of our student population, combined with new learning standards that require higher-level thinking and much more application-based and engaged learning, requires fundamental shifts in how and what we teach.

Teachers need to know more than content. They need:

- » A working knowledge of new approaches to instruction
- » Strategies and tools that enable them to shift their role from disseminators of knowledge to facilitators of the learning process
- » The ability to make effective use of data diagnostics

To enable teachers to assume these new roles and acquire the needed skills, districts must provide focused and sustained professional development, tools, and strategies. In addition, leaders need to be involved in the development, refinement, and implementation of new ways of teaching and learning.

## TENET 5: USE DATA TO MAKE DECISIONS

New advances in the collection, analysis, and communication of data create profound new opportunities for schools and districts. At an accelerating rate, education is becoming a service based on data, including measures that chronicle students’ growth, not simply their performance on a test.

Most school report cards and many of the data dashboards currently being used in districts offer little more than snapshots of one point in time. Moreover, in too many districts, students and teachers alike view data systems as “gotcha” devices.

### A MODEL OF DATA-DRIVEN DECISION MAKERS

STEWART, FL-BASED **MARTIN COUNTY HIGH SCHOOL**—ONE OF NEWSWEEK’S BEST AMERICAN HIGH SCHOOLS—HAS BUILT AN INDIVIDUALIZED DATA-DRIVEN STRATEGIC SUPPORT SYSTEM. THE SYSTEM IS USED TO INCREASE STUDENT ACHIEVEMENT AND SUPPORT THE SCHOOL’S AT-RISK POPULATION AND LOWEST PERFORMING READERS.

This is not the case in the nation's most rapidly improving schools and districts. Many of these organizations are moving to sophisticated information systems that include student growth models. These systems collect data that enables teachers to see trends and to target intervention strategies for their students.

By creating a culture of high expectations and gaining widespread support for a vision of improved student performance, these schools have implemented data systems that measure student growth, diagnose learning gaps, and monitor the impact of instructional strategies, tools, and structures. In short, these districts use their data systems to improve student performance, not merely to evaluate teachers and students—a fundamental difference from the use of data in many other districts.

More effective data systems enable these rapidly improving schools and districts to use:

- » Validated and reliable criterion-referenced measures, such as Lexile<sup>®xiii</sup> and Quantile<sup>®</sup> measures, to monitor student growth; norm-referenced measures do not give growth data
- » Assessment as a means to an end (learning), not as an end in and of itself
- » Technology and state-of-the-art information systems to pinpoint student growth, and then differentiate instruction and professional development based on those findings
- » Sophisticated applications of data analytics, such as data-driven decisions about student placement with appropriate teachers.

With such data systems in place, these districts can use the information to create short-term (typically 20-day) instructional action plans and to identify technical assistance needed to help teachers personalize instruction. Shifting from an isolated snapshot model of data use to a growth-model approach allows schools to capture, analyze, and act on information in ways that can transform student learning.

## SUMMARY

The cultures, practices, and communities associated with successful schools are each unique, but schools that make positive, transformational change all share these five central tenets. Strong schools address today's challenges in the context of emerging trends, approach leadership in a way that involves taking control rather than being controlled, and build a strong culture and shared vision of success before trying to implement new initiatives. These schools also approach educational change in a systemic way—focusing on impacting student learning, rather than changing components or practices in isolation of the larger context. Finally, effective schools use data holistically, looking at student growth over time and analyzing this data in relation to instructional initiatives and systemic innovations. These five tenets found in the nation's most rapidly improving schools are all interrelated, and can inform the work of schools just embarking on academic change.

## REFERENCES

- i <http://www.christenseninstitute.org/publications/hybrids>
- ii <http://www.tomorrow.org/speakup/pdfs/SU12-Students.pdf>
- iii <http://www.hastac.org/blogs/elkorda/2012/10/24/future-now-unpacking-digital-badging-and-micro-credentialing-k-20-educators>
- iv <http://net.educause.edu/ir/library/pdf/hr2011.pdf>
- v Hattie, John (2008). *Visible learning: a synthesis of over 800 meta-analyses relating to achievement*.
- vi Frey, C. B. and Osborne, M.A. (September 17, 2013). *The future of employment: how susceptible are jobs to computerisation?*
- vii <http://nces.ed.gov/pubs2014/2014003.pdf>
- viii <http://money.cnn.com/2013/05/17/pf/college/student-debt>
- ix <https://www.lexile.com/about-lexile/lexile/overview>
- x [http://spnetwork.org/spn/userMedia/31/31/files/FocusedOnStudentSuccess\\_7\\_26.pdf](http://spnetwork.org/spn/userMedia/31/31/files/FocusedOnStudentSuccess_7_26.pdf)
- xi Berger, R. (2013). *Leaders of their own learning: transforming schools through student-engaged assessment*.
- xii <http://iteachem.net/wp-content/uploads/2014/05/Freeman-S-Proc-Natl-Acad-Sci-USA-2014-Active-learning-increases-student-performance-in-science-engineering-and-mathematics.pdf>
- xiii <http://www.leadered.com/pdf/Reading%20White%20Paper.pdf>

---

**TO LEARN MORE ABOUT THE MODEL  
SCHOOLS HIGHLIGHTED, OR TO APPLY TO  
BE A 2015 MODEL SCHOOL, GO TO  
[WWW.MODELSCHOOLSCONFERENCE.COM](http://WWW.MODELSCHOOLSCONFERENCE.COM).**

---

1587 Route 146  
Rexford, NY 12148  
(518) 399-2776

[www.leadered.com](http://www.leadered.com)  
[info@leadered.com](mailto:info@leadered.com)