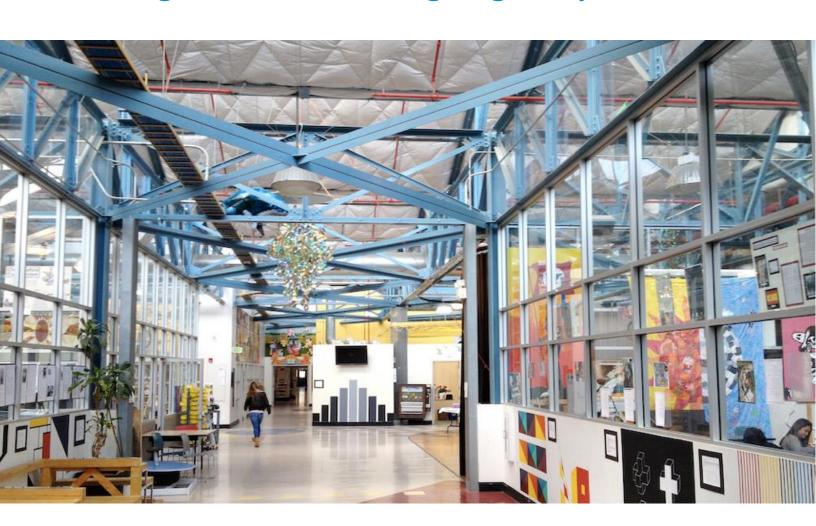


10 PRINCIPLES FOR SCHOOLS OF MODERN LEARNING

The Urgent Case for Reimagining Today's Schools



Education in the United States and around the world is at an important crossroads.



On one side are the centuries old traditions, expectations, and practices of a system of education and schooling created for another time but still deeply rooted in our various cultural fabrics. On the other side is a fast-changing and expanding new story of learning in a globally networked world, one marked by new opportunities and complex challenges, driven by the increasingly ubiquitous technologies that connect us.

For over two decades now, as technological, social, and environmental change in the world has continued to accelerate, we've been watching the growing disconnect between the old and the new of learning. It's a disconnect that many in education have felt, and that some have tried to bridge.

But despite some schools' best efforts to keep apace by adding new devices and connectivity, and by adopting a more contemporary rhetoric about learning in classrooms, we've also watched little if anything change below the shiny surface of new technologies and trendy labels. The time-worn systems and structures that are at the core of the school experience persevere untouched.

Now, as we usher in 2017, we are finally seeing signs that the core is beginning to crumble. The

profound new realities of the modern world coupled with the re-emergence of our long held (and long ignored) beliefs about how children learn most powerfully are conspiring to create what promises to be a difficult, perhaps painful reckoning for schools as we know them. And, it's become more and more clear that a fundamental reimagination of our approach to schooling is now required.

Why, What, Who, and How of Change

In 2017, we at Modern Learners will be digging into the why, what, who, and, importantly, the how of reimagination.

In this ebook, we make the compelling case as to why educators and schools urgently need to begin this work. Also, we offer a clear and concise picture of "Ten Principles of Schools of Modern Learning" that can serve as a guide to reimagination.

In our Modern Learners podcast series, we'll feature interviews with global change leaders

discussing their work to bring true transformation to their students. And in early March of 2017, we're launching a groundbreaking new course and community around how to effect serious, sustained, relevant change in schools. (More info here.)

Today, truly transformative change at a systems level in pre-existing schools is very difficult to find. It's easier to build a new school than to change an old one.

redefining the value and work of schools and teachers and classrooms.

But the bad news is that relevant, sustainable change work in schools requires time, truly

visionary leadership, community support and interaction, and more, much of which is in short supply. Today, truly transformative change at a systems level in pre-existing schools is very difficult to find. It's easier to build a new school than to change an old one.

To us, 2017 is a critical year for schools. Our deep focus is to build the capacity of educators to lead real change at every level. That effort starts here, and we hope you'll join us for this challenging and exciting journey.

This Important Moment

In the United States in particular, this moment is fraught. As a new president and administration takes office, and as efforts toward privatization seem sure to strengthen with it, public school systems face increasingly perilous times. Importantly, this comes at a time when America's global "leadership" in education reform appears to be on the wane.

Provinces like Ontario, British Columbia, and Alberta in Canada, and countries like New Zealand, and Finland are beginning to take "reimagination" seriously, and their new models are beginning to steer the global conversation around change. We worry that in response, monied interests with huge investments in traditional structures will compel U.S. lawmakers to once again double down on traditional expectations for schools and continue a focus on becoming "better" rather than "different."

Nonetheless, the good news is that a full reimagination of the school experience has already started in a small but growing number of schools and districts around the world. New stories of learning more suited to the modern contexts of life and work are appearing,

Either way, let us be clear: we believe in the idea and the power of local, place-based schools. We believe that learning in face to face spaces with adults and other students is both essential and rewarding. And we believe that a shared experience of schooling serves an important function in the development of local, national, and global communities, increasing social justice and the ability to solve problems at a global scale. In short, we are strong advocates for community-based schools.

But we are also outspoken in our support for a significant rethinking of the school experience as currently constituted. In short, the new, modern contexts for learning and education and our long held beliefs about how children learn best demand it.

Imperfect Learning

From their inception, schools have represented an imperfect construct for learning, one driven by efficiencies rather than effectiveness. As educator/author Peter Drucker said, "There is a difference between doing things right and doing the right thing." And as Drucker's colleague Russell Ackoff added, "Doing things right is efficiency. Doing the right thing is effectiveness."

In schools, we've always put efficiency and "doing things right" first and foremost. If we're honest about it, we know that deep and powerful learning is not best served by the systems and structures that allow us to "deliver an education" as efficiently as possible.

Yet, we continue to operate under the theory that becoming "educated" requires kids to show up at a particular place to sit in a particular classroom with a particular teacher with other kids their same age who are from their neighborhoods to go through a particular curriculum at a particular pace and be assessed in the same way as everyone else in the room. That's what we do when we perceive access to knowledge, information, teachers and technologies as scarce, which was the reality when schools were first conceived hundreds of years ago. That's how we "do things right."



Today, however, the advent and explosion of the Internet has given us increasingly abundant access to knowledge, information, teachers and technologies via the smartphones and laptops that we carry with us in our handbags and pockets. If we have a connection and a need or a desire, we can now learn almost anything we want, when we want, wherever we are, with whomever we can find, in whatever way works best for us.

More and more, an "education" is what we create for ourselves rather than something someone else creates and delivers to us.

In other words today, effectiveness, not efficiency, is the driver of learning outside of the traditional school experience. In essence, access allows us to "do the right thing" when it comes to learning in our own lives.

And let us be clear: it is the modern learner's newfound capability to take full control of his

or her learning that is THE educational shift of our times.

Given that shift, teachers, parents, and anyone else connected to educating our children now have a choice. On one hand, we can see this shift as a threat to our efficiency model of schooling (which it is) and try to stave it off through half-measures and fancy new language that in the end change little. Or, on the other hand, we can embrace the opportunities (and challenges) of the modern learning world and work for the creation of a fundamentally different, more effective learning experience in schools for all of our children.

Obviously, we vote for the latter.

Ignoring Common Sense

If we do fight this shift, we are ignoring common sense. It's inarguable that striving for efficiency erodes effectiveness when it comes to learning in schools. We all know that the most effective learning doesn't happen when we take children and separate them by ability, isolate the subjects we teach them, give them little choice over the what and how of learning, try to motivate them with grades, make them sit in rows, and standardize the whole process via one-size fits all assessments. Were we to build a school dedicated to powerful learning, would any of us start with those practices?

We wouldn't.

Instead, we'd focus on creating classrooms that "do the right thing," places where students could act more like adults when it comes to learning powerfully and effectively. We adults know that good learning requires passion and interest, is built around relevance and purpose, isn't constrained by time limits and subjects, and is measured by our desire to want to learn more. That type of classroom would give preference to effectiveness over efficiency. That type of vision for learning in schools is built on common sense.



Peak Schooling

The shift from efficiency to effectiveness is a difficult one to make for existing schools. Age old narratives about education and the systems we employ are deeply rooted in our culture.

Regardless, a growing body of evidence suggests that traditional, efficiency-based systems of schooling have peaked in terms of their ability to serve our kids, and that continuing to focus on a more efficient approach (i.e. trying to "do the wrong thing righter") in a world of accelerating change is increasingly putting our childrens' futures at risk. For instance:

- Students report widespread disengagement at school, with only 32% saying they are "involved and enthusiastic" about school. (Gallup)
- A recent Stanford study of middle school through college students showed that most are "easily duped" by information that flows through social media channels, and that the authors were "taken aback" by students' lack of preparation. (Stanford)
- Only 35% of 5th-12th graders said they could "find many ways around problems" in a recent survey. (Gallup)

- Despite rising graduation rates, research shows fewer students are prepared for college or a career. (New York Times)
- Across the US, public school funds are being cut, and many states face huge teacher shortages. (<u>Learning Policy Institute</u>)
- Student debt is at critical levels, at a time when the college degree is no longer a ticket to the middle class. (<u>Boston Review</u>)
- The current generation of teenagers is anxious, depressed, over-stressed and fearful. (<u>Time</u>)
- For most Western countries, scores on global or national standardized test scores are flat or declining. (<u>Pisa</u>)
- Only a third of business owners agree that graduates are leaving education with the skills needed for their company. (Gallup)

That last is especially significant. Experts who study the world of work are growing more and more concerned that current systems of education are increasingly irrelevant when it comes to the preparation of students for what is a fast-changing and uncertain future of employment.

Already, trends show that a significant number of people, perhaps as many as 50% of the U.S. workforce, will be doing some sort of freelanced, short-term, contract work as opposed to holding traditional 9-5 jobs. And that may be because many believe that technology will make jobs obsolete at a frightening pace. One study by Oxford University suggests that 47% of jobs in the U.S. will be threatened by automation in the next 20 years.

Regardless what the future holds, there is little doubt success in the future will first and foremost depend on one's ability to learn, not on one's accumulation of knowledge. As author Harold Jarche says, "Learning is the work." With the half-life of information getting shorter and shorter, and with opportunities to network and learn from others continuing to expand, those in the workforce who are not constantly learning will be hard pressed to find success in the modern world.

In short, effective schools are those that focus on developing students as learners, whereas efficient schools still prize knowing over the ability to learn.



Raising the Bar for Change

No question, conversations around "change" in schools accelerated in 2016. But despite good intentions, we believe the bar for those change conversations is still too low. A fundamental re-imagination of the work of schools, classrooms, and teachers is now urgently required.

Current calls for "21st Century Skills" or "personalized," "flipped," "blended" learning are not grounded deeply enough in what we believe is the most important shift of all: creating cultures in schools where both adults and children are seen as learners who have deep agency and ownership over the learning that

they do. Too often, well-meaning initiatives like "Makerspaces" or "Genius Hour" or "Hours of Code" give the appearance of change but in reality do little to create and nurture community wide cultures of self-determined, continual learning. They don't fully challenge the efficiency model of education.



Right now, we need to rewrite the roles of the teacher, curriculum, assessments and more, not just revise them.

We need to rethink the power relationships we create in schools between students, teachers, administrators, and parents and understand how those relationships support or inhibit deep student learning. We need to build greater transparency into the work of students and teachers, helping them become fluent and literate in the ways of the globally networked world.

So, in 2017, we urgently need to raise the bar when thinking about "change" in education.

The modern world demands that we create the conditions in our classrooms and schools where students have freedom to pursue their questions, not ours, where they can create their own curriculum, and design their own paths to mastery. Classrooms where they act as apprentice learners who work with teachers who are master learners, first and foremost, not where they are seen as "empty vessels to be filled with knowledge."

Certainly, we must to be sure that they have the basic skills and knowledge they need to "succeed" in the world that is coming toward them. But more than that, we now need to focus on nurturing the curiosity and creativity that kids already bring to us, giving them opportunities to do work that matters to them for real audiences and purposes.

In short, we need to focus our work on what is clearly the most important skill of all for this moment: developing kids who are deep, powerful, curious, agile *learners* first and foremost.

For information on the course, click <u>here</u>.

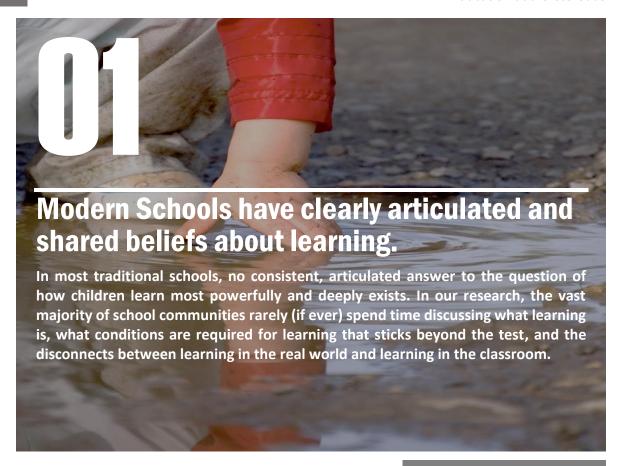
What Reimagination Looks Like

What might a higher bar for change look like? We believe that any conversations or actions around change should be guided by the "Ten Principles of Schools of Modern Learning."

These 10 principles are based upon the work that a growing number of schools and districts are already doing to transform (and we mean *transform*) student learning in schools. In every case, these principles apply to the work of entire school communities which include students, teachers, administrators, parents, support staff, and local residents.

The 10 Principles of Modern Schools

- 1. Have clearly articulated and shared beliefs about learning that are lived in every classroom.
- 2. Live a mission and a vision deeply informed by new contexts for learning.
- 3. Have cultures where personal, self-determined learning is at the center of student and teacher work.
- 4. See curriculum as something that is co-constructed to meet the needs and interests of the child.
- 5. Embrace and emphasize real-world application and presentation to real audiences as assessment for learning.
- See transparency and sharing as fundamental to a powerful learning environment.
- 7. Use technology first and foremost as an amplifier for learning, creating, making, connecting, communicating, collaborating, and problem solving.
- 8. Develop and communicate in powerful ways new stories of learning, teaching, and modern contexts for schooling.
- 9. Encourage community wide participation in the equitable, effective education of children.
- 10. Embrace and anticipate constant change and evolution.



In the modern world, being a self-directed and self-determined learner is the most important skill to develop. School communities without clearly articulated beliefs around learning create wild inconsistencies for students as they travel between classrooms and take part in extracurricular experiences. Without a collaboratively created belief system that is lived each day through classroom norms for learning and a common language, schools cannot develop each child to his or her potential as a learner.

Action Steps

Schools of Modern Learning create time for their communities to discuss and reflect on what they mean when they say "learning," and how to best make that happen for students and adults every day. These conversations occur through small group meetings, book study, sharing of curated information and research, and more. Beliefs and norms are transparent throughout school buildings, and are the basis for all decision making from budgets to technology to staffing and more.

KEY QUESTIONS

How do children and adults learn most powerfully and deeply in their lives?

How does that happen for students and teachers in this school?

How do our beliefs drive every decision we make in our school?

RESOURCES

Peel School District

And What Do You Mean By Learning?

The Surprising Truth About Learning in Schools



The lack of a clear, concise mission and a vision for how to achieve it adds to the inconsistency described in Principle 1. It's like a ship without a destination or a navigation system; it simply moves to wherever the waves or currents push it. Especially given the uncertainty of these times, school communities that are rudderless and aimless cannot fully prepare their children for the new, fast-changing realities of the modern world.

Action Steps

Mission and vision should be built on what the school community believes about how children and adults learn most powerfully, and on its understanding of how the world is changing and the new contexts for learning those changes are creating. Modern schools engage in ongoing reflection around their raison d'être, and classroom practice is constantly assessed by student progress toward the mission.

KEY QUESTIONS

Why do we exist as a school?

What is our central value in the lives of students and in our communities?

When they leave us, what will our students need to be able to do and what kind of people will they be?

What practices and conditions in classrooms, schools, and communities are required for your students to reach those outcomes?

How do we live our vision in our classrooms?

RESOURCES

Schools That Learn Building Schools 2.0

03

Modern Schools have cultures where personal, self-determined learning is at the center of student and teacher work.

True to traditional ways of thinking about education, most school cultures are much more oriented around teaching than learning. Teachers plan, organize, pace, and assess what happens in classrooms on a daily basis. The majority of teacher professional development is focused on becoming a better teacher (usually using technology) rather than developing as a learner (with or without technology.) Learners have little say in the learning process.

Why It's important

Predominantly teacher-oriented cultures minimize the amount of agency learners (children or adults) have to take charge of their own learning, a prerequisite for success in the modern world. Without giving students ample opportunities to pursue questions that matter to them and to explore their passions and talents, we minimize the potential for students to develop the skills, literacies, and dispositions of deep and powerful learners.

Action Steps

Schools must find opportunities to create a "community of learners" where students, teachers, parents, and others are engaged in self-determined learning that matters to them. The emphasis of the school experience must move from answers to questions that are situated in the passions and interests of the learner, not in the traditional curriculum. Teachers should be seen as learners first, content experts second.

KEY QUESTIONS

Is my school primarily a learning culture or a teaching culture?

What is more important, learning or knowing?

Are teachers seen as learners?

Are learners able to follow their passions?

RESOURCES

<u>From Master Teacher to</u> <u>Master Learner</u>

Manifesto 15

Creating Cultures of Thinking



In today's connected world, learning is not just self-determined but it is networked as well. We find others who share our interests, passions, and/or talents and create collaborative learning environments where each learner both consumes and contributes information and knowledge. As new information or resources become available, they are immediately vetted and added to the learning experience. We no longer rely on others to create the experience for us.

Action Steps

Schools of Modern Learning create opportunities for students (and teachers) to be designers of their own learning by pursuing their own outcomes. Included in that are questioning techniques, goal setting, the ability to vet content and people. Teachers see current curriculum as "strategy," a resource to be used at the time the learner needs it, not something to be taught "just in case" the learner may find it useful in the future.

KEY QUESTIONS

To what extent is the school experience standardized for all students?

How has curriculum evolved to meet the expectations of the modern world?

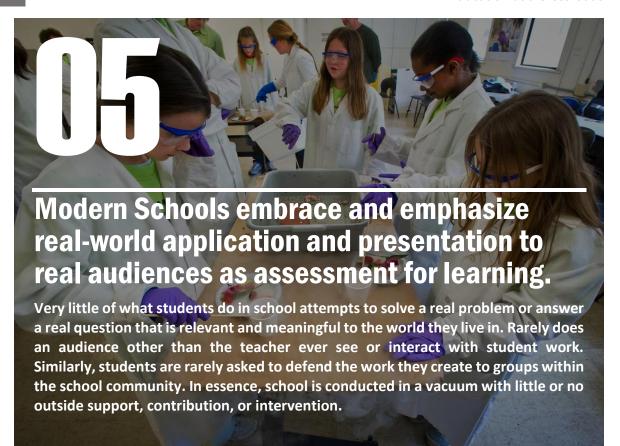
Now that we have ubiquitous access to the sum of human knowledge via the Web, how do we decide what we should teach? Who decides?

RESOURCES

Alliance for Self-Directed Education

<u>Freedom to Learn</u>

The Book of Learning and Forgetting



Traditional tests and grades as they are currently employed tell little if anything about what students can actually do with the course materials they are "learning." Similarly, national or state standardized assessments provide a snapshot of what a student knows but little in terms of that student's ability to apply that knowledge in a real world way. The skills that go into problem finding and solving, communication and presentation of ideas, and doing world-changing work are among the most sought after in the modern workforce.

Action Steps

Create opportunities for students to display and answer questions about their work for local or global audiences. This can be done using online technologies or face to face events with parents and/or other students. Encourage teachers to take part in their own real-world problem solving and share the results with colleagues and students. Give students more ownership over the process of learning.

KEY QUESTIONS

What real world problems or questions are students and teachers building their work around?

How does student work live in or change the world?

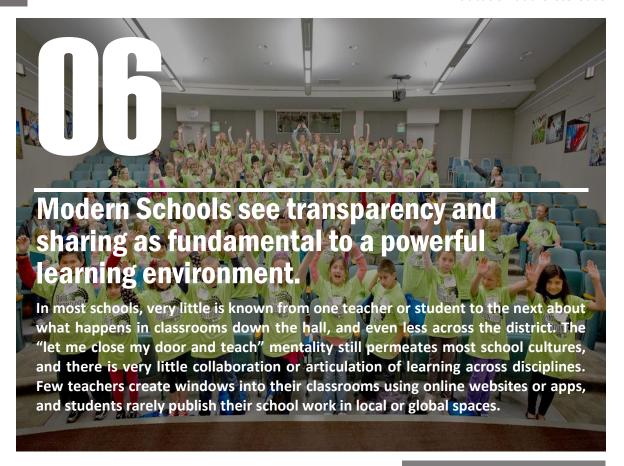
How do non-teacher audiences help play a role in student assessment of work?

RESOURCES

<u>Invent to Learn</u>

<u>Reinventing Project Based</u> <u>Learning</u>

Launch



One of the greatest affordances of the Web is the ability to learn from one another, but that can only happen when people share. Increasingly, there is an expectation from employers and others that students have built an online portfolio of work that shows creativity, curiosity, collaboration, and persistence. Work that is shared with a variety of audiences also deepens that learning process. In addition, online "reputation management" is now a necessary skill in order to navigate the Web successfully.

Action Steps

Think of having "thin-walled" classrooms where students and teachers interact with other learners from around the globe on regular basis. Encourage teachers to create classroom portfolios for student and teacher work that model the forms of online presence that can expand learning opportunities. Create learning spaces that facilitate transparency.

KEY QUESTIONS

How much do students and teachers learn from one another across classrooms and experiences?

What amount of student and teacher work is shared with the world?

What expectations are there around sharing work on a local and global stage?

RESOURCES

<u>ePortfolios for Learning</u> Connected Leadership



Modern Schools use technology as an amplifier for learning, creating, connecting, communicating, and problem solving.

Despite increased access to technology in most schools, transformative uses for student and teacher learning are exceedingly rare. Technology is primarily a teaching tool not a learning tool. Laptop, tablet, BYOD, and smartphone uses are usually highly restricted and unimaginative. While some schools are offering "Maker Spaces" and coding "courses," these and others are primarily half measures that are not supported by a school culture where technology is an essential for self-determined learning rather than an add on.

Why It's important

Technology is increasingly ubiquitous in the modern world, and Internet access continues to grow. In the modern, globally connected work and life environment, everyone is expected to have skills that allow them to both consume and create content for the Web and that show an ability to connect, collaborate, and problem solve. Similarly, a high degree of media, information, and technology literacy is a prerequisite for success in most fields of study and work.

Action Steps

Schools of Modern Learning focus on creating cultures of learning using technology. They see devices and Internet access as a way to amplify learning and to move agency over learning to the learner, to allow them to explore powerful ideas that are often at a level of complexity far beyond what we might previously have believed was possible.

To that end, schools must focus on the constructionist potentials of technology over the productivity potentials by emphasizing the creation of complex, beautiful, meaningful, original work by both students and teachers.

KEY QUESTIONS

How are students and teachers using technology to learn?

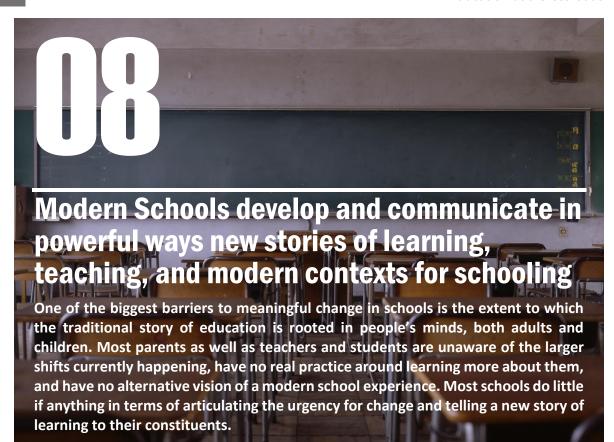
What are students and teachers doing with technology that they couldn't do without it?

To what extent are personal devices controlled by the user?

RESOURCES

<u>Mindstorms</u>

Whiplash



Traditional systems and structures worked when information, knowledge, teachers, and technologies were scarce. But the last 10 years have changed that reality, and now all of those things can be found in abundance online. Schools were not built for abundance, and they are not preparing their students for abundance in those terms.

In order for meaningful, sustainable change to occur, however, the entire school community must have a context for the why, what, and how of change. Their awareness of the impact of this changing context on their child's schooling should precede the necessary changes within the school.

Action Steps

Build communication channels via the Web (e.g. Facebook and Twitter), e-mail, newsletters and mobile (e.g. Snapchat and Instagram) to connect the school community to resources and stories that challenge the traditional narrative. Share examples of and the reasoning behind your modern mission and vision on a regular basis. Make understanding global and technological change a part of every classroom, and engage in ongoing discussions around the impacts.

KEY QUESTIONS

How is the school or district building the capacity of the community to understand the changes required for a modern education?

What is the narrative of learning in the school?

How does the entire school community engage in an ongoing conversation that develops a shared understanding of mission, learning, etc.?

RESOURCES

Most Likely to Succeed
CCSD59 on Vimeo



Schools cannot prepare students as citizens if they are not given real life opportunities to be citizens beforehand. Given the current climate regarding locally run education, it's even more important that schools are seen as an active partner in the larger community where everyone is invested in the outcomes.

Action Steps

Find ways to keep the lights on and invite community members in for learning after hours. Tap into local experts who can inform classroom practice and also help expand discussions about mission and vision. Invite parents into classrooms to volunteer, or to participate on advisory boards discussing any variety of decisions. Similarly, create opportunities for students to offer input on all aspects of school decision making.

KEY QUESTIONS

How are school community members engaged in decision making?

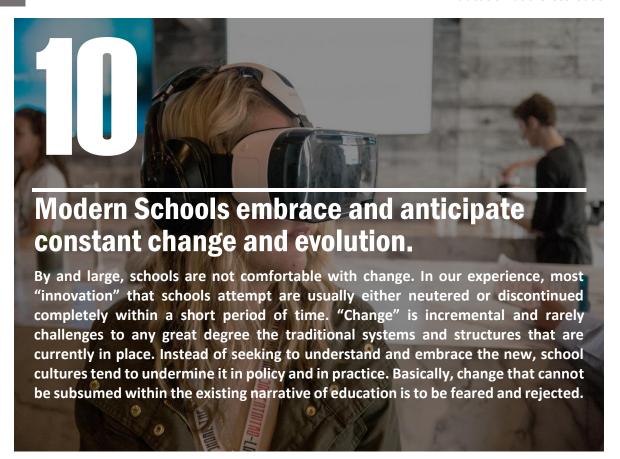
In what ways do parents play a role in classrooms?

How are school buildings used by the school community after school hours?

How is diversity nurtured and celebrated?

RESOURCES

Democratic Schooling



We now live in a moment of "perpetual beta" where very few traditional organizations or industries will survive by standing pat. This is already obvious in music, journalism, politics, and business where huge technological and cultural shifts have forced a rethinking of existing paths to success. Technological, environmental, and cultural change are speeding up, not slowing down, and schools that cannot adapt put both their students and their own existence at risk.

Action Steps

Expect students and teachers to do research and development ("R&D") in their classrooms on a regular basis. It should embedded within the culture of the school; not for the adoption of fads or trends for their own sake, but for the exploration and discovery of new ways of engaging modern learners with powerful ideas. Create a vision for classrooms where innovation and inquiry are at the core instead of at the edges. Make time for regular discussions on what changes are happening, and reflect on how to make new systems and practices in school more sustainable.

KEY QUESTIONS

How are teachers and students engaged in ongoing research and development about their work?

Is there a culture that supports innovation and trying new things?

What strategies are in place to stay abreast of change both inside and outside of education?

RESOURCES

Unboxed by High Tech High
American School of Bombay



Modern Learners 8-Week Course and Online Community

This spring, we're excited to offer both a course and a community dedicated to the high-bar changes that we think are necessary to best serve our kids in today's learning environment.

So how do you move a traditional school to a School of Modern Learning? Or, as we like to say, how do you get from "old to bold?"

No doubt, it's challenging, sometimes frustrating, learn-as-you-go-work. It's also among the most important work you can do. We're talking about kids' lives here.

So while we wish we had a "Recipe for Sustainable, Relevant, Modern School Change" that we could point you to, we can't. Like the "Recipe for Successful Modern Parenting," it unfortunately doesn't exist. There isn't one "right way" to change your school (or to parent your teenager.) Every change initiative is unique, built on the nuances of your students, your colleagues, and your community.

But instead of "THE" recipe, we do have the next best thing: a process to create your own.

For over a decade, we've been working with schools to learn about what it takes to go from

"old to bold," to identify the ingredients that allow them to create their own successful recipe for modern change. And now we want to help you do that as well.

Our 8-week in-depth course that will drill deeply into what you need to know to begin, implement, and sustain a long-term change process in your school or district.

And it's a global community of leaders that where we will build our collective capacity to take the Principles of Modern Schools from just a concept to reality.

Schools can't stand pat any longer. Traditional stories, structures, and systems are breaking. The time for reimagination is here.

If you're wondering what a real re-imagination entails, we invite you to visit our leadership course site at ModernLearners.com for more details.

About the Authors

Will Richardson



Will is an internationally recognized speaker and author on learning and technology with over 25 years of experience in schools. He holds a degree in journalism from Ohio University, and his articles and essays have appeared in numerous journals and magazines such as Ed Leadership, New York Times, Education Week, Edutopia and English Journal. He is the author of six books, most recently Freedom to Learn (Solution Tree Press, 2015) and he has blogged for 15 years at willrichardson.com.

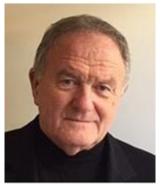
Over the last seven years he has presented in over 20 countries to hundreds of thousands of educators at every level around the opportunities and challenges for schools in an era of networked,

ubiquitous learning. Will has given three TedX Talks in New York, Melbourne, and Vancouver, and he was most recently named one of the top 100 global thought leaders and changemakers in education by the Finnish group hundrED. With Bruce, he is the co-founder of ModernLearners.com.

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Bruce Dixon



Bruce works as a strategic advisor in the development of programs that assist governments, policymakers, and school leaders to make more effective use of technology across education. His insights have enabled education leaders around the world to better manage large-scale, 1:1 personal technology deployments, ensuring outcomes that drive both school improvement and ultimately systemic transformation.

Bruce is co-founder of the Anytime Anywhere Learning Foundation and has run workshops and strategic briefings in more than forty countries. As one of the developers of the original 21 Steps to 21st Century Learning program, he is recognized as a pioneer and world leader in

scaling change management in schools, receiving commendations from the Smithsonian and the National School Boards Association and has keynoted for UNESCO, the OECD, and many international conferences.

Bruce and has authored and coauthored several commissioned whitepapers, including Right to Learn: Identifying Precedents for Sustainable Change and A Policy Agenda for a 21st-Century Education. He is the author of three books, most recently #AnytimeAnywhereLearners: A Blueprint for Transforming Where, When, and How Young People Learn. With Will, he is the co-founder of ModernLearners.com.

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