

CHAPTER 1

Numbers Don't Lie

*You never change things by fighting the existing reality.
To change something, build a new model that makes the existing model
obsolete.*

—R. Buckminster Fuller

Did you know that 70 percent of teachers have mentally checked out of teaching? How is that possible? These are not bad people. They all started out inspired, hopeful, courageous, and even playful. Some of our best novels and films—such as *Dangerous Minds*, *Stand and Deliver*, *Lean on Me*, *Up the Down Staircase*, and *Goodbye, Mr. Chips*—have featured these noble, exciting, and often daring figures.

But after a while, the Education Machine just rolled over too many teachers, mashing the life juices right out of their pores.

I'll tell you something else—by the time they graduate 60 percent of students will have also flown the coop. This is not some abstract number: these are the kids on your block, next door, and maybe in your upstairs bedrooms.

We all know that we live in perilous times. But, more than that, we live in the crumbling ruins of obsolete forms. An age is passing away (as ages always do). Don Berwick famously said, “Every system is perfectly designed to get the results it gets.” The prevalent model of public education does what it was designed to do. And in a previous era,

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For that reason, the Education Machine is in genuine and panoramic crisis; it is in personal, social, economic, and national turmoil. Numbers don't lie. But that crisis is because of its obsolescence, not its malice.

Here are a few other features of its rot.

- The Education Machine does not have the capacity to care. And learning requires people who care.
- The Machine's continual cry of "reform" results in kicking the can down the road for future administrators and teachers to solve. This response only makes matters worse and costs a hell of a lot of money.
- We can't wait. We cannot let the Education Machine move another kid down its aged and rusty assembly line until they are broken or left behind. *Now* is already late.

So, how did we end up with an education system that has not only failed in its mission but has also inflicted so much psychological, emotional, and intellectual damage on so many people that it touches? But, far more important, what can we do about it now?

Now, let's pause and consider some other realities that our work on this book revealed:

- Yes, education has become a Machine. But schools, administrators, and teachers can create a kid-centered, human-enriching, and high-achieving learning experience.
- It takes stepping into only one classroom of engaged kids to see the difference between the Machine and the deeply human experience of learning.
- The challenge of education sounds formidable. But it can be brought down to a human scale and transformed through people who care.

Cynicism says we can't change what must be changed. That is not true; we *can* do something about it. This is not an impossible task. That is what this book is about. When you finish reading, you will know the time and money invested in this book was well worth the price. We can change the way we teach and train our younger members. Do not forget that.

I know what I'm talking about. Over the past two years, my associates and I have traveled thousands of miles and talked to hundreds of students, teachers, administrators, parents, suppliers, authors, and community leaders. We heard their stories of life in

the Education Machine. Their time in education was, for too many, a soul-sucking, time-wasting, and stress-producing waste of effort. Not only that, it was a brutally demotivating and damaging experience.

But we also saw transformation. One of the most surprising features of our work was the discovery of fully absorbed, completely riveted students located clear across the K-12 spectrum; we met them in great cities and in small towns, in both "underserved" and resource-rich districts, and scattered across all the data points.

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To Humanize the Education Machine

Most people know that the earth's surface is composed of tectonic plates—"a dozen or so big crustal slabs that float on a sea of melted rock. . . . The colliding plates grind past one another about as fast as fingernails grow. . . ." ¹ As the plates grow, they break off, creating convulsions of new geologic features. Despite its deadly earthquakes and tsunamis, that process, that revolution, is quite natural and essential to the continuation of life on planet earth.

But isn't it also true that the ideas, values, and structures that form civilizations are in perpetual, grinding revolution? That's how they exchange old and dying forms for new life. The life cycles of the planet exist in continuous, and sometimes quite literal, uprisings. The convulsions of history continually heave old forms over the side, where they slip into oblivion. Of course, individuals, groups, and nations work very hard to find ways to take credit for the upheavals.

This book is a manifesto for a secret, but emerging, revolution.

That revolution is challenging public education's grip over the future and well-being of our kids. We all see the relatively small, but very visible, part of that conflict among policy makers, educators, unions, parents, politicians, and a voracious educational industrial complex. They are all pounding their fists, demanding change, pointing fingers,

expanding control, pleading for more funding, and continually changing the rules with no measurable improvement. That war has raged for the past 60 years. Most have fought with good intent; many were and are mercenaries; and some have tried to leverage the dysfunction to gain more power and profit. It doesn't matter; they are all caught in a conflict of irrelevance. It is all part of an era that is passing away.

Today, we all stand before a window of opportunity that recalls Apple's "1984" Super Bowl Ad. That landmark "manifesto" proclaimed the end of Big Brother computing and the dawn of a human-centered experience. As it was then, our highly centralized industrial education system is increasingly arthritic and exhausted. Worse, its death grip is killing creativity—in our kids and in our nation. The mission of this book is to spread hope and methods to parents, educators, administrators, and communities so they may become full partners in the human-centered learning revolution.

Everyone knows the current system is failing to graduate students who are prepared for the demands of the twenty-first century. The United States ranks last among industrialized nations for college graduation levels. Other countries with similar education models are experiencing the same fall out in student engagement and performance. Germany, England, China, Singapore, South Korea, France, Australia, Canada, Japan, and other countries are stepping back and asking the same questions we asked about the effects of their education machines.

Today's oracles, such as Sir Ken Robinson, Tony Wagner, Douglas Thomas, John Seely Brown, and others are painting vividly clear pictures of a harsh system that is killing creativity at the very time in history that most demands creativity and innovation! They are *the* most important survival skills in a postindustrial world.

The book explains how the "Gutenberg to Google" revolution has generated a perfect storm of discontent, dysfunction, and disengagement in our traditional system of education.

While the policy debates and shifting priorities continue to keep schools off-balance and parents in the dark we have a crisis that won't wait.

This book announces that we stand at a true "Oh, my God" moment in history. The numbers tell a story that can no longer be ignored. In addition to the disengagement numbers already cited, half of all students

are considered “at risk.” More than 25 percent of students live in poverty. 1.36 million students are homeless. None of this is a secret. Yet the system cannot or will not budge.

That’s why we need a manifesto, not another proposal. After 60 years of studies, we don’t have time for

more research, reform measures, or debate. The revolution has already started. It is *now* overthrowing an obsolete industrial regime, structure, and set of values. That insurgency will reclaim learning as a fundamentally human experience. Gutenberg enabled the first learning revolution more than 500 years ago. Google now symbolizes the new one. Digital technology is disrupting traditional power centers by distributing knowledge to anyone who chooses to join this historical opportunity.

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This Book: A Road Map

Before tsunamis bring death and destruction to coastlines, wild and domestic animals sense the coming devastation and escape to higher ground.

Maybe people are catching up. Today’s early warning systems are enabling human populations to flee destruction from natural forces. Our purpose for the book is not to build a case for change. That change is *here*; perceptive people plainly see it. At this point of history, a road map to the high ground would be of more benefit to the students, parents, communities, educators, and others who face destruction.

That is why this book is different from any other. Knowing that this subject carries great urgency and demands great scope and depth, we assembled about 60 career educators, a wide variety of specialists, NFP organizations, and business and community leaders who have been successfully working to rehumanize learning (see Figure 1.1). Many of these contributors have been in the trenches of education for decades.

We convened six summits, between June 2014 and January 2016, around the country in order to study very innovative schools that achieved and maintained excellence (often against great odds). Many books document the failures of our public education system. Others provide a vision for twenty-first-century schools. But there are no road



Figure 1.1 Columbus, Indiana, MindShift Meeting

maps for transforming and rehumanizing local schools or districts. Our book gives a very compelling *why* and, more important, clear maps for the new and uncharted territory.

Who Should Read This Book?

In researching and writing this book, our team focus was always on parents, teachers, administrators, and community leaders. This book is for them. It is for those who do not have the time or resources to sift through the many books or conferences or websites in order to gather the knowledge essential to taking action. We wrote this for those who are not willing to wait for local, regional, or national regulations to trickle down or be parachuted in.

That is also why we wrote a manifesto and not a typical market-driven volume. The tsunami is racing toward our shoreline. We are announcing a road to higher ground. In short, we want to save lives and join with others in building a safe future.

How One Family Escaped the Great Machine

It may help you to know the short story of one family who lived through the crumbling of the K–12 system and saw the seeding of new possibilities. That family is mine.

Back in the 1990s we moved to one of the best school districts in the state, not because we were snobs, but because we cared. We wanted our three kids to have fine educational experiences, rolling right through K–12. All three of them are, well, exceptional. By that I mean that they are true individuals. Everyone who knows them would agree. They did not come from an assembly line or central casting. Lisa and I did not know it at the time, but in looking back, we can see that our kids were like canaries in the coal mines. Their experiences (and those of thousands of other students) exposed the toxins in K–12 education.

And, I admit that our three children carried some surprising baggage.

Part of what makes Emily, our 24-year-old bold and beautiful daughter, so exceptional is Asperger syndrome. Her challenges have always caused this lovely and brilliant woman to express very unique social skills, perspectives, and boundaries.

I describe our second child, Daniel, as “a merry prankster.” He, the opposite of Emily when it came to social skills and boundaries, did extremely well in elementary school. But later he began to exhibit some discomfort with school rules and expectations. He was eventually diagnosed with ADHD.

Right out of the chute, our third child, Caleb, loved school. But very quickly (and for a whole different set of reasons) he, too, began disengaging in middle school. He started coming home and giving Lisa a hard time.

With all three of our children, we increasingly realized that we were not dealing with an organization of rational, knowledgeable, and empathetic teachers and administrators; we were coping with a machine. For a while, we tried to work with the Machine. We tried to change its speed, update its “software,” find a sense of compassion somewhere within its steel-toothed gears, help our kids to adapt to the

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Machine, help the Machine to adapt to them . . . but in the long run, there we were, caught between our love for our children and our ingrained respect for the education process.

In all three cases the Machine just kept moving our, and many other, students down the conveyor belt, delaying decisions, ordering tests, and pushing them into ill-fitting boxes. No one seemed to *care*. For example, none of Emily's teachers had training for working with students with Asperger's, or even had a working knowledge of the syndrome. Some of them did not believe she had it. After all, she had an outgoing personality and "looked normal."

One of Daniel's teachers did not believe in ADHD. As that teacher chewed gum and gazed out at us from his "bunker" (beneath his U.S. Marines buzz cut and over his folded arms), you could see that he had already diagnosed Daniel. He could see clearly that Daniel was a skateboarder and he knew *that* was "trouble in River City." In fact, he once said (while Daniel was in the room), "Kids who skateboard are always trouble."

It Takes a Village

According to an oft-quoted African proverb "It takes a village to raise a child." In other words, all the people, values, institutions, and other cultural components of a village should cooperate harmoniously around the nurture, protection, and preparation of each child.

But what happens when the village does *not* contribute to the safe and orderly maturation of a child? The 2015 "Best Picture" Academy Award went to *Spotlight*, a movie about the sex abuse scandal in the Roman Catholic Archdiocese of Boston. After quoting "It takes a village to raise a child," one of the main characters in the film observes that it also takes a village to *abuse* one.

I agree.

After the Machine damaged Emily, Lisa and I felt wounded, angry, and drained. Naturally, we wondered at what point we had missed an

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opportunity to support our child. We strained to see what we might have done differently. I thought, "Hell, if my background as an executive, my work as an author and futurist, my understanding of negotiating and

championing causes can't budge the Machine for one little girl with a clear need and a clear right—does *anyone* have a chance?"

In addition to all that, we hired doctors and experts to help them. In doing so, we reached out to “the village” as clearly and forcefully as we could. We pushed every button and pulled every lever we could find. I'm sure we made mistakes. But, here's the point: two educated, responsible, caring, and hard-working parents could not make the Machine care for, or even protect, those who were entrusted to it. We felt, whether accurately or not, that the village—*our village*—had participated in the abuse of our kids.

When Caleb began to show similar reactions to the Machine, we moved more quickly and boldly. First, I gave him the new Gallup student assessment tool, “Strengths Explorer” (it was not available when Emily and Daniel were in school). It revealed that Caleb would do best in a small, safe learning environment that allowed him to explore his creativity. From our experiences with Emily and Daniel, we knew that would never happen in public school.

One day, Lisa called me while I was on a business trip. “Let's homeschool Caleb.”

Of course, I was already very busy in my career. So I began expressing my reservations. But within 10 minutes I changed from feeling defensive about to being skeptical of to expressing full support of the idea. Lisa showed me how home schooling was not only the perfect fit for Caleb but it would also draw upon both our unique gifts and interests.

When we asked Caleb to pick a musical instrument as part of his education, he started playing around on our 15-year-old keyboard. With initial instruction from Lisa, he soon fell in love with music, films, and film score composition.

Over time, Lisa and I watched Caleb step into what author Dan Pink describes as the three elements of total motivation: autonomy, purpose, and mastery. In short, we saw the astounding difference in his experience and engagement level compared to Emily and Daniel. When we moved into the more advanced course work in high school, the Internet became a third teacher in our house. It all worked.

Engaging in education that supported autonomy, purpose, and mastery gave Caleb—and his parents!—a whole new grip on learning. After completing his K–12 education in full engagement mode, he was recently accepted to the Berklee College of Music in Boston.

Furthermore, Emily and Daniel are also doing well. At last, the Miller family escaped the great machine.

What grips me now as I review our experiences is the realization that Lisa and I were mature, resourceful, serious about our children, and determined to do and get the right things for them. *And we could not do it.*

That is because “it takes a village.” Let me explain.

The Machine broke Daniel during his senior year. Ironically he also achieved his Eagle Scout Award the same year. The same as with his schooling, we struggled long and hard with his focus and follow-through in Boy Scouts. Every mile and every moment of his journey was hard. And in the end it was high drama: Daniel completed his final requirement and was qualified as an Eagle Scout only three hours before his eighteenth birthday—the deadline! Kevin Christ, Daniel’s Scout leader, was in our kitchen quizzing him while I paced like an expectant father in the living room. Then they emerged from the kitchen smiling and the leader extended his hand to me.

“Congratulations, Mr. Miller, your son is an Eagle Scout!”

He shook his head, sipped coffee, and laughed, “I’ve never had one get down to the wire like this. But I’ve never lost a boy who told me he

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—Geoffrey Canada

wanted to become an Eagle.” I was exhausted and grateful. And, like most fathers, I played no part in the delivery.

So, what was the difference? Education had become a soul-crushing Machine, but the Boy Scouts was

like a family. Daniel’s troop was a community of caring parents and Scout leaders; we were all in it together. I was part of this community; I camped, hiked, and provided merit badge counseling and mentoring to a number of kids. We were a village. We took every child seriously and personally.

Today, I so often think about those who live in “underserved” communities. What hope do they have? How can they conquer the Machine? No wonder that educator Geoffrey Canada says (of his own K–12 path), “Schools that were failing 56 years ago are still failing. Our business model makes no sense. And we have run out of time!” Underserved communities now represent, not years or even decades, but *generations* of K–12 failure and abuse.

No matter who you are or where you live, this thing is personal. This story is about every city, community, parent, student, teacher, administrator, and citizen.

After two years of research and work with more than 60 educators and others with a stake in seeing our schools work and our kids succeed, I and many others are convinced that it just doesn't have to be this way.

But—and this is very important—the solutions will not come from the usual sources. We cannot wait for reform efforts to make any difference. Reform has been the Machine's solution for change since at least 1955—that's right, more than 60 years! But reform is often just a reshuffling of the special interests that feed at the "education cafeteria." Furthermore, reform creates sandcastles and mirages. Sandcastles don't survive the first wave that crashes on the beach and mirages aren't real.

Our work on this book verified that *education* is often a cold, organized, and dehumanizing mass of rules, concepts, and metrics. But, as you will also see throughout this book, *learning* is a profoundly human, organic, and ennobling pursuit of personal dreams and progress.

The Collaborative Hum

Our collection of 60 educators, scholars, designers, futurists, and other specialists saw Education Machines all across the country that had been humbled and humanized. What these efforts produced were not sandcastle or mirages, but oases in otherwise arid wastelands. We've seen thousands of kids as engaged in these schools as Caleb was in our home, empowered by autonomy, purpose, and mastery.

We digested more than 100 books and more than 400 articles, reports, and white papers. We watched countless TED-Ed videos and sat through often-boring White House Education Summit videos that ran eight hours straight with no editing. We attended a variety of conferences. We had pizza night during our San Diego summit in the Junior Achievement Business Park (for kids) and watched the movie *Most Likely to Succeed*.

We saw what *engaged student learning* can look like for kids at a troubled middle school in Florida.

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We visited classes in a South Texas elementary school that had been reconstituted and again witnessed high engagement. How can a school ranked at the bottom 2 percent in Texas so dramatically shift its culture from custodial to one of high engagement—of both teachers and students?

David Vroonland, Superintendent for the Mesquite (Texas) ISD, described what we saw and would continue to see as “the collaborative hum.” This is how he describes the vibrating atmosphere of discovery, laughter, honest questions, staccato beeps and clicks of tech tools, and choruses of “wow,” “cool,” and “awesome!”

I think this also describes the journey that begins with the next chapter. Come join us. The K–12 MindShift project has invested leadership, research, and resources in imagining new models for a new era in educating our children. We are genuinely passionate about demonstrating what we have learned to those who are caught in whirlpool of diminishing returns on education. We will explain how to lead change at a local level as a parent, administrator, teacher, business leader, and community leader.

The stories we tell are gripping and authentic. Portraying real people caught in real crises, they could give you glimpses of what could work in your neighborhood and school.

Let’s get started. Chapter 2 tells the story of how we first heard the clear and compelling call to go around the Education Machine and begin the work of building new models.