



breaking free

from myths about
teaching and learning

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Introduction

This book is my response to the pervasive weariness I have observed during numerous classroom observations, staff development workshops, and leadership meetings. Despite intentions to ensure that all learners can be successful, educators seem to be working harder than ever but accomplishing less, while students seem to be more disengaged than ever but longing for more. In the effort to improve student achievement, we have pushed the existing system of schools into hyperdrive, asking students and staff to work at a speed that negatively affects learning in the long run. Limitations on what is possible in schools are generated and perpetuated by the very people who suffer because of them. The more certain we are that schools cannot change, the more awful the situation becomes for everyone.

This book is a call to action for teachers, departments, school staff, educational leaders, community activists, school board members, and students. The premise of this book is that school is not working—not for students, who are more bored and disengaged; not for teachers or administrators, who are worn down from serving more purposes; not for college professors, who need to do more remediation with incoming students; and not for employers, who are more deeply concerned about the quality of prospective applicants than ever before.

For schools to work better, we need to break free from myths about teaching and learning and find ways to “hardwire” schools to develop the natural intelligence of our learners. This conversation cannot be layered on top of the pile of existing implementation efforts to improve

student achievement. It requires the courage, tenacity, and certitude that our schools can become true learning organizations. We need to stop rushing to action, stop killing new ideas, and stop resigning ourselves to doing the best we can with the system we have. It is time to focus on the problems of 21st century life that we have been too busy to acknowledge and find power in the opportunity to redefine the work of our schools. The mission of a 21st century learning organization is to engage all learners in the acquisition of key knowledge and skills and the development of connections so that they can pursue powerful questions, tackle complex problems, collaborate with diverse people, imagine new possibilities, and communicate their ideas.

As you read this book, be patient with me (and with yourselves), because there are no quick-fix solutions or fail-proof strategies. There is also no sweeping condemnation of schools, educators, children, or society. Fads, flying accusations, and rush to action have gotten us nowhere. In fact, much of the push for developing 21st century skills is eerily similar to earlier attempts to reform education. The novelty of this book lies in a multifaceted exploration of the problem. While some facets are likely to be more familiar (and perhaps more intriguing) than others, I encourage you to consider the possibility that new connections and fresh thinking lie in the creative recombination of the knowledge already in your head. The “next big thing” could be the idea that schools must finally become the learning organizations that we entrust with nourishing the hearts and minds of our students and ourselves.

Chapter 1 explores the disconnect of students from their schooling as demonstrated by their minimum-compliance attitudes, disengagement, and lack of motivation. At young ages, students construct generalizations about what school requires of them as learners; simply put, these generalizations are wrong. In their efforts to do well in school, students have largely become low-level bureaucrats who complete the requisite paperwork but suffer from the monotony of the experience. While the myths explored in Chapter 1 may reflect flawed conceptions of learning, they are understandable coping mechanisms given the design of curriculum, assessment, and instruction. Not only do these realities dampen the enjoyment of learning, but they also harm students’ abilities to become wiser and more skillful, to persevere in the

face of challenges, and to apply their learning to new problems and contexts. These concerns about the performance of our students also pertain to our performance as educators, making it difficult to get teachers to believe in the sincerity or potential of any improvement effort.

Spinning off of the long-standing concern about the disconnect between the learner and the school, Chapter 2 explores two problems that have evolved over the years. First, the demands on 21st century workers and citizens constitute a shift in the way students are expected to think, work, and interact with others in the real world, yet the instructional core in many classrooms remains teacher-directed and highly routinized. Second, the way time is organized in and out of school, leading to a never-ending list of assignments and tasks for students to accomplish, inhibits deep learning. Accordingly, the defining documents, practices, and assessments at the heart of many school structures benefit neither the performance of our children during their time in school nor their success after graduation day.

Chapter 3 shifts the focus from the limitations of our current reality toward what could be: a 21st century schoolhouse that is truly a learning organization. Through the development of mission and vision statements, we can create a new image of what learning goals we aspire to achieve and what practices, policies, and structures will make that work most meaningful for our learners. This section includes exemplars developed by informal and formal school leadership teams to illustrate possibilities and inspire your work.

Chapter 4 explores how to measure and motivate student achievement through the design of authentic tasks. When students are invited to apply their prior knowledge and personal interests to solve relevant problems and communicate their thinking, they can experience real enjoyment. Creativity is an essential component of task design in a 21st century school. While marginalized and misunderstood by many, creativity is fundamental to modern life, as it requires both deep knowledge and playful use of that knowledge to create new connections, products, solution paths, and forms of expression.

Chapter 5 delves into the science of learning to better understand the impact of our structures, practices, and policies on the learner. Through the development and establishment of learning principles,

educators can transform their daily practices to better align with how the brain works and, consequently, how learners learn. Research also proves helpful as we discuss four common practices that *don't* work: relying on extrinsic motivators, praising students' intelligence, tolerating disengagement, and lowering expectations. The intent of this discussion is to engender greater engagement and purpose in our students and ourselves.

Chapter 6 revisits the myths delineated in Chapter 1 and provides concrete suggestions to enable new realities to emerge. These ideas are intended to open up the reader's thinking about both small-scale and sweeping reforms, thus beginning to change the relationship between the learner and the learning organization so that it becomes a more natural, energizing experience for all.

What Does This Text Require of the Writer and the Reader?

This book is an act of combinatory play for both writer and reader. It is the pursuit of cutting-edge ideas and eternal wisdom, the commitment to improve schools for our students and ourselves, and the passion for creativity and deep knowledge. The list of references cited is certainly eclectic; one area of exploration led to another in a way that broke the boundaries of traditional education literature. Experts in business, dance, creativity, neuroscience, meditation, psychology, and innovative design add dimension to conversations about the development of ideas and the substance of learning.

This book is also an act of courage for both writer and reader. It requires the suspension of what you may know for certain, the broad-mindedness to explore areas that may be beyond your current expertise, and the search for connectivity among areas that previously felt unrelated. As a consultant, I have the privilege to work with educators in very different systems, with unique challenges, diverse student populations, and limited resources. Despite the commitment to do what's best for students, it is increasingly apparent that there is a crisis of confidence and imagination among educators. They often describe

what is impossible with such detail, passion, and certainty that there is little space for new ideas to breathe. They rapidly draw upon extensive expertise and past practices in their memory banks to justify, explain, and deny reality. To begin to break the “certainty habit,” I have integrated reflection questions and quotations throughout the text to slow down your thinking, for the reality we think we see in schools is both triggered by and confirmed by our thinking. The brief texts, quotations, and questions in italics are intended to forestall action or judgment. Try it now as you consider the following three statements from three very different authorities on the nature of thought.

We see only what we know.

Goethe

I can live with doubt and uncertainty and not knowing. I have approximate answers and possible beliefs and different degrees of certainty about different things. . . . It doesn't frighten me.

Nobel laureate Richard Feynman

Our minds have their own agendas. We can intervene through greater understanding of what we can and cannot control, by knowing where potential deceptions lurk, and by a willingness to accept that our knowledge of the world around us is limited by fundamental conflicts in how our minds work. . . . Certainty is not biologically possible. We must learn (and teach our children) to tolerate the unpleasantness of uncertainty.

Neurologist Richard Burton (2008, p. 223)

I am regularly baffled by the certainty with which educators tell me what can and can't be done, what the system permits and disallows, and what students are capable of and have no shot at becoming. So many educators are resigned about what schooling has to be because they cannot see it for what it is: a set of habits that feel permanent but do not have permanence. We were not predestined for a system of Carnegie units, standardized tests, and grade-level expectations. For just a little while, turn your back on your certainty and instead make space for the possibility that there must be a better way to “do” school, a way that requires—but also creates—tremendous energy.

The reflection questions in each chapter are intended to open up thinking about unexamined habits, assumptions, and practices within the school that inhibit learning. Ideally, these questions will become fodder for dialogue, insight, and new practice. They can be thought through in structured venues, such as professional learning community meetings, or in less controlled environments, such as teaching blogs or personal journals. Spend a few minutes playing with one or more of the following questions. Try not to push yourself to come up with an answer, but rather observe the train of feelings and thoughts that cross your mind.

Reflection Questions:

What do students think about during the school day because of how we design learning?

How do those thoughts help students grow? How do they limit students?

How much has the work in your school changed in the past two decades? Have those changes led to increased engagement?

What is the most innovative idea that has improved the thinking (and the resulting work) of staff? Of students?

What current practices are off limits in reimagining the work of the school?

If a reflection question unsettles you or others with whom you are sharing this reading experience, it may be better to acknowledge the discomfort than to aggressively pursue it in that moment. I have found while writing this book that there are times where it is either excruciating or unproductive to engage with certain questions. But I have also learned to come back to those questions periodically to see if something has changed or something new has occurred to me that opens up space for inquiry to begin. The only wrong way to treat these questions, or this text for that matter, is as an intellectual exercise tangential to the “real work” of schools. The quality of the reader’s thinking throughout this

experience affects the depth of the connections to one's own learning organization.

I believe in the following ideas:

- Learning is a joyful experience when it commands our attention.
- Schools can transform into learning organizations the moment that you decide there must be a better way, and then pursue it.
- What we think defines the quality of our experience.
- Exploring unfamiliar territories creates the uncertainty and discomfort needed to begin to think anew.
- The power of educators to affect the lives of children is breathtaking.

I wish you the best of luck on this journey; I am on it with you. I have struggled for over two years to find words to express what I have always known to be true.

I'll see you in the Afterword.