



Thinking Big and Thinking Small

What College and Career Readiness Demands

“The increased focus on college and career readiness, combined with the complexity of the challenges associated with the topic, have led to a rapidly expanding college and career readiness community, rich with resources yet replete with confusion.”

- National High School Centerⁱ

“The real issue is whether a decision of this nature should be left solely or primarily to the students in the first place and whether the adults really know enough about student potential and capabilities to make such choices.”

- David Conleyⁱⁱ

A decade ago, few people mentioned College and Career Readiness; today, it pops up everywhere. It is, dare I say, an educational buzzword. Buzzwords tend to live in a dangerous space that invites one of two extreme reactions from educators – uncritical allegiance or unwarranted cynicism. Unfortunately, both reactions diminish the meaning and significance of the idea.

College and career readiness has a very specific meaning in the New Tech Network (NTN). What NTN means when we say college and career readiness is that every graduate of a New Tech school leaves *aware, eligible* and *prepared* to pursue post-secondary education or training. However, whether or not the goal of college and career readiness for all students is *meaningful* flows from the way we set about the work of achieving that goal, not its definition.

As part of the New Tech Network, you will have many opportunities to learn about all of the details around college and career readiness and how the New Tech model aligns with that end. However, the goal of this article is not to detail the research behind the idea or authoritatively define it. My aim is to articulate some foundational ideas that inform how we (the New Tech Network) go about the work. My focus is on what it will take to achieve college and career readiness for each of our students.

Before we can get to that, we need to acknowledge two things about the goal of college and career readiness for all.

First, *it is an audacious goal*. The American high school was not originally designed to educate all students to this level. Furthermore, the goal of college and career readiness for every student has never been accomplished before. At this moment, it is an aspirational goal more than an operational one. Before too much pessimism creeps in, remember that we pursue big goals because they are worthy of our best energy and attention, not because we already know how to achieve them.

Second, *it is achievable*. While accomplishing it will require an ongoing effort to re-imagine teaching and learning, it is important to remember that high school graduation, college entrance, and college persistence rates for New Tech schools outpace national averages by a significant margin.ⁱⁱⁱ We (the entire Network, including you) already know an immense amount about how to engage students and create schools where deeper learning occurs. College and career readiness for every student in the New Tech Network is within our collective reach.

That does not mean it will be easy. Achieving college and career readiness for all students will require more from us than updating the mission statement on a website. It will require more than simply implementing a program someone else has devised. Whether or not we achieve the goal of college and career readiness for all is driven as much by our (the adults) capacity to learn as it is by the capacities of our students. Therefore, we will have to get serious about learning, organizing all of our work around it. To this end there are three things you must do.

- Adopt a Growth Mindset
- Engage in Adaptive Leadership
- Become a Learning Organization

Growth Mindset

How many of you have ever thought something like the following about a student?

- José is smart enough; he just needs to learn how to study...
- If Jane would just do her homework...
- If Antoine would just pay attention and take notes in class...

One of our main strategies in schools for helping struggling students is to try and get them to behave like kids who are already successful in school. If we could just get them to sit quietly, pay attention, take notes, raise their hand when they have a question, do their homework, study for tests, etc., we are sure they could do just as well as their already successful classmates. So we set about trying to teach all of the skills associated with organizing a binder, taking notes, studying for tests and so on. However, recent and compelling psychological research calls this strategy into question. “Study skills and learning skills are inert until powered by an active ingredient...If you target that belief, you can see more benefit than you have any reason to hope for.”^{iv}

What is that belief? Enter Carol Dweck and mindset. Her research demonstrates that the biggest determinant of our capacity for learning and growth may be our own mindset. Dweck asserts that there are two basic mindsets – the fixed mindset and the growth mindset.

The fixed mindset is one that virtually all of us have encountered at some point. The basic belief that animates the fixed mindset is that our abilities are fixed - either you are or you are not. Either you are good at music or you aren't. Either you are good at math or you aren't. Either you are smart or you aren't. And if José believes he is not smart, there is really no point in studying anyway. A fixed mindset is the province of innate talent and limited potential. Thus, the fixed mindset limits learning and growth because it prompts us to avoid any sort of challenge that might reveal our own perceived lack of ability.

Alternatively, the “growth mindset is the basic belief that your basic qualities are things you can cultivate through your efforts.”^v Music or math or intelligence are not things at which you are simply good or bad – they are all things where one's capacity can develop substantially through intentional effort, study and practice. The growth mindset makes you crave challenge and see failure as an opportunity for new learning and growth. However, whether or not one invests the effort is dictated by belief, not skill.

The most dramatic proof comes from a...study by Dweck and Lisa Sorich Blackwell of low-achieving seventh graders. All students participated in sessions on study skills, the brain and the like; in addition, one group attended a neutral session on memory while the other learned that intelligence, like a muscle, grows stronger through exercise. Training students to adopt a growth mind-set about intelligence had a catalytic effect on motivation and math grades; students in the control group showed no improvement despite all the other interventions.^{vi}

In short, Dweck's research has a particularly inspiring lesson for us as educators who are working to take the challenge of college and career readiness seriously – *human capacity is more malleable than we ever dared dream*. The research on growth mindset also comes with a cautionary tale – *our potential, individually and collectively, is alarmingly easy to undermine*. It takes no coordinated effort. It takes no conspiracy. All it requires is a lack of belief that we can learn, grow and improve. That one belief – the fixed mindset – has such a profound influence on all of our subsequent behavior that our actual potential becomes irrelevant and unfulfilled. Teaching José to study will never matter until he believes that his potential is not something that limits him, but something he can actually change.

This research is not only about our students. The idea of mindset is every bit as relevant for adults. If you have a fixed mindset about what your students might be able to accomplish – or your own ability to change your practice – it has already impacted the way you engaged learning about New Tech Network, project-based learning, and college and career readiness (or anything else for that matter).

Adaptive Leadership

In his work on leadership and change, Ron Heifetz makes an important distinction between two types of challenges – technical versus adaptive.^{vii} Technical problems require learning new skills and can be extremely complex, but the knowledge required to solve the problem already exists. For example, as a young woman, my wife needed heart surgery to correct a serious arrhythmia. While the procedure was very complex and required a high degree of skill, a proven procedure for the surgery already existed.

When individuals and organizations confront an adaptive challenge, they face a dilemma where the capacity to solve it does not presently exist. Consequently, confronting adaptive challenges requires experimentation and active problem-solving, not just training around existing solutions. Adaptive challenges require that we generate the knowledge to solve the problem while working on it.

The goal of college and career readiness for all students represents just such a challenge. While many organizations around the country are working on issues related to college and career readiness, no one has figured out how to reliably achieve such outcomes for all students. There is no established, proven recipe for achieving that end. Hence, pursuing college and career readiness demands that we implement practices and tools that have demonstrated promise while simultaneously working to generate new solutions that will further narrow the gap between our aspirations and our reality.

Adaptive challenges also force us to reconsider our values and priorities in relation to our work, individually and organizationally. As we experiment with and explore new possibilities, we inevitably bump up against the assumptions and values of the current system. If we allow those assumptions and values to go unquestioned we quickly fall back into existing norms, patterns and routines around the work of teaching and learning. This is what happens when a school district invests large sums of money in training around a new instructional initiative only to see little or no change in teaching practice or student learning. They treated an adaptive challenge as if it were a technical problem. “Adaptive challenges can only be addressed through changes in people’s priorities, beliefs, values, and loyalties.”^{viii}

Most of the important challenges we face come with both technical and adaptive elements. Accordingly, we must be able to recognize adaptive challenges and subsequently do the adaptive work. That work requires a willingness to engage in tough conversations that cut right to the heart of our beliefs about teaching, learning, students, and schools. Few among us volunteer for opportunities to interrogate our values. For this reason, adaptive leadership – the practice of mobilizing people to tackle adaptive challenges and thrive - is a requirement for the journey towards college and career readiness.

Becoming a Learning Organization¹

Adaptive challenges always require some trial and error type of experimentation because they lack existing solutions, and we presently lack the capacity to solve those challenges. If the goal of college and career readiness for all represents an adaptive challenge, achieving it will require creating knowledge and solutions that do not presently exist. If we are to achieve the goal of college and career readiness for all, schools must become places capable of generating knowledge, not merely disseminating it. They must become learning organizations.

Peter Senge defines learning organizations as places that “...continually expand their capacity to create the results they truly desire.”^{ix} This definition implies and assumes the importance of a growth mindset. However, the research on growth mindset focuses on the learning and growth of individuals. Becoming a learning organization is about the capacity of the school to learn and perform collectively.

Individual learning is undoubtedly important. A school where every individual on the staff cares deeply about learning and actively pursues it is a considerable asset as we chase down the goal of college and career readiness. However, individual learning and performance do not necessarily translate into better organizational performance. It is entirely possible and disappointingly common to have a mediocre school full of good teachers.

To become a learning organization, we must fashion the work of schools in such a way that it enables collective learning in pursuit of a common purpose. When done well, every interaction, every practice, and every structure in the school is organized around learning (not accountability). Schools that are learning organizations have the capacity to learn their way out of problems they did not anticipate; continuously achieving the student outcomes they care about in the midst of trying and volatile circumstances. “A learning organization is a place where people are continually discovering how they create their reality. And how they can change it.”^x

Operating as a learning organization asks that we individually and collectively adopt a growth mindset and a willingness to engage in adaptive work. The learning organization concept simultaneously reveals the limits of our individual capacities and illuminates the necessity of serious collaboration in schools. It goes straight to the core of how your school functions and performs as a team. Whether we like it or not, our fate is bound up with the person in the classroom next to us. We need to acknowledge, not avoid, that reality in the way we set about organizing the work of teaching and learning.

Ultimately, the ability of your school and our network to become learning organizations – places that continually increase their capacity to achieve the outcomes we care about – will determine whether we achieve college and career readiness for all of our students.

Re-Imagining Teaching and Learning

I have tried to outline some of the ideas and dispositions that New Tech Network believes are necessary to be a successful network school, striving for college and career readiness with its students. At this time I want to draw your attention to the last word in our name – *Network*. That word has important implications for what it means to be a New Tech school.

If you have spent any time on our website, visited one of our schools, or attended one of our events, you have probably encountered the phrase “Re-Imagining Teaching and Learning.” Our tag line is written in the present tense. That is not an accident.

¹ NTN has a learning organization framework to help you think about how to operationalize the idea in your school. You will encounter and learn about the details of that framework through various conversations and events in the New Tech Network. However, the goal of this section is simply to establish the importance of the idea in relation to the goal of college and career readiness.

Being a part of the New Tech Network is about more than implementing the model. Please do not misunderstand: the model is incredibly important. It represents the best thinking and practices of our entire network with regard to how we can achieve college and career readiness for each of our students. But keep in mind that some aspects of the model that you will learn about were once simply good ideas that came from good people trying to solve a problem in one of our schools – emerging practices, in other words. Our model and design continuously evolves to reflect the best learning and thinking happening across all of our schools. This is how we live out our beliefs around having a growth mindset, practicing adaptive leadership, and being a learning organization.

Re-Imagining teaching and learning is more than just a nice slogan – it is a moral imperative that flows from being a network committed to college and career readiness for all students. Becoming a part of the New Tech Network represents your acceptance of an invitation to participate in the re-imagining of teaching and learning.

Thinking Small

At NTN, thinking about big goals and big ideas is tied intimately to thinking small. Admittedly, I love big ideas and the conversations they generate. I also know that they can be off-putting for some. “Adaptive leadership” and “learning organization” can sound like terms that might show up on one of those mission posters outside the main office that everyone ignores. College and career readiness can sound like an assertion that everyone has to go to Harvard to have a meaningful life.

I am sympathetic to those concerns, particularly the latter. My mother, a Panamanian immigrant, never completed the third grade. For a substantial portion of my life she worked at McDonald’s, happily greeting people and refilling their coffee in the dining room. I know she had a meaningful life; my sister and I are the evidence. I also know that she took that job because it was the only work available to a person with her education in our community.

At its core, college and career readiness is not about big ideas and big goals. It is about thinking small. It is about the individuals whose lives are altered by the schools we create. It is about recognizing that the choices we make as adults and educators work to limit or expand the options available to the students we care about. It is a commitment to making sure that our schools are not places that artificially or prematurely take options away from young people. After all, choosing the only option available to you is not actually making a choice. It is simply acquiescing to a limited reality.

Do all kids need to go to college? Certainly not. But that choice should not be up to you or me. Our job is not to make that decision for them. Our job is to develop their capacities, empowering them to make the decision for themselves.

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Endnotes

- ⁱ What is college and career readiness? (2013). From <http://www.betterhighschools.org/CCR/overview.asp>
- ⁱⁱ Conley, D. T. (2010). *College and career readiness: Helping all students succeed beyond high school*. San Francisco, CA: Jossey-Bass.
- ⁱⁱⁱ *Student outcomes report 2013: Re-imagining teaching and learning*. (2013). Napa, CA: New Tech Network.
- ^{iv} Krakovsky, M. (2007). The Effort Effect. *Stanford Magazine*, (March/April 2007). Retrieved from http://alumni.stanford.edu/get/page/magazine/article/?article_id=32124
- ^v Dweck, C. (2006). *Mindset: The new psychology of success*. New York: Ballantine Books.
- ^{vi} Krakovsky, M. (2007). The Effort Effect. *Stanford Magazine*, (March/April 2007). Retrieved from http://alumni.stanford.edu/get/page/magazine/article/?article_id=32124
- ^{vii} Heifetz, R. A. (1994). *Leadership without easy answers*. Cambridge, MA: The Belknap Press.
- ^{viii} Heifetz, R. A., Grashow, A., & Linsky, M. (2009). *The practice of adaptive leadership: Tools and tactics for changing your organization and the world*. Cambridge, MA: Harvard Business Review Press.
- ^{ix} Senge, P. (1990). *The fifth discipline: The art & practice of the learning organization*. New York: Doubleday.
- ^x Senge, P. (1990). *The fifth discipline: The art & practice of the learning organization*. New York: Doubleday.