



Heart of the Matter

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March, 2013

rainbow
community
school

Educating the Innovation Generation



Part I: Why Create Innovators?

The mission statement at Rainbow Community School ends saying we are developing students who will be “leaders in building a more compassionate and environmentally sustainable world.” Anyone enrolling their child at this unique school must resonate with the urgency of this goal. One would have to have blinders on to ignore the stream of evidence and quotes from leading scientists, sociologists and experts in almost every field who declare that sustainability is the most important vision for human survival. From Tony Wagner, “The solution to our economic and social challenges is the same: creating a viable and sustainable economy that creates good jobs without polluting the planet. And there is general agreement as to what that new economy must be based on. One word: innovation.”

This is a four-part *Heart of the Matter* on preparing children to be innovators in the new global economy. In the first part we will

explore how rapidly our world is changing and try to adjust our own thinking to the new paradigm of innovation. In Part Two we will examine why innovation is important and how innovators are developed. In Part Three we will unveil the barriers to innovation in our current traditional school system and society. Finally, in Part Four we will understand the methods one unique school, Rainbow Community School, in Asheville North Carolina, uses to encourage innovation, and how parents can support that effort at home.

First, how do we define innovation?

The simple definition I propose is a blend of popular definitions: *Innovation is creativity that results in new products or new processes that have value and the potential of improving life.* An even simpler definition from Ellen Bowman of Proctor and Gamble is “creative problem solving.” A more complicated description of innovation from Rick Miller, president of Olin College of Engineering is: “The process of having original ideas and insights

that have value, and then implementing them so that they are accepted and used by significant numbers of people. By this definition, a major innovation is one that is so successful that soon after its introduction few people can even remember what life was like before the innovation was introduced."

Other words that help define innovation: systems-thinking, entrepreneurialism, design-thinking. Good design and innovation are almost synonymous. Tim Brown, from the award-winning IDEO design firm, in a *Harvard Business Review* article, lists: Empathy, Integrative Thinking, Optimism, Experimentalism, and Collaborators as the five characteristics of design thinkers. Gary Hamel, who is ranked the most influential business thinker by the Wall Street Journal, defines great design has meeting four qualifications:

Utterly unexpected (You look at it and go, "Jeez, how cool!")

Amazingly competent (functional)

Aesthetically exquisite (attractive)

Conspicuously conscientious (socially responsible)

The Future of Innovation: The Future of Your Child

Note that the Rainbow's mission considers preparing students to create a sustainable world as a loftier, more difficult goal than preparing them for prep school. We can prepare them for high school all day long—that is the most basic job we do—but the bigger, more complex work is preparing them to be innovators. Not only is this paramount to the survival of the planet, but by the time your child is in the marketplace he will need to be an innovator to be successful.

Over and over, top US employers now rate creativity and innovation among the most important qualities they seek, including the federal government. From President Obama's 2011 State of Union address: "In America, innovation doesn't just change our lives. It's how we make a living. We need to out-innovate, out-educate and out-build the rest of the world." Although America used to be considered the most innovative country in the world, Obama is aware that we have lost our

hold, and as a result, our economic dominance will decline. Economist Thomas Friedman (author of *Freakonomics*) along with Michael Mandelbaum in *That Used to Be Us*: "Going forward, we are convinced, the world increasingly will be divided between high imagination-enabling countries... and low imagination-enabling countries. America...needs to become a hyper-high-imagination-enabling society. That is the only way we can hope to have companies that are increasingly productive and many workers with jobs that pay decent salaries."

Daniel Pink, author of the hugely popular best sellers *A Whole New Mind*, and *Drive* and one of the most watched Ted speakers, boldly states, "Gone is the age of 'left-brain' dominance. The future belongs to a different kind of person with a different kind of mind: designers, inventors, teachers, storytellers—creative and empathic 'right-brain' thinkers whose abilities mark the fault line between who gets ahead and who doesn't."

Some futurists even predict the fall of large corporations because the size of their bureaucracy keeps most of them behind the cutting edge of innovation. Traditional corporations have a top-down hierarchy that prevents the creative problem-solving ideas at the grassroots level from ever reaching the top. Except for the corporations who develop innovative, de-centralized management systems, like Apple and Google, many believe the future belongs to small entrepreneurs. Hamel, author of *What Matters Now: How to Win in a World of Relentless Change, Ferocious Competition, and Unstoppable Innovation* lists Values, Innovation, Adaptability, Passion, and Ideology as the most important qualities for individuals and businesses to possess if they are to thrive in the "new market." What are the features of this *new market*? Kai-ming Cheng, in "The Postindustrial Workplace and Challenges to Education," puts it in a bad news/good news format. The bad news is that there will be fewer jobs. The good news is that "...there will be almost limitless space for freelancing and entrepreneurship."

What's new about innovation?

First, let's recognize that innovation certainly isn't a

new concept. We, as humans, wouldn't even be alive without innovation; and we certainly wouldn't be as comfortable or have the quality of life we have today without it. Innovation has always been what advances the human race. What's new is how rapidly everything is changing, and how high the stakes are. The fast rate of change makes the demand for innovation a commodity like never before. It used to be that innovation was a fluke – something that happened despite the odds; whereas now it is becoming expected. Stakes are higher than ever because innovation needs to outpace the rate of destruction. As H.G. Wells put it, "Civilization is in a race between education and catastrophe;" and Einstein: "We cannot solve our problems with the same thinking used when we created them."

Unfortunately, our public school system is caught up in exactly the same paradigm of thinking that got us into this mess, and they keep increasing the testing, adding more school days to the calendar, and ratcheting up the requirements for achievement in the traditional system so that they are leaving less time and space open for the qualities that all our experts say are needed for innovation, such as creativity, exploration, and intuition. (We will explore this more in Part III.)

Who are the new innovators?

Most of the world's greatest innovators became such despite the system, rather than through it. Einstein being the most famous, as he said, "The only thing that interferes with my learning is my education." Although dropping out of high school, as Einstein did, is less common, today's top CEO's of innovative companies, such as Bill Gates and Steve Jobs quit college. Interview after interview with the hottest young innovators, such as creators of the iPhone, reveal that they had to quit school or somehow get around it to pursue their creative interests. Today's innovators are frustrated with the traditional educational model. They want to actively *make* things rather than passively process information, and they aren't motivated by extrinsic rewards.

Today's innovators aren't just in the field of technology, they are also social entrepreneurs.

They are creating new systems for helping people, such as the microloans that Gramien bank and Kiva created. They are Laura White, the teenager who started Swim 4 Success, serving inner-city kids who would ordinarily never have the opportunity to take swim lessons. Although these examples are superstars, they represent the ilk of the new generation. In general, young people today have a passion for meaning and purpose. They want to make a *difference* in people's lives. Matthew T.A. Nash, professor at Duke's School of Business and author of *Social Entrepreneurship and Social Enterprise*, is in awe of the change in culture evident in the business school. Just since 2005 he has seen a tripling of the number of Duke MBA students who join the Net Impact Club --business students who care about sustainability and justice. It has risen so much, that now the majority of Duke MBA students join the organization and are actively involved in compassionate service!

Economists say this generation will be the first in many predicted to be worse off than their parents. Fortunately, that isn't their primary interest! After watching the older generations' quest for power and money, their rebellion is in contrast to the values of greed. Their goal isn't to consume, and thereby *mine* as much of the environment and exploit people for profit. Of course they want to make a living and be comfortable and healthy, but in general, they are purpose-motivated and interested in contributing to making life sustainable. That's a good thing, because unless you believe the planet can sustain another generation of mega-consumers, a new paradigm will be necessary for this generation's own survival.

This generation isn't cut from the same cloth as the Wall Street three piece suit. They are post-Watergate, post-Enron, and now post-Great Recession--they have seen the misdeeds of the powerful exposed on the internet, so they aren't naive. As a result, they aren't loyal to the system since they don't expect the people at the top to take care of them. They are accustomed to a quickly changing world, where change is the only constant. All of the top 10 in-demand jobs in 2010 *did not even exist in 2004*. This is one of the reasons young people won't stay in job long. The US Labor

Department estimates that today's student will have 10 -14 jobs, on average, by the age of 38. They are life-long learners, so when they stop learning in a position, they move on. Plus, they don't let fear keep them from abandoning a secure position to pursue something they are more passionate about or to start their own business or non-profit.

Remember that for children, the environment they grow up in is all they really know. Sadly, a salient example is children who grow up in abusive homes – they don't seek help or escape because they assume every household is the same. Abuse is all they know. That is how powerful *environment* is to a child's expectation. Then, think about how different the world is now than a mere generation ago, and, therefore, how different their assumptions and expectations are. This generation is growing up with information technology at their fingertips. They don't need a traditional education to have knowledge. They are accustomed to the culture of the internet, where there is no hierarchy-- with its open-sourcing, meritocratic architecture--where anyone can become famous or successful in an instant without moving up through the ranks of education or the corporate ladder. On the internet collaboration and online communities launch spontaneously, so networking on a grand scale is easy and expected. In terms of innovation: the proverbial genius "tinkerer" of the past who worked out of his basement and who may die a pauper without ever having his inventions known, is now able to post an innovation online with the potential of it going viral. No wonder this is the most innovative generation thus far.

My hope with Part I of "Educating the Innovation Generation," is that you find yourself seeing the world differently than before reading this issue of *Heart of the Matter*. In Part II you will have the opportunity to explore which conditions in home, school, and work encourage innovation to flourish by creating an innovation-friendly environment. In Part III we will examine the anti-thesis of an innovative environment – the traditional school system, and in Part IV we will contrast that with

one school that exemplifies an educational model for creating innovators: Rainbow Community School in Asheville, North Carolina.

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