

# Educating for Entrepreneurship *(Working Paper, June 2014)*

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## Introduction: Japanese visitors to American schools

Recently a team of Japanese investigators come to the United States to study its school system. Japan is a successful nation—it is prosperous and dynamic in many areas. But the team had a question: *Why does our country have so few innovators?*

They looked to the United States with its many centers of innovation: Silicon Valley technology, Hollywood movies, New York finance, Broadway theatre, and others. In the business world, they noted the many entrepreneurs such as Steve Jobs, Bill Gates, Andy Grove, and Mark Zuckerberg.

So the Japanese investigators had a question: *What are American schools doing so well to generate so many creative, innovative, entrepreneurs? What is their “secret ingredient”?*

The question is important, because we live in an era that, for the first time in history, is taking entrepreneurism seriously.

The Business-Employment environment is different in the early twenty-first century. Business professor Steven Rogers has pointed out: “In the 1960s, 1 out of every 4 persons in the United States worked for a Fortune 500 company. Today, only 1 out of every 14 people works for these companies. Employment at Fortune 500 companies peaked at 16.5 million people in 1979 and has steadily declined every year to approximately 10.5 million people today” (Rogers 2002, p. 42). The employment market has shifted from a relatively few large corporations to many smaller entrepreneurial firms.

The Economics literature has been transforming itself into what economists Arnold Kling and Nick Schulz (2011) call “Economics 2.0.” For many generations, economics ignored or downplayed the unpredictable and idiosyncratic entrepreneur and focused on abstracted, impersonal models. Contrarians such as Joseph Schumpeter (1950) and Israel Kirzner (1973) argued the importance of

entrepreneurship, but they were lonely voices in economics through most of the twentieth century. Only in the last twenty years has mainstream economics begun the project of recasting itself on the basis of entrepreneurship.

In the Psychology and Ethics literature, we see a movement toward understanding entrepreneurship's importance as a vehicle for a flourishing life. Not only in one's work life but in one's overall life, more psychologists are stressing autonomy, self-directedness, and creative exploration as foundationally positive ingredients in a healthy life (Seligman 2012). And moral philosophers are increasingly making the connections between entrepreneurial character traits and moral virtues in the context of making one's career an integral part of an overall flourishing life (Hicks 2009).

So in this new, entrepreneurial century, the question for us as educators is: How do we help students prepare for an entrepreneurial economy and an entrepreneurial life?

To return to the Japanese investigators' question: I think it is important but mis-focused. The "secret ingredient" of entrepreneurship is *not* in the schools. Most U.S. formal school is government schooling, and most government schools are not good at teaching entrepreneurship. Some schools in prosperous neighborhoods are solid, but most schools are weak, some are poor, and many are terrible.

Consider the common phenomenon of kids who start school when they are five years old—they are full of energy and curiosity and excitement—but after a few years they come to dislike or even hate school. They are bored. They don't like science and they don't even like art. If you ask them, as parents do, what their favorite subject is, they will say that it is lunch and recess when they are allowed to go outside and play. And for several decades we have seen a decline in basic-competency test scores and an increase in students graduating with weak reading and math skills, minimal scientific and historical knowledge, and so on.

Yet the U.S. does produce a large number of creative individuals. How is this possible?

In my view, what American culture does well is what it does *outside* of school. After-school hours are busy with extracurricular activities such as drama and chess clubs and sport and debate teams (Petrelli, 2012). American culture is also characterized by significant parental involvement in music lessons, trips to museums

and galleries, sports leagues, summer camps, and travel. And, of course, American culture is prosperous, which means it has much wealth to support all of these informal learning opportunities.

Music education in the U.S. is a good example. Everyone loves music, and American culture has much creativity in music—rock bands, jazz clubs, Broadway musical theatre, symphonies in most cities, and so on. But that musical activity did not come out of music education in schools. Kids naturally love music, but they typically tolerate or dislike their music classes in schools. When it is an elective, most students choose not to take it. Instead, those who become musicians and music enthusiasts are inspired from popular culture, by learning from their friends and families, or by extra-curricular lessons paid for by their parents.

All of this points to a challenge for formal educational reform. Schooling is currently characterized by two problems: (1) It wastes much of its students' time, as measured by the students' self-reports of how bored and otherwise disengaged from school they are; and (2) it misses the opportunity to use its considerable resources to develop young adults prepared for entrepreneurial careers and entrepreneurial living.

Steve Jobs—who as a young man disliked school and dropped out of university—perhaps put the entrepreneurial aspiration best: “Your work is going to fill a large part of your life, and the only way to be truly satisfied is to do what you believe is great work. And the only way to do great work is to love what you do. If you haven't found it yet, keep looking. Don't settle. As with all matters of the heart, you'll know when you find it. And, like any great relationship, it just gets better and better as the years roll on. So keep looking until you find it. Don't settle.” (Jobs 2005)

So how can we re-focus the schools to enable students to take on that great life challenge? One element must be educating for entrepreneurship.

## **The entrepreneurial process**

Let us start by articulating explicitly the nature of entrepreneurship. Consider the stereotypical entrepreneurial process.

The entrepreneurial process begins with an *informed and creative idea* for a new product or service. The entrepreneur is *ambitious* and *gutsy* and takes the *initiative* in developing the idea into a new enterprise. Through much *perseverance* and *trial and*

*error*, the entrepreneur *produces* something of value. He or she takes on a *leadership* role in showing consumers the value of the new product and in showing new employees how to make it. The entrepreneur *trades* with those customers and employees to *win-win* results. He or she thus achieves *success* and then *enjoys* the fruits of his or her accomplishment.

To expand upon each italicized element in that description:

Entrepreneurs generate business ideas and decide which ones are worth pursuing. In the process of coming up with *informed, creative ideas*, entrepreneurs speak of vision, “thinking outside the box,” imagination, active-ness of mind, and “light-bulb moments.” Having generated ideas, they speak of exercising judgment: Which ideas are actually good ones? Can the product or service be developed technically? Will it sell? What does the market research show? Entrepreneurs exhibit a commitment to cognitive achievement—intellectual playfulness, research, experimentation, analysis, and judgment. As one venture capitalist put it, “Money does not get the ideas flowing. It is ideas that get the money flowing.”

*Ambition* is the drive to achieve one’s goals, to be successful, to improve oneself, to be better off, to be the best than one can be. Entrepreneurs feel more than the often-abstracted and idle wishing—“Wouldn’t it be nice if I were rich and independent?”—that many people experience. Ambitious individuals feel strongly the *need* to achieve their goals.

Entrepreneurship requires *initiative*. It is one thing to have a good business plan; it is another to turn the plan into reality. Entrepreneurs are self-starters who make the commitment to bring their good ideas into existence.

Yet a new enterprise involves venturing into the unknown, a willingness to take on obstacles—including the possibility of disapproval and mockery—and the possibility of failure. Consequently, entrepreneurial activity takes *courage*—the willingness to take calculated risks, to be aware of possible downsides while not letting the fear of failure or disapproval dominate one’s decision-making.

Entrepreneurial success is almost never easy and overnight, so it requires sticking with it through the difficulties and over the longer term. That is to say, *perseverance* is essential. Entrepreneurs must persevere through the technical obstacles in product development, in the face of the naysayers who say that it cannot be done or who are otherwise obstructionist, and in the face of their own self-doubts.

Entrepreneurs must be good at short-term discipline and at keeping their long-term motivations present in their thinking.

The development process is almost always a *trial and error* process, requiring that the entrepreneur make adjustments based on experience. Successful entrepreneurs adjust to real-world feedback, which means being able to admit mistakes and to incorporate newly-discovered facts, rather than pig-headedly ignoring anything that is a threat to their pet ideas.

*Productivity*: The development process hopefully culminates in a working product. If so, the entrepreneur has added value to the world by creating a new good or service, making it work consistently, producing it in quantity, and continuing to improve the quality.

Those who transact with the entrepreneur, whether as customers or as employees, engage in *win-win trade*, exchanging value for value. Socially, trade is a process of dealing with others on a peaceful basis according to productive merit. It requires protecting one's own interests and respecting the other party's doing the same, exercising one's skills of negotiation, diplomacy, and, when necessary, toughness in order to achieve a mutually beneficial result.

Entrepreneurs also add value by bringing *leadership* to the trade. Entrepreneurs are creating something new, so they are the first to go down a new path. Those who go first set an example for others to follow and, especially in the case of a new product or service, they must show new customers the value of the new product and service and they must teach new employees how to produce the new product or service. Accordingly, entrepreneurs must exhibit leadership in showing others the new way, encouraging them through the learning process, and in marketing the new. Part of the trade, then, is that the customer or employee is shown a new opportunity and is enabled to take advantage of it, and in turn the entrepreneur receives compensation for doing so.

Finally, the entrepreneur experiences *success* and the *enjoyment* of success. Entrepreneurial success yields both material and psychic rewards—both the goods that financial success can bring and the experience of financial independence and security that go with it. And of course there is the psychological reward of achievement: experiencing enhanced self-respect and the sense of accomplishment in what one has created.

If we put those traits in a table, we get the following:

<i>Entrepreneur Success Trait</i>
Knowledge and creativity
Ambition
Courage
Initiative
Perseverance
Trial and error experimentalism
Productivity
Trade value for value
Leadership
Experiencing and enjoying success

## Implications for Education

Now let us turn to education. If entrepreneurship involves the successful exercise of certain traits, where do those traits come from in the first place? Can formal schooling instill, develop, or at least enhance those characteristics in younger students? If we take entrepreneurship as lens for education, then can we teach creative exploration, courage, initiative, and so on?

If we contrast much of traditional and current schooling, what do we see? We do not see much uniqueness, activity, or experimentalism. Instead, students sit in straight rows of desks. Students do what the teacher and textbook say. *Every* student does the *same thing* at the *same time* in the *same way* and takes the *same standardized tests*. That is, we see uniformity, obedience, passivity, and rote learning. This stereotype is perhaps often softened in practice, but it has been the default model for teachers with classes of thirty students and standardized, state-established curricula. So while there is useful knowledge in the curriculum, the embedded lessons students also learn are: *Do what the authorities say*, *Do what everyone else is doing*, and *The correct*

*answers are pre-set and already known.* (And we sometimes wonder why we have so many unmotivated, dependent, and timid students—or students who, out of sheer boredom and the chaotic need to be themselves, rebel in destructive ways.)

So if an explicit goal of education is to cultivate the exploration mindset of entrepreneurship, as a first step let us consider getting the students out of the rows of seats and letting them interact with prepared materials on their own.

I have three suggestions in this direction.

### **1. Develop formal, age-appropriate exercises in entrepreneurial character-trait development**

As educators, we fill in the following table with exercises appropriate for children of different ages.

<i>Entrepreneur Success Trait</i>	<i>Educational exercises</i>
Knowledge and creativity	
Ambition	
Courage	
Initiative	
Perseverance	
Trial and error	
Productivity	
Trade value for value	
Leadership	
Experiencing and enjoying success	

To develop one example further, let me focus on courage.

Courage is the virtue of acting as one judges best despite fear. Fear comes in many forms—fear of pain, fear of disapproval, fear of feeling like a failure, fear of loss of love, money, and so on. Life involves many risks, and risk is the potential for

failure, so having the character resources to be able to handle risk is an important part of success in life. One direct connection to entrepreneurship is the many people who do not attempt it due to fear.

So one thread within entrepreneurial education is to develop formal exercises that embody risk and help the child learn to manage it.

For example, younger children learn skills that involve *physical* risks: going down a slide, jumping into a swimming pool, learning to ride a bicycle. Such activities and dozens more can be formally identified and introduced in schools as exercises. They can also be scaled up as children age and mature in their skill and character. Eventually, they will be able to handle mixing chemicals, climbing rock-walls, doing bungee-jumps, and driving cars.

Other risks are more *psychological*. For younger children, these can include greeting and conversing with new adults whom one's parents have invited for dinner, raising one's hand to ask the teacher a question in class, or expressing an opinion that differs from one's classmates'. Again, exercises to model these can be introduced in schools and scaled up as children mature so that eventually they will be able to handle comfortably giving a speech before a large audience, asking someone for a date, and arguing civilly with their teachers about political and religious differences.

Courses in acting and public speaking are natural homes for some of the exercises for developing psychological courage, just as courses in physical education are natural homes for developing physical courage. So building consciously and systematically upon activities already present in those courses and extending them across the curriculum is a good starting point.

And what holds for developing courage also holds for developing initiative, experimentalism, perseverance, and the rest of the success traits.

## **2. Learn from the Montessori method**

My second suggestion is, if one is not already aware of it, to explore the Montessori approach to education. Maria Montessori opened her first school in Rome in 1907, and for over a century her method has spread, mostly as a grassroots phenomenon, all over the world.



The scholarly literature is beginning to study Montessori's results systematically and to pronounce upon them positively (e.g., Rathunde and Csikszentmihalyi 2005 and Lillard 2007), but for now let me just give two indicators.

Anecdotally, Montessori advocates point out that four of the leading entrepreneurs of our generation—Larry Page and Sergey Brin of Google, Jeff Bezos of Amazon, and Jimmy Wales of Wikipedia—were all Montessori educated (Brin and Page 2004).

More formally, Hal Gregersen reports a striking statistic about the proportionately large number of innovative entrepreneurs who were Montessori-educated. After interviewing a large number of entrepreneurs, identifying their shared characteristics, and investigating how they became innovative, Gregersen notes: "It's fascinating when we interview these famous entrepreneurs to realise that they grew up in worlds where adults paid attention to these innovation skills. Most often these adults were parents and grandparents, but in about *one-third* of the cases they were master teachers at Montessori or Montessori-like schools" (Gregersen 2011, italics added).

### **3. Emulate the Network for Teaching Entrepreneurship and Junior Achievement**

A third option is to incorporate methods from currently-supplemental education programs that explicitly tie education to preparation for entrepreneurship. Two examples are the Network for Teaching Entrepreneurship (NFTE) or Junior Achievement (JA), both of which have chapters all over the U.S. and in many other countries.

The methods they use can apply to all children, but as often as not NFTE and JA work with students in failing schools, perhaps because the administrators of such schools are more desperate and so willing to experiment.

Steve Mariotti (2009), the founder of NFTE, began his teaching career at one of the worst of New York City's public schools. He began by using traditional methods but found that they failed to teach the students anything. Then he realized that children, especially poor kids, are often fascinated with money but know nothing about it or how to make it. So, drawing upon his own entrepreneurial experience, Mariotti changed his methods and explicitly began teaching his students how to start

their own businesses. The students' attitudes toward him and their education altered dramatically. Their profit motive kicked in, and they began to see a realistic potential for independence and a better life. Thinking about business led them to see the need for other skills—reading, writing, math, organizational, and social—and then they also became motivated to learn from their textbooks and their other teachers in math, writing composition, and computers. Students in Junior Achievement programs have achieved similar results (see e.g., Marty 2011).

### **Closing anecdote: dirt bikes and dads**

In the above comments, I have focused on formal education and argued for an increased place for entrepreneurship within it. I would like to conclude, though, by not overlooking the important role that parents play in their children's education by giving one, hopefully inspiring, example from my own neighborhood. It is an anecdote that I think captures the essence of education.

On my drive home from work I passed regularly some vacant land upon which kids with their bikes had created paths and piles of dirt to jump over. Over time, the kids' efforts had become more elaborate. They had built some crude ramps with wood (likely stolen from nearby construction sites), dug shallow pits and let them fill with water, and they had extended the criss-crossing network of paths to ride upon. I confess to some envy at the sight of so much fun—being a middle-aged man who wanted again to be a kid out there riding my bike up the ramps and jumping the puddles.

But what really caught my attention was an evening when there was suddenly much more activity at the dirt bike site. The fathers had gotten involved. So I stopped and got out of my truck and went to watch. The ramps were now sturdier and safer, and the activity was organized. Kids with their bikes were lined up at the end of one long stretch of path, and each one would ride his or her bike fast up and over the ramp and fly through the air as far as possible.

That wasn't all. One of the dads had a radar speed gun that measured how fast each kid's bike was going when it hit the ramp. Another dad, working with one of the kids, measured the distance of each jump and recorded it in a notebook. And all of the kids were now wearing helmets. But each kid wanted to know how far he had jumped, how to improve his distance, and as the kids waited their turns they were all

discussing the best air pressures for the tires, bike speeds and ramp angles, lubrication for their bike's gears, and so on.

The point for entrepreneurial education is that the kids first showed initiative and pursued their interests. The adults got involved and both encouraged that initiative and facilitated a more structured activity. The kids were learning math and engineering, cooperation and competition, being creative and getting exercise—and they were having a whole lot of fun themselves and with their dads.

That is only one anecdote, though it points to a path for entrepreneurial educators to pursue. What some kids and their dads can do with a vacant lot and some creativity—we professional educators with our training and resources should be able to do even better.

## Bibliography

- Brin, Sergei and Page, Larry. 2004. "Google Founders Talk Montessori." [https://www.youtube.com/watch?v=0C\\_DQxpX-Kw](https://www.youtube.com/watch?v=0C_DQxpX-Kw).
- Gregersen, Hal. 2011. *The Innovator's DNA*. Harvard Business Review Press.
- Hicks, Stephen. 2009. "What Business Ethics Can Learn from Entrepreneurship." *Journal of Private Enterprise*, 24(2), 49-57.
- Jobs, Steve. 2005. "Commencement Address." Stanford University. <http://news.stanford.edu/news/2005/june15/jobs-061505.html>.
- Kirzner, Israel. 1973. *Competition and Entrepreneurship*. Chicago: University of Chicago Press.
- Kling, Arnold, and Schulz, Nick. 2011. *Invisible Wealth: The Hidden Story of How Markets Work*. Encounter Books.
- Lillard, Angeline. 2007. *Montessori: The Science behind the Genius*. Oxford University Press.
- Marty, Eduardo. 2011. "Entrepreneurship in Argentina." *Kaizen* 15. <http://www.ethicsandentrepreneurship.org/20110221/interview-with-eduardo-marty/>.
- Mariotti, Steve. 2009. "Entrepreneurship and Education." *Kaizen* 9. <http://www.ethicsandentrepreneurship.org/20091005/interview-with-steve-mariotti/>.

Petrelli, Michael J. 2012 (February 23). "Memo to the world: America's secret sauce isn't made in our classrooms." <http://edexcellence.net/commentary/education-gadfly-daily/flypaper/2012/memo-to-the-world-americas-secret-sauce-isnt-made-in-our-classroom.html>.

Rathunde, Kevin and Csikszentmihalyi, Mihaly. 2005 (May). "Middle School Students' Motivation and Quality of Experience: A Comparison of Montessori and Traditional School Environments." *American Journal of Education* 111, 341-371.

Rogers, Steven. 2002. *The Entrepreneur's Guide to Finance and Business*. McGraw Hill.

Schumpeter, Joseph. 1950. *Capitalism, Socialism and Democracy*. 3<sup>rd</sup> ed. New York: Harper & Brothers. See especially Chapter VII.

Seligman, Martin E.P. 2012. *Flourish: A Visionary New Understanding of Happiness and Well-being*. Atria Books.

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