

Zhao, Y., (2012). *World class learners: Educating creative and entrepreneurial students*. Thousand Oaks, CA: Corwin.

Reforming Education to Inspire Creative Entrepreneurs in a Changing World

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World class learners: Educating creative and entrepreneurial students, is the follow up to Zhao's 2009 book, *Catching up or leading the way: American education in the age of globalization*. Zhao (2009) previously compared the educational practices of the United States and China and the impact of high-stakes, standardized testing on the educational philosophy and the creation of innovative students ready for the future. Zhao's new book (2012) makes a case for educational reform and discusses how educational systems can create entrepreneurial students for the 21st century. "The entrepreneurial spirit captures the common qualities shared by entrepreneurs: 'inspiration, creativity, direct action, courage, and fortitude'" (p. 81). The main thesis of the book is that educational systems should be creating students that encompass the 'entrepreneurial spirit' to ensure that students are globally competent, creative, and entrepreneurial. The assumption is that through the creation of an entrepreneurial mindset, students will be able to not only find jobs in a changing world, but also find innovative ways to address the problems of the future.

According to Zhao (2012), what is missing in today's culture is the cultivation of an entrepreneurial mindset or the entrepreneurial spirit. Zhao (2012) includes "alertness to opportunities, foresight, ambition, passion, confidence, innovation, risk taker, creativity, social networker, and persistence" (p. 82) as critical traits of the entrepreneurial spirit. Zhao (2012) introduces

a new way to think about different types of entrepreneurship by delineating three types of entrepreneurs: (a) social entrepreneurs, who recognizes a social problem and applies entrepreneurial principles to achieve social change, (b) intrapreneurs, who bring significant innovative changes from within an organization, and (c) policy entrepreneurs, who bring innovative improvements in policy from within public and government institutions. The question that Zhao (2012) attempts to answer is if the American educational system produces an environment where these qualities are cultivated or hindered.

Zhao (2012) argues that a push toward a narrow or standardized curriculum will not produce an environment where these traits can be encouraged in students. Zhao (2012) provides a long-term, longitudinal study in which a correlation between schooling and a drop in creative genius among students in American schools (Land & Jarman, 1992). While Zhao (2012) does state many different contributing factors to this decline, he views the primary factors are a push toward higher performance on international tests, such as the PISA and TIMMS, the No Child Left Behind initiative (NCLB), curriculum narrowing, and teaching to high-stake tests.

Zhao's (2012) fundamental issue surrounding standardizing education around global assessments is the homogenization of education. "The homogenization is achieved through increased national control of what children should learn" (Zhao, 2012, p. 27). Zhao sees NCLB and the Common Core

State Standards leading to this homogenization of education by identification of core subjects, centralized curriculum standards, and high-stake testing to ensure that the core subjects are at the core of the academic environment. Zhao (2012) sees the consequences of a laser focus on core subjects and homogenization in education is too important to be ignored.

Zhao (2012) states that not only is there a high opportunity cost, where all resources are sent to the development of the core curriculum and not to other, more creative, educational movements, but there is also a natural tendency toward curriculum narrowing and teaching to these high-stake tests. This causes a decrease in focus subjects that are not part of the core, such as physical education or bilingual education. Zhao (2012) convincingly argues that this is the case in U.S. schools. Much of his thesis is based on the idea that a more focused curriculum is a curriculum that does not provide someone the environment to develop the entrepreneurial spirit. Zhao (2012) provides data from two studies from the Center on Education Policy that shows that NCLB has directly led to curriculum narrowing and thus a homogenization of education (McMurrer, 2007, 2008). Homogenization specifically provides a number of problems for the future workforce.

According to Zhao (2012), the first issue is that if all children master the same skills, then those who cost less will be much more competitive. Next, new industries are rapidly replacing old jobs and the skills that are important now may not be in the future. Third, jobs that are low skilled are being automated or sent to places where the same skills can be hired at a much lower cost. Fourth, we are moving from a local based economy to a globalized economy where future generations will need skills and knowledge to interact with people who are not from the same community or culture.

Lastly, globalization and technological advancement opens up potential customers and investors from around the world, providing opportunities for more niche markets and talents.

Zhao (2012) views a root problem with American schools that, “in general reduce instead of enhance creativity and entrepreneurial spirit because they have been designed to prepare good employees” (p. 15) and not good entrepreneurs. Perhaps if you were to ask Zhao what the difference is between a good employee and a good entrepreneur, he would say that a good employee is someone who can consistently and efficiently complete a task, while a good entrepreneur is someone who possesses the entrepreneurial spirit. When the two meet, you have an intrapreneur.

How does the U.S. educational system create an environment where more entrepreneurs come from our schools? Entrepreneurs are those who are “dissatisfied with an existing condition ... then they see an opportunity and take the risk to change the condition with ingenuity, and finally they persist to make it successful” (Zhao, 2012, p. 81). The next phase in Zhao’s (2012) research is how to instill these values. Zhao (2012) starts by looking back at the recent trends in American and Chinese education. The United States typically scores lower on international tests such as the PISA and TIMMS, but produces more patents and entrepreneurs. On the other hand, China typically scores higher on the same international tests, but has significantly lower numbers of entrepreneurs and patents and there is a negative correlation between the higher scores on these international test and lower scores on entrepreneurship indicators at significant levels (Zhao, 2012).

“Correlation does not mean causality” (Zhao, 2012, p.107). While Zhao admits that there could be other explanations for the correlation, what it means is “what resulted

in the high test scores is what causes the low entrepreneurship activity” (p. 107). Zhao (2012) believes this link again is education. “It seems reasonable to believe that there is a relationship between schooling and entrepreneurship, but the question is the nature of the relationship” (p. 108). It does not seem likely that test scores have a direct impact on entrepreneurship, but “there are some factors that help raise the PISA scores and lower entrepreneurial activities” (p. 108). These factors range from perceived opportunities and capabilities to cultural interpretation of entrepreneurs. To support the relationship between these factors Zhao draws a correlation between PISA raw scores and entrepreneurial qualities (Zhao, 2012, p. 109).

The Chinese Ministry of Education realizes that they must change if they want to compete in a global economy. China should not lack any natural entrepreneurial predisposition, and the country’s government has made major investments in research and development. Yet, “China had only 1% of the patent filings with or patents granted by any of the leading patent offices outside of China. In addition, 50% of the China-origin patents were granted to subsidiaries of foreign multinationals” (Zhao, 2012, p. 126).

Zhao (2012) gives five reasons for this lack of entrepreneurial spirit. “First, the laser focus on education means nothing outside academic excellence is of value....Second, some creative and entrepreneurial talents are sorted out because they do not fit the academic requirement” (p. 126-127). Due to the way students’ progress in traditional Chinese education, those students who do not perform well on required tests are forced to attend lower quality schools or classes or even expelled from school. Thirdly, “For the majority of people, who are all born with some level of natural curiosity, capacity for creativity, and potential for entrepreneurship, the focus on education works to remove

curiosity, stifle creativity and suppress entrepreneurial impulses, while teaching the ability to excel in test” (p. 128).

Fourth, with the major focus on academic preparation, students do not have time for play and socialization. This is where children learn many of the entrepreneurial skills that have been discussed. Lastly, “when children are judged by a single criterion, they are constantly asked to compare with their peers” (Zhao, 2012, p. 129). Zhao (2012) goes on to say that this comparison between students leads to inferiority and even a loss of self-confidence. This “test-oriented education” simply prepares students for test and not for a global and competitive world.

Traditionally, the U.S. education has produced students who are solid academically and great entrepreneurs. This is due to: (a) lack of razor focus on schooling, (b) lack of uniform national curriculum and high-stakes test, (c) more playtime, (d) lack of rigor and direct competition, and (e) a general availability of out-of-school events and institutions. American students have more time to socialize. This can seem like a disadvantage, assuming that free time-not dedicated to schooling can hinder academic achievement. However, Zhao (2012) argues that this gives Americans a significant advantage when they enter the workforce.

Zhao (2012) believes educational leaders must ask, “Do we want individuals who are good at taking test or individuals who are creative and entrepreneurial” (p. 139)? “To prepare the talents we need, we cannot count on accidents or side effects; we must work toward a paradigm shift” (Zhao, 2012, p. 140).

There are many examples of famous entrepreneurs who failed at or dropped out of school to pursue their own ‘*unacademic*’ interests. Zhao (2012) makes the point that child-centered education is part of the solution. Children are different and educators should capitalize on these differences, grant

them autonomy, and let their educational experience be unique. “At the heart of the battle is the fundamental issue of who should be in control of children’s learning” (Zhao, 2012, p. 167). For Zhao (2012), an authentic entrepreneurial spirit can only be attained when a child has the autonomy necessary to develop the qualities of an entrepreneur.

Zhao (2012) gives examples of instances where schools grant children the autonomy to design their own unique, individual education. For instance, Zhao (2012) references the Summerhill School of England, where students govern the school and have as much right as adults to determine what rules are developed. Classes are not mandatory, and students follow their own schedule. This shifts the responsibility of learning to the student, and helps them to be creative, curious, and imaginative by taking the focus off of standardized tests and letting students be successful according to his/her own definition of success.

Another successful example of an entrepreneurial school is High Tech High (HTH) in San Diego, California. Here, students are not given traditional exams, but create and develop projects such as books, films, video games, art exhibits, posters, music audio fictions, photographs, and many other imaginable products. HTH uses product-based learning because of the way students “learn by making.”

Zhao (2012) goes on to describe various types of product-based learning including (a) the academic model, (b) the mixed model, and (c) the entrepreneurial model. The entrepreneurial model is often used at HTH because students work with community members to market and sell many of their projects. Experiential approaches such as project-based and problem-based learning provide an environment where students are empowered to pursue their interest and follow their passions. One of Zhao’s (2012) major worries about these experiential

approaches is the lack of a central curriculum. While many educators would agree that an experiential classroom may be a satisfactory model, it is a question of implementation in today’s modern educational system.

These experiential classrooms tend to look chaotic and to a casual observer they may look as if they are not covering the predetermined curriculum. According to Zhao (2012) there are three reasons that prove that these methods do not take away from a well-rounded education.

First, if the basics are truly basic, that is essential to functioning in today’s society, they are unavoidable in students’ pursuit of making great products. Second, children learn more and better when they are interested and engaged. In this new paradigm the basics are sought after rather than imposed upon. Third, there is plenty of empirical evidence that in democratic schools, like Summerhill, graduate [children] with excellent basics and much more (p. 250).

“This book is really about the human dimensions. It is about respecting children as human beings and about supporting, not suppressing, their passion, curiosity, and talent” (Zhao, 2012, p. 256). Children are human beings and need to be respected and supported, instead of suppressing their passion, curiosity, and talent. Doing this will cause children to become global, innovative, and entrepreneurial human beings. Not doing this will demote those things to the status of unimportant, trivial, and obsolete. If we provide children with the opportunity to learn in a supportive and experiential environment, they will become more successful in the future. “It is not about keeping jobs at home and preventing others from taking the jobs away, rather, it is about creating new jobs” (Zhao, 2012, p. 59).

Overall, this was a very thorough, well-written book about some of the current trends and problems in American education, and

Zhao's (2012) view to strengthen U.S. education. A few minor criticisms of the work are that Zhao (2012) seems to be looking at students as economic entities. Throughout history, students have been objectified as a means-to-an-end (in this case, entrepreneurial players) instead of ends-in-themselves. While the reviewers are not trying to imply that Zhao (2012) does this intentionally or that the entrepreneurial spirit cannot lead to other ends, such as happiness, these ends are not fully addressed in this book. It is not clear that is what Zhao wants, even though the reviewers might.

Zhao (2012) seems to look at life from an entrepreneurial, or product-developing angle. If students are not inventors or not business-oriented, it might seem to the reader that they are inferior, and the book does not make clear this is not the case. Millions of people are

health care workers, for example, and contribute greatly to the functioning and enjoyment of society. It is not known if Zhao (2012) deems them as successful as an entrepreneur, or as valuable a member of society.

Zhao (2012) does look at each child's uniqueness as it applies to entrepreneurship, but, a downfall in our minds, is that he does not take into account each child's definition of success, how money may not have to do with it, and that success to some can mean not making a lot of money. Overall, we would highly recommend this book as a source that educators, policy makers, students, and the public can use to challenge the current state of education and encourage their students or children to cultivate the entrepreneurial spirit.

References

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