http://zhaolearning.com

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http://www.facebook.com/yongzhao.uo
Catching Up or Leading the Way

American Education in the Age of Globalization

Yong Zhao
World Class Learners
Educating Creative and Entrepreneurial Students

Yong Zhao
Individual differences
Multiple intelligences
Cultural diversity
Curiosity, passion, creativity

Schooling

Employable skills
Side Effects
Drug Facts

Active ingredient (in each tablet)
Chlorpheniramine maleate 2 mg...

Purpose
Antihistamine

Uses
temporarily relieves these symptoms due to hay fever or other upper respiratory allergies: sneezing, runny nose, itchy, watery eyes, itchy throat

Warnings
Ask a doctor before use if you have
- glaucoma
- a breathing problem such as emphysema or chronic bronchitis
- trouble urinating due to an enlarged prostate gland

Ask a doctor or pharmacist before use if you are taking tranquilizers or sedatives

When using this product
- drowsiness may occur
- avoid alcoholic drinks
- alcohol, sedatives, and tranquilizers may increase drowsiness
- be careful when driving a motor vehicle or operating machinery
- excitability may occur, especially in children

If pregnant or breast-feeding, ask a health professional before use. Keep out of reach of children. In case of overdose, get medical help or contact a Poison Control Center right away.

Directions

<table>
<thead>
<tr>
<th>Group</th>
<th>Dosage</th>
</tr>
</thead>
<tbody>
<tr>
<td>adults and children 12 years and over</td>
<td>take 2 tablets every 4 to 6 hours; not more than 12 tablets in 24 hours</td>
</tr>
<tr>
<td>children 6 years to under 12 years</td>
<td>take 1 tablet every 4 to 6 hours; not more than 6 tablets in 24 hours</td>
</tr>
<tr>
<td>children under 6 years</td>
<td>ask a doctor</td>
</tr>
</tbody>
</table>

Drug Facts (continued)

Other Information
- store at 20-25°C (68-77°F)
- protect from excessive moisture

Inactive ingredients
- D&C yellow no. 10
- lactose, magnesium stearate, microcrystalline cellulose, pregelatinized starch

WARNING: HOT DOGS CAN WRECK YOUR HEALTH
www.CancerProject.org

THIS MEDICINE MAY AFFECT MENTAL ALERTNESS AND/OR COORDINATION. IF AFFECTED, DO NOT DRIVE A MOTOR VEHICLE OR OPERATE MACHINERY.

THIS MEDICINE MAY CAUSE DROWSINESS AND MAY INCREASE THE EFFECTS OF ALCOHOL. IF AFFECTED DO NOT DRIVE A MOTOR VEHICLE OR OPERATE MACHINERY.
Look and Learn ABCs
Magnetic Book
Pre-K
Ages 3-4

Magnetic storybook that reinforces:
• Letter recognition
• Letter and picture association

Includes 26 letter magnets!

#1 Trusted Name in teaching kids to read*

WARNING
CHOKING HAZARD—Small parts
Not for children under 3 years of age.

The Fun and Easy Way to Learn the ABCs!
Why Didn’t China Have a Big Party?
A Grattan Institute report, to be released today, shows Australian performance has slipped since 2000, with maths students now more than two years behind children in Shanghai and one to two years behind children in Hong Kong, Singapore and South Korea.

--Sydney Morning Herald, 02-17-2012
http://www.smh.com.au/national/education/australian-students-lag-asia-by-three-years-20120216-1tbt8.html#ixzz1me2MH9mL

We've become a nation of wusses. The Chinese are kicking our butt in everything. If this was in China do you think the Chinese would have called off the game? People would have been marching down to the stadium. They would have walked and they would have been doing calculus on the way down...

--Former Pennsylvania Governor Ed Rendell on the rescheduling of an NFL game, 2010
http://voices.washingtonpost.com/44/2010/12/ed-rendell-were-a-nation-of-wu.html

I am happy to confess I’d like us to implement a cultural revolution just like the one they’ve had in China…Like Chairman Mao, we’ve embarked on a Long March to reform our education system.

--Michael Gove, British Secretary of State for Education
http://www.telegraph.co.uk/education/8227535/Michael-Gove-my-revolution-for-culture-in-classroom.html
Arne Duncan: “A wake-up call”

Barack Obama: “A Sputnik moment”
<table>
<thead>
<tr>
<th>Math</th>
<th>Sciences</th>
<th>Reading</th>
</tr>
</thead>
<tbody>
<tr>
<td>Shanghai, China</td>
<td>Shanghai, China</td>
<td>Shanghai, China</td>
</tr>
<tr>
<td>Singapore</td>
<td>Finland</td>
<td>South Korea</td>
</tr>
<tr>
<td>Hong Kong, China</td>
<td>Hong Kong, China</td>
<td>Finland</td>
</tr>
<tr>
<td>South Korea</td>
<td>Singapore</td>
<td>Hong Kong, China</td>
</tr>
<tr>
<td>Taiwan</td>
<td>Japan</td>
<td>Singapore</td>
</tr>
<tr>
<td>Finland</td>
<td>South Korea</td>
<td>Canada</td>
</tr>
<tr>
<td>Liechtenstein</td>
<td>New Zealand</td>
<td>New Zealand</td>
</tr>
<tr>
<td>Switzerland</td>
<td>Canada</td>
<td>Japan</td>
</tr>
<tr>
<td>Japan</td>
<td>Estonia</td>
<td>Australia</td>
</tr>
<tr>
<td>Canada</td>
<td>Australia</td>
<td>Netherlands</td>
</tr>
</tbody>
</table>
Qian Xuesheng: “Why doesn’t China have great talents?”

Wen Jiabao: “China must have entrepreneurs like Steve Jobs”

Kai-fu Lee: The next Apple or Google will appear, but not in China… unless it abolishes its education.
Real Dragon or Paper Tiger: Patent filings in 2008

- U.S.A. 400,769 filings
- Japan 502,054 filings
- China 203,481 filings
- Europe 14,525 filings
- U.S.A. 14,399 filings
- Japan 13,446 filings
- China 473 filings

In 2010 China accounted for:

- 20% of the world's population
- 9% of the world's GDP
- 12% of the world's R&D expenditure
- 1% of the patent filings with or patents granted by any of the leading patent offices outside China.
- 50% of the China-origin patents were granted to subsidiaries of foreign multinationals

Source: Chinese Innovation is a Paper Tiger http://online.wsj.com/article/SB1000142405311904800304576472034085730262.html?mod=googlenews_wsj
Steve Wozniak: Apple couldn’t emerge in societies like Singapore where ‘bad behavior is not tolerated’ and people are not taught to think for themselves.

Alexis Ong: Wozniak’s comments are really a scathing indictment of the Singapore education system, its strictly regimented curriculum and by-rote study techniques that sustain the city’s “formal culture.”
Why Aren’t the Model Minority Happy?
2008 NAEP Math Scores by Race/Ethnicity

Asian Americans

- 5% of the US population
- 15 to 25% of Ivy League enrollment
- 24% at Stanford
- 46% at UC Berkeley
- 64 percent of Asians versus 52 percent for Caucasians want to hold top positions
- 2% of total 5,520 board seats of the Fortune 500 (98 of them have Asians on their board)

Why Is the U.S. Still Here?
Inside photos showed Alexei doing complicated experiments in physics and chemistry and reading aloud from *Sister Carrie*.

**1958**

Stephen, by contrast, retreated from a geometry problem on the blackboard and the caption advised, "Stephen amused class with wisecracks about his ineptitude." Seated at a typewriter in typing class, Stephen tells us "I type about one word a minute."
A Long History of Bad Test-takers

• 1960s
  – FIMS: 12\textsuperscript{th} out of 12 countries
  – FISS: 14\textsuperscript{th} out of 18 countries

• 1970s/1980s
  – SIMS: 12, 14, 12, 12 out of 15 (number systems, algebra, geometry, calculus)
  – SISS: 14\textsuperscript{th} (biology), 12\textsuperscript{th} (chemistry), 10\textsuperscript{th} (physics) out of 14

• 1990s—2007: TIMSS (8\textsuperscript{th} graders)
  – 28\textsuperscript{th} out of 42 in 1995
  – 15\textsuperscript{th} in 2003
  – 9\textsuperscript{th} in 2007
…America still has the largest, most prosperous economy in the world. (Applause.) No workers -- no workers are more productive than ours. No country has more successful companies, or grants more patents to inventors and entrepreneurs. We’re the home to the world’s best colleges and universities, where more students come to study than any place on Earth.

--President Obama, 2011 State of the Union Address
The Soviet Union, America’s archrival in national security during the Cold War, which supposedly had better education than the U.S., disappeared and the U.S. remains the dominant military power in the world.

Japan, which was expected to take over the U.S. because of its superior education in the 1980s, has lost its #2 status in terms of size of economy. Its GDP is about 1/3 of America’s. Its per capita GDP is about $10,000 less than that in the U.S.

The U.S. is the 6th wealthiest country in the world in 2011 in terms of per capita GDP. It is still the largest economy in the world.

The U.S. ranked 5th out of 142 countries in Global Competitiveness in 2012 and 4th in 2011.

The U.S. ranked 2nd out 82 countries in Global Creativity, behind only Sweden in 2011.

Data source: International Monetary Fund: http://goo.gl/r7SFQ
Possible Explanations
Entrepreneurial Qualities

- Confidence
- Passion
- Global competency
- Friends
- Creativity
- Uniqueness
- Risk-taking
- Alertness to opportunity
- Empathy
### Correlations between PISA and Entrepreneurship Indicators

<table>
<thead>
<tr>
<th></th>
<th>PISA Reading</th>
<th>PISA Math</th>
<th>PISA Sciences</th>
</tr>
</thead>
<tbody>
<tr>
<td>Perceived Capabilities</td>
<td>-.595**</td>
<td>-.586**</td>
<td>-.608**</td>
</tr>
<tr>
<td>Nascent Entre Rate</td>
<td>-.693**</td>
<td>-.636**</td>
<td>-.678**</td>
</tr>
<tr>
<td>New Biz Ownsp Rate</td>
<td>-.371*</td>
<td>-.374*</td>
<td>-.392*</td>
</tr>
<tr>
<td>Total Early Stage Entre</td>
<td>-.658**</td>
<td>-.620**</td>
<td>-.658**</td>
</tr>
</tbody>
</table>

Data source: OECD PISA 2010, Global Entrepreneurship Monitor, 2010
“It may be wrong, but it’s how I feel.”
Responses to “I usually do well in Math”
Correlations between TIMSS Math Score and Confidence and Enjoyment

<table>
<thead>
<tr>
<th>Grade</th>
<th>Correlation</th>
</tr>
</thead>
<tbody>
<tr>
<td>4</td>
<td>-0.58</td>
</tr>
<tr>
<td>8</td>
<td>-0.64</td>
</tr>
<tr>
<td>4</td>
<td>-0.67</td>
</tr>
<tr>
<td>8</td>
<td>-0.75</td>
</tr>
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Tom Loveless (2006): How Well Are American Students Learning
http://www.brookings.edu~/media/Files/rc/reports/2006/10education_loveless/10education_loveless.pdf
Lady Gaga
Lady Gaga
What matters?

Diversity of talents
Creativity
Entrepreneurship
Passion
In our travels to China it was everywhere, that laser-focus on education…This public school in Shanghai where the children are two years old. By three they are in school from 8 until 4, already learning phrases in English…On average Chinese students attend schools 41 more days than American students a year and with extra lessons on the weekend, Chinese students receive 30% more hours of instruction.

--ABC World News with Diane Sawyer, 2010
http://abcnews.go.com/Politics/china-debuts-top-international-education-rankings/story?id=12336108#.Tz5va0xU2Fc

Over 80% of parents send their children to tutorial school…Compared with other societies, young people in Shanghai may be much more immersed in learning in the broadest sense of the term. Naturally they learn more, what they learn and how they learn are subjects of constant debate. Critics see young people as being “fed” learning because they are seldom left on their own to learn in a way of their choice. They have little direct encounters with nature, for example, and little experience with society either. While they have learned a lot, they may not have learned how to learn.

--OECD, 2011
http://dx.doi.org/10.1787/9789264096660-en
It is a miracle that curiosity survives formal education.
---Albert Einstein
The future: The Age of Globalization

The stone age did not end because they ran out of stones
World population development

- Developing countries
- Industrialized countries
The world’s workforce is rising steadily...
Apple Employees: 43,000 US, 20,000 overseas
People working on Apple Products: 700,000
Apple profit: 400,000 per employee

Global
Creative
Entrepreneurial
Entrepreneurs:

- Business entrepreneurs
- Social entrepreneurs
- Intrapreneurs
- Policy entrepreneurs
## Entrepreneurial Qualities

<table>
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<tr>
<th>Confidence</th>
<th>Friends</th>
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<tr>
<td>Passion</td>
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Individual differences
Multiple intelligences
Cultural diversity
Curiosity, passion, creativity

Enhanced Human Talents

Schooling
Entrepreneurship-oriented Education

What: Student Autonomy

Where: The Global Campus

How: Product-oriented Learning
What: Student Autonomy

• Curriculum
• Governance
• Environment

How: Product-oriented Learning

• Authentic product
• Drafts and review
• Persistence and discipline

Where: The Global Campus

• Global partners
• Global markets
• Global resource

The Global Campus

Global partners

Global markets

Global resource

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OBA
http://globaleducation.uoregon.edu
http://zhaolearning.com