## Education Post COVID: Students as Change Partners

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### 30 Years of Reforms

- Excellence?
- Equity?

#### FIGURE | Changes in twelfth-grade NAEP mathematics average scores, by selected student groups

Student group	2019 score	2019 score compared to			
Student group		2015	2009	2005	
All students	150	<b>♦</b>	₩3	<b>♦</b>	
Race/ethnicity					
White	159	<b>♦</b>	<b>♦</b>	<b>1</b> 2	
Black	128	<b>♦</b>	<b>♦</b>	•	
Hispanic	138	<b>♦</b>	<b>♦</b>	<b>4</b>	
Asian/Pacific Islander	173	<b>♦</b>	<b>♦</b>	<b>1</b> 0	
American Indian/Alaska Native	136	<b>♦</b>	<b>♦</b>	<b>♦</b>	
Two or More Races	157	<b>♦</b>	<b>♦</b>	<b>1</b> 5	
Gender					
Male	152	<b>♦</b>	<b>4</b> 3	•	
Female	149	<b>♦</b>	<b>4</b> 3	•	





Score increase in 2019 Score decrease in 2019



FIGURE | Changes in twelfth-grade NAEP reading average scores and scores at selected percentiles

	2019	2019 compared to		
	score	2009	2002	1992 <sup>1</sup>
Average score	285	<b>₩</b> 3	<b>•</b>	<b>₩</b> 7
Percentile score				
10th	228	<b>1</b> 0	<b>4</b> 9	<b>1</b> 20
25th	258	<b>4</b> 6	<b>4</b> 5	<b>1</b> 3
50th	288	<b>4</b> 2	<b>•</b>	<b>4</b> 5
75th	315	•	<b>1</b> 3	<b>•</b>
90th	338	<b>•</b>	<b>①</b> 5	<b>①</b> 5

Score increase in 2019 • Score decrease in 2019 • No significant change in 2019

<sup>&</sup>lt;sup>1</sup> Accommodations not permitted.

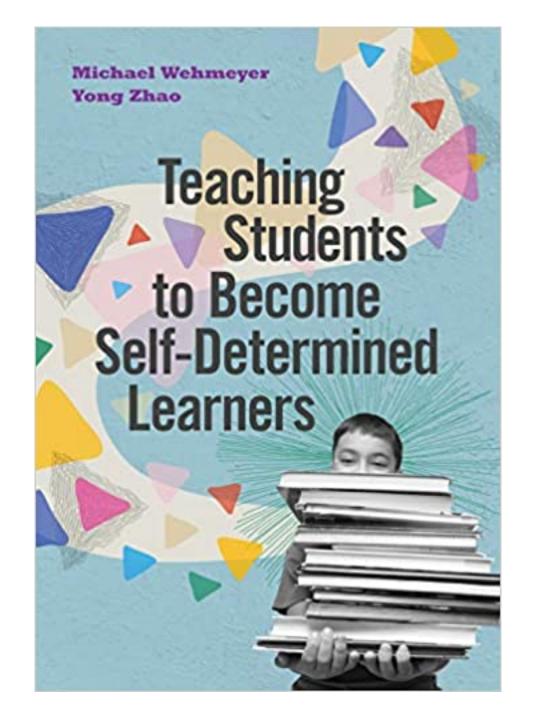
**FIGURE** | Changes in twelfth-grade NAEP reading average scores and scores at selected percentiles, by selected student groups

	2019 score compared to 1992 <sup>1</sup>					
Student group	Average score	10th percentile	25th percentile	50th percentile	75th percentile	90th percentile
All students	<b>4</b> 7	<b>1</b> 20	<b>1</b> 3	<b>4</b> 5	<b>*</b>	<b>1</b> 5
Race/ethnicity						
White	<b>4</b> 2	<b>1</b> 6	<b>4</b> 7	<b>*</b>	<b>1</b> 4	<b>1</b> 7
Black	<b>1</b> 0	<b>4</b> 24	<b>1</b> 6	₩8	<b>*</b>	<b>*</b>
Hispanic	•	<b>1</b> 7	<b>1</b> 0	<b>*</b>	<b>*</b>	<b>*</b>
Asian/Pacific Islander	<b>1</b> 8	<b>♦</b>	<b>•</b>	<b>*</b>	<b>1</b> 4	<b>1</b> 5
American Indian/Alaska Native	‡	‡	‡	‡	‡	‡
Two or More Races	‡	‡	‡	‡	‡	‡
Gender						
Male	₩8	<b>4</b> 23	<b>1</b> 5	<b>4</b> 7	•	<b>1</b> 5
Female	<b>↓</b> 5	<b>1</b> 6	<b>1</b> 0	<b>4</b>	<b>♦</b>	<b>1</b> 4

Score increase in 2019 Score decrease in 2019 No significant change in 2019

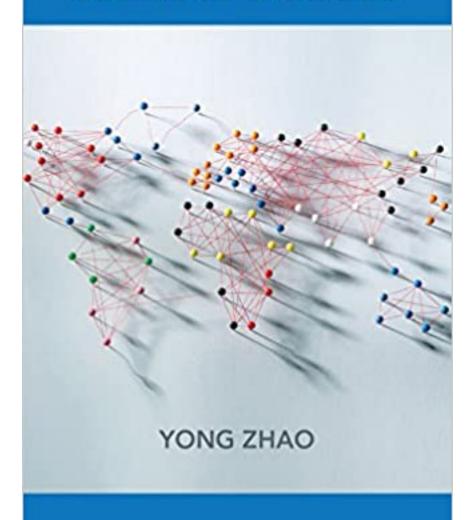
 $<sup>\</sup>ddagger$  Reporting standards not met. Sample size insufficient to permit a reliable estimate.

<sup>&</sup>lt;sup>1</sup> Accommodations not permitted.



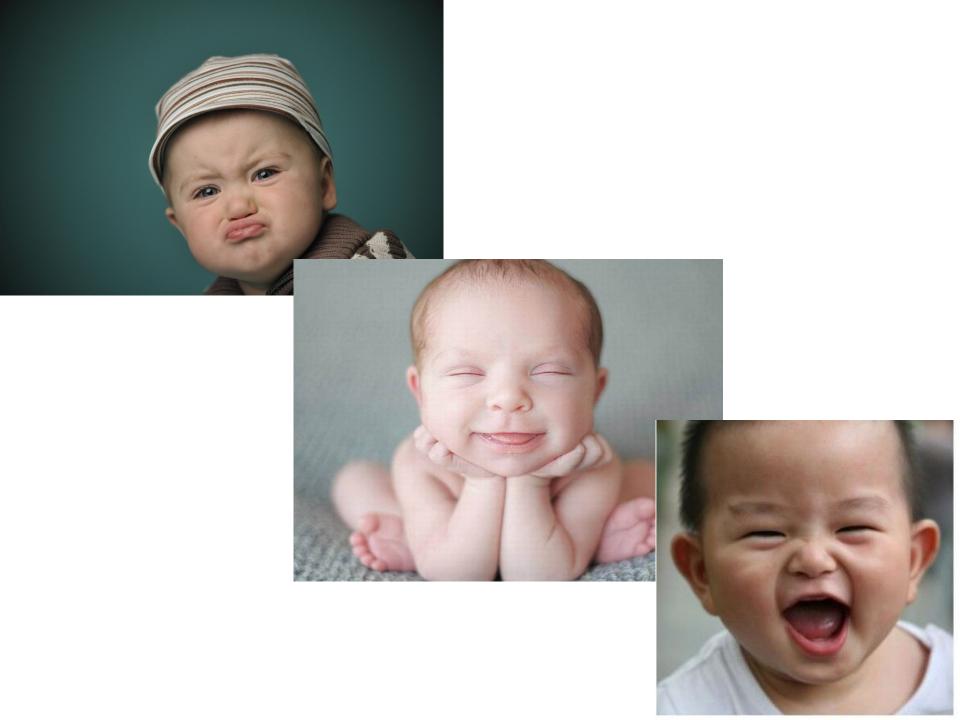
#### REACH FOR GREATNESS

PERSONALIZABLE EDUCATION FOR ALL CHILDREN



CORWIN IMPACT LEADERSHIP SERIES





THE TOP TEN BESTSELLER

# nature via nurture

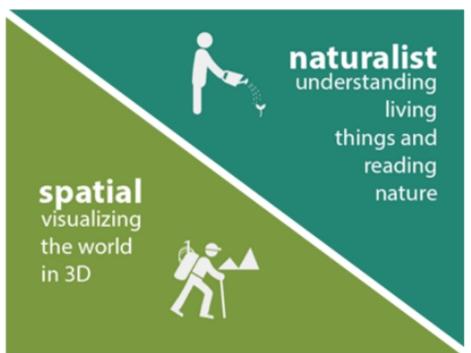
GENES, EXPERIENCE AND WHAT MAKES US HUMAN



'Sets the modern terms for an ancient debate . . . These times need a book like this.' Ian McEwan

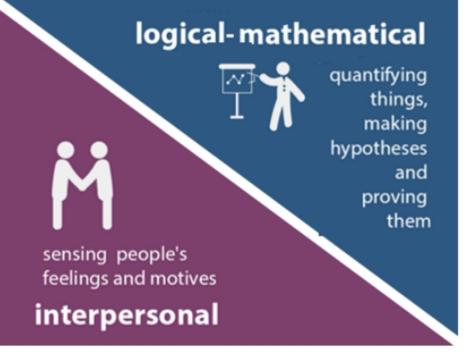
## MATT RIDLEY

**Author of Genome** 

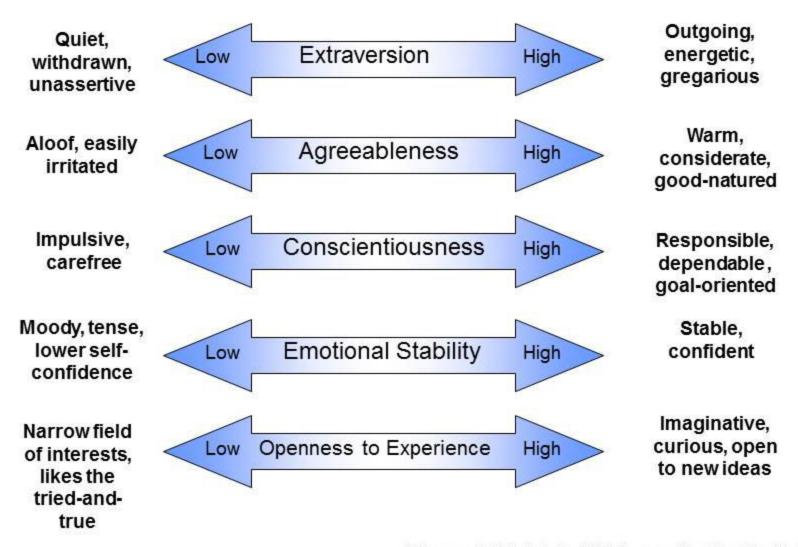








### The Big Five Personality Dimensions



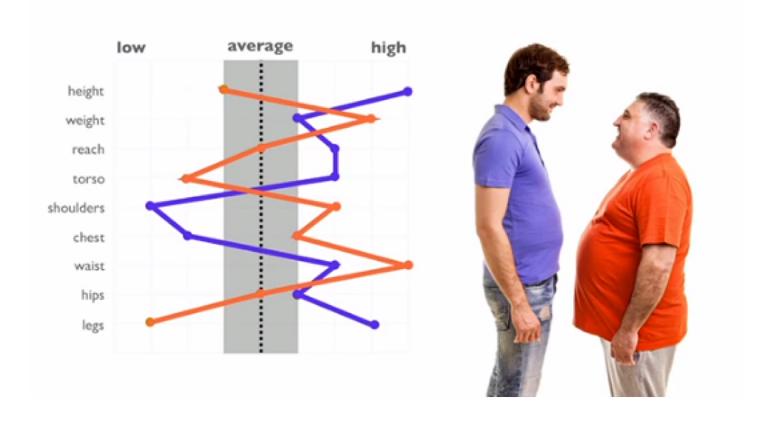
(Tupes & Christal, 1961, as cited by Daft, 2007)

#### The 16 basic desires

Power Influence others, Create	Independence Self-reliance	Curiosity Understanding	Acceptance Avoid failure/criticism
Order Structure, Orderliness	Saving Collect things	Honor Upright character	Idealism Social justice
Social contact Peer companionship	Family Raise a family	Status Respect based on Social standing	Vengeance Confront those who offend, frustrate & annoy
Romance Beauty & Sex (libido) Art & Music	Eating Food & Appetite	Physical activity  Muscle exercise	Tranquility Safety Free of anxiety & pain Source: Steven Reiss, PhD.

# Diverse Experiences: Family and Community

# Jagged Profile: Everyone can be great (All are above the Average)



Individual differences Multiple intelligences

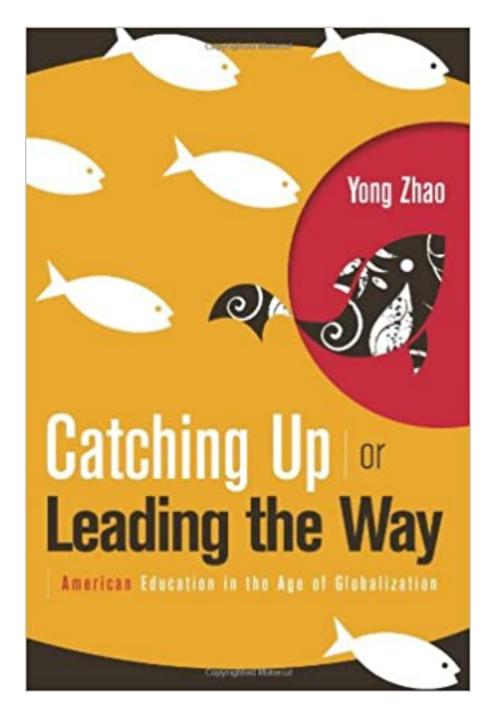
Cultural diversity
Curiosity, passion, creativity

Schooling

Employable skills

### What do we have?

- Natural Born Learners
- Naturally Diverse Learners
- Naturally Intentional Learners



2009 PISA Results

## A Long History of Bad Test-takers

#### • 1960s

- -FIMS: 12<sup>th</sup> out of 12 countries
- -FISS: 14<sup>th</sup> out of 18 countries

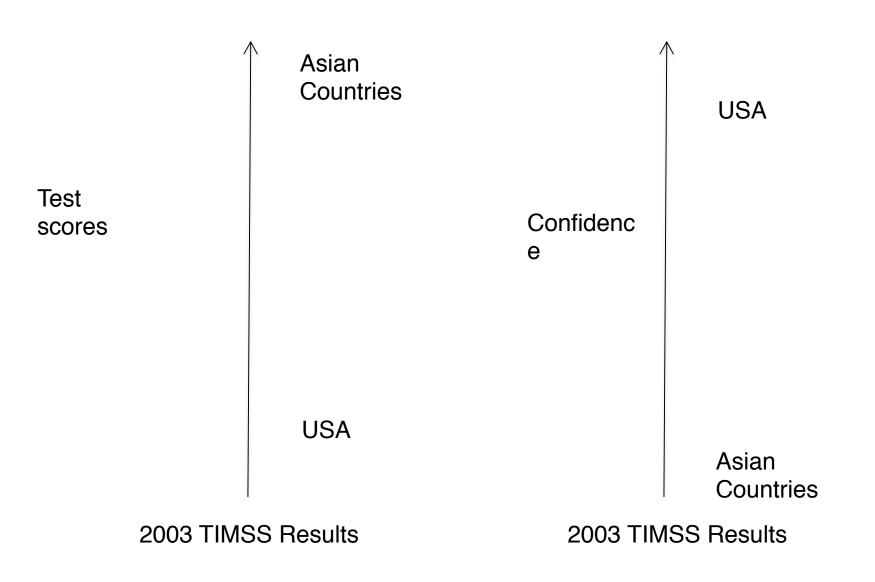
#### 1970s/1980s

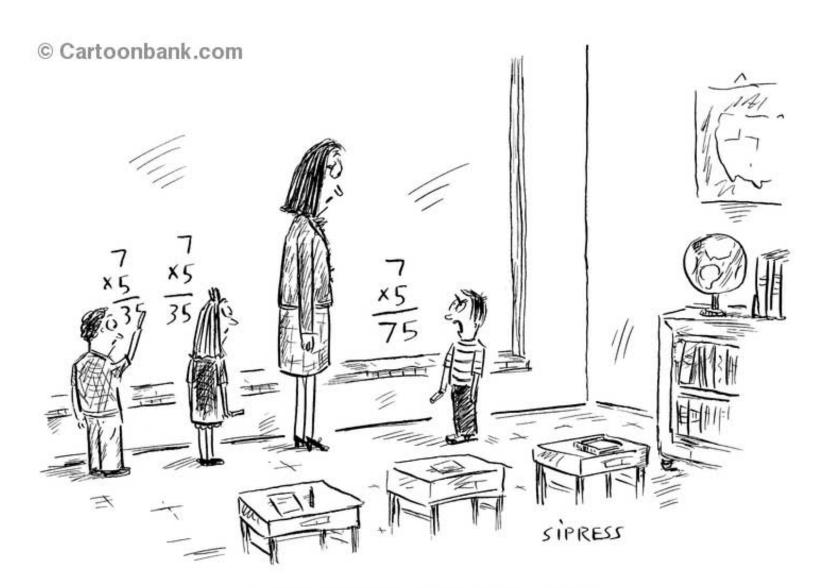
- -SIMS: 12, 14, 12, 12out of 15 (number systems, algebra, geometry, calculus)
- -SISS: 14th (biology), 12th (chemistry), 10th (physics) out of 14

### 1990s—2007: TIMSS (8<sup>th</sup> graders)

- -28<sup>th</sup> out of 42 in 1995
- -15<sup>th</sup> in 2003
- -9<sup>th</sup> in 2007

## Why Is the U.S. Still Here?





"It may be wrong, but it's how I feel."

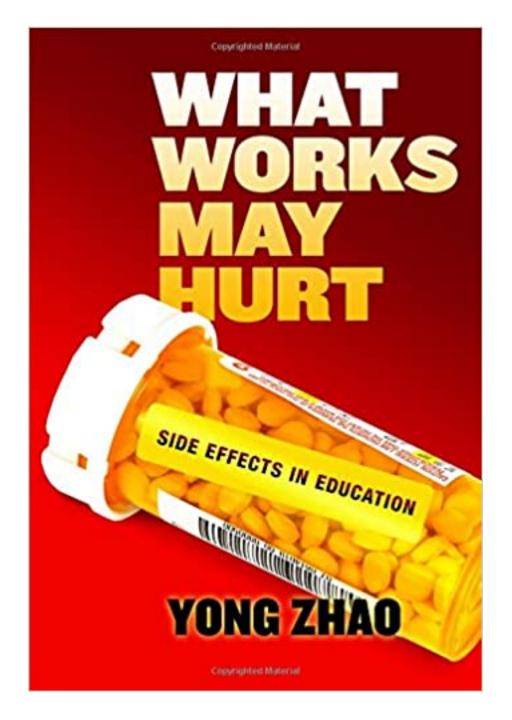
#### **TIMSS 2011 Math Scores vs. Confidence of Select Countries**

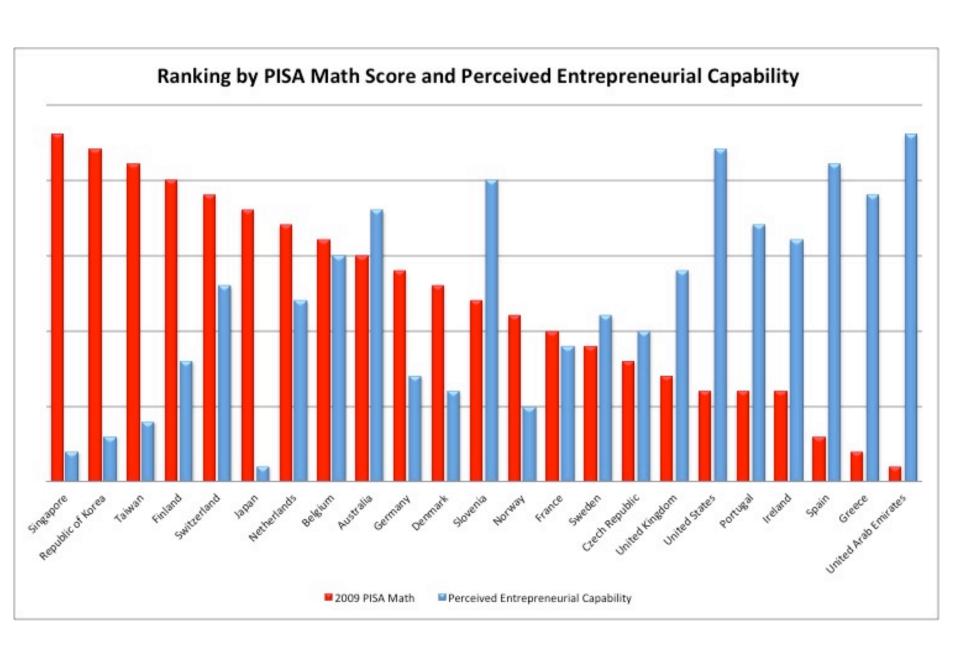
Country	Math Scores	Confidence (%)	Value Math (%)
Korea	613	03 (11)	14
Singapore	611	14 (21)	43
Chinese Taipei	609	07 (20)	13
Hong Kong	586	07 (24)	26
Japan	570	02 (09)	13
United States	509	24 (40)	51
England	507	16 (33)	48
Australia	505	17 (38)	46

## Correlations between TIMSS Math Score and Confidence and Enjoyment

	Grade	Correlation
	4	-0.58
Confidence	8	-0.64
	4	-0.67
Enjoyment	8	-0.75

Tom Loveless (2006): How Well Are American Students Learning http://www.brookings.edu/~/media/Files/rc/reports/2006/10education\_loveless/10education\_loveless.pdf





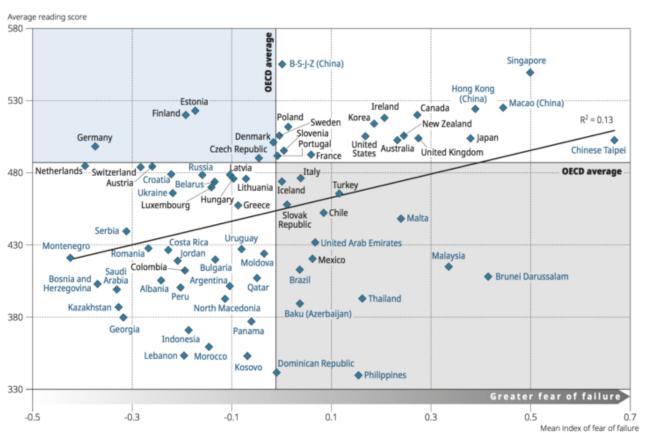
#### Correlations between PISA and Entrepreneurship Indicators

	PISA Reading	PISA Math	PISA Sciences
Perceived Capabilities	595**	586**	608**
Nascent Entre Rate	693**	636**	678**
New Biz Ownsp Rate	371*	374*	392*
Total Early Stage Entre Activity	658**	620**	658**

Data source: OECD PISA 2010, Global Entrepreneurship Monitor, 2010

Figure III.13.4 Fear of failure and average reading performance

Source: OECD, PISA 2018 Database, Tables III.B1.13.2 and I.B1.4

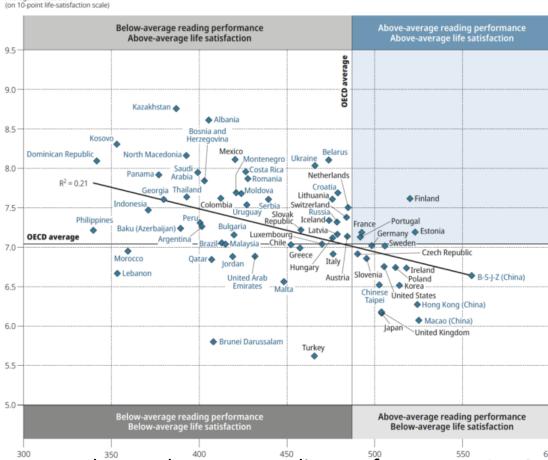


"At the system level, the greater the fear of failure expressed by students, the higher the reading scores in that education system" (OECD, 2019, p. 193).

a large number of Englishspeaking and East Asian education systems were amongst those whose students were both more likely to report a fear of failure and to be high performers in reading. (OECD, 2019, p. 193).

The strongest positive associations between general self-efficacy and reading performance were observed largely in countries and economies whose average reading performance was below the OECD average, whereas the weakest associations were observed often in education systems whose reading performance was at or above the OECD average. In Beijing, Shanghai, Jiangsu and Zhejiang (China) and Japan, students who expressed more self-confidence in their ability to succeed and accomplish tasks scored lower than students who expressed less self-confidence. (p. 190-191).

Average life satisfaction



a trend towards poorer reading performance amongst both students with very high and very low levels of life satisfaction... reading scores were lower amongst students who reported between 0 and 4, and 9 or 10 on the lifesatisfaction scale, while reading scores were higher amongst students who reported 5 through 8 on the scale" (OECD, 2019, p. 161)

"students in low-achieving countries" tended to report higher levels of life satisfaction than students in highachieving countries... Moreover, in most East Asian countries and economies, such as Beijing, Shanghai, Jiangsu and Zhejiang (China) (hereafter "B-S-J-Z [China]"), Hong Kong (China), Japan and Macao (China), students scored above the OECD average in reading, but reported lower levels of life satisfaction than the average 15year-old student in OECD countries" (OECD, 2019, p. 160).

"students who were classified as 'very satisfied' with their lives scored 16 points lower in reading than more dissatisfied students, after accounting for students' and schools' socioeconomic profile. In Hong Kong (China), Malta and the United States, 'very satisfied' students scored at least 30 points lower in reading than other students."

## Short-term vs. Long Term

- Productive failures
- Unproductive successes



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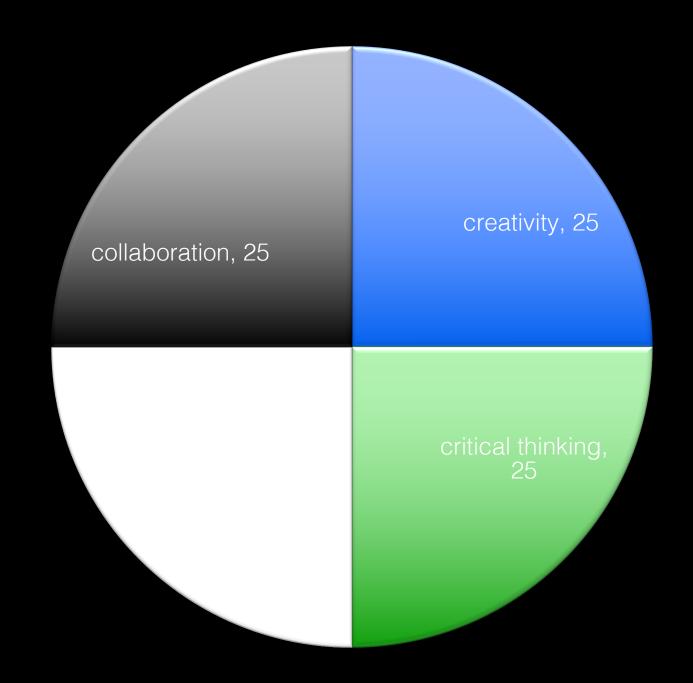
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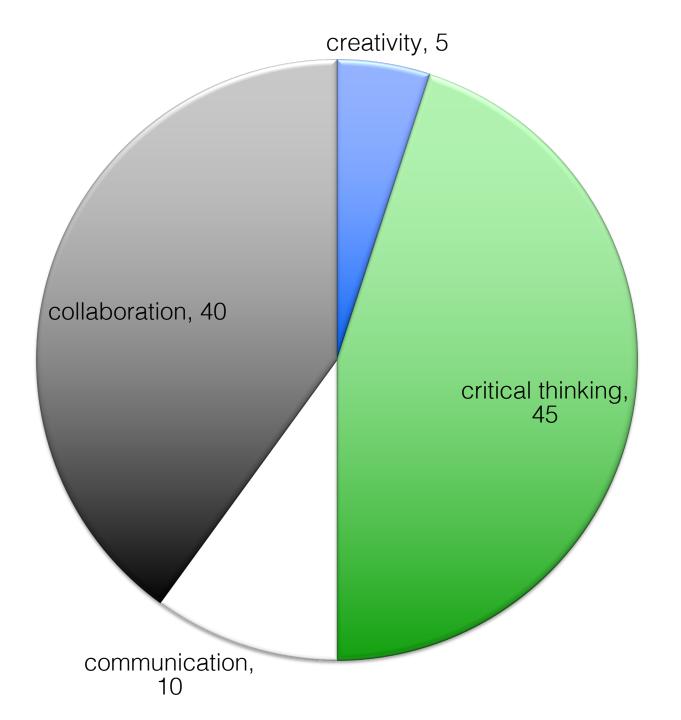
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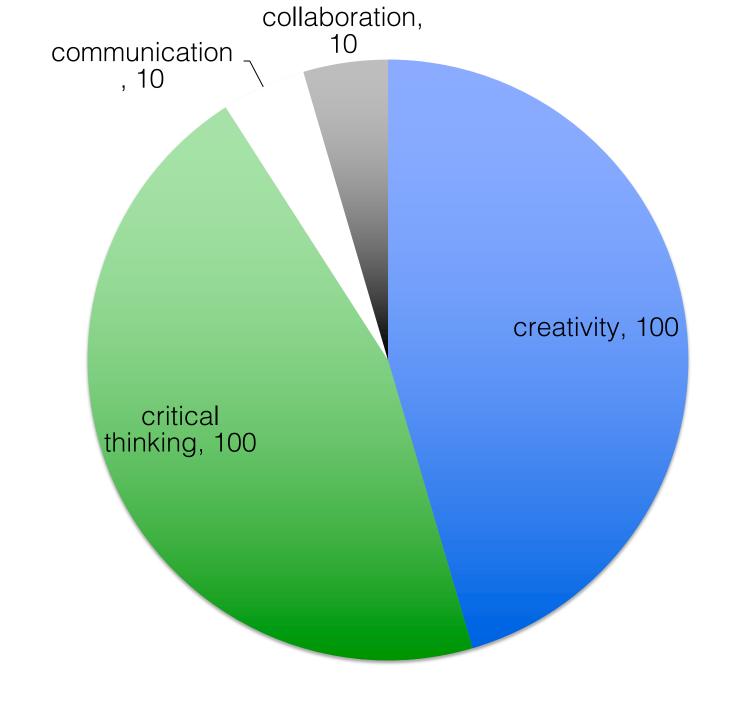
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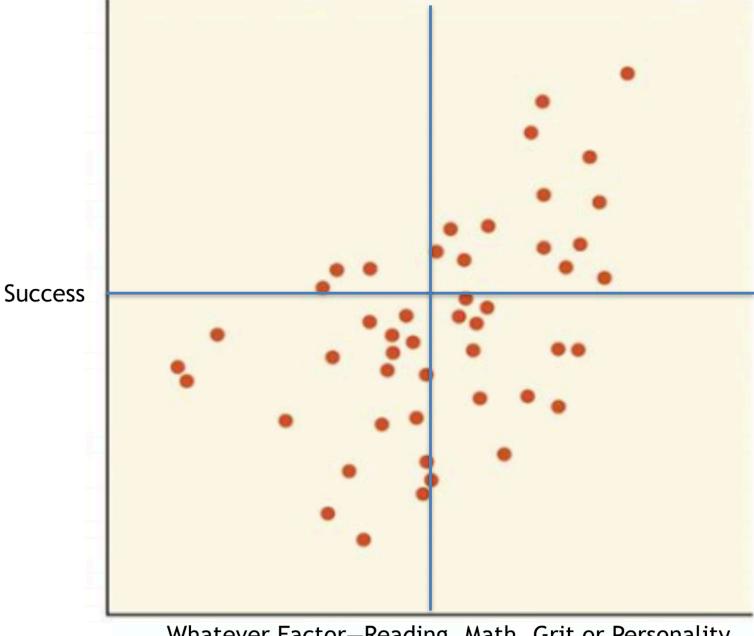
## Teacher Effects on Student Achievement and Height: A Cautionary Tale

Marianne Bitler, Sean Corcoran, Thurston Domina & Emily Penner





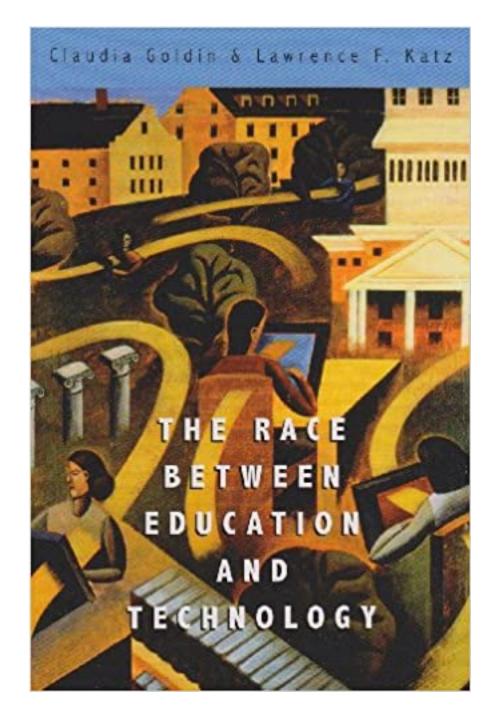


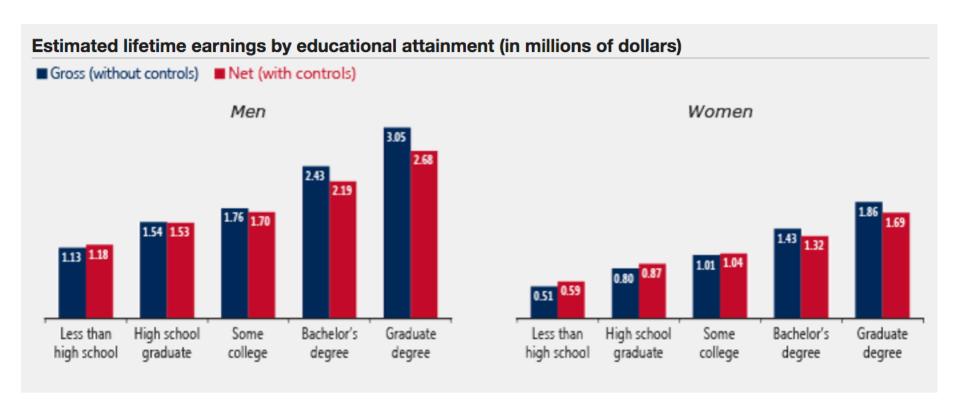


Whatever Factor—Reading, Math, Grit or Personality Correlation r = 0.5

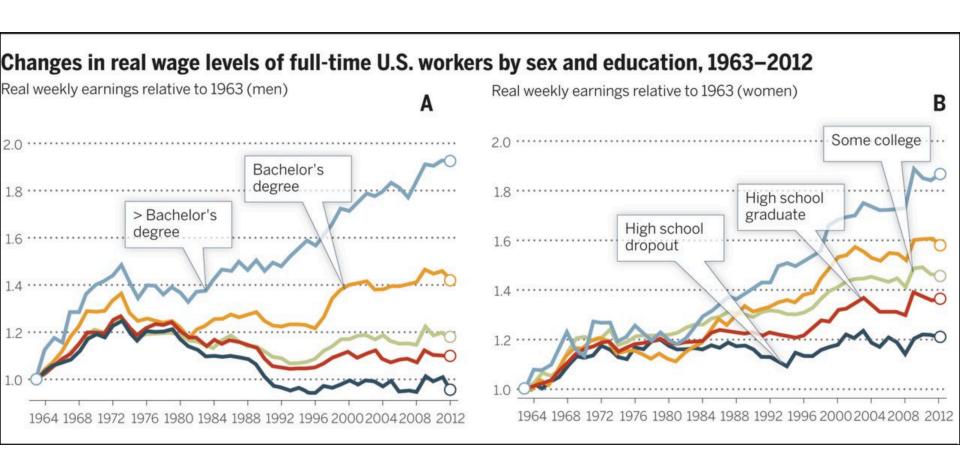
#### **Evidence-based Practice**

- Multiple outcomes
- Short-term vs. long-term outcomes
- Instructional vs. educational outcomes
- Cognitive vs. non-cogntive





**SOURCE:** Tamborini, Christopher R., ChangHwan Kim, and Arthur Sakamoto. 2015. "Education and Lifetime Earnings in the United States." *Demography* 52: 1383–1407.



Relative earnings from employment by level of educational attainment for 25-64 year-olds (2009 or latest available year) (upper secondary and post-secondary non-tertiary education = 100) – OECD (2012)<sup>6</sup>

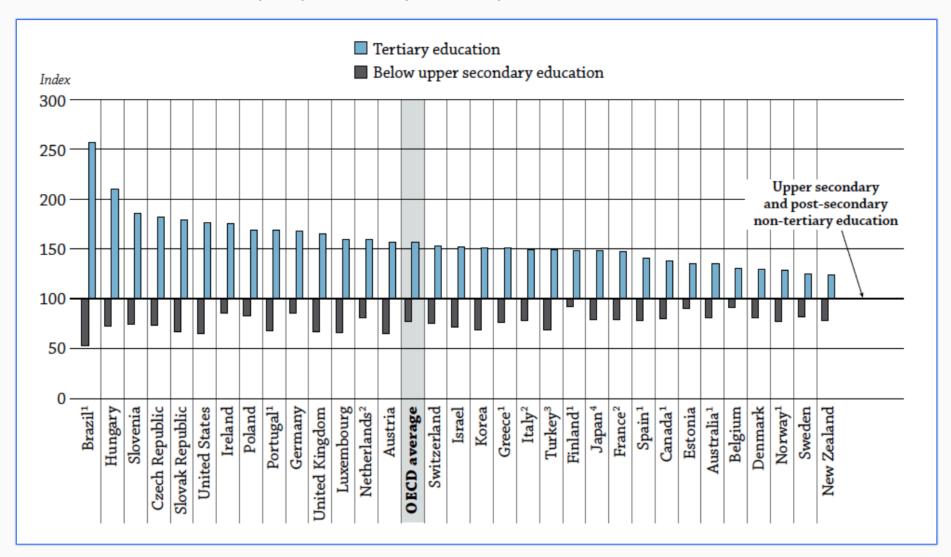
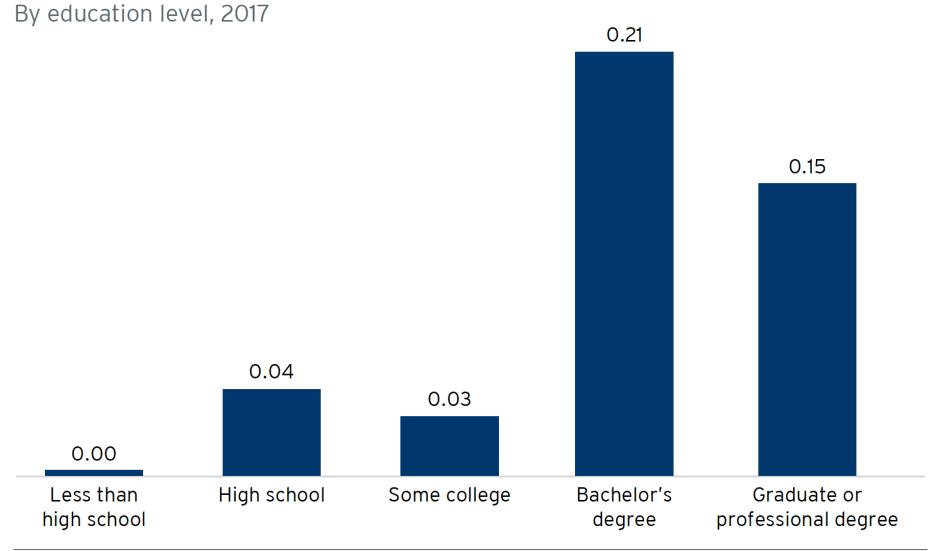


Figure 4. Standardized Al exposure, 2017



Note: Figures smoothed using a LOWESS regression Source: Brookings analysis of Webb (2019) and OES data

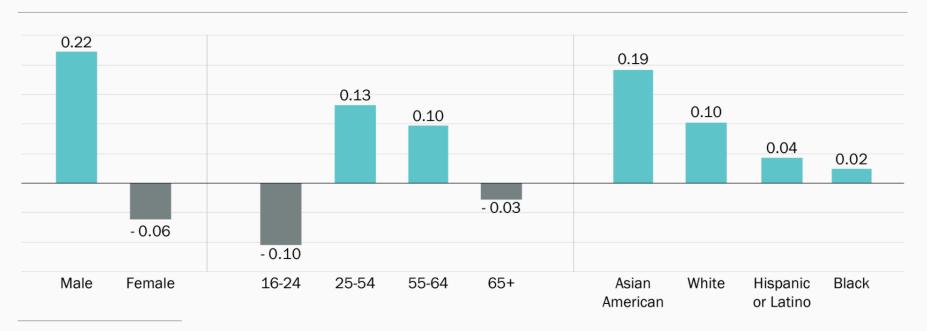
Figure 3. Average standardized Al exposure



Source: Brookings analysis of Webb (2019) and IPUMS-USA ACS 1-year microdata

#### Al may not spare any demographic, but exposure levels will vary

Average standardize Al exposure by sex, age, and race-ethnicity, 2017

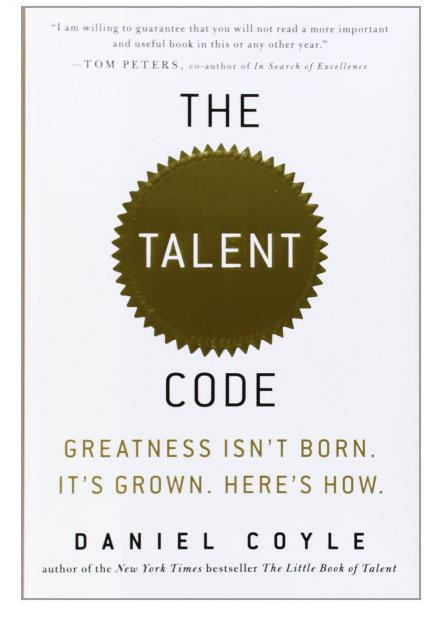


American Indians and Alaskan Natives, Native Hawaiians and Pacific Islanders, and people indicating they are two or more races are not shown due to limited data availability.

Source: Brookings analysis of Webb (2019)

#### What do we need?

- Creative, entrepreneurial, globally minded
- Diverse and unique
- Social and emotionally healthy



## 3 Ts: Talent, Time, & Teaching

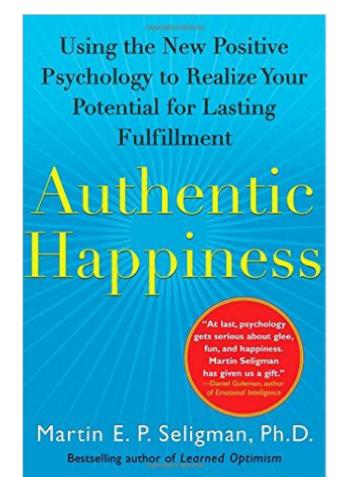
## Everyone Needs to be Great

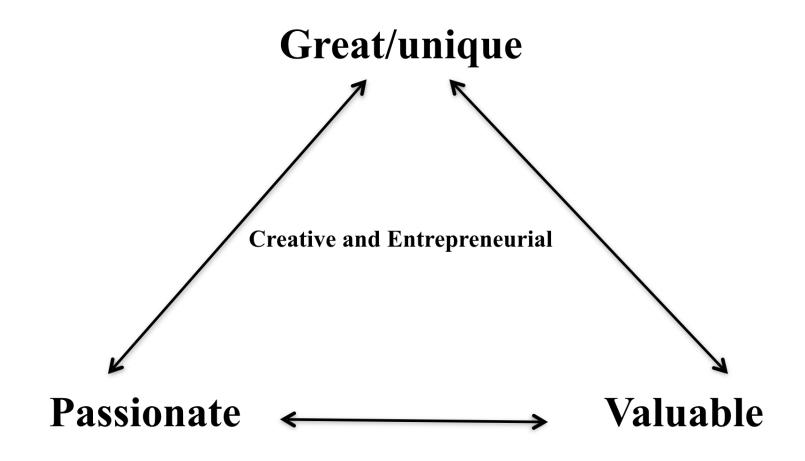
A musician must make music, an artist must paint, a poet must write, if he is to be ultimately at peace with himself. What a man can be, he must be.

--Abraham H. Maslow

# Creating value for others: Entrepreneurial Mindset

Use your signature strengths and virtues in the service of something much larger than you are." ~ Martin Seligman

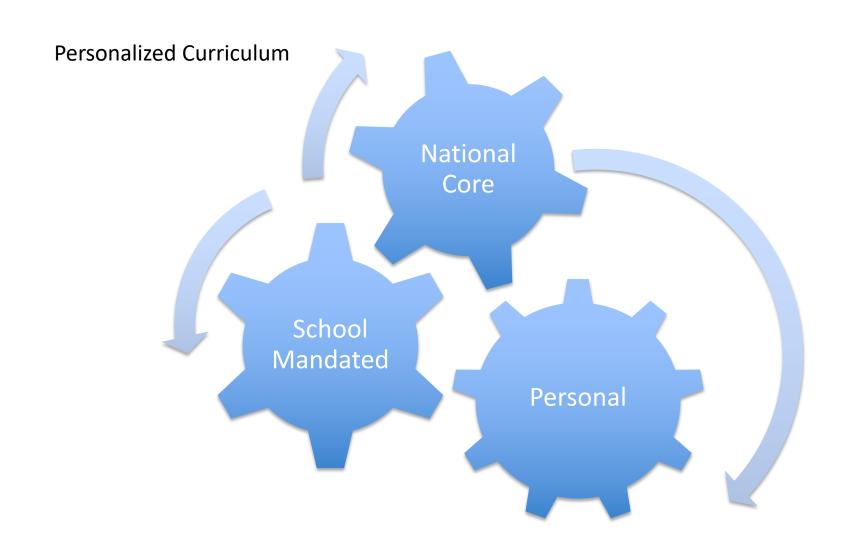




### Three Principles

- Personalization
- Product oriented
- Globally connected

## HIP Human Interdependent Project





## An Education Crisis Is a Terrible Thing to Waste

How Radical Changes Can Spark Student Excitement and Success

> Yong Zhao, Trina E. Emler, Anthony Snethen, and Danqing Yin

#### The Crises

- The Pandemic
- Geo-politics
- Social Unrest
- Climate and Environment
- Education
  - Past
  - Present
  - Future

silverliningforlearning.org Episode #33 | October 31 10:00 am EDT

## Nepali High School Students in MOOCs: Scalable Results Lending to an Optimistic Future



Baman Kumar Ghimire



Bishwa Raj Gautam

& students

#### The Forces...

- Education Failures
  - Equity
  - Excellence
- The Future is Waiting
  - Technology
  - Globalization
- The Human Nature
  - Natural born learners
  - Diverse learners
  - Intentional learners
- The Homogenous and Homogenizing Education

#### School within a School

- The Independent Project
  - https://www.youtube.com/watch?v=REIUmGI5gLc
- The Staff Project
- The School Project

#### Curriculum and Pedagogy

- School Level
  - A student day
  - A student project
  - Seeking students' vote for courses
- Classroom Level
  - Allow student choices
  - Enable student course offerings
  - Product-oriented learning
  - Connect globally