BMW GROUP
Plant Spartanburg

THE NEXT 100 YEARS

Cool, or what?!



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2019 BMW i8 Coupe





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QUARTZ *at* WORK

Perennials, not millennials, will trigger the next wave of talent retention efforts

By Corinne Purtill • December 3, 2018

When BMW realized how many workers with job protection at one German plant were aging, the automaker retooled its production facility to accommodate older workers, installing ergonomic seating and softer floors, enlarging the type on the computers, and supplying more supportive work boots. Productivity rose, and absenteeism plummeted. US companies reluctant to lose the institutional knowledge of older workers have done the same, with manufacturers installing ergonomic seats in trucks and redesigning assembly lines to avoid repetitive motion injuries.

Automotive World est. 1992

"Our forward-looking approach has absolute priority. Particularly in these volatile times, we are maintaining our focus on the future and taking the decisions that will lead to tomorrow's success," said **Harald Krüger**, Chairman of the Board of Management of BMW AG, in Munich on Wednesday. "We stand for trust and continuity. The BMW Group has more than 100 years of experience in dealing with transformation and volatility in a rapidly changing world. This is why we see challenging conditions as an opportunity to move forward and strengthen our position as market leader. We are implementing our strategy rigorously and investing extensively in the technologies of the future, despite today's volatile environment," **Krüger** emphasised.

BMWBLOG

BMW Wants to Train More Specialists, Doubles Scholars Program

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Disruption, (4IR) Innovation, and Opportunity

Leveraging Independence

PAIS-SC | January 25, 2019

Jefferson Burnett
SVP
burnett@nais.org

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BLUE OCEAN OPPORTUNITY

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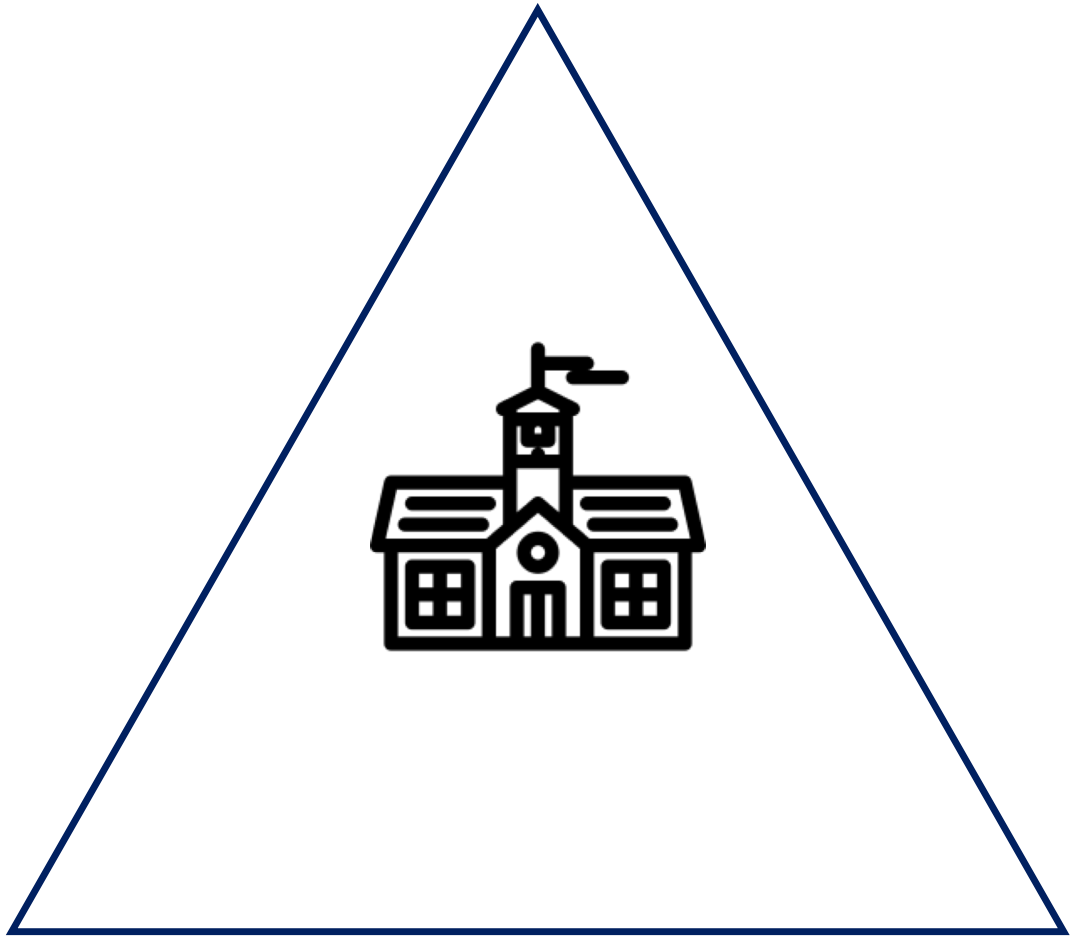




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Why

Mission



How

Model

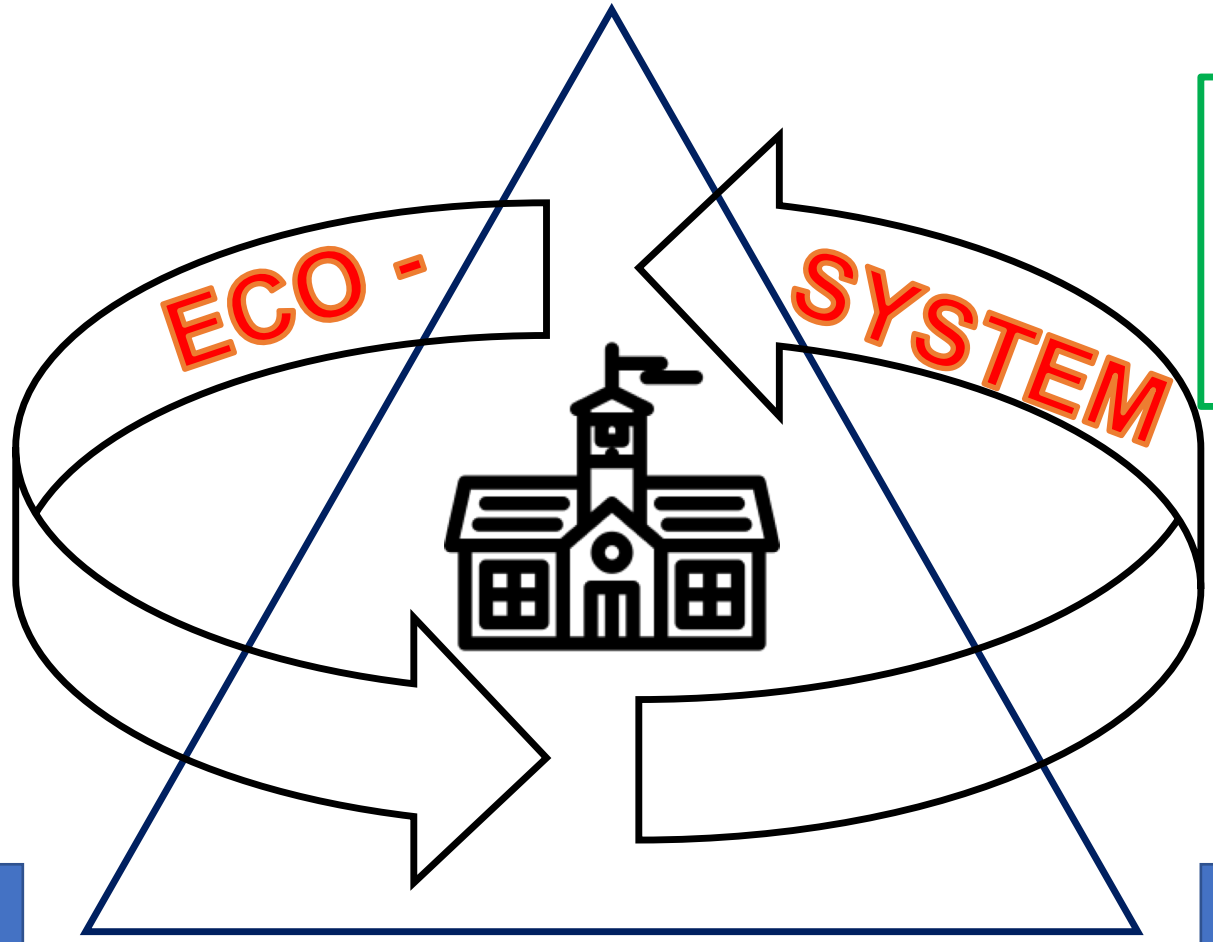
Whom

Market

National Association of Independent Schools

Why

Mission



1. **Demographics**
2. **Education Disruption**
3. **4IR & Ed**

How

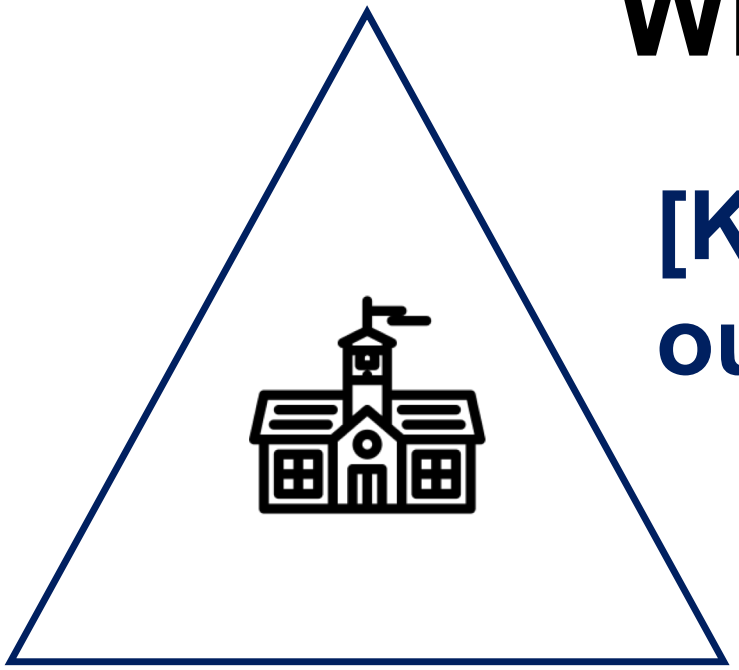
Model

Whom

Market

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Mission



Why we do what we do

[Kindergarteners] who started at our k12 schools this year…

…Will graduate in [2030]

Will they be ready?

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Will they be ready for 2030?

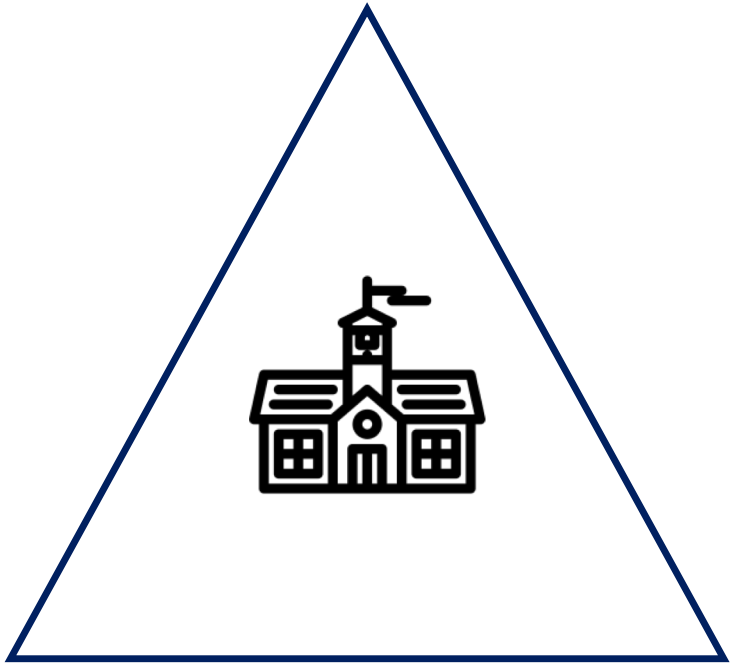


1. Why does your school do what it does?
2. What's its "secret education sauce"?
3. How do you deliver your "why and what?"

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The Eco-System and Market

Whom we serve & value

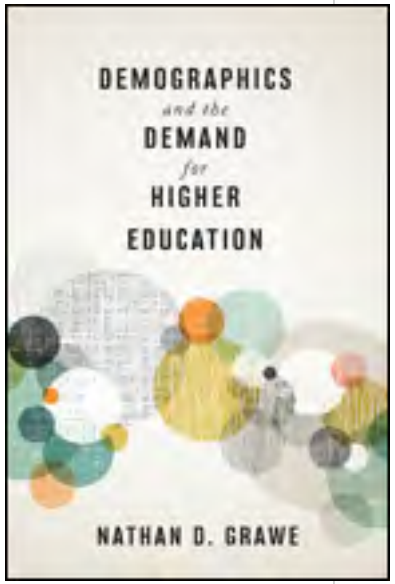


1. **Demographics (future & present)**
2. **Education Disruption**
3. **4IR and education**

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WICHE
WESTERN INTERSTATE COMMISSION FOR HIGHER EDUCATION

Where the Students Are/Are Not



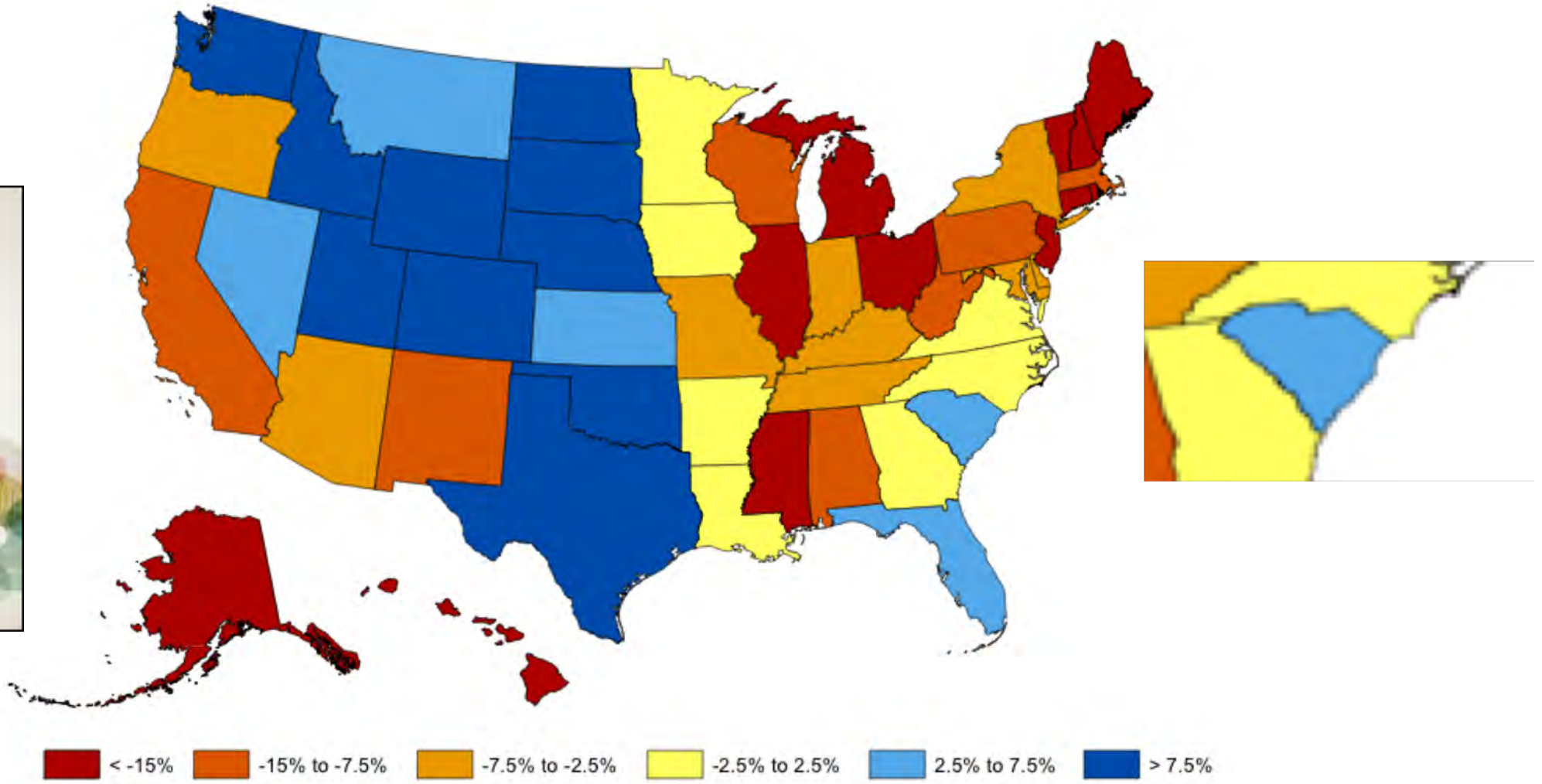
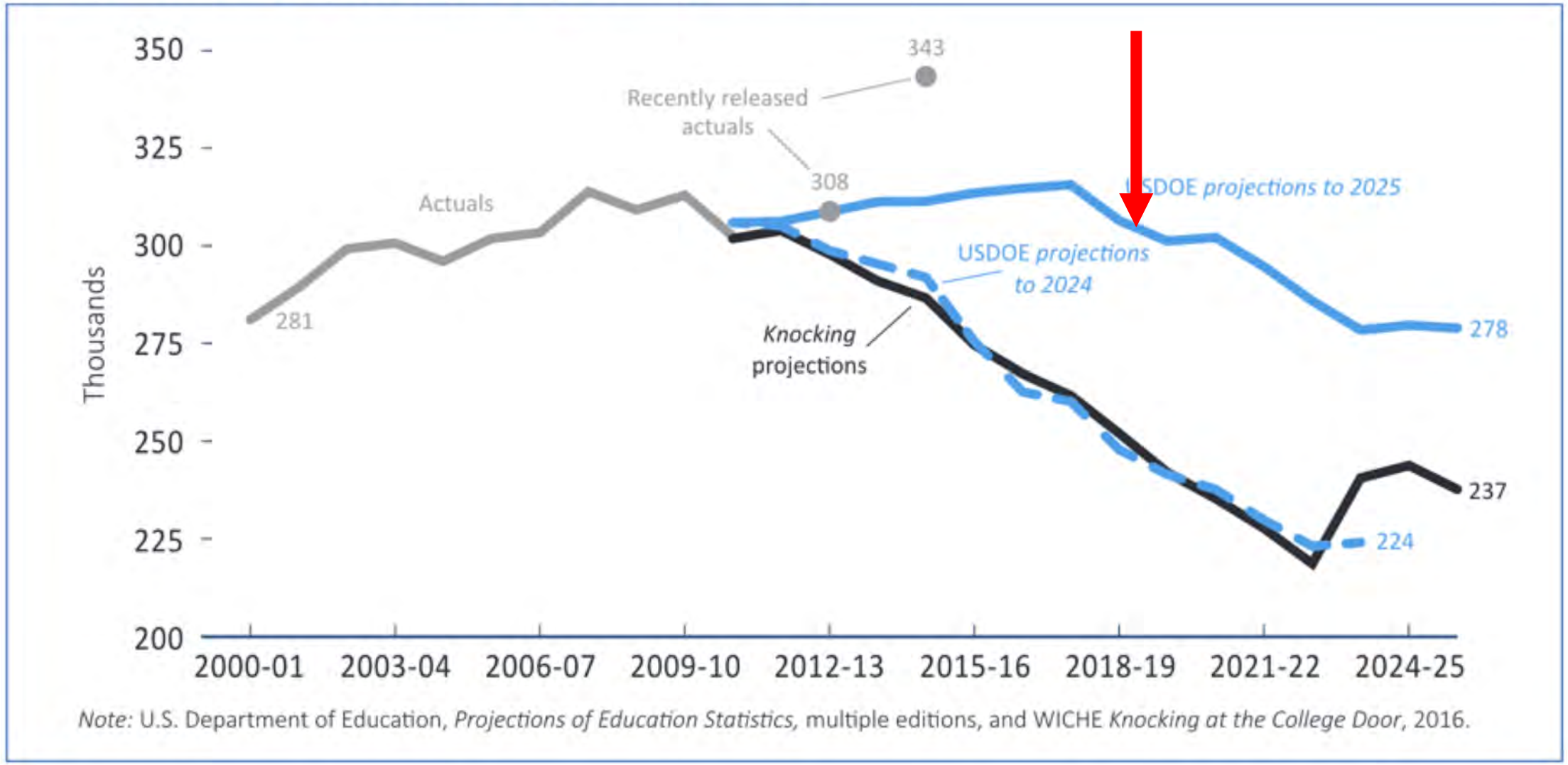


Figure 1.5 Forecasted growth in high school graduates, 2012 to 2032

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Figure 1. Actual and projected private high school graduates



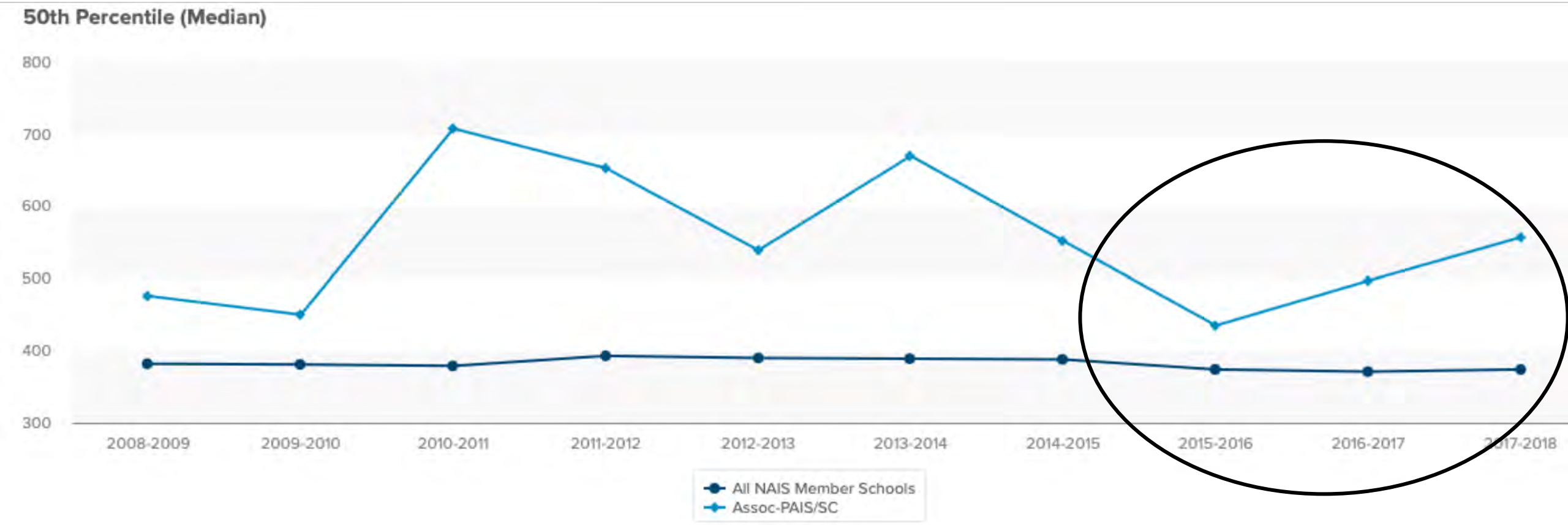
Note: U.S. Department of Education, *Projections of Education Statistics,* multiple editions, and WICHE *Knocking at the College Door*, 2016.

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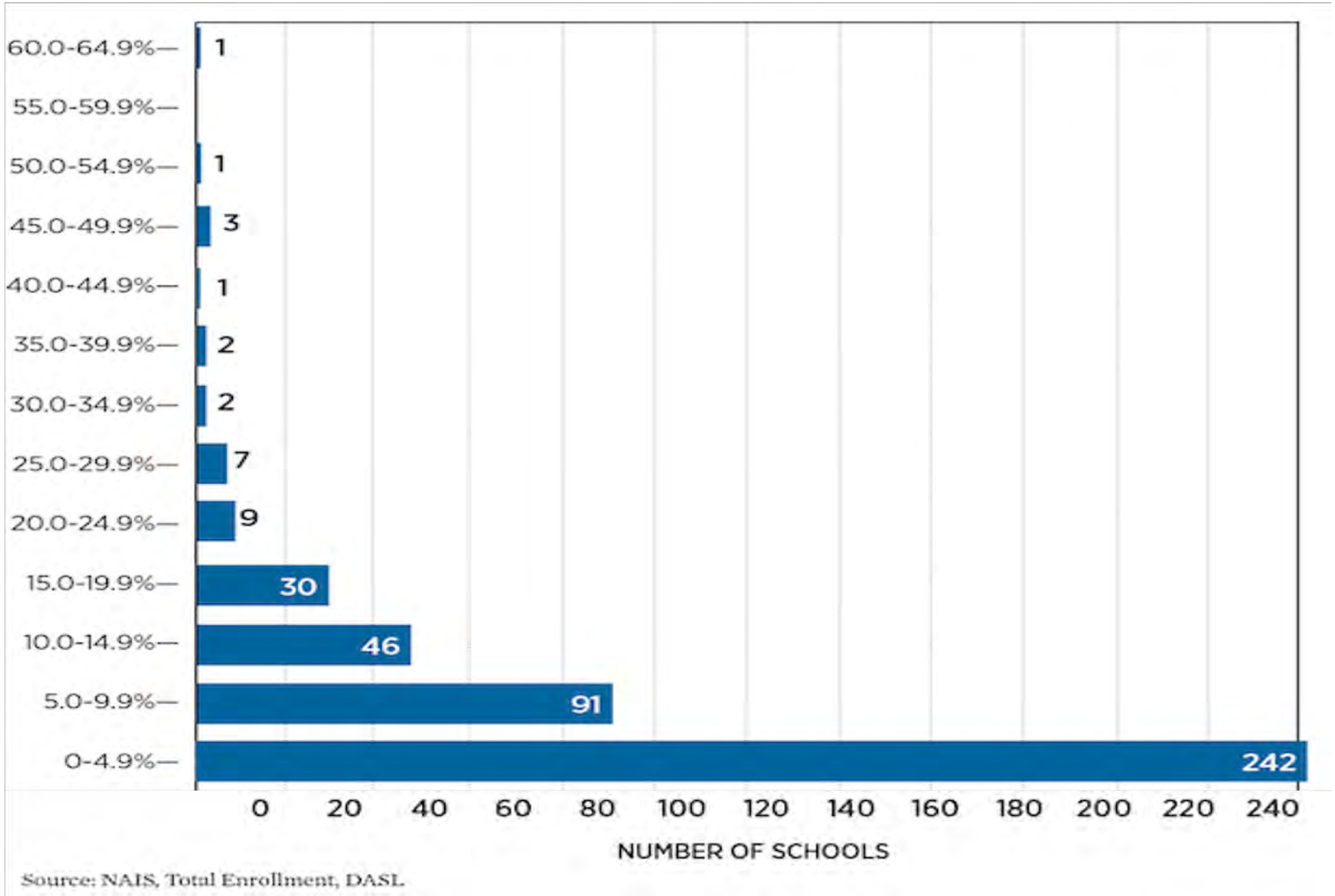
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Enrolment PAIS-SC



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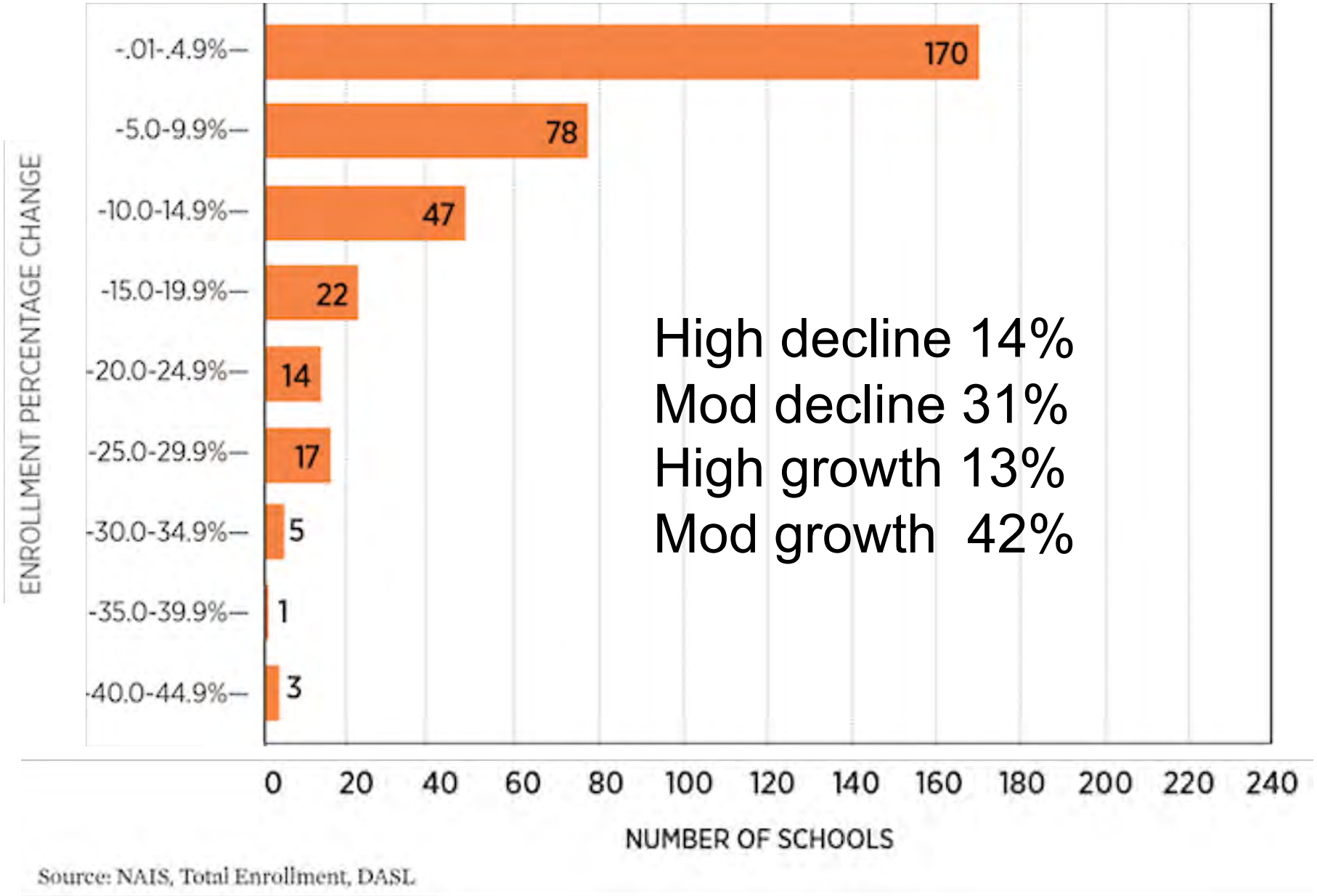
Distribution of Schools by Enrollment Change, 2013-2014 to 2017-2018



Source: NAIS, Total Enrollment, DASL

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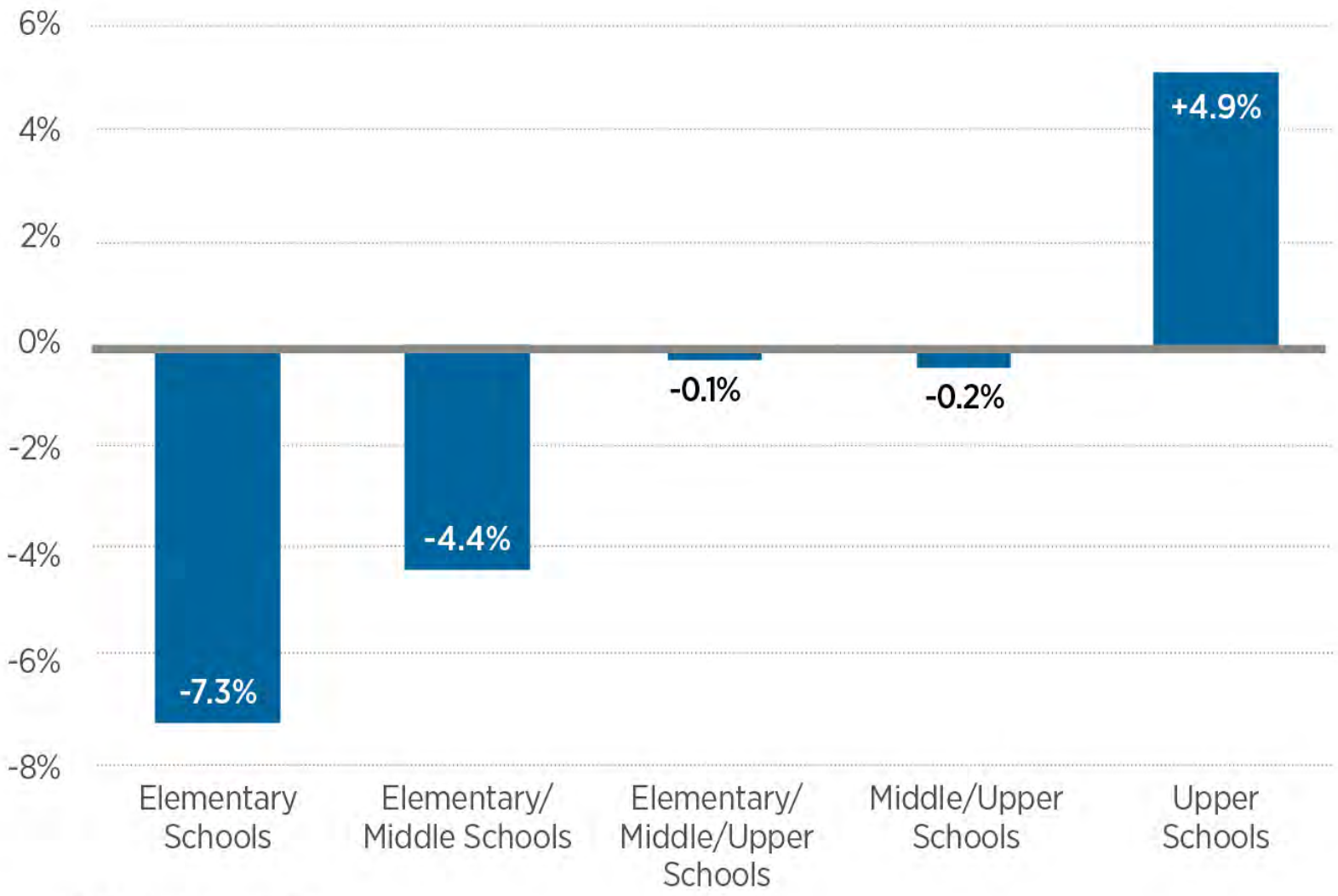
Distribution of Schools by Enrollment Change, 2013-2014 to 2017-2018



Source: NAIS, Total Enrollment, DASL

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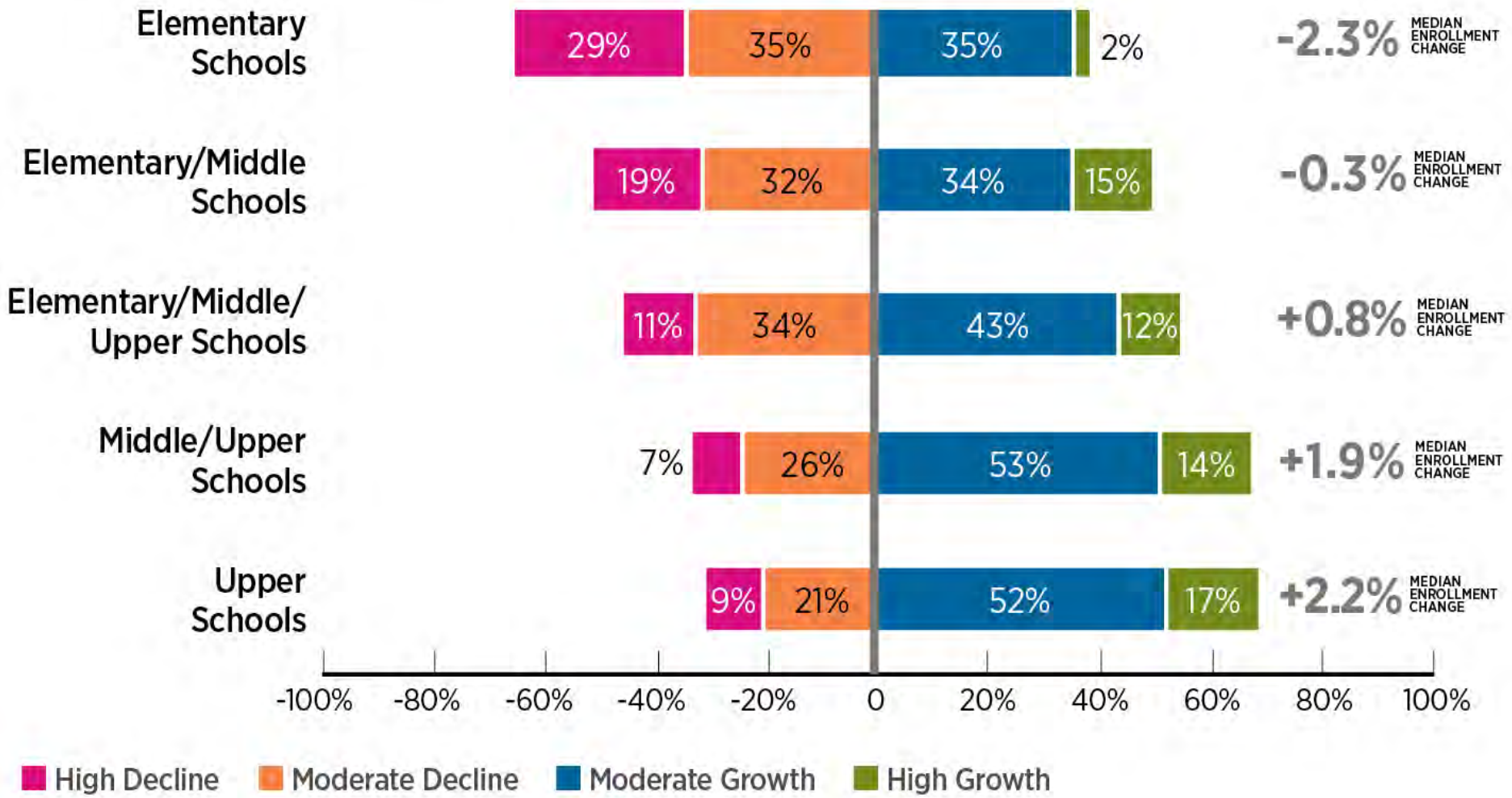
Change in Median Number of Applications, by Grades Served, 2013-2014 to 2017-2018



Source: NAIS, Admissions, DASL

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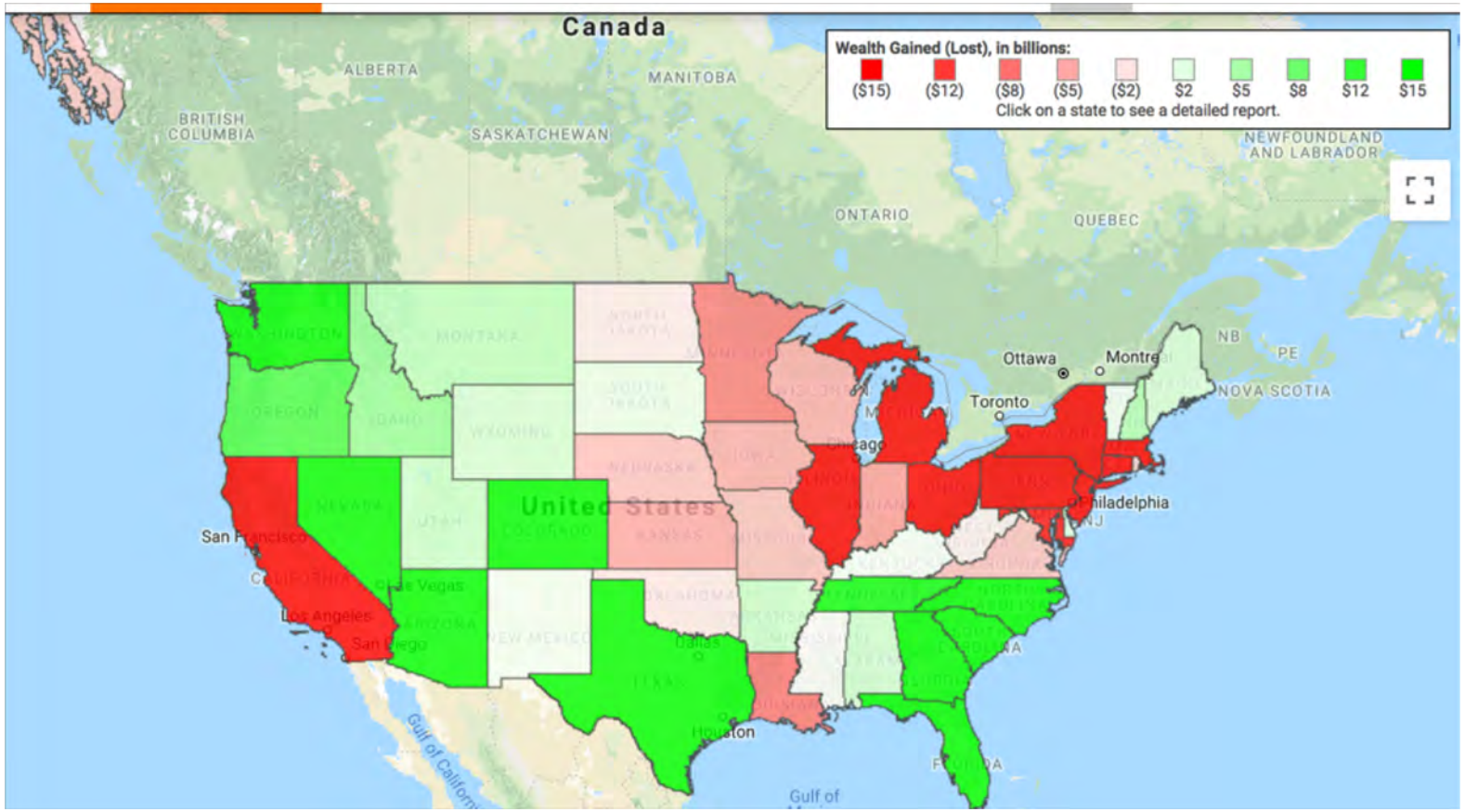
Median Enrollment Change, by Grade Levels Served, 2013-2014 to 2017-2018



Source: NAIS, Enrollment, DASL

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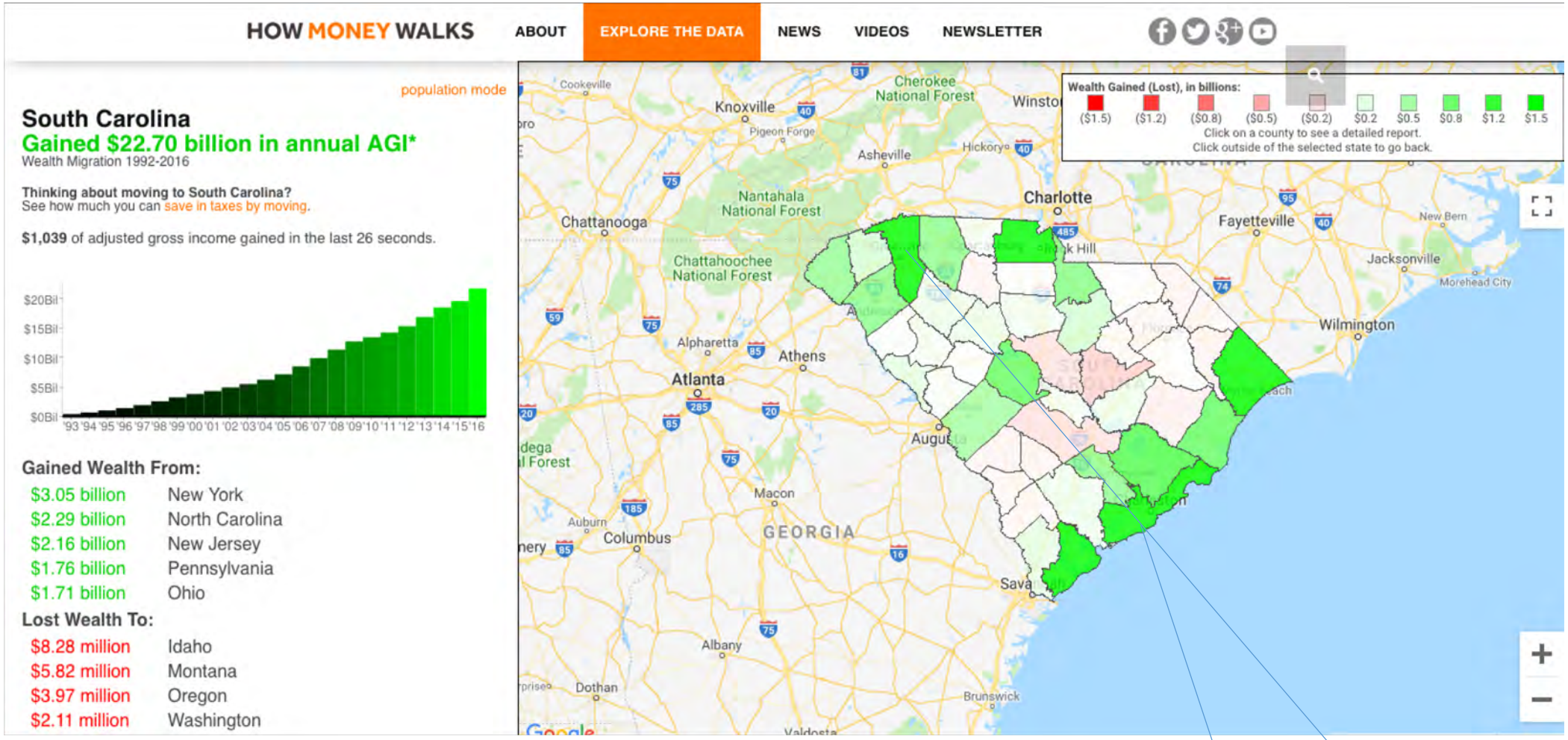
Where the Wealth Is/Is Not



Money talks, and it also walks…

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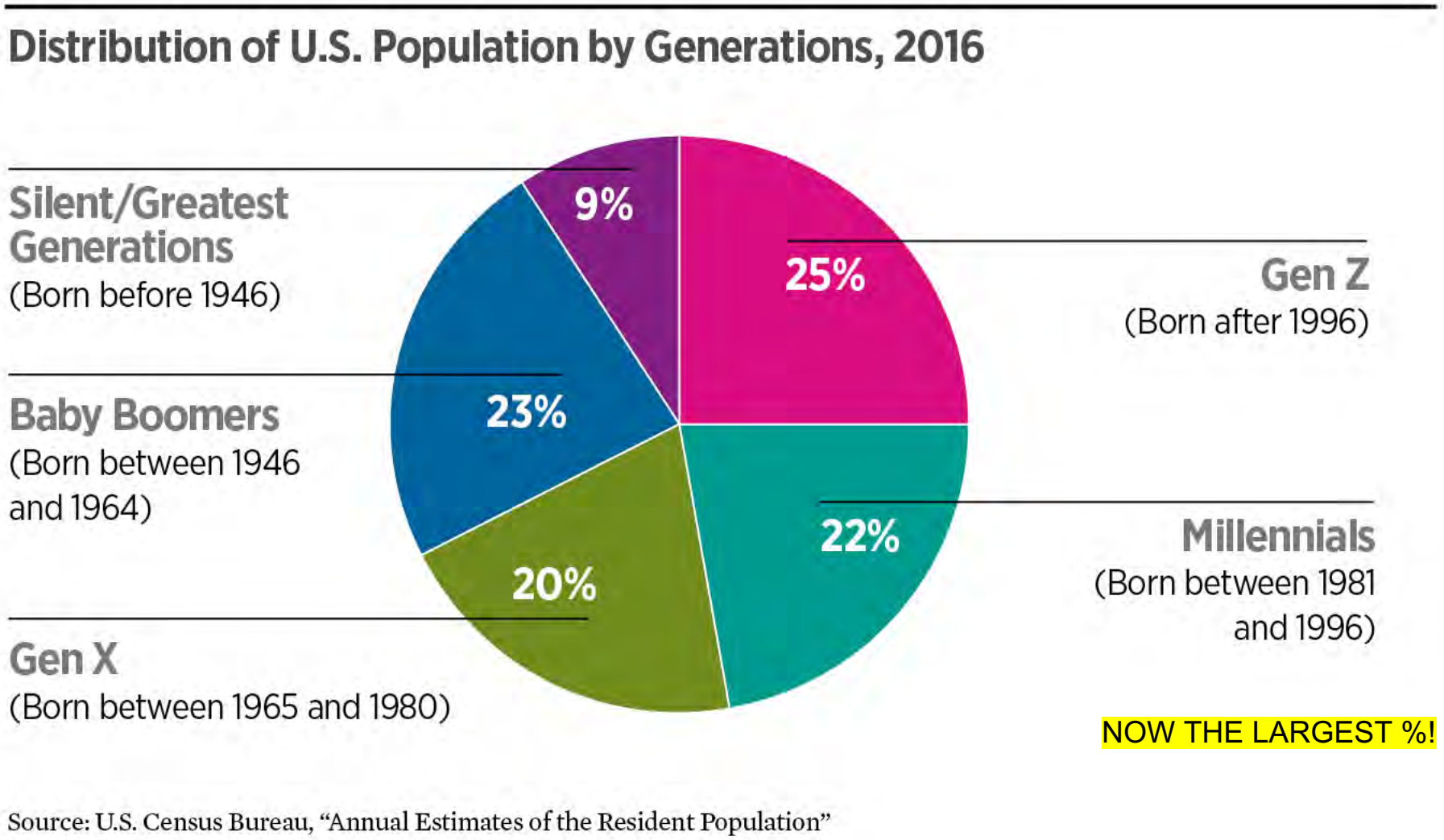
Money talks, and it also walks…



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TALKIN' 'BOUT MY G-G-G-GENERATION(s)

Meet your stakeholders!



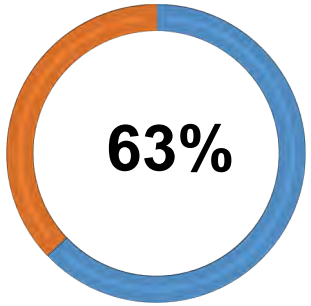
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Millennials by the Numbers

"Millennials represent the **largest generation in the country** and will soon constitute a significant percentage of current and prospective parents at independent schools". "However, Millennials also **make less money** than other generations, and are concerned with **saving for their children's college** education, making rising tuitions a more important concern for them".

It's Good Enough…

75.4 Million
currently live in the U.S



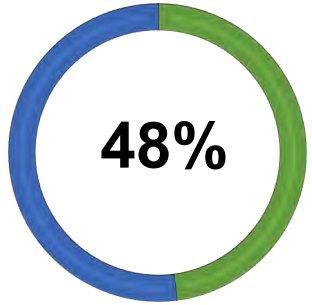
have over $10,000 in student loans

22 Million
are parents as of October 2015



median age at first home purchase

7 Percent
make over $150,000



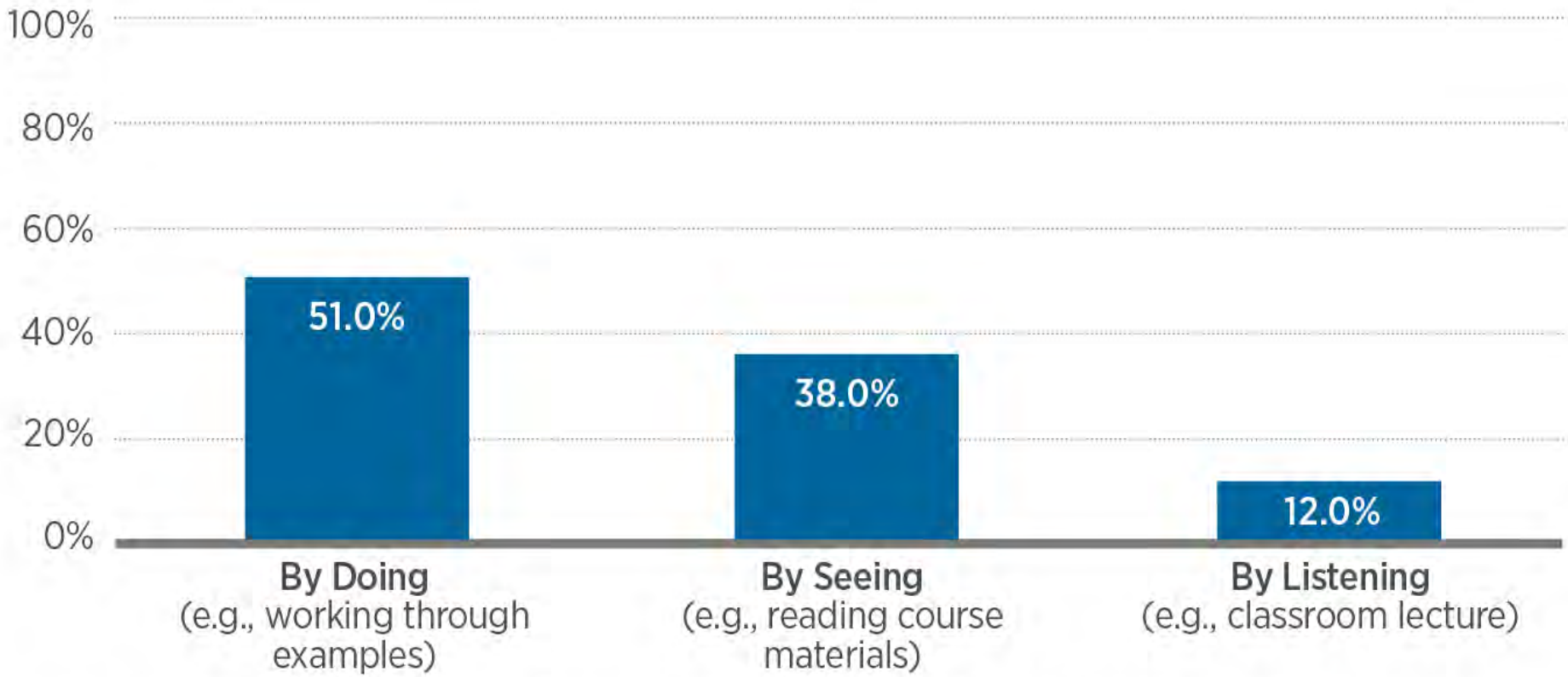
plan to pay all college costs for their children compared to 16% of Gen Xers

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How Does Gen Z Learn?



Source: Barnes & Noble College, "Getting to Know Gen Z: Exploring Middle and High Schoolers' Expectations for Higher Education"

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Do demographics matter?

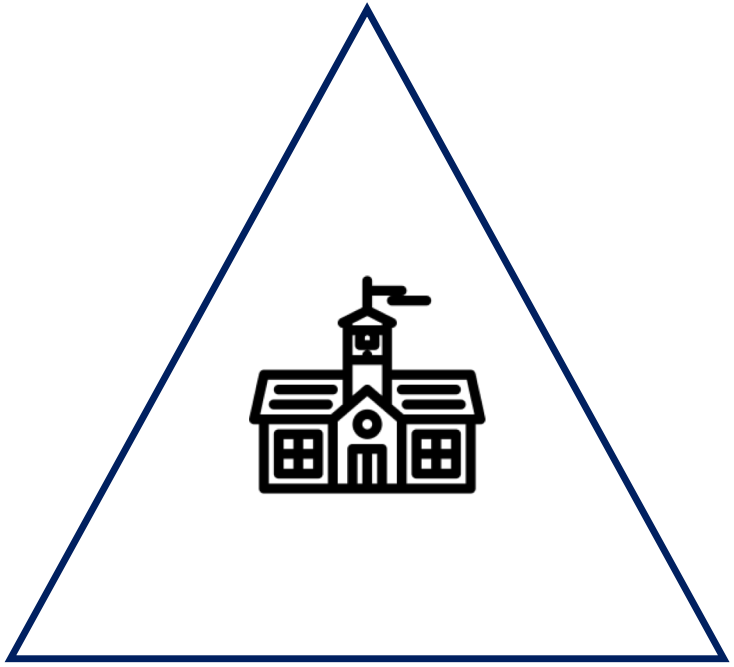


1. How are/will demographic factors impact your school market?
2. Do you embrace the gens or not?
3. What does it mean for your school if your area loses wealth or gains it?

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The Eco-System and Market

Whom we serve & value



1. Demographics (future & present)
2. **Education Disruption**
3. 4IR and education

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Private Nonprofit

Independent Day

Public

Independent Boarding

Parochial

Micro

MARKETPLACE

Network

Charter

University

For Profit

Corporate

One to One

Online + Bricks ’n’ Mortar

Online

Homeschool

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https://www.youtube.com/watch?v=2uAj4wBIU-8

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[NASHVILLEPOST]

EDUCATION

OCT 19, 2018

SHARE

Historic downtown building eyed for private school

Blyth-Templeton Academy to begin classes in 2019 in Litterer Laboratories structure

AUTHORS **Linda Bryant**

Downtown Nashville is slated for its first private school — to be located in an historic masonry building that once accommodated Vanderbilt University, no less.

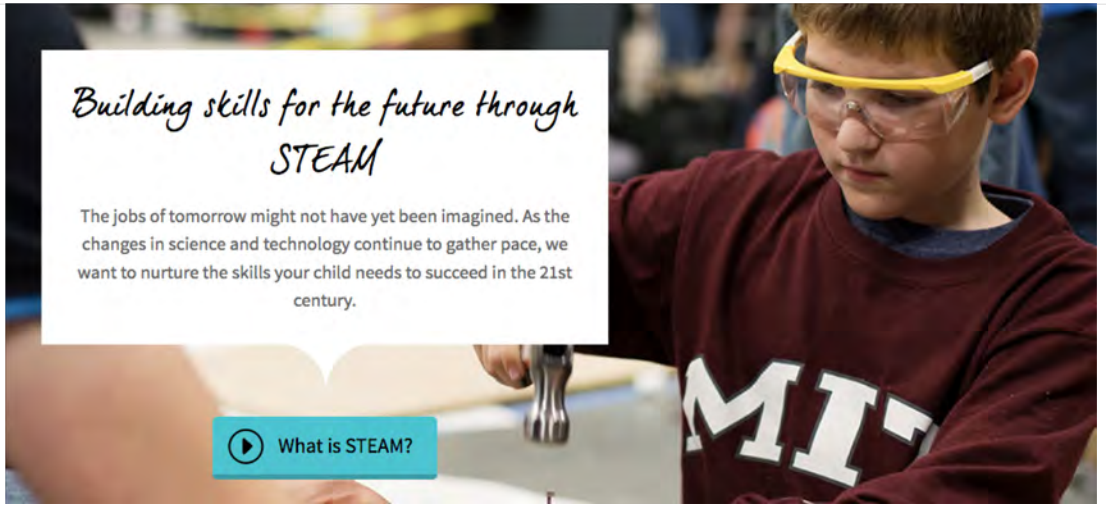
Washington, D.C.-based Blyth-Templeton Academy is eyeing a fall 2019 opening for the co-ed college preparatory school, which will serve students in the fifth through 12th grades and have an annual tuition of about $15,000. The school is actively seeking students and teachers, according to Head of School Kalee Willingham Barbis.

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NORD ANGLIA EDUCATION



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Amerigo is committed to nurturing international students in the pursuit of academic achievement and cultural development.

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ELITE SCHOOL PARTNERS

Superior academic programs and outcomes

THE AMERIGO PROMISE

Direct conditional acceptance to university

THE SUCCESS FRAMEWORK

Support and guidance in a boarding environment

Our Campuses

Amerigo offers campus locations across the United States to meet the needs of each student and your unique interests. We believe that in order for you to excel and pursue your dreams, you need to learn and live in an environment that supports your academic, emotional, and social needs. At Amerigo you'll find a place to build strong relationships with trusted adults that look after you and peers who grow alongside you.

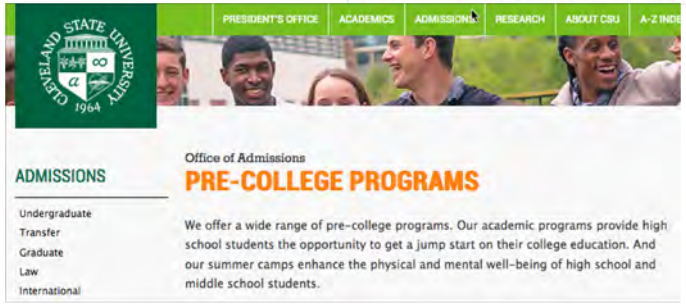
- AMERIGO BOCA RATON
- AMERIGO CHICAGO
- AMERIGO LEXINGTON
- AMERIGO LOS ANGELES
- AMERIGO MARYLAND
- AMERIGO NAPA VALLEY
- AMERIGO TWIN CITIES



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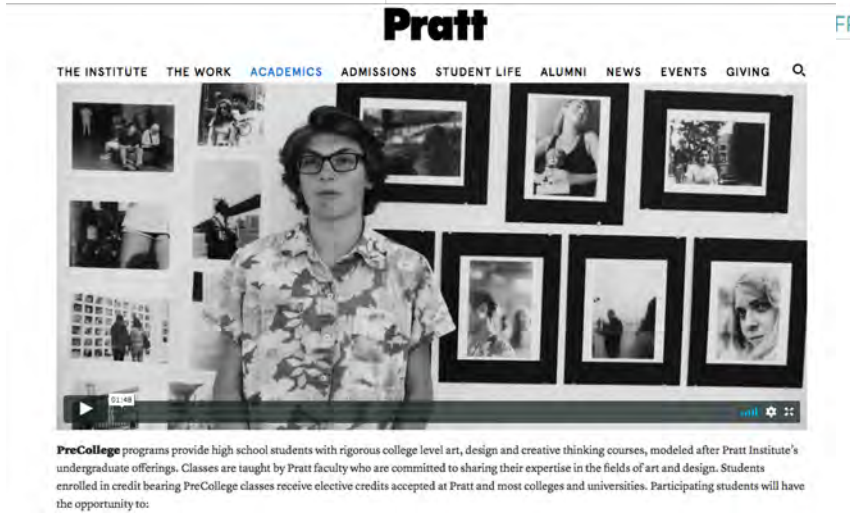






"I had completed enough math at The Brearley School that I was able to take calculus at Columbia over the summer. I enjoyed the class so much that I continued taking math, physics, and theoretical computer science classes. I have almost completed the requirements for a math major at Columbia. I just found out that I've been accepted to Cambridge and Yale and I'm looking forward to starting college!"

FRANCESCA SLADE, Age 17



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A Whittle School Education

We aim to create an extraordinary school—the first truly modern, global institution serving children from ages 3 to 18

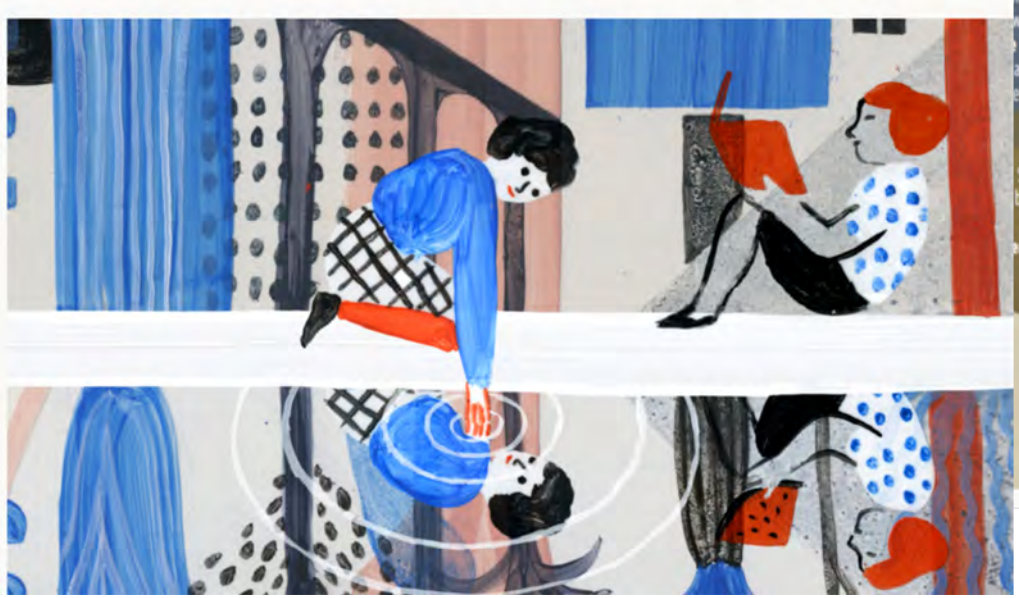
01 *Open and Connected* 02 *A Place for Creativity* 03 *Built for Learning*

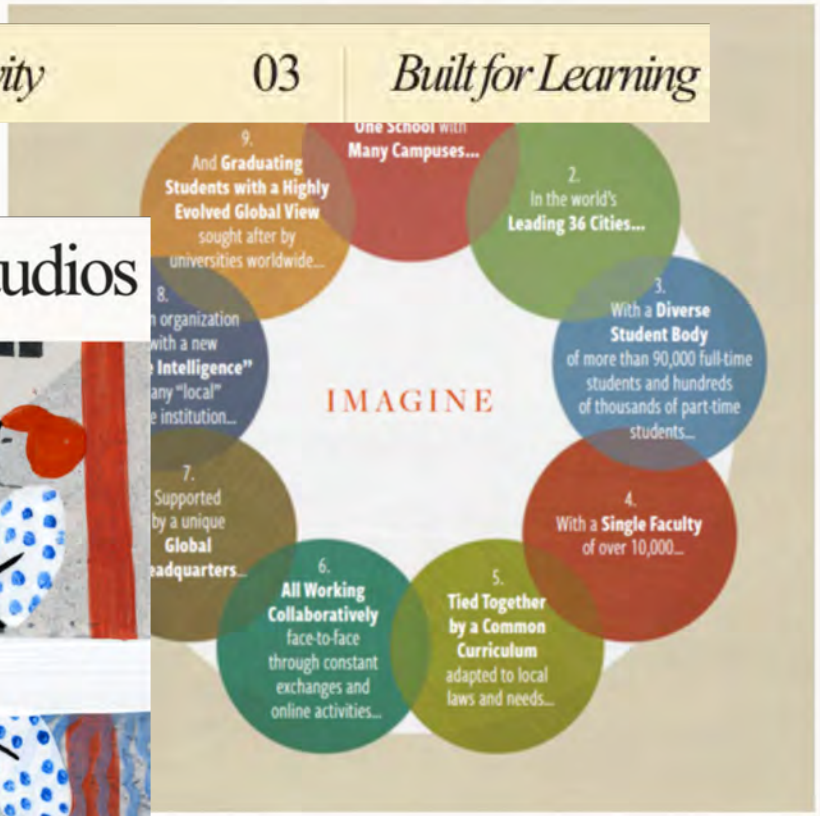




Education *Re-Imagined*

Centers of Excellence and Studios





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Do looks matter?

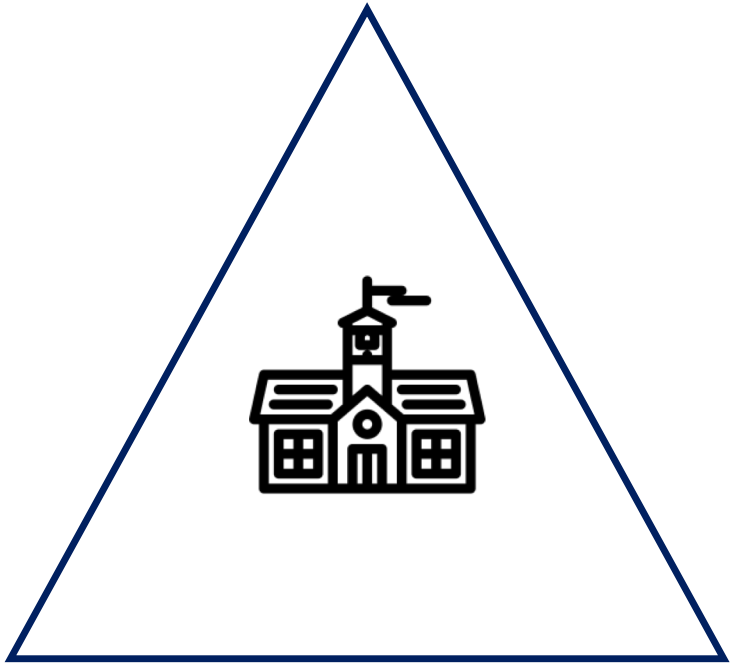


What are three key learnings from these education disruptor examples?

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The Eco-System and Market

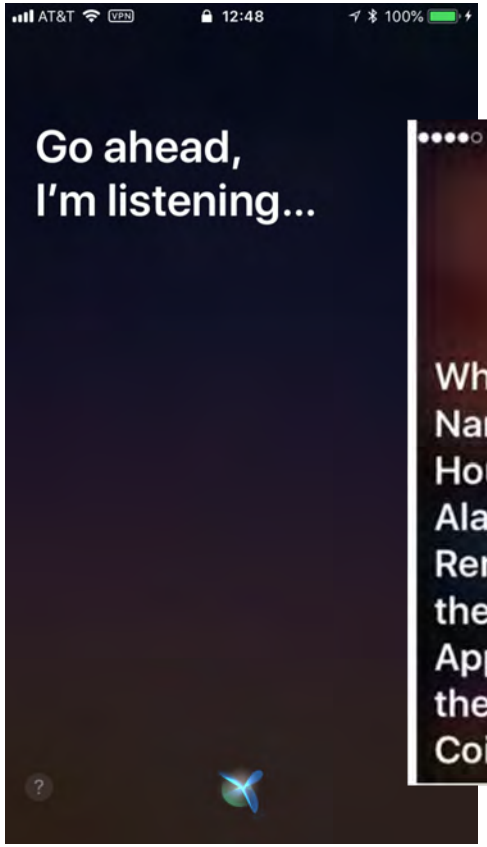
Whom we serve & value

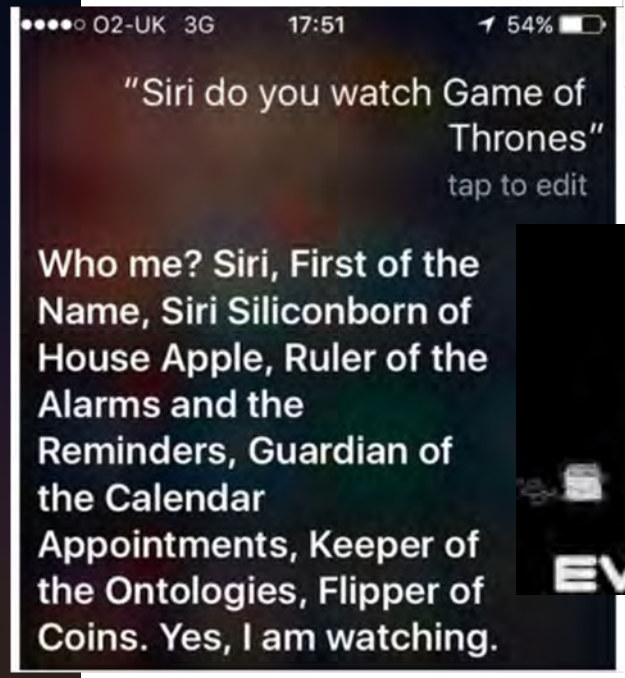


1. Demographics (future & present)
2. Education Disruption
3. **4IR** and education

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What is the 4IR 2u?







By **Drew Harwell**
November 23, 2018

The Washington Post
Democracy Dies in Darkness

Wanted: The 'perfect babysitter.' Must pass AI scan for respect and attitude.



glia holds her son, Bennett, in their home in Rancho Mirage, Calif. While screening for a er, Battaglia started using Predictim, an online service that claims to use "advanced ligence" to assess a sitter's risk of drug abuse, bullying or having a "bad attitude." for The Washington Post)

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Navigating the next industrial revolution

WORLD ECONOMIC FORUM

COMMITTED TO IMPROVING THE STATE OF THE WORLD

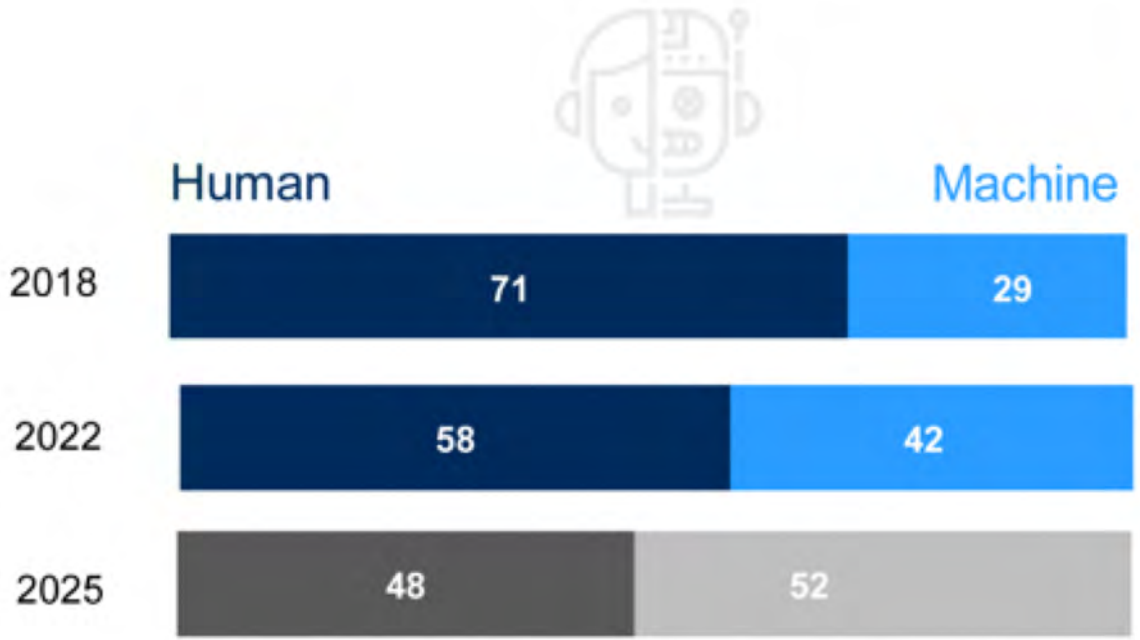
Revolution	Year	Information
1	1784	Steam, water, mechanical production equipment
2	1870	Division of labour, electricity, mass production
3	1969	Electronics, IT, automated production
4	?	Cyber-physical systems

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WORLD ECONOMIC FORUM

Rate of automation

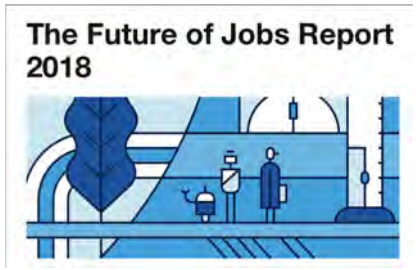
Division of labour as share of hours spent (%)



Source: Future of Jobs Report 2018, World Economic Forum

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WORLD ECONOMIC FORUM

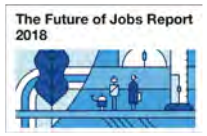


Jobs Created
Jobs Displaced
Jobs Altered

The future of work and the workforce are being shaped by three significant forces: accelerated changes in technology, especially **artificial intelligence and robotics**; **demographic polarities** with increases in both younger and older populations; and the rise of a **mobile and global talent market** combined with increasing customer empowerment.

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WORLD ECONOMIC FORUM



What this means…

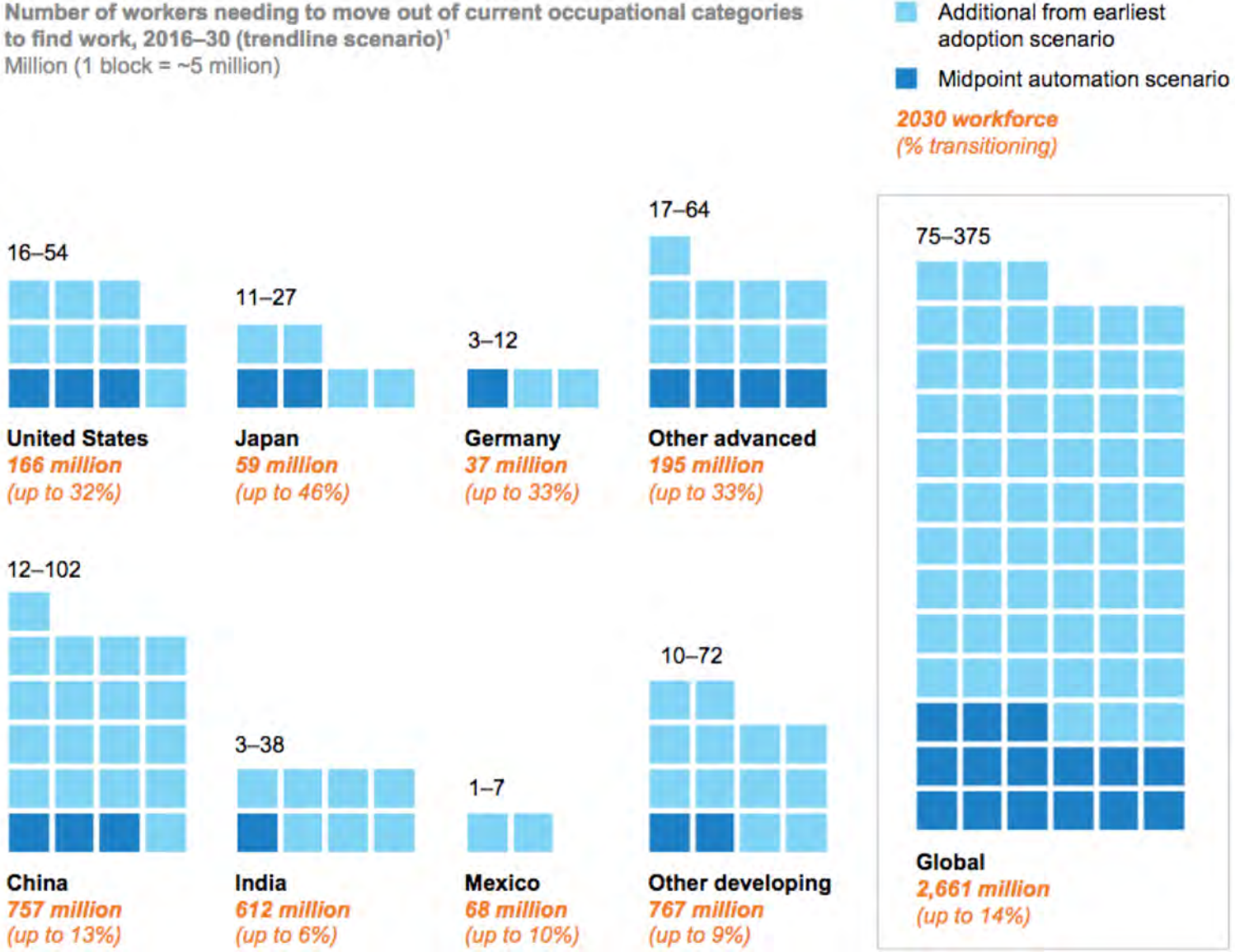
1/3 workforce in US and Germany will need to find new occupations and learn new skills by 2030

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Exhibit E6

Globally, up to 375 million workers may need to switch occupational categories

Number of workers needing to move out of current occupational categories to find work, 2016–30 (trendline scenario)[1]
Million (1 block = ~5 million)

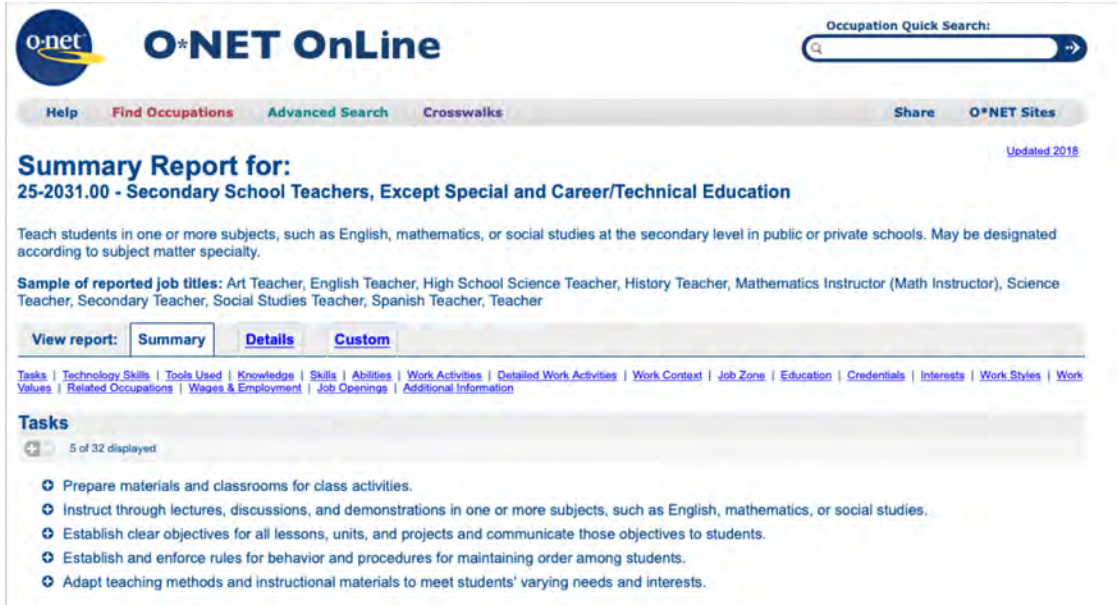


1 Some occupational data projected into 2016 baseline from latest available 2014 data.

SOURCE: U.S. Bureau of Labor Statistics; McKinsey Global Institute analysis

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Tech Skills
Knowledge
Skills
Abilities
Work Activities
Work Context
Interests
Work Styles
Work Values

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Table 1: Components of a job

Content	Aptitudes	Experience
Work activities are the range of tasks that need to be accomplished within a job role	**Knowledge** is the body of facts, principles, theories and practices that acts as a foundation for skills **Skills** are used to apply knowledge to complete tasks **Cross-functional skills** are skills required by a variety of job roles which are transferrable to a broad range of job role **Specialized skills** are particular to an industry or a job role and are not easily transferable (e.g. skills related to the use, design, maintenance and repair of technology) **Abilities** are the range of physical and cognitive capabilities that are required to perform a job role	**Time spent in education** is the duration of time spent gaining knowledge and skills through a formal route of training **Years of work experience** are the time spent forming and improving skills to apply a given knowledge through on-the-job practice **Years of job family experience** are the share of work experience to date that has been spent within related professions which exhibit similarities in their required skills, knowledge and overall profile

Note: Elaboration based on taxonomies by Burning Glass Technologies and Occupational Information Network (O*NET).

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Deconstruct the work

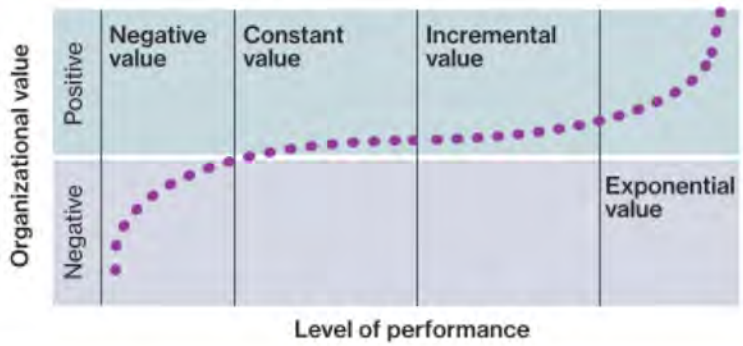
Step 1 Automation compatibility

Repetitive — Variable

Independent — Interactive

Physical — Mental

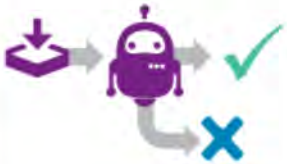
Step 2 Return on improved performance



Automate the Work

Step 3: Automation type

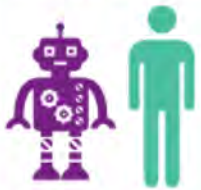
Robotic process automation



Cognitive automation



Social robotics



Step 4: Automation role

Substitute



Augment



Transform



Source: *Reinventing Jobs*, Jesuthasan and Boudreau, Harvard Business Review Press, 2018

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Here is a quick guide to tasks that are more difficult to automate, according to experts. See if you can spot the ones you do most in your job.

Perception tasks

Humans are much better than robots at working in unstructured work environments, for example a home where there are many different and irregular objects and space can be cluttered. Robots need structure to navigate and work better in environments such as supermarkets, factories or warehouses.

Manipulation tasks

Robots find it difficult to do certain handling and manipulation tasks, such as working with irregular objects, planning the best course of action to move objects or identifying mistakes when assembling items.

Creative intelligence

Artificial intelligence to date lacks the creative intelligence of human beings. Creative intelligence means using one's imagination and coming up with new and meaningful ideas, approaches and products.

Social intelligence

While robots are getting better in producing some aspects of human social interaction, they fail to grasp its subtleties. For successful social interaction, humans analyse and navigate each other's emotions in real time.

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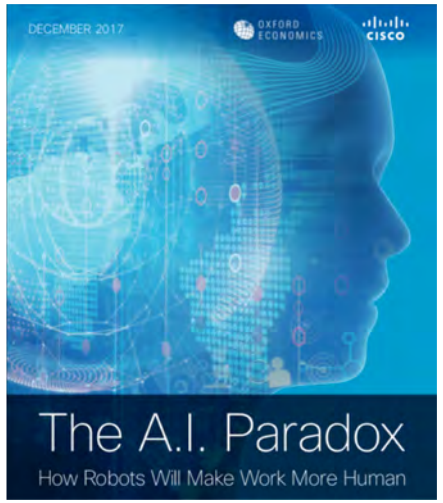
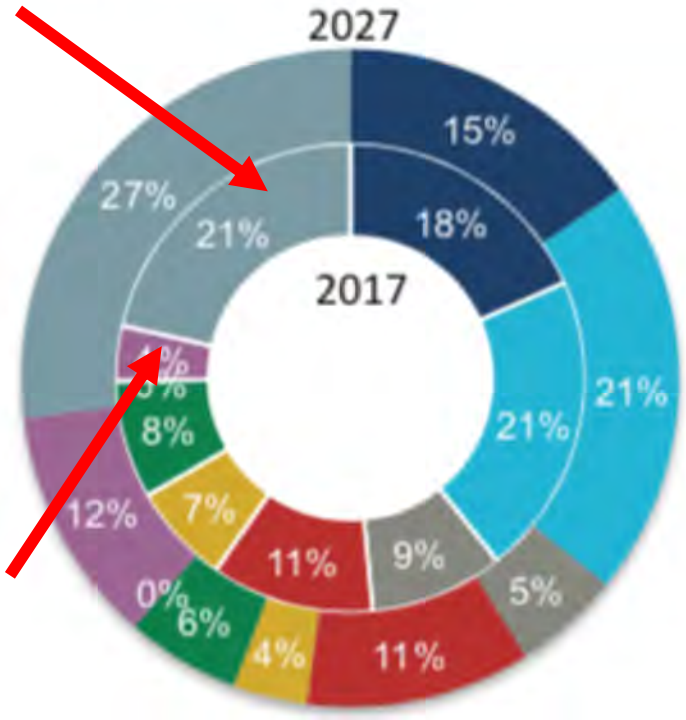


Fig. 6 Change in lawyer's task profile from 2017 to 2027, following the displacement effect



- Analyzing routine and actionable data
- Making human connections
- Routine communication: connecting with people
- Logistical implementation
- Routine administration
- Capturing and monitoring information
- Physical interactions
- Interacting With Computers
- Critical and creative thinking
- Repairs and maintenance

Source: Oxford Economics

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How future proof are your skills?



- Studying which degree at university will earn you a higher salary in the US?
  - Chemical engineering
- What will be the most in-demand job in 2020?
  - Data analyst
- Which set of skills will be most in demand in 2030?
  - Tech skills
- Which country's workers are most AI susceptible?
  - China
- In what year will the majority of the US workforce be freelance?
  - 2030

So What?

We are in education because…

1. School Missions Matter
2. Markets (students) Also Matter…

are they market & life ready?
education experience & purpose of the experience

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Career Opportunities

The Clash

They offered me the office, offered me the shop
They said I'd better take anything they'd got
Do you wanna make tea at the BBC?
Do you wanna be, do you really wanna be a cop?

Career opportunities, the ones that never knock
Every job they offer you is to keep you out the dock
Career opportunities, the ones that never knock

I hate the army and I hate the RAF
I don't wanna go fighting in the tropical heat
I hate the civil service rules
I won't open letter bombs for you

Career opportunities, the ones that never knock
Every job they offer you is to keep you out the dock
Career opportunities, the ones that never knock

Oi!
Bus driver
Ambulance man
Ticket inspector, I don't understand

They're gonna have to introduce conscription
They're gonna have to take away my prescription
If they wanna get me making toys
If they wanna get me, well I got no choice

Career opportunities, the ones that never knock
Every job they offer you is to keep you out the dock
Career opportunities, the ones that never knock

Career, career
Career, it ain't never gonna knock

Songwriters: Joe Strummer / Mick Jones / Paul Simonon / Topper Headon

Career Opportunities lyrics © Universal Music Publishing Group

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What % of your students are so well-off that they don't need a day job?

https://opportunityinsights.org

Take Aways:

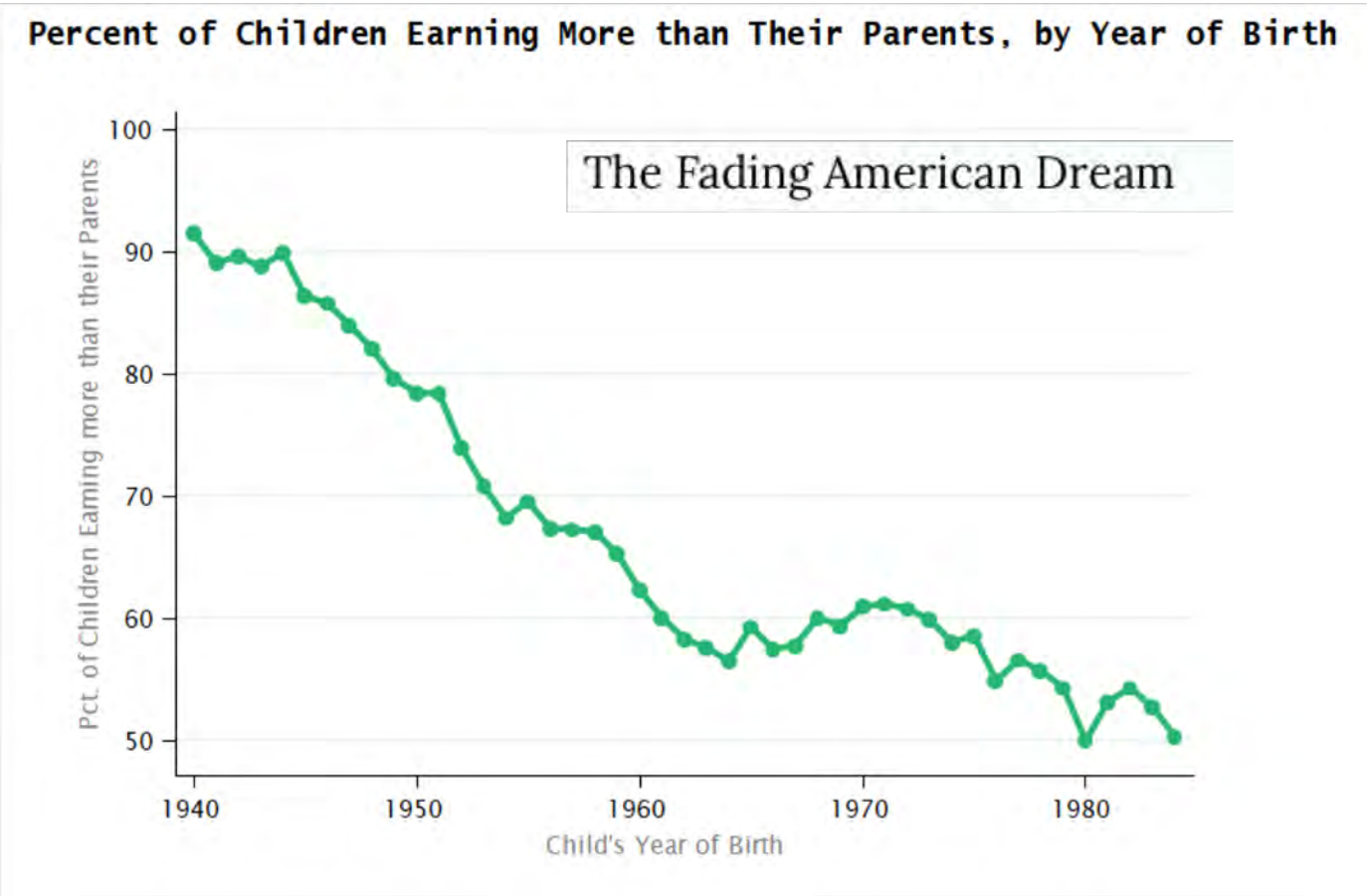
- 90% children born in 1940 earned more than their parents
- 50% children born in 1980 did so
- Across **all** income levels
- Largest decline middle and upper class

Why:

- Lower GDP
- Growth rates and greater inequality in the distribution of growth

Question:

- How will the 4IR and job displacement-replacement affect the model?



HOT SPOTS MOVEMENT

STUDENTS

Future-proofing Your People Strategy

Your employee experience is changing fast - technological innovations are transforming jobs and work, people are living and working a great deal longer, and family structures and roles are in flux. The result is that your people practices and processes are under increasing pressure to realign. At the same time, the competitive landscape is requiring speed, focus and agility.

For the last ten years the Hot Spots Movement has worked with companies around the world to ensure that their employee experience, people
founder Professor Lynda
ofing people strategies and is
ies on this topic. Using our
pported companies including

at our goals of inclusion

us to attract and retain

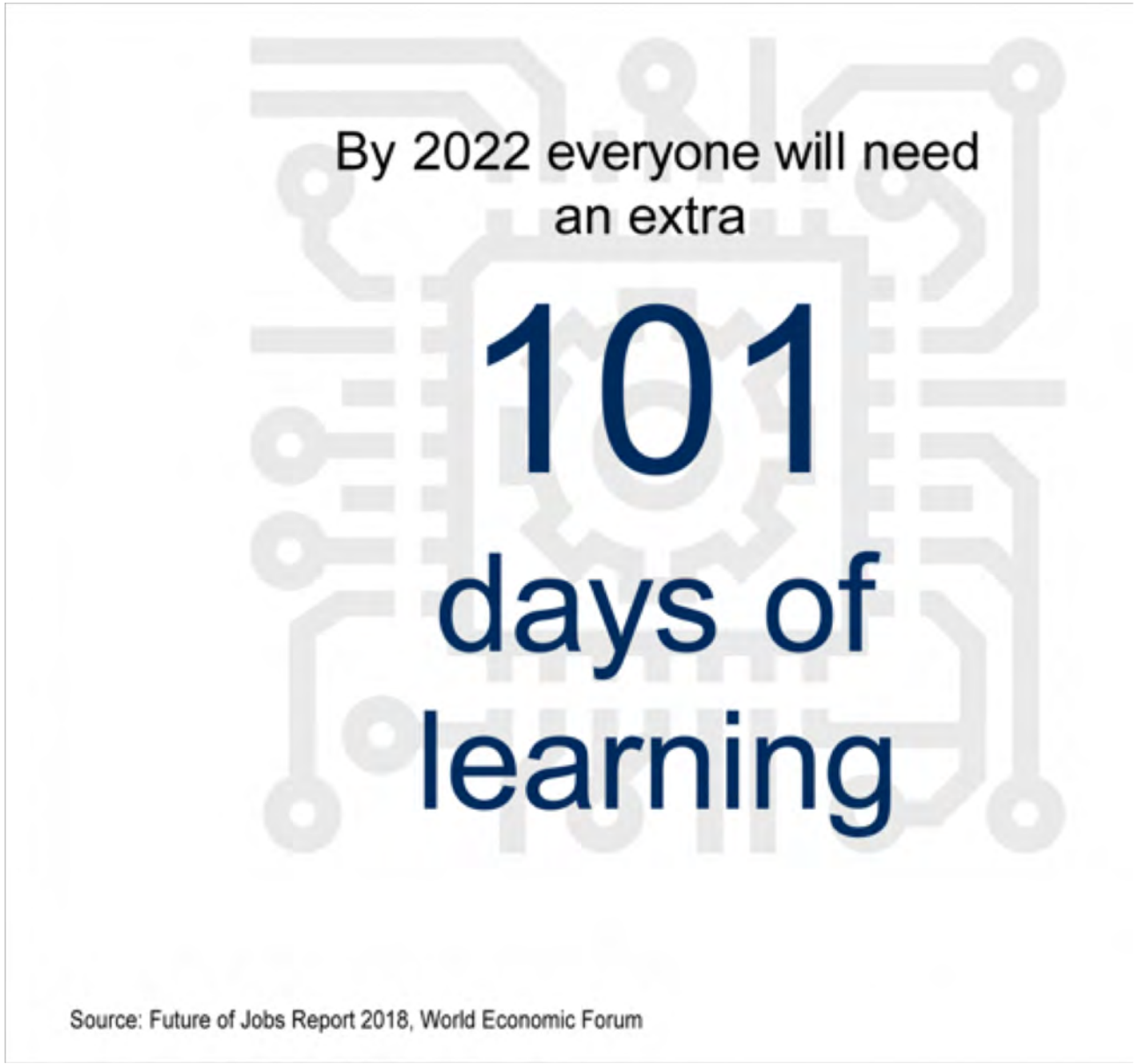
- What aspects of our people strategy are future-proofed and what needs to change?
- How do we prepare our people for significant job automation and support them through Continuous Learning?
- What are the steps we need to take now to increase the collaborative and innovation capacity of our business?
- Managing shifting cultures

The Guardian Labs

What will the workplace of the future look like?

From the 70-year career to shorter working weeks, here's what your future career could look like – according to industry experts

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Automation and AI will change the skills needed in the workforce

Total is for United States and 14 Western European countries

SKILLS	Physical and manual	Basic cognitive	Higher cognitive	Social and emotional	Technological
Hours spent, in 2016 Billion	203	115	140	119	73
Change in hours spent by 2030 %	-14	-15	8	24	55
Skills with the biggest shift in demand	▼ General equipment operation and navigation ▼ Inspecting and monitoring	▼ Basic data input and processing ▼ Basic literacy, numeracy, and communication	▲ Creativity ▲ Complex information processing and interpretation	▲ Entrepreneurship and initiative taking ▲ Leadership and managing others	▲ Advanced IT skills and programming ▲ Basic digital skills

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MCKINSEY GLOBAL INSTITUTE

JOBS LOST, JOBS GAINED: WORKFORCE TRANSITIONS IN A TIME OF AUTOMATION

DECEMBER 2017

Jobs of the future: Employment growth and decline by occupation

Net impact of automation and seven catalysts of labor demand, 2016–30
% change (+/–), step-up labor demand, midpoint automation[1]

% change: -35 or less; -25 to -34; -15 to -24; -5 to -14; Within ±5; 5 to 24; 25 to 49; 50 to 99; 100 or more

Occupation groups *% of labor force across 6 focus countries*	Example occupational categories[2]	United States	Germany	Japan	China	Mexico	India
Care providers *1–9*	Doctors						
	Nurses, physicians assistants, and pharmacists						
	Childcare workers						
	Community and social workers						
Educators *1–5*	School teachers						
	Education support workers						
Managers and executives *2–5*	Executives						
	Managers						
Professionals *2–19*	Account managers						
	Engineers						
	Scientists and academics						
	Legal support workers						
Technology professionals *0–2*	Computer engineers						
	Computer specialists						
Builders *5–11*	Architects, surveyors, and cartographers						
	Construction workers						
	Crane and tower operators						
Creatives *0–1*	Artists and designers						
	Entertainers/media workers						
Customer interaction *10–25*	Personal care workers						
	Food serving workers (hosts)						
	Sales workers (retail and online)						
	Hotel and travel workers						
Office support *3–18*	Computer support workers						
	Financial workers (procurement, payroll, etc)						
	Administrative assistants						
Other jobs, predictable environments *15–29*	Production workers						
	Material moving machine operators						
	Agricultural graders and equipment operators						
	Food preparation workers						
	General mechanics						
Other jobs, unpredictable environments *9–42*	Specialized mechanics and repair						
	Emergency first responders						
	Machinery installation and repair workers						
	Agricultural field workers						
	Building and grounds cleaners						

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ALREADY, THERE IS EVIDENCE OF SKILL MISMATCHES IN THE UNITED STATES AND EUROPE

A growing body of evidence suggests a mismatch between the skills the workforce has and the skills employers are looking for. The OECD, for example, finds mismatches both in the skills of individuals and in the educational credentials they hold, compared with what companies need.[5] In the European Union, there is evidence of a long-standing qualification mismatch over the past decade, with more than 20 percent of workers receiving either more or less formal education than is required for their job.

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Wait for it…

The emerging contours of the new world of work in the Fourth Industrial Revolution are rapidly becoming a lived reality for millions of workers and companies around the world

The inherent opportunities for economic prosperity, societal progress and individual flourishing in this new world of work are enormous , yet depend crucially on the ability of all concerned stakeholders to instigate reform in education and training systems

Catalysing positive outcomes and a future of good work for all will require bold leadership and an entrepreneurial spirit from businesses and governments, as well as an agile mindset of lifelong learning from employees.

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OK, this is BIG

Workforce Trends and Strategies for the Fourth Industrial Revolution

Policy-makers, educators, labour unions and individual workers likewise have much to gain from deeper understanding of the new labour market and proactive preparation for the changes underway.

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OUR SWEET SPOT IS…Intentionally educating for these…

Based on McKinsey Global Institute workforce skills model

Low — High

Category	Skill	United States, all sectors: Hours worked in 2016, billion	United States, all sectors: Change in hours worked by 2030, %	Western Europe, all sectors: Hours worked in 2016, billion	Western Europe, all sectors: Change in hours worked by 2030, %
Higher cognitive skills	Advanced literacy and writing		-10		-8
	Quantitative and statistical skills		-2		2
	Critical thinking and decision making		17		8
	Project management		2		3
	Complex information processing and interpretation		18		18
	Creativity		40		30
Social and emotional skills	Advanced communication and negotiation skills		27		26
	Interpersonal skills and empathy		30		21
	Leadership and managing others		33		27
	Entrepreneurship and initiative-taking		33		32
	Adaptability and continuous learning		24		24
	Teaching and training others		14		8
Technological skills	Basic digital skills		69		65
	Advanced IT skills and programming		91		92
	Advanced data analysis and mathematical skills		25		22
	Technology design, engineering, and maintenance		31		20
	Scientific research and development		28		25

Are we aligned?

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Skills of today vs skills of tomorrow: technological, social and emotional skills will become even more important.

Based on McKinsey Global Institute workforce skills executive survey, March 2018

Bubble size = Hours worked in 2016, billion

75 5

Skills

Physical and manual | Basic cognitive | Higher cognitive | Social and emotional | Techno-logical

Important, but declining

Important and growing

Limited and declining

Limited, but growing

Basic data input

Equipment repair

Basic digital

Leadership

Communication and negotiation

Equipment operation

Critical thinking

Advanced IT

Interpersonal and empathy

Basic literacy

Creativity

Technology design

Project management

Craft and technician

Entrepreneurship

Advanced data analysis

Adaptability

Teaching and training

Advanced literacy

Gross motor

Complex information processing

Scientific research and development

High

Average

Low

Perceived importance of skills today

Skills needed less of in the future 0 Skills needed more of in the future

Expected future skill need[1]

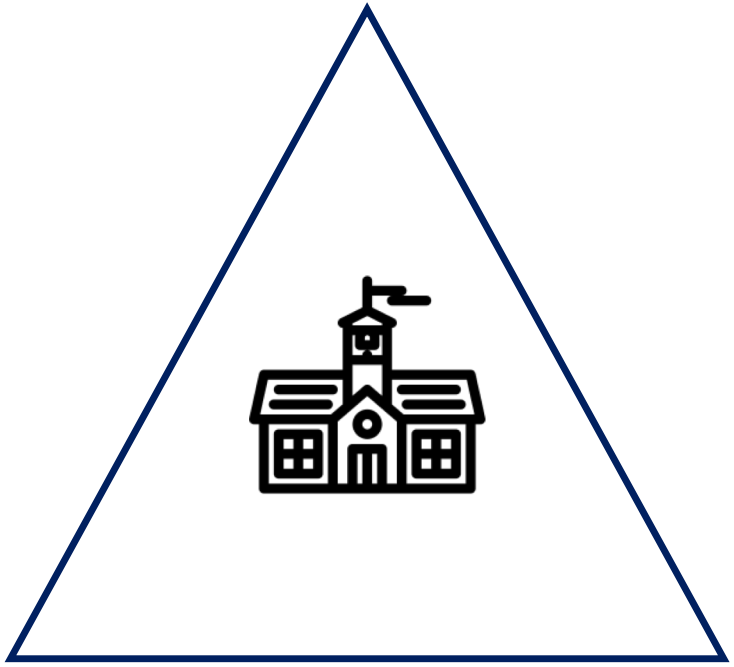
High Value = social/ emotional, higher cognitive, and tech skills

Are we aligned?

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The Eco-System and Market

Whom we serve & value



1. Demographics (future & present)
2. Education Disruption
3. **4IR <u>and education</u>**

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The McKinsey Global Institute looked at five broad categories of AI: computer vision, natural language, virtual assistants, robotic process automation, and advanced machine learning. Companies will likely use these tools to varying degrees.

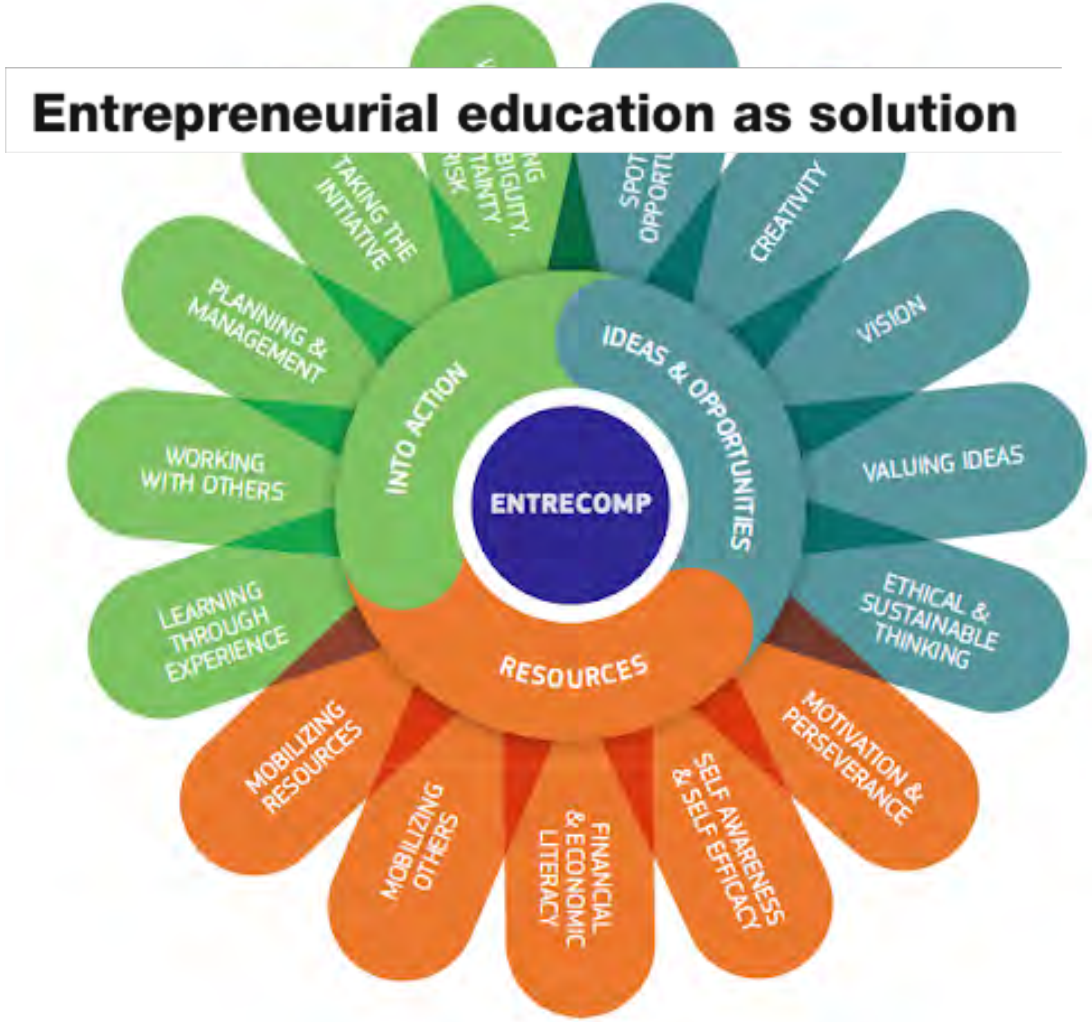
How countries can capitalize on AI

How can policy makers evolve education systems and learning with a new emphasis on creativity, critical thinking, and adaptive and lifelong learning? How can countries increase investment in human capital, reversing the trend of low—and, in some countries, declining—public investment in worker training?

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Education systems can stifle creative thought. Here's how to do things differently

According to the European Commission's new [Entrepreneurship Competence Framework], entrepreneurial education includes life skills as well as business skills. It means learners can act upon opportunities and ideas and transform them into value for others, whether financial, cultural, or social.



WORLD ECONOMIC FORUM

Scotland is teaching its school children to be ethical entrepreneurs



There are more than 1,000 ethical businesses that children have created and run in Scotland, a global leader in fostering young social entrepreneurs.

Image: REUTERS/Michaela Rehle

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Need for new solutions in a rapidly changing world

Societies are changing rapidly and profoundly.

A first challenge is **environmental**: e.g.

- Climate change and the depletion of natural resources require urgent action and adaptation.

A second challenge is **economic**: e.g.

- Scientific knowledge is creating new opportunities and solutions that can enrich our lives, while at the same time fuelling disruptive waves of change in every sector. Unprecedented innovation in science and technology, especially in bio-technology and artificial intelligence, is raising fundamental questions about what it is to be human. It is time to create new economic, social and institutional models that pursue better lives for all.
- Financial interdependence at local, national and regional levels has created global value chains and a shared economy, but also pervasive uncertainty and exposure to economic risk and crises. Data is being created, used and shared on a vast scale, holding out the promise of expansion, growth and improved efficiency while posing new problems of cyber security and privacy protection.

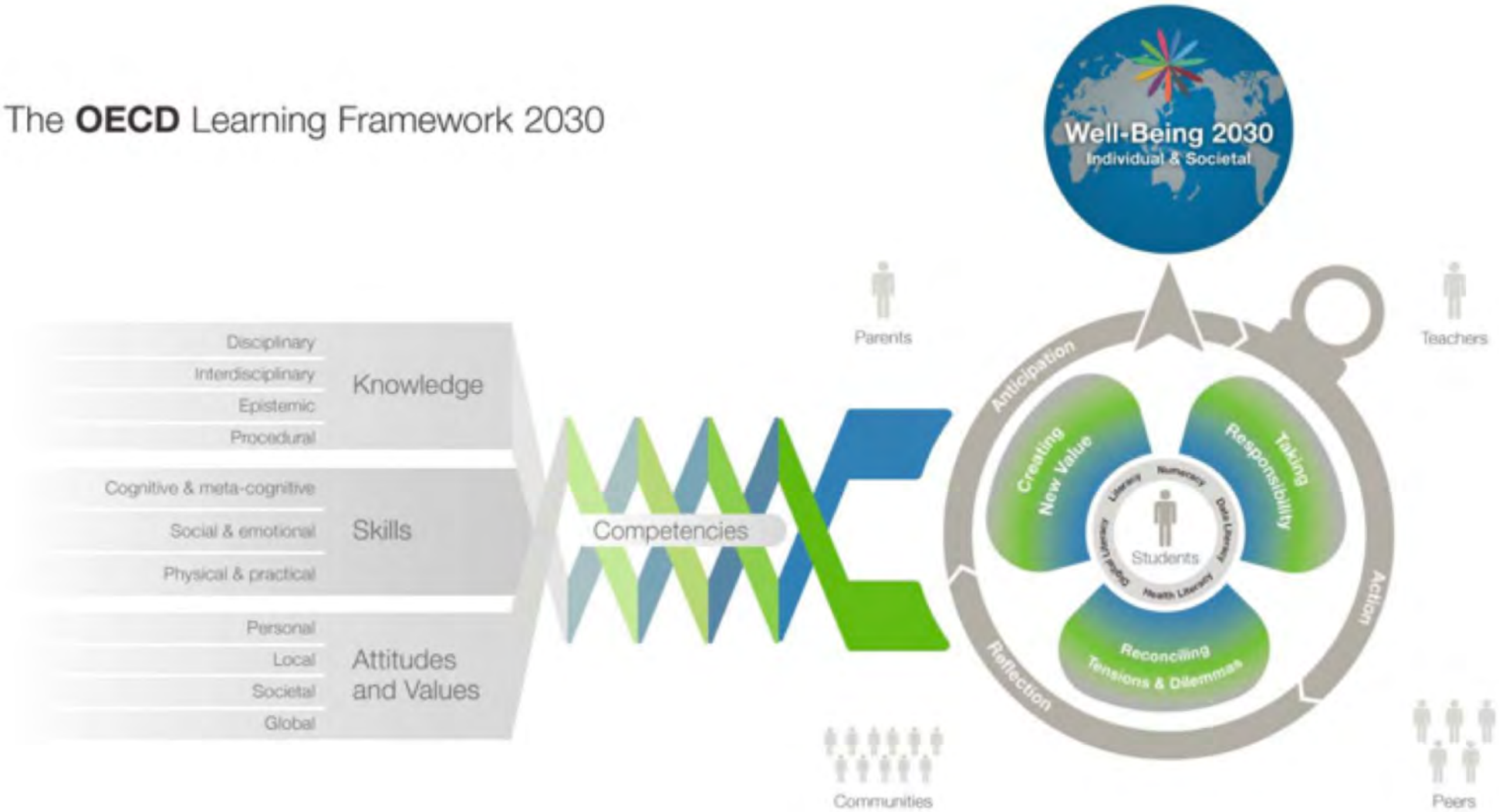
A third challenge is **social**: e.g.

- As the global population continues to grow, migration, urbanisation and increasing social and cultural diversity are reshaping countries and communities.
- In large parts of the world, inequalities in living standards and life chances are widening, while conflict, instability and inertia, often intertwined with populist politics, are eroding trust and confidence in government itself. At the same time, the threats of war and terrorism are escalating.

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The **OECD** Learning Framework 2030



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Australian Government



Through Growth to Achievement

Report of the Review to Achieve Educational Excellence in Australian Schools

March 2018

National Association of Independent Schools



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A fine educational heritage, but declining performance 5

Many Australian schools are cruising, not improving 10

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Acting on the Review's recommendations 13

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The Economist

Room for improvement

It has the world's best schools, but Singapore wants better

The government wants pupils not just to ace exams, but also to be creative



Print edition | Asia ›

Aug 30th 2018 | SINGAPORE

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WORLD ECONOMIC FORUM

Agenda | Initiatives | Reports | Events | About | TopLink

Education and Skills | Education, Gender and Work | European Union

10 reasons why Finland's education system is the best in the world



10 Sep 2018

Mike Colagrossi
Writer, Big Think

1. No Standardised Testing
2. Teacher Accountability
3. Cooperation not competition
4. Make the basics a priority
5. Start school at age 7
6. College or vocational options
7. Start school later, 9ish to 2ish
8. Same teacher for up to 6 yrs
9. Less stressful
10. Less homework (30mins)

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Why Early Childhood Education Matters (even more…) & Why this is an Opportunity To Showcase Independent School Lower Grades

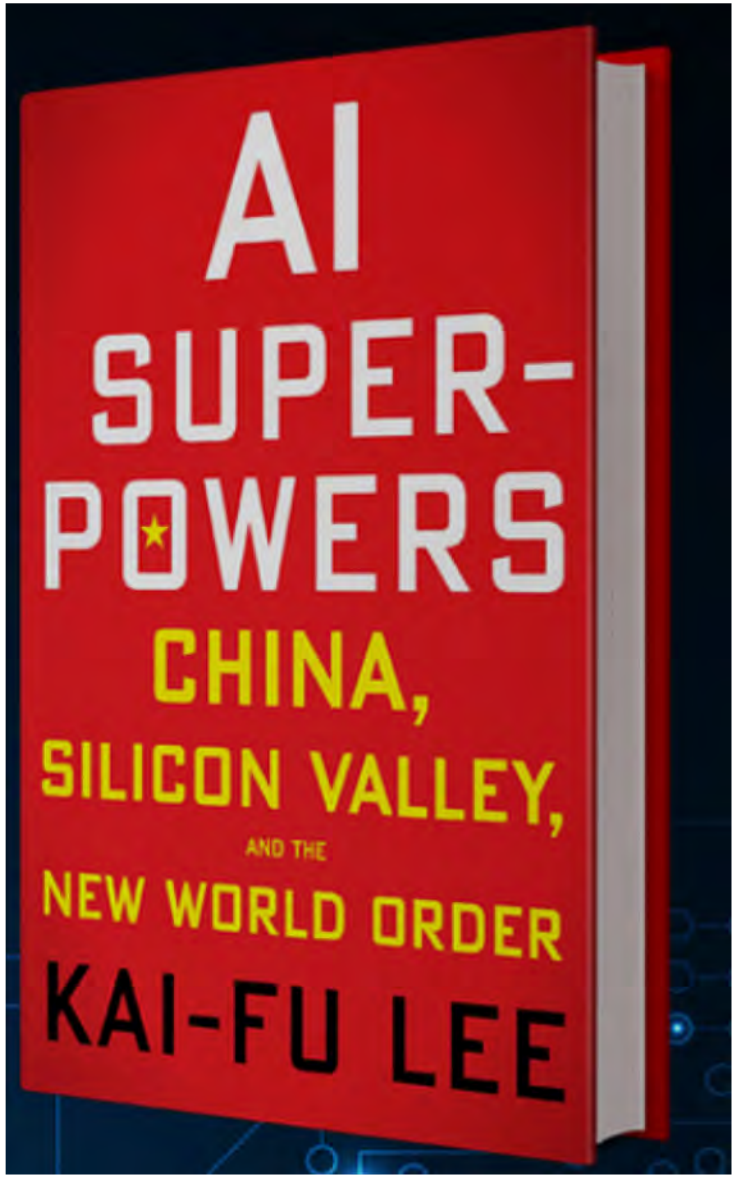
Learning in early childhood

In France, the mandatory school starting age will soon be lowered from 6 to 3 years. According to President Emmanuel Macron, this reform is intended to boost equality, thereby improving the ability of children from disadvantaged backgrounds to remain competitive in the education system.

The most effective way to acquire the skills demanded by the changing nature of work is to start early. Early investments in nutrition, health, social protection, and education lay strong foundations for the future acquisition of cognitive and sociobehavioral skills. They also make future skills acquisition more resilient to uncertainty.

PAUSE! Thoughts?

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AI and Education

How To Provide the Best Education for Your Children in the AI Era

AI displacement of jobs is just starting but will accelerate in the next 5-15 years. This will clearly affect today's children.

For younger children, career choice is far less important than developing critical thinking and creativity. Parents should encourage curiosity, and the pursuit of deeper understanding (always ask "why?" or "why not?").

It is also important to have high emotional intelligence, which is near impossible for current AI technologies. Learn empathy and sincere concern for others. Practice communication, persuasion, and teamwork.

For older children thinking about careers, it's important to point out to them the certain types of jobs

d for obliteration.

ne quiz to determine if your

Educate Your Kids in Areas of Creativity and Humanities

Encourage your children to develop skills in areas where AI is weak like: creativity, strategic thinking, learn new skills independently, dexterity, and compassion/empathy. And if your child shows promise in some area (such as entrepreneurship or scientific discovery), encourage them or to go deep, and start early.

Help your children find his or her passion. Passion is highly correlated with motivation and achievement. Doing something he or she is passionate about is most likely to lead to a sustainable job, as well as a fulfilling life.

Finally, our education system was not designed for the AI era, nor is it likely to catch up quickly. Thus, it is even more important that you spend more time as a parent connecting to your child, not only to help him or her access the latest information, but also to develop a stronger parent-child bond.

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THE WALL STREET JOURNAL.

M.B.A. Applications Decline at Harvard, Wharton, Other Elite Schools as Degree Loses Luster

American business schools struggle to lure professionals out of strong job market, face competition from top programs overseas



Harvard Business School received 9,886 M.B.A. applications for this fall's entering class, down 4.5% from last year—the biggest drop since 2005. **PHOTO:** CODY O'LOUGHLIN FOR THE WALL STREET JOURNAL

By *Kelsey Gee*

Oct. 1, 2018 12:01 a.m. ET

180 COMMENTS

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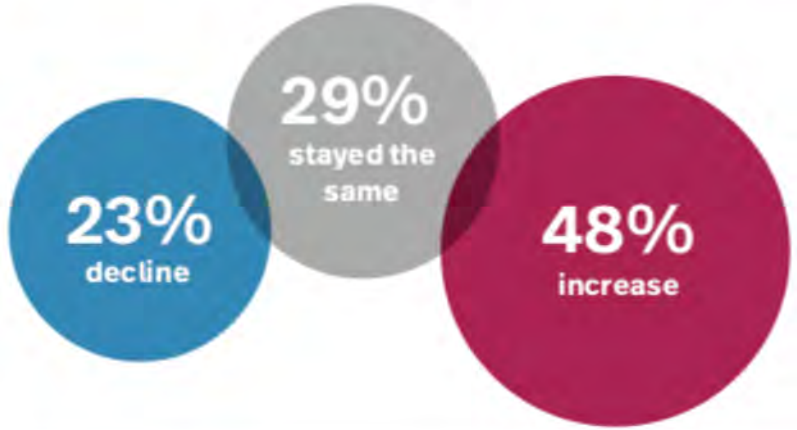


64%

of employers believe "the need for continuous lifelong learning will demand higher levels of education and more credentials"

Figure 1. Change in Value of Educational Credentials in Hiring vs. 5 Years Ago

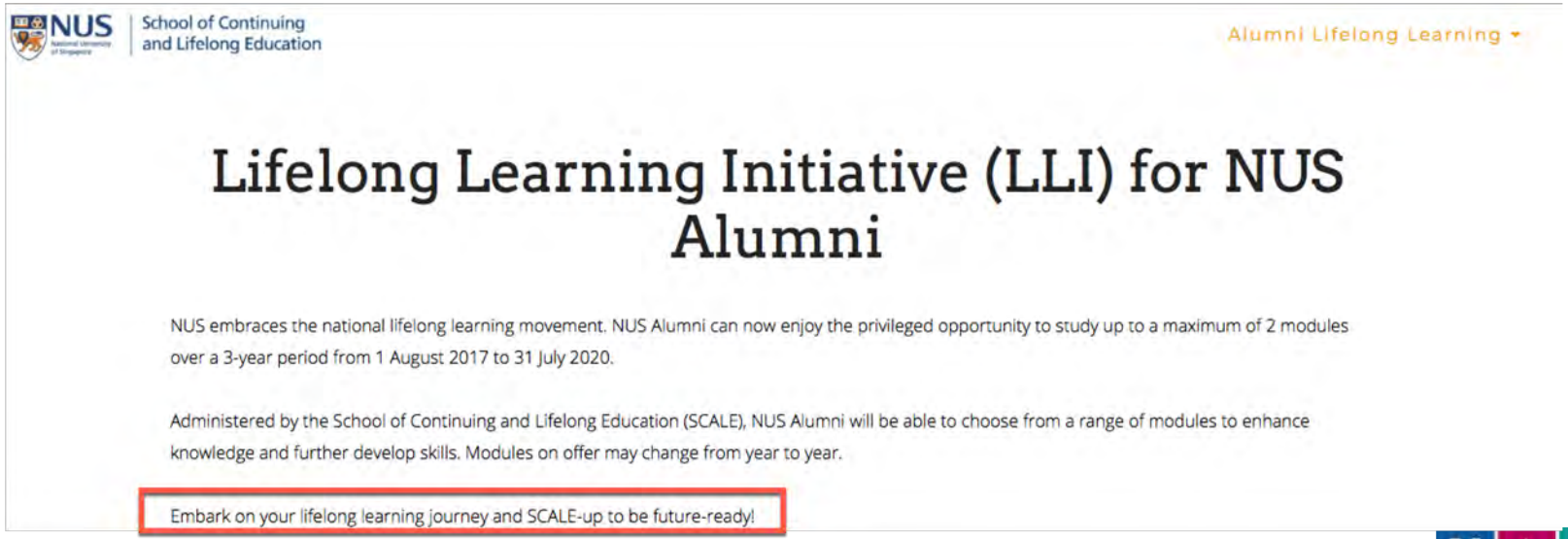
"Compared to 5 years ago, has there been any change in how your organization values educational credentials alongside other job qualifications?"



It is clear that educational credentials – typically degrees – retain a central and even growing role in the hiring equation. Yet, as more employers evolve their hiring practices through the application of technology and skills-based hiring practices, the emphasis on degrees is likely to be challenged.

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DRIVERS OF CHANGE

- CHANGING DEMOGRAPHICS
- SOCIO-ECONOMIC CLIMATE
- WORKFORCE SKILLS
- SCIENCE OF LEARNING

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> ...the business of national and international education is rapidly changing. The old models of business, pedagogy, and mission are either being questioned, or are no longer valid, meaning we must continually assess and reassess our own methodologies. Issues of 'flat world' connectivity, technology and accessibility, affordability and return on investment, and a diversifying body of learners drive today's higher education model, all while the old funding model becomes obsolete.

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The Georgia Tech Commitment Initiatives

1. Whole-person Education (experiential learning, multicultural global context, new curriculum with interpersonal and intrapersonal dimensions plus cognitive dimensions [4IR])
2. New Products/Services (micro credentials, minimester classes, new accomplishment credit, new transcript uses evidence of learning and achievements)
3. Advising for a New Era (AI based advising, professional networks)
4. AI & Personalisation (adaptive learning platforms)
5. Distributed Worldwide Presence (Atrium microlearning, human library)

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4IR Impacts…teaching, too



whom!

Who's teaching who?

Digital TAs

Hey, teacher…

Partnerships

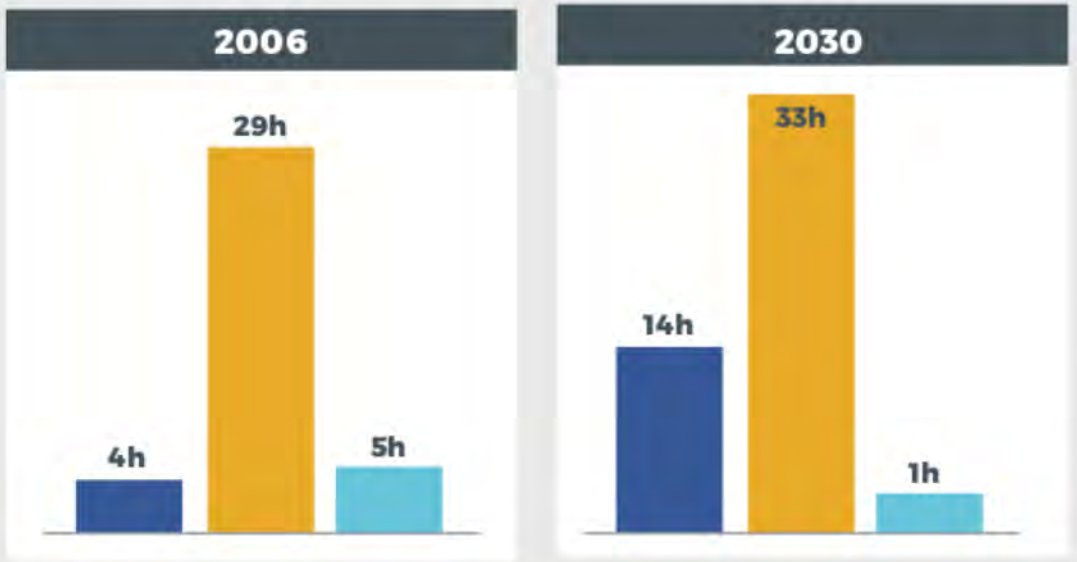
New skills. Now please.

Curriculum. On demand.

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Exhibit 3: In 2030, teachers will increasingly facilitate learning, and spend less time 'lecturing', as digital technologies enable more self-directed learning

These work activities will have the most significant shifts.



Key:

- Facilitate student learning
- Interacting with students
- Repetitive information analysis

* Facilitation tasks will incorporate interaction with students, such that tasks are not mutually exclusive

Note: Comparison of time spent on key activities performed by a primary school teacher in 2030 versus 2006. ONET, ABS, AlphaBeta analysis

FACILITATE STUDENT LEARNING* ↑10h

- Facilitate digital exchange
- Facilitate 'digital excursions'
- Plan lessons for the week

REPETITIVE INFORMATION ANALYSIS ↓4h

- Grading

INTERACTING WITH STUDENTS ↑4h

- English
- History
- Maths
- Science
- Geography
- Private tutoring
- P.E
- Special needs tutoring

Why IT Matters to Higher Education
EDUCAUSEreview

Three Examples from the Field: AR and VR in Teaching and Research

by Annie Rota Thursday, August 2, 2018 Transforming Higher Ed

Three projects at Harvard University illustrate how AR and VR technologies are transforming the work of faculty and students.

Virtual Immersion: French Culture and Language through 3D Video

What Did the Egyptian Pyramids Really Look Like?

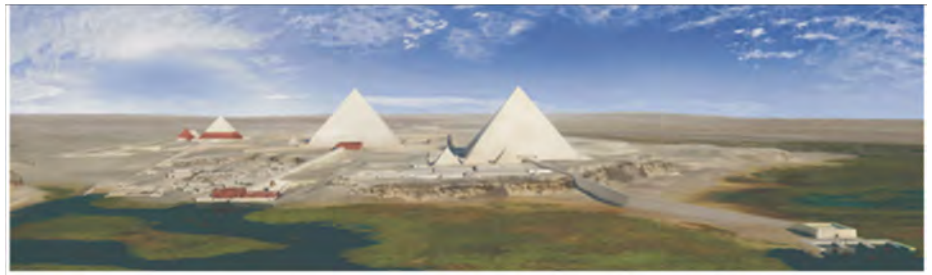
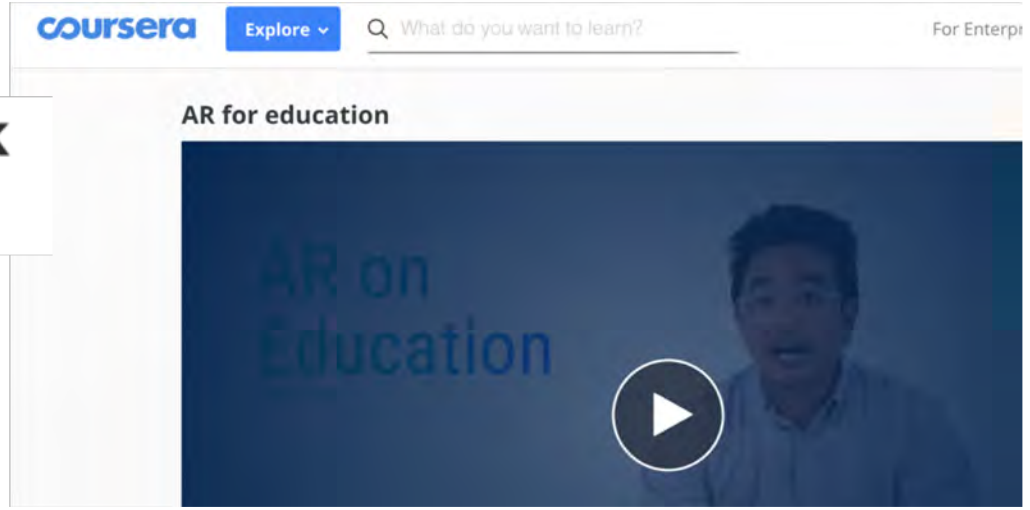


Figure 4. Scenes from the Giza Project, where Ancient Egypt is brought to life in an immersive 3D experience



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"If the standard education model of today was created for the industrial age, nothing less than a new educational model is needed to prepare the world's students for the demands and challenges of the information and innovation age…Students, workers, and entire economies will compete across global borders for the best education, jobs, and growth; all three will need to be nimble, flexible, and dynamic, ready to recognize and respond to emerging trends swiftly."

The Worldwide Educating for the Future Index: A Benchmark for the Skills of Tomorrow, The Economist Business Intelligence Unit 2017

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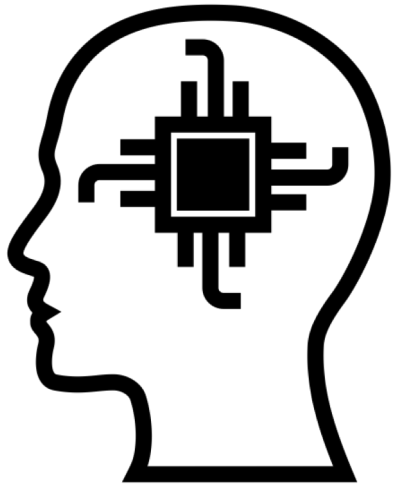
4IR Ready or Not?



1. Does your school's mission align with the 4IR?
2. How is the 4IR a value-add?
3. How will your school adjust?

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JB's 4IR Opportunity What Ifs

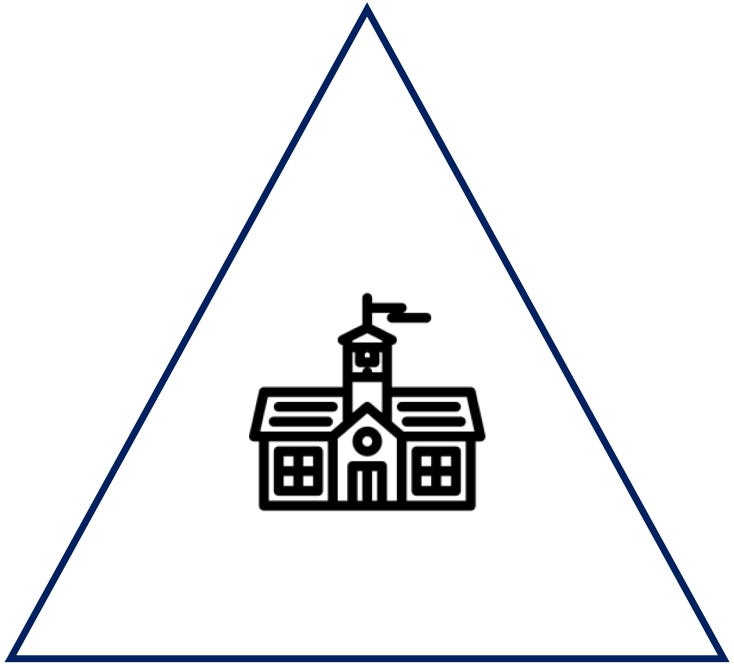


Created by shanthagawri
from Noun Project

- What if we were to redesign our curriculum, learning, and teaching around the 4IR (OECD 2030)?
- What if we think about the 4IR as a portal into an independent school learning continuum (alumni upskill/reskill/lifelong)?
- What if we partnered with accreditors to rethink accreditation in light of the 4IR?
- What if we were to become 4IR ready schools, where ps-10 focus on the breadth of core skills and competencies (including creativity, entrepreneurship, ethics, etc.) and then deep dive into math and science for grades 11 and 12?

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Model

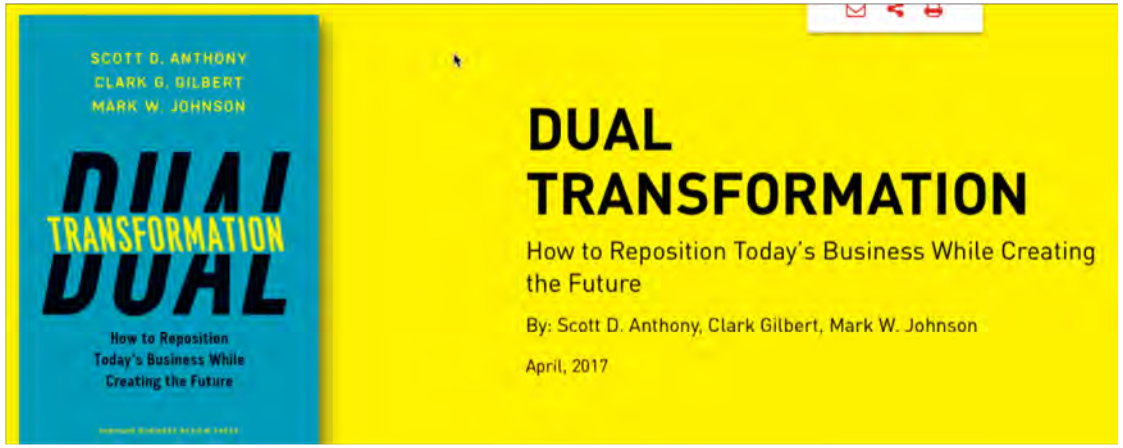


How we deliver

Affordability | Access | Mode

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THE WALL STREET JOURNAL.

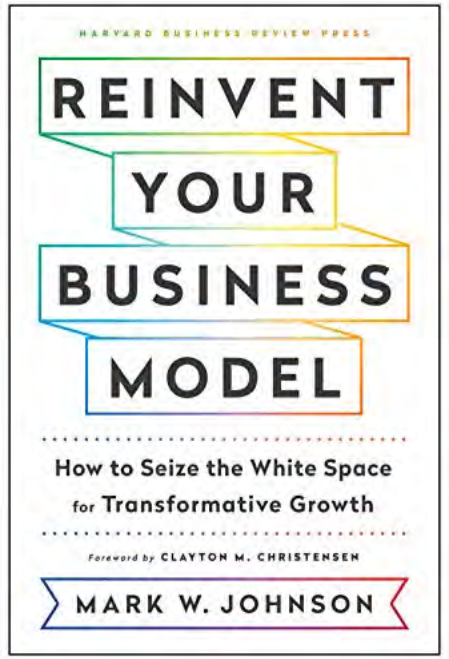
CIO JOURNAL.

It's All About Business Model Innovation, not New Technology

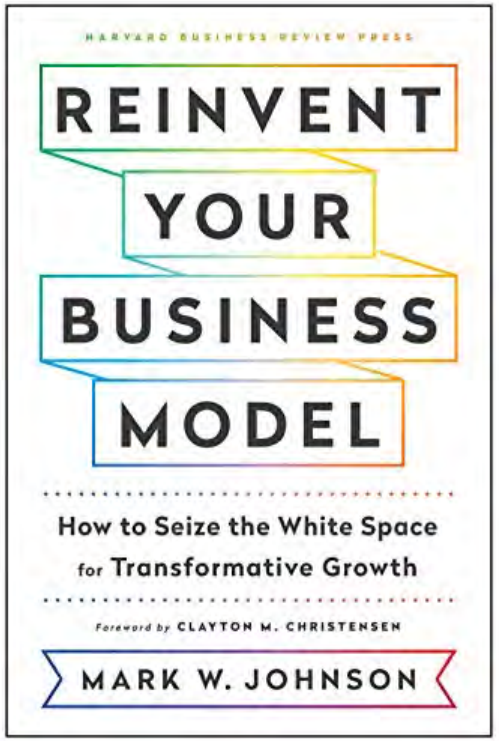
New technology, no matter how transformative, is not enough to propel a business into the future.



Custumers arrive and leave a Blockbuster video rental store in Bend, Ore., the last of its kind, March 16, 2018. PHOTO: RYAN



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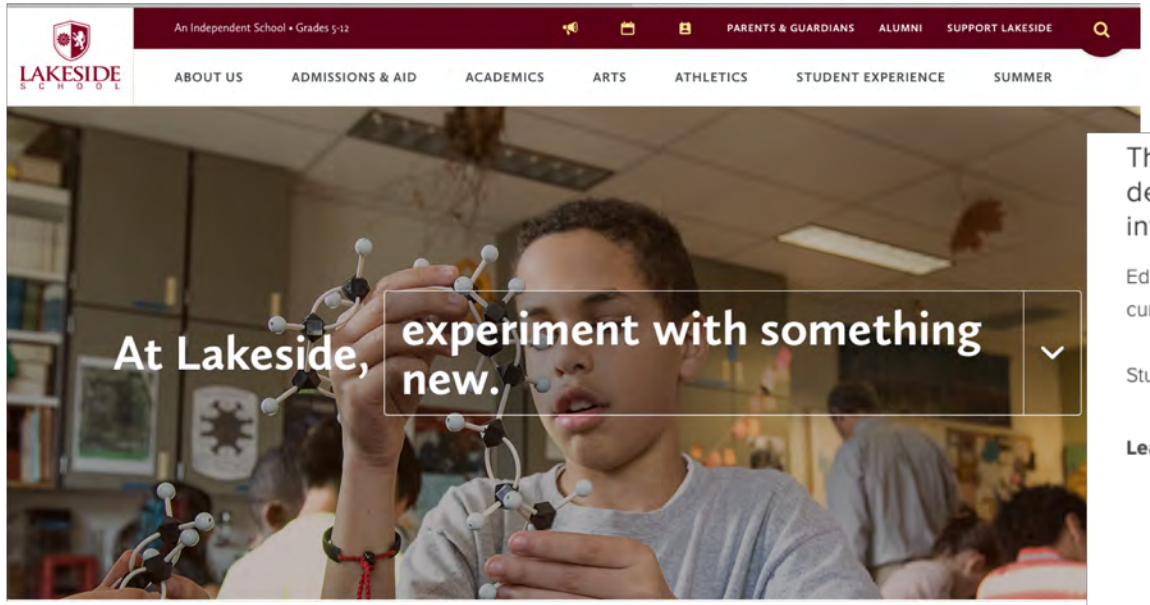


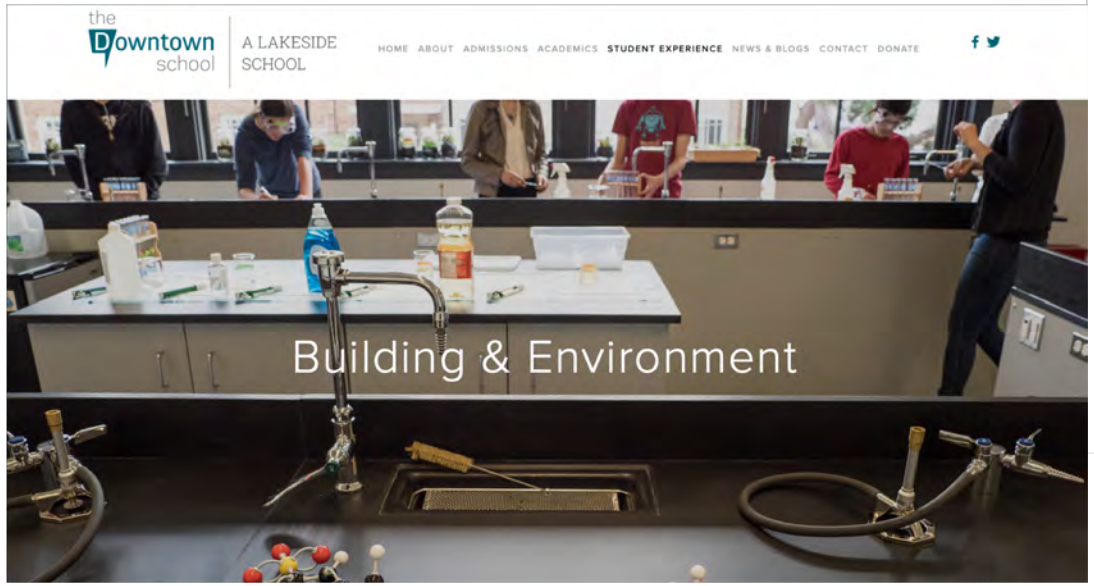
A business model is a representation of how a business creates and delivers value for a customer while also capturing value for itself, doing so in a repeatable way.

When you deconstruct any business model, you can see four distinct yet interdependent elements:

1. **The Customer Value Proposition (CVP).** A customer value proposition helps customers more effectively, reliably, conveniently, or affordably solve an important problem (or satisfy a job-to-be-done) at a given price.
2. **Key Resources.** The people, technology, facilities, equipment, funding, branding, and raw materials required to create the product or service and deliver it.
3. **Key Processes.** The means that people in organizations develop to produce and deliver products in repeatable, scalable, and sustainable ways.
4. **The Profit Formula.** How the company creates value for itself and its shareholders. It includes a revenue model, a cost structure, a target unit margin, and resource velocity.

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The academic program at The Downtown School: A Lakeside School is focused on developing active learners who can think critically and creatively and communicate and interact effectively.

Educators at Lakeside School developed the academic program, combining some of the best aspects of Lakeside's high-quality curriculum with an emphasis on interdisciplinary, experiential, and online learning.

Students who graduate from The Downtown School will have highly developed skills in five key competencies and will be able to:

Learn how to learn:

- Employ available tools and resources.
- Take risks, learn from failure, and persevere.
- Engage in self-reflection.
- Transfer skills from one context to another.
- Use feedback effectively.

Think critically:

- Question prior knowledge and admit errors.
- Identify and address cognitive filters.
- Identify patterns and create connections.
- Assess the accuracy and reliability of information.
- Make reflective and reasoned decisions.

Think creatively:

- Practice design thinking to solve problems.
- View the world from multiple perspectives.
- Explore with curiosity.
- Think metaphorically.
- Embrace and harness the unexpected

Communicate effectively:

- Understand their audience and respect others' perspectives.
- Listen to understand.
- Use modes of communication (oral, written, computational, visual, non-verbal language) that match the given context.
- Cultivate empathy and develop awareness of their own cultural perspective.
- Check for understanding in their audience.

Collaborate:

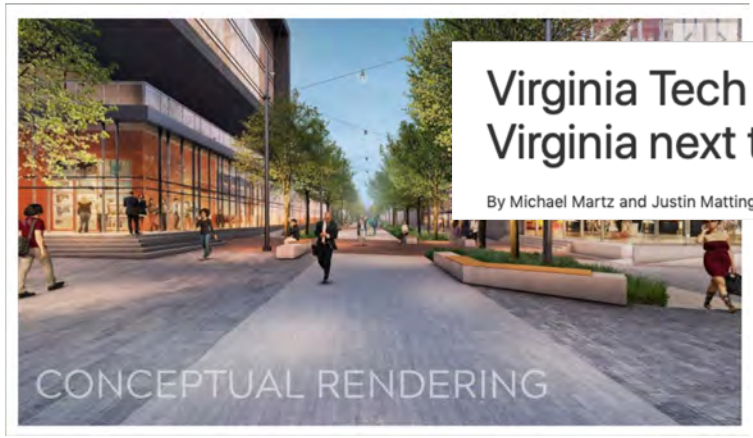
- Engage in debate to sharpen ideas.
- Use a generative feedback cycle to drive growth.
- Share group ownership for tasks and outcomes.
- Demonstrate awareness of group need and harness individual strengths.
- Share work appropriately in a group setting.

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Are you Amazon Ready?



With Amazon coming to Virginia, state colleges are expanding their plans for computer science and innovation.



Virginia Tech will open a $1 billion campus in Northern Virginia next to Amazon HQ2

By Michael Martz and Justin Mattingly Richmond Times-Dispatch Nov 13, 2018

Amazon has just made this announcement. What do you do?

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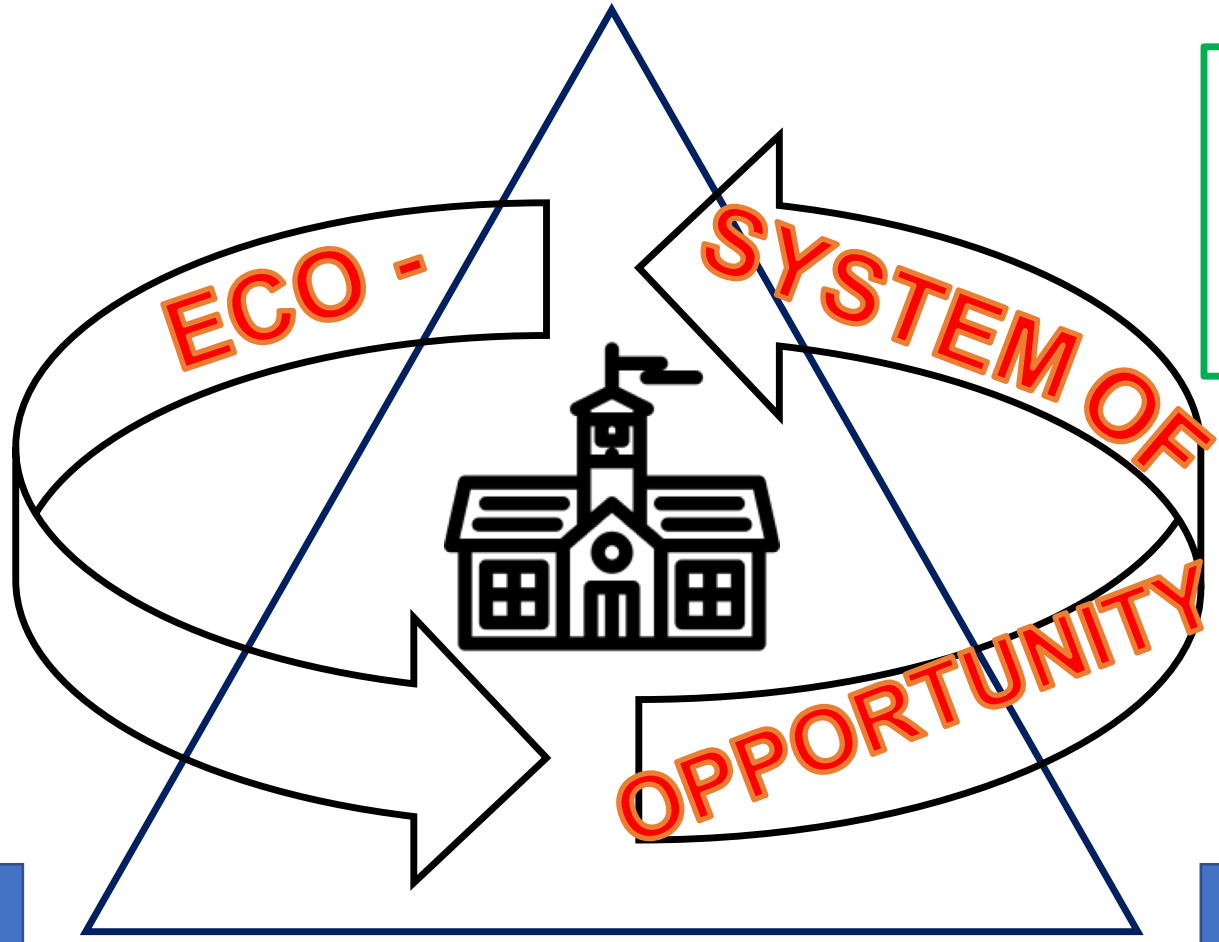
YOU MAY ASK YOURSELF



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Why

Mission



1. **Demographics**
2. **Education Disruption**
3. **4IR & Ed**

How

Model

Whom

Market

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Opportunity to travel from the…

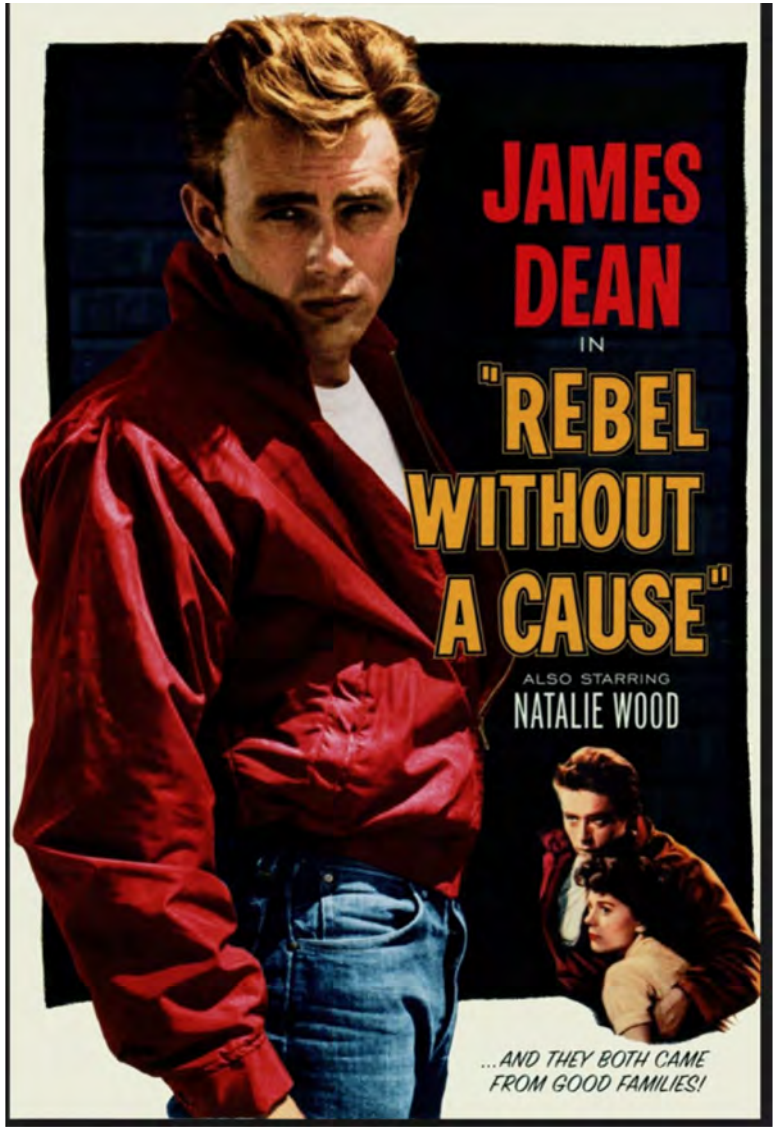
Whole Child



Whole School

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Independent Schools: Rebels with a Cause! We make the rules!



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