



TOM MURRAY

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FUTURE READY
SCHOOLS  **>>**
PREPARING STUDENTS FOR SUCCESS

@futureready
futureready.org



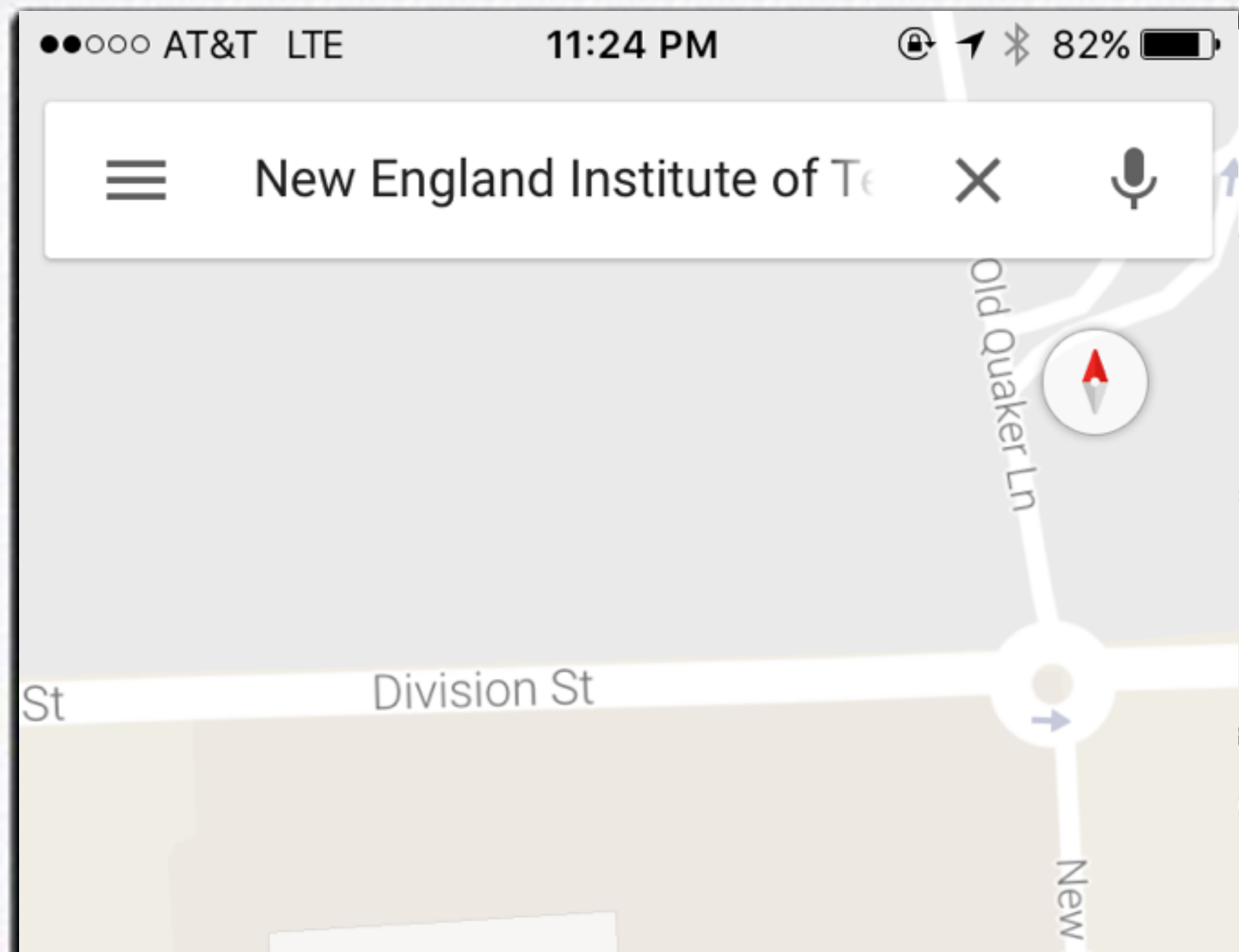
@all4ed
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THANK

YOU

Disruptive Innovation in Every Sector





How big is Uber?

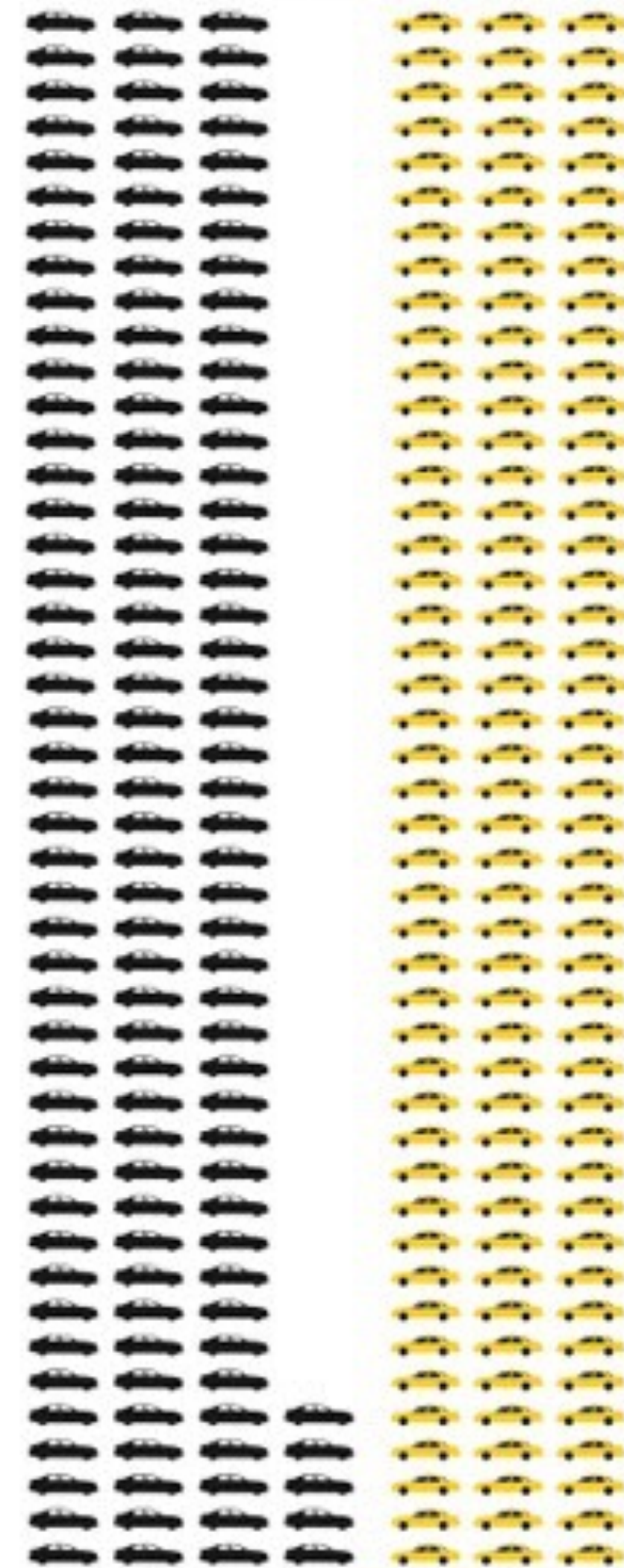


100 UBER DRIVERS



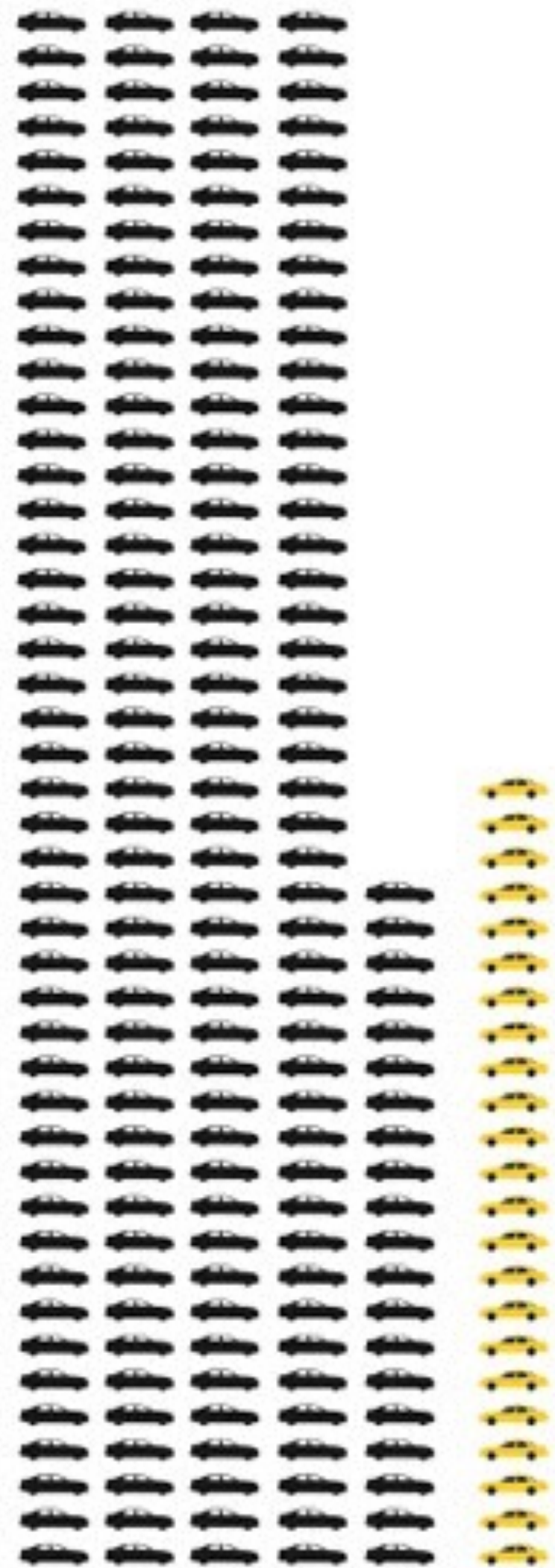
100 TAXIS

NEW YORK CITY



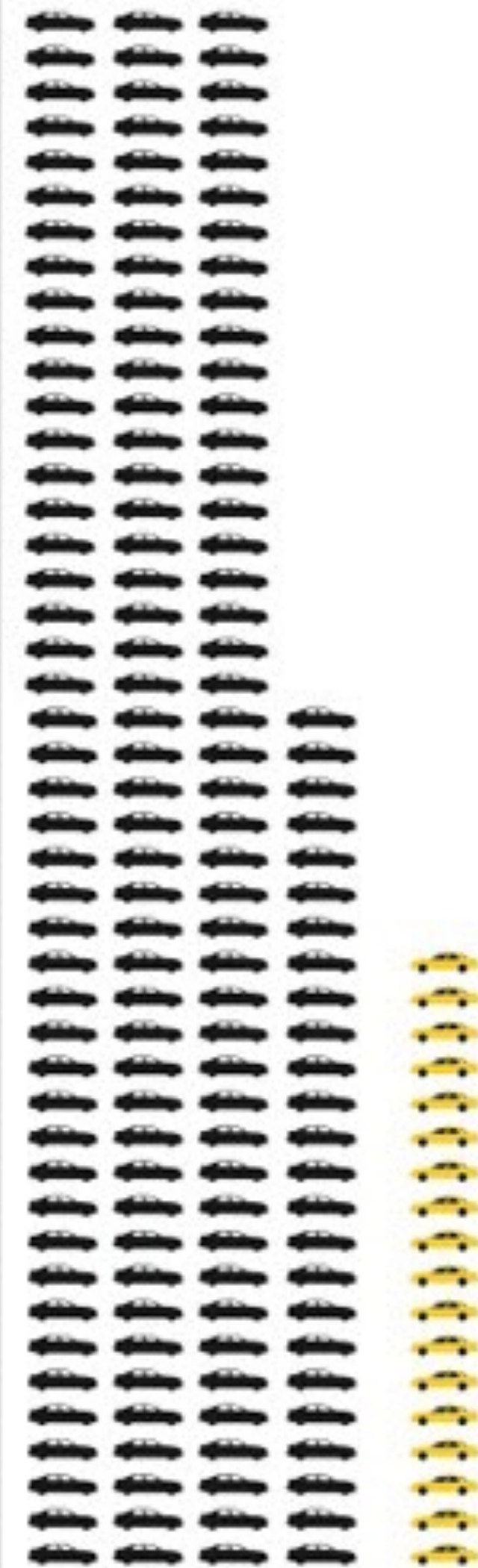
14,000 13,500

LOS ANGELES



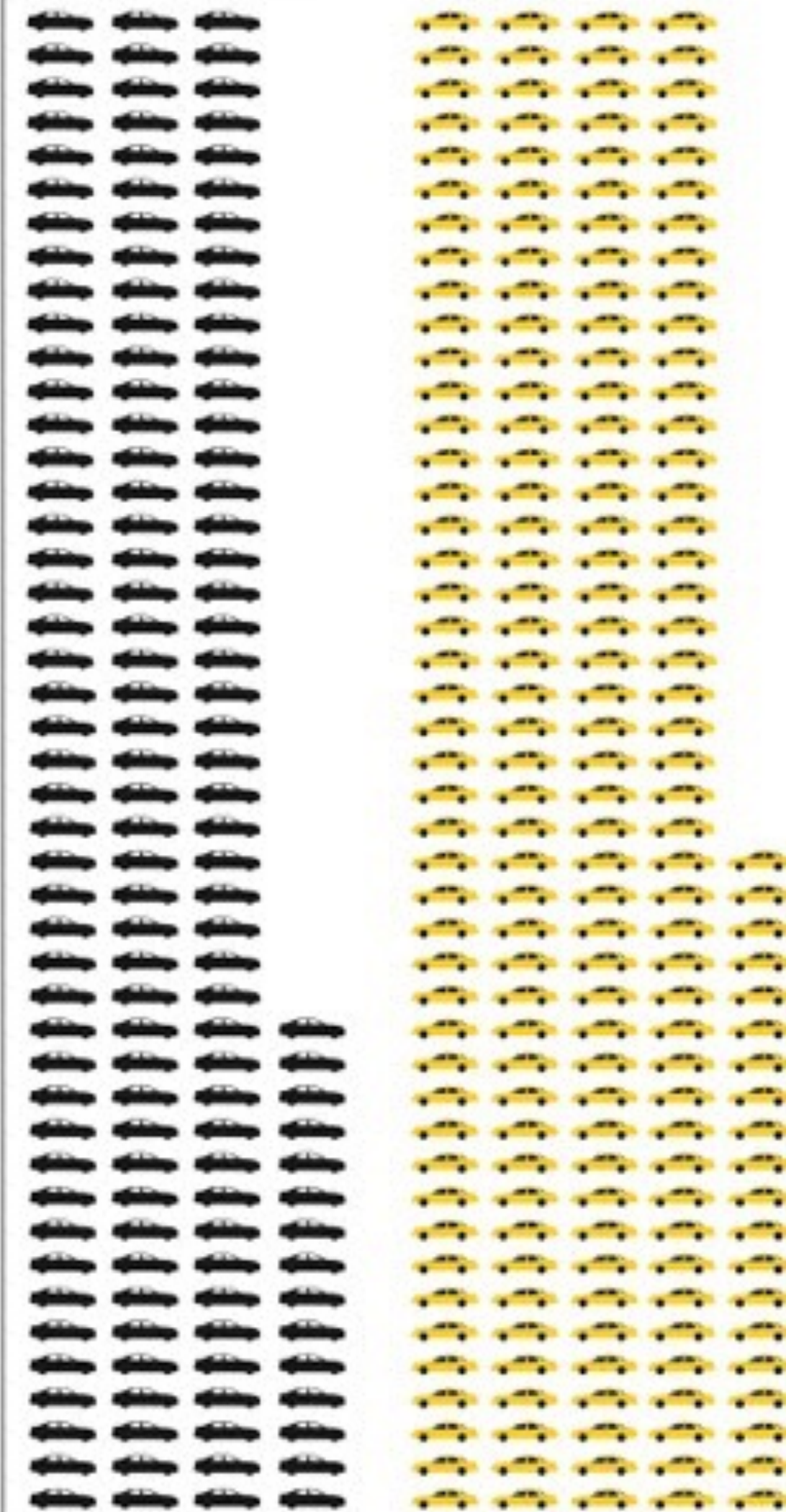
20,000 2,300

SAN FRANCISCO



16,000 1,800

LONDON, UK



15,000 20,000

SYDNEY, AUSTRALIA



4,000 6,000

SOURCES: UBER, MUNICIPAL AUTHORITIES

ANDREW BARR / NATIONAL POST

8,000,000 People
Using the Service

Over **1 Billion**
Rides to Date



U B E R
In first five years

1 Million Rides
Per Day

Available in
68 Countries



Bloomberg

Uber's First Self-Driving Fleet Arrives in Pittsburgh This Month



Uber's First Self-Driving Fleet Arrives in Pittsburgh This Month

The autonomous cars, launching this summer, are custom Volvo XC90s, supervised by humans in the driver's seat.

August 18, 2016

by  Max Chafkin
from **BloombergBusinessweek**

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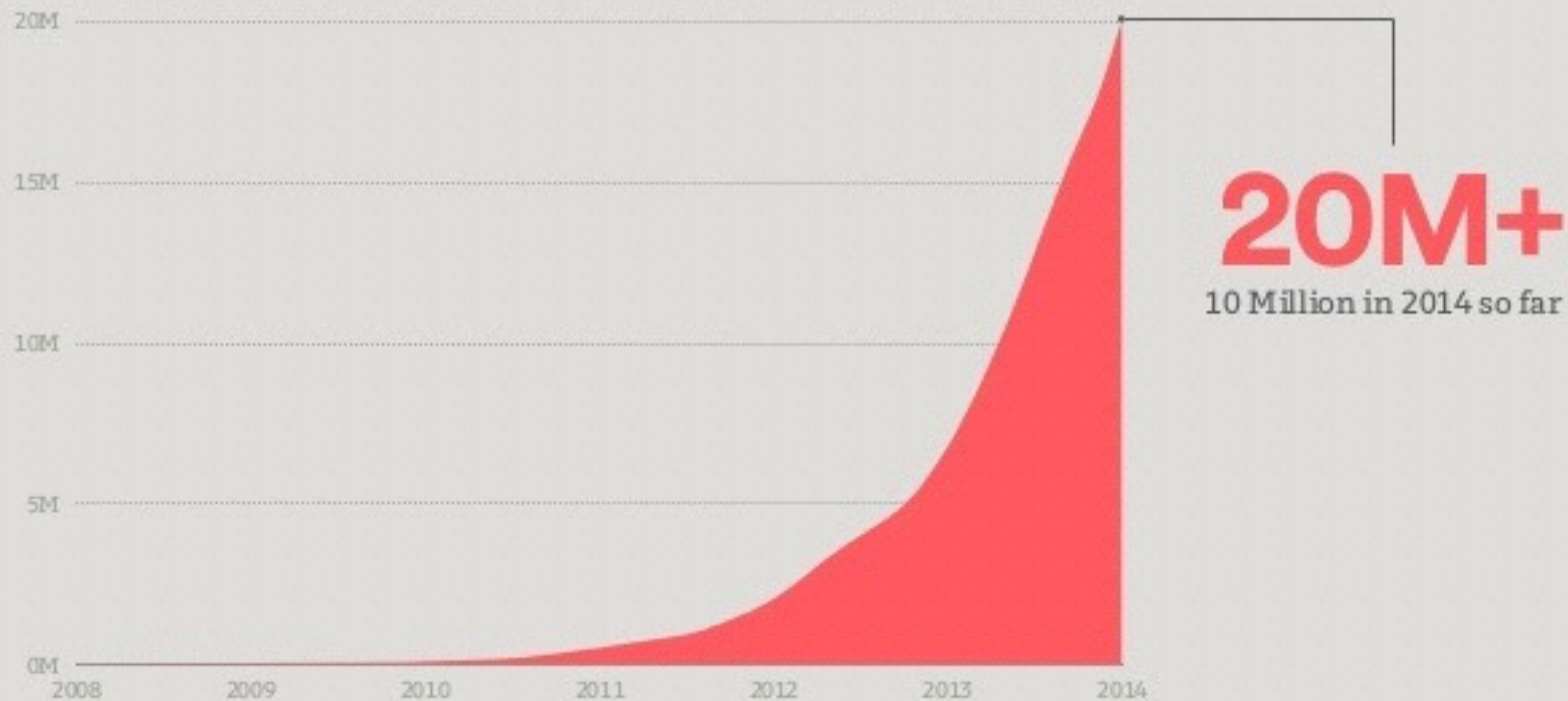






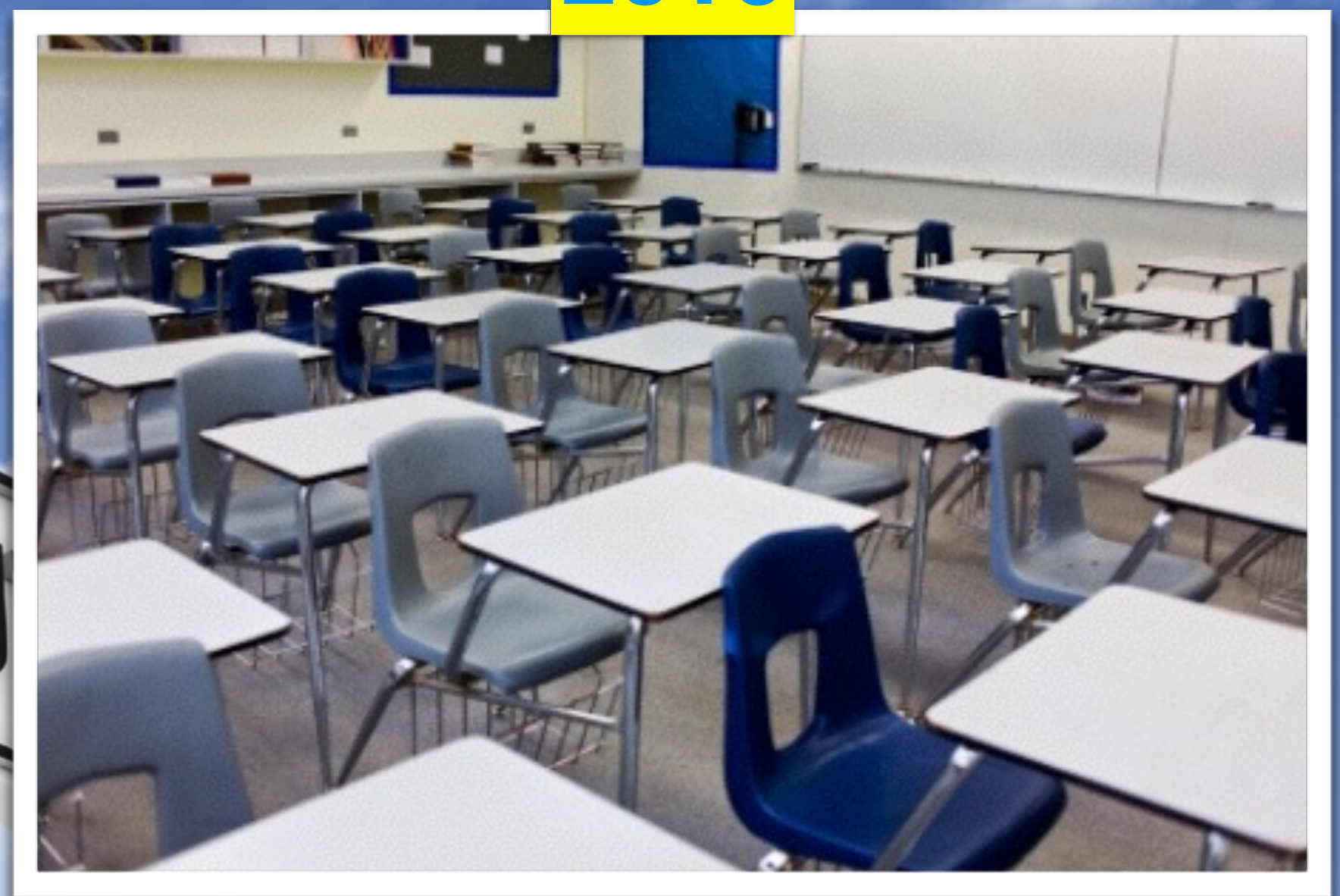
airbnb

Total Airbnb Guests



But what about educational innovation?

2016



1916

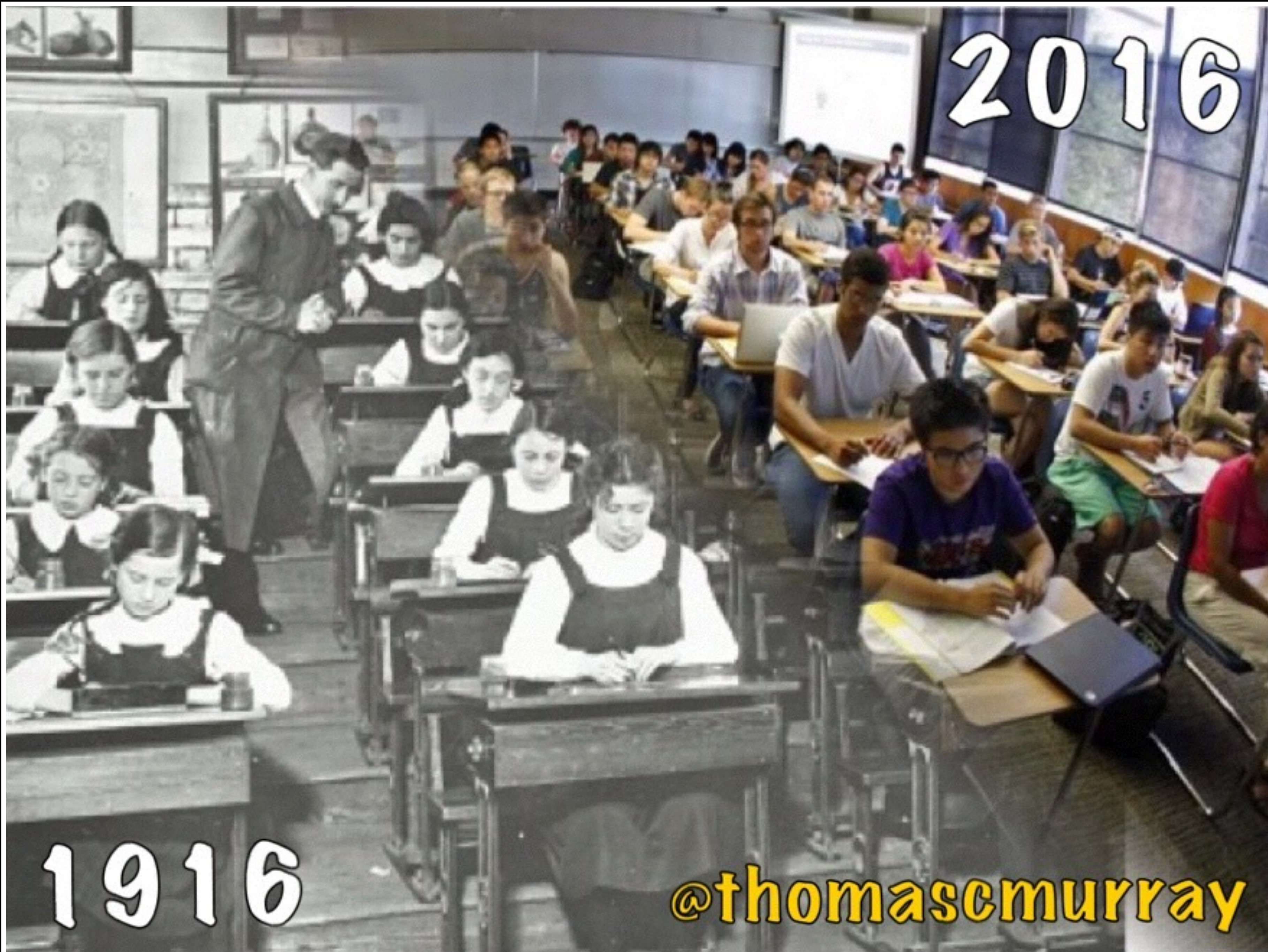


PAST

FUTURE

PRESENT

*How much has changed
in the past 100 years?*



1916

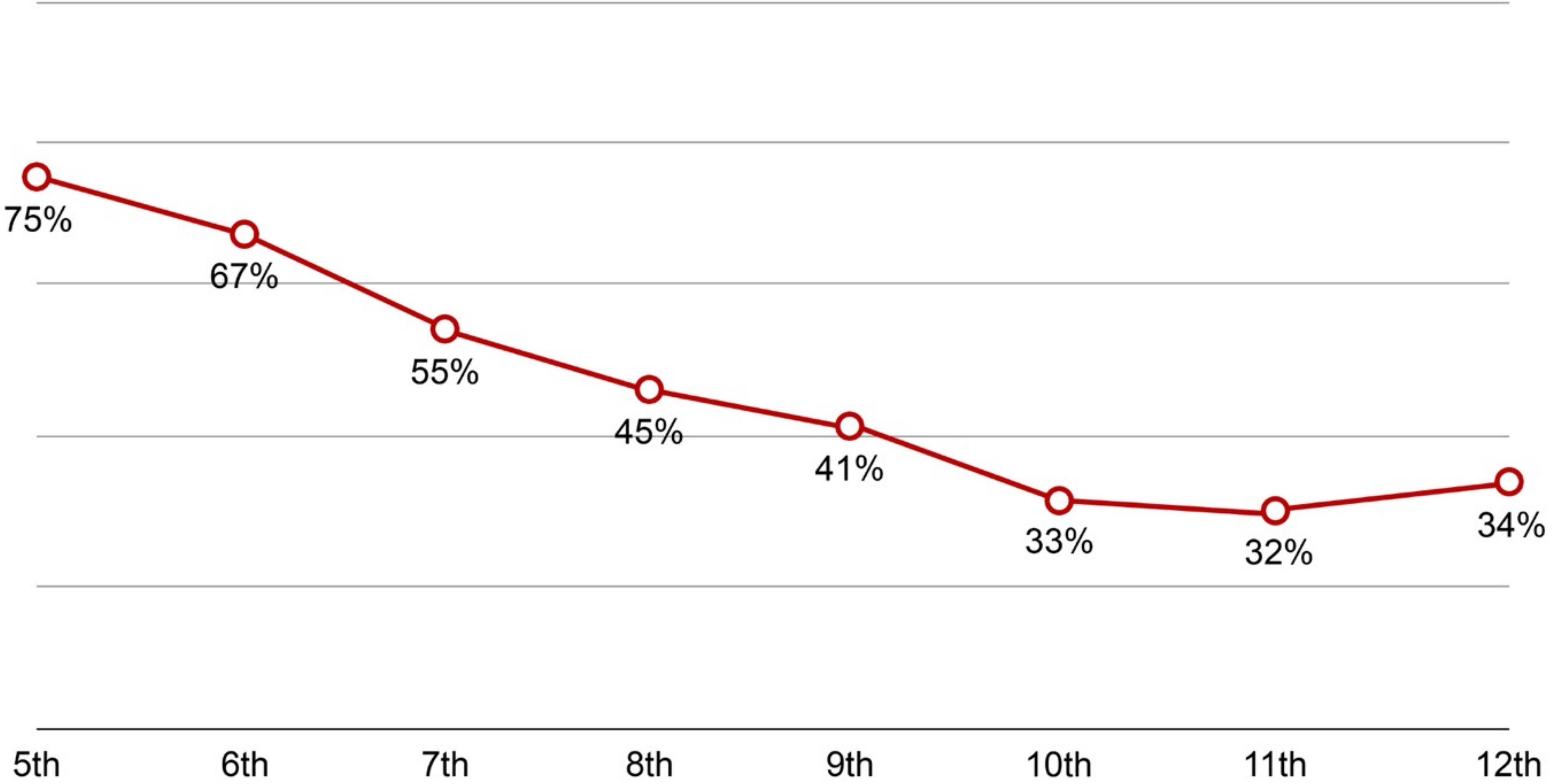
2016

@thomascsmurray

***School Innovators
Make Learning Personal.***

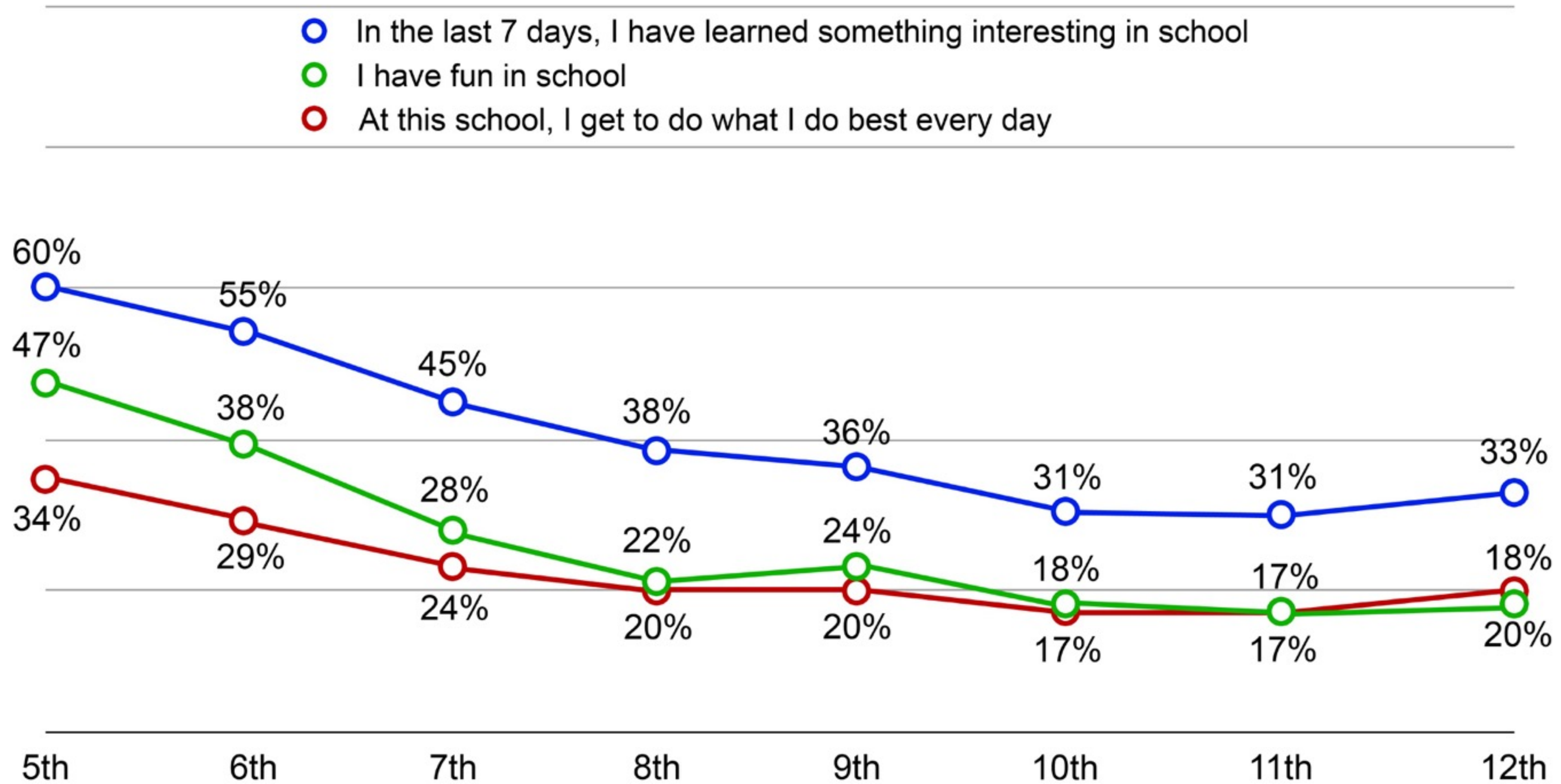


Percentage of Students Engaged
in School, By Grade
(n = 928,888)



Gallup. (2016). *Gallup student poll. Engaged today - Ready for tomorrow. Fall 2015 survey results*. Washington, DC: Author.

Percentage of Students Who Strongly Agree, By Grade (n = 928,888)





Gallup. (2016). *Gallup student poll. Engaged today - Ready for tomorrow. Fall 2015 survey results*. Washington, DC: Author.

***We are in the first few days of the
4th Industrial Revolution.***

1.8 million American truck drivers could lose their jobs to robots. What then?

One of the last well-paying working-class jobs is basically doomed.

Updated by David Roberts on August 3, 2016, 8:40 a.m. ET  [@drvox](#)  david@vox.com

 TWEET

 SHARE (4,668)

+

2016 Report to Congress

White House Economists Predict:



- **83%** chance that workers earning less than \$20 per hour will lose their jobs.
- **31%** chance that workers earning less than \$40 per hour will lose their jobs.
- **4%** chance that workers earning more than \$40 per hour will lose their jobs.



But where do we even begin?





Author:

Dr. Linda Darling-Hammond, Stanford University, SCOPE

Report: bit.ly/usingtechtosupportstudents

Key Findings:

Specifically, the report identifies three important components to successfully using technology with at-risk students:

- (1) interactive learning;
- (2) use of technology to explore and create rather than to "drill and kill;" and
- (3) the right blend of teachers and technology.

The report also identifies significant disparities in technology access and implementation between affluent and low-income schools.

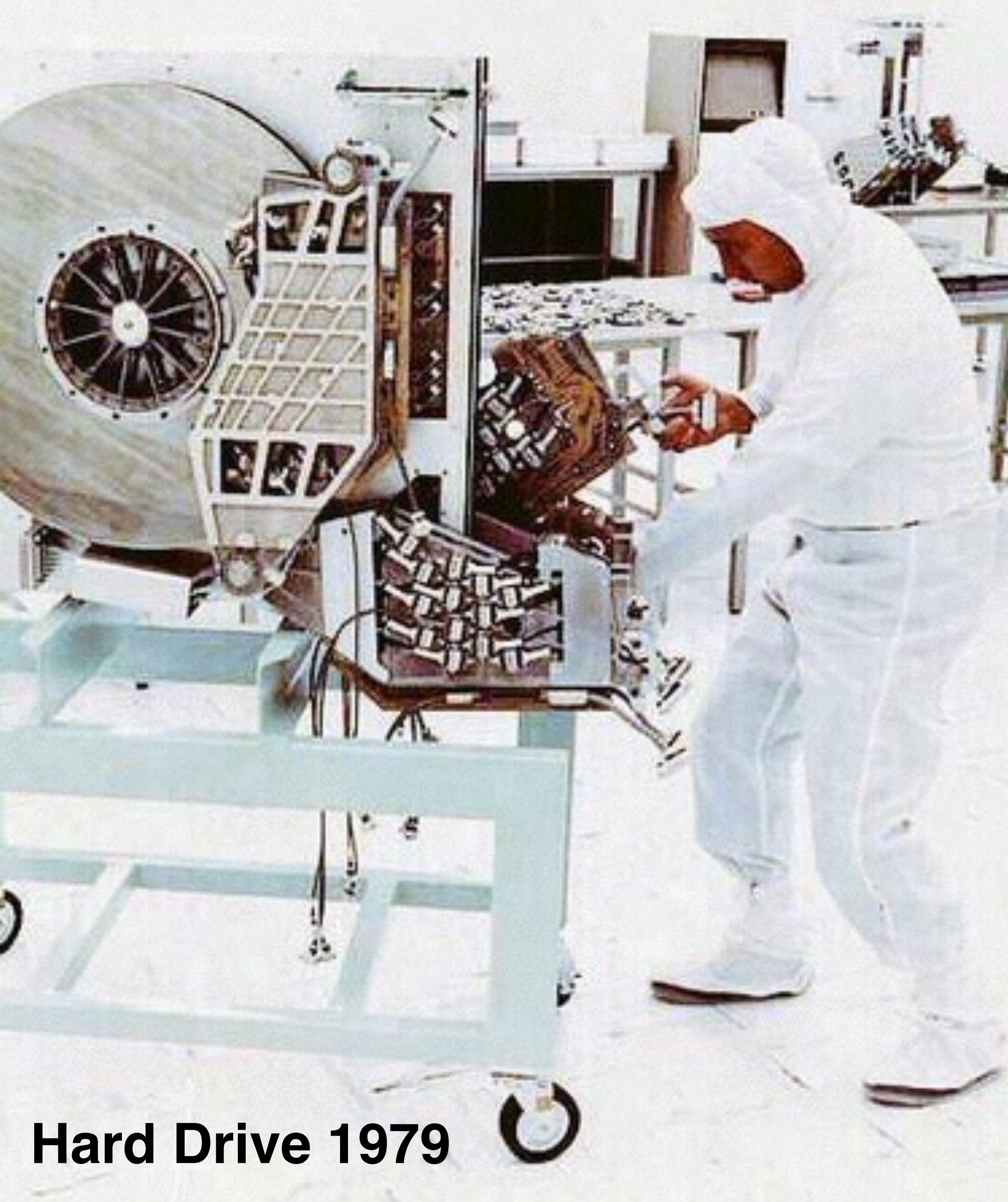
Explore. Design. Create

***“Today, a two year old can unlock a tablet
or phone, open and close their favorite
apps all by themselves.
When I was that age, I was eating dirt.”
- Unknown***



A young child with blonde hair, wearing a colorful plaid shirt and blue jeans, stands on a small silver step ladder. The child is reaching up to draw a large rocket ship on a grey concrete wall with white chalk. The rocket is tall and slender, with a pointed nose, a circular window, and a triangular base. A small black dog sits on the ground to the left of the ladder, looking up at the child. On the ground to the right of the ladder, there are several pieces of colorful chalk and a small purple container. The background is a large, textured grey wall.

***School Innovators
Redefine What's Possible.***



Hard Drive 1979

Storage cost of 1 GB:

1981 \$300K

1987 \$50K

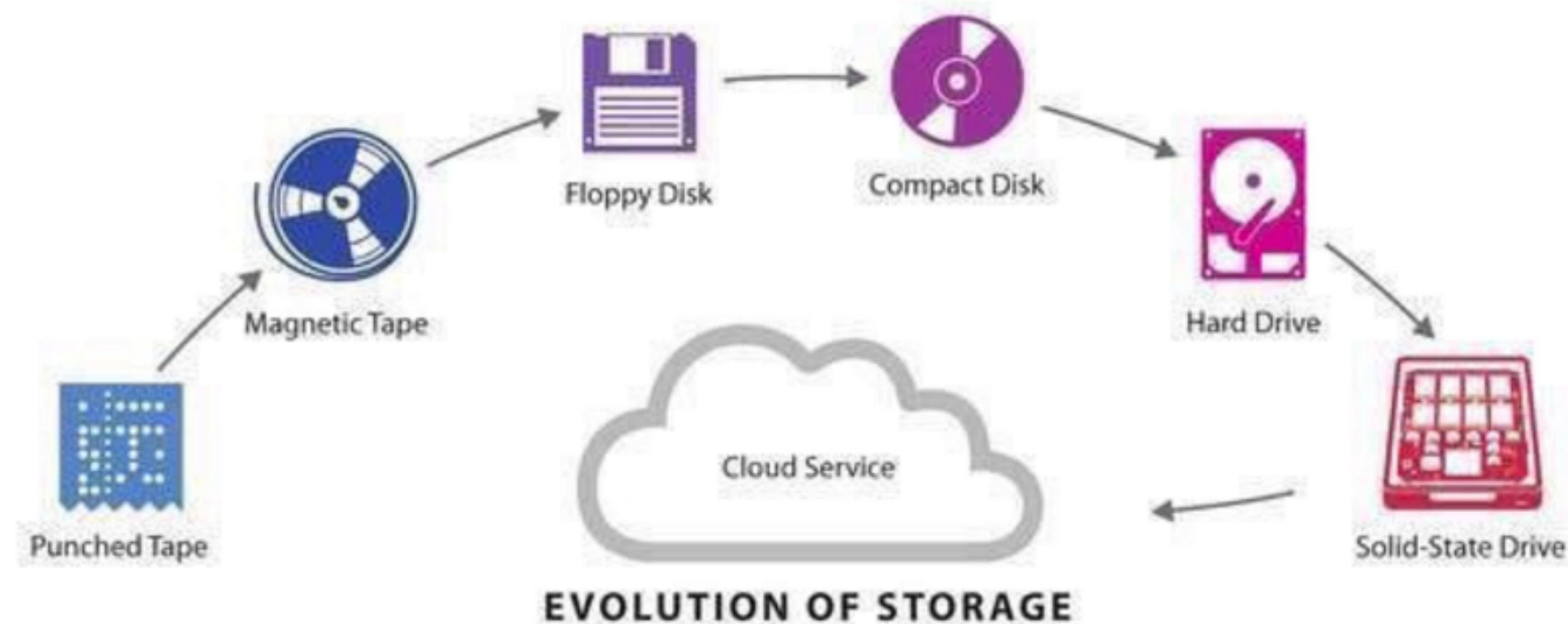
1990 \$10K

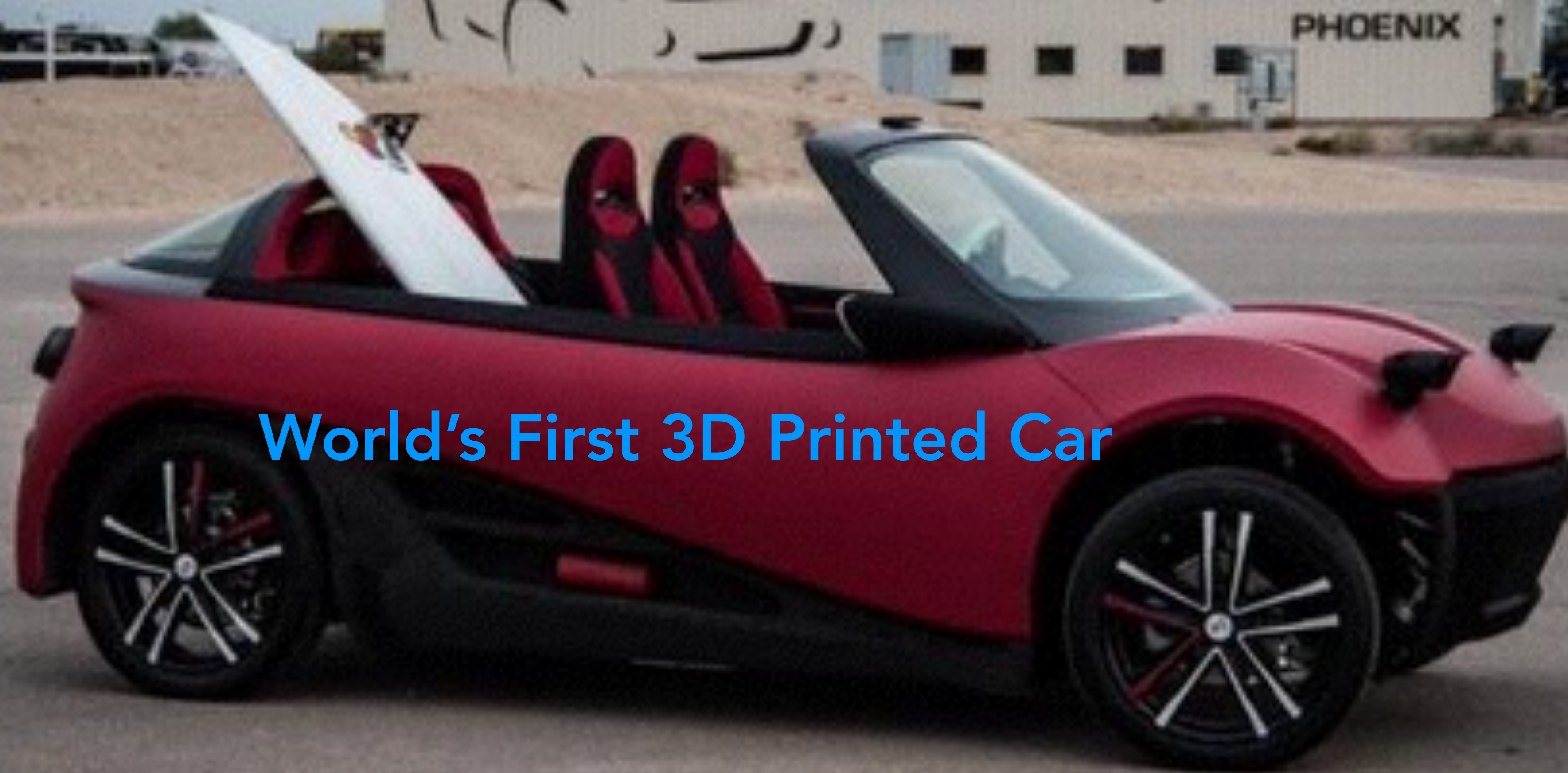
2000 \$10

2004 \$1

2012 \$0.10

2015 FREE 15GB —GOOOG/MSFT





World's First 3D Printed Car

Augmented Reality





PROSTHETIC KIDS HAND CHALLENGE



[Home](#) | [About](#) | [Sign Up](#) | [Printing](#) | [Assembling](#) | [Shipping](#) | [Photos](#) | [Contact](#)



WELCOME! WE'RE GLAD YOU'RE HERE.

We are the Prosthetic Kids, and we print, assemble, and provide 3d-printed prosthetic hands to children in need. We want to issue a challenge: If you have access to a 3D Printer, you can get involved with helping children.

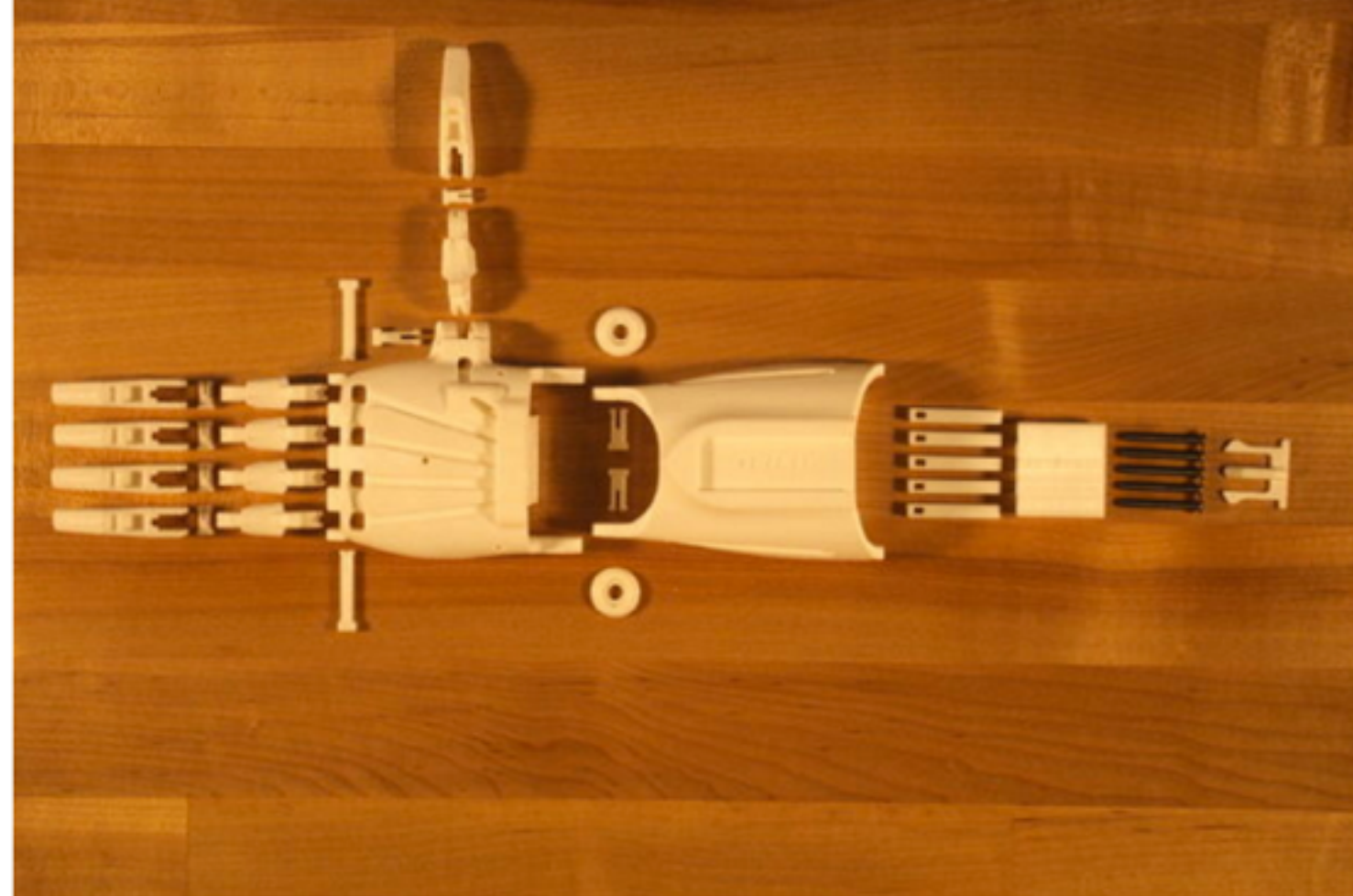
We challenge you to print and assemble ONE prosthetic hand. Don't worry, we'll help you. You CAN do this, we believe in you, and we'll be there for you, every step along the way.



STEP 1: PRINTING

Let's dive into the actual printing process and talk about infill percentages, printing best practices, whether to use rafts/supports and more.

PRINTING



STEP 2: ASSEMBLING

Got the hand printed? Great!
Let's get our hands dirty and start assembling it. Don't worry, we'll walk you through step by step.

ASSEMBLING



STEP 3: SHIP IT

If your hand is assembled, strung, and polished you are ready to complete the challenge and send it to us! Find out those details in this section.

SHIPPING

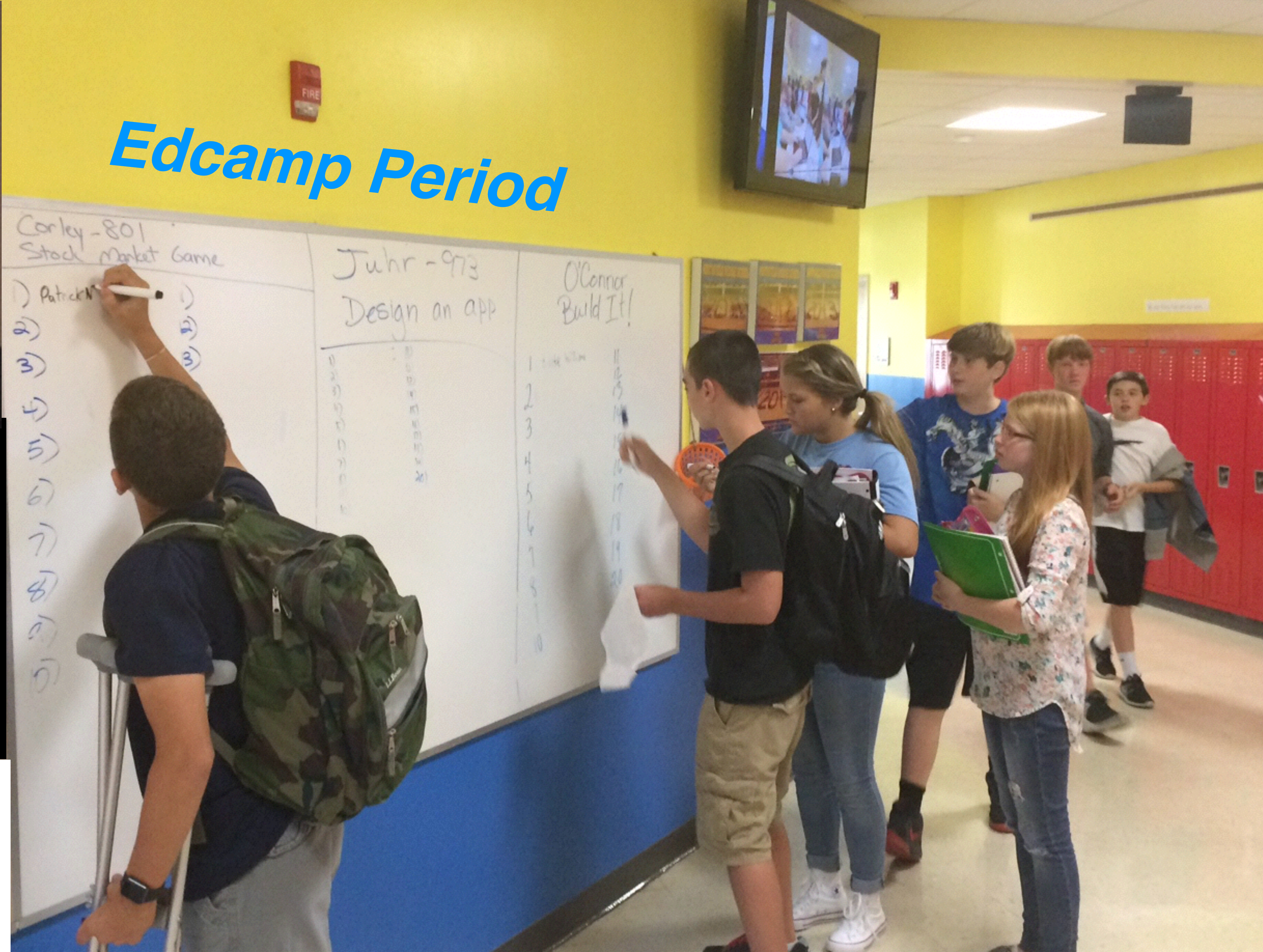
handchallenge.com
@handchallenge

Chris Craft, Teacher
South Carolina
@crafty184





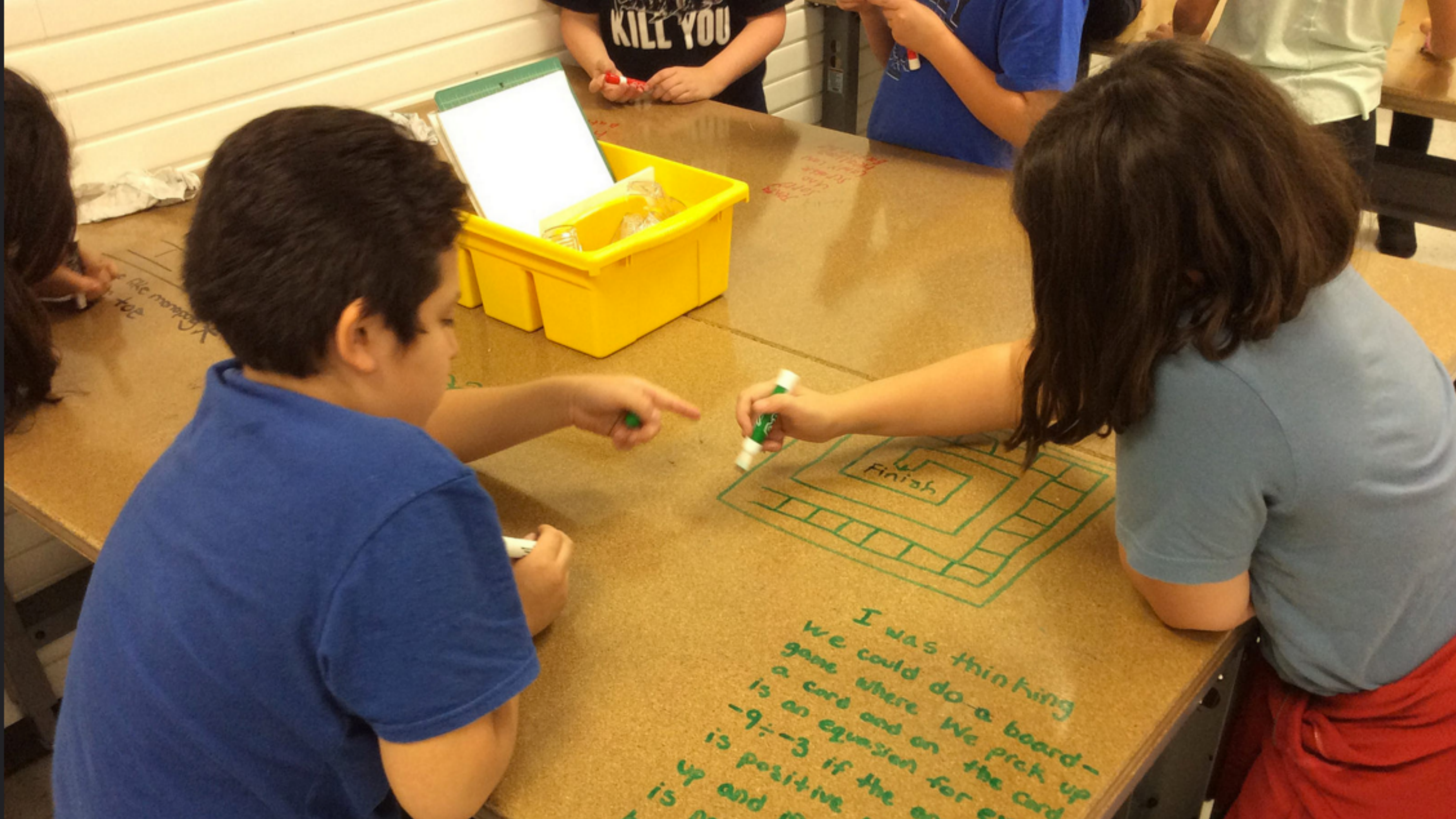
Kevin Jarrett, STEAM Teacher
Northfield Community
Middle School
Edcamp Founder
@kjarrett



Edcamp Period



**Glenn Robbins, Principal
Northfield Community
Middle School
@Glennr1809
2016 Digital Principal
of the Year**



I was thinking
we could do a board-
game where we pick up
a card and on the card
is an equation for ex
-9 ÷ -3 if the an
is positive
up and
is n



School Innovators
Fail Forward.

#EpicFail

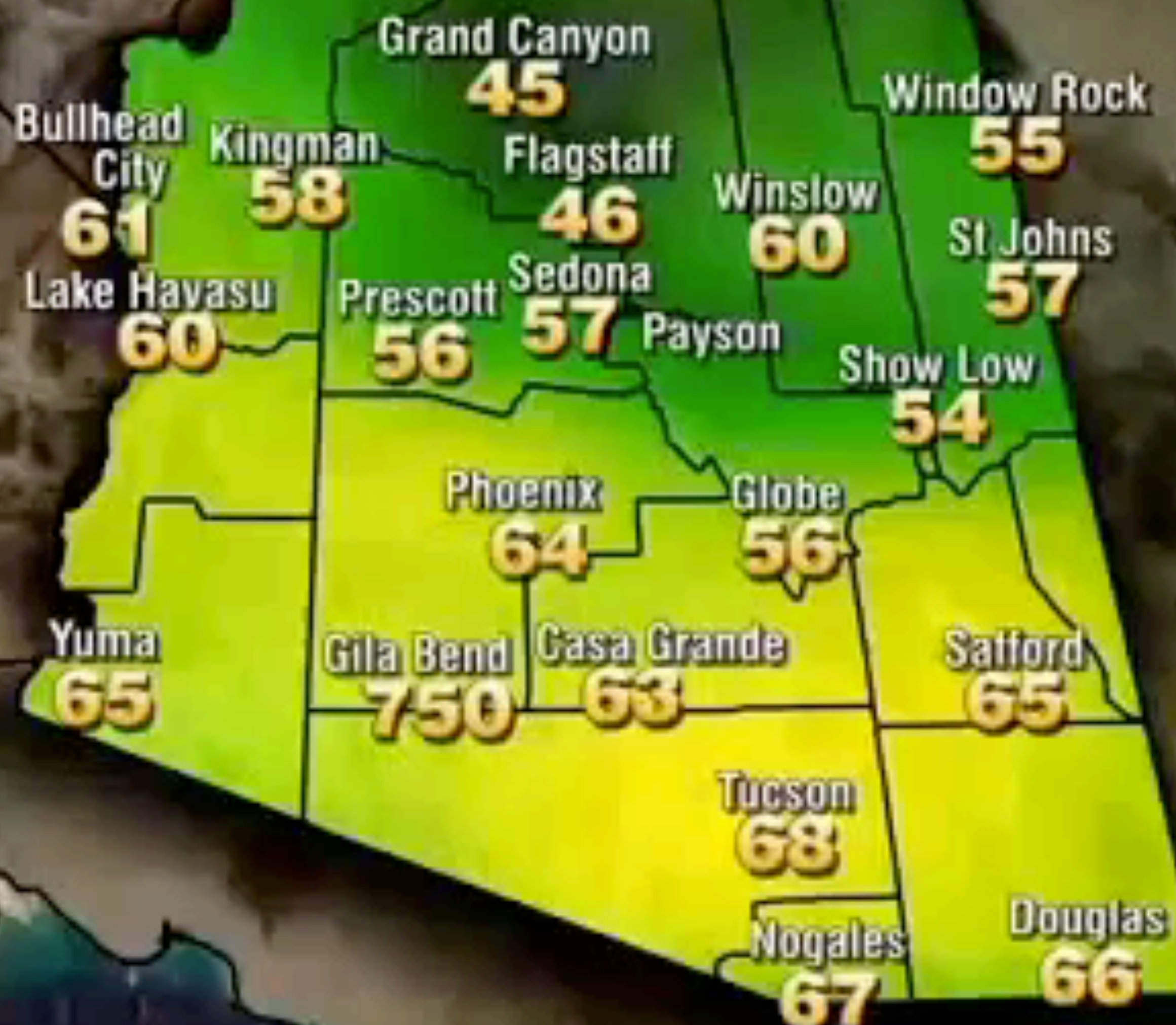


RIGHT NOW

FOX 10
AccuWeather

TEMPERATURES

Page



FOX 10

12:19 64°

***"Your **attitude**, more than your aptitude,
will determine your altitude."
- John Maxwell***

Today's technology **is the worst technology** that our kids will ever see moving forward.

- @thomascmurray

What Type of Devices are in Your Classroom?

Digital
Worksheet
Storage
Hub

Pathway
to
Unleash
Genius

@thomasmurray

DIGITAL USE DIVIDE

While essential, closing the digital divide alone will not transform learning. We must also close the digital **use** divide by ensuring all students understand how to use technology as a tool to engage in creative, productive, life-long learning rather than simply consuming passive content.

Simply consuming media or completing digitized worksheets falls short.

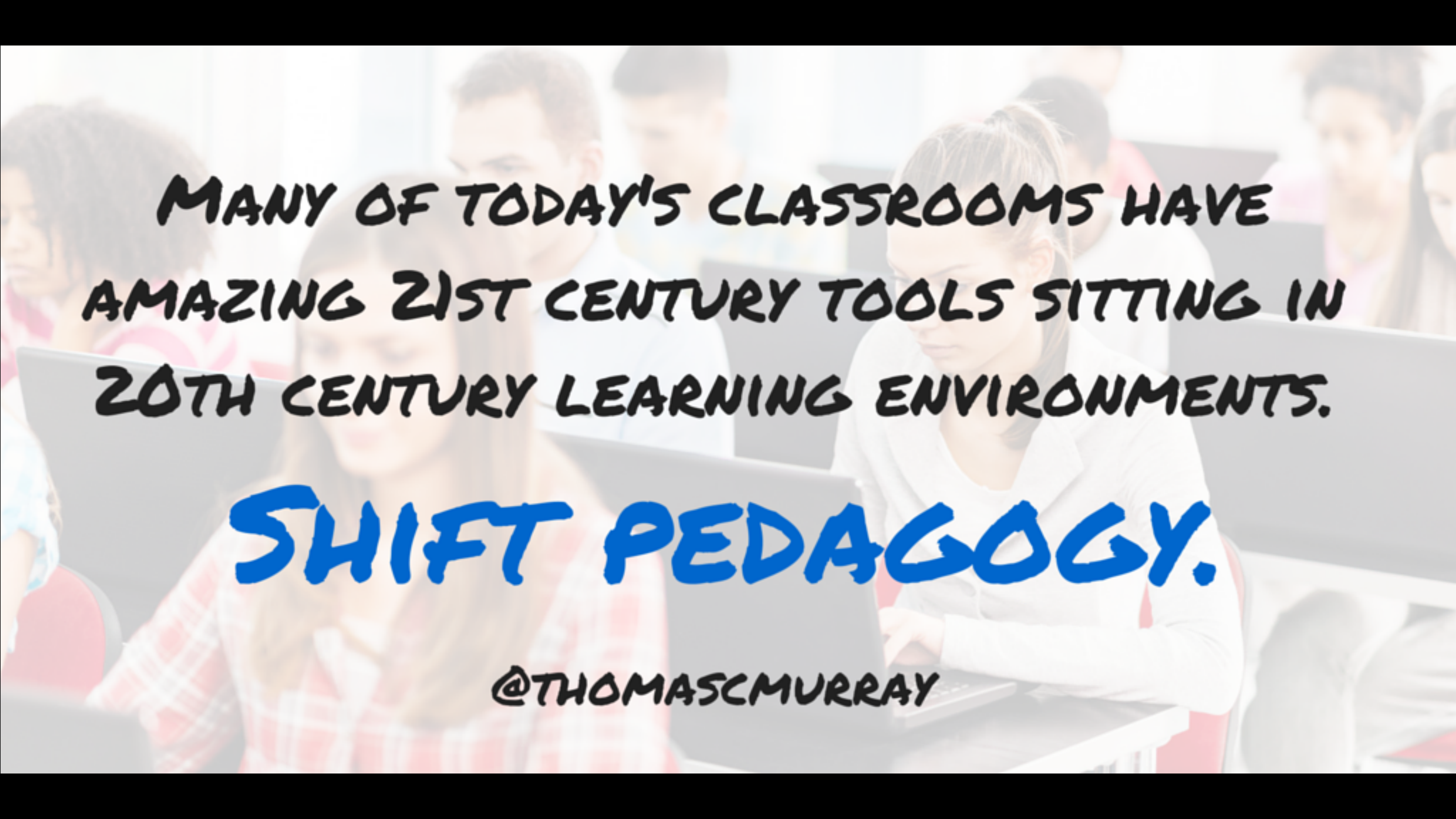


PASSIVE USE



ACTIVE USE

tech.ed.gov/netp

A blurred background image of a classroom where several students are seated at desks, each working on a laptop. The students are diverse in age and ethnicity. The text is overlaid on this background.

**MANY OF TODAY'S CLASSROOMS HAVE
AMAZING 21ST CENTURY TOOLS SITTING IN
20TH CENTURY LEARNING ENVIRONMENTS.**

SHIFT PEDAGOGY.

@THOMASCMURRAY

www.futureready.org

dashboard.futurereadyschools.org

School Innovators **build relationships.**





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@thomascmurray thomascmurray.com

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