

Learning, teaching and  
leading  
for the innovation age

Professor  
John Fischetti



A Different Kind of Teacher  
for a Different Kind of School

Professor  
John Fischetti



Install only. Offer ends 04.09.19. Netflix offer based on Standard (25) plan and must be redeemed on IQ4 by 31/12/19. Ongoing Netflix subscription fee applies.

foxtel

# 7,688,464,285

**\$58\*** Sport  
Drama  
Entertainment

per month on a 12 month plan  
\*Foxtel min cost \$696 on direct debit

6 mths of Netflix on us

Get it now

\*New residential customers and standard install only. Offer ends 04.09.19. Netflix offer based on Standard (25) plan and must be redeemed on IQ4 by 31/12/19. Ongoing Netflix subscription fee applies.

foxtel

London

World Clock

Yr Mth Wk Day Now

Population Clock

4:45

Moscow

6:45

New York

11:45 Sun PM

LA

8:45 Sun PM

Tokyo

12:45 PM

Sydney

1:45 PM

Pop Clock

Pop by Demographics

Africa

Americas

Asia

Europe

Oceania

Future

Past

Births

Health Clock

Earth Clock

Civ Clock

Regional Clocks

Special offer

**\$58\*** Sport  
Drama  
Entertainment

per month on a 12 month plan  
\*Foxtel min cost \$696 on direct debit

No IQ4 set-up costs

Get it now

\*New residential customers and standard install only. Offer ends 04.09.19. Netflix offer based on Standard (25) plan and must be redeemed on IQ4 by 31/12/19. Ongoing Netflix subscription fee applies.

foxtel

6 months of Netflix on us\*



Canada  
37,351,661

US  
331,329,807

Mexico  
133,597,222

Brazil  
214,857,880

Argentina  
45,171,070

Africa  
1,308,226,509

Europe  
740,100,259

North America  
368,804,651



United Kingdom  
66,326,630

Germany  
80,663,305

Morocco  
36,168,630

Nigeria  
201,702,603

South America  
56,410,000

Asia  
4,568,223,362

Latin America  
661,454,777

Oceania  
41,654,715

Check regional population pages for more detail



This workshop will explore these issues and  
help each leader form a  
roadmap  
for his/her school toward where we are heading.

What is one innovation  
that is  
on track  
in your school?

What is one innovation  
that is **NOT** on track  
in your school?

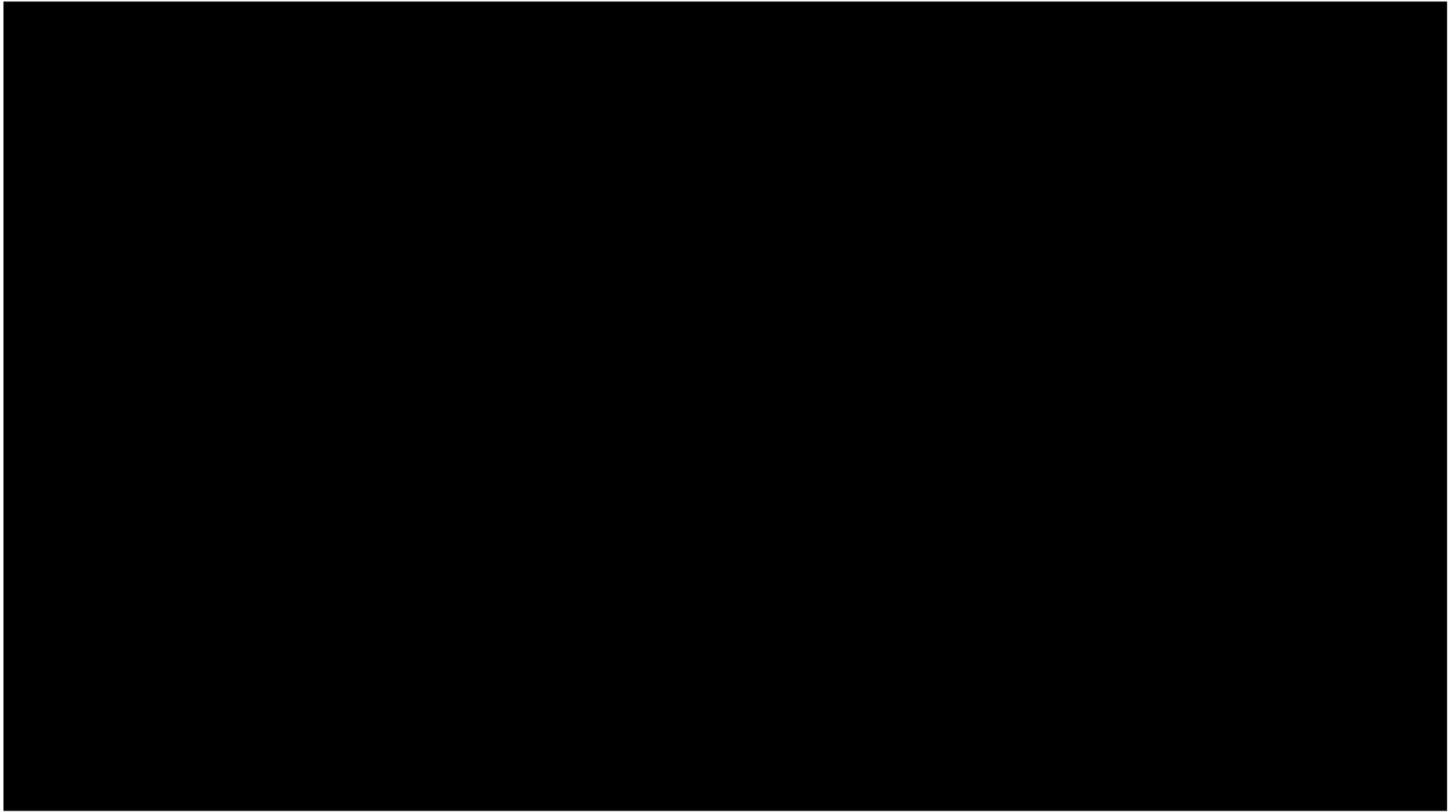
for too long  
schools have been places  
young people go

to watch their teachers work

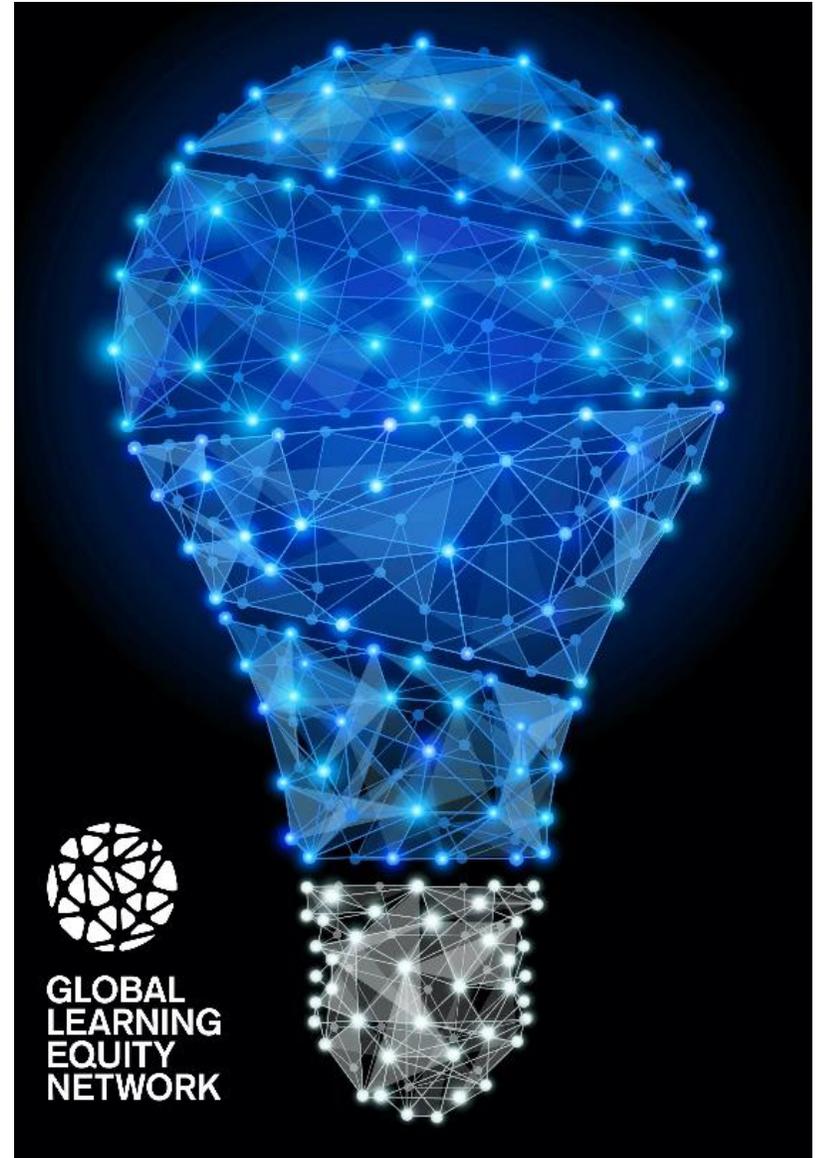
we're holding on to

the schools that we know  
rather than evolving the schools  
that we need

and assessment  
is holding us  
back

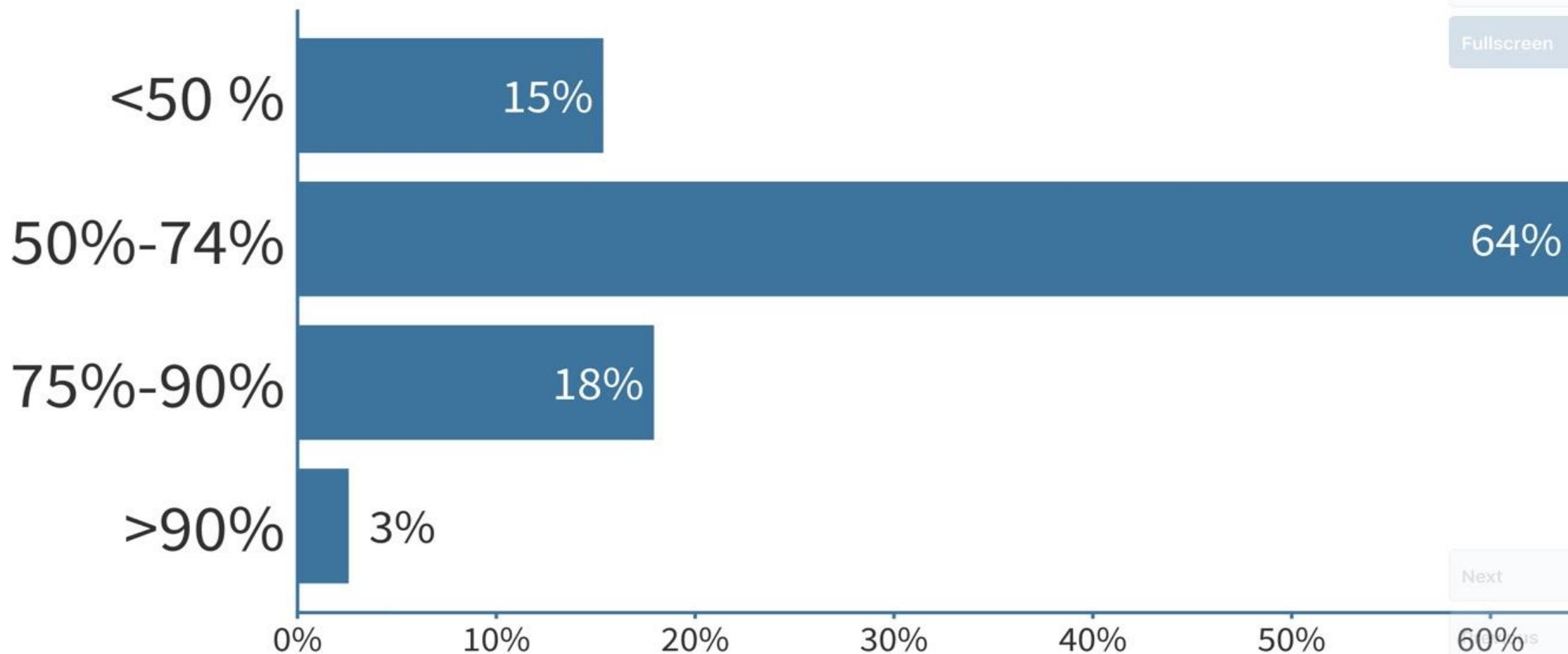


How many of  
your current students  
are fully switched on  
to their schooling?



# We have this many of our staff switched on to switching on kids?

 **Poll locked.** Responses not accepted.



Next 

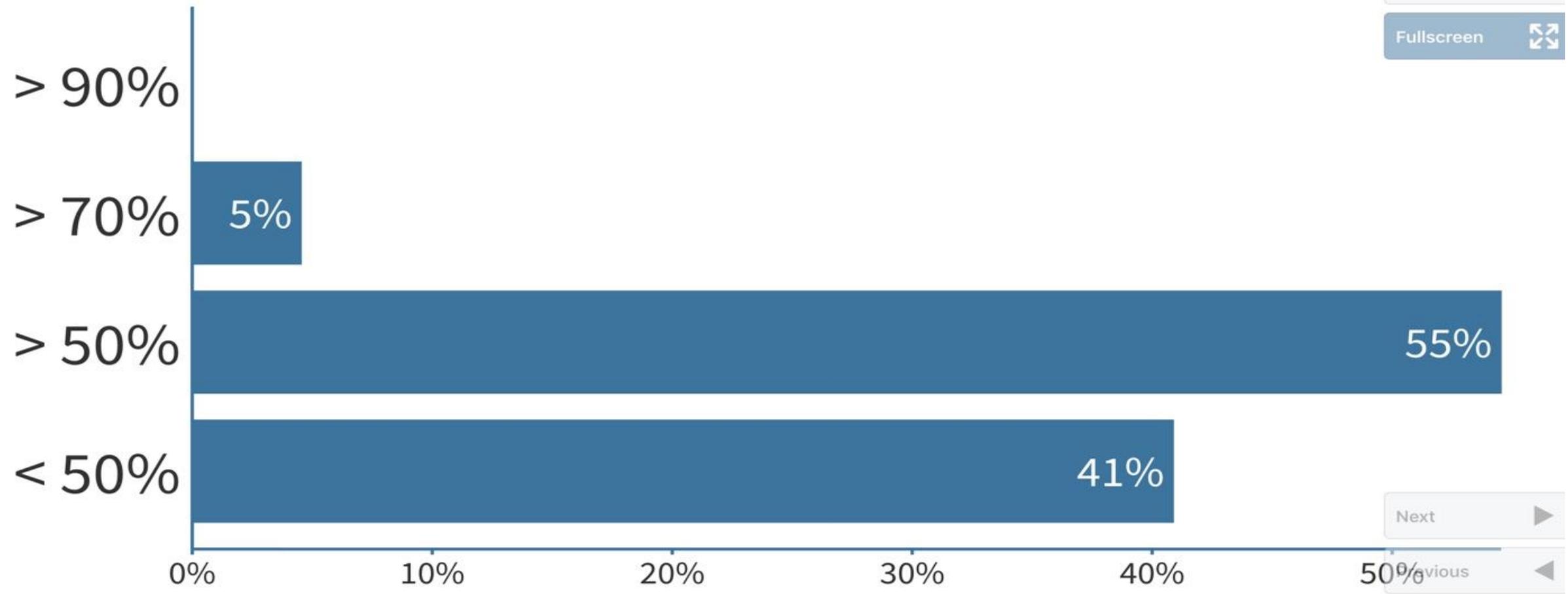
60% 

- Activate 
- Show results 
- Lock 
- Clear results 
- Fullscreen 

# How many of your current students are fully 'switched on' to their schooling?

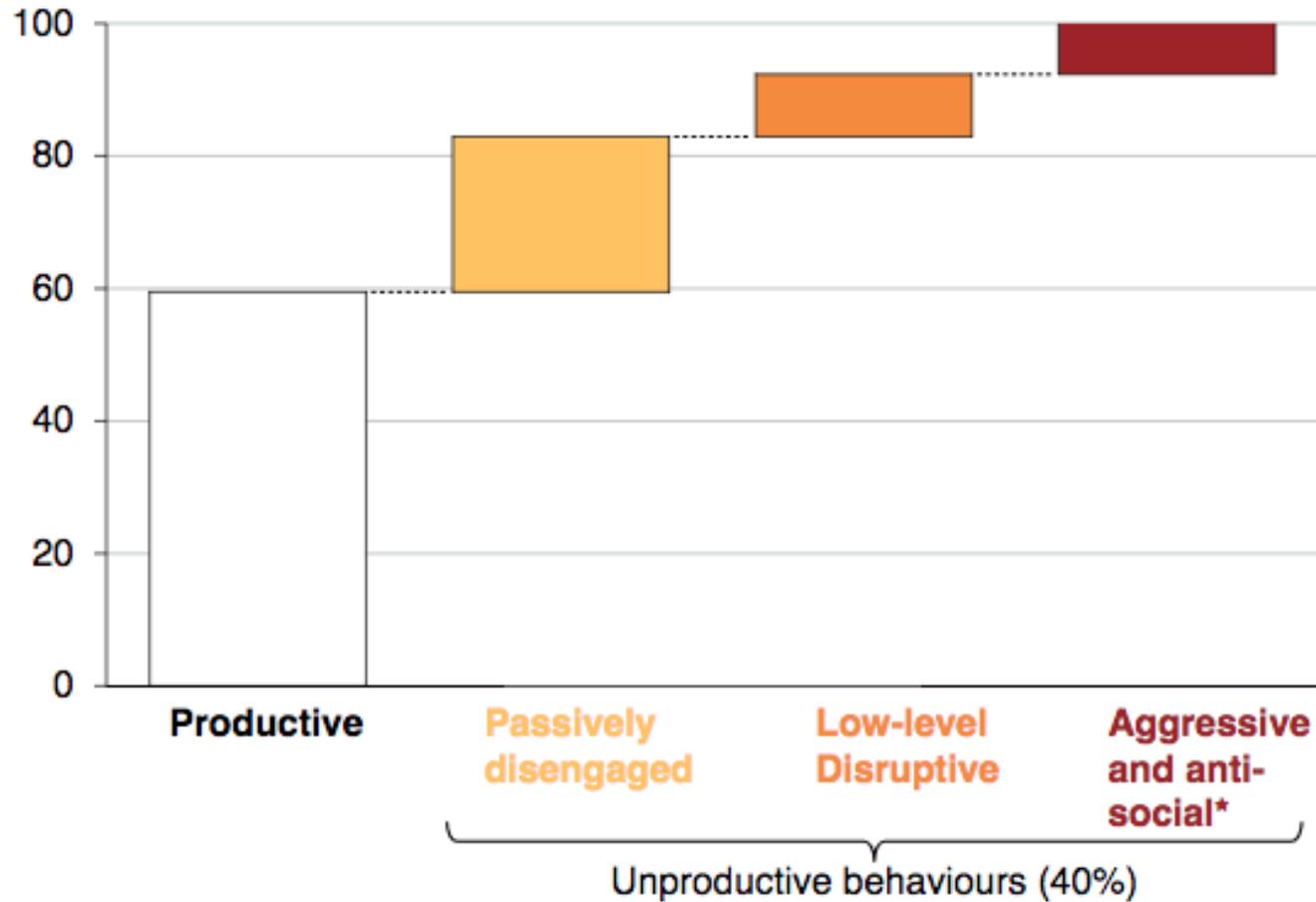
- Visual settings
- Activate
- Show results
- Lock
- Clear results
- Fullscreen

**🔒 Poll locked.** Responses not accepted.



**Figure 2.1: About 40 per cent of all students are regularly unproductive in a given year**

Percentage of students

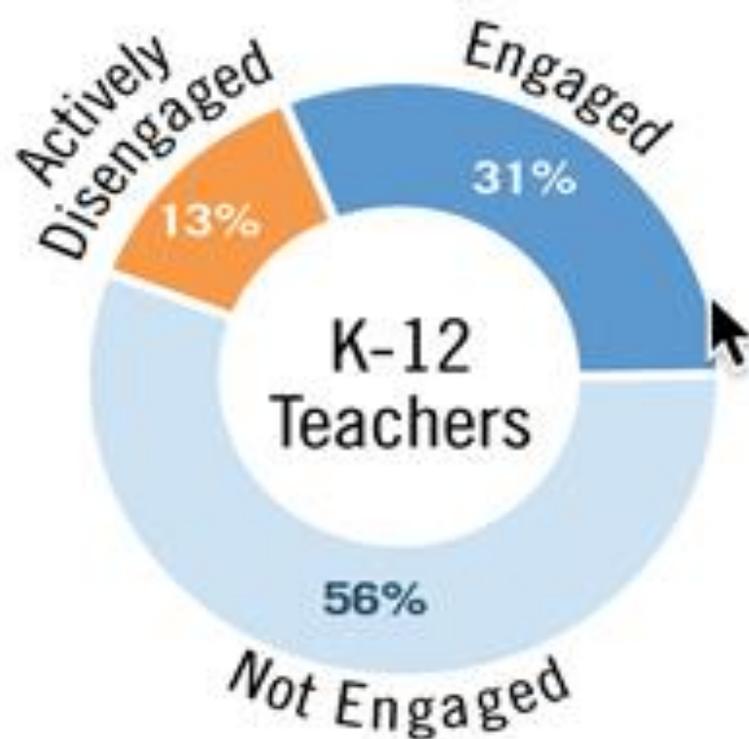


Notes: \* Called uncooperative students in Angus et al. (2009). Percentage of students productive vs. unproductive is averaged across 4 years (2005-2008).

Source: Angus et al. (Ibid.).

# Teacher Engagement

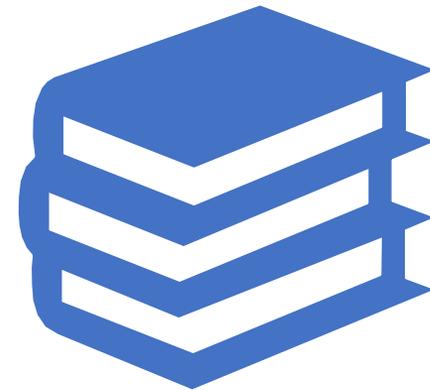
Teachers' engagement levels at work are similar to those of the general workforce, according to a 2012 Gallup poll of 70,000 U.S. employees. Gallup measures employee engagement through an index that incorporates responses to 12 questions related to the workplace. The questions dealt with clear expectations from supervisors, access to necessary resources, employer feedback and praise, having "a best friend at work," and a sense that a worker's "opinion seems to count."



70,000 U.S. employees were surveyed, including 7,200 teachers from K-12 schools.

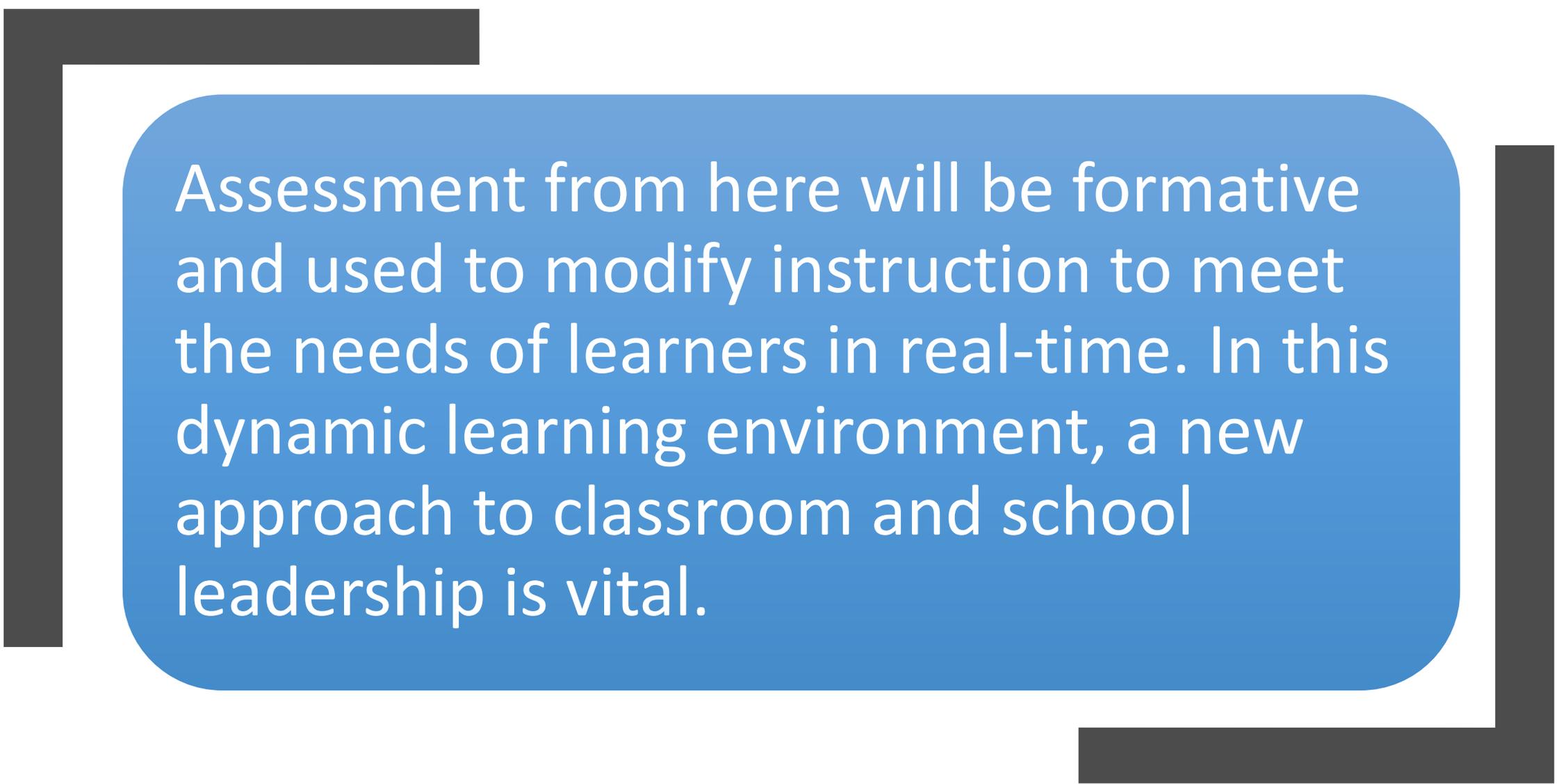
This disengagement is a failure for the individuals and a tragic loss of human capacity for young people to be relevant in the innovation age where critical thinking, problem solving, adaptive reasoning and collaboration are core skills.

In the 'new school' era we are heading toward, schools will no longer be places young people go to watch their teachers work. They are learning centres, with student engagement at the forefront and personalized approaches focusing the instruction on the needs of the learner.



Emerging virtual reality and artificial intelligence systems (immersive technologies) will require the reinvention of content delivery and leapfrog pedagogies to new frontiers of exploring and mastering ideas and knowledge. Students in this new school approach are at the centre of the learning as they accomplish the syllabus in ways that work for each of them.





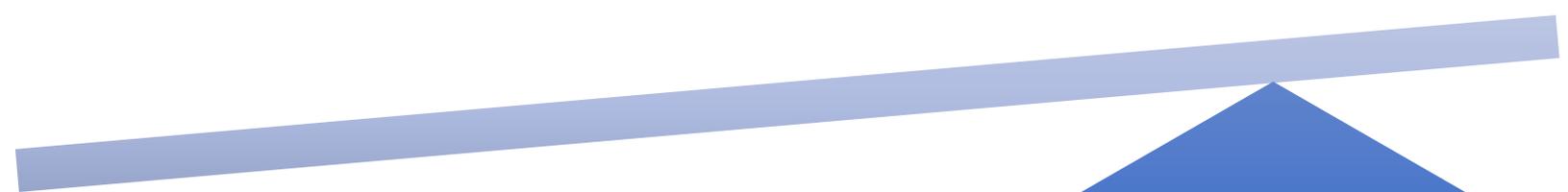
Assessment from here will be formative and used to modify instruction to meet the needs of learners in real-time. In this dynamic learning environment, a new approach to classroom and school leadership is vital.

We are on the precipice of a massive transformation of schooling and the assumptions around the education of children around the world. The current “old school” paradigm of teaching and learning is based on students sitting passively in rows, completing a required syllabus in the order they are told to do so, and with very little choice.

School leaders will need a new set of skills to help them create the learning environments that empower every child for success and embrace the culture and expectations of the community as vital partners in the process.



Adaptive reasoning, Critical thinking,  
Creativity, Problem solving,  
Collaboration, Open-Mindedness,  
Well-being, Indigenous perspectives,  
Cultural competence, Global  
awareness, Ethics, Digital literacy, ...

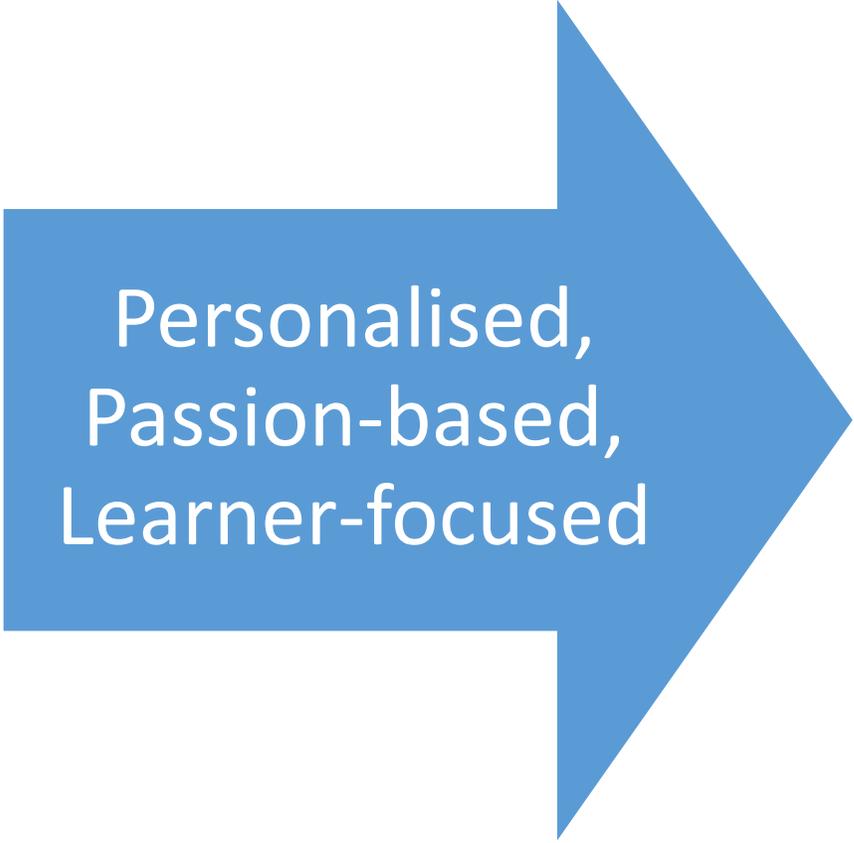


Literacy  
Numeracy





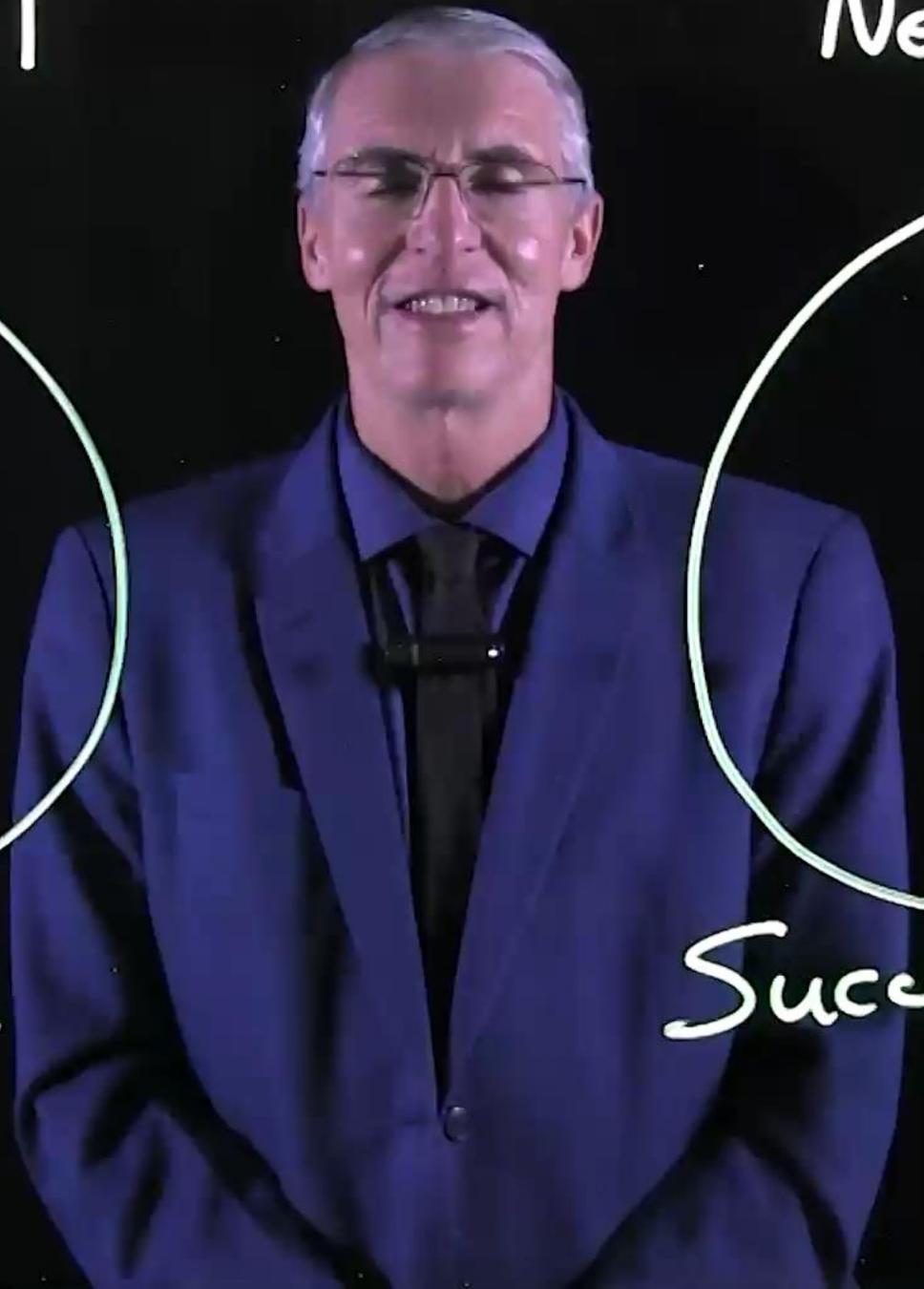
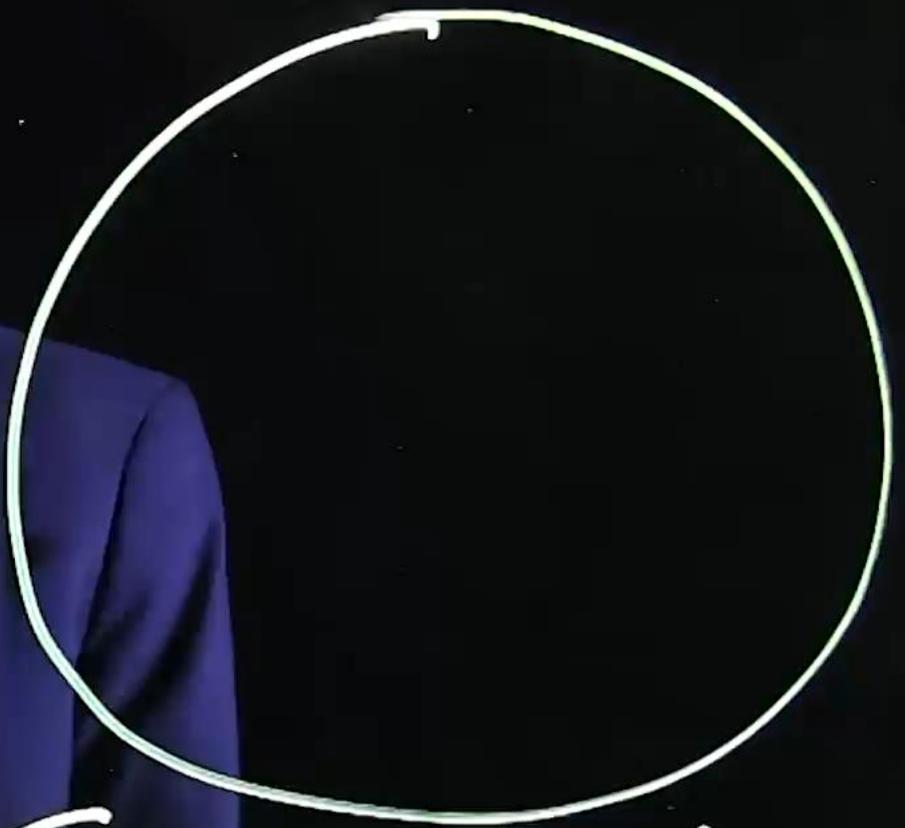
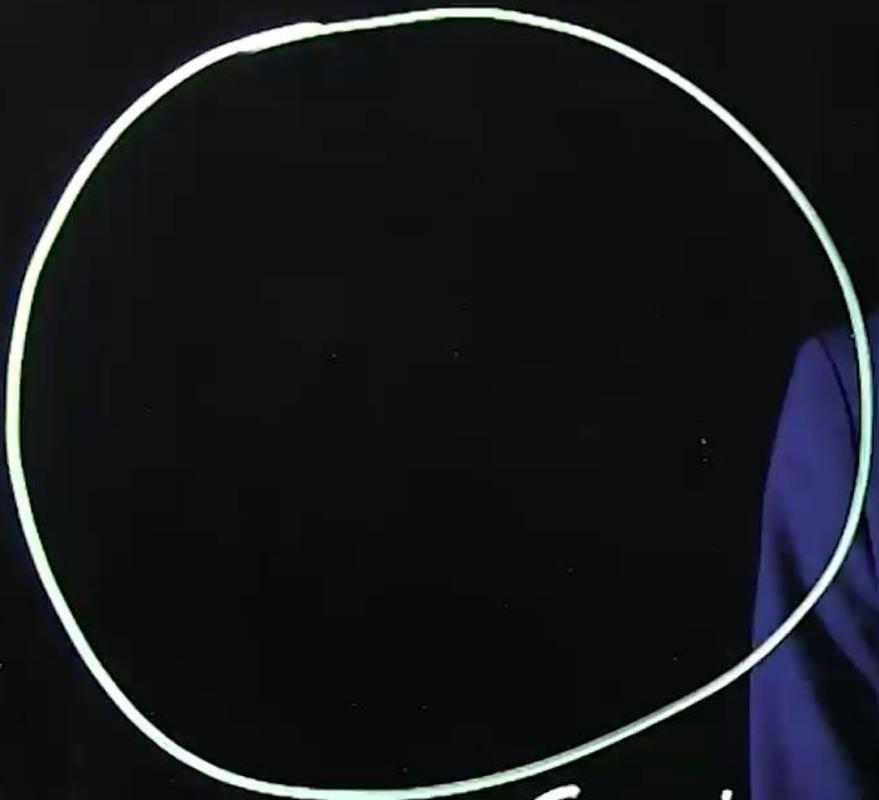
Compliance,  
Passivity, Rules,  
Teacher-focused



Personalised,  
Passion-based,  
Learner-focused

Old School

New School



Success for:

Success for:

# Old School

# New School

teacher-centered  
Passive  
compliance  
rules  
sameness-  
assessment equality  
for sorting

Success for  
some

learner-  
focused  
Passion  
Personalisation  
fairness → equity  
assessment  
for learning

Success for:  
all

# 'Sit and Git'



**Compliance**  
**Passivity**  
**Rules**



**HIKERS and BIKERS**  
Move to the side of  
the road when a  
vehicle approaches

# 'Sit and Git'



**'Sit and Git'**

**2D**

**Compliance**  
**Passivity**  
**Rules**



**HIKERS and BIKERS**  
Move to the side of  
the road when a  
vehicle approaches





## Olympic Gold Medalist Debuts 3-D Printed Shoes at London Marathon

Kenyan long-distance runner Eliud Kipchoge won the London Marathon with Nike's Flyprint brand shoe, which is believed to be the first-ever 3-D printed performance footwear.







The goal of learning for all is to design schools based upon and built around the needs of learners rather than the syllabus or the needs of adults.

This is the direction we are heading led by great educators in around the world who have adopted promising school designs.



every child  
deserves the education  
that is right for them

philosophy

**An educated citizenry is  
a vital requisite for our  
survival as a free people.**

Thomas Jefferson, 1816

flipping  
the  
school

100475  
flipping  
the  
school



Instead of students revolving around the teacher/school, the school revolves around the learner.



learning =  
knowing +  
doing +  
using when it matters

7-21 times practice  
to learn to  
use when it matters

interconnected  
world

**To summarize the numbers (which sometimes get cited differently) learners retain approximately:**

90% of what they learn when they teach someone else/use immediately.

75% of what they learn when they practice what they learned.

50% of what they learn when engaged in a group discussion.

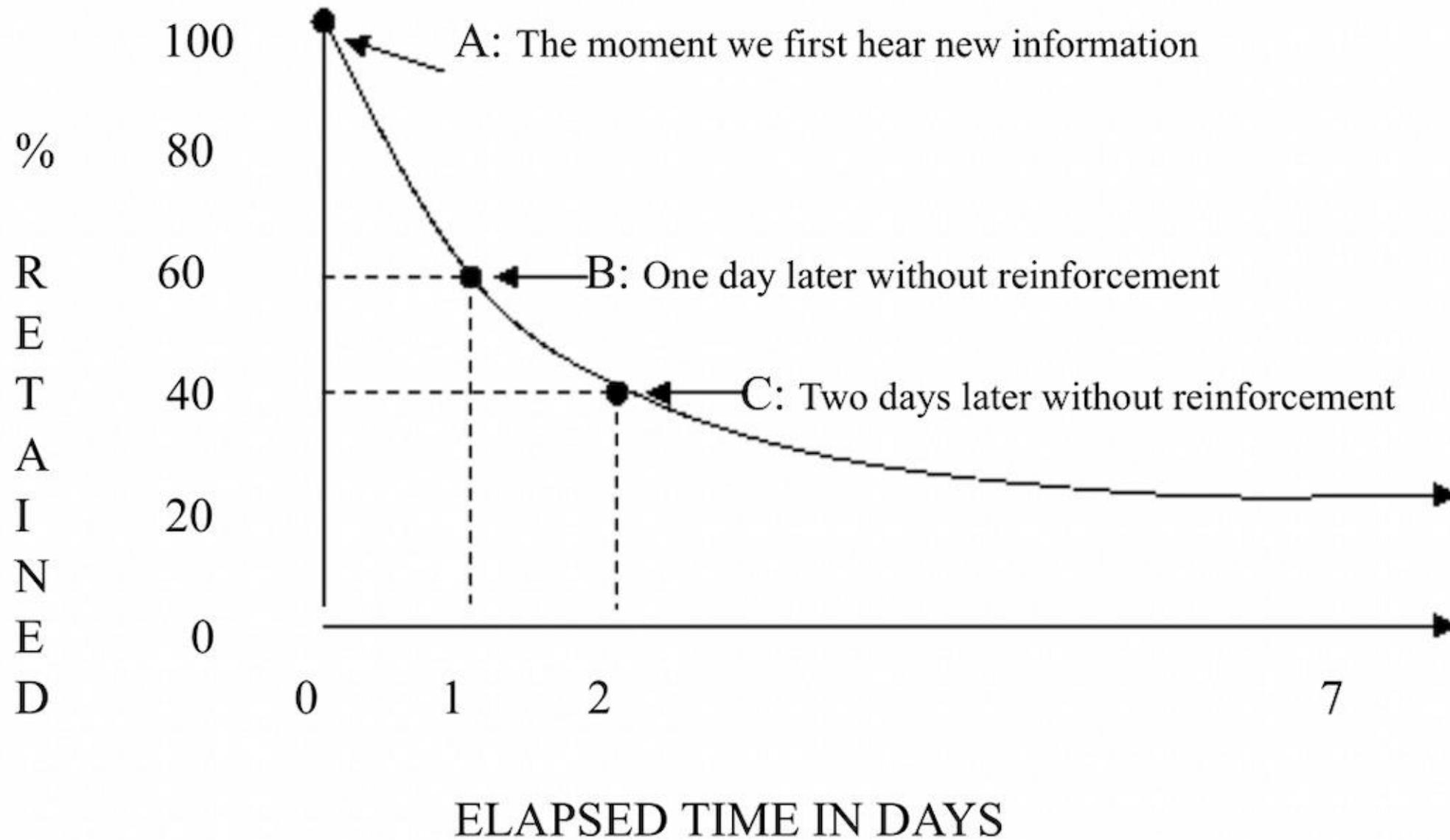
30% of what they learn when they see a demonstration.

20% of what they learn from audio-visual.

10% of what they learn when they've learned from reading.

5% of what they learn when they've learned from lecture.

# THE CURVE OF FORGETTING



9  
Hours  
day<sup>a</sup>  
online

3  
Hours<sub>a</sub> day  
social media

JAN  
2019

## TIME SPENT WITH MEDIA

AVERAGE DAILY TIME SPENT CONSUMING AND INTERACTING WITH MEDIA [SURVEY BASED]



AVERAGE DAILY TIME  
SPENT USING THE  
INTERNET VIA ANY DEVICE



**5H 04M**

we  
are  
social

AVERAGE DAILY TIME  
SPENT USING SOCIAL  
MEDIA VIA ANY DEVICE



**1H 31M**

we  
are  
social

AVERAGE DAILY TV VIEWING TIME  
(BROADCAST, STREAMING  
AND VIDEO ON DEMAND)



**3H 02M**

we  
are  
social

AVERAGE DAILY TIME  
SPENT LISTENING TO  
STREAMING MUSIC



**0H 47M**

Reading  
to Watch (sometimes)

Watching  
to read (sometimes)





### Connecting a Bluetooth® phone

There are two connecting methods available:

#### Automatic

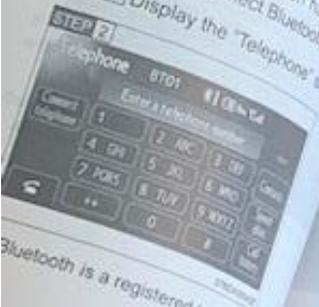
When you register your phone, auto-connect is set to ON. Always set it to this mode and leave the phone in the vehicle where connection can be established.

When the "POWER" switch is turned to the "ON" position, the system will search for a nearby Bluetooth® phone. Next, the system automatically connects to the phone of the phones connected to in the past is displayed.

#### Manual

When the auto connection has failed or is off, you must connect Bluetooth® manually.

**STEP 1** Display the "Telephone" screen.



Bluetooth is a registered trademark of



Touch the device to connect. A message is shown if connection has been successful. If connection fails, a message will be displayed and connection will be re-attempted.

#### Connecting to the Bluetooth® phone

The system cannot connect due to poor signal strength with the "POWER" switch in ACCESSORY or ON mode, the system will automatically attempt to reconnect.

If the phone is turned off, the system will not attempt to reconnect. In this case, connection must be made manually, or the phone must be re-selected.

When connecting the phone while Bluetooth® audio is playing, Bluetooth® audio will stop temporarily. It will take time to connect.



CLIMATE CONTROL:  
Manual Controls

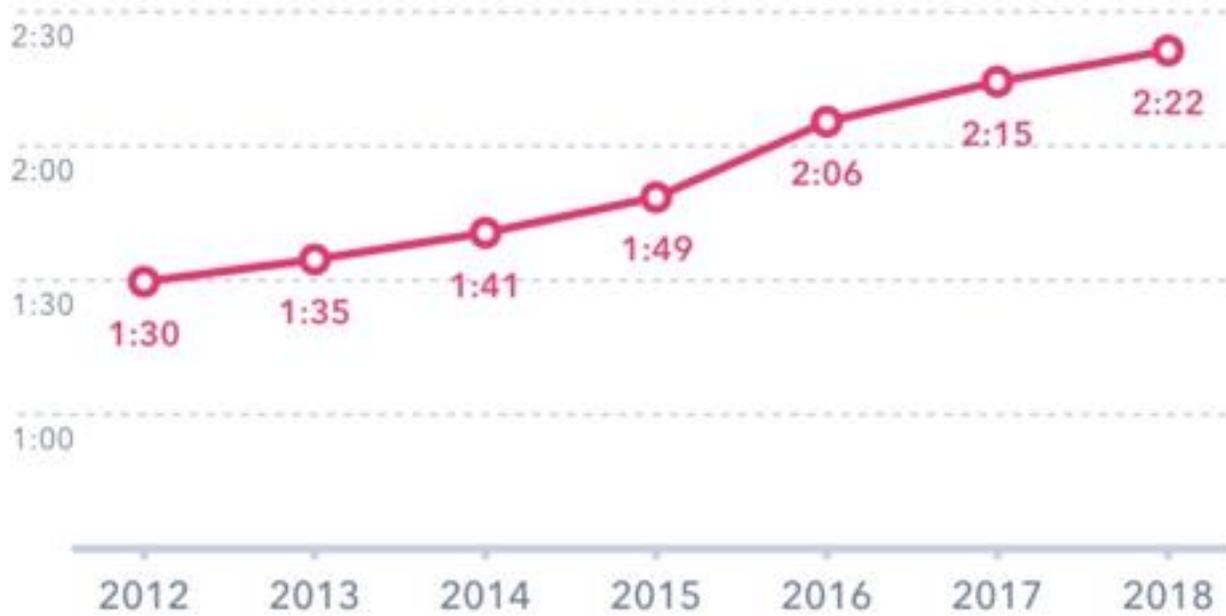
Watching  
to read (sometimes)

**Teens spend 1200hrs a year on social media**

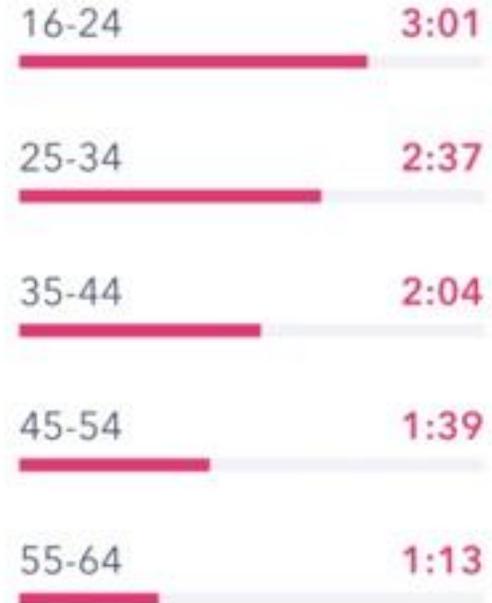
## DAILY TIME SPENT ON SOCIAL MEDIA

Average h:mm spent engaging with/connected to social networks/services during a typical day

### OVER TIME



### BY AGE



## Evaluation

Make and defend judgments based on internal evidence or external criteria.

appraise  
argue assess attach  
choose compare conclude  
contrast defend describe discriminate  
estimate evaluate explain judge justify interpret  
relate predict rate select summarize support value

## Synthesis

Compile component ideas into a new whole or propose alternative solutions.

arrange assemble categorize collect combine comply  
compose construct create design develop devise explain  
formulate generate plan prepare rearrange reconstruct relate  
reorganize revise rewrite set up summarize synthesize tell write

## Analysis

Break down objects or ideas into simpler parts and find evidence to support generalizations.

analyze appraise breakdown calculate categorize compare  
contrast criticize diagram differentiate discriminate distinguish  
examine experiment identify illustrate infer model outline  
point out question relate select separate subdivide test

## Application

Apply knowledge to actual situations.

apply change choose compute demonstrate discover  
dramatize employ illustrate interpret manipulate  
modify operate practice predict prepare produce  
relate schedule show sketch solve use write

## Comprehension

Demonstrate an understanding of the facts.

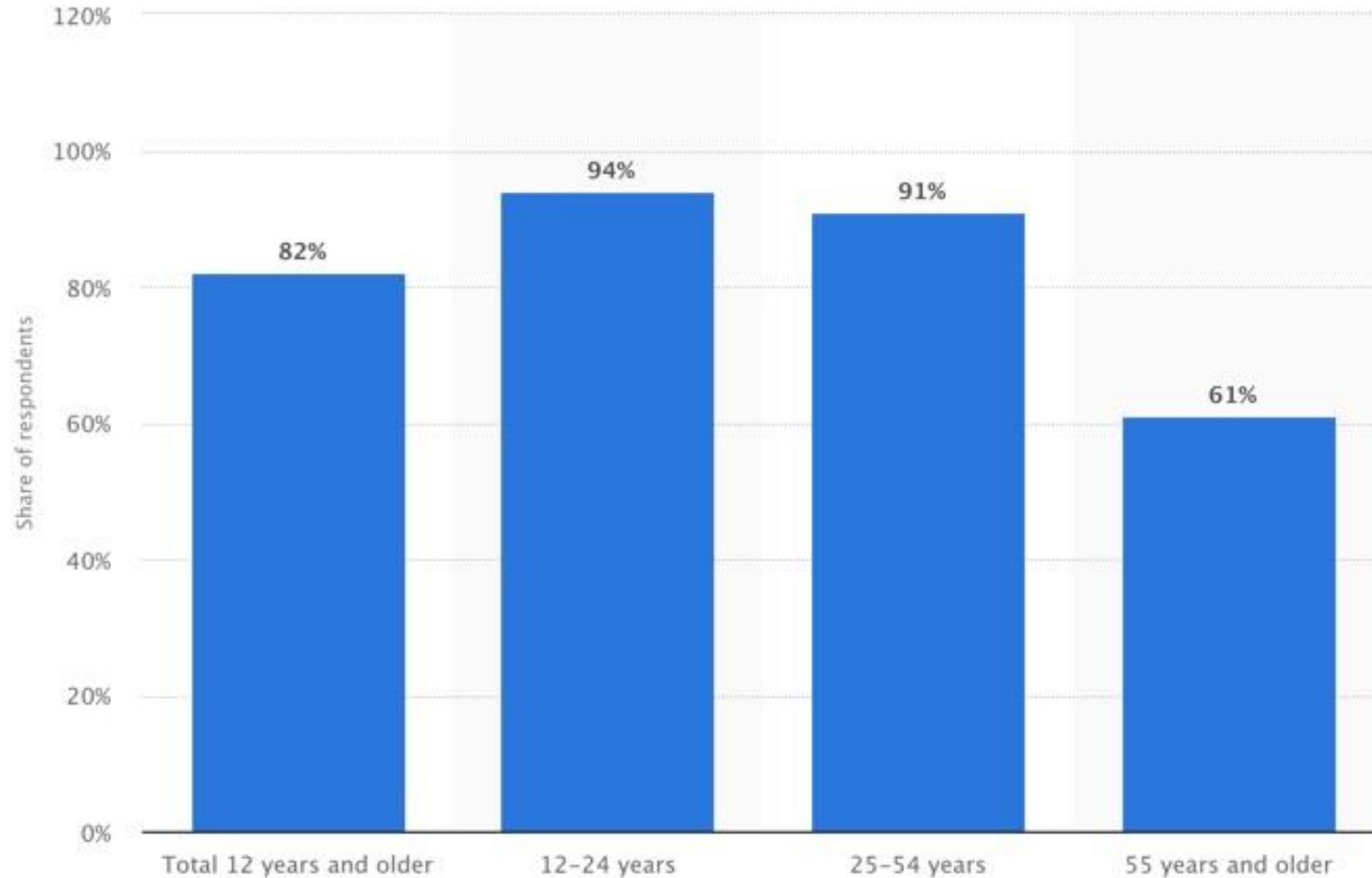
classify convert defend describe discuss  
distinguish estimate explain express  
extend generalized give example(s)  
identify indicate infer locate paraphrase  
predict recognize rewrite review select  
summarize translate

## Knowledge

Remember previously learned information.

arrange define describe duplicate  
identify label list match memorize  
name order outline recognize  
relate recall repeat reproduce  
select state

# Use of social networking sites in Australia as of March 2018



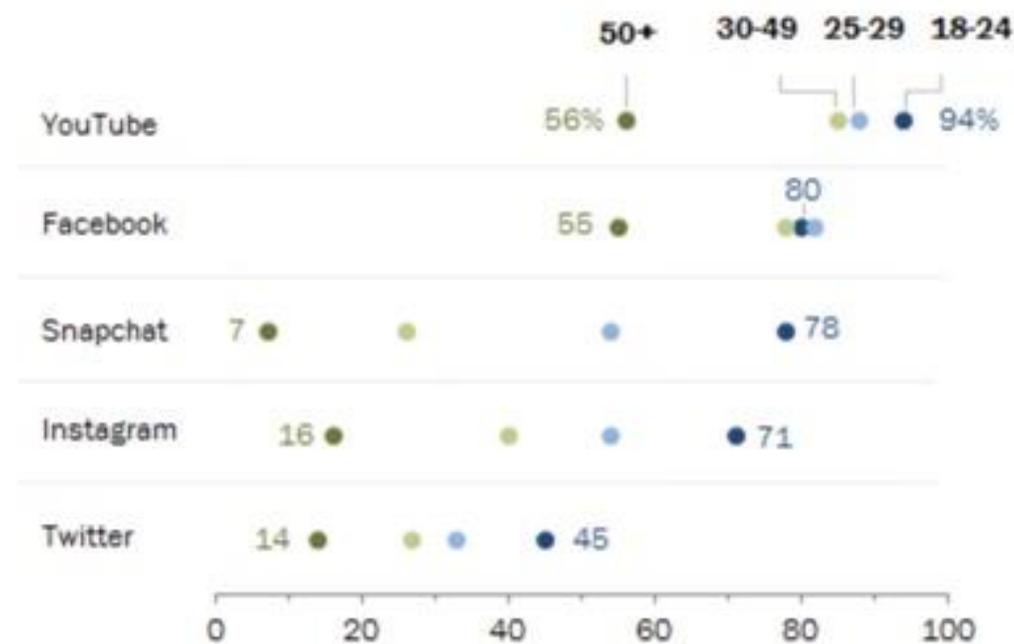
(41% of boys vs. 11% of girls). The top emotion teens associated with not having access to their phones was anxiety (42%), with girls once again reporting more anxiety from phone deprivation than boys (49% to 35%).

The study, which included 743 US teens and 1,058 US parents of teens, was conducted between March 7 and April 10, 2018. In keeping with other findings, girls were more likely than boys to say they spend too much time on social media (47% vs. 35%) while boys were four times as likely to report spending too much time on video games (41% of boys vs. 11% of girls). The top emotion teens associated with not having access to their phones was anxiety (42%), with girls once again reporting more anxiety from phone deprivation than boys (49% to 35%).

# Social platforms like Snapchat and Instagram are especially popular among those ages 18 to 24

## Social platforms like Snapchat and Instagram are especially popular among those ages 18 to 24

*% of U.S. adults in each age group who say they use ...*



Source: Survey conducted Jan. 3-10, 2018.  
"Social Media Use in 2018"

PEW RESEARCH CENTER

JAN  
2019

## USE OF INTERNET TECHNOLOGIES

PERCENTAGE OF INTERNET USERS THAT USE EACH TOOL OR SERVICE EACH MONTH



VOICE SEARCH OR  
VOICE COMMANDS



25%

we  
are  
social

RIDE-HAILING  
SERVICES



20%

we  
are  
social

AD-BLOCKING  
TOOLS



36%

we  
are  
social

VIRTUAL PRIVATE  
NETWORK (VPN)



17%

Among teenagers, 29 per cent had been bullied on social media within the past year, while 35 per cent said they had posted content on social media they later regretted.

## Evaluation

Make and defend judgments based on internal evidence or external criteria.

appraise  
argue assess attach  
choose compare conclude  
contrast defend describe discriminate  
estimate evaluate explain judge justify interpret  
relate predict rate select summarize support value

## Synthesis

Compile component ideas into a new whole or propose alternative solutions.

arrange assemble categorize collect combine comply  
compose construct create design develop devise explain  
formulate generate plan prepare rearrange reconstruct relate  
reorganize revise rewrite set up summarize synthesize tell write

## Analysis

Break down objects or ideas into simpler parts and find evidence to support generalizations.

analyze appraise breakdown calculate categorize compare  
contrast criticize diagram differentiate discriminate distinguish  
examine experiment identify illustrate infer model outline  
point out question relate select separate subdivide test

## Application

Apply knowledge to actual situations.

apply change choose compute demonstrate discover  
dramatize employ illustrate interpret manipulate  
modify operate practice predict prepare produce  
relate schedule show sketch solve use write

## Comprehension

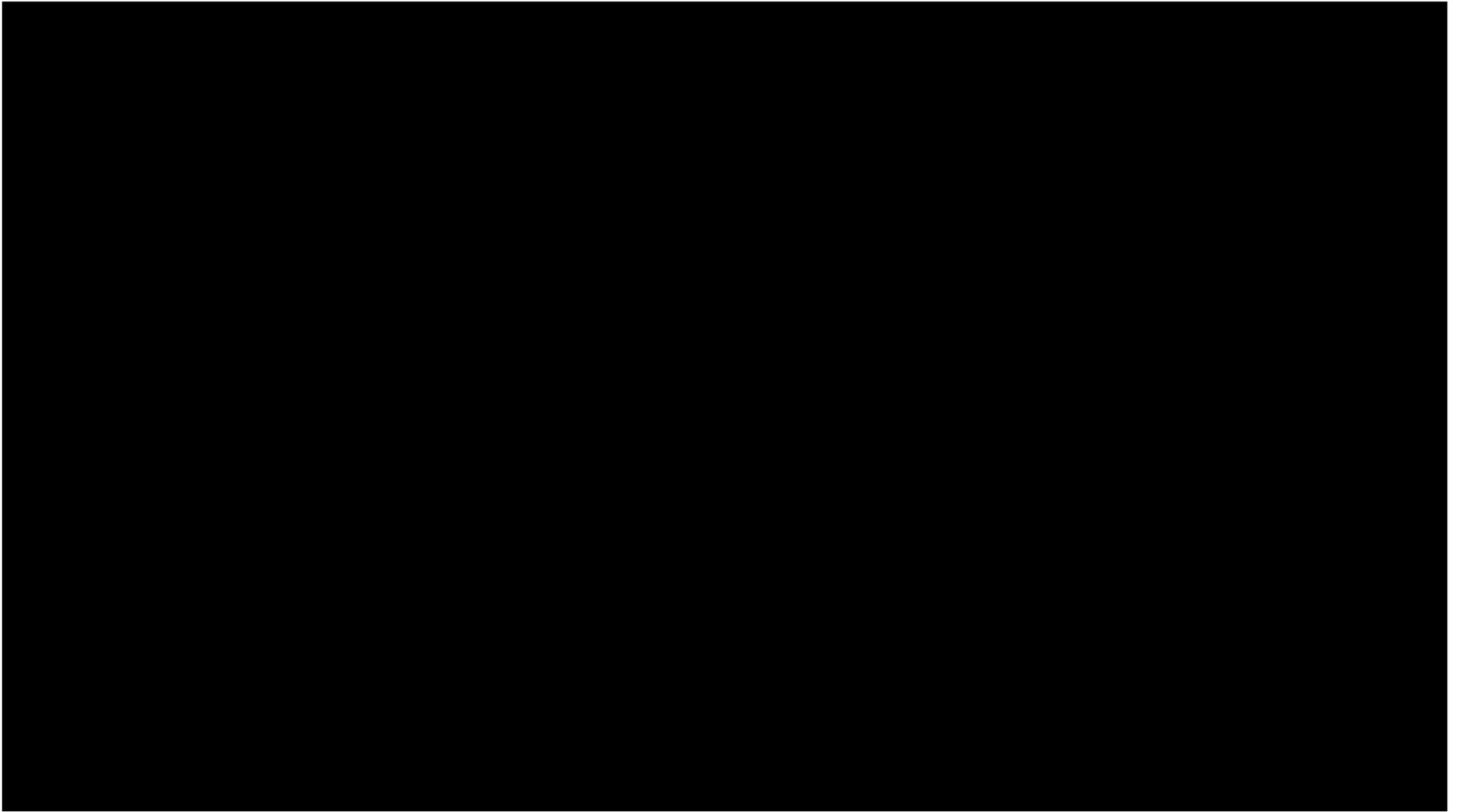
Demonstrate an understanding of the facts.

classify convert defend describe discuss  
distinguish estimate explain express  
extend generalized give example(s)  
identify indicate infer locate paraphrase  
predict recognize rewrite review select  
summarize translate

## Knowledge

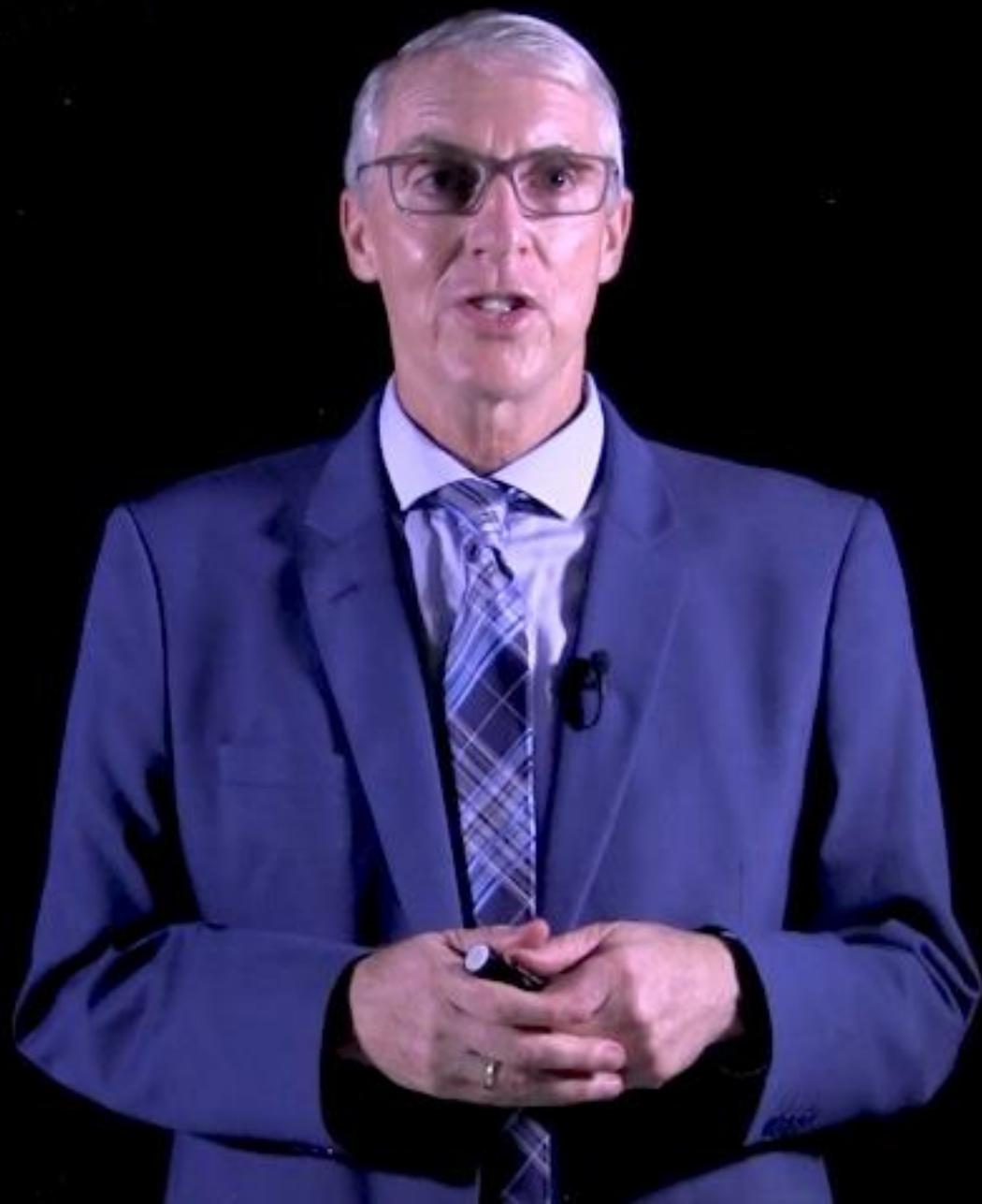
Remember previously learned information.

arrange define describe duplicate  
identify label list match memorize  
name order outline recognize  
relate recall repeat reproduce  
select state



Vision:  
Learning  
Equity

School  
designs  
to enable  
Success



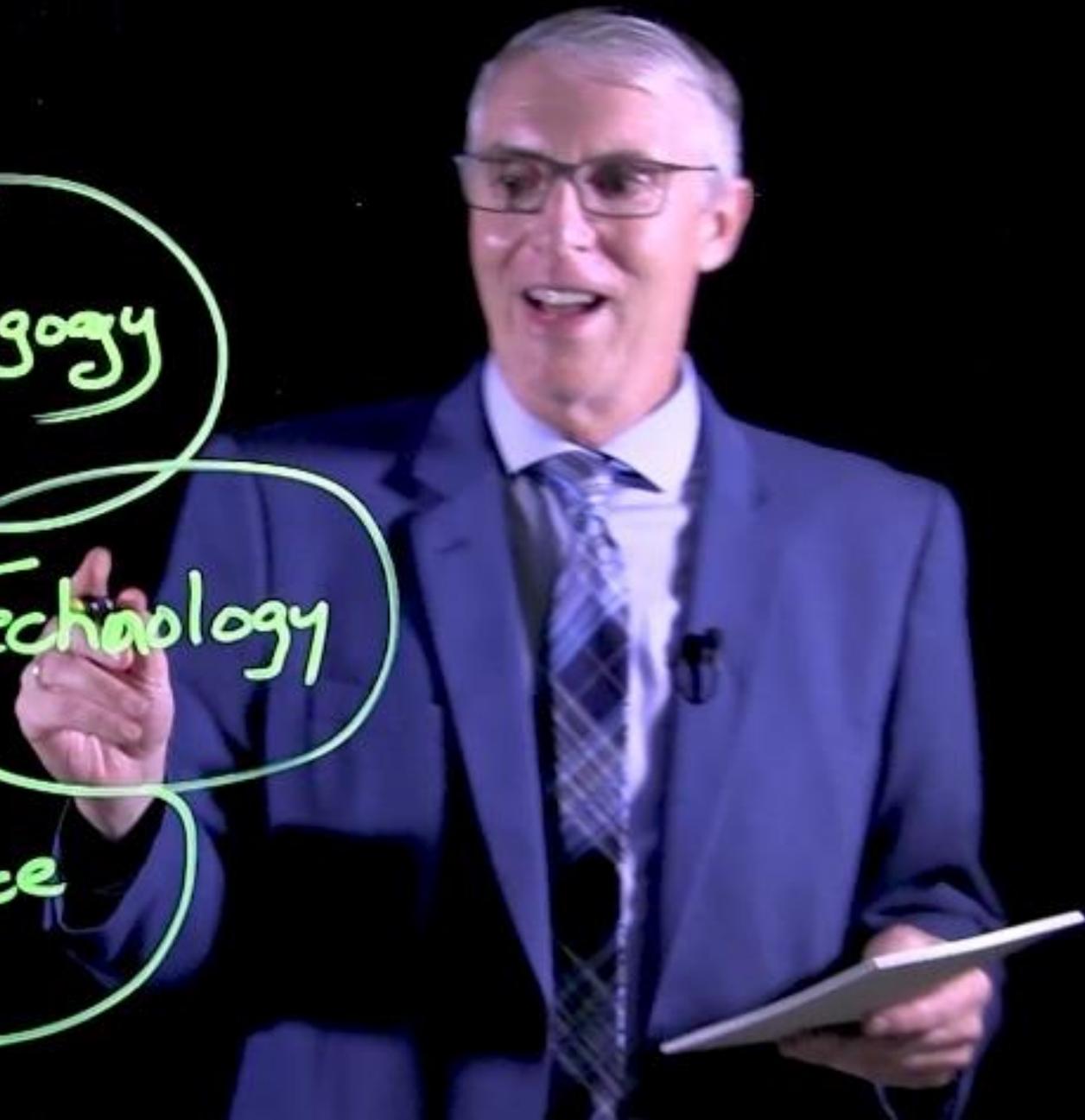
Vision:  
Learning  
Equity

School  
designs  
to enable  
Success

Pedagogy

Technology

Space



Vision:  
Learning  
Equity

School  
designs  
to enable  
Success

Pedagogy

Support

Professional  
Learning

Technology

Engagement

Space

Staffing  
new  
leadership



What is one innovation  
that is  
on track  
in your school?

REVISED

What is one innovation  
that is **NOT** on track  
in your school?

REVISED

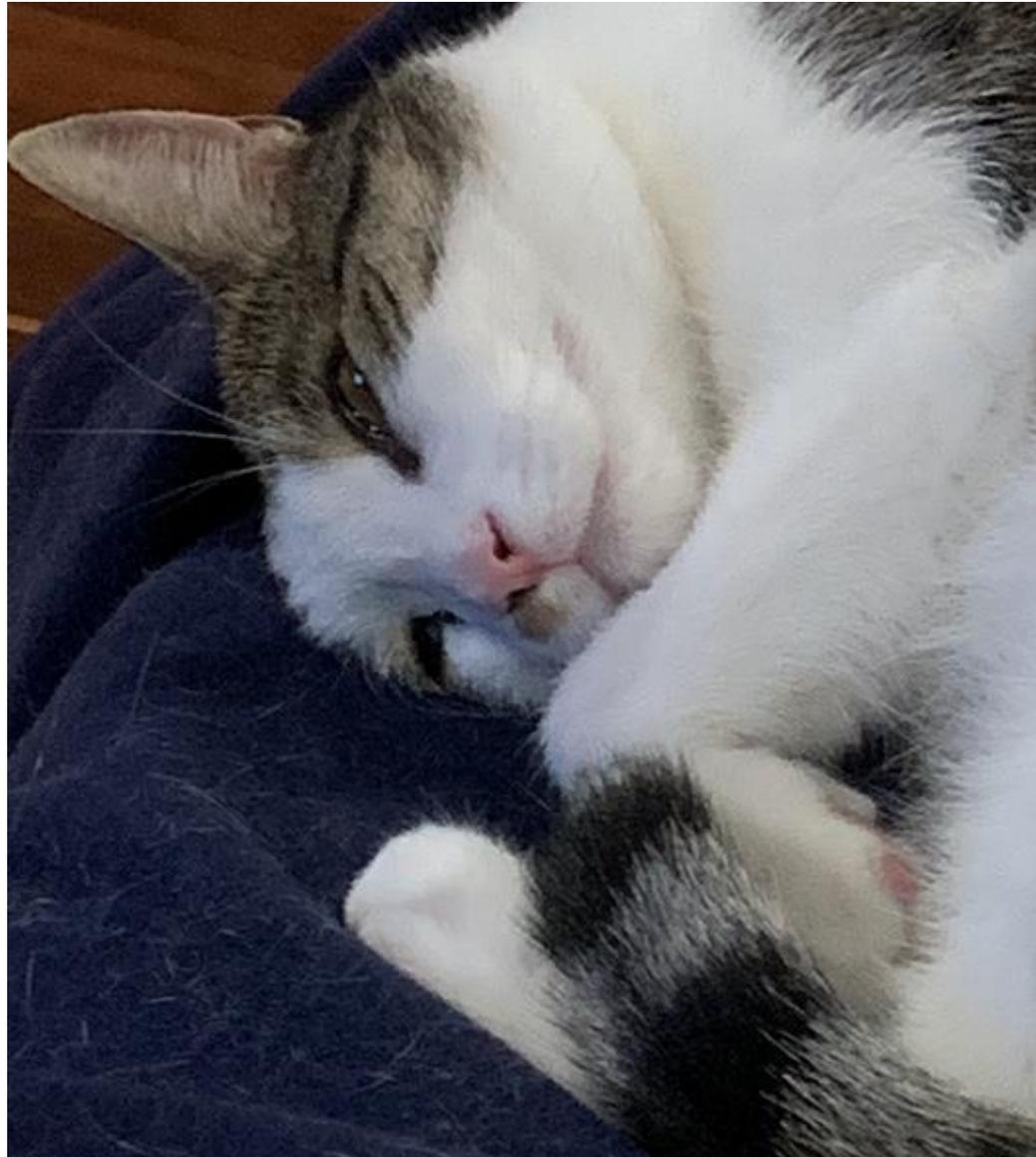
What is one next step you  
can take to move  
transformation forward?



When Copernicus posited, and Galileo confirmed the Sun as the centre of the solar system and that the Earth revolved around it, many learned people of the time considered this heresy. The notion that the syllabus can be accomplished by adjusting it to the passions and needs of the learners is possibly considered heresy today.



To some, the idea that passion and student wellbeing help drive intellectual curiosity and lead to building cognitive capacity seems impossible at worst or unrealistic at best.



Tue, 26 Mar, 1:01 pm

REMINDER: You are almost out of Breeders Choice Litter 30 Litres. Stock up. Shop now <http://m.gxlpet.co/NOTEQNUU>. Optout Stop to [0416906814](tel:0416906814)

Alexa





**Future**

NEXT EXIT ↗

A Different Kind of Teacher  
for a Different Kind of School

Professor  
John Fischetti

