

The Future of (No) Work: Artificial Intelligence and UC's Response

A Forum for UC Faculty

Hosted by UC Forward
with support from CET&L,
Taft Research Center, the Niehoff Urban Studio,
and the Otto M. Budig Family Foundation





Today's Emcee:

**David Adams,
UC's Chief Innovation Officer
and CEO of the UC Research
Institute**

Forum Goals:

- Reflect on the **dramatic impacts** of Artificial Intelligence and related technologies on our society and our economy, and especially on the future of work
- Gain an understanding of the **challenges** Artificial Intelligence poses to the mission and relevance of higher education, including to UC
- Begin a conversation among faculty members on how we **confront these challenges** in our curricula, pedagogy, and research



Premises:

- The trajectory of A.I.'s development isn't certain, but it's developing rapidly, converging with other technologies, and already is having an impact on many business sectors and types of work.
- Our students face a dramatically different world of work – one that demands different preparation than higher education, in general, currently provides.
- If UC and other institutions of higher education are to remain relevant, we must develop new educational strategies and content.
- Our research programs in nearly every field will need to change to reflect the opportunities and threats of A.I.



Schedule

2:15: Keynote presentation by Lee Rainie

3:05: UC faculty responders

3:40: *UC Talks* competition

4:40: Secret ballot voting on *UC Talks* presentations & invitation to CETL reading groups

5:00: Announcement of *UC Talks* winners

5:05: Provost Kristi Nelson – “Rising to the Challenge”

5:15: Adjourn to Happy Hour at Taste of Belgium

*Program is continuous. Coffee & tea available throughout program.
Restrooms in hall and on lower level.*



Our Keynote Speaker: Lee Rainie



Director of Internet & Technology Research at Pew Research Center, author of *Artificial Intelligence and the Future of Humans*, former managing editor at *US News & World Report*



University of
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The future of higher education

Lee Rainie

Director, Internet and technology research

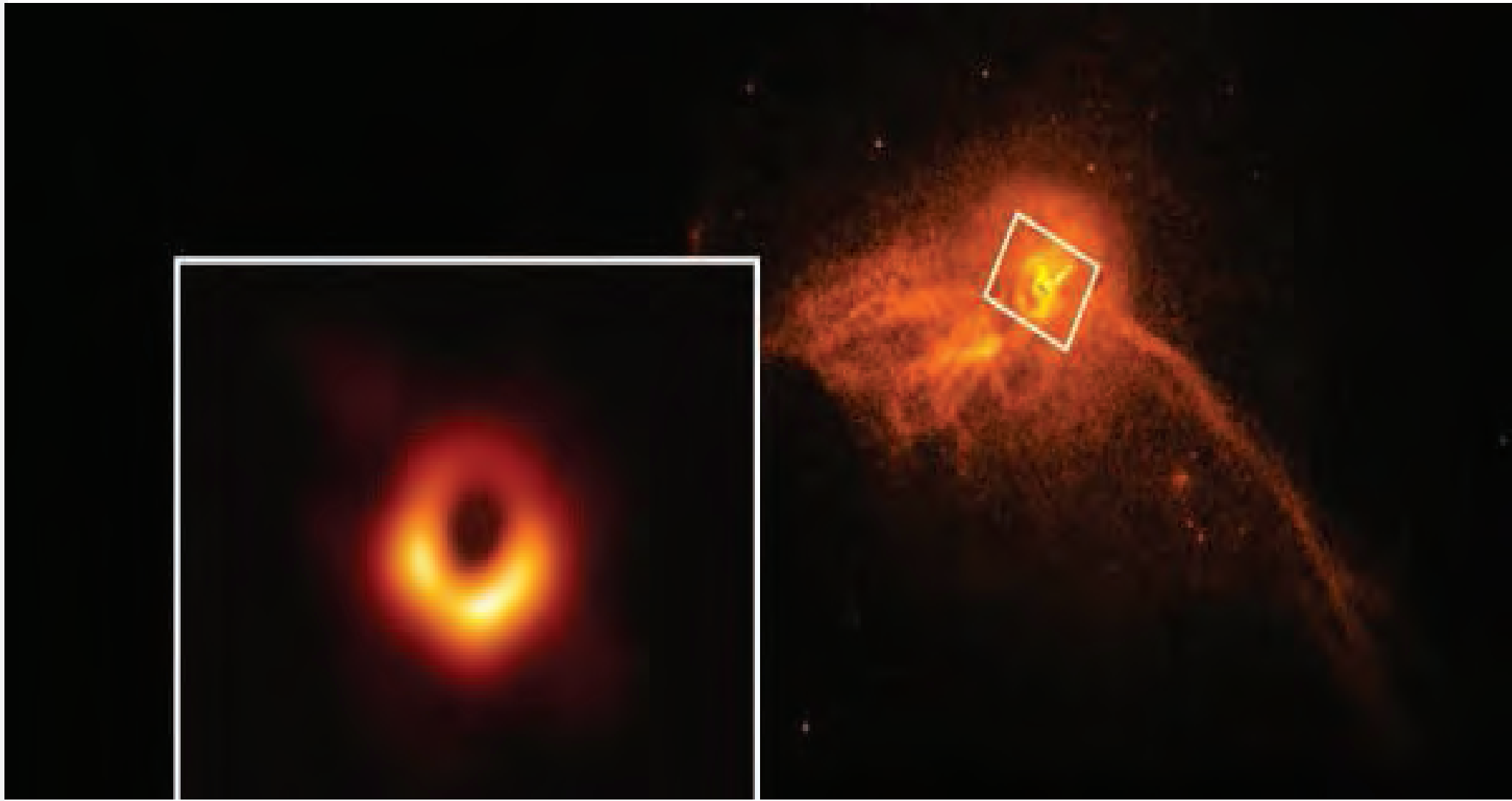
Email: Lrainie@pewresearch.org

Twitter: [@Lrainie](https://twitter.com/Lrainie)

FACTTANK 

NEWS IN THE NUMBERS

“Regularizers” and “priors” that analyzed Messier 87



One Month, 500,000 Face Scans: How China Is Using A.I. to Profile a Minority

In a major ethical leap for the tech world, Chinese start-ups have built algorithms that the government uses to track members of a largely Muslim minority group.

7. 小区敏感人员防控

- 1、在小区门口部署摄像头，当识别为维族、藏族等敏感人群时，建立重点敏感人员人脸数据库，实时关注这些敏感人群的进出记录及活动轨迹（结合全城封锁的人脸大数据）；
- 2、当该小区的敏感人群数量增加时（如当初该小区居住了1个维族人，20天后该小区出现了6个维族人），立即报警，公安人员上门询问处置及准备应急预案。



1) At the neighborhood gate video cameras are set up. If they recognize Uighurs, Tibetans, or other sensitive peoples, they will generate a key sensitive persons face-photo database, and in real time pay attention to these sensitive people's entry and exit records and their movements (integrating with the city's closed face-photo database).

2) If the number of sensitive groups of people in the neighborhood increases (for example, if originally one Uighur lives in a neighborhood, and within 20 days six Uighurs appear), it immediately sends alarms so that law enforcement personnel can respond, question the people and handle the situation, and develop a contingency plan.

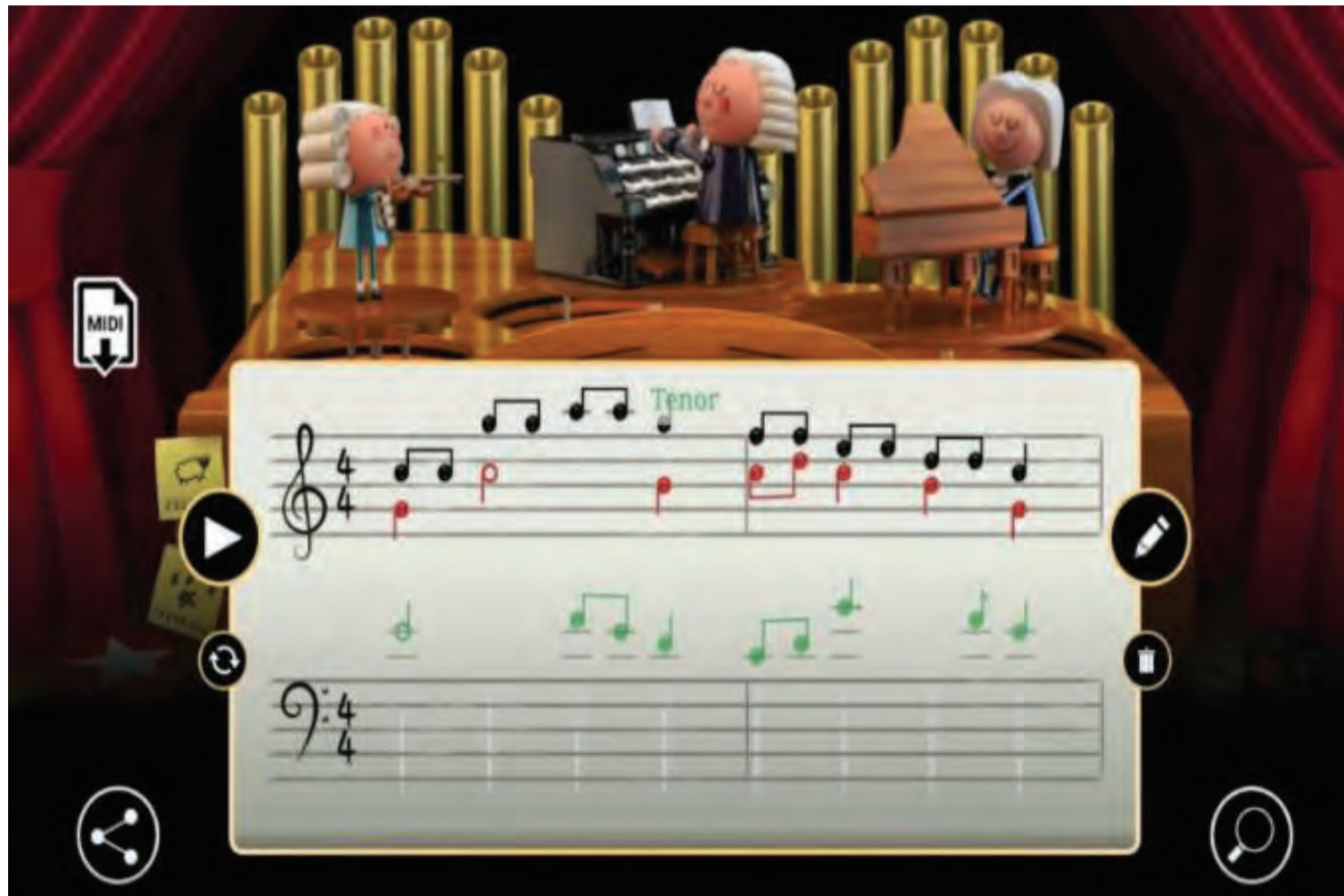
In the neighborhood, the facial recognition system collects these people's identity and facial data, at the same time the Fire Eye big data platform collects sensitive people's identities, times of entry and exit.... And issues warnings to police so they can carry out their goal of managing and controlling sensitive groups.

Neural network tracks treatment of brain tumors on MRI

Physicians and scientists in Germany have developed an artificial neural network that's capable of interpreting brain MRI scans to tell neuroradiologists how brain tumors are responding to chemotherapy and radiation therapy, according to a [study](#) published in *The Lancet Oncology*.



Be Bach in the first AI-powered Google Doodle



Two rival AI approaches combine to let machines learn about the world like a child

Together, deep learning and symbolic reasoning create a program that learns in a remarkably humanlike way.



PHOTO FROM THE NEURO-SYMBOLIC CONCEPT LEARNER: INTERPRETING SCENES, WORDS, AND SENTENCES FROM NATURAL SUPERVISION; EDITED BY MIT TECHNOLOGY REVIEW

Machine learning is making pesto even more delicious

Researchers at MIT have used AI to improve the flavor of basil. It's part of a trend that is seeing artificial intelligence revolutionize farming



Amazon Workers Are Listening to What You Tell Alexa

A global team reviews audio clips in an effort to help the voice-activated assistant respond to commands.



Common Echo owners questions

“Do you work for the NSA?”

“Alexa, is someone else listening to us?”

The jobs crunch

Self-driving cars, intelligent digital agents that can act for you, and robots are advancing rapidly. Will networked, automated, artificial intelligence (AI) applications and robotic devices have displaced more jobs than they have created by 2025?

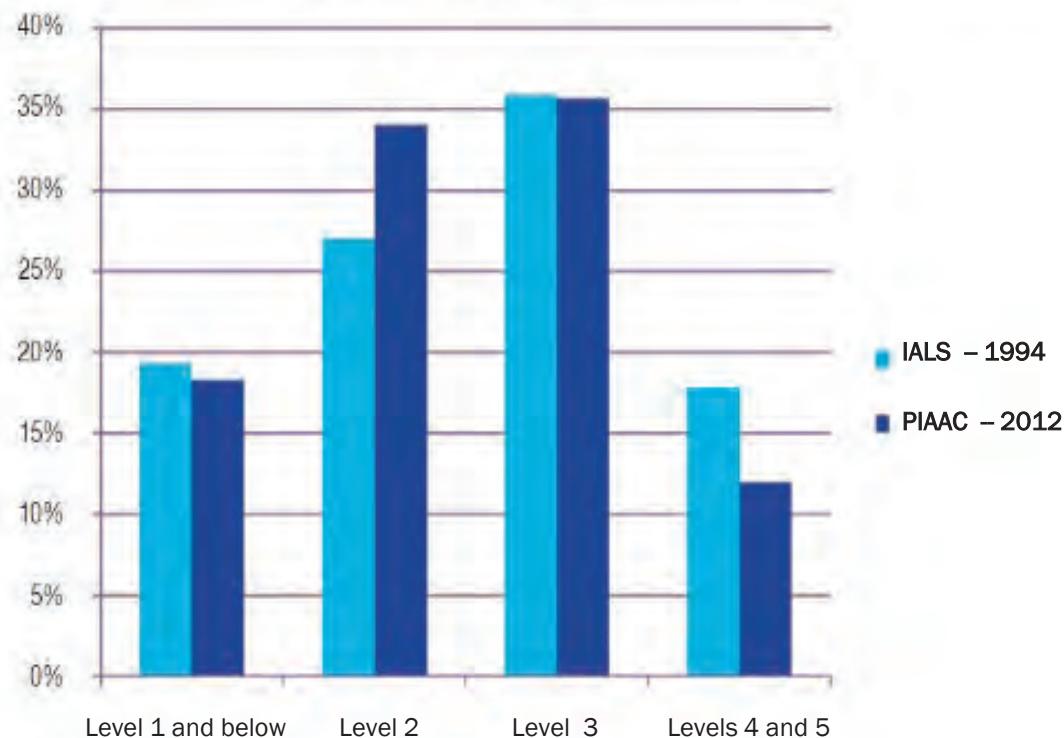


52% - more jobs created than destroyed

48% - more jobs displaced than created

The literacy showdown between humans and AI: National Academies of Sciences, Engineering and Medicine and OECD

Figure 1. Literacy proficiency for working-age adults in the United States, 1994-2012



Level 3 question: Find a website that can be used to figure out how to place an international phone call.

Level 4: Find a book about genetically modified foods that asserts there are problems with arguments on both sides of the debate.

PIAAC = Programme for the International Assessment of Adult competencies, OECD test

IALS = International Adult Literacy Survey

AI in education – Holmes, Bialik, Fadel

Areas where machines best humans

Repetitive/predictive tasks

Tasks that hinge on computational power

Classifying huge amounts of data and inputs

Making decisions based on concrete rules

Areas where humans best machines

Experiencing authentic emotions and building relationships

Formulating questions and explanations across scales and sources

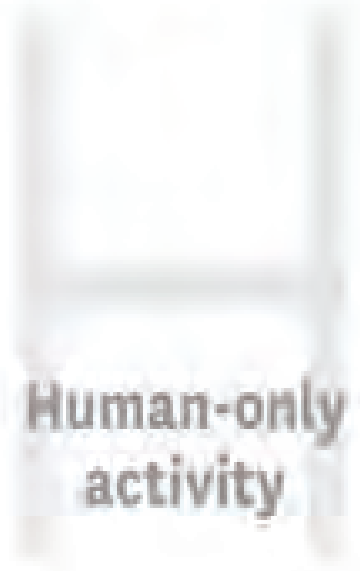

Deciding how to use limited resources across dimensions strategically (including tasks machines should be doing and what data to give them)

Making products and results usable for humans and communicating about them

Making decisions according to abstract rules

Accenture: Look at the “missing middle”

Human + Machine – Paul Daugherty, James Wilson

Lead	Empathize	Create	Judge	Train	Explain	Sustain	Amplify	Interact	Embody	Transact	Iterate	Predict	Adapt
 <p>Human-only activity</p>				<p>Humans complement machines</p>				<p>AI gives humans superpowers</p>					
				<p>Human and machine hybrid activities</p>									
 <p>Machine-only activity</p>													
												<p>Machine-only activity</p>	

Automation, robots, artificial intelligence will even take over sophisticated tasks

45 years

2018 study (Oxford/Yale): The timeframe estimated by artificial intelligence experts when “high level machine intelligence” – unaided machines that can accomplish any given task *better and more cheaply than humans* – will be developed

2024: outperform language translators

2027: drive a truck

2031: work in retail

2049: write best selling book

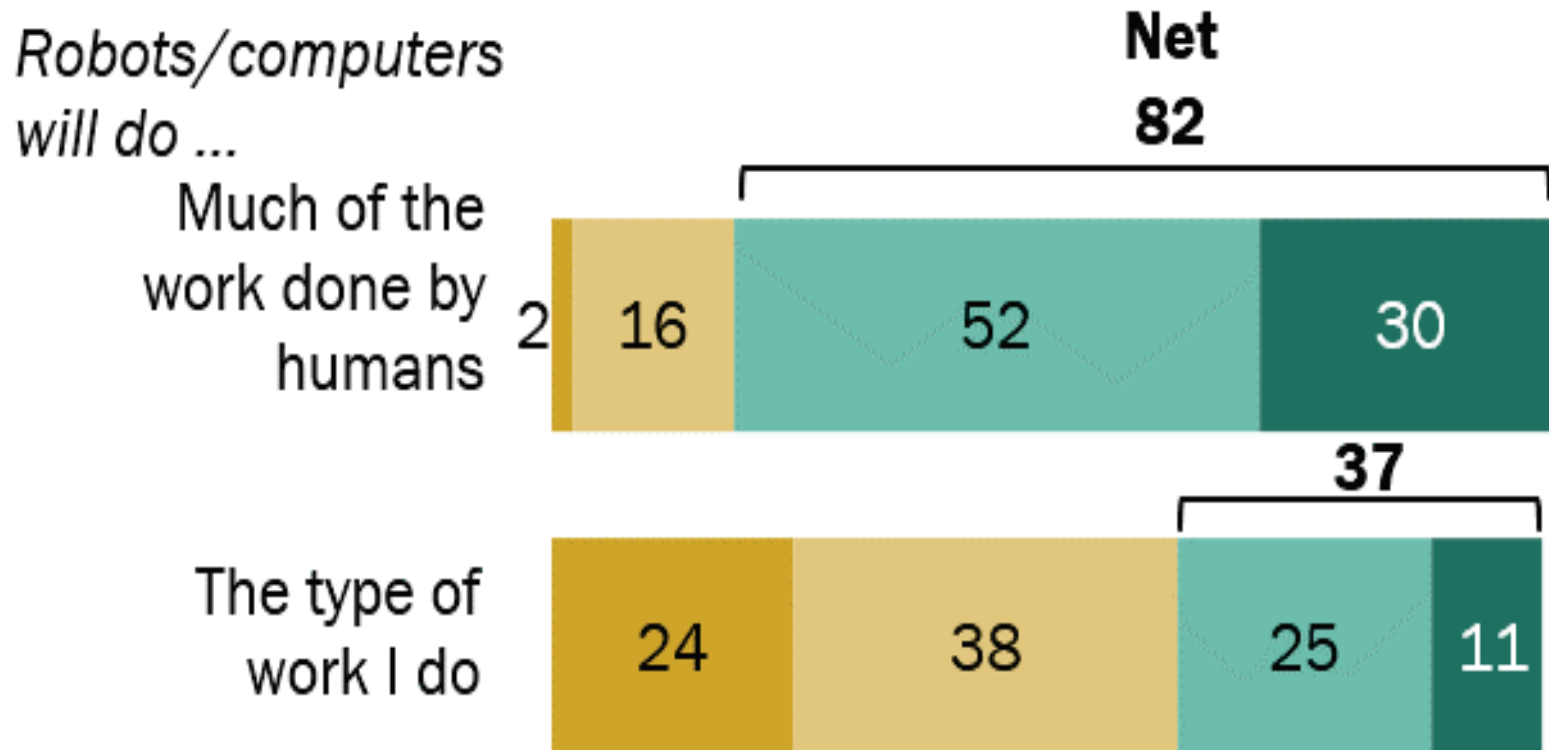
2053: work as a surgeon

The need for re/training

Americans say robots will take over much of the work done by humans, but most workers don't think it will affect their own type of work

% saying within the next 30 years each of the following will _____ happen

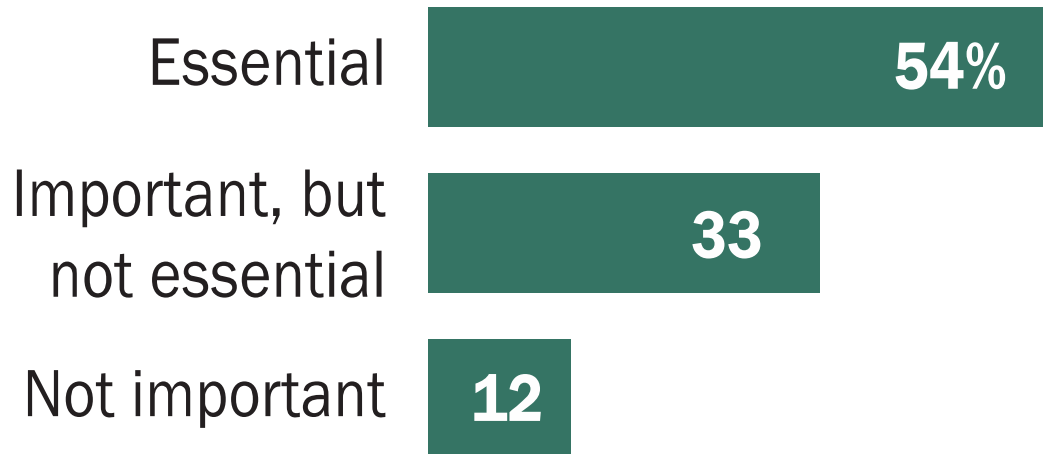
■ Definitely not ■ Probably not ■ Probably ■ Definitely



Training is now seen as essential

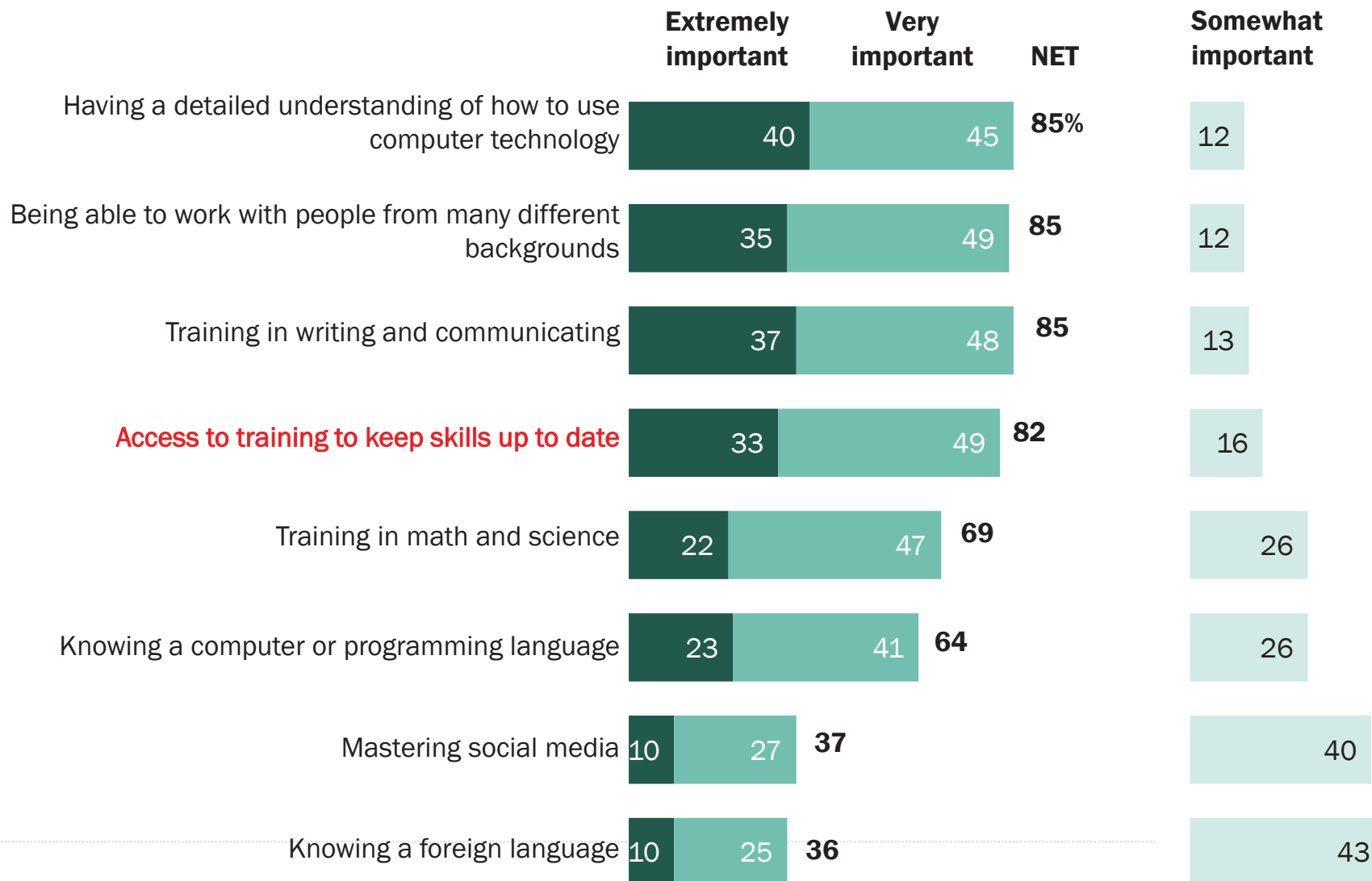
... and most workers see continuous training as essential or important to career success

% saying training/skills development throughout their work life will be ...



People think knowledge of computers, social dexterity, communications skills and access to training are key to success

% saying these traits are ... for workers to be successful in today's economy



Top expected outcomes: greater inequality, no new job explosion

POSSIBLE NEGATIVE OUTCOMES

Inequality between rich and poor will be much worse than today

No, not likely

Yes, likely

23%

76%

People will have a hard time finding things to do with their lives

36

64

POSSIBLE POSITIVE OUTCOMES

Economy as a whole will be much more efficient

56

43

People can focus less on work and more on what really matters

57

42

Humans would find jobs more meaningful and appealing

59

40

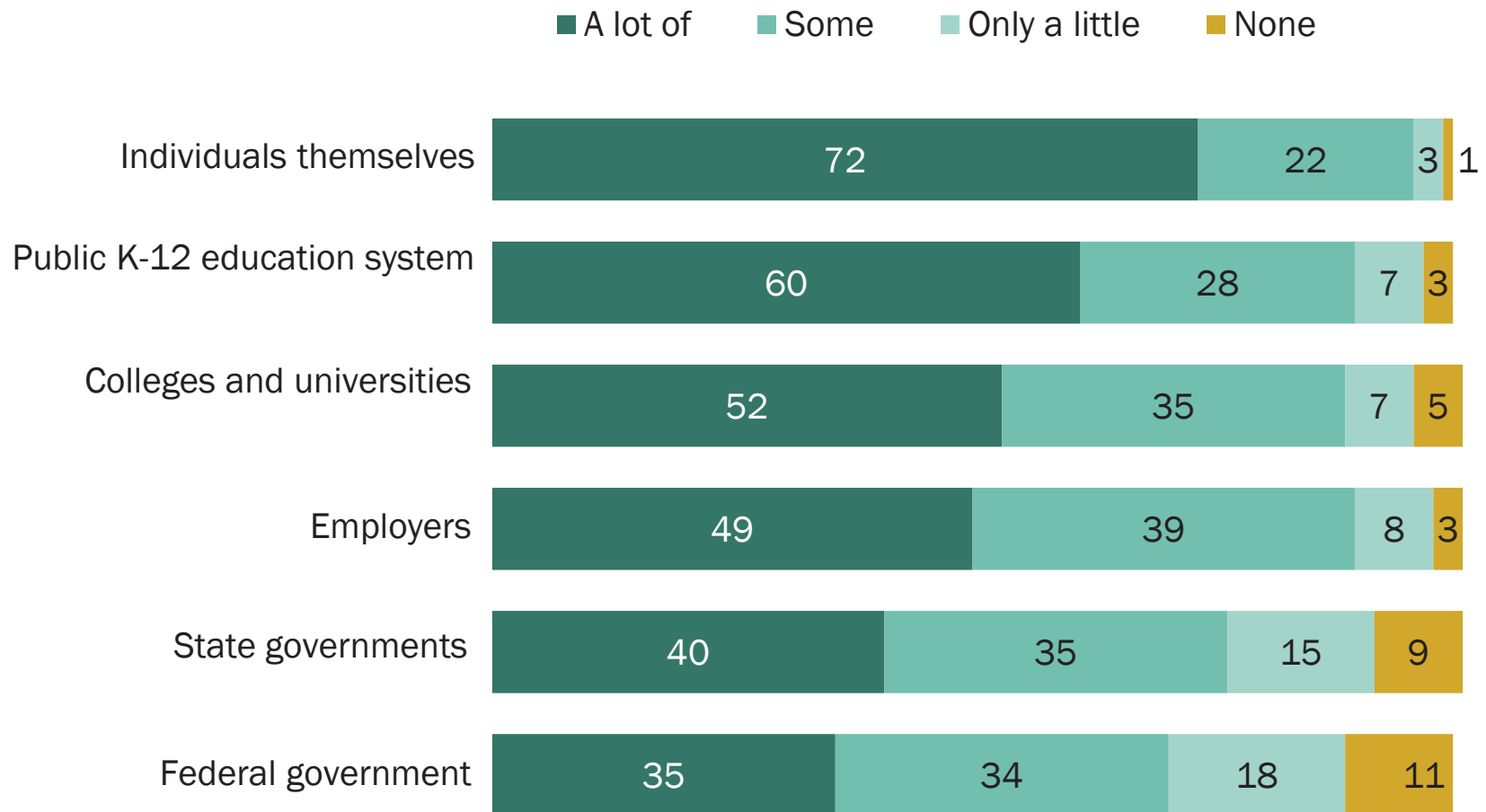
Economy will create many new, better-paying human jobs

75

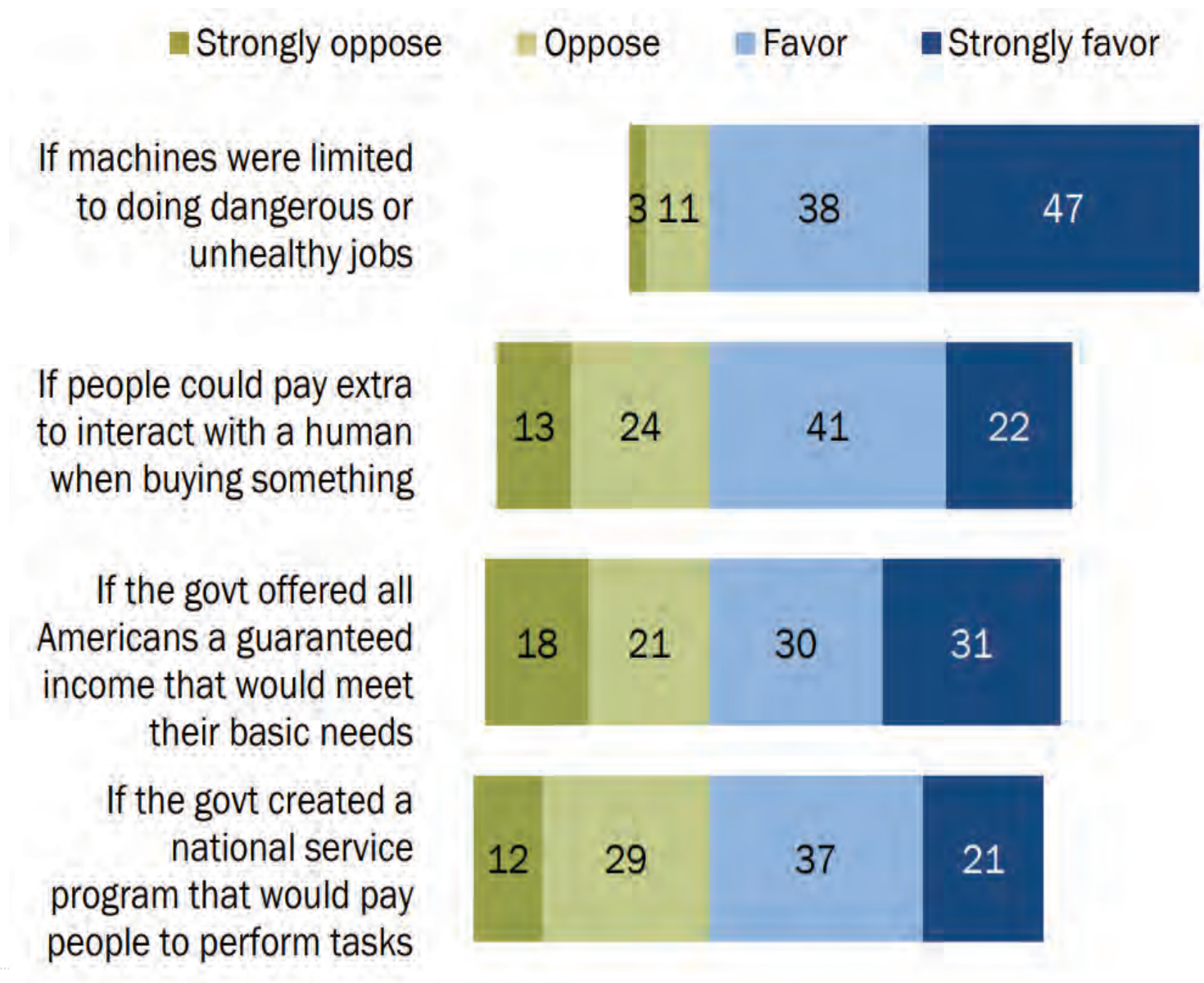
25

Americans think individuals and public schools should have the most responsibility to make sure workers have the right skills

% saying these groups should have ___ responsibility in making sure that the American workforce has the right skills and education to be successful in today's economy



Strong support for policies that limit impact of automation



Source: Survey conducted May 1-15, 2017.

In the next 10 years, do you think we will see the emergence of new educational and training programs that can successfully train large numbers of workers in the skills they will need to perform the jobs of the future?



70% - “yes”

30% - “no”

Theme 1

The training ecosystem will evolve, with a mix of innovation in all education formats

- More learning systems will migrate online. Some will be self-directed and some offered or required by employers; others will be hybrid online/real-world classes. Workers will be expected to learn continuously
- Online courses will get a big boost from advances in augmented reality (AR), virtual reality (VR) and artificial intelligence (AI)
- Universities still have special roles to play in preparing people for life, but some are likely to diversify and differentiate

Theme 2

Learners must cultivate 21st-century skills, capabilities and attributes

- Tough-to-teach intangibles such as emotional intelligence, curiosity, creativity, adaptability, resilience and critical thinking will be most highly valued
- Practical, experiential learning via apprenticeships and mentoring will advance

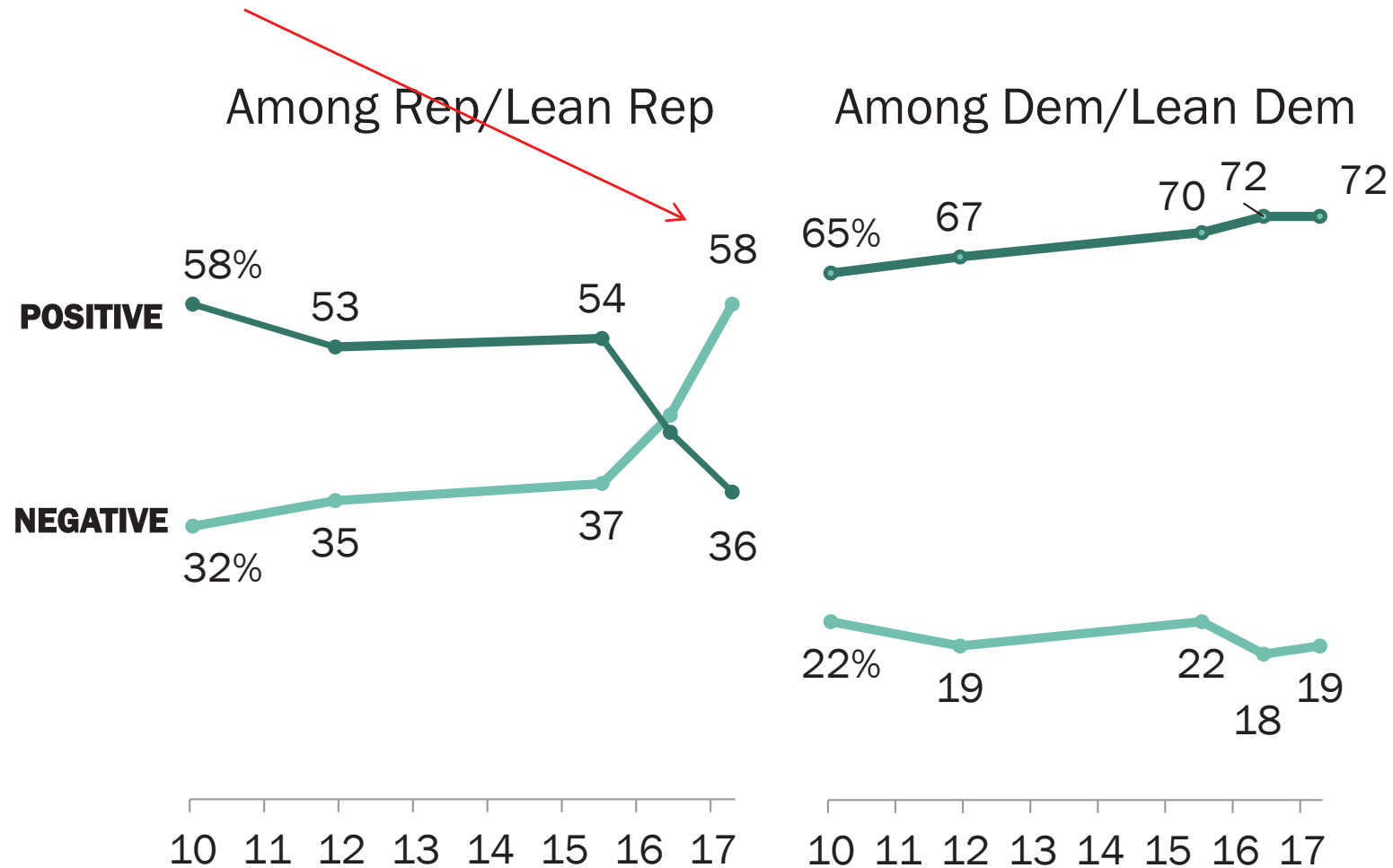
Theme 3

New credentialing systems will arise as self-directed learning expands

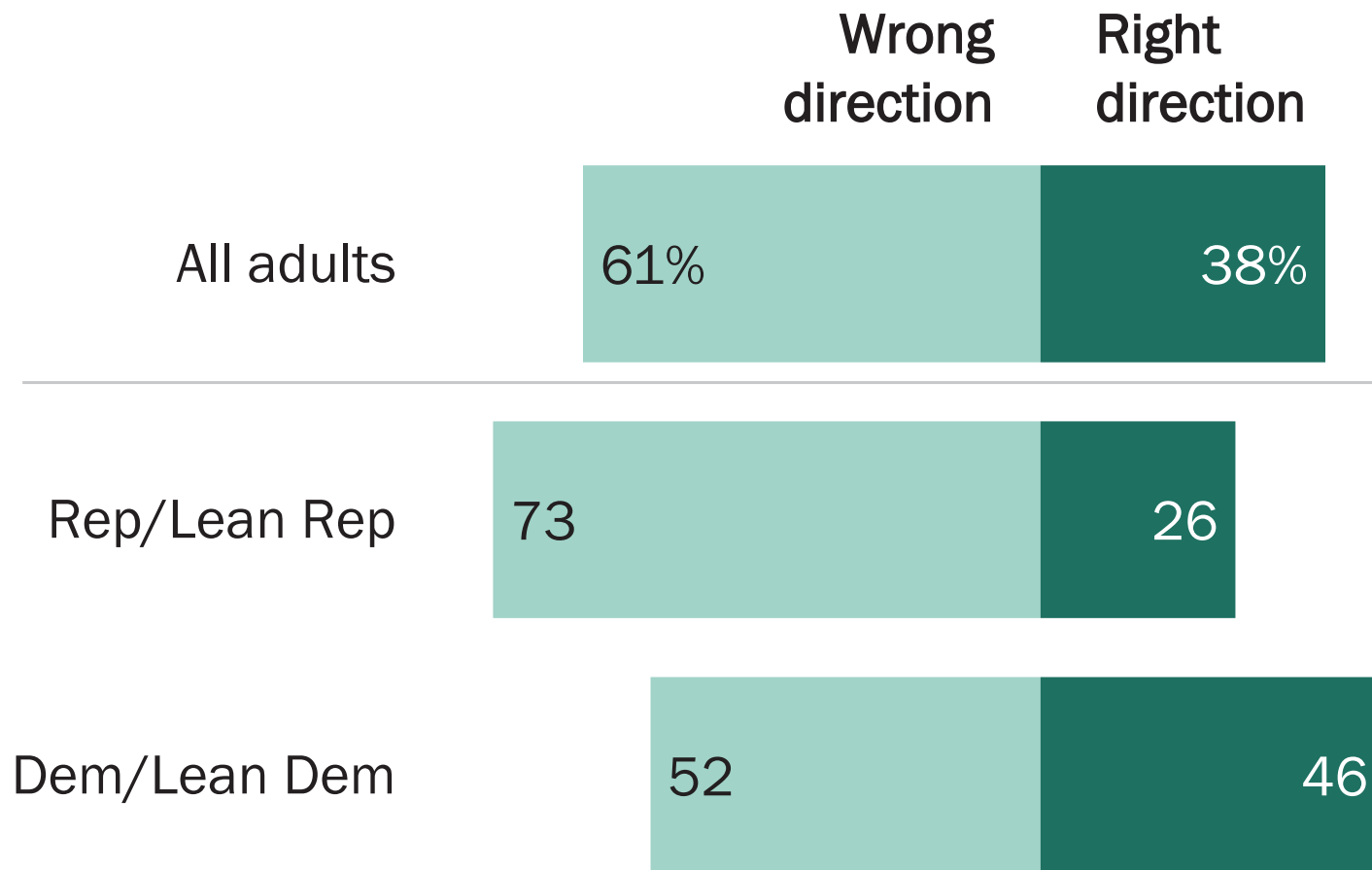
- While the traditional college degree will still hold sway in 2026, more employers may accept alternate credentialing systems as self-directed learning options and their measures evolve
- The proof of competency may be in the real-world work portfolios

The broader, more challenging environment for higher education

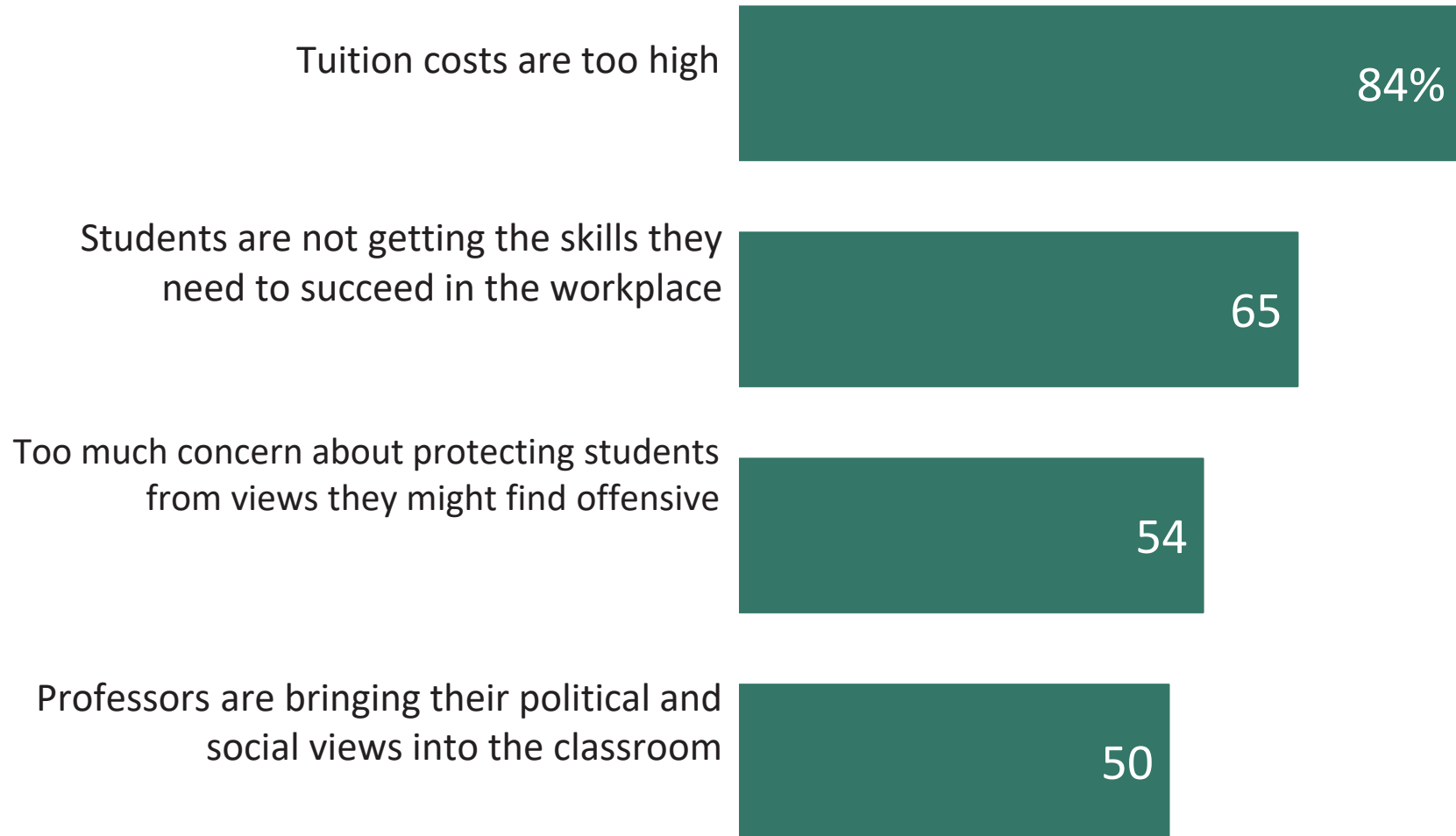
Colleges and universities have a positive/negative effect on the country, by party (2010-2017)



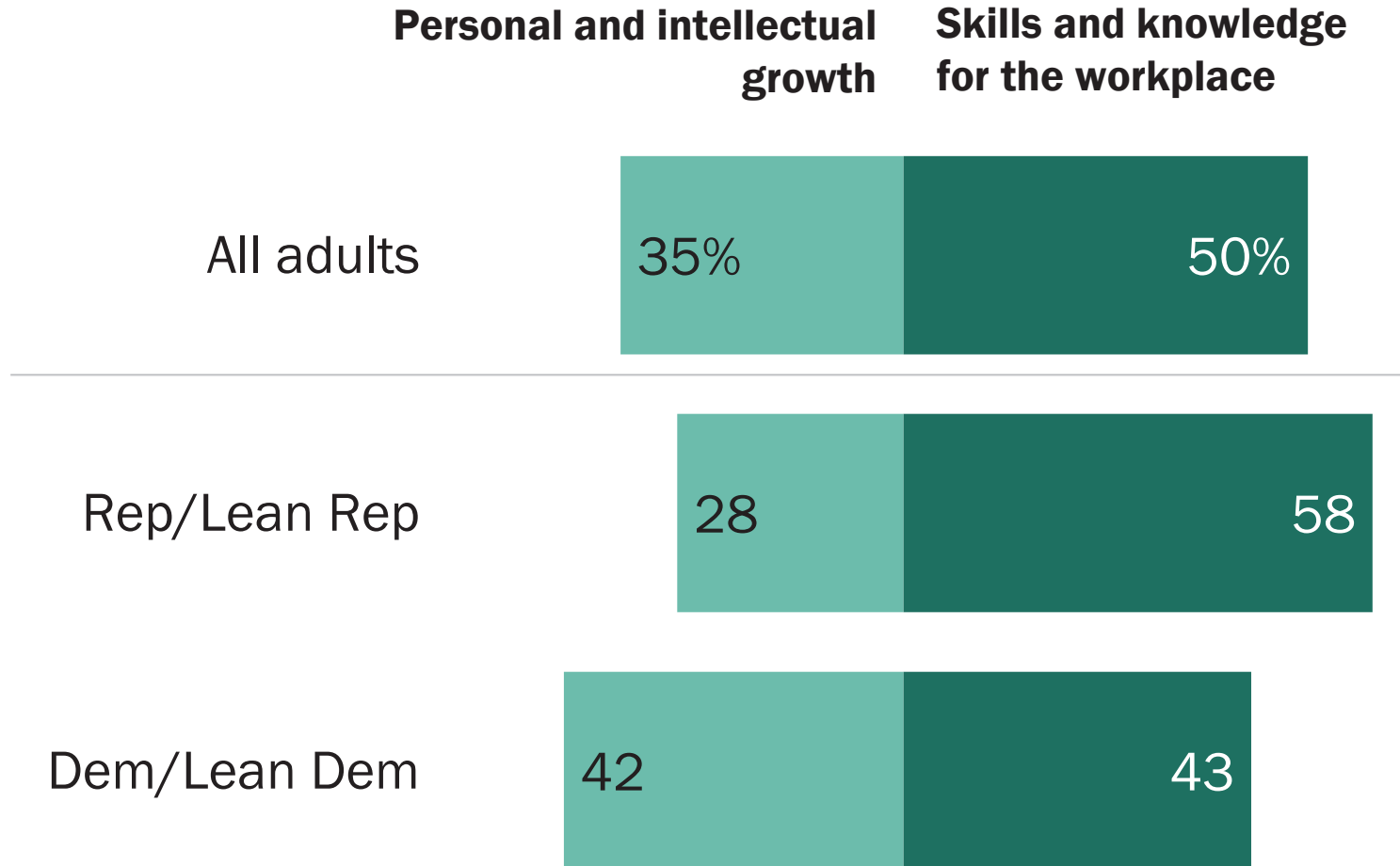
Majority of adults say higher education system in the U.S. today is generally going in the wrong/right direction



Major reasons for saying higher education is going in the wrong direction

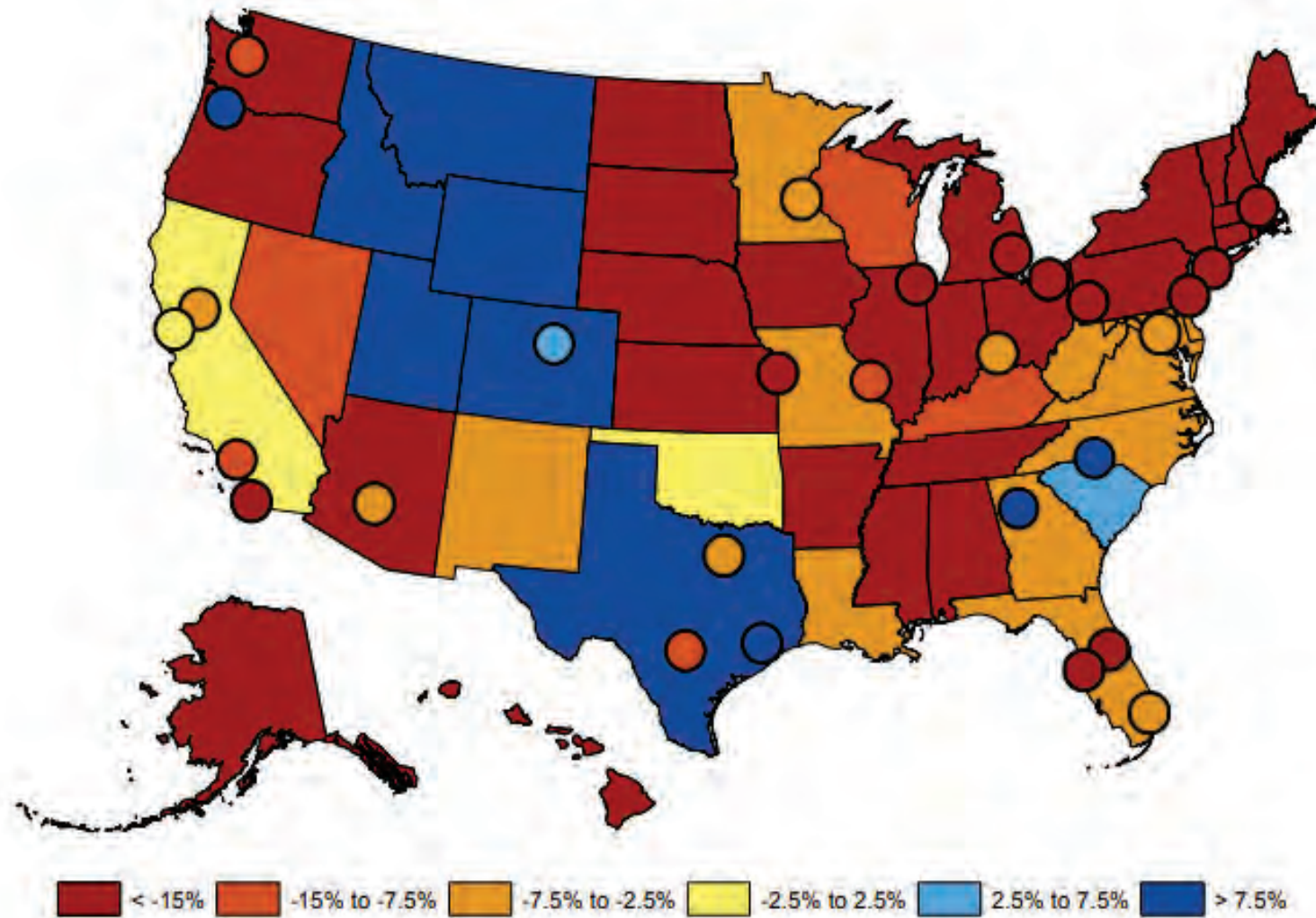


The main purpose of college should be...



Projected growth in college-going students 2012-2029

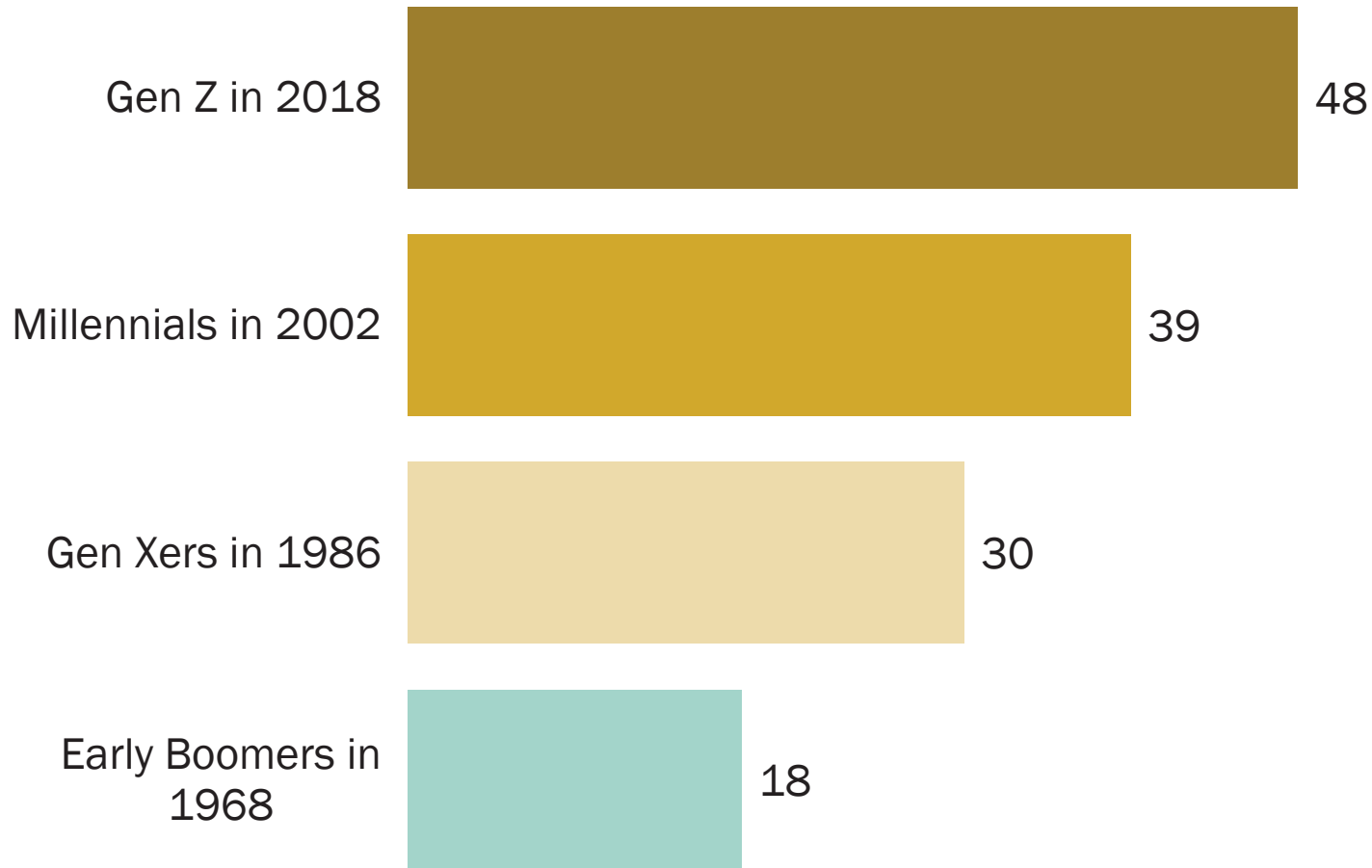
15% drop after 2025



Meet your new students in Generation Z

Gen Z is the most racially and ethnically diverse generation yet

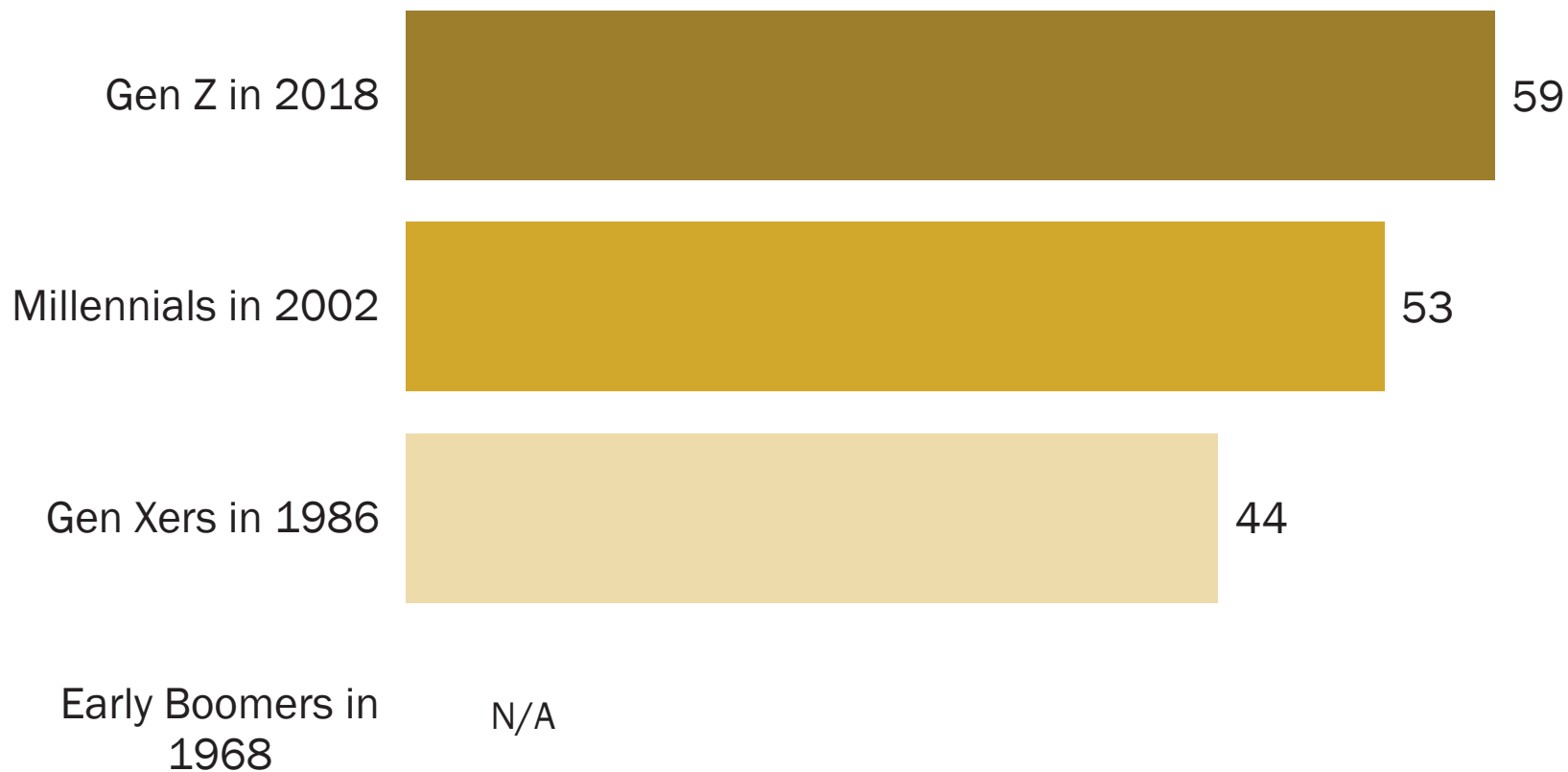
(% of 6- to 21-year-olds who are nonwhite)



Source: Pew Research Center tabulations of Current Population Survey Annual Social and Economic Supplement (IPUMS)

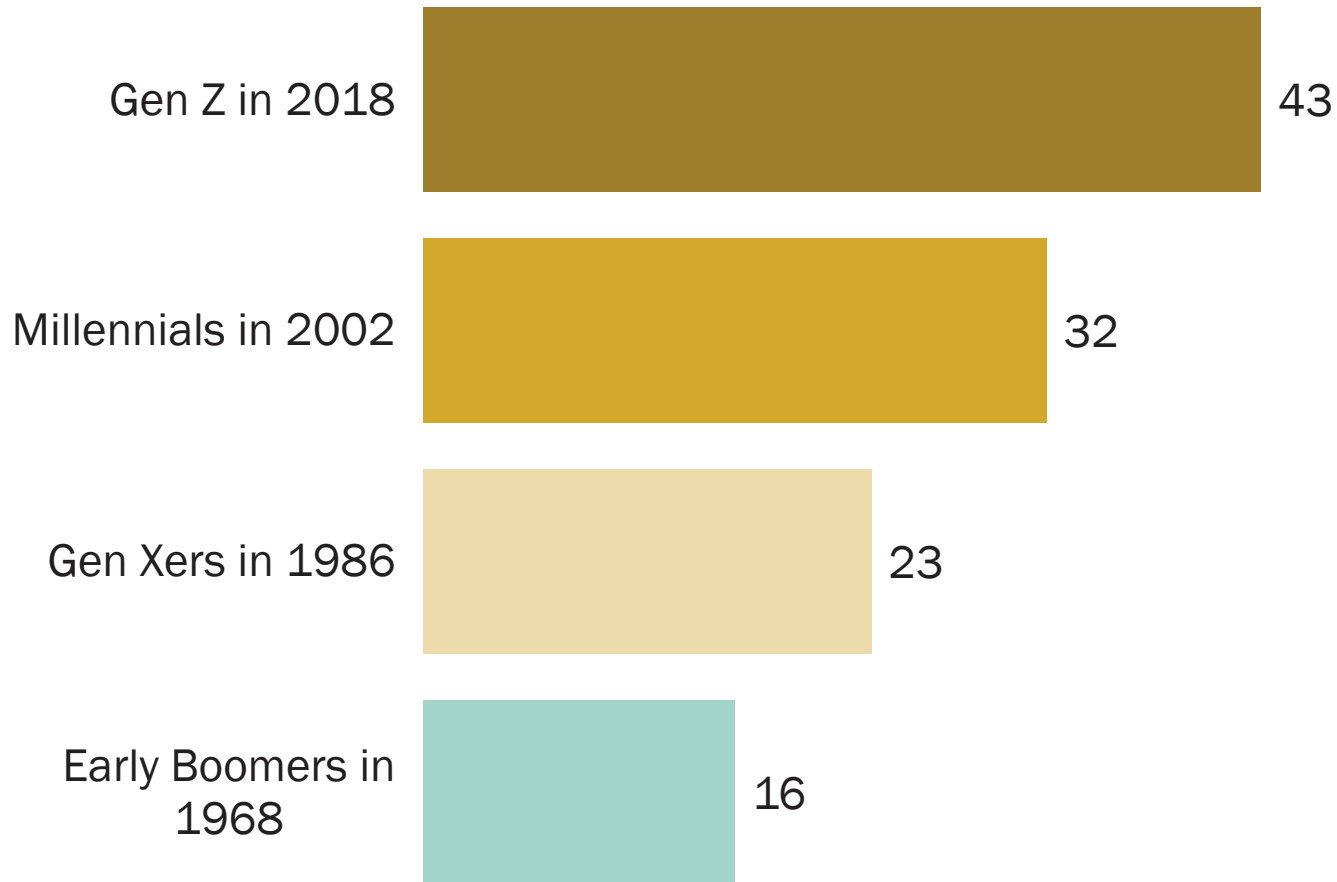
Gen Z more likely to be pursuing college

(Among 18- to 21-year-olds who are no longer in high school, % enrolled in college)



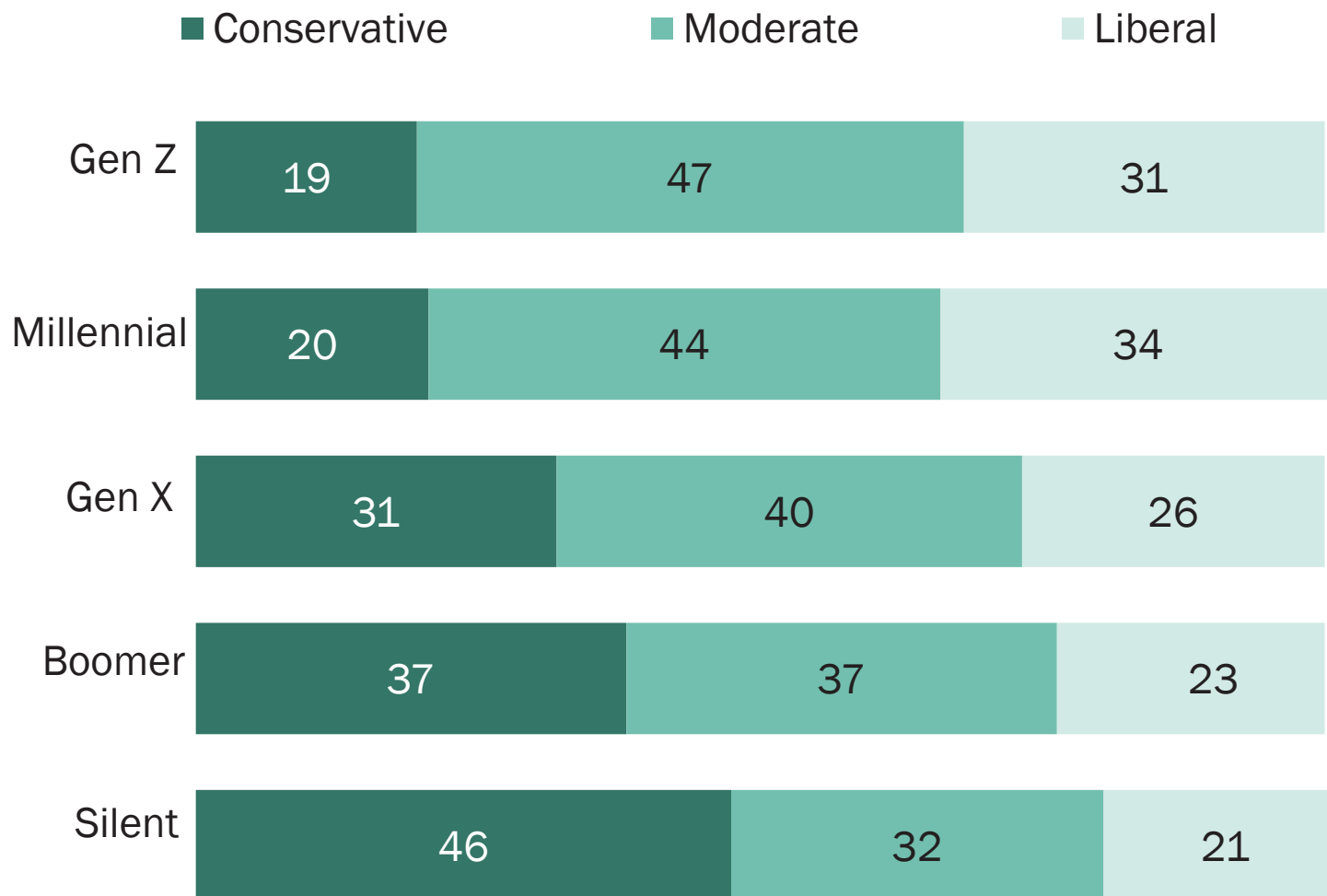
Gen Z more likely to have college-educated parents

(% of 6- to 17-year-olds living with a parent who has at least a bachelor's degree)



Source: Pew Research Center tabulations of Current Population Survey Annual Social and Economic Supplement (IPUMS)

Gen Z and Millennials less conservative than older generations



The fate of humans

By 2030, do you think it is most likely that advancing AI and related technology systems will enhance human capacities and empower them? That is, most of the time, will most people be better off than they are today? Or is it most likely that advancing AI and related technology systems will lessen human autonomy and agency to such an extent that most people will not be better off than the way things are today?"



63% - hopeful people will be better off
37% - believe people will not be better off



1) Human agency

Decision-making on key aspects of digital life is automatically ceded to code-driven, “black box” tools. People lack input and do not learn the context about how the tools work. They sacrifice independence, privacy and power over choice; they have no control over these processes. This effect will deepen as automated systems become more prevalent and complex.



2) Data abuse

Most AI tools are and will be in the hands of companies striving for profits or governments striving for power. Values and ethics are often not baked into the digital systems making people's decisions for them. These systems are globally networked and not easy to regulate or rein in.



3) Dependence lock-in

Many see AI as *augmenting* human capacities but some predict the opposite – that people’s deepening dependence on machine-driven networks will erode their abilities to think for themselves, take action independent of automated systems and interact effectively with others.

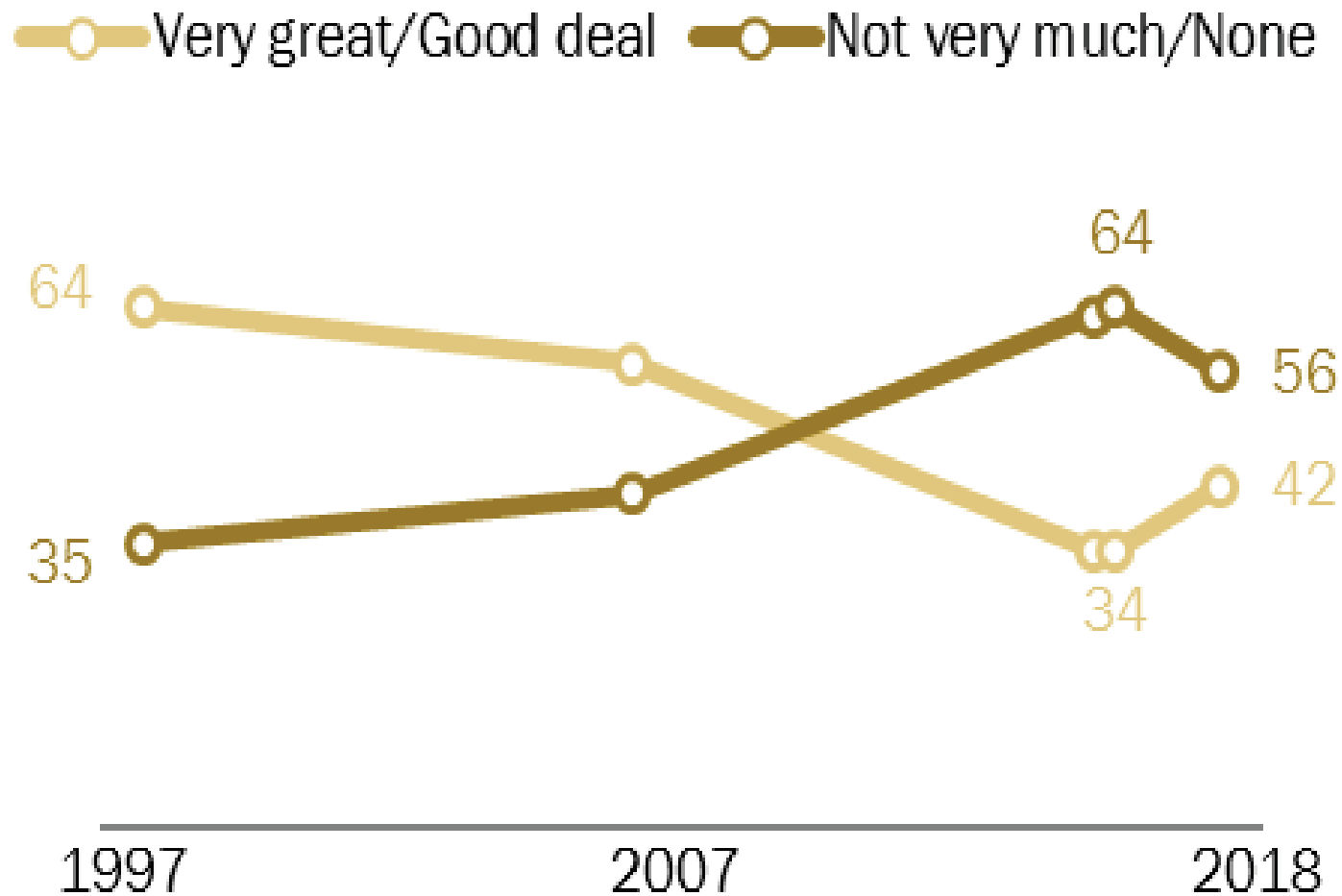


4) Mayhem

Some predict further erosion of traditional sociopolitical structures and the possibility of great loss of lives due to accelerated growth of autonomous military applications and the use of weaponized information, lies and propaganda to dangerously destabilize human groups. Some also fear cybercriminals' reach into economic systems.

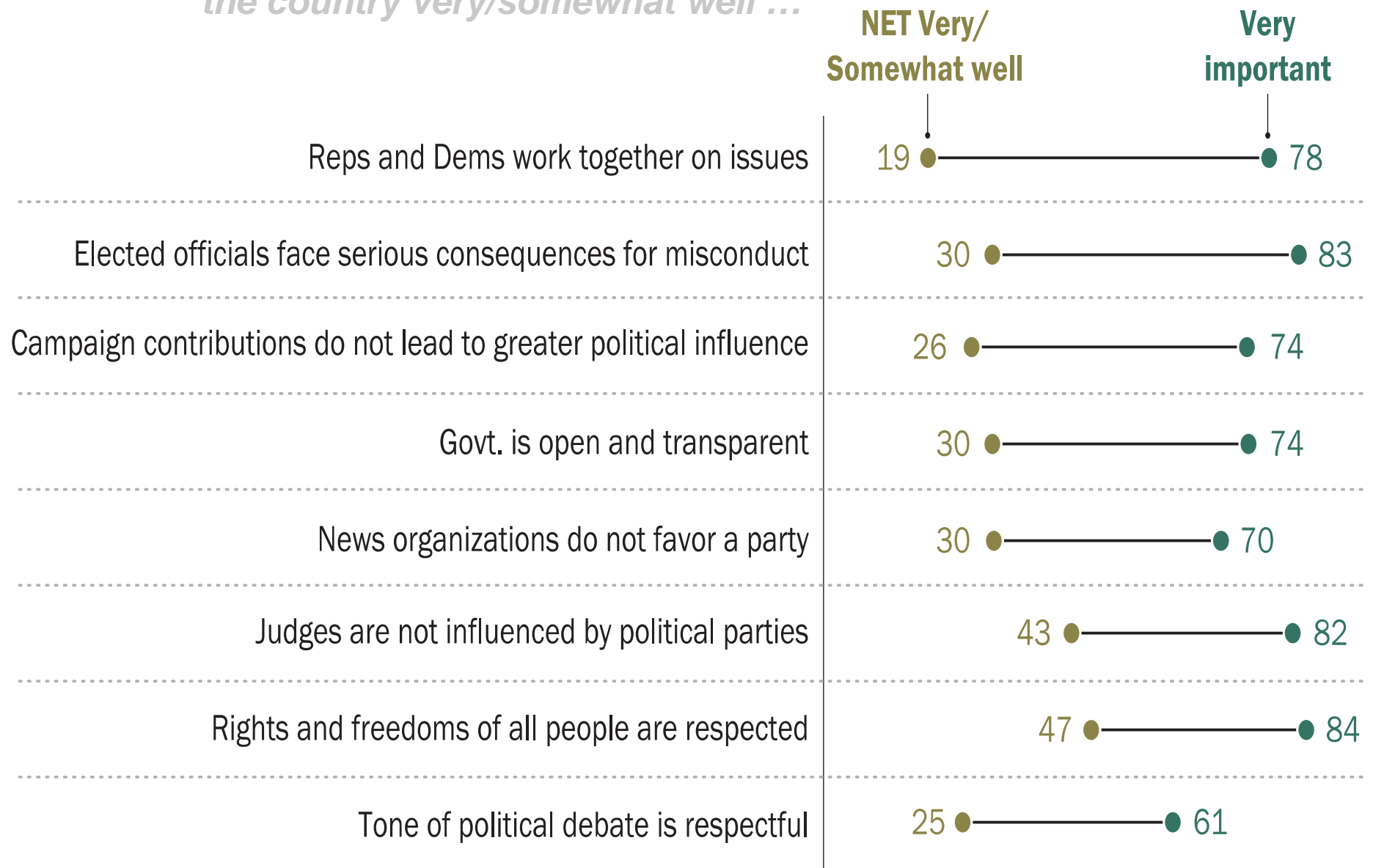
Many have little or no confidence in political wisdom of the American people

% saying they have ____ of trust and confidence in the wisdom of American people in making political decisions



Country viewed as falling short on a range of widely supported democratic values

% who say each is very important for the U.S. and describes the country very/somewhat well ...



**NET Very/
Somewhat well** **Very
important**

News organizations are independent of government

43 ● ————— ● 76

Everyone has an equal opportunity to succeed

52 ● ————— ● 82

People agree on basic facts even if disagree on politics

34 ● ————— ● 60

Govt. policies reflect views of most Americans

36 ● ————— ● 59

Views of those not in the majority on issues are respected

40 ● ————— ● 62

Balance of power between govt. branches

55 ● ————— ● 76

People are free to peacefully protest

73 ● ● 74

Military leadership does not publicly support a party

66 ● —● 74

Public is broadly pessimistic about the future of America

% saying ...



When the public looks to the future of the U.S. over the next 30 years, they see ...

A country declining in stature on the world stage

The U.S. will be **LESS** important in the world

The U.S. will be **MORE** important in the world



A widening gap between the haves and the have-nots

Gap between rich and poor will **GROW**

Gap between rich and poor will **GET SMALLER**



Growing political polarization

Country will be **MORE** politically divided

Country will be **LESS** politically divided



And they are worried that the country's political leaders are not up to the challenge





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Thank you!

Email: [**lrainie@pewresearch.org**](mailto:lrainie@pewresearch.org)

Twitter: **@lrainie**
@pewinternet
@pewresearch

UC Responders

Dr. Julia Heath



Executive Director of UC Economics Center, Alpaugh Professor of Economics, and nationally recognized leader in the field of economic education

Dr. Richard Harknett



Professor of Political Science and Head of Department, Affiliated Faculty with Department of Information Technology – internationally recognized expert on international security and cybersecurity

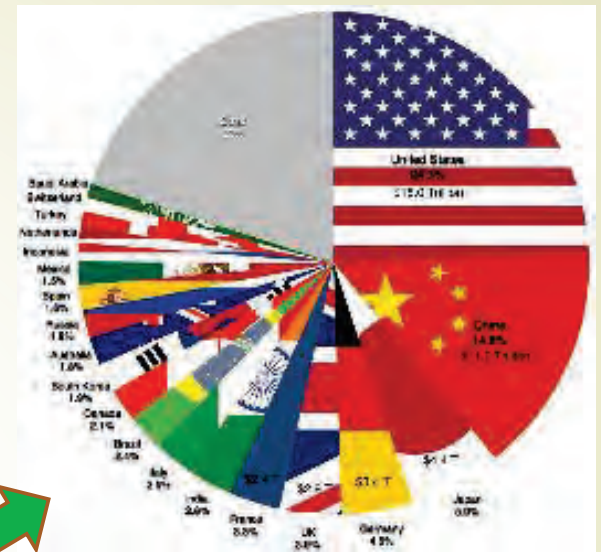
Terry Grundy



Adjunct Associate Professor in the School of Planning and Course Director for UC Honors seminars in ethics and intellectual and cultural history



1819 72% of US Labor Force



2019 US World's largest Economy

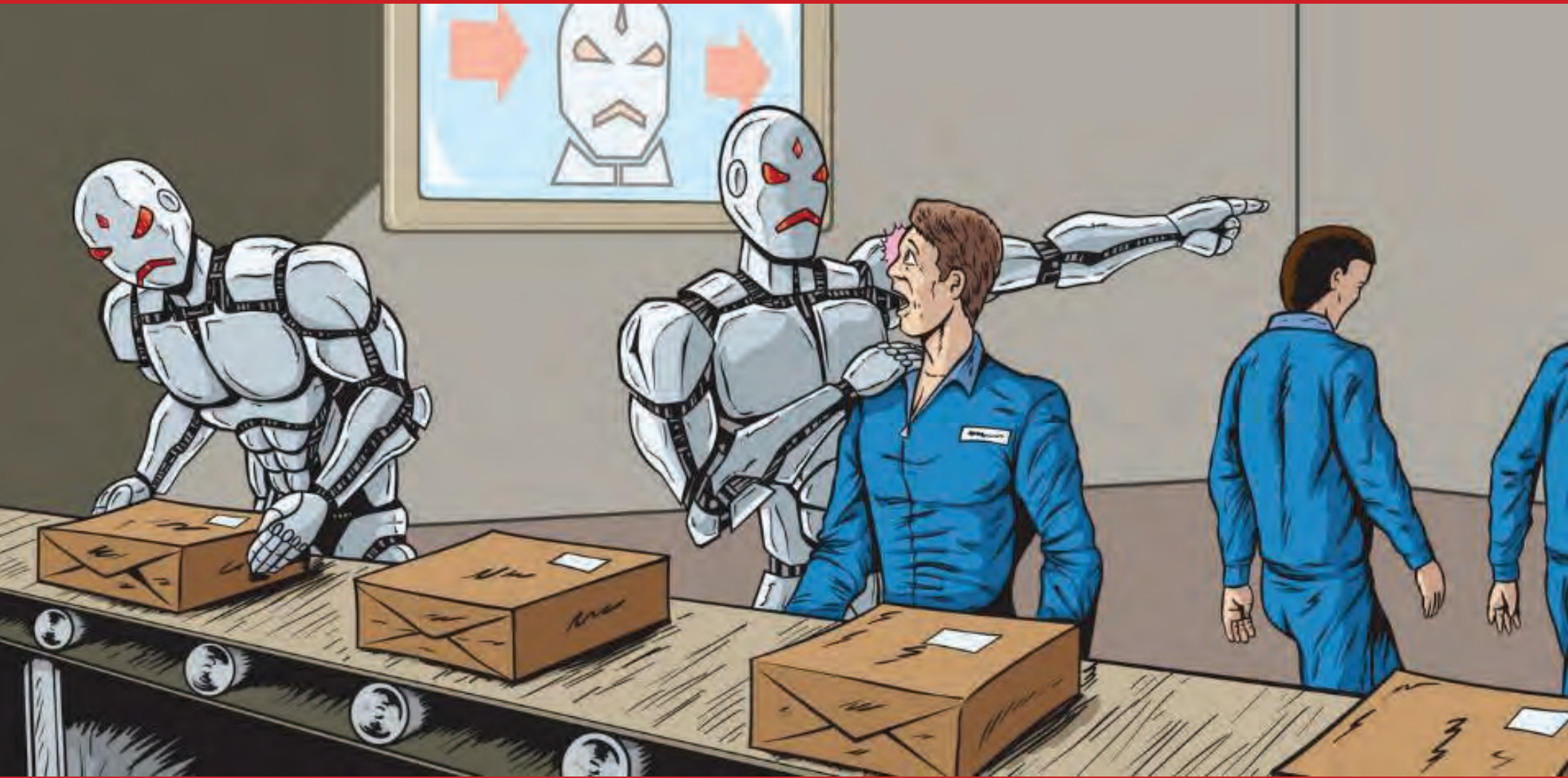


1819 US 2% of world economy

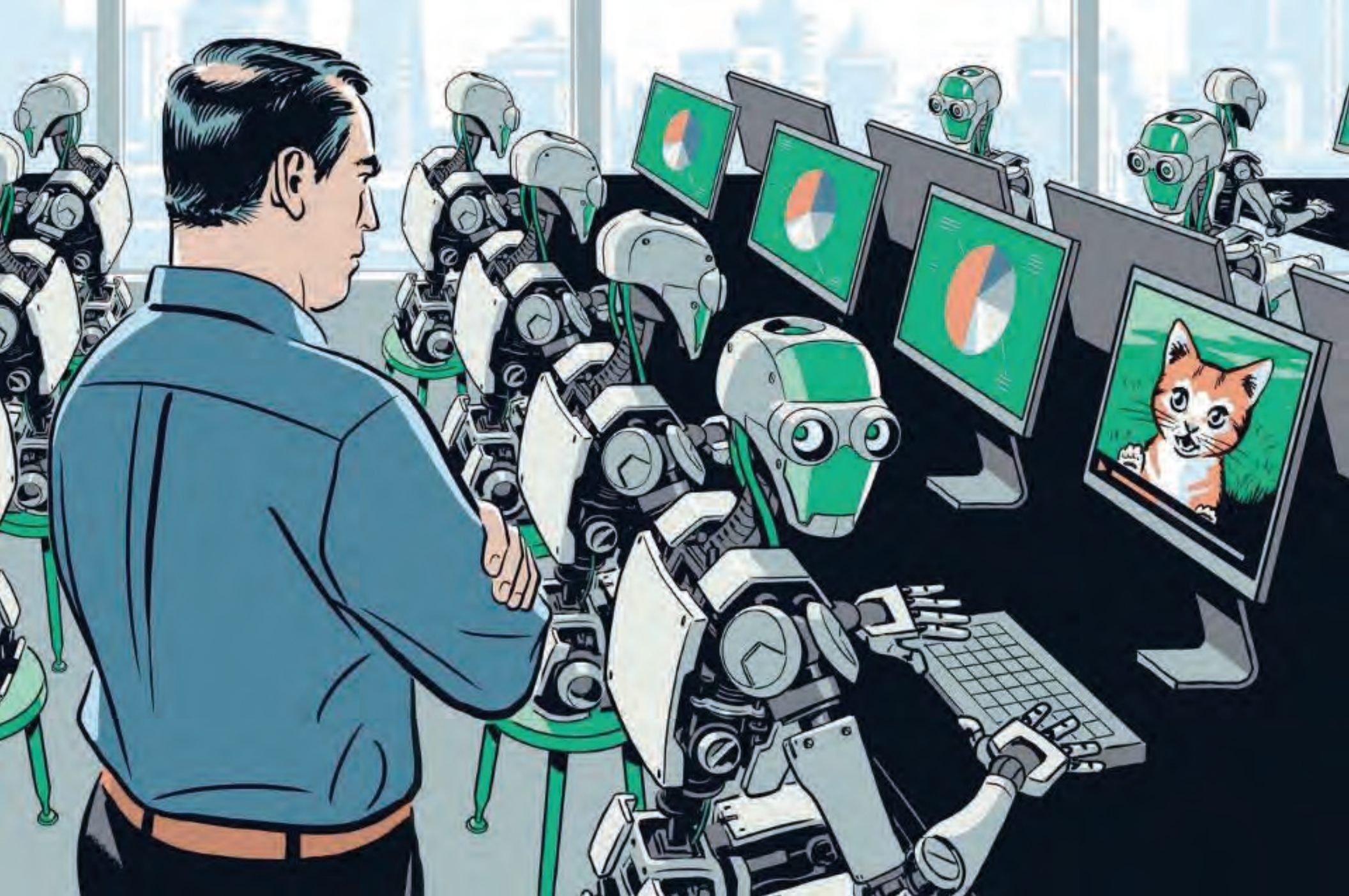


2019 less than 2%

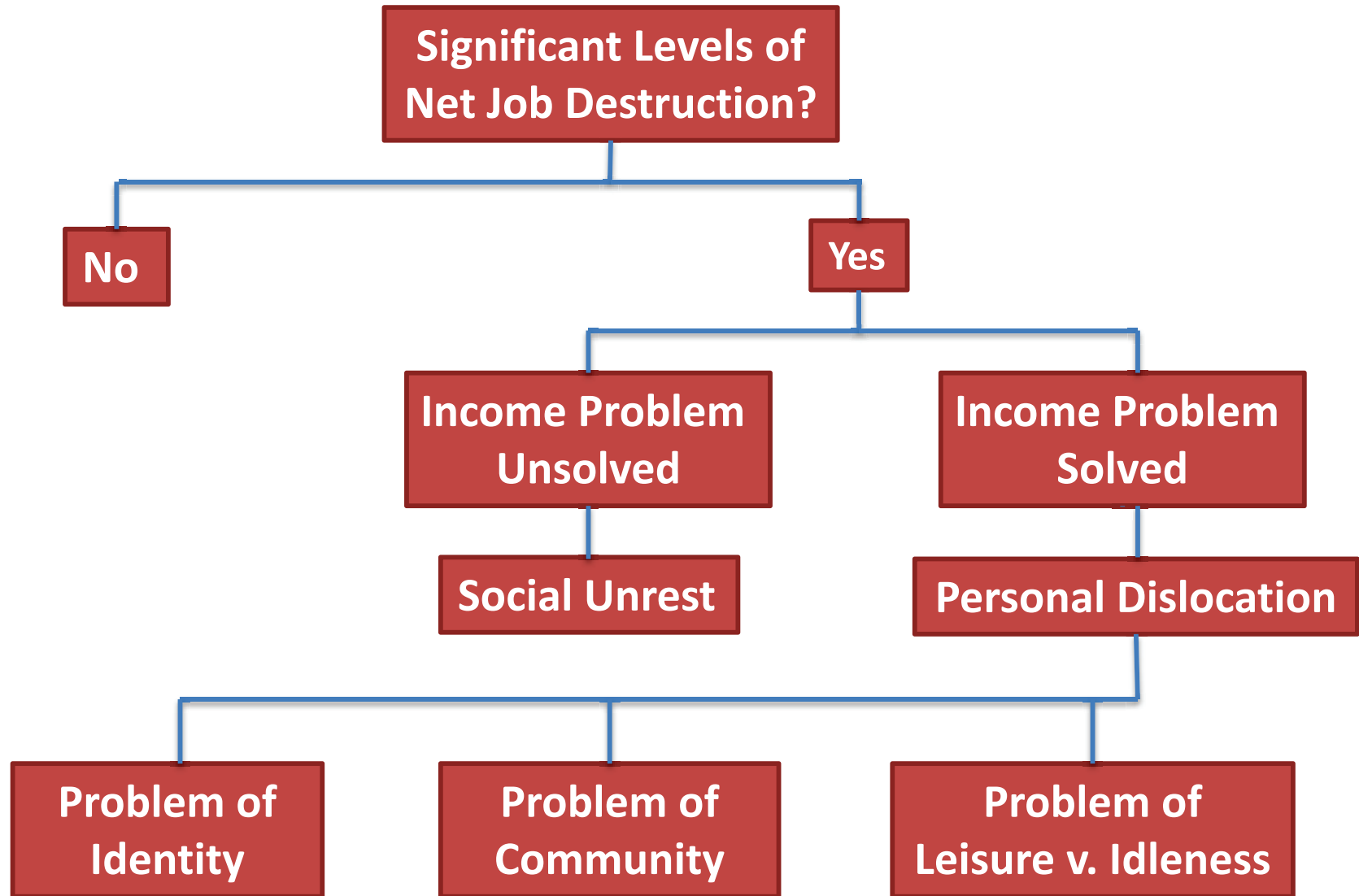
This?



Or This?



Critical Path



Curricular Content *

Problem	Course Content	U.C. Contributors
Forming Identity	<ul style="list-style-type: none"> • Ethnic/Cultural Studies • Developmental Psychology • Media Studies • “Mindfulness” Meditation 	<ul style="list-style-type: none"> • Arts & Sciences • CCM (Media/Acting) • DAAP (Arch) • College of Medicine • College of Nursing
Building Community	<ul style="list-style-type: none"> • Ethics/Moral Philosophy • Sociology of Groups/Social Organizations • Applied Psychodynamics • Community Organizing 	<ul style="list-style-type: none"> • Arts & Sciences • CECH • LCB • DAAP (SOP) • CAHS
Cultivating Leisure/Avoiding Idleness	<ul style="list-style-type: none"> • Music/Art Practice • Humanities (Philosophy Literature, History) • Service Learning 	<ul style="list-style-type: none"> • CCM • DAAP (Art) • Arts & Sciences • ELCE

* Examples only

UC Talks



Host:


**Udo Greinacher,
Niehoff Professor for Film
and Media Studies, DAAP
School of Architecture &
Interior Design**

Presenters:

**Aaron Bradley, Donna Chrobot-Mason, *et al*, Jessica Furgerson,
Michael Jones, and Zvi Biener**



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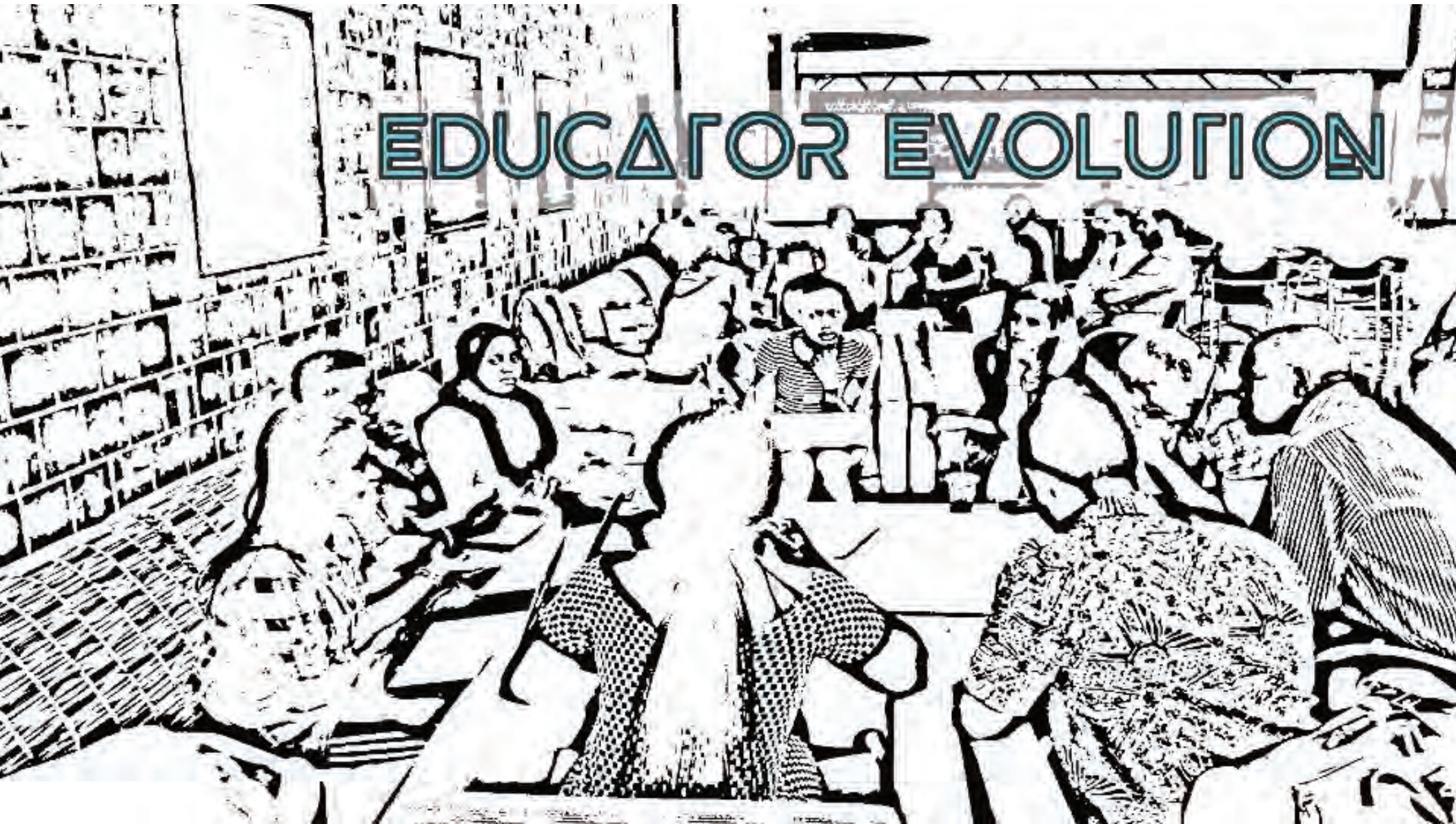
**COLLABORATIVE, ADAPTABLE, AND
CROSSING “MAJOR” BOUNDARIES:**

THE NEW PARADIGM OF
CAREER EDUCATION

UNIVERSITY EVOLUTION




EDUCATOR EVOLUTION





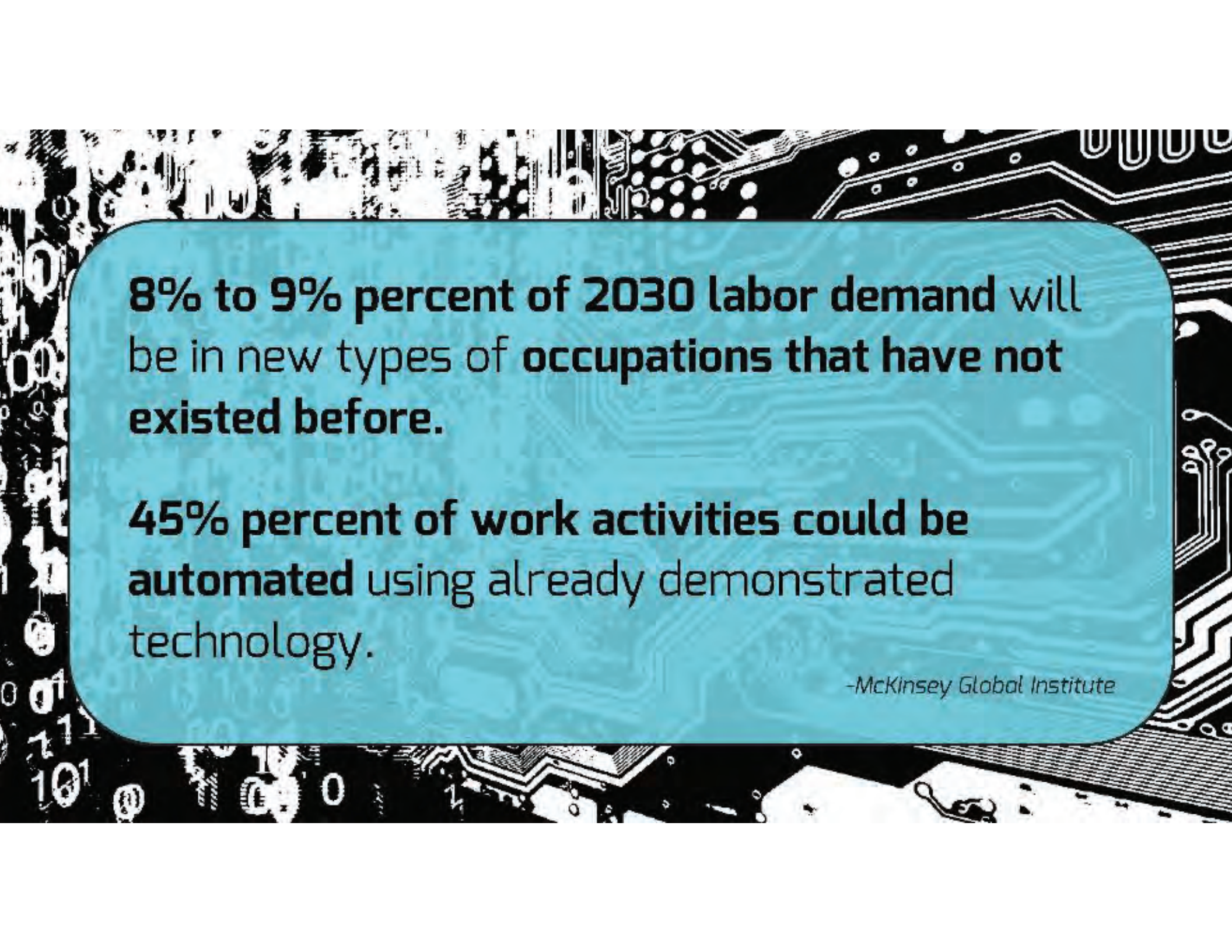
SKYNET
NEURAL NET-BASED ARTIFICIAL INTELLIGENCE



“...automation will **displace between 400 and 800 million jobs by 2030**, requiring as many as **375 million people to switch job categories entirely.**”

Midpoint estimate = **75 million workers could need to change occupational category by 2030.**

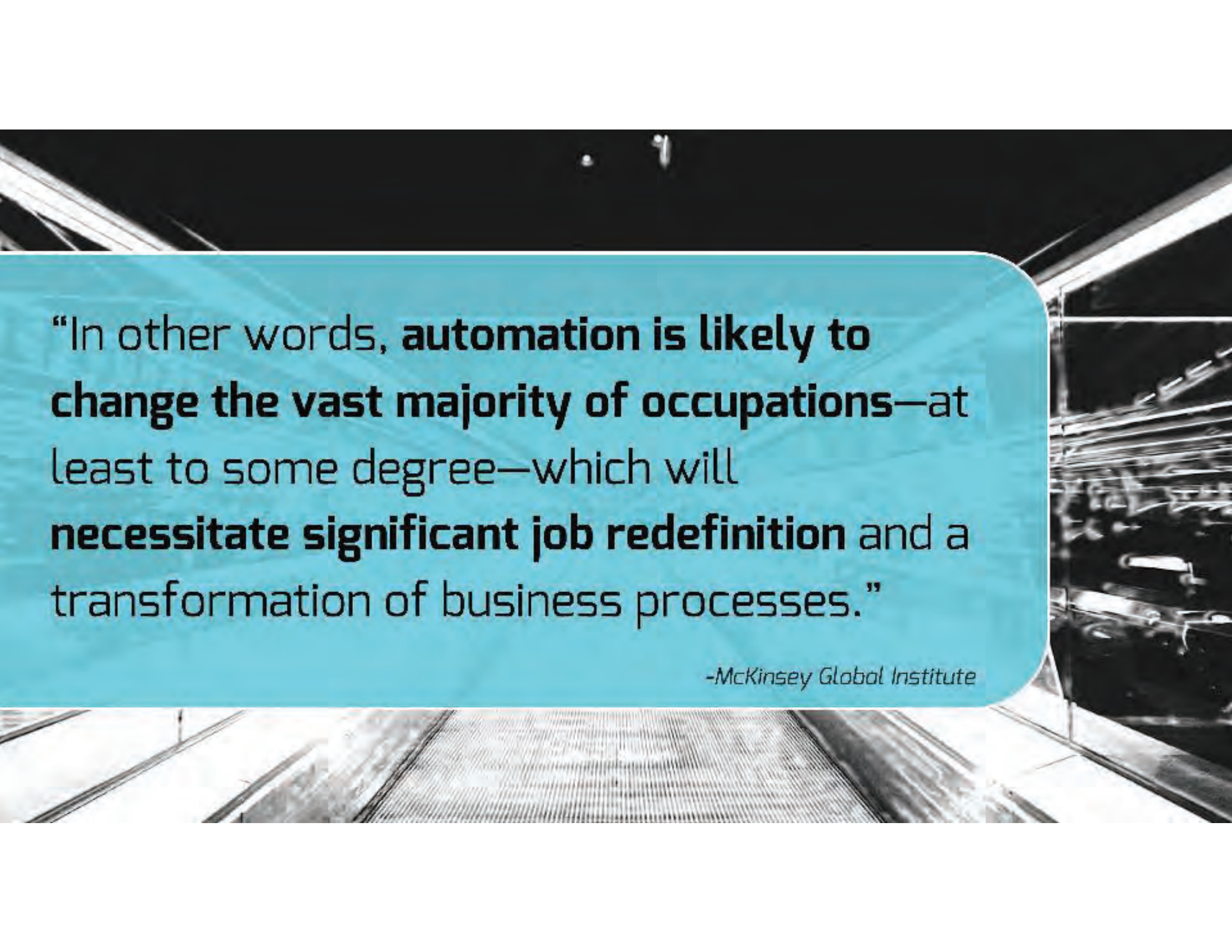
-McKinsey Global Institute



8% to 9% percent of 2030 labor demand will be in new types of occupations that have not existed before.

45% percent of work activities could be automated using already demonstrated technology.

-McKinsey Global Institute



“In other words, **automation is likely to change the vast majority of occupations**—at least to some degree—which will **necessitate significant job redefinition** and a transformation of business processes.”

-McKinsey Global Institute

OUR RESPONSE

Intentionally **disrupt the current paradigm** of **siloes, discipline-based experiences** and the premise of professional degrees as **pipelines to specific careers.**

A high-angle, slightly blurred photograph of a busy public transit station. In the center, a red and black train or tram is stopped at a platform. To the right, a wide set of escalators leads up and down. The station is filled with a diverse crowd of people, some walking, some standing, and some using the escalators. The lighting is bright, suggesting an indoor or well-lit outdoor space. The overall atmosphere is one of a bustling, modern urban environment.

Top Skills Graduates Need:


Creativity

Creative Problem Solving

Critical Thinking

Collaboration

*-U.S. Department of Education, Bloomberg,
the World Economic Forum, and PayScale*



“In countries around the world, **economies run on creativity, innovation, and collaboration.** Skilled jobs are more and more centered on **solving unstructured problems and effectively analyzing information.**”

- *World Economic Forum*



OUR RESPONSE

Sharpen students' **critical thinking + problem solving skills** through practical applications; invite industry **collaboration and co-creation opportunities** for all students.

CAREER EDUCATION 2.0:

Leveraging signature strengths to develop **resilient, adaptable, problem-solvers** who **embrace ambiguity** with curiosity and confidence.

PARTNERED SHELL COURSES

SLO's dedicated to creative problem-solving, adaptability, and innovation approaches NOT specific to a discipline or major

Project-based activities + assignments, quickly adaptable to various industry partners

Cross disciplinary and cross-listed, or department specific

CASE STUDY

INQUIRY TO INNOVATION: THE FUTURE OF WORK

Transdisciplinary seminar course; Co-op 2.0 pilot

Collaboration with local architecture and design research firm BHDP

Co-create predictive insights about the future of work from the perspective of undergraduate students (*the future workforce*)

GEN ED REQUIREMENTS

Introduce Gen Ed requirements of transdisciplinary, industry-partnered seminars throughout students' educational career

Industry partnered experiences with practical resume, portfolio, and skills-development applications

THEMATIC TRACKS

Nimble, thematic degree tracks that cross disciplines
(even colleges + schools)

Collection of courses, project-based experiences,
extra-curriculars, and external engagements that can
adapt in real-time

OUR RESPONSE TO THE FUTURE OF (NO) WORK?

Cross-disciplinary engagement and exploration
Fluid, agile collaboration with industry partners
Real-time integration of theory and practice
Students as collaborators and co-creators





SKYNET
NEURAL NET-BASED ARTIFICIAL INTELLIGENCE



**EXPERIENCE-BASED LEARNING
AND CAREER EDUCATION**

AARON BRADLEY
ASSISTANT PROFESSOR

DESIGN, ARTS,
MULTI-DISCIPLINARY
INITIATIVES



Four Fundamentals of Workplace Automation; McKinsey Quarterly (2015)

Jobs lost, jobs gained: What the future of work will mean for jobs, skills, and wages; McKinsey Global Institute (2017)

Cultivating Digital Literacy; Adobe Report (2016)

"The Future of Jobs Employment, Skills and Workforce Strategy for the Fourth Industrial Revolution." World Economic Forum (2016)

New Vision for Education - Unlocking the Potential of Technology"; World Economic Forum (2015)

A scenic landscape featuring a long, curved wooden pier extending from the foreground into a calm, blue lake. The sky is a vibrant blue with scattered white clouds. In the distance, there are low mountains and a small structure on the left. The water reflects the sky and the pier.

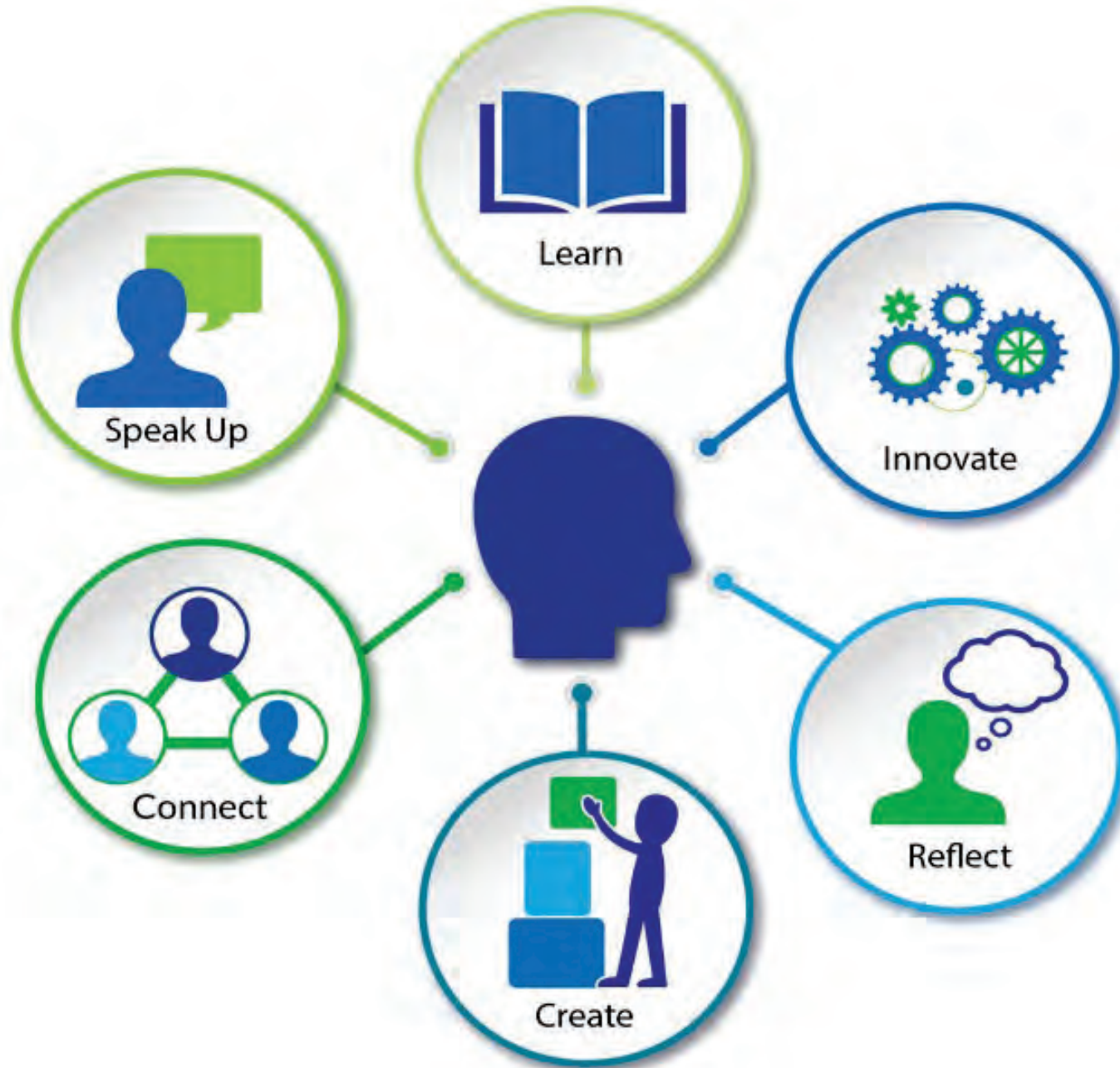
Preparing Future Leaders with the help of Artificial Intelligence

**Dr. Donna Chrobot-Mason
Kristen Campbell
Riley Mayr
Jack Fitzgerald**



**AI will not replace, but will
change, the role of leaders in
organizations**

Traditional Approach to Leadership Education



From Heroic
Individual



To Collective
Leadership

Changes in leadership

- Complex problems
- Collaborative problem-solving
- Managing paradox
- Leadership as a process, not a person
- Leadership anywhere, anytime, from anyone
- Relational property rather than individual ability



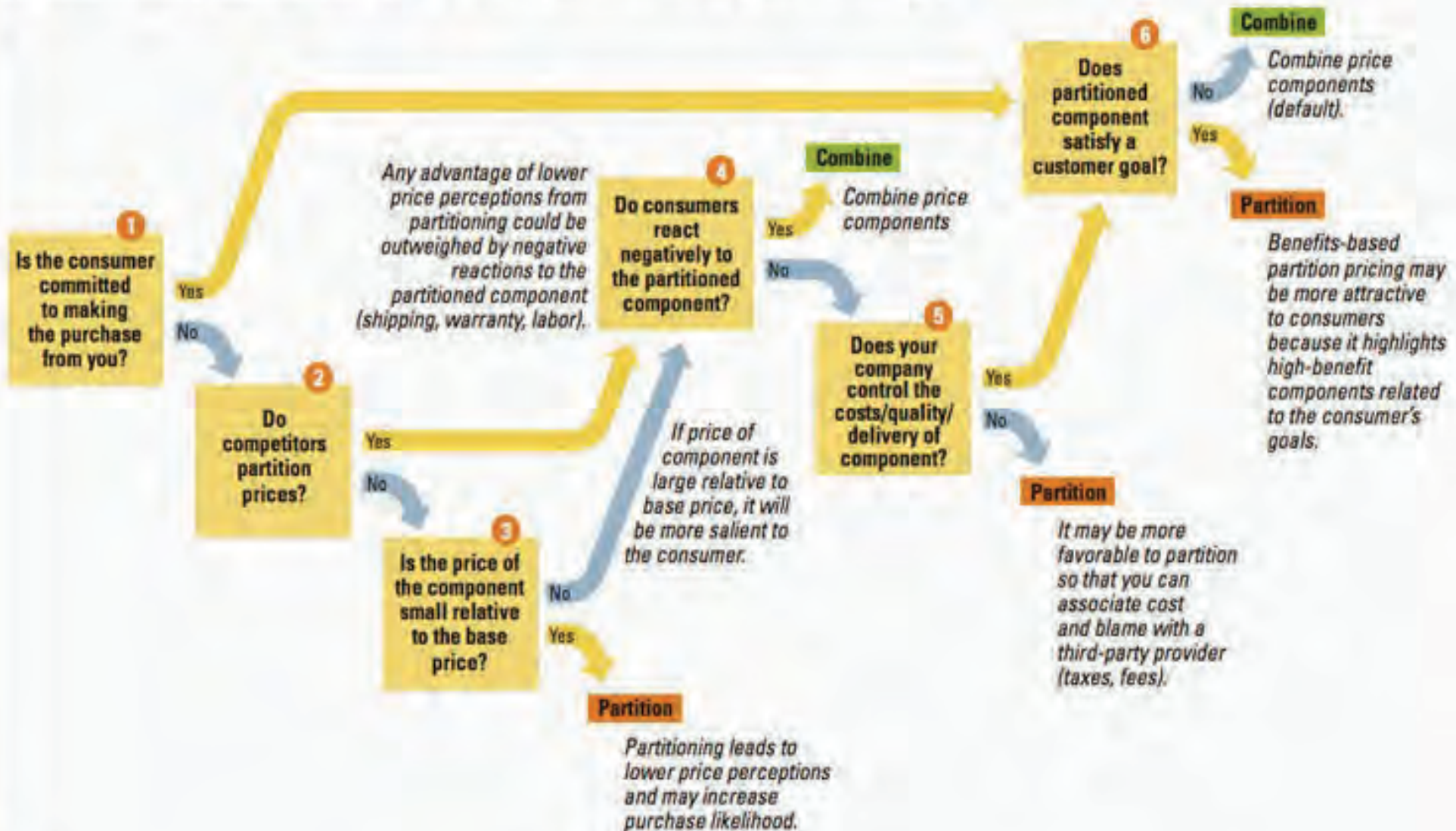
TRUE LEADERS
DON'T CREATE
FOLLOWERS,
THEY CREATE
MORE LEADERS

A word cloud composed of numerous names of varying sizes and orientations, arranged in a triangular shape that tapers downwards. The names are in white and light gray, set against a dark background. The overall shape is roughly triangular, with the base at the top and the point at the bottom.

Future Approach to Leadership Education

DECISION TREE FOR BENEFITS-BASED PARTITIONED PRICING

There are six decision points that can help managers decide whether to partition or separate charges, or combine prices across components. Every case is different, even for similar products offered by the same company.




Feedback Scenario

You are the Director of a small HR department for a manufacturing firm (you manufacture plastic parts for automobiles). You supervise four people and are going to provide feedback to your lowest performer:

- 6 months tenure
- Manages training and development
- Appears disorganized and missed major deadline
- Company-wide safety training program - training materials were not ready as scheduled

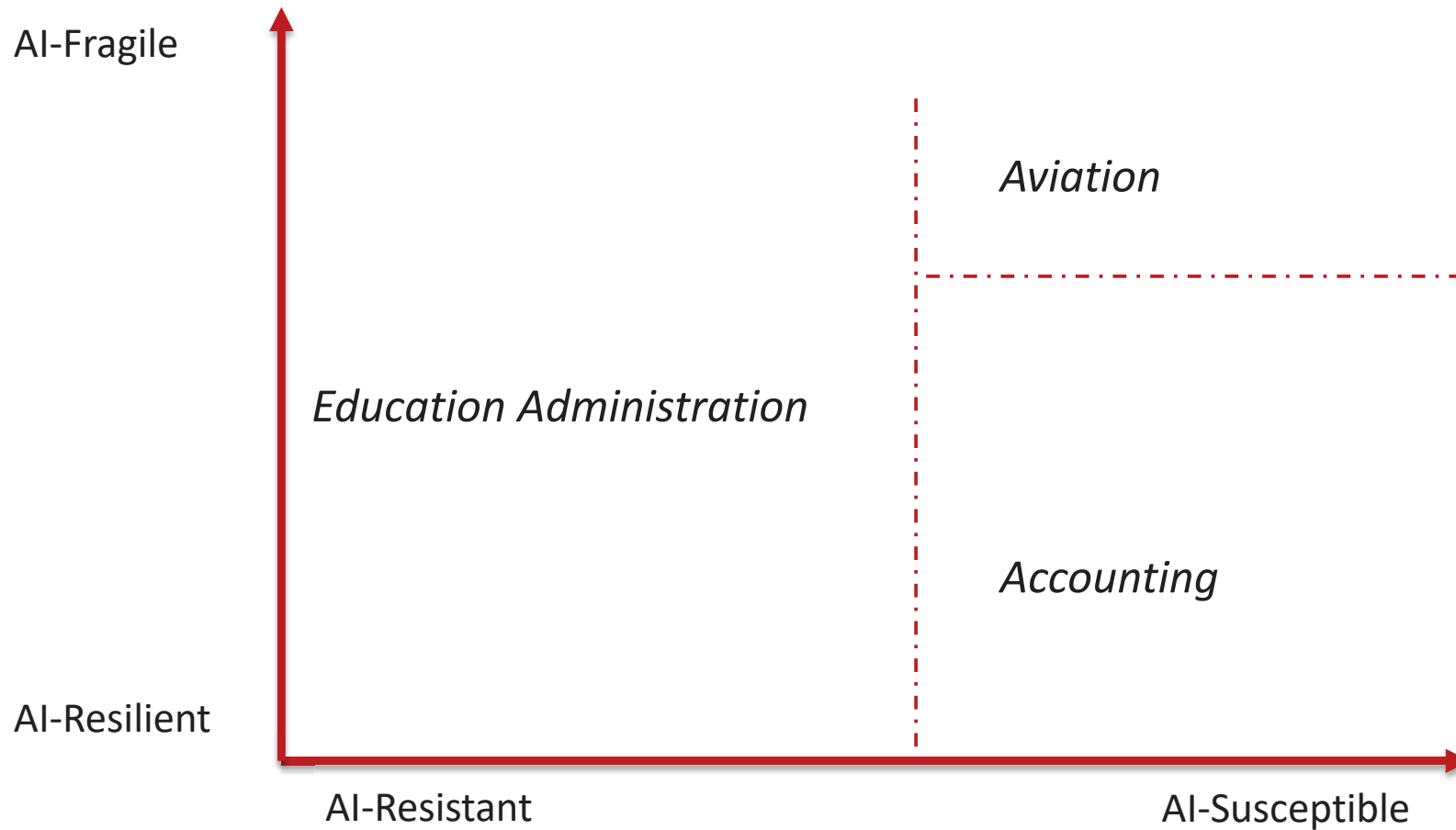
Case Study: Floating Holidays

- **Company Policy**
≡ closed on
Good Friday
 - **Jewish**
employee,
Rachel, comes
to your office to
talk to you
 - **Change Good Friday**
from a paid holiday
to a floating holiday
 - **company gives**
employees **10 days**
off a year for
holidays, three of
which are **Christian**
celebrations
- 

Leadership Adventures using AI

- White Box Decision Tree
- “Choose your own Adventure” Book
- Driven by database of knowledge provided by experts (leaders)
- Use existing cases to create novel cases
- Use AI as a tool to enhance student learning by creating richer more realistic scenarios
- Completely new scenario each time
- Powerful Debrief !!

“Major” Decision



SKILL &
HUMAN
IDENTITY

SOME BAD NEWS,
SOME GOOD

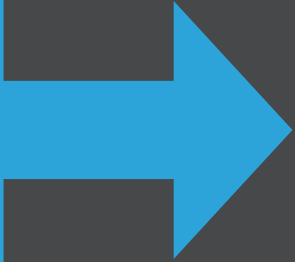
FIRST,
THE BAD
NEWS
(& THE BIG
PICTURE)

1. AI IS ALREADY
SMARTER THAN
US

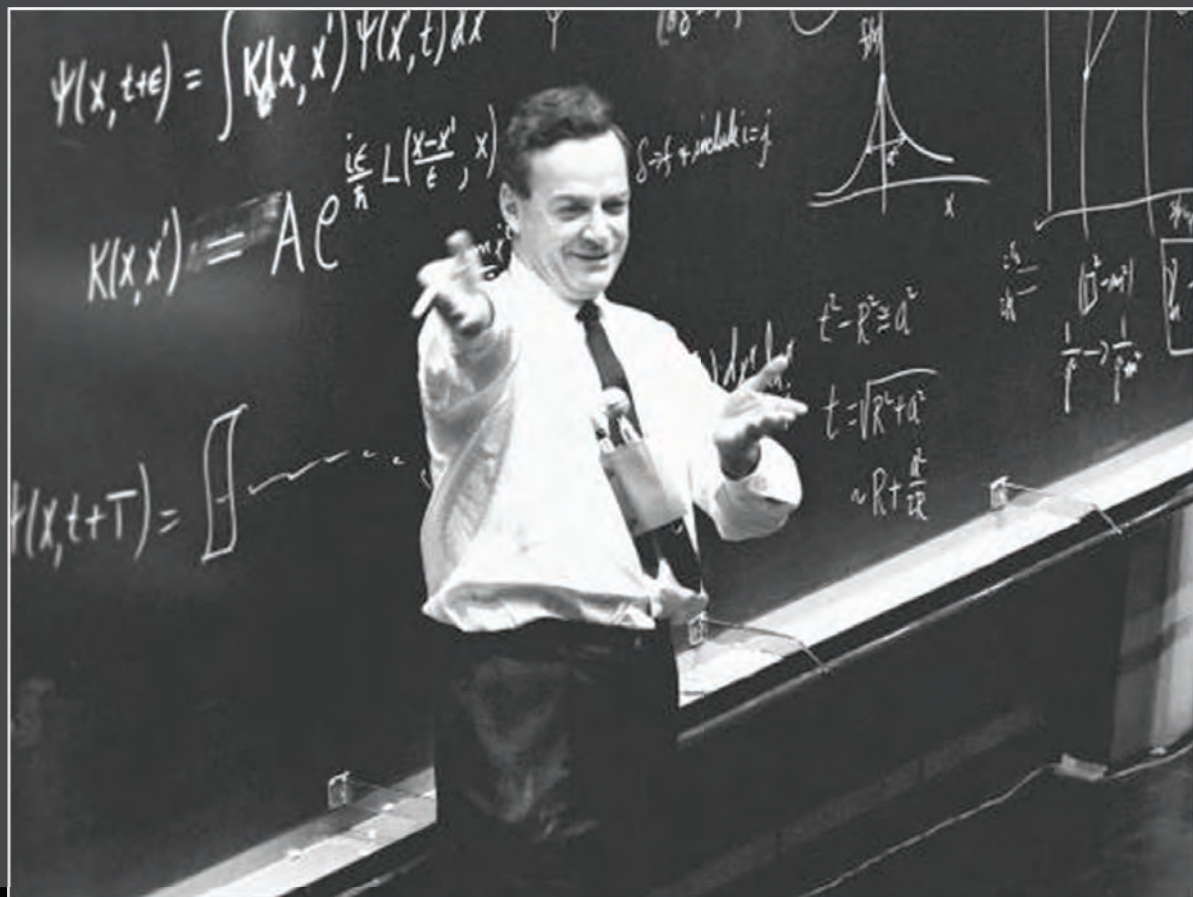
2. IT WILL CHANGE
WHAT IT MEANS
TO BE HUMAN

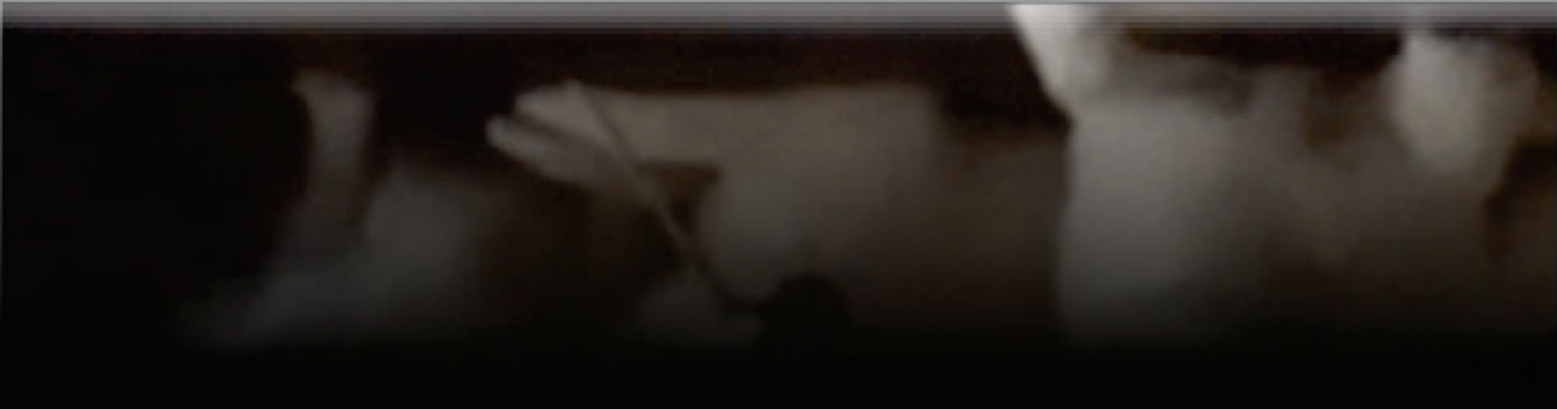
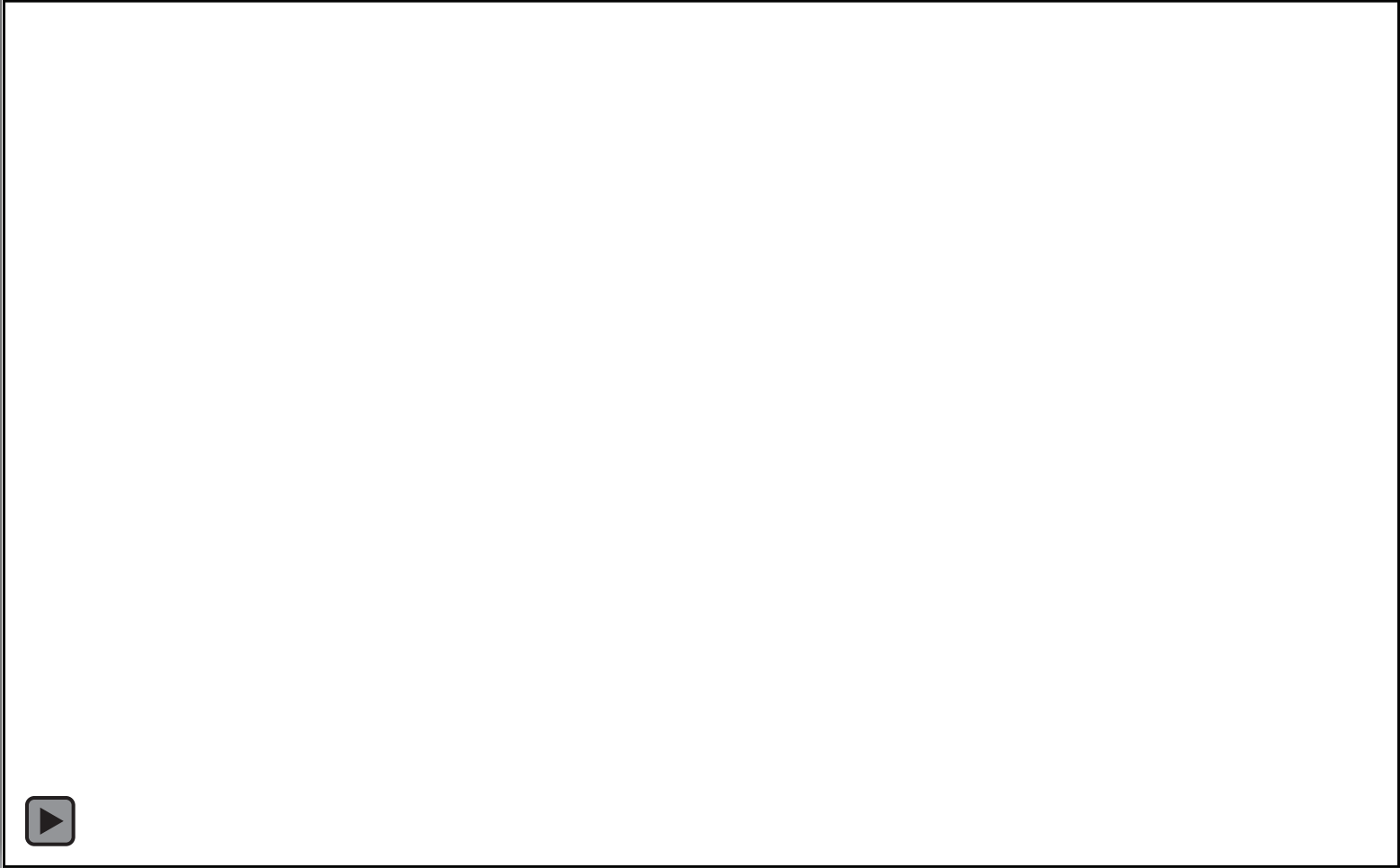
1. AI IS ALREADY
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US

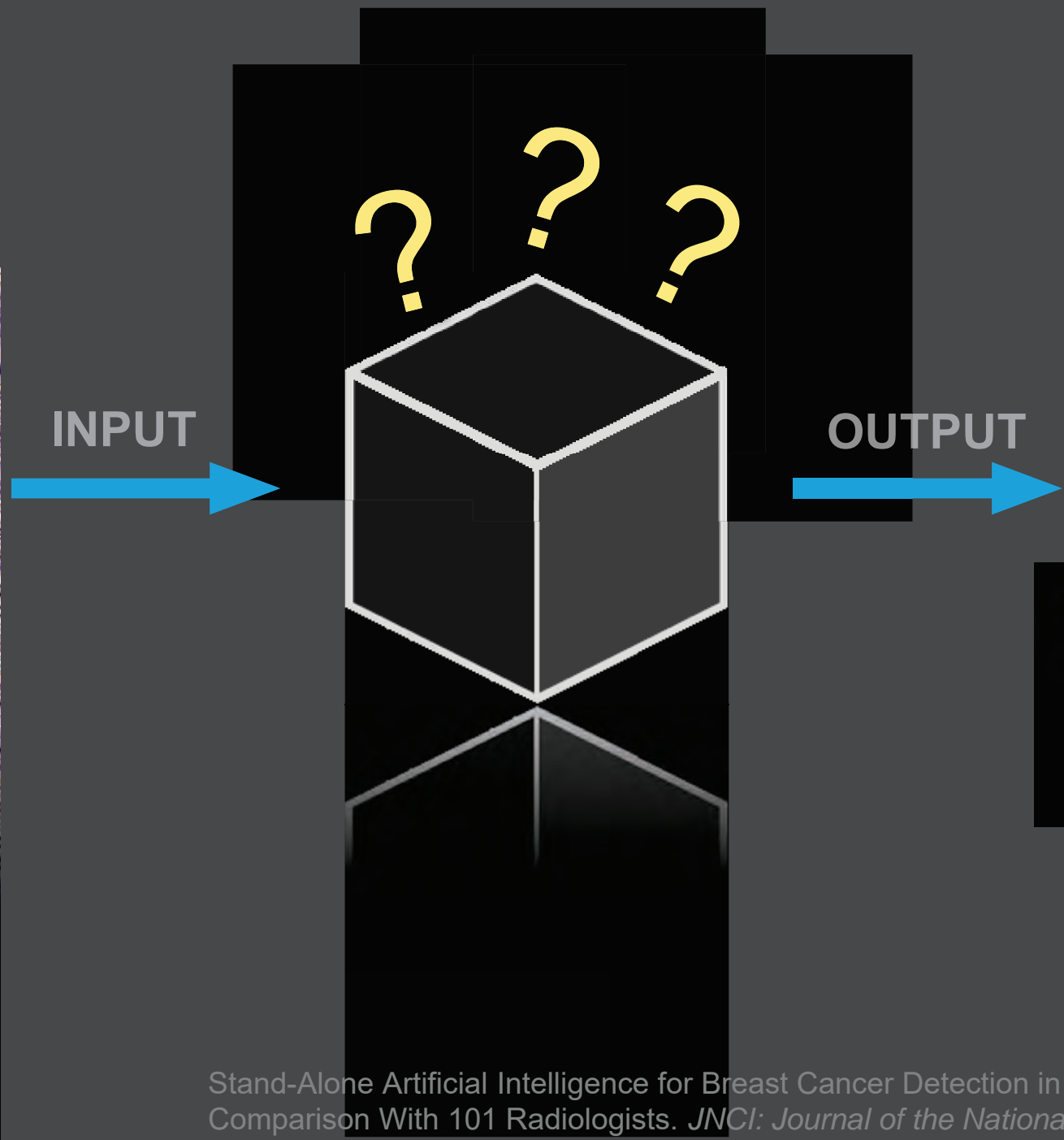
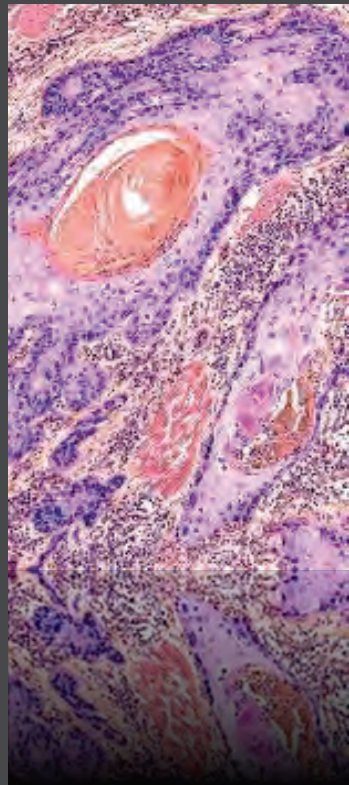
2. IT WILL
CHANGE WHAT
IT MEANS TO
BE HUMAN



EDUCATI
ONAL
STRATE
GIES





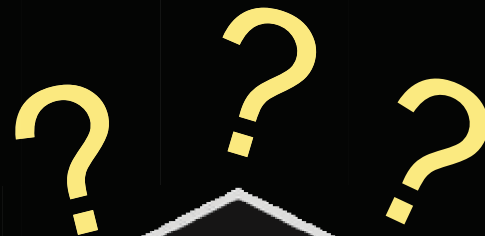


Is it
CANCER?

Stand-Alone Artificial Intelligence for Breast Cancer Detection in Mammography: Comparison With 101 Radiologists. *JNCI: Journal of the National Cancer Institute*, 2019

**DATA +
GOALS**

INPUT



OUTPUT



**AI will
meet
goals
at
superhuman
levels**

levels
superhuman
at

Life-or-Death Algorithms: Avoiding the Black Box of AI in Med

By Thomas Hornigold - D

By Thomas Hornigold - D

nature

International weekly journal of science

Can we open the black box of AI?

Artificial intelligence is everywhere. But before scientists trust it, they first need to understand

THE WALL STREET JOURNAL.

Companies Grapple With AI's Opaque Decision- Making Process

The Rise of Opaque Intelligence

Harvard Journal of Law & Technology
Volume 31, Number 2 Spring 2018

January 20, 2015 at 7:31 am in **Economics, Science**



SCIENTIFIC
AMERICAN.

Subscribe

ENGINEERING

Demystifying the Black Box That Is AI

trusting our security, health and safety to
"intelligent machines"

 Data Driven Investor

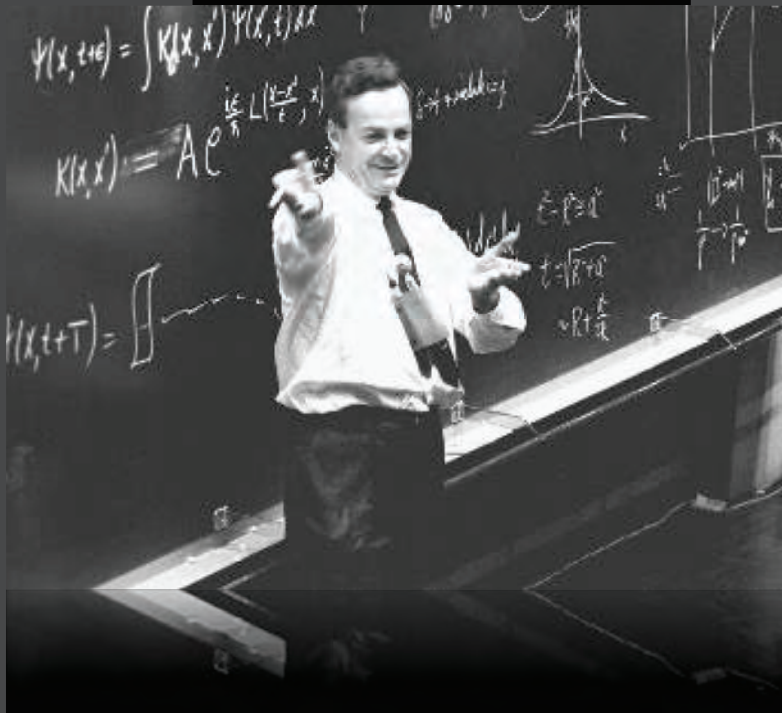
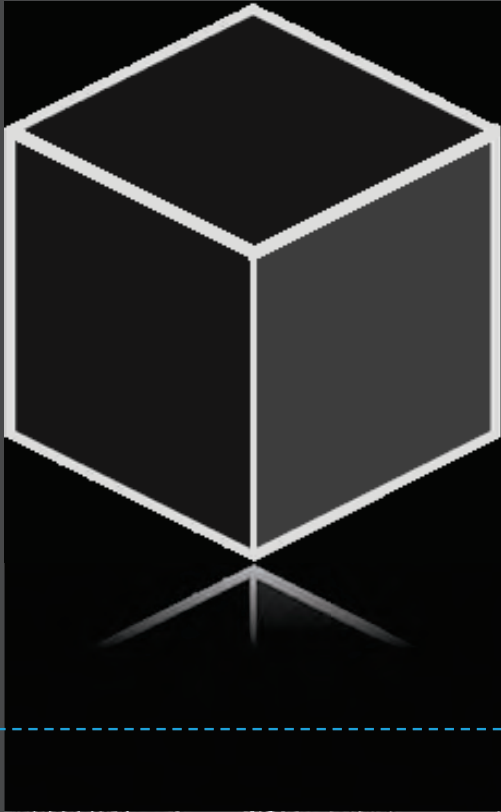
The 'Black Box' Problem of AI

THE ARTIFICIAL INTELLIGENCE BLACK BOX AND FAILURE OF INTENT AND CAUSATION

*Yavar Bathaee**

THE BLACK BOX PROBLEM CLOSES IN ON NEURAL NETWORKS

September 7, 2015 Nicole Hemsoth



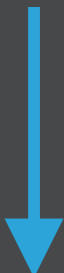
CAPACITIES



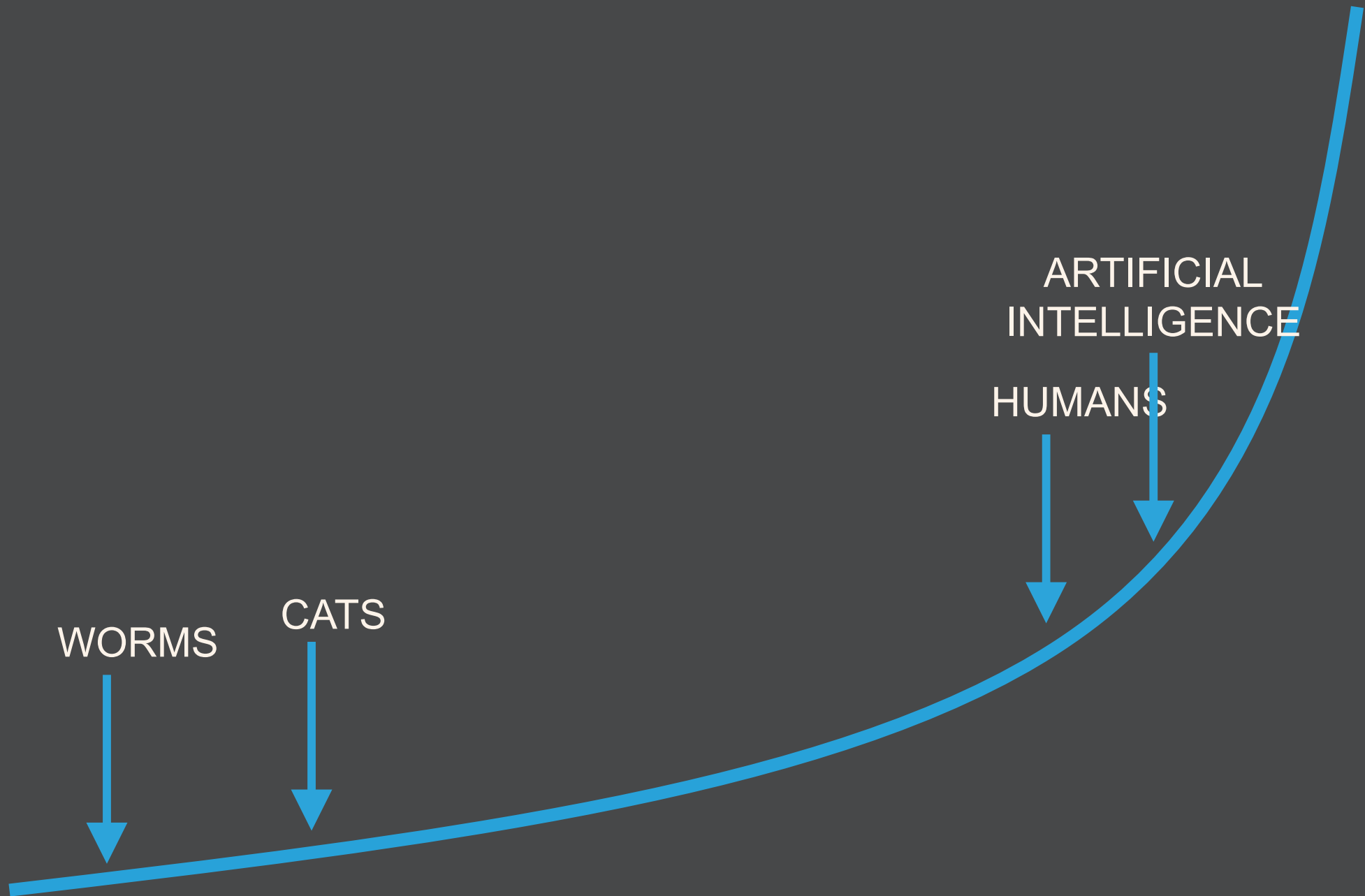
WORMS



CATS



ARTIFICIAL
INTELLIGENCE
HUMANS

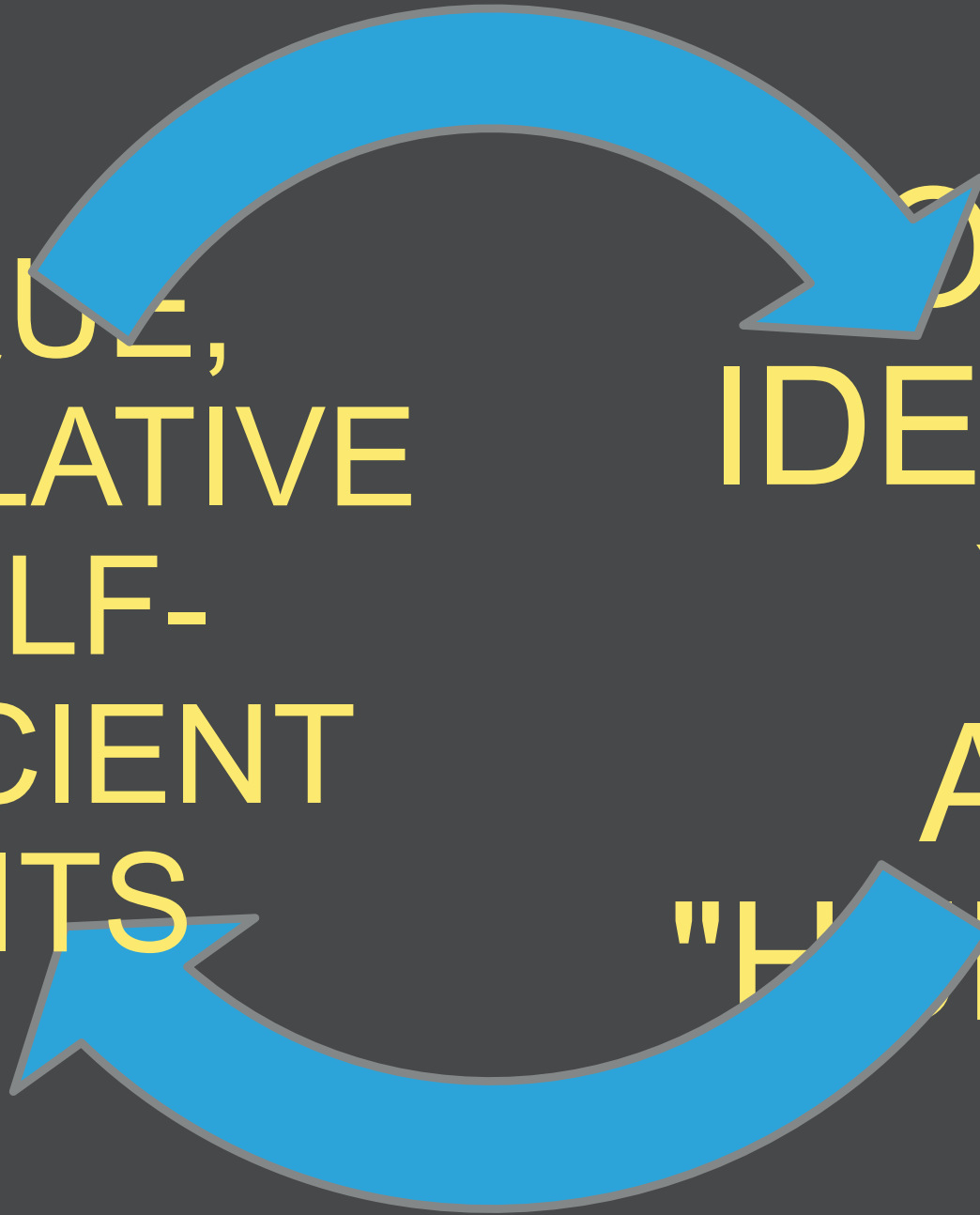


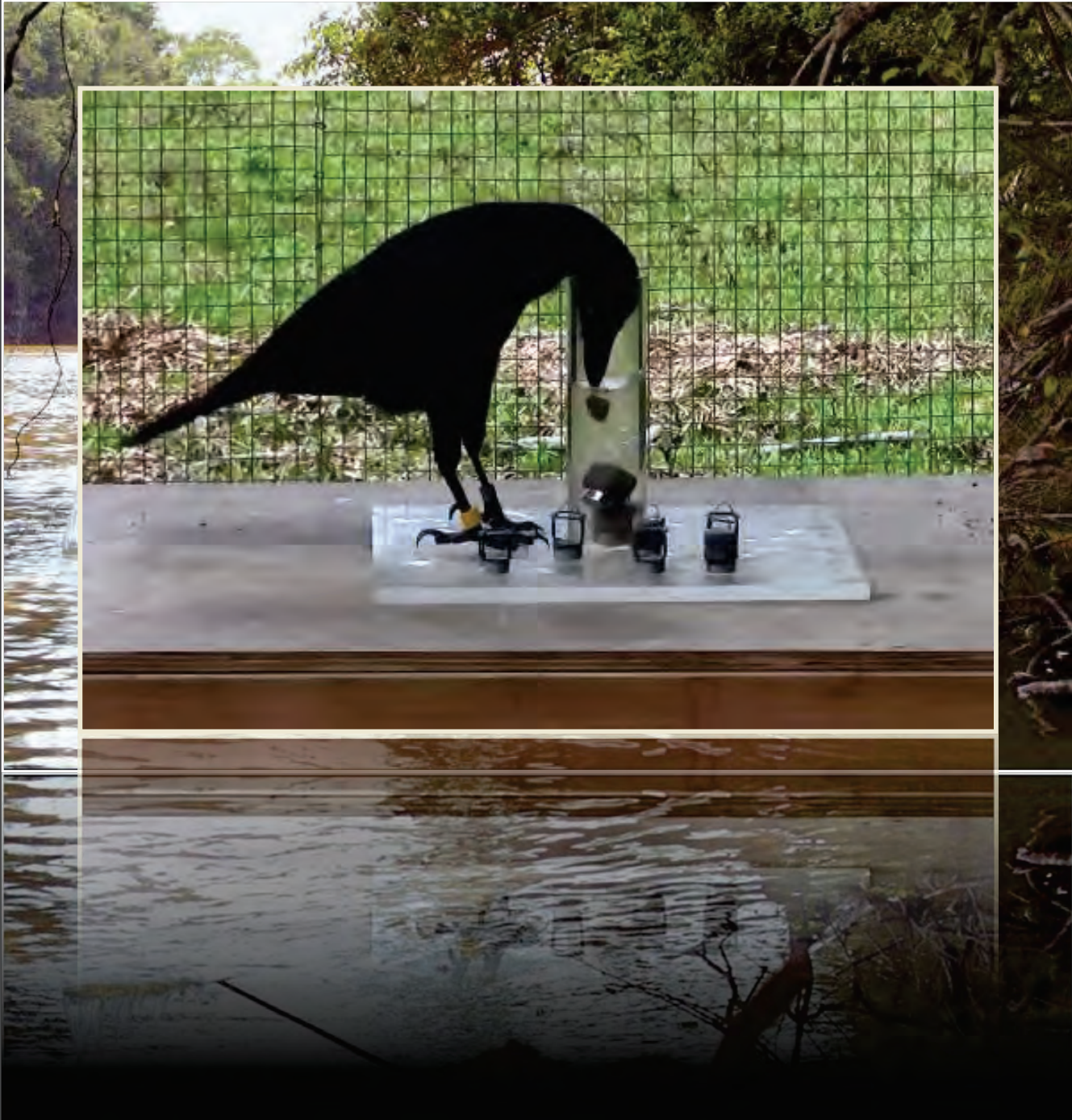
1. AI IS ALREADY
SMARTER THAN
US (AS A SPECIES!)

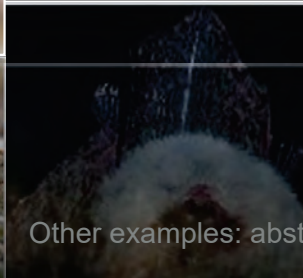
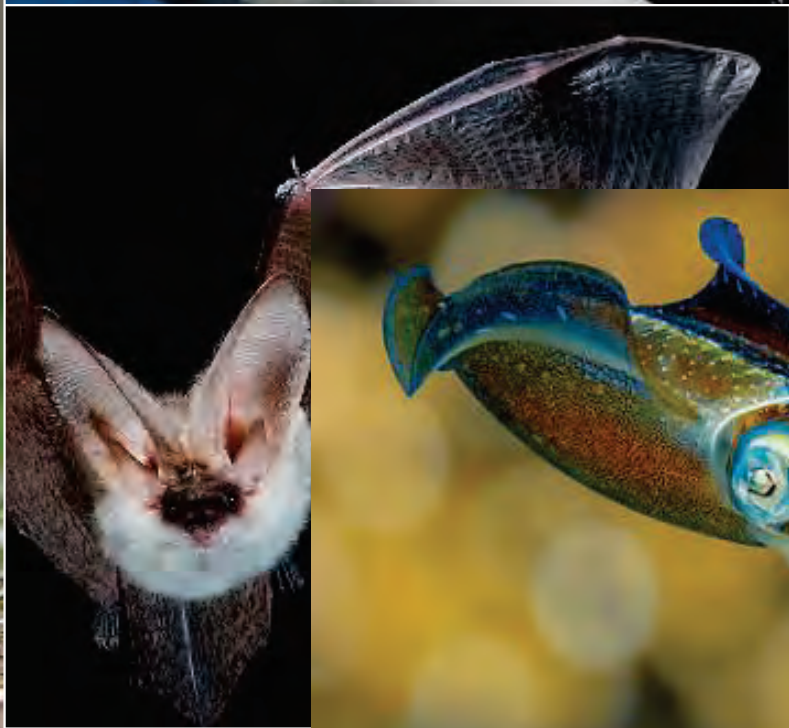
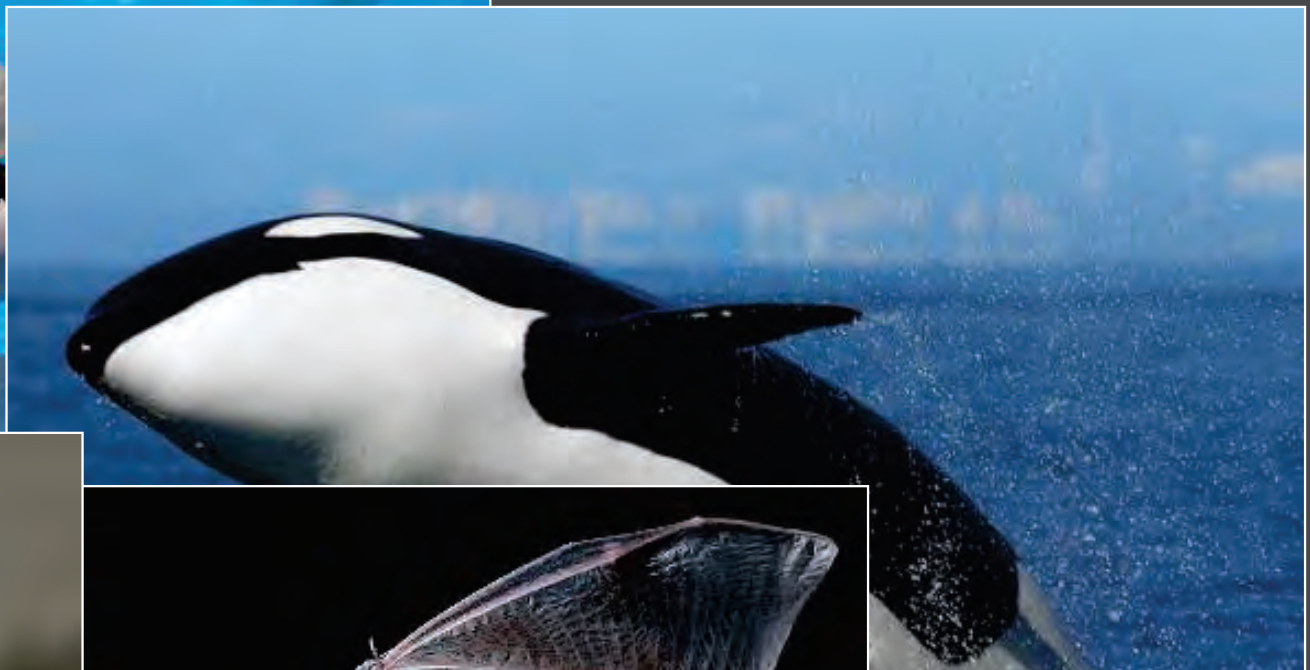
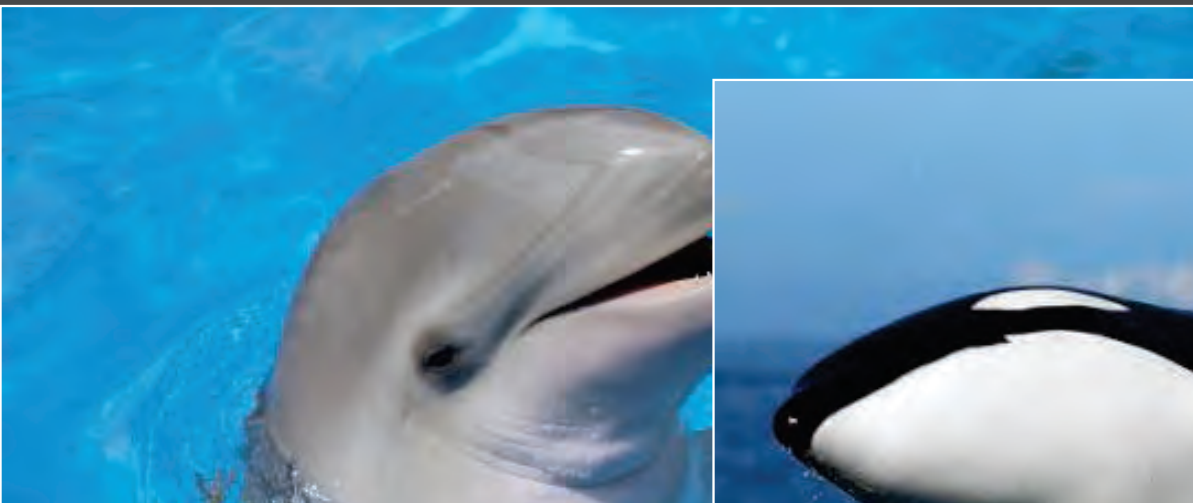
2. IT WILL CHANGE
WHAT IT MEANS
TO BE HUMAN

UNIQUE,
SUPERLATIVE
& SELF-
SUFFICIENT
TRAITS

OUR
IDENTIT
Y
AS
"HUMAN"







Other examples: abstract symbolic thinking, self-analysis, freewill, geocentrism, evolution, etc.

NO ABILITY WILL BE

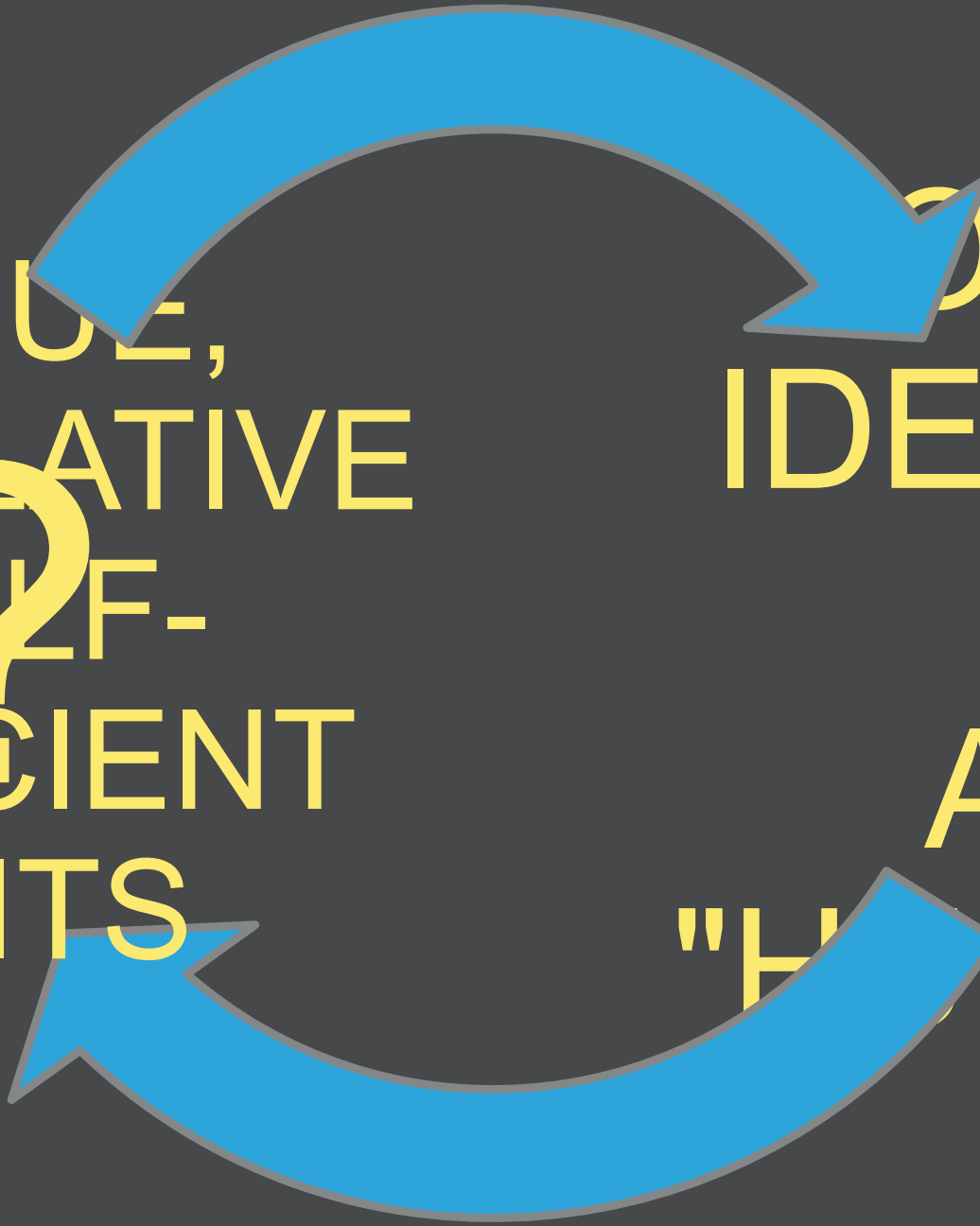
UNIQUE TO US

NONE WILL BE

UNIQUE,
SUPERLATIVE
& SELF-
SUFFICIENT
TRAITS



OUR
IDENTIT
Y
AS
"HUMAN"



THE QUESTION OF EDUCATION
RUNS DEEP.

HOW DO WE PREPARE FOR A
FUTURE WHERE:

EVERY ABILITY IS
REPLACED

THE GOOD NEWS

(HOW TO TEACH
FOR THE FUTURE)

1.

TRANSCEND
FIRST-ORDER
SKILLS

FIRST ORDER SKILLS:

PROGRAMMING, DIAGNOSING
DEPRESSION, MODELLING
PROTEIN FOLDING,
ANALYZING MARKETING
DATA, DESIGNING
MACHINERY, OR
ANY PROBLEM-SOLVING
WHERE THE SOLUTION

MOST
PROBLEM-
SOLVING IS LIKE
THIS!

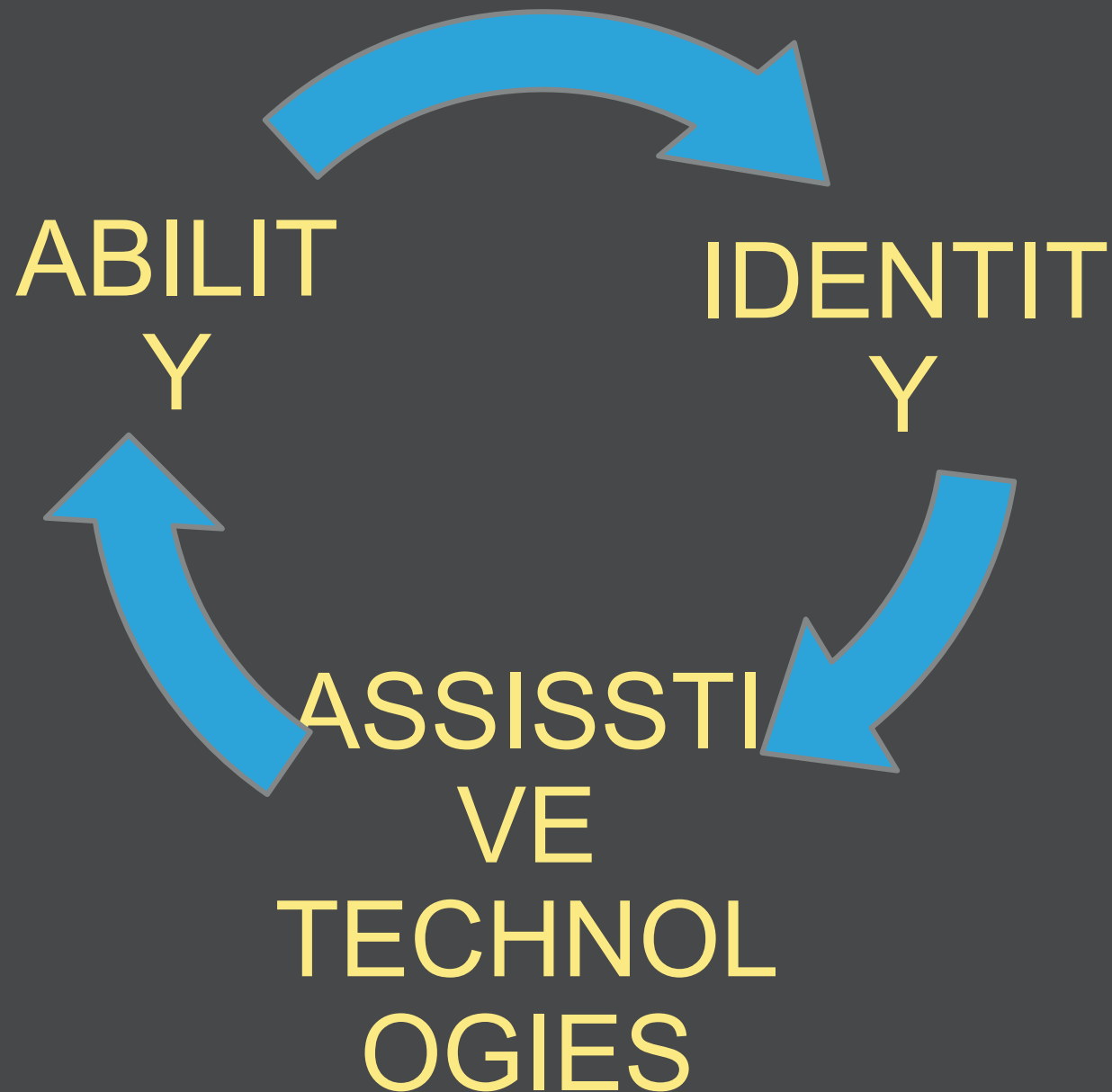
NOT PROBLEM-
SOLVING

BUT PROBLEM-
ARTICULATION
by teaching how to
RECOGNIZE MISALIGNMENTS
IN VALUES, INFORMATION,
PRECEDENTS, & PROSPECTS

2.

HELP STUDENTS
COPE WITH THE
TRANSITION TO A
NEW “HUMANITY”

DISABILITY STUDIES IS ALREADY WORKING ON THIS BY



DSM-V:

... disability involves impairments...
[in] how well an individual copes
with everyday tasks:

- [Includes] skills in language, reading, writing, ... knowledge, and memory.
- self-management in areas such as personal care..., money management... and organizing

What do you
use
for everyday
tasks?

Spellcheck
iPhone/Android
Outlook
Calendar
GPS
Text-search

Braille
Reader
Voice
Generator
Wheelchair
Prostheses

WHAT HAPPENS
WHEN EVERY
ABILITY IS
DELEGATED TO
MACHINES?

(WHEN WE ARE PERMANENTLY AND
INEXTRICABLY RELIANT ON ASSISTIVE
TECHNOLOGY)

WHAT HAPPENS
WHEN EVERY
ABILITY IS
DELEGATED TO
MACHINES?

(WHEN WE ARE PERMANENTLY AND
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TECHNOLOGY)

WHAT HAPPENS
WHEN EVERY
ABILITY IS
DELEGATED TO
MACHINES?

(WHEN WE ARE PERMANENTLY AND
INEXTRICABLY RELIANT!)

DO ALREADY

DISABILITY
STUDIES SHOULD
BE A
CORNERSTONE OF
THE CURRICULUM



Thank you

Image Sources

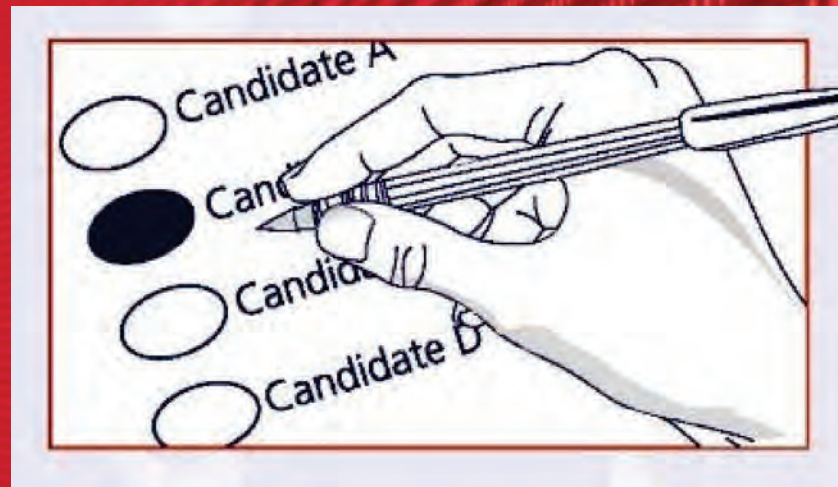
- <http://live.iop-pp01.agh.sleek.net>
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- <http://zimdarsgen564s14.weebly.com/phylogeny.html>

**VOTING COMING
UP!!**



University of
CINCINNATI

Please complete and turn in your ballot for one of the winners of the *UC Talks* competition! Enjoy coffee and a bite while ballots are being counted.



Sign-up for one of the CET&L reading groups on AI

Rising to the Challenge

Provost Kristi Nelson



Kristi Nelson, PhD, is Executive Vice President for Academic Affairs and Provost of the University. She has served UC in many roles, including as Interim Dean of the College of Arts & Sciences, Senior Vice Provost, and Associate Dean for Academic Affairs in the College of DAAP.



Thank you for attending

**Please join your
colleagues for “happy
hour” at Taste of
Belgium, just a few
steps across and up
the street!**



University of
CINCINNATI