

Future Proof Higher Education



wesleyan Higher Education

Trying to predict the future is like trying to drive down a country road at night with no lights while looking out the back window.

Peter Drucker



The rate of change is not going to slow down anytime soon. If anything, competition in most industries will probably speed up even more in the next few decades.

John Kotter, Harvard



Two Ways to Future Proof Your Institution



Urgency for change and
focus on emerging trends



Approach change with a
dual transformation mindset



Three Ways to Future Proof Your Institution



Urgency for change and
focus on emerging trends

A culture's
natural state is
status quo.

Bureaucracies in particular crave predictability,
stability, and control.

Four Shifting Plates in the US



Wealth Distribution

Declining Birth
Rates

Growing
Ideological Divide

Pace of Learning
in Society



Can We Afford Not to Change Given the Speed of Technological Advances



What were you doing
10 - 15 years ago?

What technologies
were you using?



Here is what you were **NOT** doing:

Listening to music on your iPod

Googling anything

Texting someone

Reading your email or taking a picture
on your smart phone

Finding directions through GPS

Asking Siri and Alexa questions like:
do you love me?

A large, dense crowd of people is gathered in a city street at night. The crowd is viewed from behind, filling the street and extending into the distance. The street is illuminated by warm, yellowish streetlights. In the background, there are buildings with lit windows and some palm trees. A few people in the foreground are looking towards the camera or holding up phones. The overall atmosphere is one of a large-scale event or gathering.

2005, BEFORE the 2010 threshold

2013, AFTER the 2010 threshold



Three Waves of the Internet

Web 1.0 Content & Information

1997

Southwest Airlines Home Gate

The Home of Southwest Airlines on the World Wide Web

Updated December 19, 1997

[Enter our contest to win a free Super BowlTM trip for you and two friends.](#)

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Three Waves of the Internet

Web 1.0
Content & Information



Three Waves of the Internet

Web 1.0 Content & Information



Google

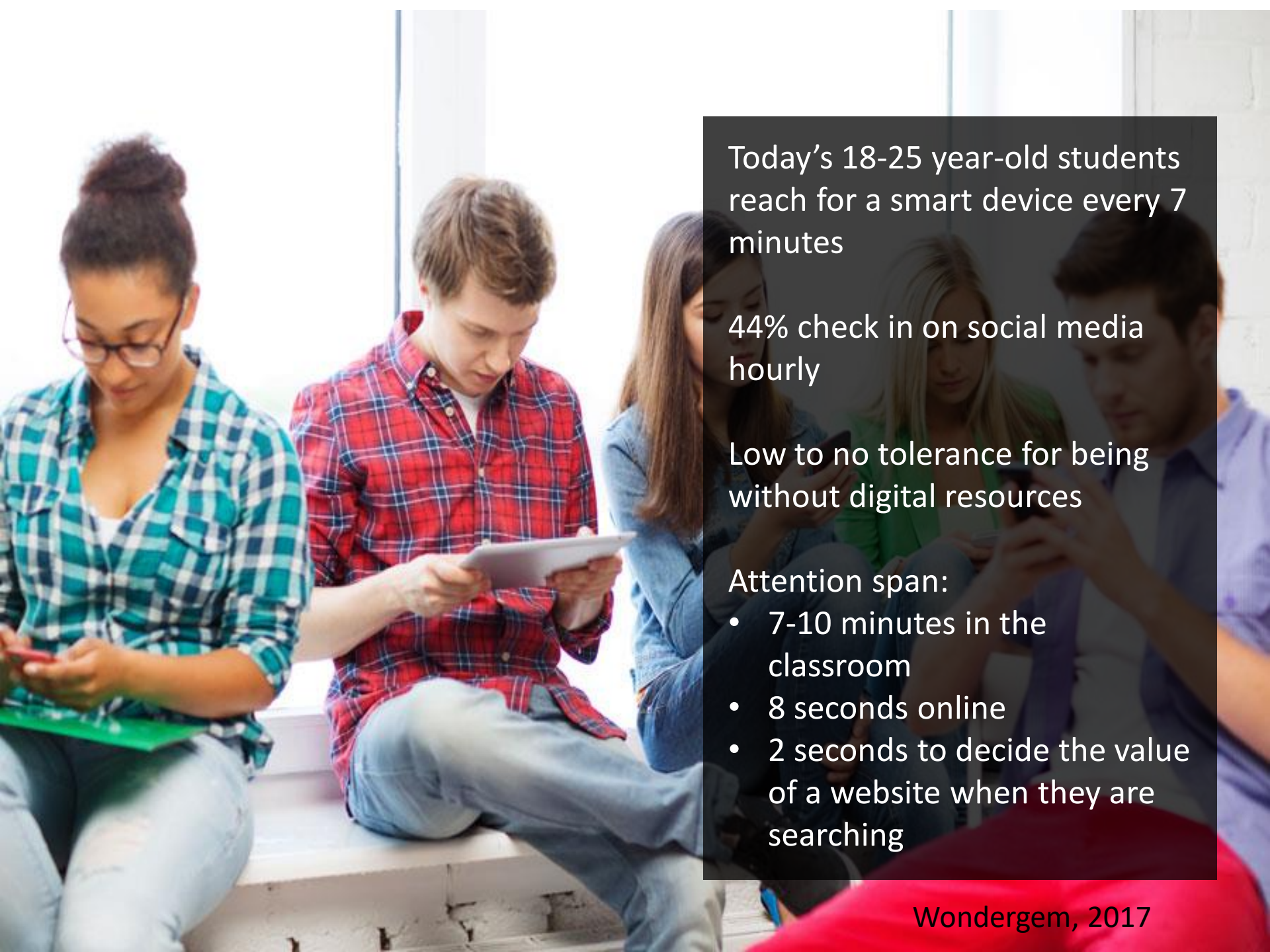
Google Search

I'm Feeling Lucky

Web 2.0 Social Media



Web 3.0 Personalization and Data Accumulation and Prediction



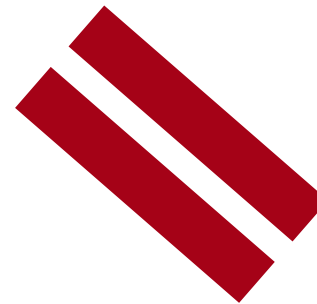
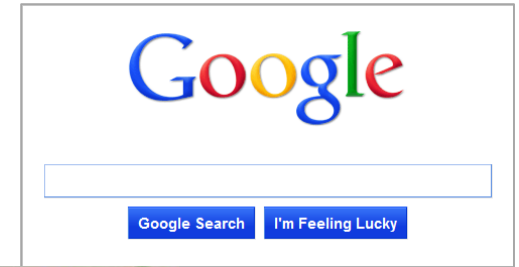
Today's 18-25 year-old students reach for a smart device every 7 minutes

44% check in on social media hourly

Low to no tolerance for being without digital resources

Attention span:

- 7-10 minutes in the classroom
- 8 seconds online
- 2 seconds to decide the value of a website when they are searching



BIG DATA

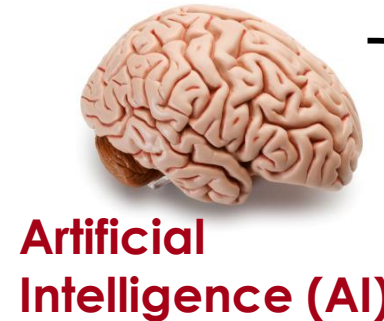


Now What?

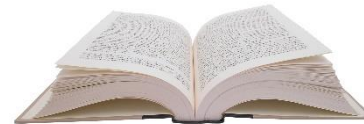


= Big Data

Greater Capacity
to Store Large
Quantities of Data



**Computer
Learning**

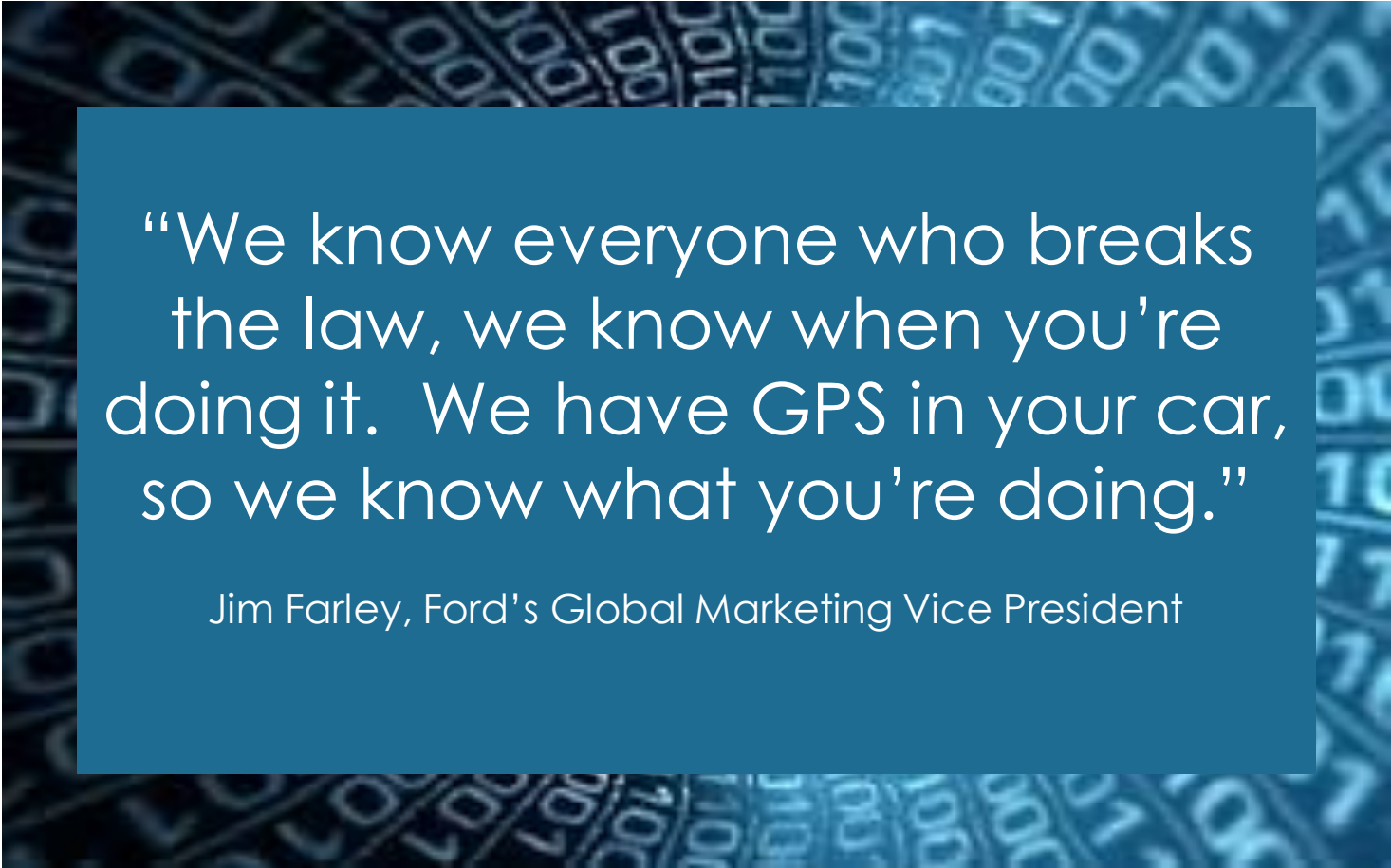


**Better
Predictive
Abilities**

**Next
Generation
Robotics**

New Era of Data

- . “Ninety percent of the world’s data has been generated over the last two years”
(Science Daily, 2013)

The background of the slide features a dark blue field with a pattern of light blue binary code (0s and 1s) arranged in a grid-like fashion. Overlaid on this is a solid blue rectangular box containing white text.

“We know everyone who breaks the law, we know when you’re doing it. We have GPS in your car, so we know what you’re doing.”

Jim Farley, Ford’s Global Marketing Vice President

The background of the slide features a dark blue field with a pattern of glowing, slightly blurred binary digits (0s and 1s) in a lighter blue color, creating a sense of digital data flow. Overlaid on this is a solid, medium-blue rectangular box that serves as a container for the main text.

**New Era of Big Data, Artificial
Intelligence, Machine
Learning is already reshaping
our lives in ways we don't
even recognize.**

Examples of the Impact of Artificial Intelligence

Amazon

Learns and predicts your preferences

Plans to ship products to us before we even know we need them.

Google

Has a tremendous amount of data on our preferences through our search history

Netflix

Analyzes billions of records to suggest films that you might like based on your previous reactions and choices of films.

Banking

Fraud detection

Nest, Siri, and Alexa – most technologies are collecting data on us.



Arizona State University

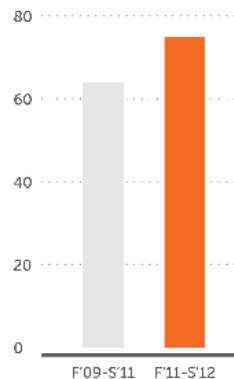
When Arizona State University started using Knewton-powered developmental math courses, pass rates rose by 17%, course withdrawals dropped by 56%, and 45% of students finished four weeks early.

Source: ASU evaluation

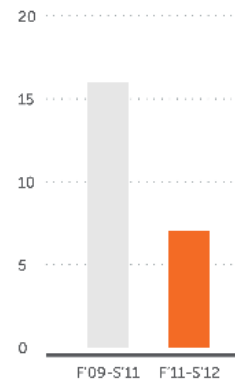


Adaptive Learning

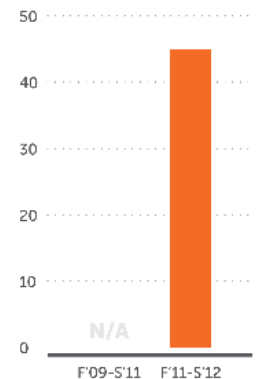
Pass Rate
17% increase



Withdrawal Rate
More than halved



Early Completion Rate
Finished 4 weeks earlier





Problem: Low retention rates for Hispanic men

Civitas: Low retention rates for Hispanic men who are from four major zip codes and take college Algebra in their first semester.

GPA Findings: First Year and Post First Year Departure

62 (ALL) Institutions			
	GPA < 2.0	2.0 - 3.0 GPA	> 3.0 GPA
FIRST YEAR			
	34%	21%	45%
POST FIRST-YEAR			
	18%	38%	44%

30 Community Colleges			
	GPA < 2.0	2.0 - 3.0 GPA	> 3.0 GPA
FIRST-YEAR			
	32%	20%	48%
POST FIRST YEAR			
	18%	38%	44%

32 4-Year Institutions			
	GPA < 2.0	2.0 - 3.0 GPA	> 3.0 GPA
FIRST-YEAR			
	36%	22%	42%
POST FIRST-YEAR			
	17%	40%	43%

16 Research Institutions			
	GPA < 2.0	2.0 - 3.0 GPA	> 3.0 GPA
FIRST-YEAR			
	33%	27%	40%
POST FIRST-YEAR			
	17%	41%	42%

39 Access Institutions			
	GPA < 2.0	2.0 - 3.0 GPA	> 3.0 GPA
FIRST YEAR			
	34%	19%	47%
POST FIRST-YEAR			
	18%	37%	45%

23 Selective Institutions			
	GPA < 2.0	2.0 - 3.0 GPA	> 3.0 GPA
FIRST-YEAR			
	34%	26%	40%
POST FIRST YEAR			
	18%	42%	40%

16 Online Programs			
	GPA < 2.0	2.0 - 3.0 GPA	> 3.0 GPA
FIRST-YEAR			
	32%	18%	50%
POST FIRST-YEAR			
	14%	34%	52%

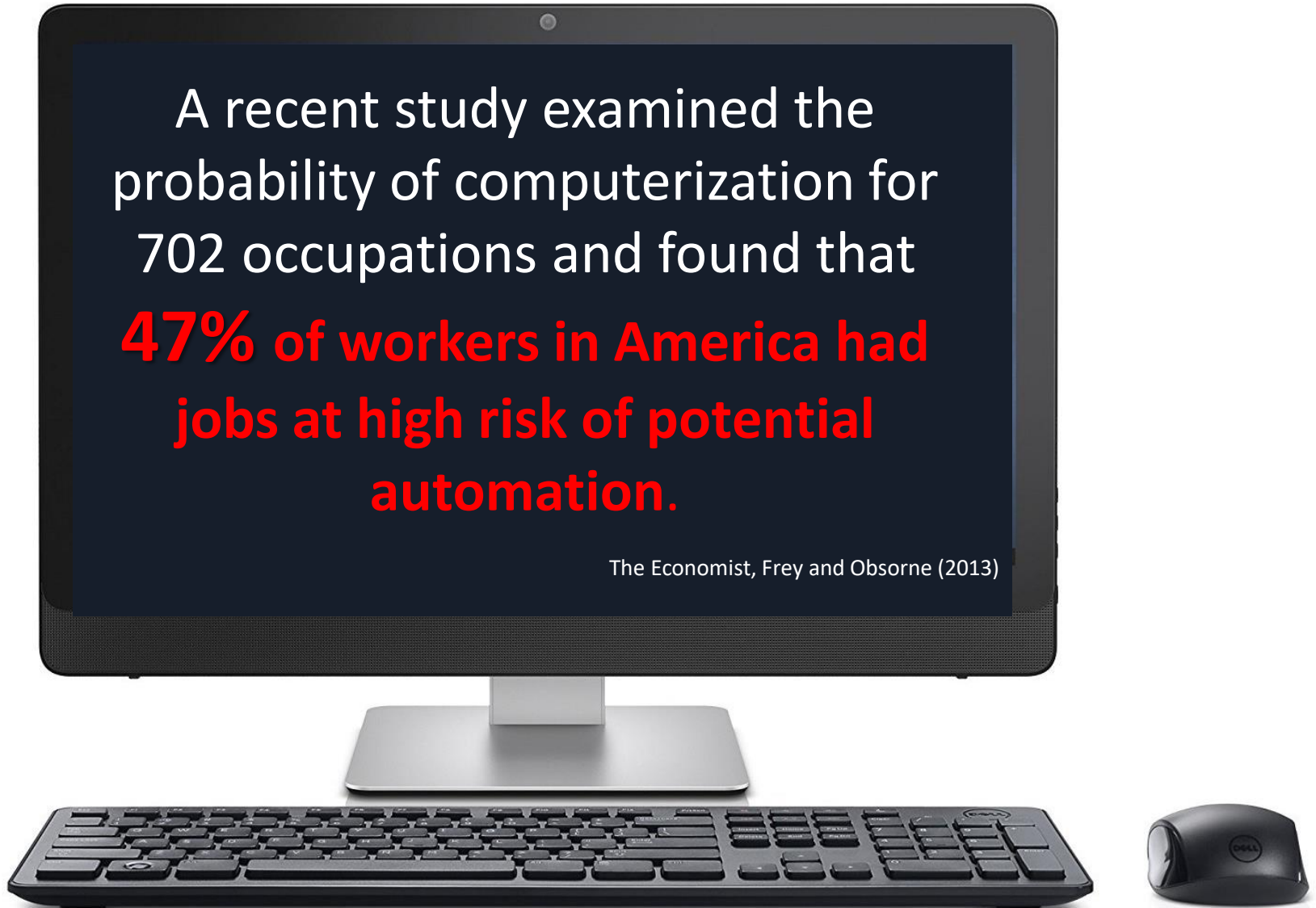
59 On-Ground Programs			
	GPA < 2.0	2.0 - 3.0 GPA	> 3.0 GPA
FIRST-YEAR			
	34%	22%	44%
POST FIRST-YEAR			
	19%	40%	41%

Better Decision
Making

Changing Workforce Demands

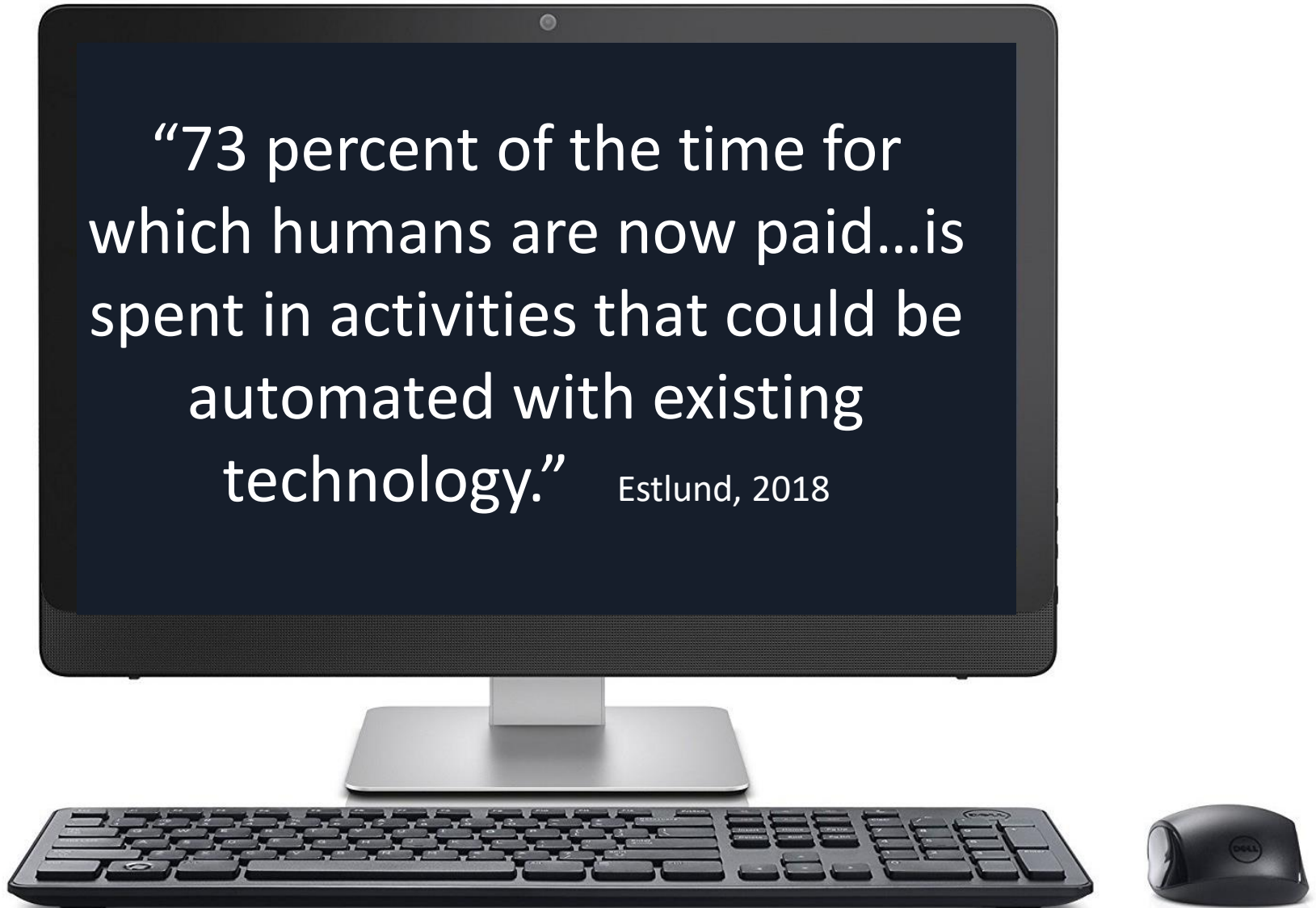
A recent study examined the probability of computerization for 702 occupations and found that **47% of workers in America had jobs at high risk of potential automation.**

The Economist, Frey and Osborne (2013)



Changing Workforce Demands

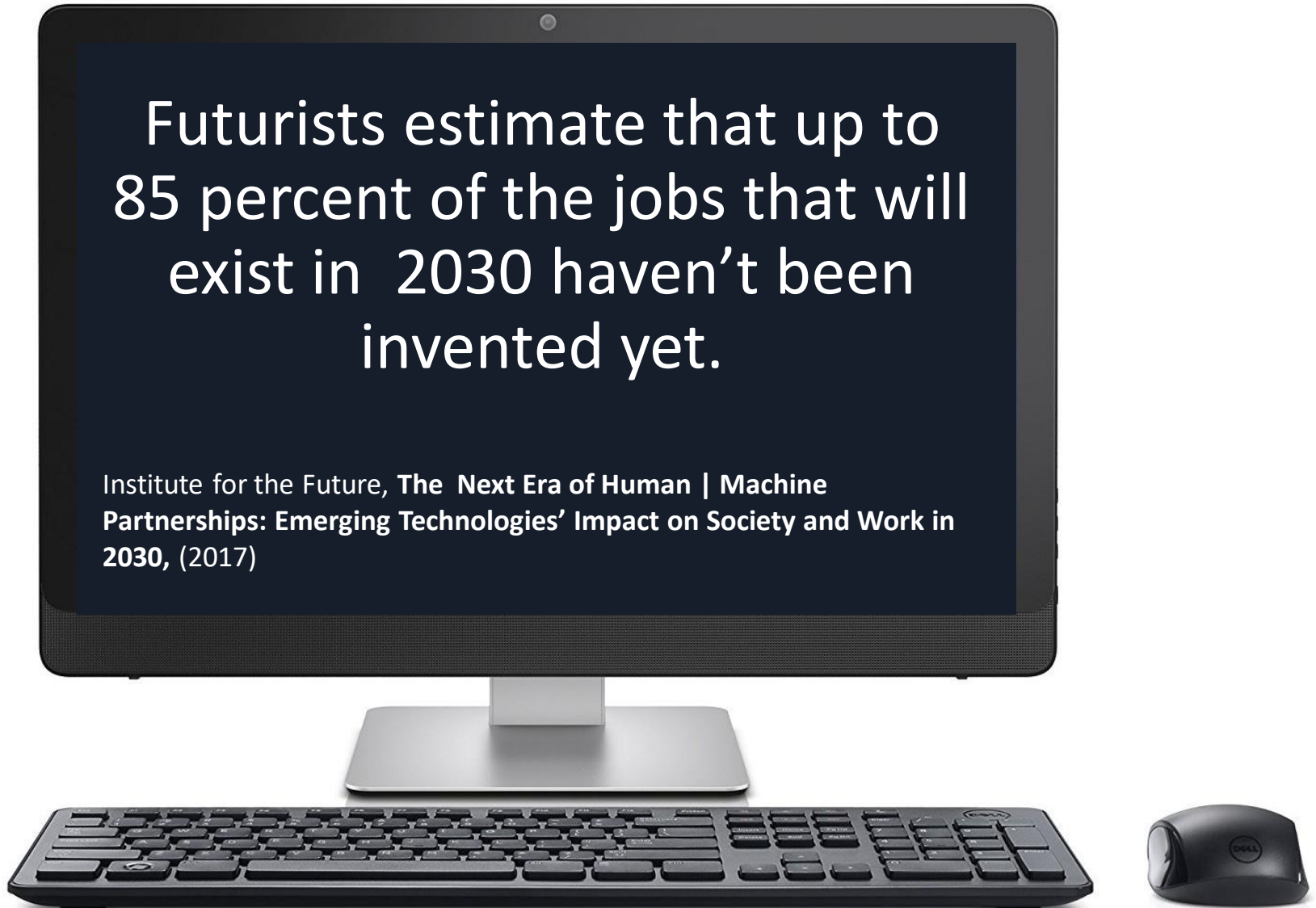
“73 percent of the time for which humans are now paid...is spent in activities that could be automated with existing technology.” Estlund, 2018



Changing Workforce Demands


Futurists estimate that up to 85 percent of the jobs that will exist in 2030 haven't been invented yet.

Institute for the Future, **The Next Era of Human | Machine Partnerships: Emerging Technologies' Impact on Society and Work in 2030**, (2017)





We are preparing students for a world we
can't imagine!



Irrelevance happens when the
speed of change outside an
organization is greater than speed
of change inside an organization.

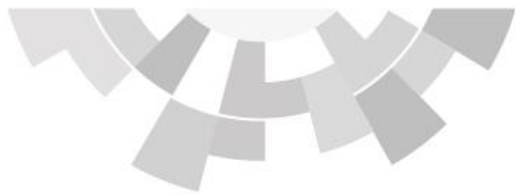
Rick Warren

“ quote fancy

Two Ways to Future Proof Your Institution



Urgency for change and
focus on emerging trends



Approach change with a
dual transformation mindset



Approach change with a dual transformation mindset



Transformation A: Repositioning an institution to maximize its resilience by challenging long-held assumptions and improving its agility



Transformation B: Creating new growth engines by creating entities focused on accelerating new ideas and initiatives



Capabilities link: Taking advantage of difficult-to-replicate assets

Approach change with a dual transformation mindset

At your tables,

Do you need two separate entities to create both types of change?

Is it better to try and change the existing culture or to create a new one?

Is it vital for consistency of brand for academic decisions to be made by the same faculty governing board?



<https://www.youtube.com/watch?v=MFzDaBzBIL0>



Transformation A: Repositioning an institution to maximize its resilience by challenging long-held assumptions and improving its agility

Extremely difficult to challenge long-held assumptions because they become “sacred” and the “best way to do things” - “If it’s not broken don’t fix it.”

Quakers ask a question when in a disagreement – are you arguing out of preference or conviction? We often make most things convictions when they are really preferences.

Also, hard to challenge long-held assumptions because they are taken for granted.



Transformation A: Repositioning an institution to maximize its resilience by challenging long-held assumptions and improving its agility

To future-proof our institutions we must go beyond surface technical changes to explore our deeply held assumptions.

Assumptions that guide the liberal arts curriculum.

The liberal arts and professional programs are incompatible.

Incoming students should primarily take general education requirements their first two years.

General education is best taught in single three – unit classes by a faculty member with expertise in that discipline.



Assumptions that guide the liberal arts curriculum.

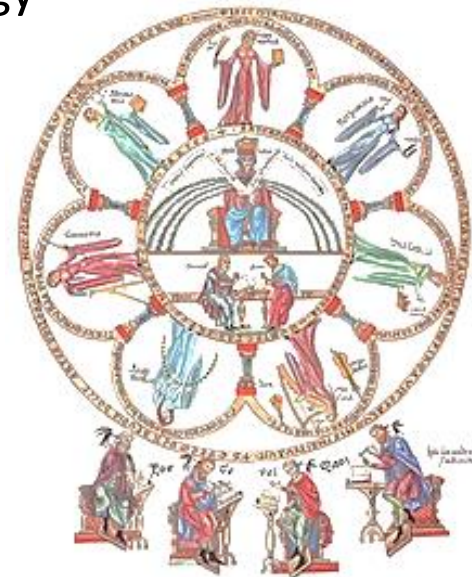
What if?

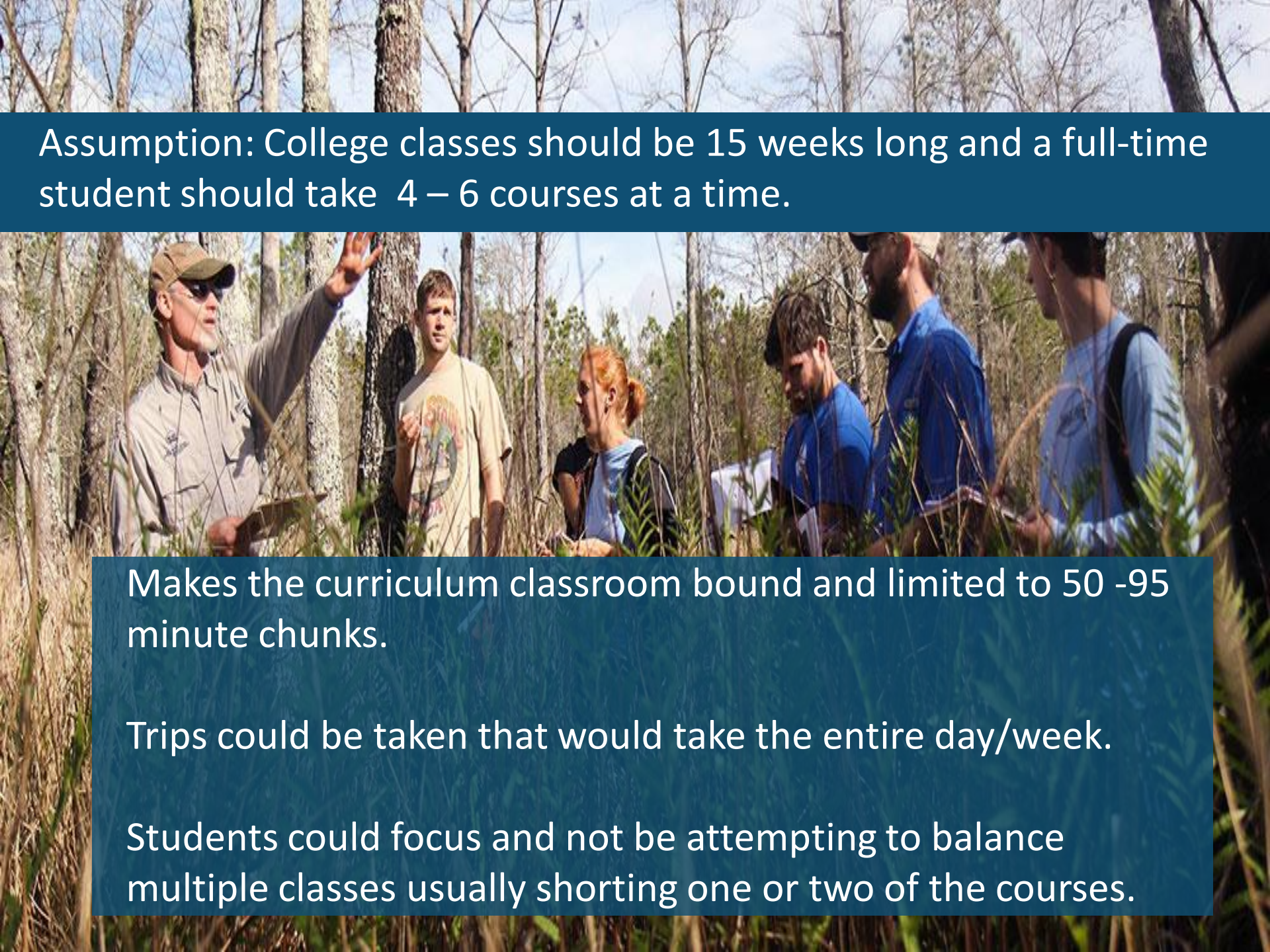
Two classes were team taught by faculty from various disciplines.

Introduction to Digital Media and Ethics of Technology
“What is truth online?”

Introduction to 21st Century Criminal Justice and
the History of Justice in American and Its
Relationship to the Christian Faith

We desperately need greater coherence in our general
education requirements.



A photograph of a group of people in a forest. On the left, a man wearing a cap and sunglasses points his right hand towards the trees. He is holding a clipboard. Next to him is a young man in a t-shirt. To the right, a woman with red hair is looking towards the man. Further right, two more men are visible, one in a blue shirt and another in a light blue shirt. They are all standing in a wooded area with many trees and some undergrowth.

Assumption: College classes should be 15 weeks long and a full-time student should take 4 – 6 courses at a time.

Makes the curriculum classroom bound and limited to 50 -95 minute chunks.

Trips could be taken that would take the entire day/week.

Students could focus and not be attempting to balance multiple classes usually shorting one or two of the courses.

Faculty loads should be determined primarily by the number of courses taught.

Most faculty teach four classes a semester.

Some teach classes with 30 – 50 students.

Others teach seminars with 10-12 students.

Some teach first-year high risk classes who don't know the first thing about being successful in class.

Others teach senior seminars with students who have found ways to be success in college.

Is this fair? Is this a good business model?

Faculty loads should be determined primarily by the number of courses taught.

Many faculty are on 12-month salaries without any summer responsibilities. The rationale is that we get paid less. Yet, that is not often true when you are competing for qualified PhD's. The market drives salaries not work load.

Research hours and sabbaticals are often given with little accountability for productivity.

Is this fair? Is this a good business model?

At your table

Discuss the assumptions, beliefs, and values that shape your institution that should be reconsidered given our changing world?

Approach change with a dual transformation mindset



Transformation A: Repositioning an institution to maximize its resilience by challenging long-held assumptions and improving its agility

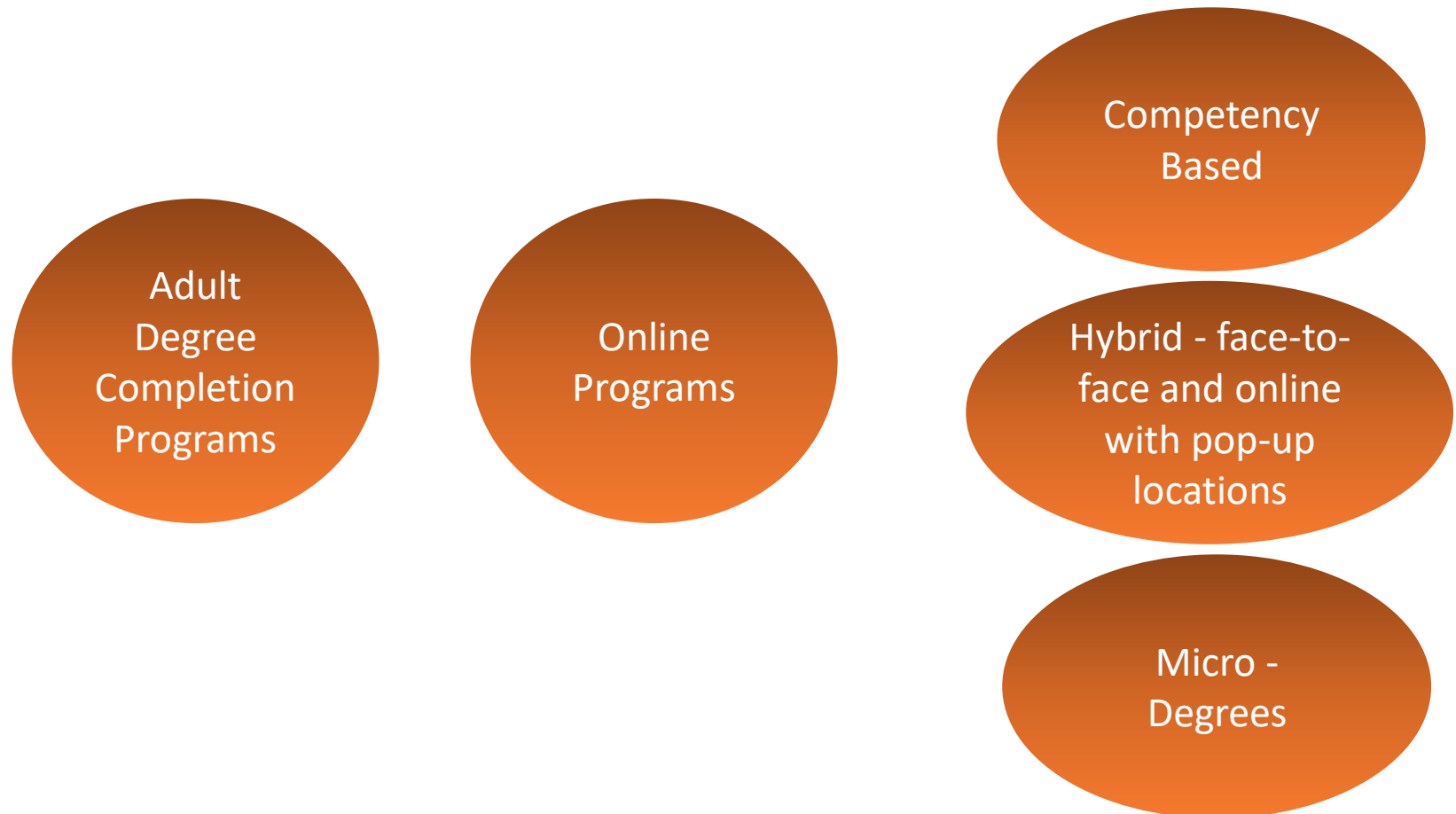


Transformation B: Creating new growth engines by creating entities focused on accelerating new ideas and initiatives



Capabilities link: Taking advantage of difficult-to-replicate assets

Transformation B: Creating new growth engines by creating entities focused on accelerating new ideas and initiatives



Transformation B Requires

New spaces, resources, and attention given to innovative initiatives.

Point Loma – went through a process of cutting programs, etc. to free up money for innovation.

Gain a start up mentality

Make experimentation and piloting the norm

Empowering employees to take action – cut down on the red tape and lack of trust

Fostering creativity

Making decisions quickly

Determine the best structure and staffing for transformation B

25% of campuses now have some form of Chief Innovation Officers

Deep innovation – first and foremost demands courageous, curious leaders.

Small groups

What can trustees do to encourage transformation A & B?

How Can boards Help With Transformation A and B Without Getting Into the Weeds?

- Asking – why does it have to be this way?
- Encourage risk-taking and experimentation
- Stand behind your leader

A black and white portrait of Abraham Lincoln, showing him from the chest up. He is wearing a dark suit jacket, a white shirt, and a dark bow tie. He has a full beard and is looking slightly to the right of the camera.

Thanks for coming

**“The best way to
predict the
future is to
create it.”**

Abraham Lincoln

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