Future Proof 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?*
2005, BEFORE the 2010 threshold
2013, AFTER the 2010 threshold
Three Waves of the Internet

Web 1.0
Content & Information

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 Bowl® trip for you and 4 friends.

Attention Freedom Reward Members! Find out how you can be Extended through June 30, 1998.

Ticketless Travel is available online.
You will need Netscape 1.2 or greater in order to use Ticketless Travel for the most common questions and issues about Ticketless Travel.

Click here to see a Southwest Airlines Route Map and get it serves.

See what's new on the Home Gate! If you are new to the Home Gate, contains an alphabetical listing of our attractions, including information about Southwest Airlines now offers service to 51 cities in 25 states.

Southwest Airlines Cargo. When Overnight is Overdue. Click here for

Do you live in Chicago, Providence, Louisville or Cleveland and want
Airlines and Icelandair Expand Marketing Agreement.

Apply now for the Southwest Airlines Rapid Rewards VISA® card.

Southwest Airlines Passenger Reservations Phone Numbers:
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En Espanol 1-800-221-0016
Telecommunications Device (TDD) 1-800-333-1305

Southwest Airlines Home Gate
P.O. Box 36611
Mail Drop SMD

1997

2017
Three Waves of the Internet

Web 1.0
Content & Information
Three Waves of the Internet

Web 1.0
Content & Information

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.

Wondergem, 2017
Now What?

Improved Means of Capturing Data

Big Data

Greater Capacity to Store Large Quantities of Data

Artificial Intelligence (AI)

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)
“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
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
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

<table>
<thead>
<tr>
<th>GPA Findings: First Year and Post First Year Departure</th>
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</thead>
<tbody>
<tr>
<td><strong>62 (ALL) Institutions</strong></td>
</tr>
<tr>
<td>GPA &lt; 2.0</td>
</tr>
<tr>
<td><strong>FIRST YEAR</strong></td>
</tr>
<tr>
<td>34%</td>
</tr>
<tr>
<td><strong>POST FIRST-YEAR</strong></td>
</tr>
<tr>
<td>18%</td>
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</tbody>
</table>

| **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%       |

| **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%       |

| **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%       |

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

| **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%       |

| **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

*Civitas, Community Insights, 2016*
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 Obsorne (2013)
“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.

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
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.

*Dual Transformations* by Anthony, Gilbert & Johnson
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?
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.
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.
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.
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?
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.

Dual Transformations by Anthony, Gilbert & Johnson
Transformation B: Creating new growth engines by creating entities focused on accelerating new ideas and initiatives

- Adult Degree Completion Programs
- Online Programs
- Competency Based
- Hybrid - face-to-face and online with pop-up locations
- Micro - Degrees
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
“The best way to predict the future is to create it.”

Abraham Lincoln