

# SREB

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Educational Technology  
Cooperative

# Personalized Learning in a Digital World

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Why?



# The Speed of Technology vs. The Speed of Education





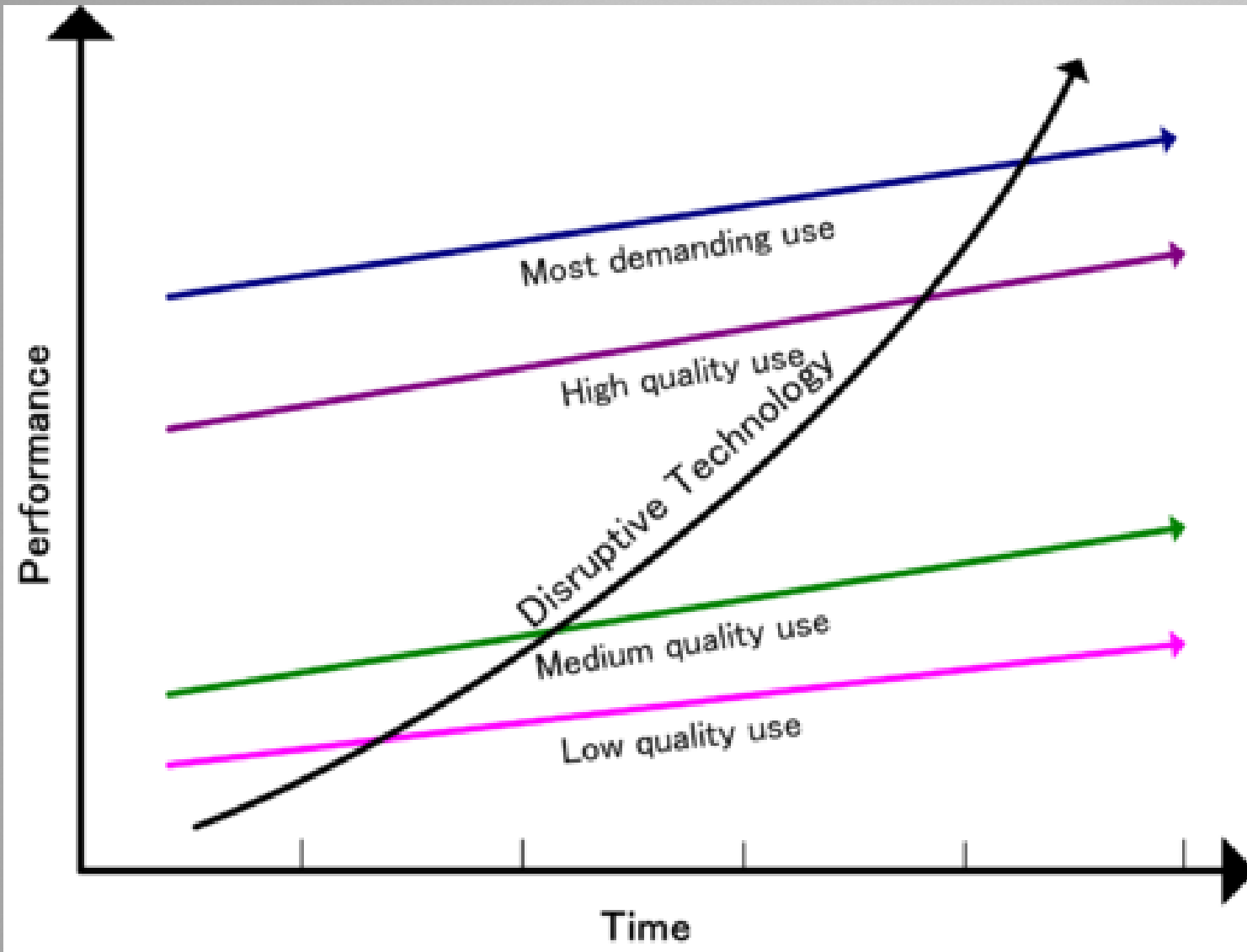


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# Schools Built for Mass Production, Not the Information Age



The Time is  
Right for  
Disruption  
in  
Education



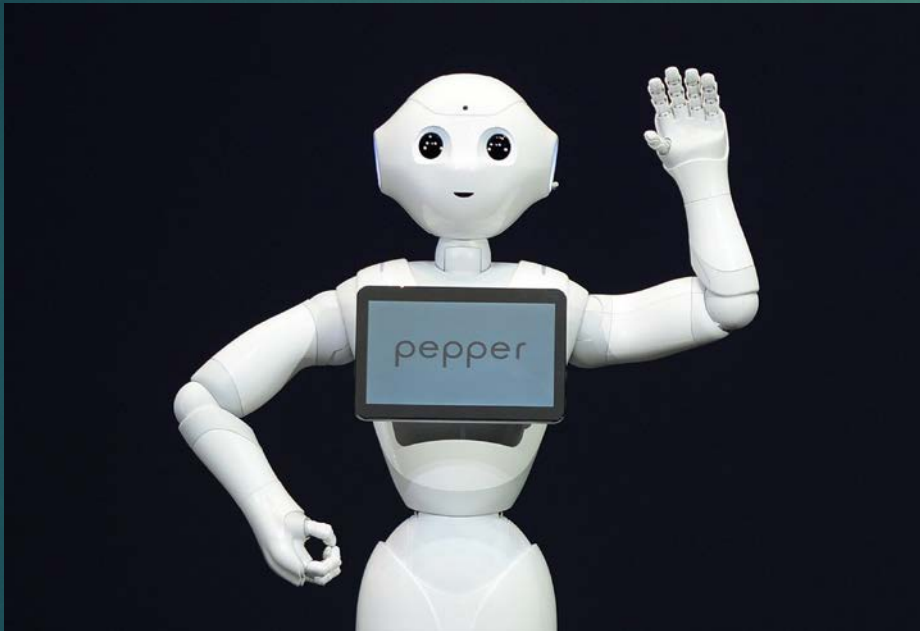
# Disruption in the Health Industry



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<http://tricorder.xprize.org/teams/final-frontier-medical-devices>

How are we preparing students for a future controlled by computers? For jobs that don't exist today?



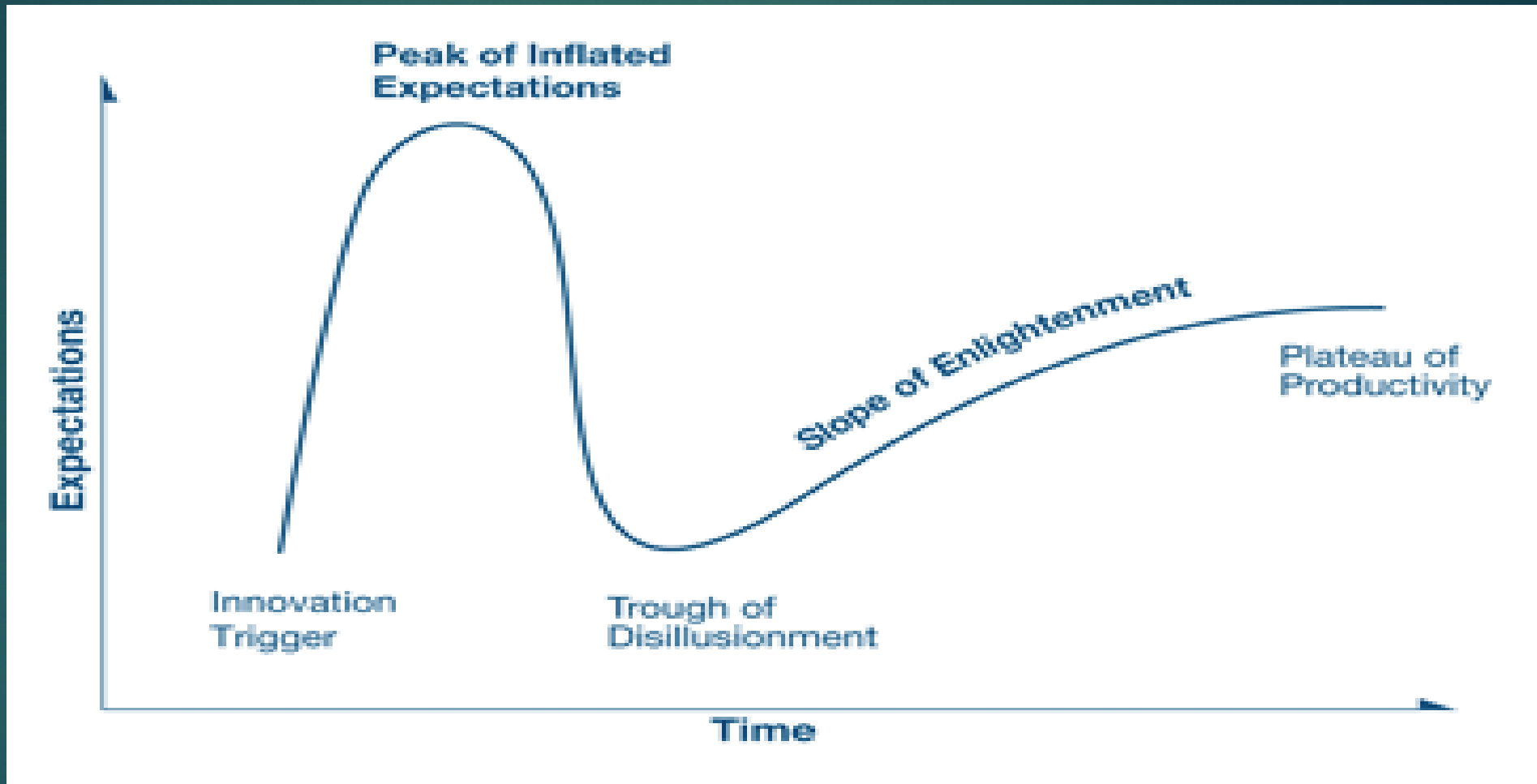
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What?



# Gartner Hype Cycle



Source: Gartner, Inc. This graphic was published by Gartner, Inc. as part of a larger research document and should be evaluated in the context of the entire document. The Gartner document is available upon request from <http://www.gartner.com/technology/research/methodologies/hype-cycle.jsp>.

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# Gartner 2017 Hype Cycle for Emerging Technologies



# Gartner Top 10 Higher Education Business Trends and Technology Trends

- ▶ Competency Based Education
- ▶ Reinventing Credentials
- ▶ Analytics Everywhere
- ▶ Innovative Learning Spaces
- ▶ Personalization
- ▶ Student Recruiting
- ▶ Breaking Boundaries
- ▶ Revenue Diversification
- ▶ Increasing Political Intervention
- ▶ Ranking
- Open Microcredentials
- Digital Assessment
- Predictive Analytics
- Artificial Intelligence
- Listening and Sensing Technology
- Robotic Telepresence
- VR/AR Comeback
- Hybrid Integration Platforms
- Institution Video Management
- Adaptive Learning

Source: Gartner, Inc.



# SREB-ETC 10 Issues in Educational Technology

1. Data systems
2. Data privacy
3. Predictive analytics
4. Bandwidth
5. Emerging technologies
6. New learning models
7. Student digital literacy
8. Technology security
9. Digital accessibility
10. Policy

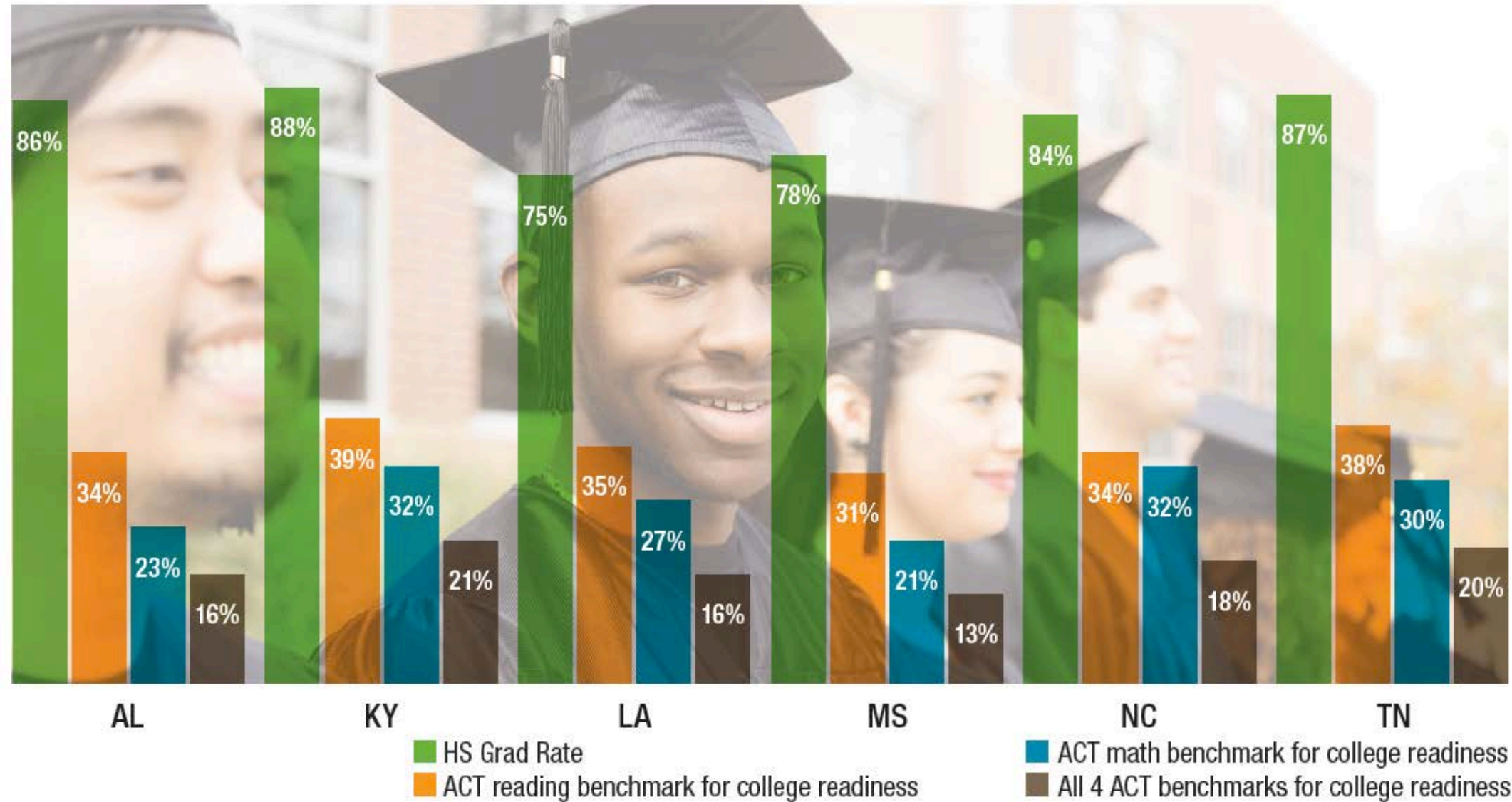


**Not in order of importance -  
but connected, interwoven.**



When?

Note: Grad rates for 2014; ACT benchmarks for 2015  
Sources: NCES and ACT, Inc.



*SREB states where 100 percent of seniors took the ACT*

# HS Graduation and College Readiness



## Percentage working-age adults, southern region, 2008-2014

Source: Lumina Foundation

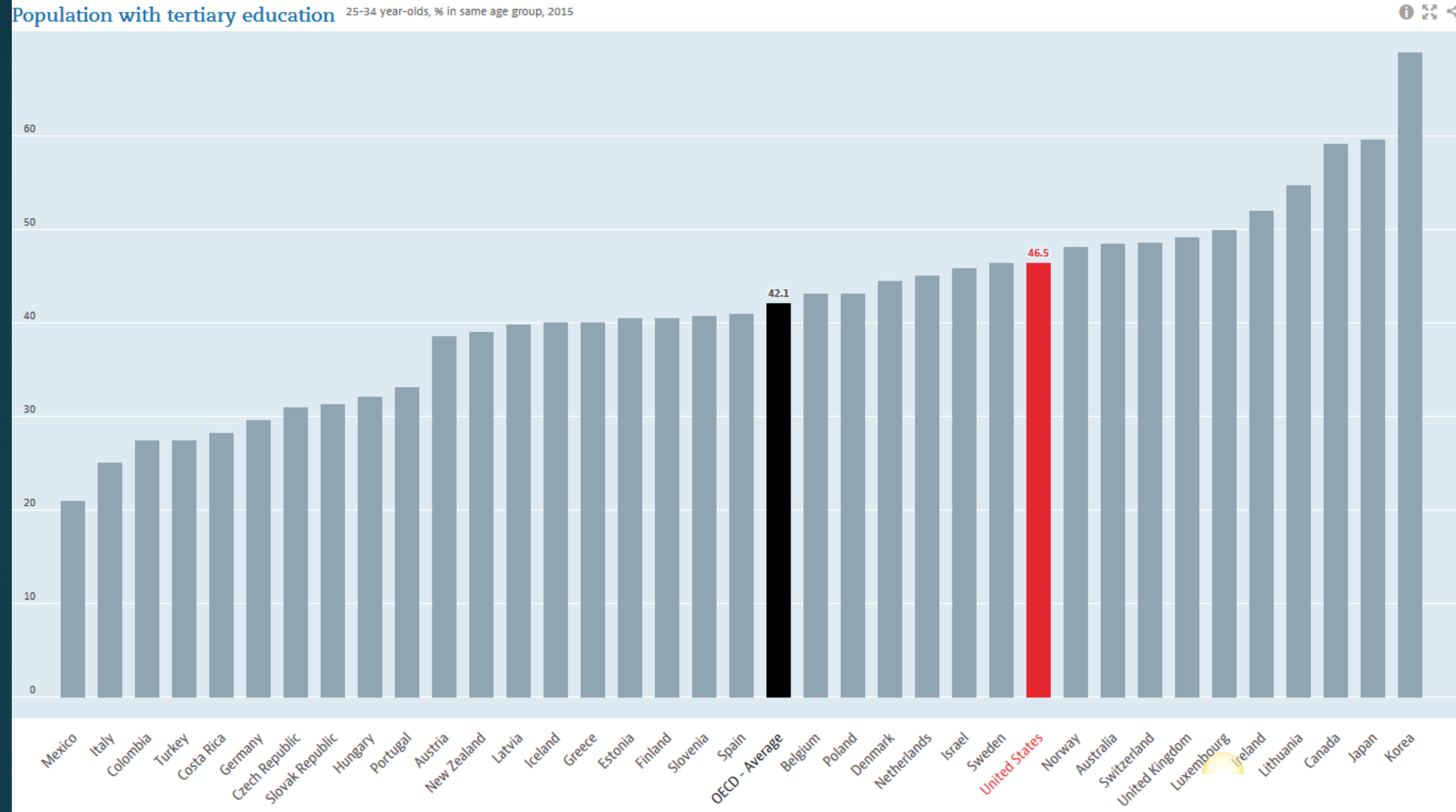


Source: SREB Fact Book and Lumina Foundation

# Adults with High-Quality Postsecondary Credentials

Associate degrees or higher

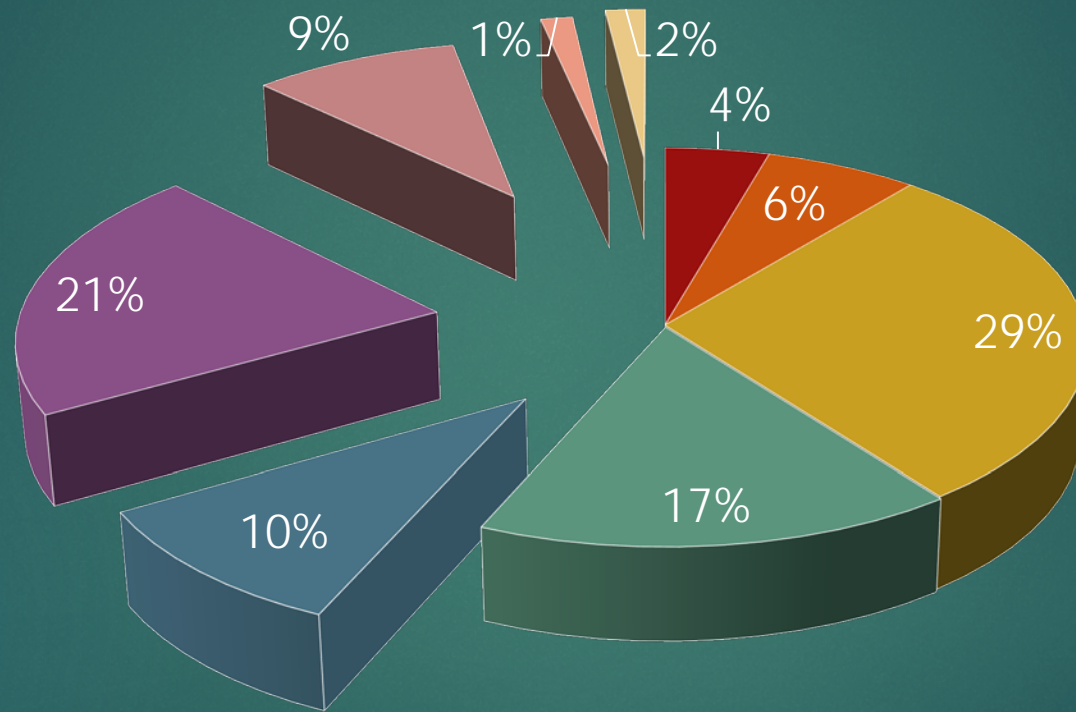
Certificates or higher



U.S. Ranks 11<sup>th</sup> Internationally in  
Postsecondary Attainment (OECD 2015)



# 2016 Census Data – Educational Attainment in U.S.



- None - 8th grade
- 9th - 11th grade
- High school graduate
- Some college, no degree
- Associate's degree
- Bachelor's degree
- Master's degree
- Professional degree
- Doctoral degree


We have  
some work to  
do!

THE TIME IS  
NOW





How?

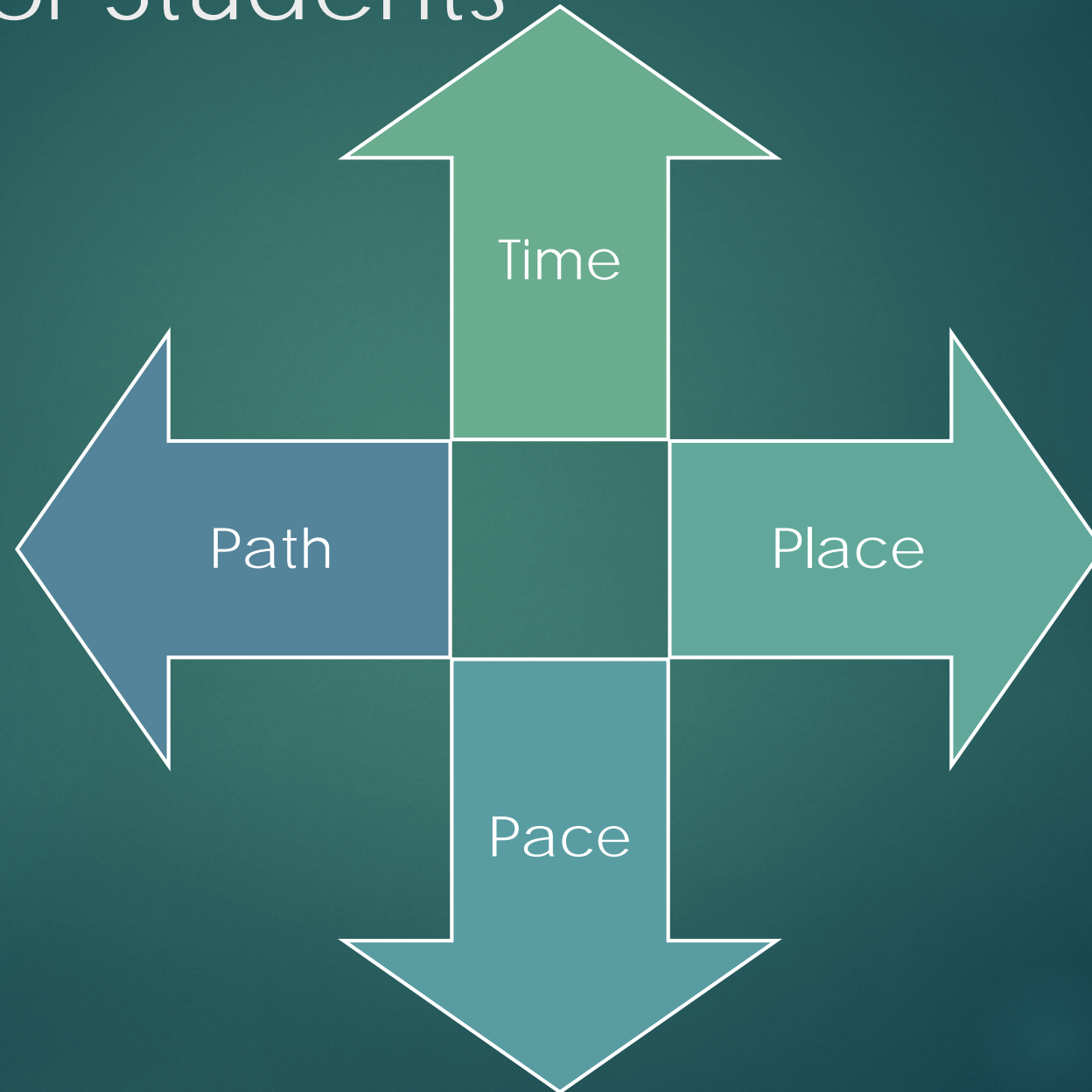


## How Do We Reach Our Students Where They Are? Personalized Learning!

- ▶ At their own pace (mastery based, not time based)
- ▶ Addressing different learning styles
- ▶ Providing options for the types of assignments
- ▶ Allowing choice for evidence of learning
- ▶ Adapting content based on answers
- ▶ Credit for prior learning and experiential learning



# Flexibility for Students





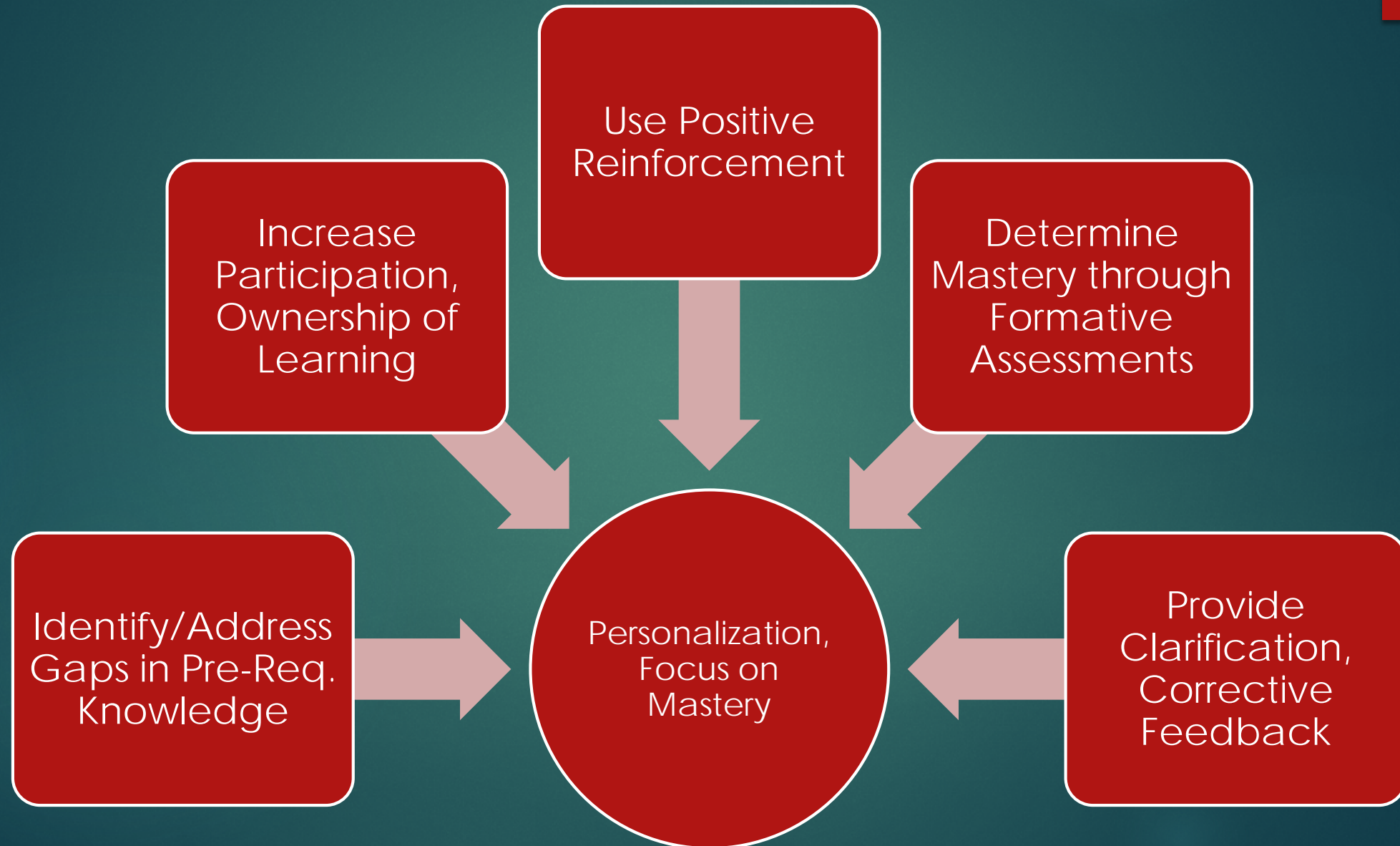
## Engagement and Practical Application

- ▶ Problem Solving
- ▶ Project Based/Service Learning
- ▶ Flipped Classrooms
- ▶ Intelligent Tutoring Systems
- ▶ Gaming
- ▶ Artificial Intelligence Embedded in the Educational Experience

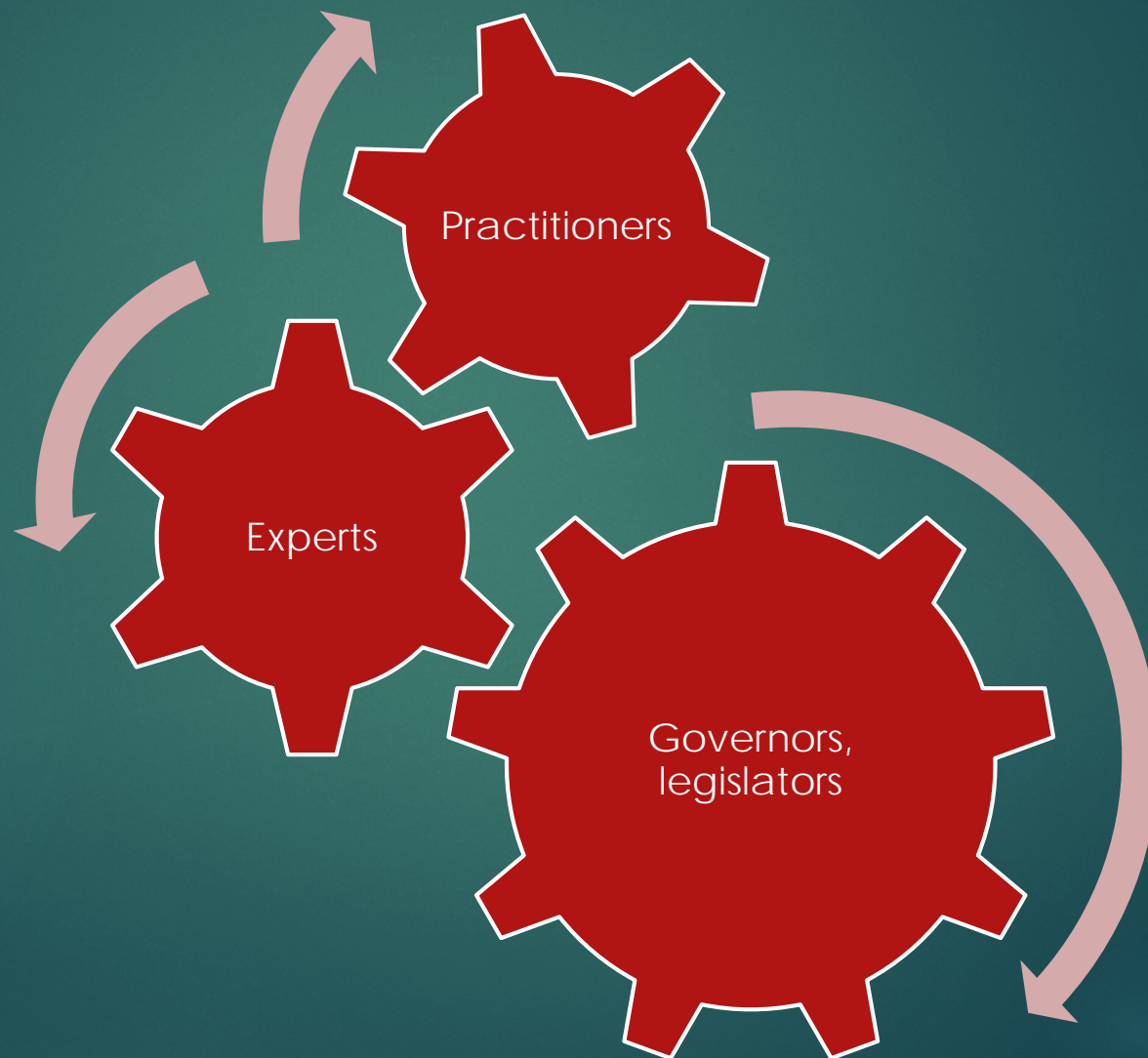


# But, Why Personalized Learning?

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# 2016 Regional Meeting – 4 States







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We have  
some  
hurdles to  
overcome!

Policies  
Aligned with  
Practices



The diagram features two large, red, stylized arrows pointing towards each other, meeting at a central point. The left arrow is labeled 'Carnegie Unit' and the right arrow is labeled 'Competencies'. The arrows have a slight 3D effect with a darker red shadow on the right side. The background is white, and there is a dark teal curved shape on the left side of the slide.

Carnegie Unit

Competencies



# Student Perspective

Learner Profiles



Personal  
Learning  
Path/Plan



Student  
Voice/Choice



Self-Directed  
Learning



Competency/  
Mastery Based



What are  
these GA and  
SC students  
expecting in  
college?



# Human Capacity, Leadership and Professional Learning

- ▶ Requires leadership from the top
- ▶ Build capacity through coaching, mentoring, professional learning
- ▶ Defined roles for educators, administrators, advocates
- ▶ Credentials and skill sets
  - ▶ Curriculum design
  - ▶ Data analysis

# Digital Content

- ▶ Learning materials/activities mapped to competencies
- ▶ Assessments
  - ▶ Diagnostic
  - ▶ Formative
  - ▶ Summative
- ▶ Adaptive
- ▶ Analytics



# Infrastructure and Data

- ▶ Bandwidth
- ▶ ERP, Student Information Systems, Identity Management
- ▶ Learning Management Systems, Content Management Systems
- ▶ Diagnostic Assessments and Analytics
- ▶ Longitudinal Data Systems

Develop



```
graph TD; A[Develop] --> B[Conduct]; B --> C[Create];
```

Develop a strategic plan

Conduct

Conduct Gap analysis to determine what is missing

Create

Create a timeline/road map to fill in the missing pieces

Plan



Communicate

Communicate the vision



Train

Train all stakeholders



Evaluate

Evaluate as you go, correcting the path as needed

Then Act!

# SREB



Questions?

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Southern Regional Education Board

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# Educational Technology