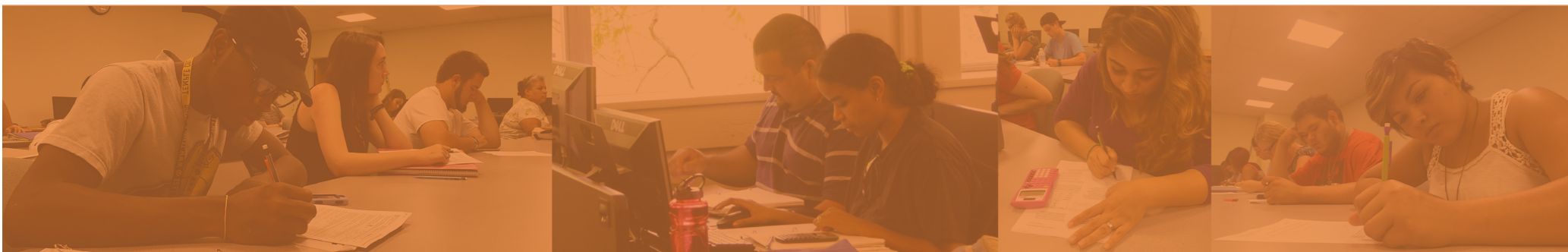


Dana Center
Mathematics
PATHWAYS

CSU EO 1110 Fall Meeting: Promoting Continuous Improvement

Long Beach, California
September 28, 2018



Facilitators

Dr. Martha Ellis, Director of Higher Education Strategy, Policy, and Services, Charles A. Dana Center

Dr. Christie McPhail, Department Chair of Higher Education, Morgan State University

Paula Talley, Systems Implementation Lead, Charles A. Dana Center

Jeremy Martin, Senior Policy Analyst, Charles A. Dana Center



Group Norms

Make equity central.

Focus on fulfilling our charge.

Seek clarification in language and ideas to increase understanding.

Understand that those who work, learn.

Look for solutions, not blame.

Focus on systems, not people.

Recognize that everyone has expertise.

Be honest.

Share talk time.

About the Dana Center

— Equity — Access — Excellence —

2018

Dana Center by the Numbers

By the close of 2017, the Dana Center had contributed to the **implementation of math pathways** in higher education systems, institutions, and campuses in **29 states**.



Meeting Outcomes

Participants will:

- Review operational processes of the first cycle of implementation of EO 1110, including institutional planning, scheduling courses, and placing and advising of students
- Refine plans for gathering evidence to inform continuous improvement of placement, advising, curriculum and instruction
- Adopt strategies for engaging faculty and staff in a sustained continuous improvement process
- Provide input for the First Term Reflections meetings in January and February.

Who is in Attendance?

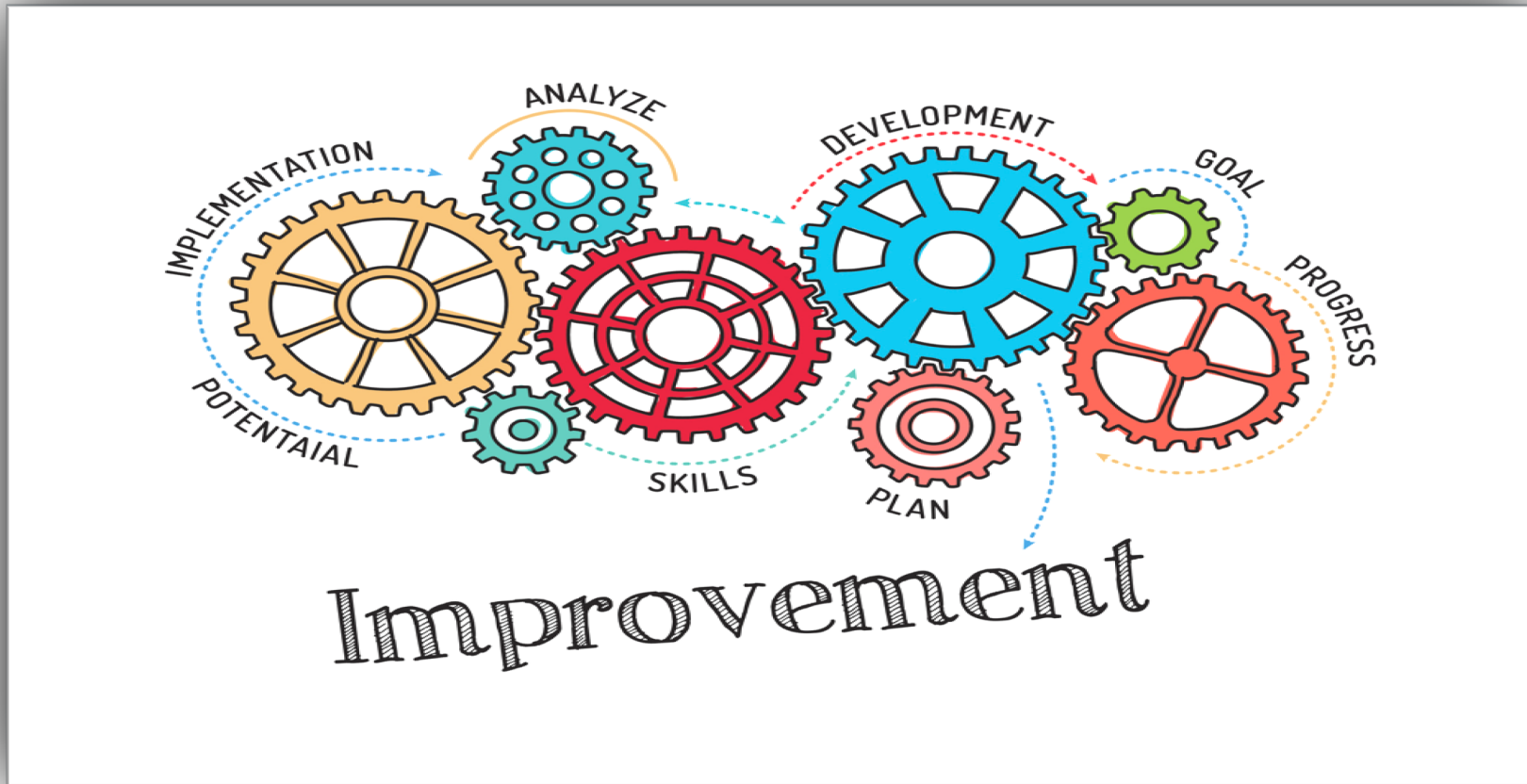
Please stand up if you are ...

- An Administrator
- A Math Faculty
- A Written Composition Faculty
- A Director of Advising
- A Student Services Leader
- An Institutional Researcher
- A Course Lead
- A Faculty Development Lead
- A Registrar

Implementation: A broad framework

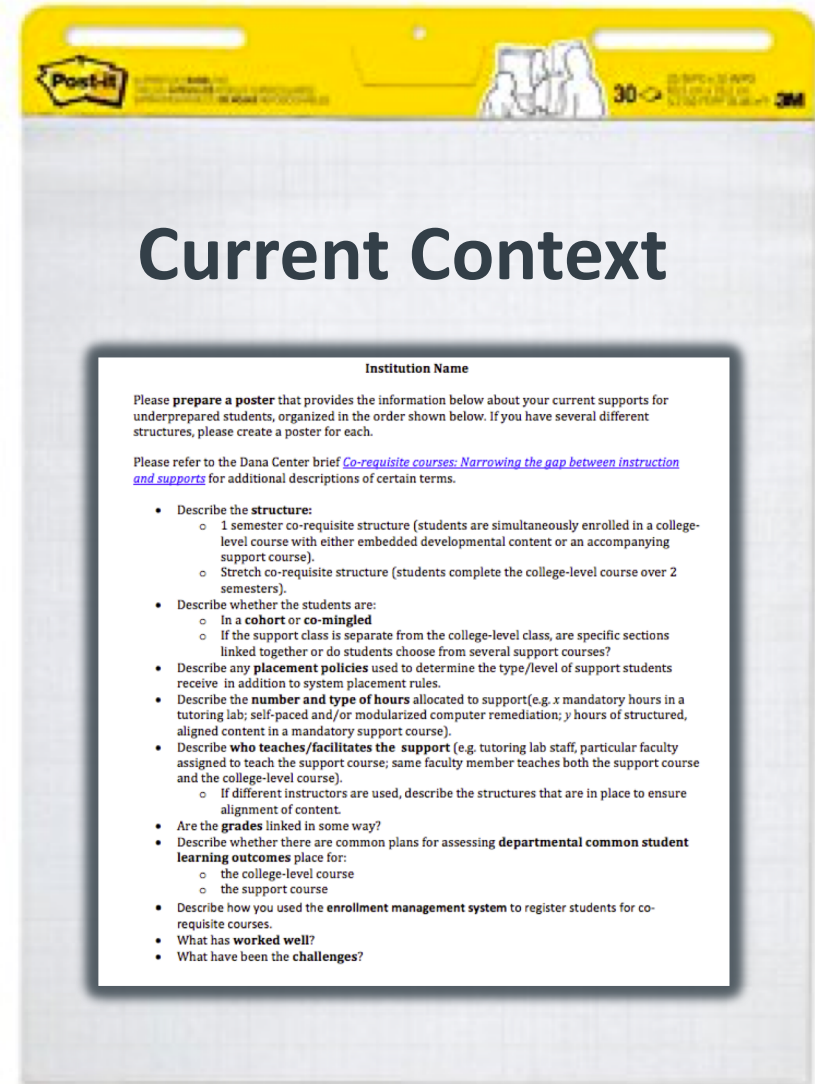
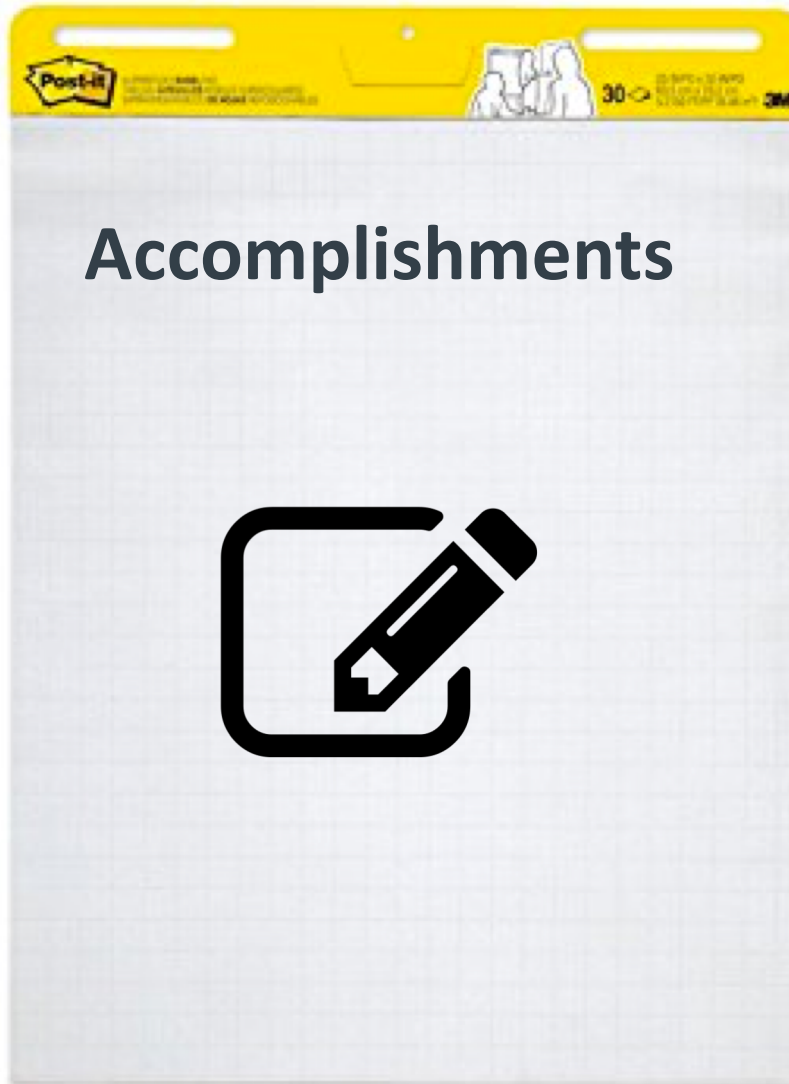
| <u>Stage of Implementation</u> | <u>Description</u> |
|--------------------------------|--|
| Getting Started | Commitment and leadership |
| Planning | Collect and review data to define problem, establish goals, and create a plan. |
| Implementing | Carry out the plan. |
| Continuous Improvement | Evaluate and improve. |

Continuous Improvement



Continuous Improvement is an ongoing process through which we collect and analyze data and engage with others to identify areas of strength and areas in need of improvement.

Capturing Current Context





Co-requisite work is hard and systemic

- **Our universities are complex**
- **Can not do co-requisites in isolation**
- **Co-requisites impact many areas of the university**
- **Universities hire curious, inquisitive people who work in an academic, research space where asking questions is the norm**
- **Lots of “noise” during any change as this is intellectualism out loud.**

The 20-60-20 Phenomenon

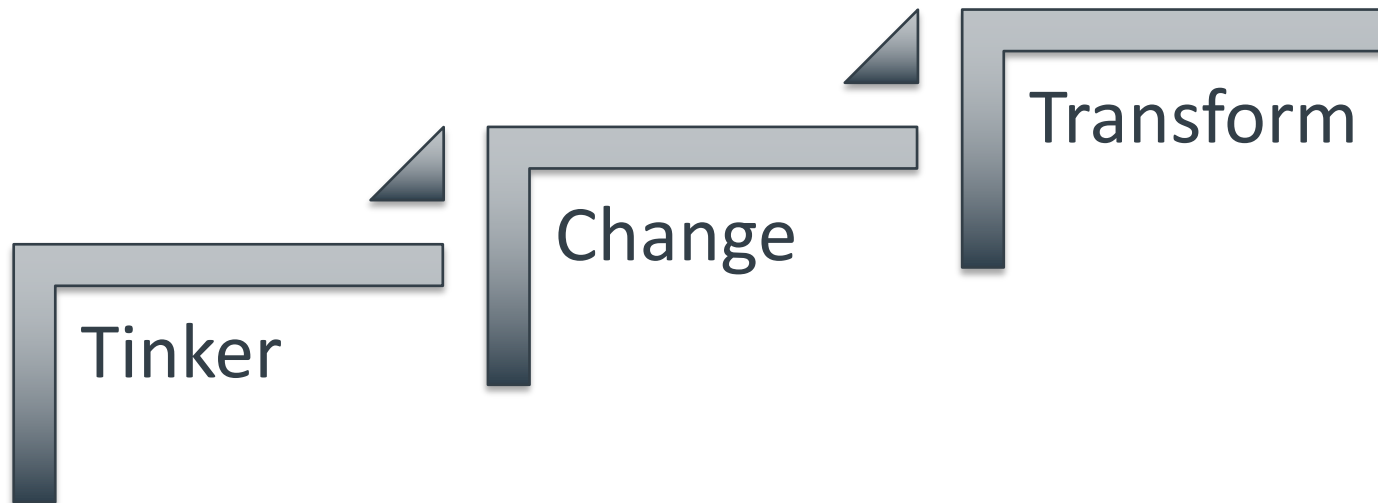
- 20% readily embrace
- 60% will take a wait and see position
- 20% will vehemently oppose

Leading

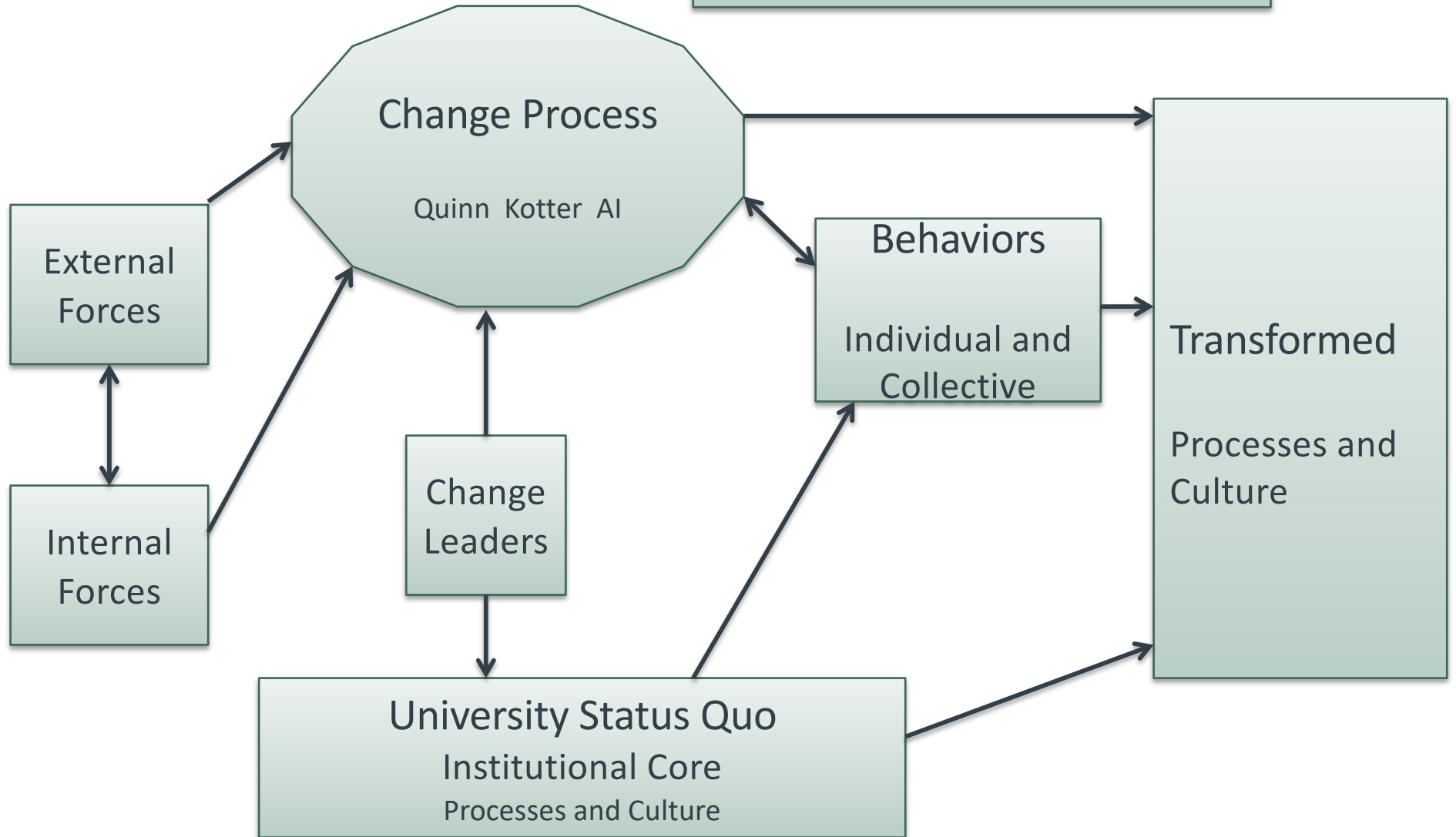
- Importance of quality leadership cannot be overemphasized
- Leaders everywhere in the university
- Takes raw courage
- Facilitate listening and reflection
- People commit to causes, not plans

Leading change

- Change is not episodic
- Change process ebbs and flows
- Culture of your institution evolves



Change Framework



Culture

“Culture eats strategy for breakfast”

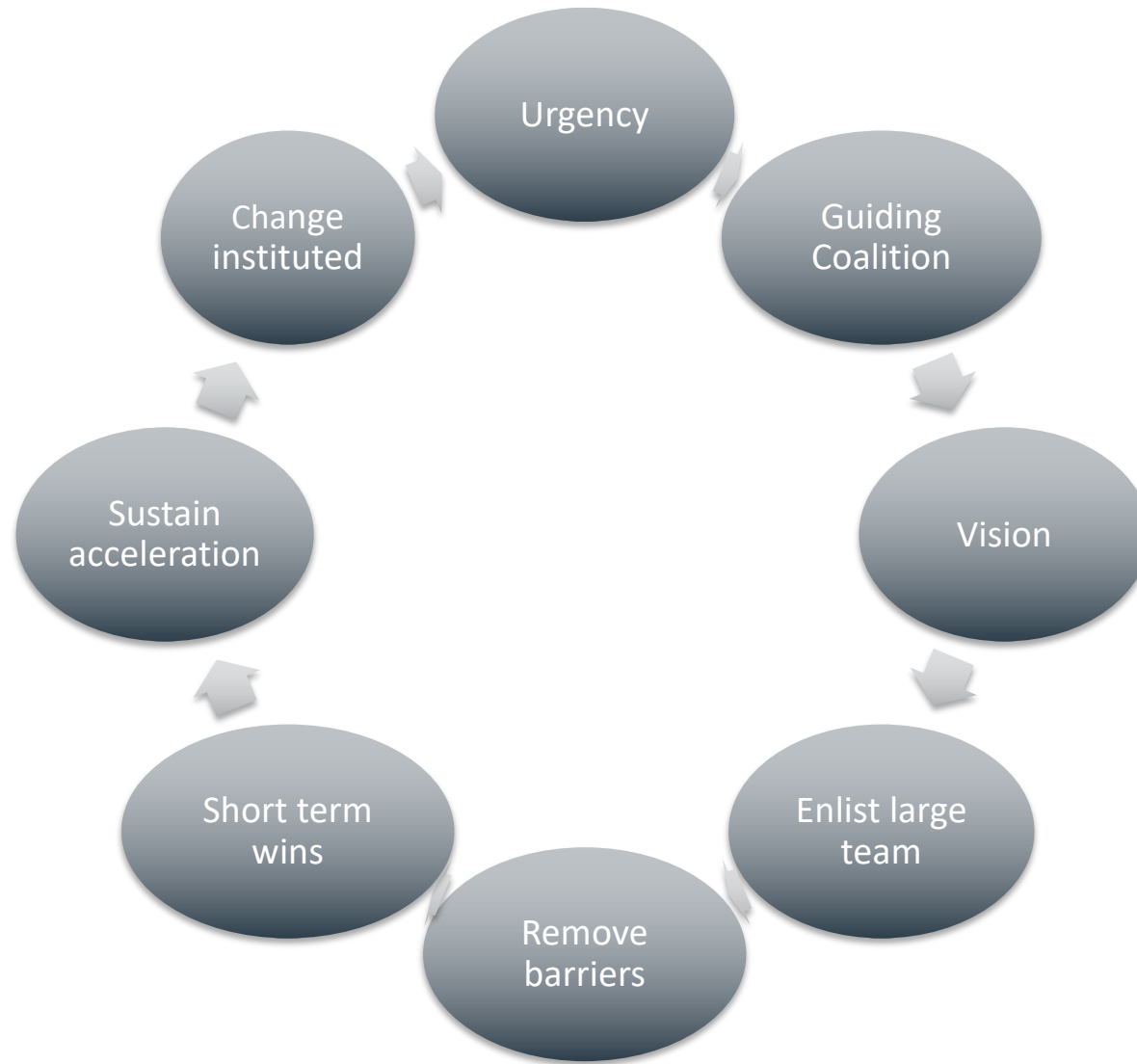
-Peter Drucker

- Artifacts—climate, behavior, structure, processes—easy to observe
- Beliefs and values of institution—shared social experience
- Underlying assumptions—the way we do things

Your Culture

- Write down 3 to 5 phrases that describe the culture of your university:
 - Climate
 - Behavior
 - Structure
 - Values
 - Underlying assumptions

Kotter's leading change model



Kotter, 2013

Vision

Endgame is not E01110 implemented—it is student learning and success



Vision and Why

- **Painting the future and bringing it to life**

Identify the “why”

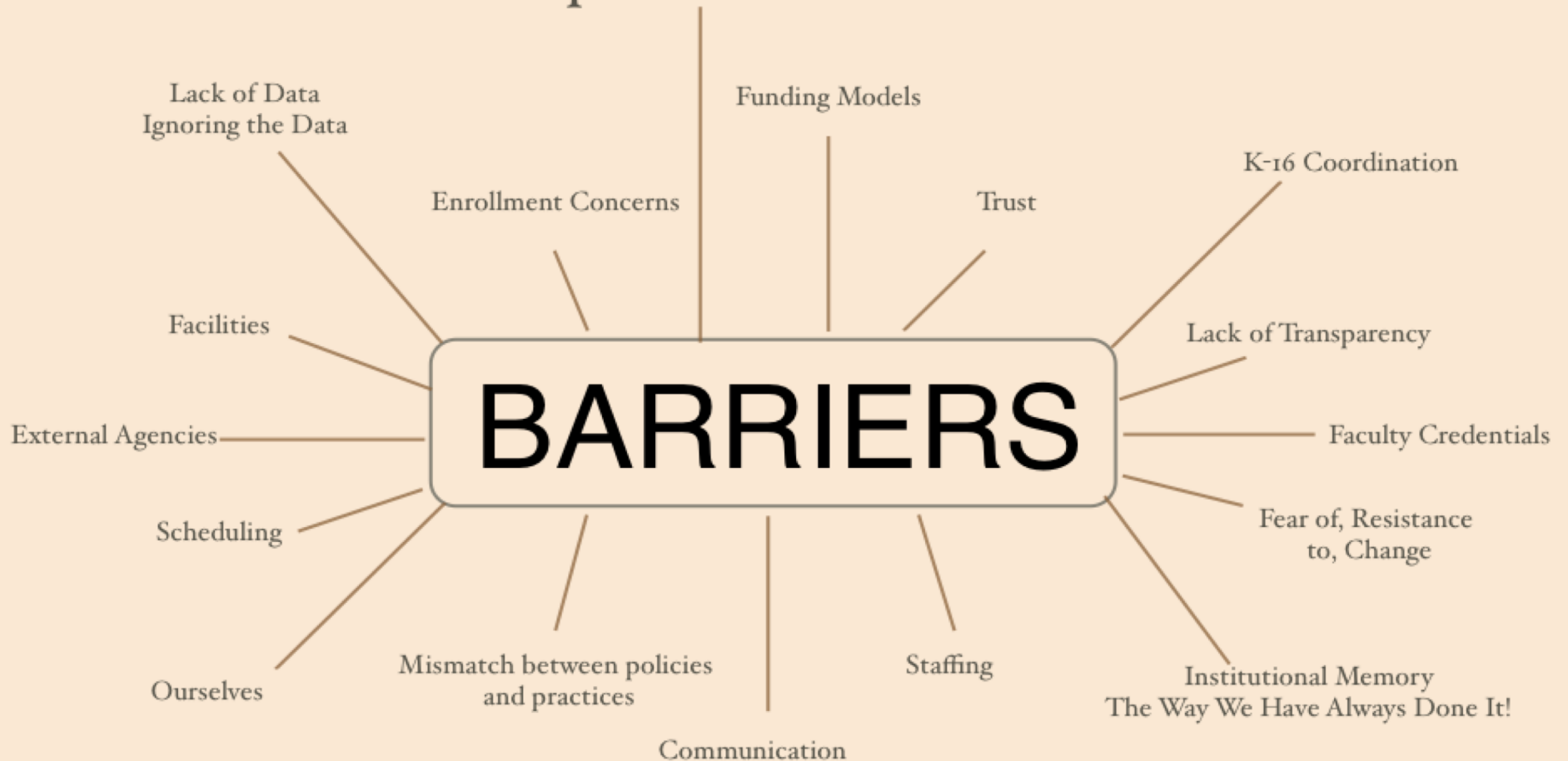
Craft the message—the why

Communicate the message

Preparing for continuous improvement

- Think of a change initiative that was successful at your university. What promoted that success?
- Have past change initiatives in your university failed? Is so, what barriers prevented success?

Leadership Commitment and Focus



Preparing for continuous improvement

- Which of the most common barriers do you have—silos, parochialism, complacency, this too shall pass, it's the students' fault, rules and procedures?
- Barriers can be commonly stated and accepted statements that, while appearing helpful, can deter attempts to get past legacy obstacles. These are statements like:
 - “It's just not done that way,” or,
 - “We tried that before and it did not work.”

Identify the “Why Vision”

- Draft the “why vision” of this work

If you can't communicate the vision to someone in less than 5 minutes and get a reaction that signifies both understanding and interest, you are not done.

Kotter, 2007

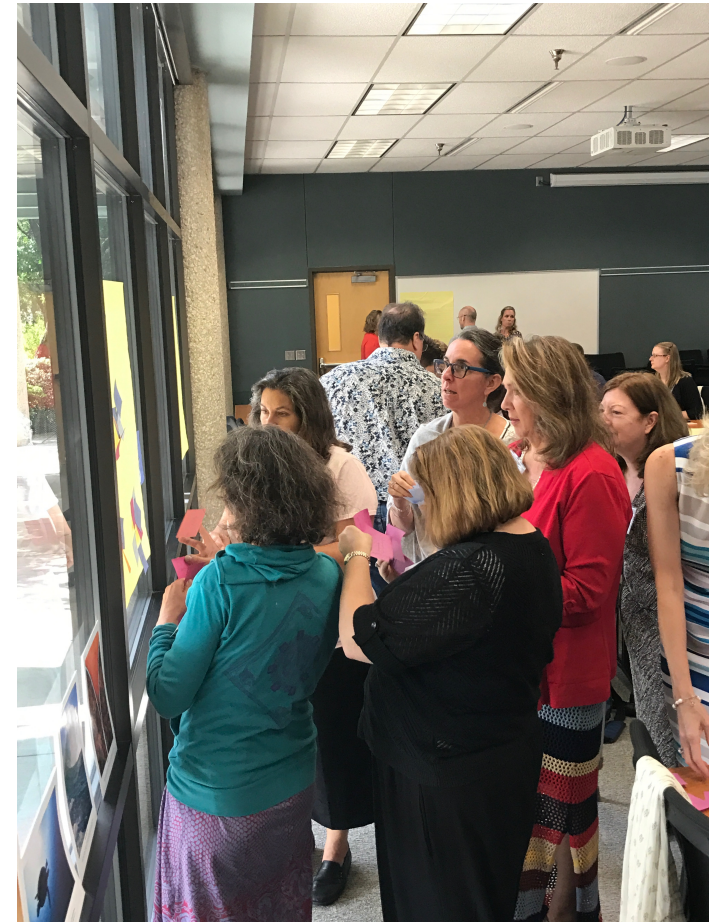
Anticipating Challenges to Remove Barriers

- Anticipating Challenges
- Assume that, five years from now, you have failed to achieve your transformational goals. Identify on the chart below the likely major causes of that “mortality.” Consider what specifically might happen that could derail the effort and conduct a “pre-mortem.” A *pre-mortem* is a way to anticipate challenges and to come up with strategies to navigate and/or pre-empt them. For each cause, delineate specific leadership strategies you will employ to anticipate and avert or address the challenges.
- Cause of “Mortality”
- Leadership Strategies
- Actions to Mitigate Risk

Gallery Walk

As you rotate with your campus team:

- Record ideas that resonate with *you* based on your role on your campus team
- As a team, identify ideas that you are excited about or want to learn more about



Completion and Equity

CSU Graduation 2025 Initiative lays out ambitious goals for increasing degree attainment and achieving equitable outcomes.

Placement and remediation reform are essential components to reaching these goals.

Roadmap to Continuous Improvement

Feedback

- students
- faculty
- advising
- registrar
- academic support
- leadership

Revisions

Implementation 2.0

Planning

Implementation 1.0

Lessons from the Field

Community College of Denver

Teresa Adams, mathematics faculty and former chair

<https://youtu.be/yhXphUwzlx8>

Table Discussion

In your breakout:

- Discuss the question:

In your role, what does continuous improvement mean to you?



Continuous Improvement of Structural Change

- Registration
- Advising
- Placement
- Structures



- Surveys
- Interviews
- Placement Data
- Reports

Image credit: lhorzigor/iStock/Thinkstock

Continuous Improvement of Curriculum and Pedagogy

- Deans
- Department Chairs
- Course Coordinators
- Faculty
- TAs, Tutoring Labs
- Faculty Developers



Image credit: Scanrail/iStock/Thinkstock

- Student Information
- Classroom Assessment Techniques
- Common Assessment Questions
- Surveys

Continuous Improvement

- Engage the right people.
 - Leadership
 - Diverse stakeholders
 - Experts
- Set clear and appropriate goals (roles).
 - Short-term
 - Long-term
- Develop a climate of trust and commitment.

Communication of Continuous Improvement

“The single biggest problem in communication is the illusion that it has taken place.”

George Bernard Shaw

Communication and engagement

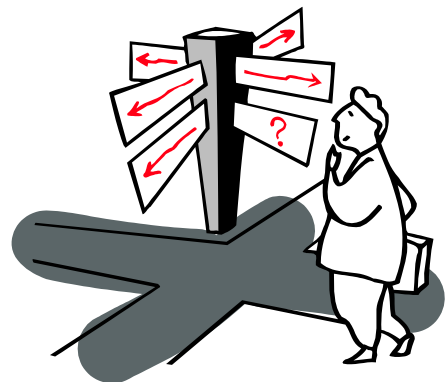
- This work requires communication and engagement across the institution.
- Communication disseminates information; it builds awareness.
- Engagement encourages people to process and act upon information; it builds ownership.
- Communication and engagement must be bi-directional.

Basics of planning communications

- Who needs to know?
- What do they need to know?
- When do they need to know it?
- Who should the information come from?
- What are the best ways to get the information to them?

Get the **right information** to the **right people**
at the **right time**.

Continuous Improvement for Systemic Change



Where are you going?

What is your goal?

What do you want your students to accomplish in long run?

How will you get there?

Actions to improve structural, curricular, and pedagogical changes

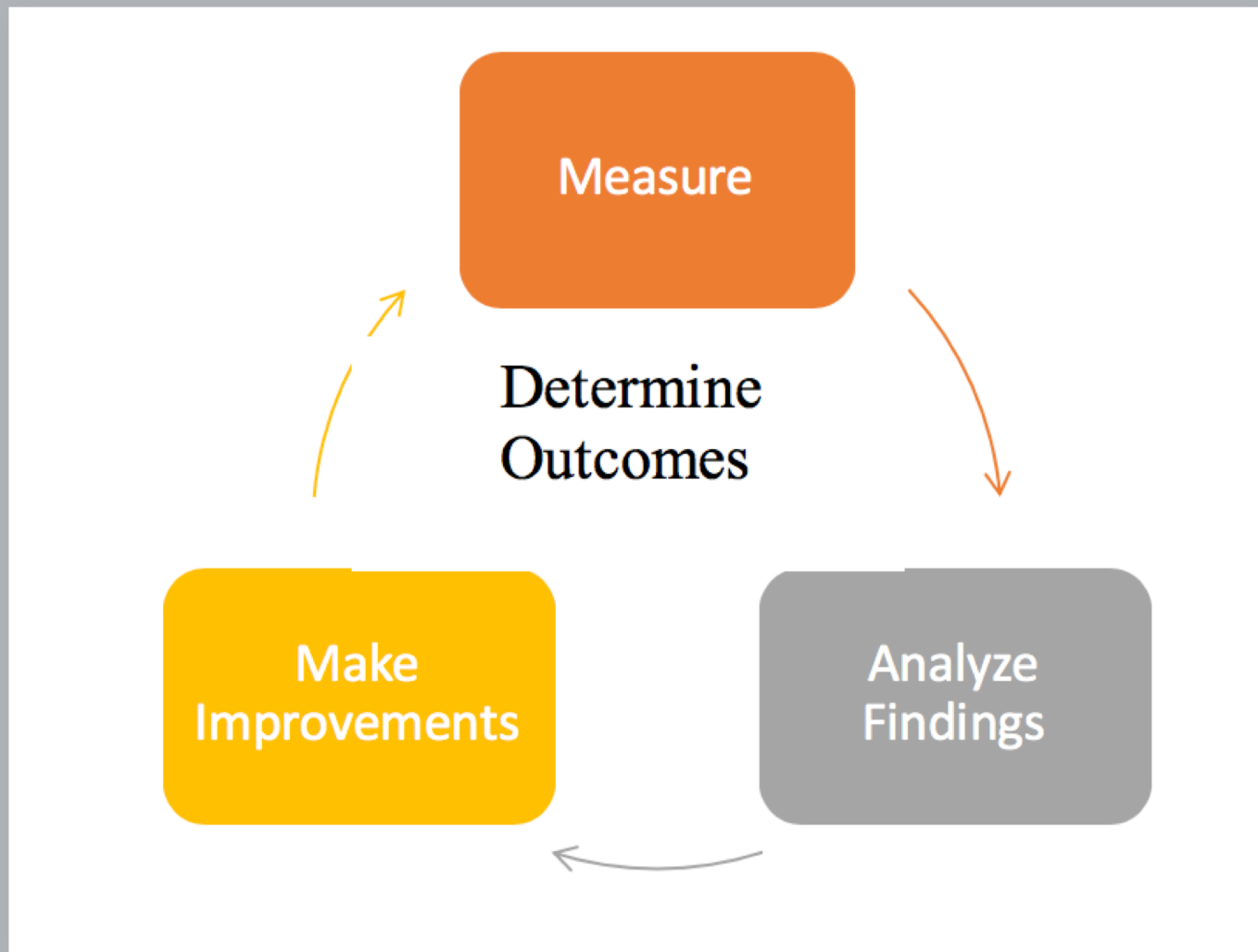


What will tell you that you've arrived?

Evidence—quantitative and qualitative—along the way and at the end

Did your students achieve?

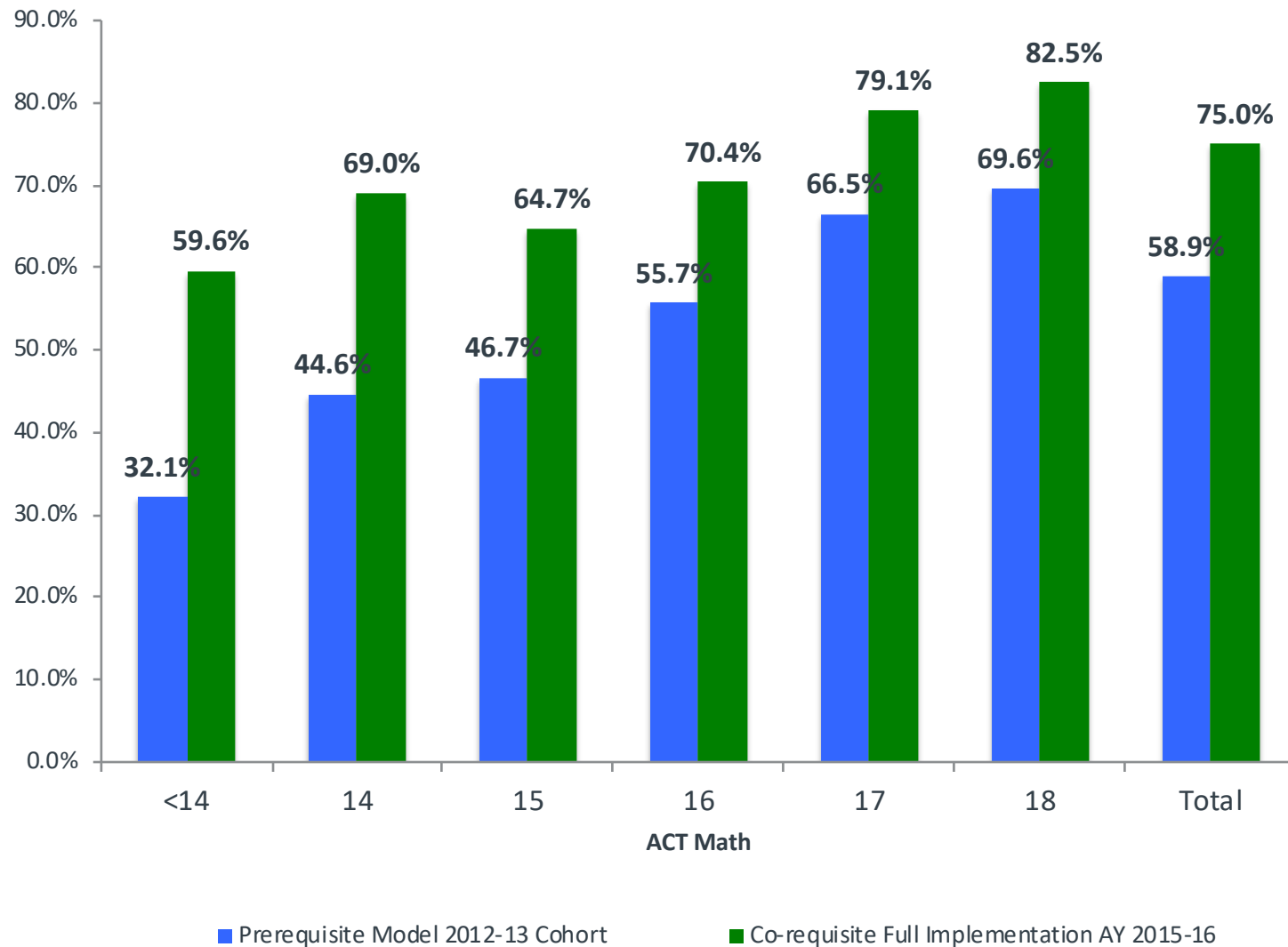
Continuous Improvement Framework



Metrics for Continuous Improvement

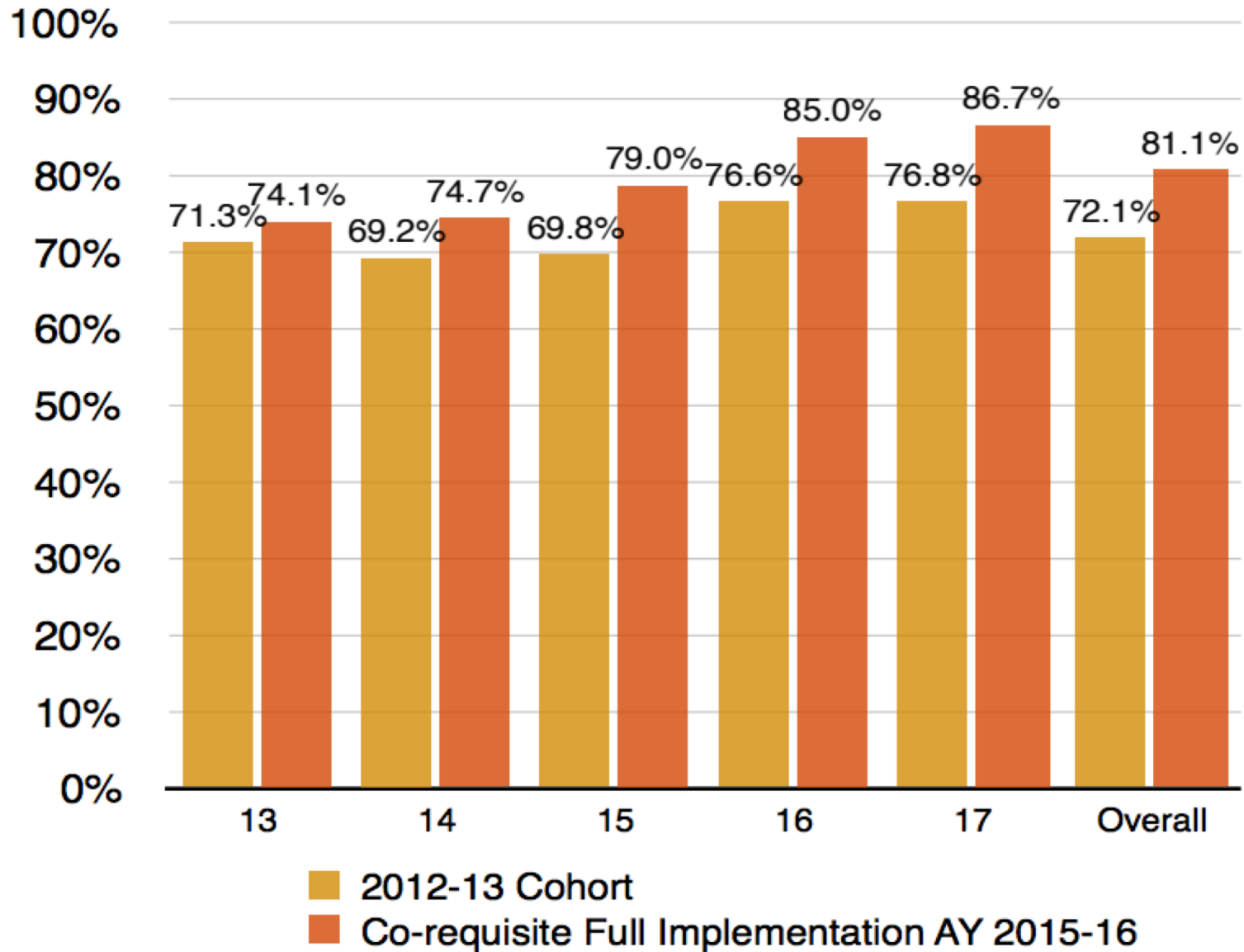
| Goals for 2018-2019 | Goal Statements | Who needs to be involved? |
|------------------------------------|-----------------|---------------------------|
| Effective placement | | |
| Effective course/support structure | | |
| Decreased Equity Gap | | |
| Achievement of Learning Outcomes | | |
| Course completion | | |
| Completion of “next” course | | |
| Completion of GE in first year | | |

Tennessee Universities Gateway Math Success in One Year

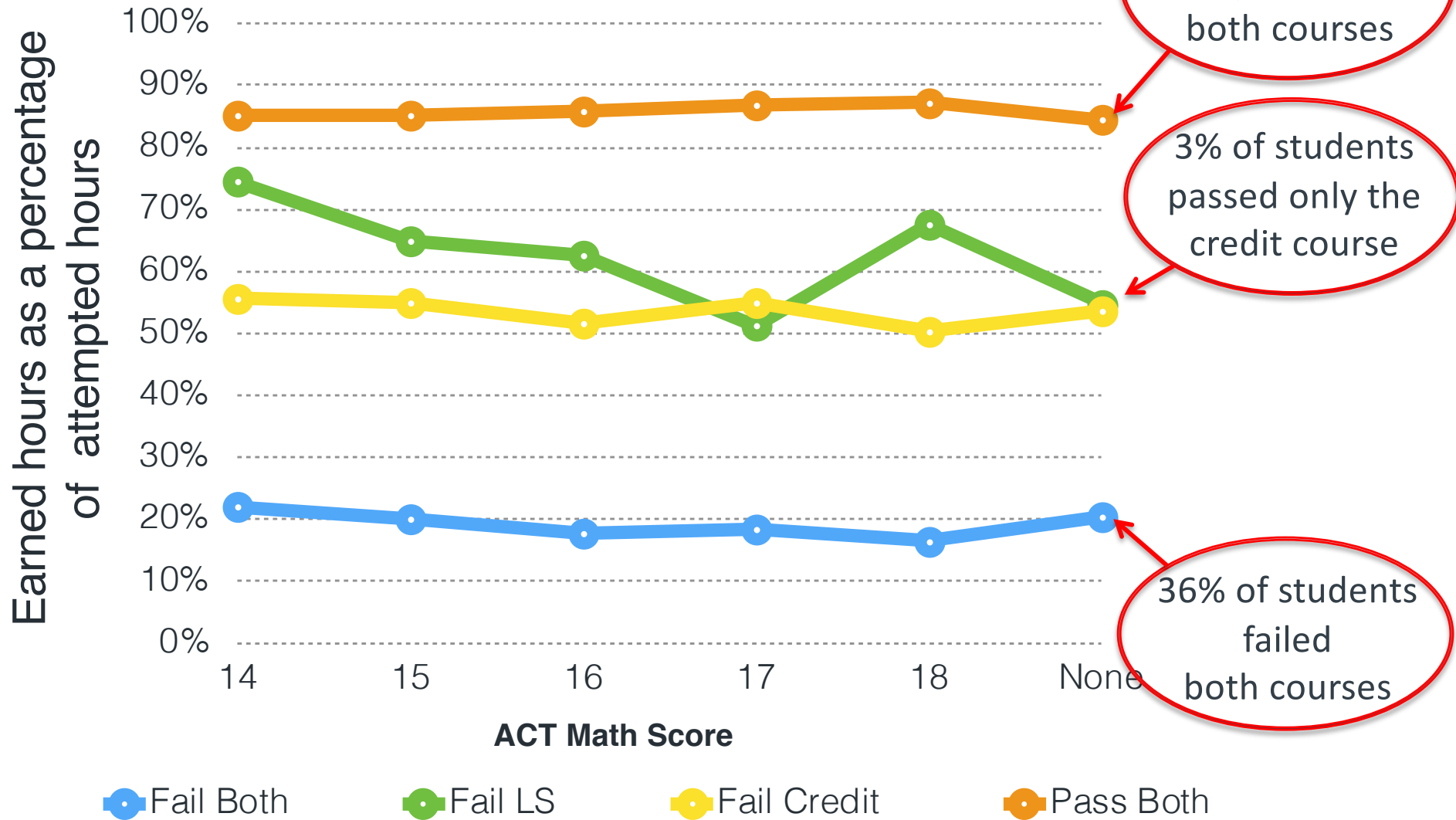


Tennessee Board of Regents Brief #3: *Co-Requisite Remediation Full Implementation 2015-16*

Results of TBR Full Implementation Co-requisite Writing in Universities



Tennessee Community Colleges



Adapted from TBR Brief #3: *Co-Requisite Remediation Full Implementation 2015-16*

Implementing and Sustaining Change

- Build on momentum.
- Foster collective leadership.
- Engage the right people.
- Celebrate reaching milestones.
- Learn from successes and challenges.
- Listen.
- Communicate.
- Lead by example.

Implementing and Sustaining Change

- Guide continuous improvement work:
 - Monitor progress
 - Surface challenges in implementation
 - Strategically deploy resources and supports
- Develop a strong local evidence base to continue to mobilize change
- How will your team implement and sustain change?

Refining Implementation

Guiding Questions

- What works well right now?
- Which adjustments will improve implementation in the short term?
- What about the long term?
- What resources are required to implement these adjustments, and who should be involved?
- What else should we consider as we think about version 2.0?

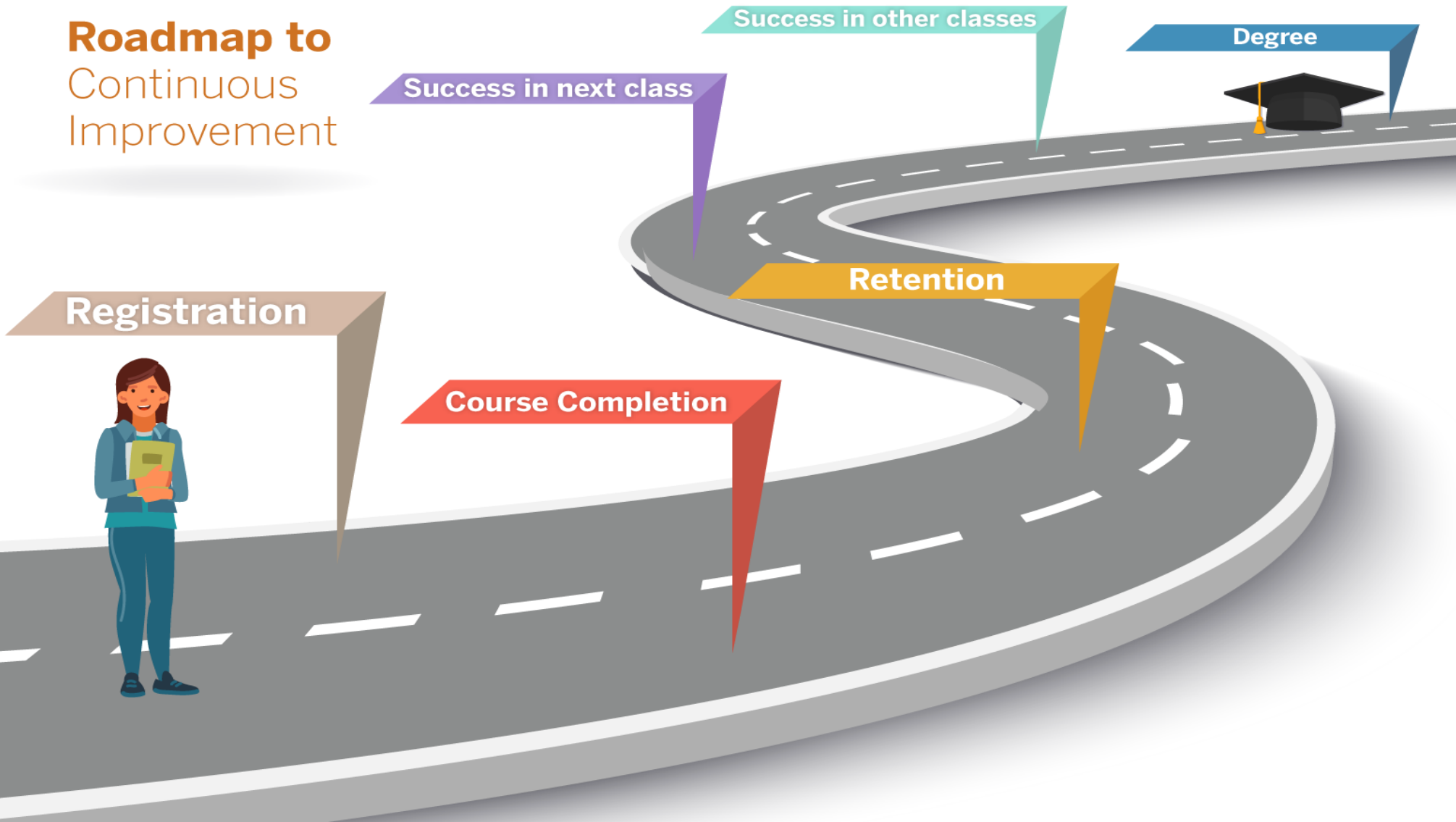
Lunch 12:00 – 12:45



What is your biggest take-away from the sessions so far?

Milestones for Continuous Improvement

Roadmap to Continuous Improvement



Other Resources

CSU Collaboration Spaces

- <http://tiny.cc/csuteams>
- <http://tiny.cc/csumath>
- <http://tiny.cc/csueenglish>

Calendar

- www.calstate.edu/professional-development-calendar

Recordings and resources are linked to event listings in the archive.

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www.utdanacenter.org
- DCMP Resource Site
www.dcmathpathways.org
- To receive monthly updates about the DCMP, contact us at
dcmathpathways@austin.utexas.edu

About the Dana Center

The **Charles A. Dana Center** at The University of Texas at Austin works with our nation's education systems to ensure that every student leaves school prepared for success in postsecondary education and the contemporary workplace. Our work, based on research and two decades of experience, focuses on K–16 mathematics and science education with an emphasis on strategies for improving student engagement, motivation, persistence, and achievement.

We develop innovative curricula, tools, protocols, and instructional supports and deliver powerful instructional and leadership development.



The University of Texas at Austin
Charles A. Dana Center

2016