

# The Science of Improvement in Teacher Education

Presented by:

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# Agenda

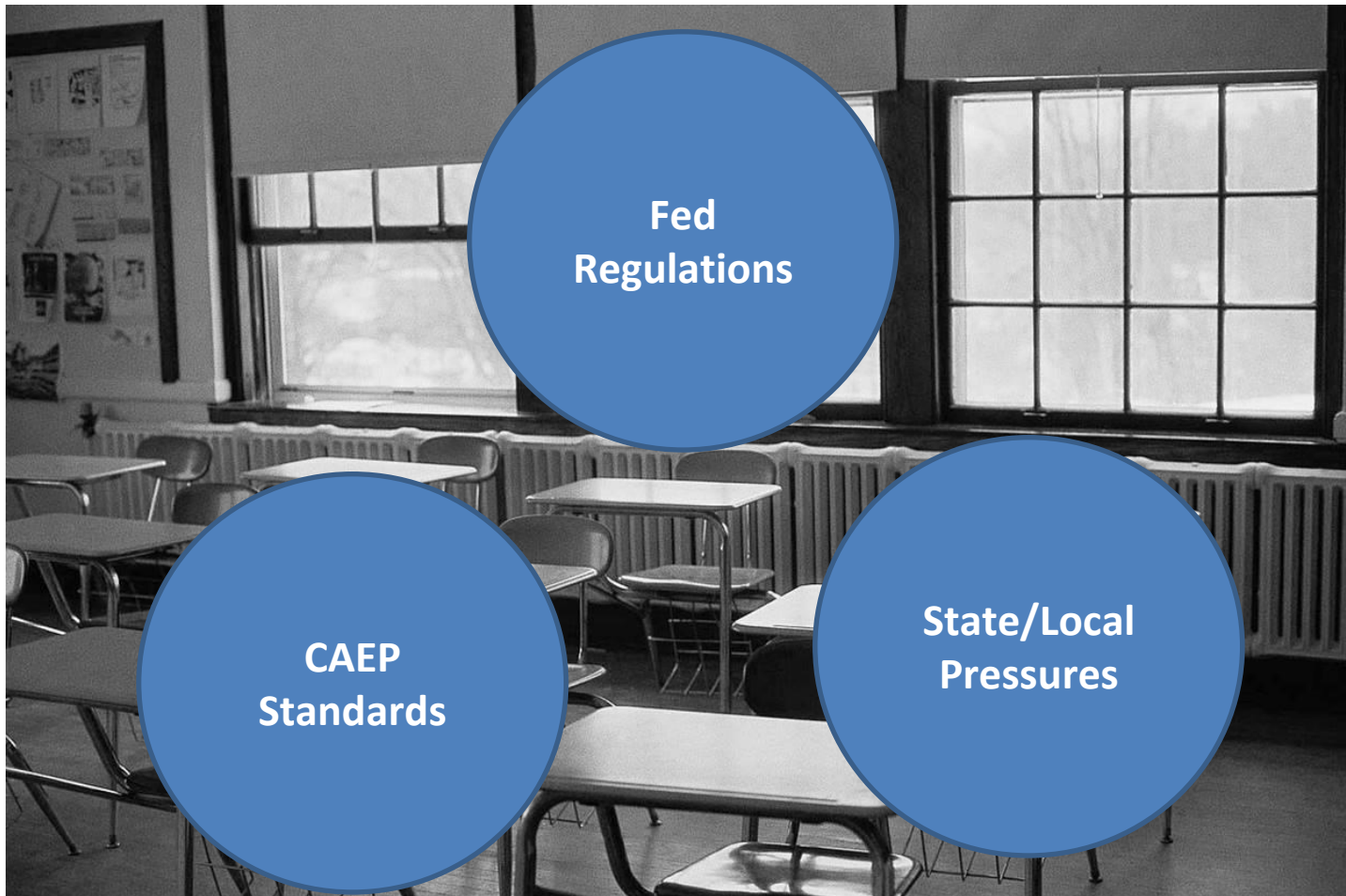
- Description of the challenges & unique Hawaii context
- Effective data use at University of Hawaii - Mānoa
- Understanding variation in practice/performance
- Making work problem-specific & user-centered

# No Headlights



Source: [gettyimages.com](https://www.gettyimages.com)

# Headlights Really Matter



# What data do programs need to improve?

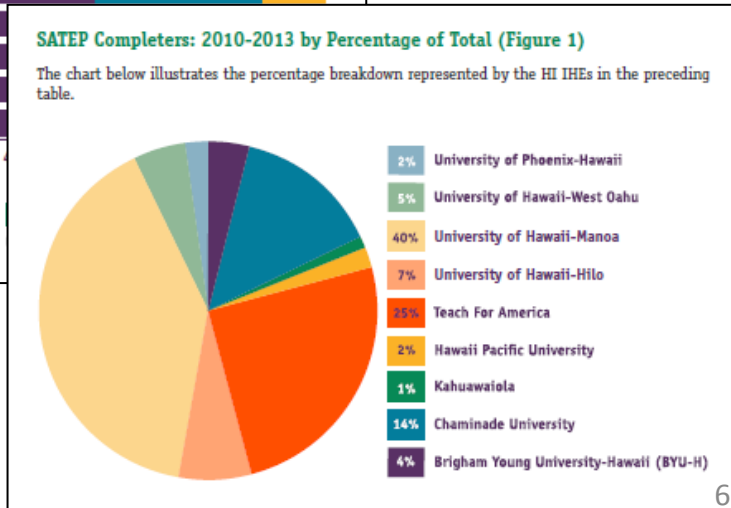
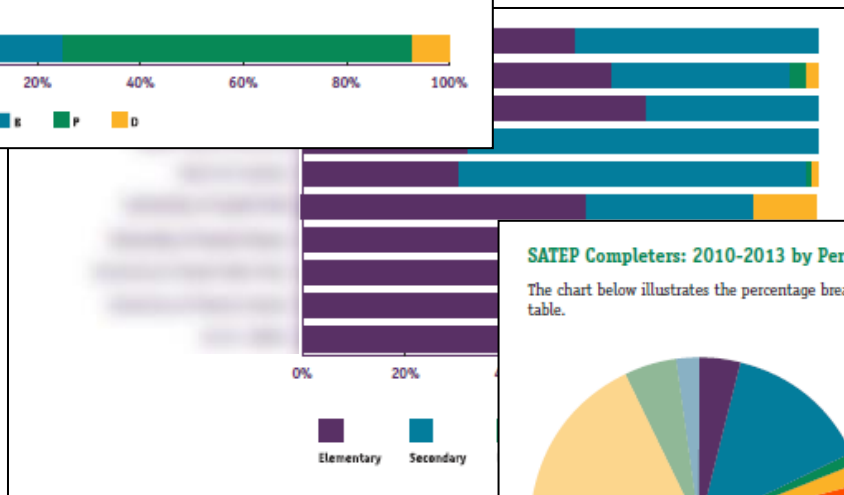
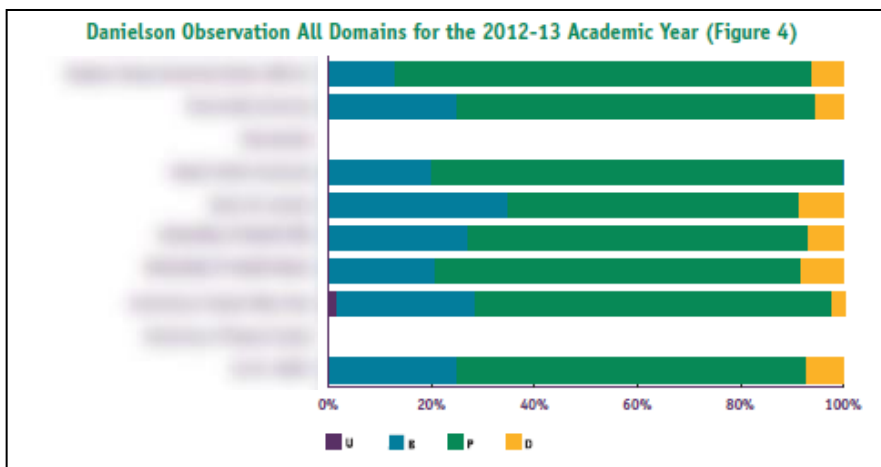
Who should they be recruiting?

How well do their teacher candidates demonstrate the knowledge and skills needed to be successful teachers?

Where are teachers placed and how do they perform once in the classroom?

What are the teacher candidates' impact on K-12 students?

# Data Linkages for Hawaii Teacher Prep Programs circa 2012-13



# University of Hawaii - Mānoa Vision for Data Use

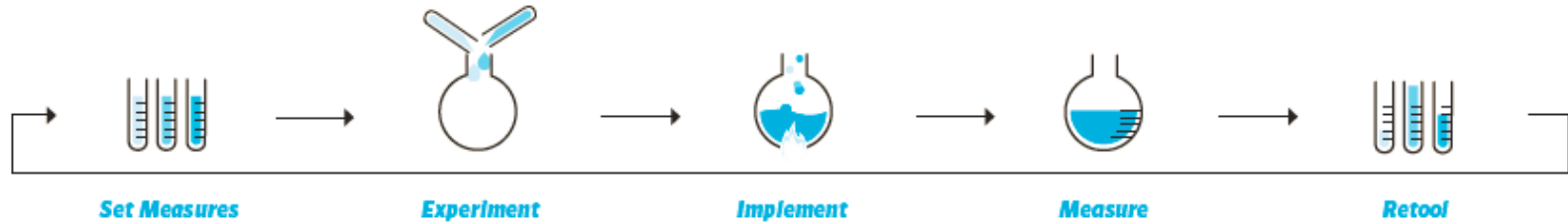


# Principles of Improvement Science

1. Make the work **problem-specific** and **user-centered**.
2. **Focus on variation** in performance.
3. **See the system** that produces the current outcomes.
4. We **cannot improve** at scale **what we cannot measure**.
5. Use **disciplined inquiry** to drive improvement.
6. Accelerate learning through **networked communities**.



# EdPrepStat Process



**What are we doing  
within our programs to  
prepare teachers?  
(Inputs)**

**Is it working?  
(Outcomes)**

**What will we do together to improve?**

# Setting Improvement Goals



Source: Adams, Scott, Dilbert.com, 2012.

# UHM COE Theory of Action and Key Metrics

**Goal: By AY 2016-17, COE will prepare 100% of graduates to serve as effective new teachers (framed by InTASC Standards for purposes of this project) capable of increasing P12 student learning (Version 10/02/15)**

## Short-Cycle Metrics to Track Progress Across Programs Toward this Goal:

1. Performance on COE admission, program, and completer requirements, and satisfaction surveys
2. Graduate performance on HIDOE EES measures (Classroom Observations, Student Learning Objectives, HSA Median Growth Percentile, Core Professionalism, Tripod Student Surveys)
3. Performance on shared assessments (planning, instruction, P12 assessment, dispositions)

## To reach this goal, we will work to:

*Examine curriculum, field/clinical experiences, performance and survey data across programs to ensure that all candidates have the knowledge, skills and dispositions to serve as effective new teachers (aligned with CAEP Standard 1)*

1. *Establish consistent high quality of coursework and field/clinical experiences, using shared internal assessment results and EES data to triangulate evidence and track progress (CAEP Standards 1 and 2)*
2. *Use data from multiple measures of performance (shared internal assessments, EES) across programs to triangulate evidence and improve completers' ability to contribute to P12 student learning (CAEP Standard 4)*
3. *Use data from COE system of surveys (completers, graduates, mentor teachers, employers) across programs to triangulate evidence related to satisfaction with educator preparation programs, and respond to needed areas of improvement (CAEP Standard 5)*

*Examine recruitment and admission policies and procedures across programs to ensure that COE attracts, retains, and graduates diverse, high-quality cohorts of candidates (CAEP Standard 3)*

1. *Examine profile of incoming applicants across programs (GPA, Core/SAT/ACT/Praxis II scores, undergraduate degrees, interview data, and other evidence from review of applicant qualifications and promise of teaching ability), to track progress from baseline into the first three years of teaching to strengthen the quality of admitted cohorts of candidates*
2. *Analyze state needs to target hard-to-staff schools (e.g., in rural areas) and shortage fields (i.e., English/reading, Hawaiian language, Hawaiian immersion, mathematics, science, special education, vocational/technical education), and track recruitment, retention, and graduation of new teachers against these needs*

# Identifying Critical Action Items

<b>Action Item</b>	Develop <b>common assessments</b> for measuring candidate performance (content knowledge, planning, instruction, assessment, dispositions)
<b>Rationale</b>	Assessments now in use vary widely between programs and may not always tell us what we need to know about the performance of our candidates in the context of our definition of effective teaching.
<b>Expected Outcome</b>	<ul style="list-style-type: none"> <li>•Assessments provide accurate measures of relevant content knowledge, pedagogy and teaching skills required for effective first year service</li> <li>•Aligned content knowledge, planning, instruction, assessment, dispositions assessments used across the program areas will indicate future performance on edTPA domains for our teacher candidates</li> </ul>
<b>Key Milestones</b>	<ol style="list-style-type: none"> <li>1. Identify assessments that need to change and how – (both within and across programs) - 10/15/15</li> <li>2. Revise current assessment instruments and align training, scoring, and use across the program areas– 12/1/15</li> <li>3. Implement newly developed, aligned assessments – 1/15/16</li> <li>4. Examine differences in scores between in-program assessments '14-15 &amp; '15-16 - 8/1/16</li> <li>5. Examine differences in local scoring and national edTPA scoring - 8/1/16</li> </ol>

# Four Main Insights

1. A process is required to measure and manage the work of improvement;
2. Change is difficult, and, without clear goals and work-specific levers for change, programs stay stuck in their current position;
3. Stakeholder input is critical, but it requires strategic facilitation so that input leads to action;
4. Providing data is not enough - understanding what it means and how it drives future action is a skill that is built over time and best done when driven by practitioners.

# Contact Info

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