

A photograph of a large crowd of people at night, likely at a sports event or concert. The foreground shows the silhouettes of several people with their arms raised in celebration. The background is filled with a dense crowd and out-of-focus lights in various colors (white, blue, yellow, red). A semi-transparent dark grey rectangular box is positioned in the upper right quadrant, containing the text 'GETTING REAL AND SUSTAINED IMPROVEMENTS IN SCHOOLS'.

# GETTING **REAL** AND **SUSTAINED** IMPROVEMENTS IN SCHOOLS

# Program **Evaluation** Team



# Our guiding mission...

"...to build the capacity of school leaders to make informed decisions using evidence that improves programs and services for all students."



What is improvement?

# Improvement Science **Defined**

A systematic approach to making changes that draws on the efforts of everyone to collectively learn their way into stronger system performance and better outcomes for students.

# Principles of Improvement

Improvement occurs through application when you...

1. Know why you need to improve
2. Have a feedback mechanism to tell you if the improvement is happening
3. Develop an effective change that will result in improvement
4. Test a change before attempting to implement
5. Know when and how to make the change permanent

# Deming: Theory of Profound Knowledge



Image credits: Oshatrain

- Best known improvement guru
- Japan post WWII
- United States post WWII
- Automotive crisis late 1970s
- The theory of profound knowledge

# Improvement Model

## AIM

What are we trying to accomplish?

## MEASURE

How will we know if a change is an improvement?

## CHANGE

What changes can we make that will result in improvement?

## IMPROVEMENT CYCLE

Plan

Do



Act

Study



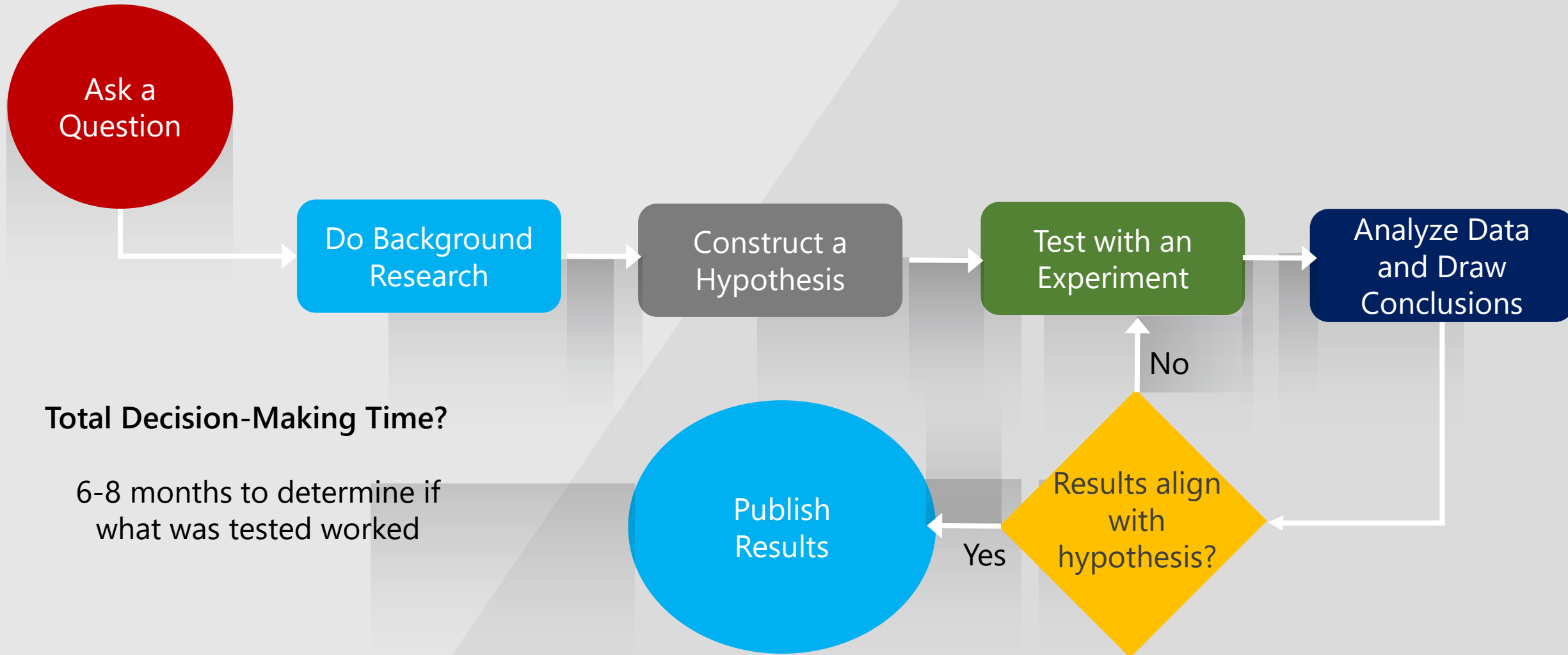


Why education needs an improvement approach?

Effort and attitude are never  
a **substitute** for learning.



# Consider the way we make **decisions** about what works in education...



# Keep in mind...

- The aim of educational research is primarily for **publishing**, not improvement.
- Schools have to **implement** research in a real-world, messy, & chaotic context, not laboratories.
- We lack an **evidence-based way** to learn during testing & implementation that is just as rigorous as our method for determining the best practice.

# Knowledge of Improvement

Improvement combines **subject matter knowledge** with **improvement methods** to develop effective changes for improvement

The diagram consists of two overlapping rectangular boxes. The left box is light blue and contains the text 'Subject Knowledge (Research/Best Practices)'. The right box is light yellow and contains the text 'Improvement methods and measurement (Model for Improvement, Run Chart, PDSAs)'. The overlapping area in the center is a darker shade of yellow and contains the text 'Increases the likelihood that changes made result in real and sustainable improvement'.

Subject Knowledge  
(Research/Best Practices)

Increases the likelihood  
that changes made result  
in real and sustainable  
improvement

Improvement methods  
and measurement  
(Model for Improvement, Run  
Chart, PDSAs)



What does improvement typically look like in education?



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What if there was a better way?

# Improvement Activity



# Coin Experiment: **Debrief**

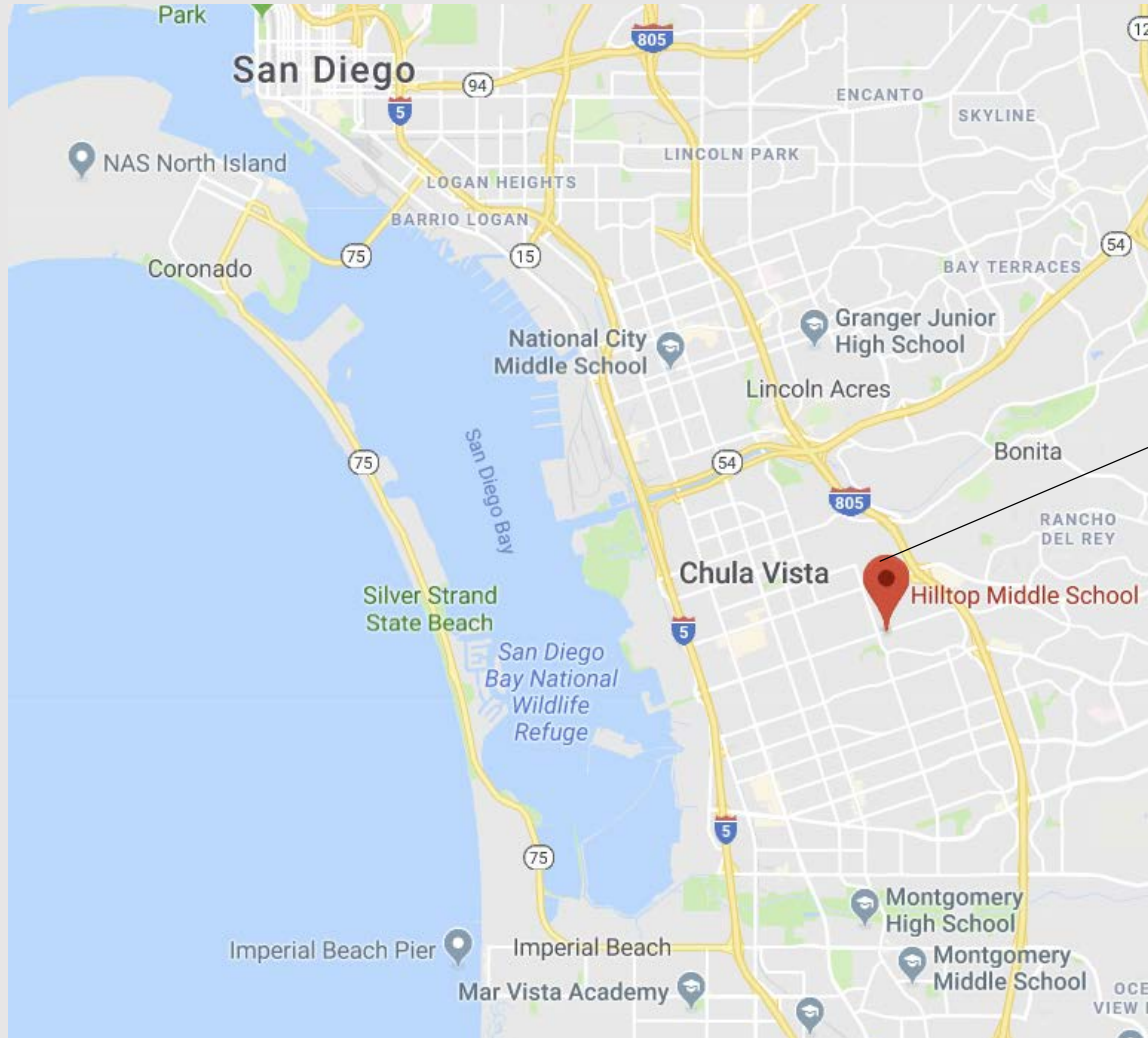
- What did you learn from your initial tests? What did you do with that learning?
- Why is it important to get a stable process first?
- How is this different than the way we typically go about trying to make improvements?

An aerial photograph of a road intersection, with a semi-transparent green overlay covering the entire image. The text is centered over the road.

# One School's Improvement Journey



# Our Journey Begins...



Rhea spends an average of 25 hours of her work week on discipline issues.



# Our Journey Begins...

Loss of instructional time is among the most preventable reasons why students perform poorly academically. According to UCLA IDEA, students in high poverty schools lose nearly *18 minutes of instructional time per period* compared to 12 minutes in low poverty schools. This difference reflects approximately 30 more instructional minutes lost per day in a high poverty school (Rogers, Mirra, Seltzer, & Jun, 2014).



# Understanding the Problem

- Identifying the problem is the most critical part of the improvement process because it establishes the **foundation** for all the other improvement work.
- To identify the problem, you must have a deep understanding of the **system** and the **processes** that produce the problem.
- The people within the system may contribute to the problem, but the root cause exists in **work processes**.

# Conduct Empathy Interviews



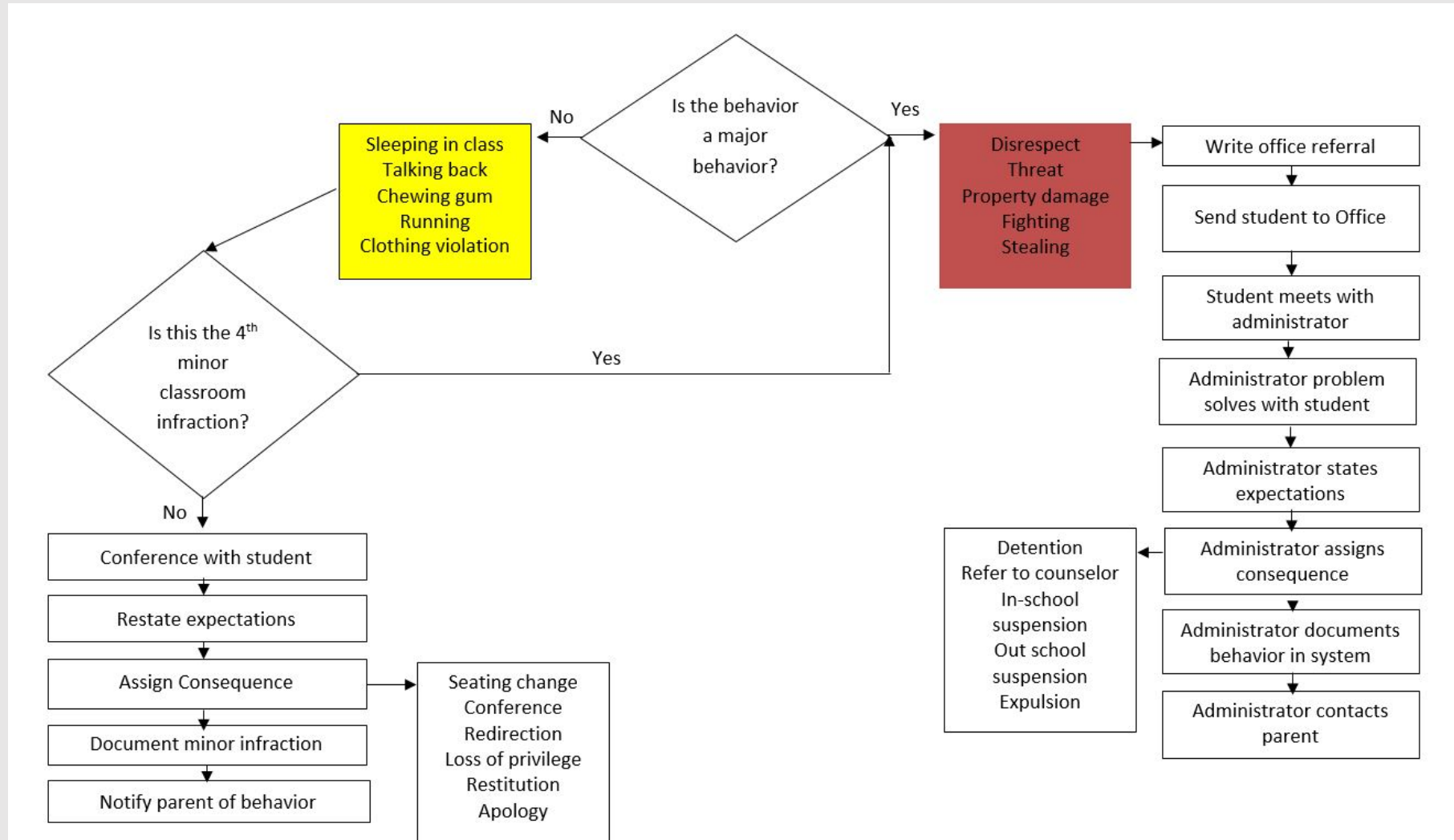
Reasons...

"I don't know why I'm here."

"Dress code violation"

"Chewing gum in class"

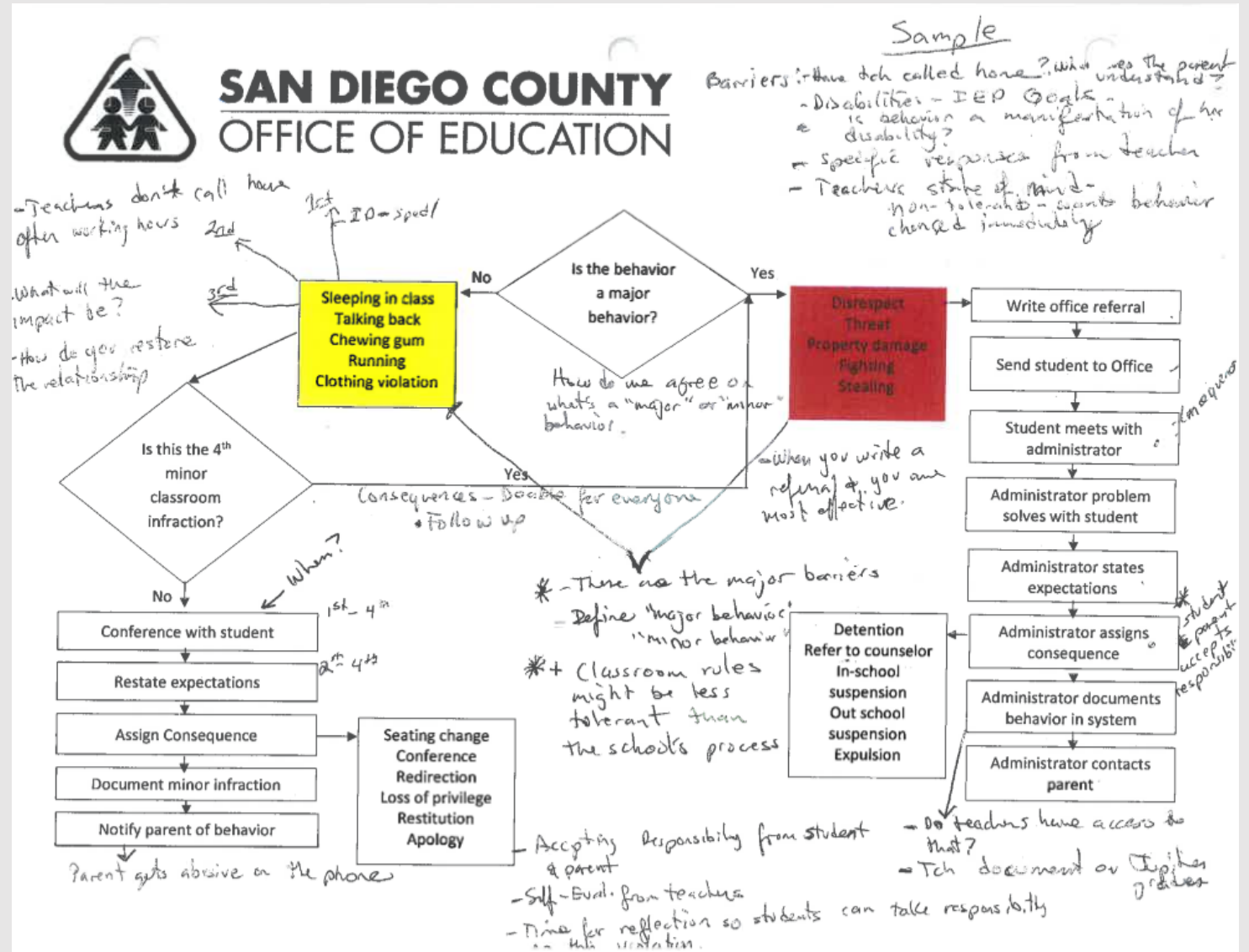
# Map Out Key Processes



# Identify Root Causes in the Processes

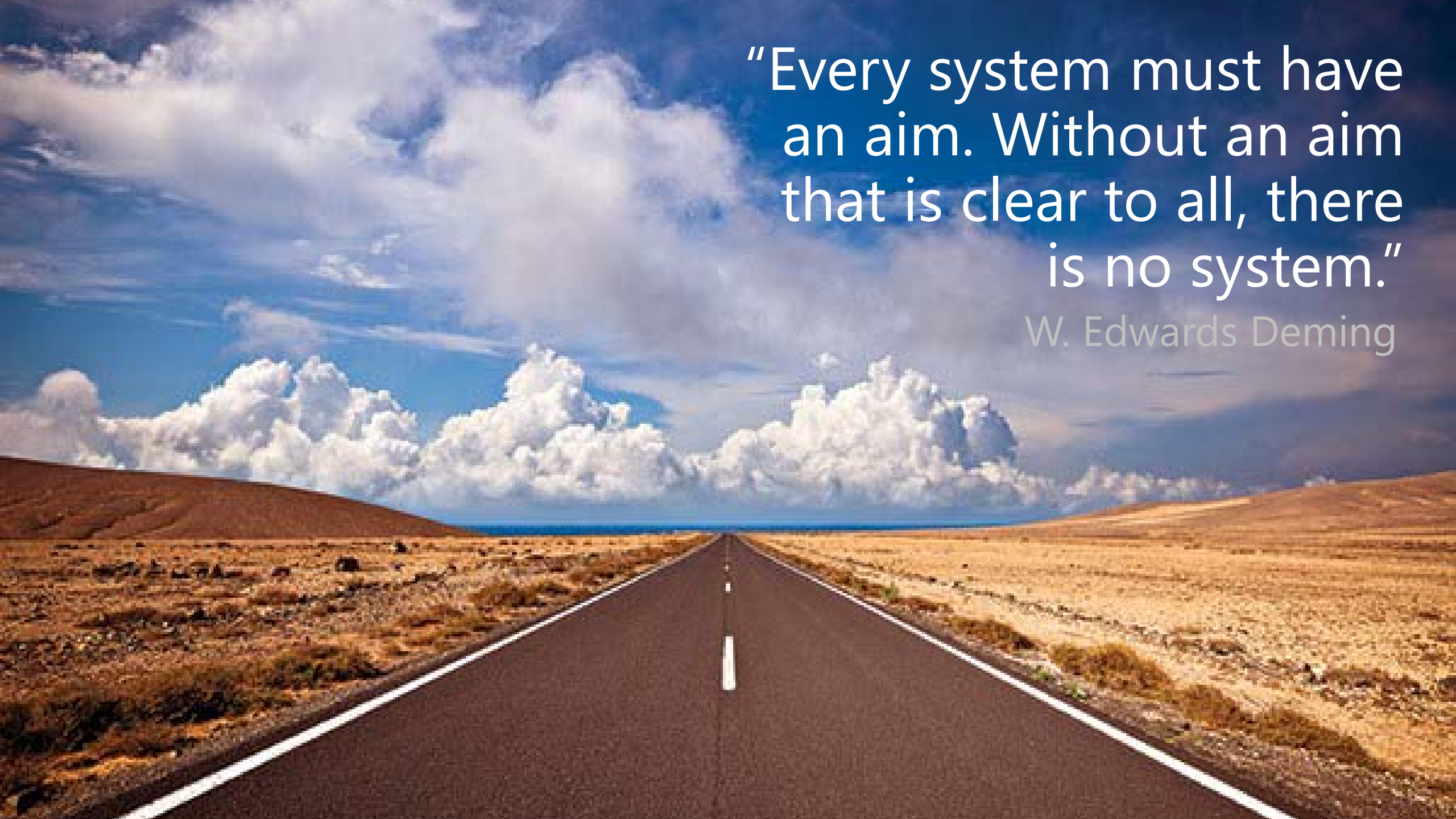
What prevents this process for working?

What major barriers do you encounter?





The **aim** is what the improvement effort is trying to accomplish.

A photograph of a long, straight asphalt road stretching from the foreground into the distance. The road is flanked by dry, brownish-yellow fields. In the far distance, a blue horizon line is visible under a bright blue sky filled with large, fluffy white clouds. The overall scene conveys a sense of journey and direction.

"Every system must have  
an aim. Without an aim  
that is clear to all, there  
is no system."

W. Edwards Deming

# Establish an Aim

The student discipline team's goal for reducing the loss of instructional time due to ODRs is **30 percent** from baseline by March 2018.



# Measurement: Why it is Necessary



1. Measurement lets us know if a particular innovation should be kept, changed or rejected
2. Measurement helps in understanding causes.
3. Measurement helps to clarify aims.

"The purpose of **measurement** is to provide just enough information to take the next step in learning."

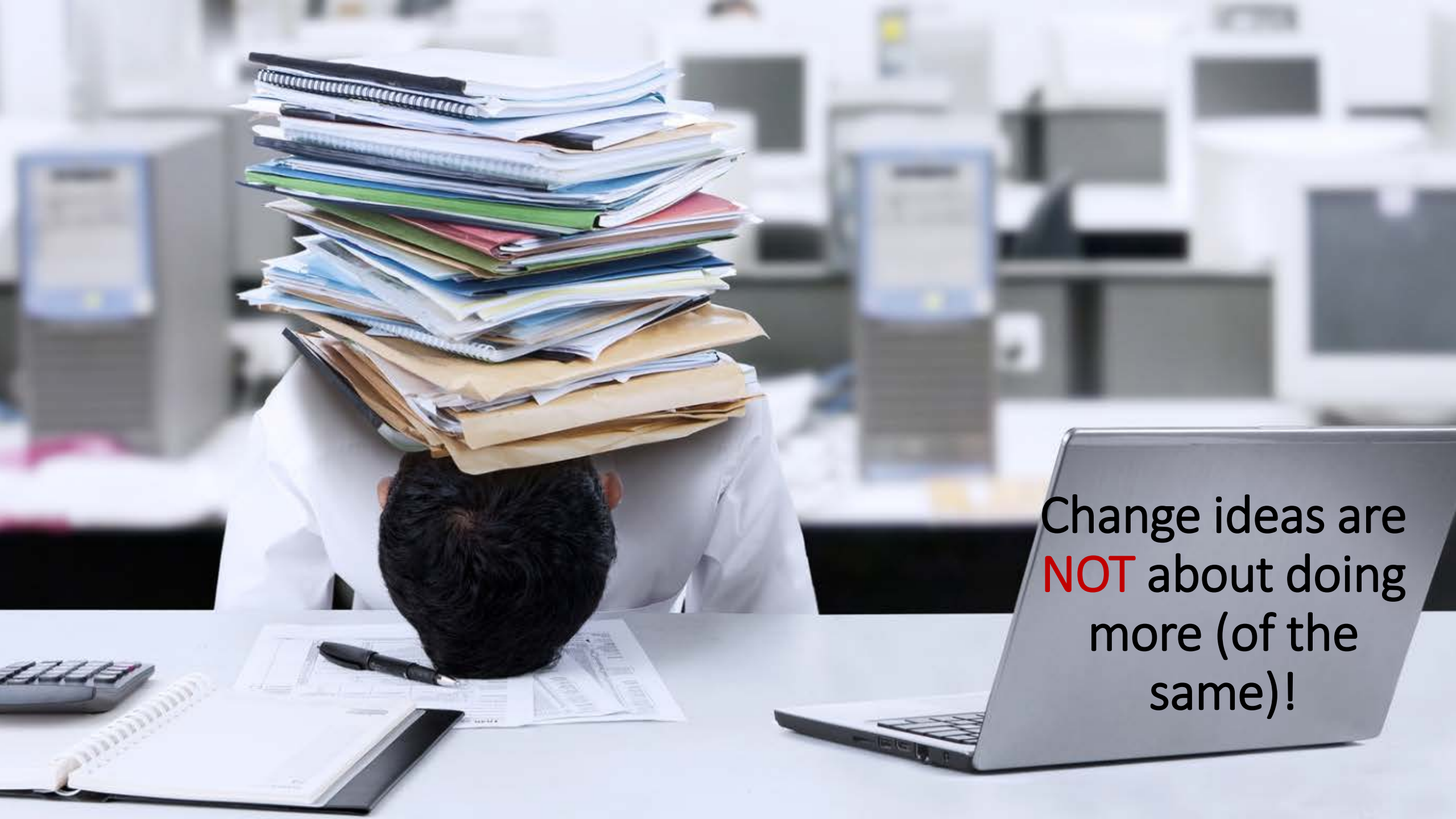


# Develop a Family of Measures

Concept	Outcome	Process	Balancing
Reduce Lost Instructional Time	The # of office discipline referrals.	Loss of Instructional Time due to ODRs. Calculated as the length of time between student admission and discharge for ODR. All suspensions are calculated as the number of days suspended.	Staff turnover

# Develop a Family of Measures

Concept	Outcome	Process	Balancing
Reduce Lost Instructional Time	<i>My result...what I'm trying to accomplish.</i>	<i>How I'll know if the system is performing in a way that allows me to accomplish my outcome.</i>	<i>What is affected by focusing on this outcome?</i>



Change ideas are  
**NOT** about doing  
more (of the  
same)!

When we use the word “changes” we mean:

**Changes as practices that result in alterations to how work gets done.**

# Changes must be **actionable**, not conceptual

**Conceptual**



**Actionable**

**Change**

Help student to become self-regulated

Have student set goals

1:1 conversation protocol where teachers help students identify a goal, anticipate barriers and obstacles, and plan how to overcome them

# Change Idea



Step 3

- Standardized referral process that distinguishes referable offenses into two categories: classroom managed offenses and administratively managed offenses.
- Classroom expectations/management plan for substitute teachers (handout placed in sub folder).
- Daily whole school threat assessment (red day, yellow day, green day).
- Check-in/Check-out (Parent contact script)



85%

of ideas fail when put into practice

# Plan-Do-Study-Act Cycle

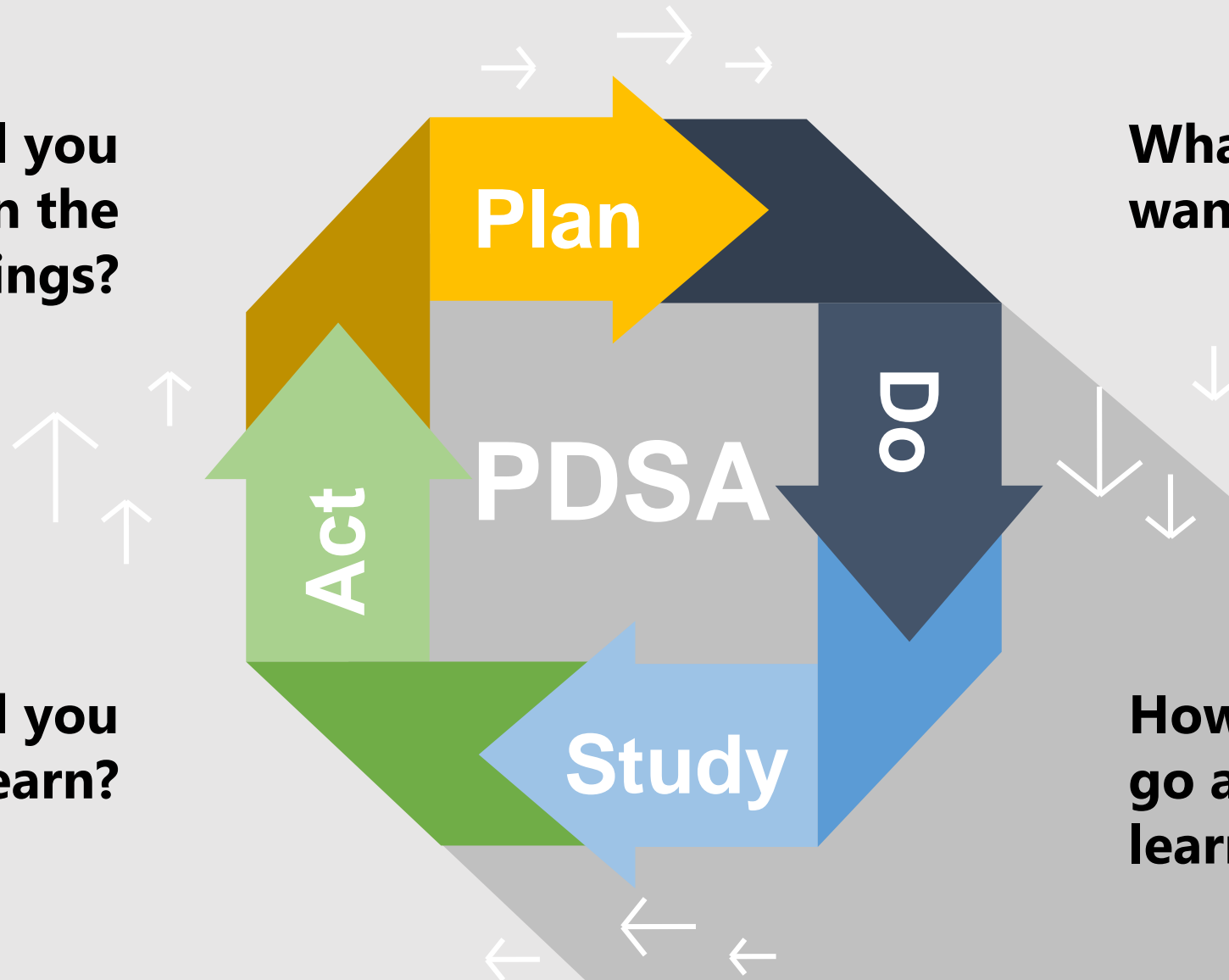


**How will you  
act on the  
learnings?**

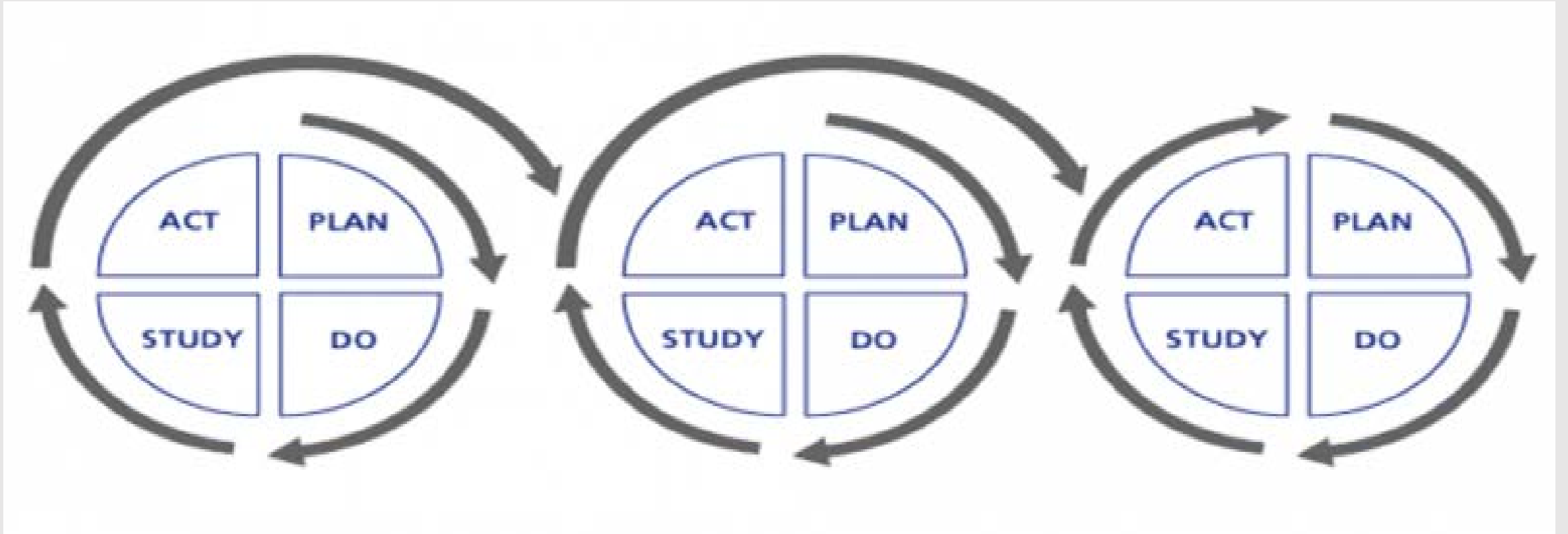
**What do you  
want to learn?**

**What did you  
learn?**

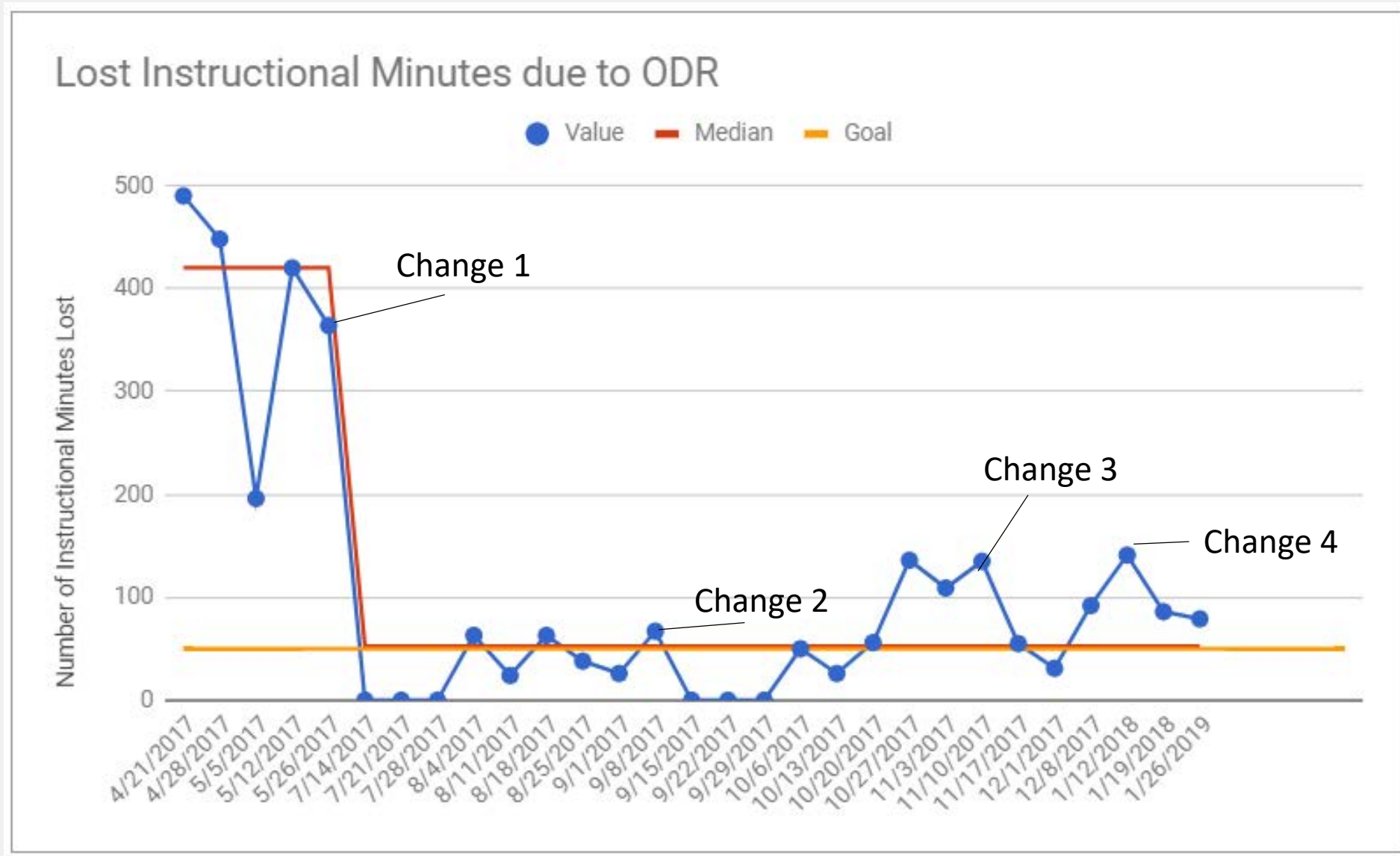
**How will you  
go about  
learning it?**



# Apply **learning** and **retest**...



# Results from tests...



# The Sequence of Improvement



Hunch

Develop change idea

August 2016

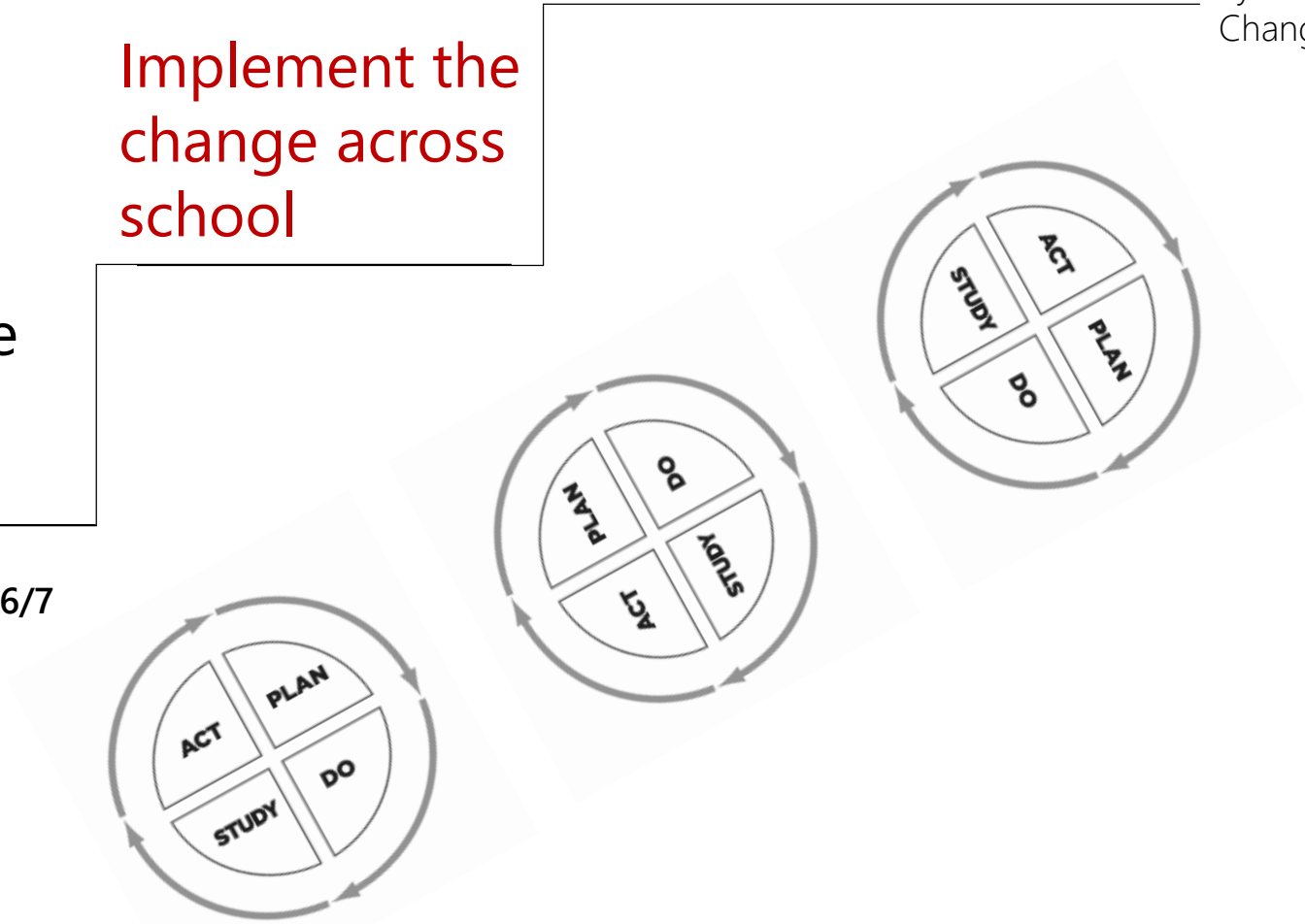
September-February 2016/7

Test the change under multiple conditions

Implement the change across school

Spread the change rapidly and permanently

System Change





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