

Developing a Measurement Strategy

Welcome

Your Facilitators



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Learning Outcomes

- Understand the role of the Model of Improvement in building a theory
- Understand how to build a family of measures
- Get started in building your theory and possible measures

Model for Improvement

Fundamental Belief

Every **system** is perfectly designed to get exactly the results it gets

How is data used in your system?

What data does your team use?

How often do they look at it?

How do you decide what data to use?

Data, Data, Data



5,433

Students Enrolled
2021-22 School Year



72.4%

Students Regularly Attend
2020-21 School Year

53.6%
Met ELA Standards

45.2%
Met Math Standards
Spring 2022

42.8%
Met Science Standard



\$13,015

Per-pupil Expenditure
2019-20 School Year



79%

Graduated in 4 Years
2020-21 School Year



324

Number of Classroom Teachers
2020-21 School Year



37.2% **28.8%**

High Math Growth High ELA Growth

2018-19 School Year



15.8

Average Years of Teaching Experience
2020-21 School Year

Data is collected on different timelines throughout the year. To provide the most current data possible, each measure is updated as data becomes available.

Summary Trend By Grade

How long are students being excluded for in response to a behavioral violation?

2019-20

1 Day or Less 2-3 Days 4-5 Days 6-10 Days 10+ Days

All Students



Gender



Gender X N<10 0.0%



Federal Race/Ethnicity

American Indian/ Alaskan Native Suppressed: Top/Bottom 0.0%



Black/ African American Suppressed: Top/Bottom 0.0%



Summary Trend Trend: Program

What percent of students passed all their courses in ninth grade?



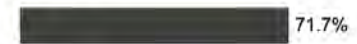
All Students

All Students



Gender

Female



Gender X

Male



Race/Ethnicity

American Indian/ Alaskan Native

Asian



Black/ African American

Hispanic/ Latino of any race(s)



Fundamental Belief

Data is the voice of the
system

A Different Way....

How measurement is usually used in Education	Measurement that guides improvement
Using data to determine if something worked	Using data to help make adjustments during the improvement journey
A source of judgement	A source of learning
Looked at and put away until next year	A vital component for teams to use as a part of their meetings

A Different Way....

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PARTNER SHARE:

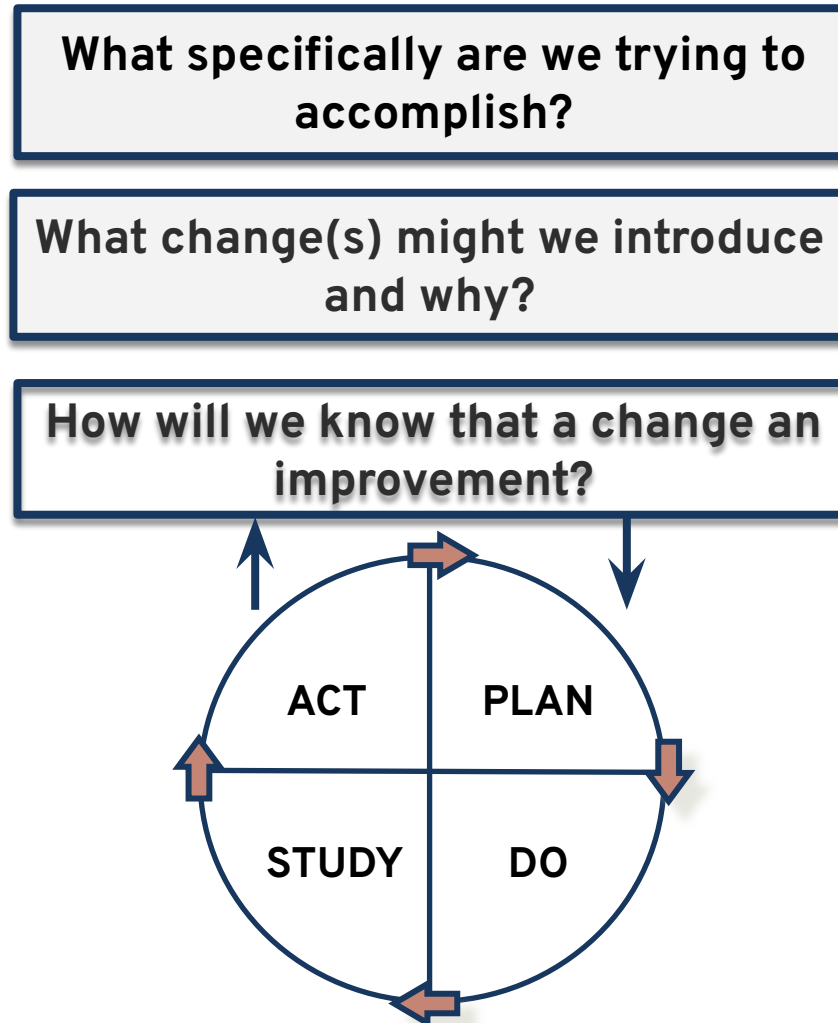
How does this align or is different from your experience using data?

Measurement for Improvement

	Measurement for Research	Measurement for Learning and Process Improvement
Purpose	To discover new knowledge	To bring new knowledge into daily practice
Tests	One large "blind" test	Many sequential, observable tests
Biases	Control for as many biases as possible	Stabilize the biases from test to test
Data	Gather as much data as possible, "just in case"	Gather "just enough" data to learn and complete another cycle
Duration	Can take long periods of time to obtain results	"Small tests of significant changes" accelerates the rate of improvement

Model for Improvement

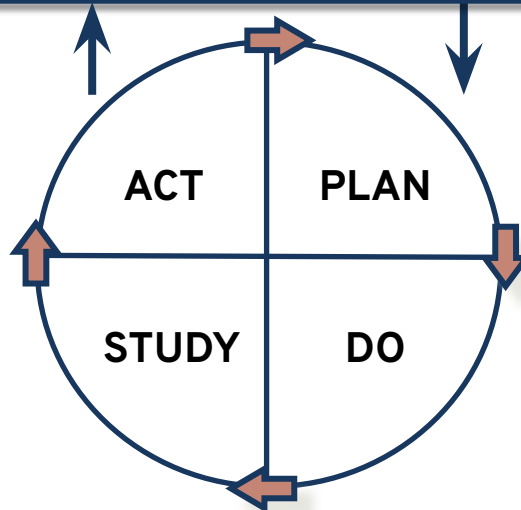
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Measurement for Improvement

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Model for Improvement



*The “engine”
of any
improvement
effort*

Model for Improvement

KEY Point

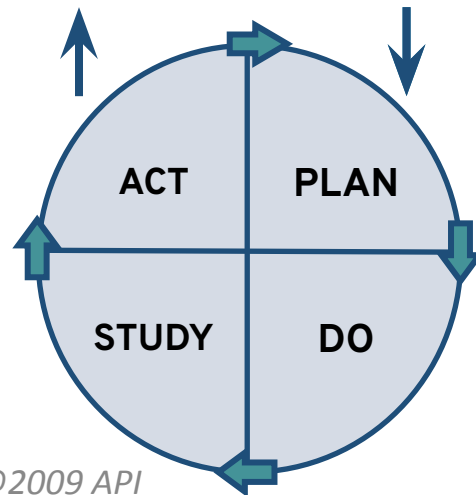
Guiding framework to focus collective efforts

What specifically are we trying to accomplish?

What changes might we introduce & why?

How will we know that a change is an improvement?

Articulating your theory



Learning in Practice

Theory of Improvement

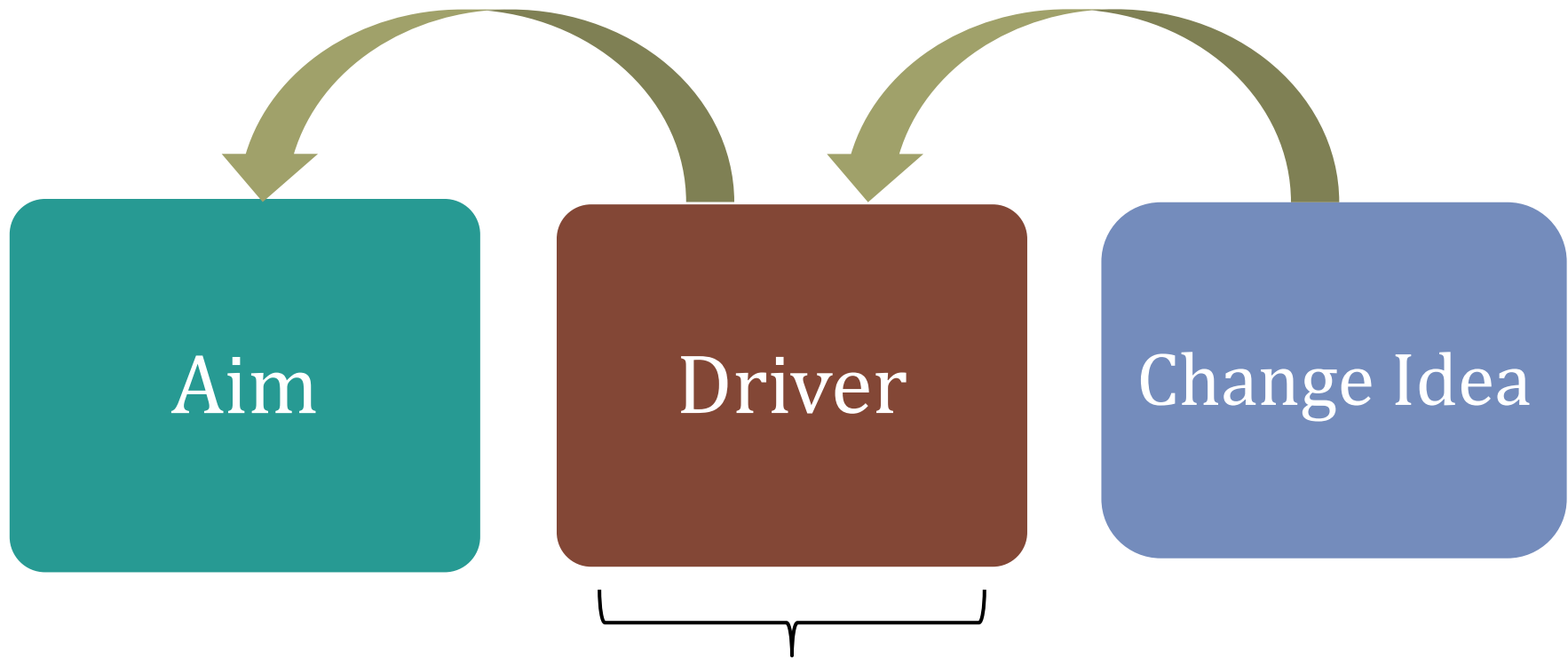
- **Theory starts with belief**
 - We begin with conceptions of why things are the way they are and what we might do to change them
- **Theory is strengthened by gathering evidence**
 - Confirmatory evidence from practice over time strengthens belief in a theory
- **Theory must, by definition, evolve when failure occurs**
 - All theories remain humble. While confirmatory evidence strengthens belief, only a single instance of theory failing in practice necessitates its change, incorporating learning(s) from the failure

Theory of Improvement

...which in turn will...

...that will impact...

If I do...



Key leverage points in the system

What is your Theory?

See if you can draw out your theory of improvement for the balanced calendar...

One example: *If students are provided with additional opportunities (e.g., intersession) during the school year to receive interventions, then XXX District students will have increased student achievement and engagement*

MEASUREMENT PLAN

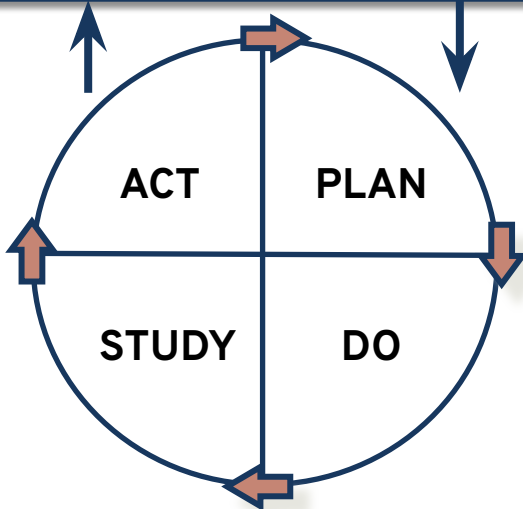
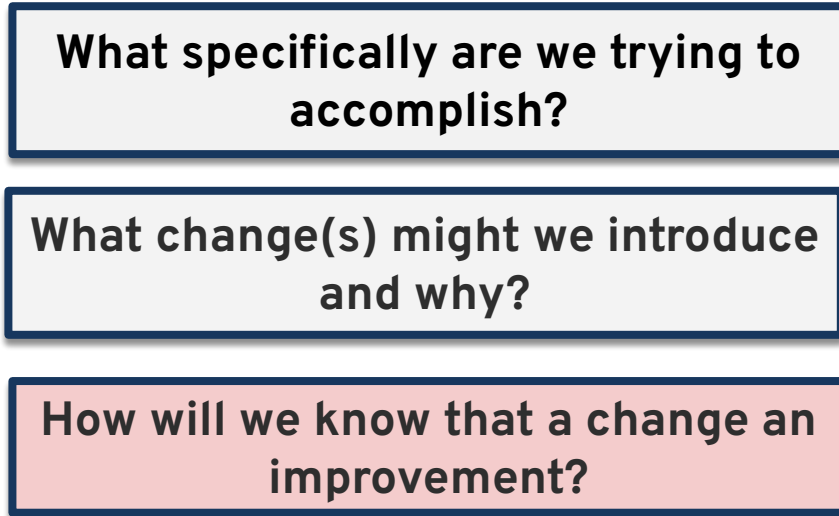
Balanced Calendar Theory: *If..*

then.....

Measurement for Improvement

Measurement for Improvement

Model for Improvement

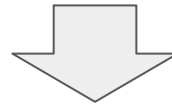


“Measurement is a critical part of testing and implementing changes; measures tell a team whether the changes they are making actually lead to improvement.”

-Institute for Healthcare Improvement

Measurement for Improvement

Provides useable information for learning about how to improve your system.



What is measured:

Needs to be **closely aligned** to the actual work and **specific** to the processes and outcomes you hope to change.

How & when it is measured:

Needs to be **embedded** in the daily workflow. Must produce data accessible in a **timely** manner.

Social processes shaping *use*:

Requires transparency, **trust**, low stakes, and the **safety** to take risks.

A Family of Measures

OUTCOME MEASURES

How is the system performing? What is the result?

PROCESS MEASURES

Are the parts performing as planned?

BALANCING MEASURES

What's happening to the parts of the system we aren't currently focused on?

A Family of Measures

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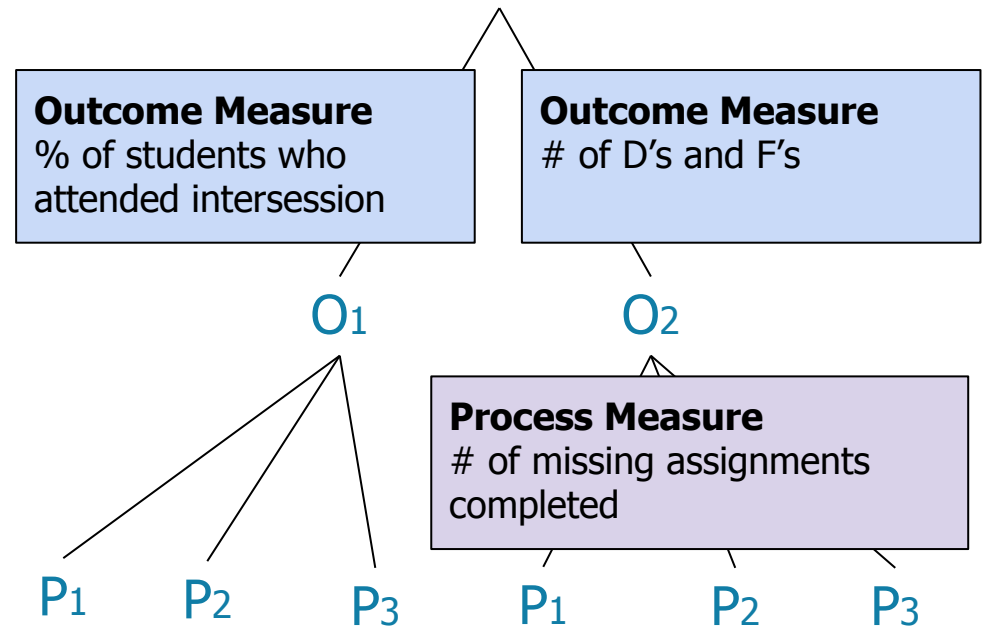
A starting set of Measures

O = Outcome Measures

The overall outcomes we are trying to move through our improvement work. May be measured infrequently.

P = Process Measures

Help us understand performance of day-to-day work; tend to be timely & readily available.



A Starting Set of Measures

Not enough to decide what to measure.....

Also consider:

- How will it be collected? How will it be calculated - think what is the numerator and what is the denominator?
(Measurement Calculation plan)
- Who will be collecting it, where, when? **(Data Collection Plan)**
- Who will be looking at it? How often? What protocol? **(Data Sharing Plan)**

Example Measure

Example- Operational Definition for Measure

Process Measure:

- **Percentage of Senior students** who have a log-in rate to class synchronous online sessions greater than 70% in the LMS **each week**
- **Log-in Rate** = student's overall % for logging into the online LMS

Percentage:

Numerator = # of senior students with greater than 70%

Denominator = Total # of senior students in the class

Collection:

- **Each week** = Measure will be calculated on **Friday** end-of-day for the **preceding week**

A Starting Set of Measures

Measurement Name	Measurement Calculations	Data Collection Plan	Data Sharing Plan
OUTCOME DATA			
PROCESS DATA			
BALANCING			

Closing

Resources

We are available for coaching during the conference if you want further assistance thinking through your measurement plan:

Wednesday, Oct. 12th **3:15-4:00**

Conference Room G1

Thursday, Oct. 13th **9:45-10:45**

Conference Room G1

Thank you!

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