



Carnegie Foundation
for the Advancement of Teaching

Coaching PDSA Cycles

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Objectives

- Understand how PDSAs fit into the larger improvement science context
- Be able to assess the learning from a PDSA
- Be able to determine next steps in building a team's capacity to run PDSAs

PDSA Expertise Development

(1) KNOW
ABOUT
PDSAs

(2)
EXPERIENCE
USING PDSAs

(3) COACH
OTHERS
PDSAs

(4) TEACH/
DESIGN
TESTING
STRATEGY

- (1) Create a TRIAD with at least 1 person that currently coaches
- (2) Introduce yourself (BRIEFLY) to your group
 - One thing you hope you learn today

Agenda

- Introduction to PDSAs in an improvement context
- Practice PDSA coaching
 - Assessing PDSAs
 - Deciding where to focus
 - Setting up a coaching conversation
- Tips and Tricks

Be problem-
focused
and user-centered



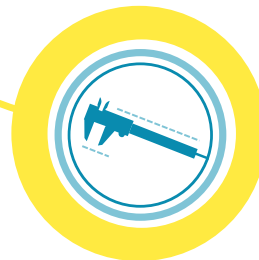
Attend to
variability



See
the system



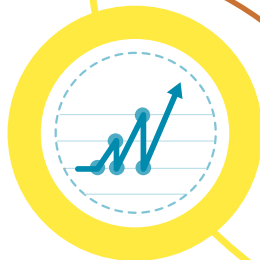
Embrace
measurement



Organize as
networks



Learn through
disciplined
inquiry



6

CORE PRINCIPLES OF
IMPROVEMENT

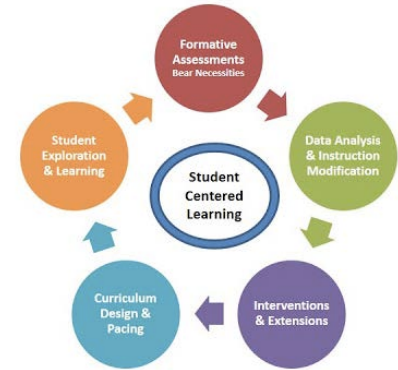
Forms of Disciplined Inquiry in Education



Lesson Study



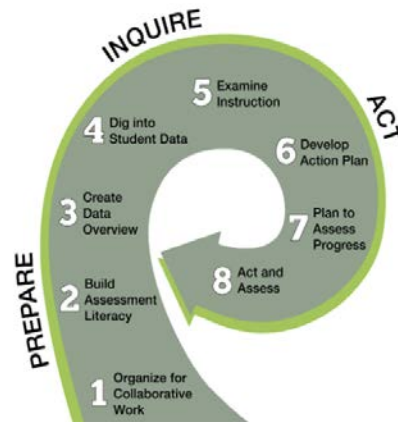
Action Research



PLC Cycle



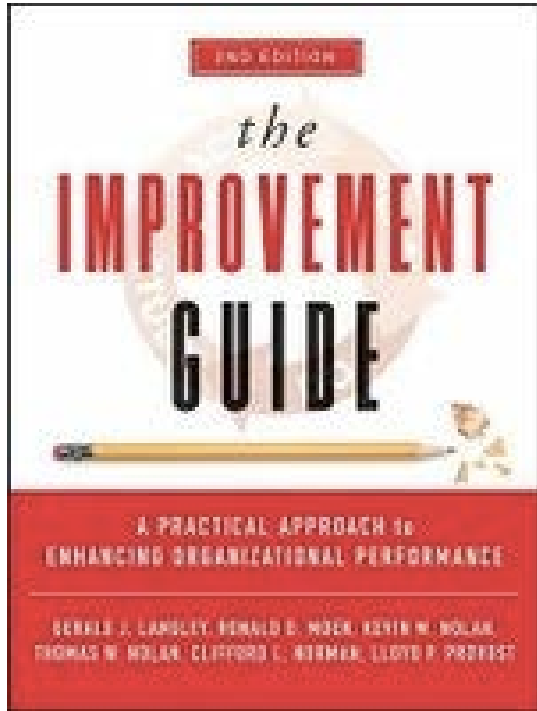
ROCI



Datawise



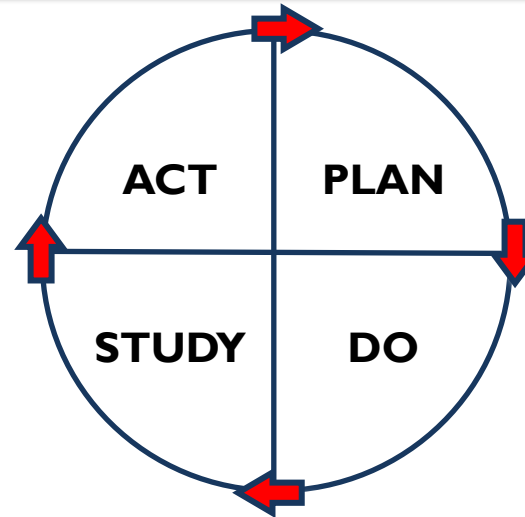
PDSA Cycle



What specifically are we trying to accomplish?

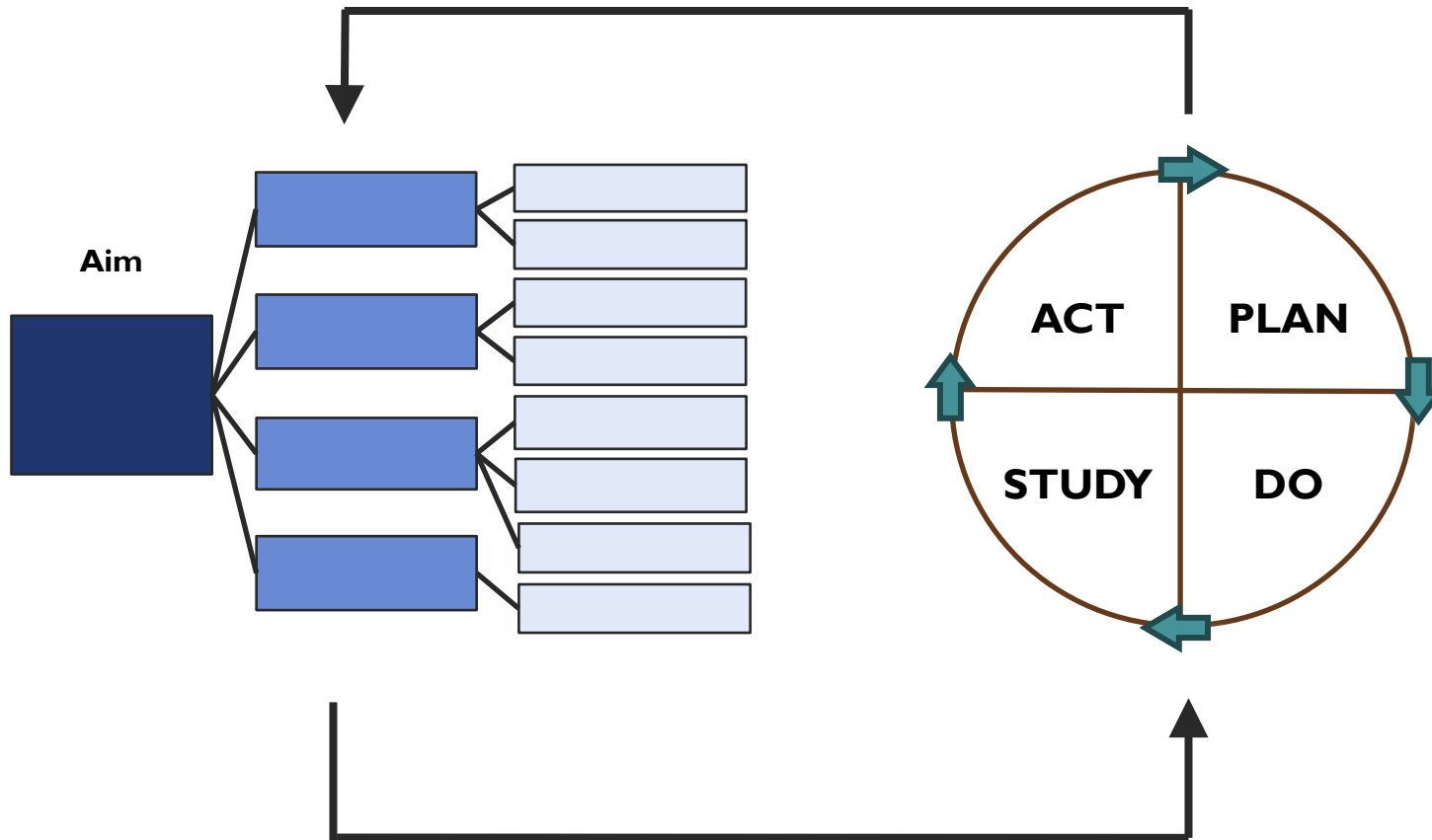
What change might we make and why?

How will we know that a change is an improvement?

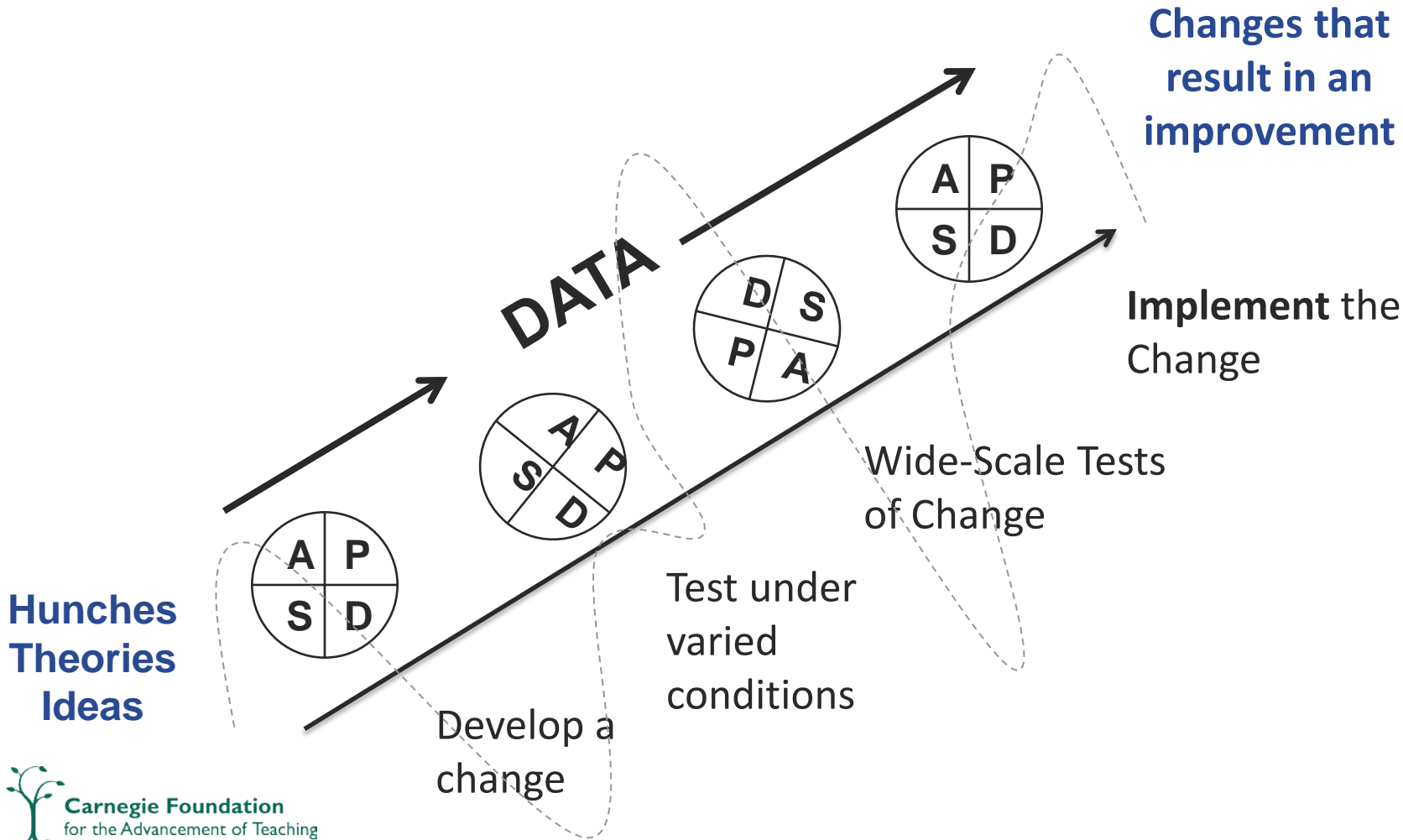


*The Model for Improvement
Associates for Process Improvement*

Theory Informs Testing and in Turn Testing Refines Theory



Learning Your Way into Improvement

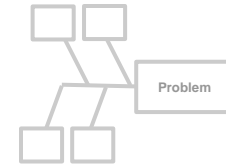


Hunches
Theories
Ideas

Inquiry in Improvement Science

- **Prediction** based test of change
- **The improvement aim** disciplines the focus of inquiry
- **Paired** with process and outcome data (as well as other improvement tools)
- **Flexible methodology** that can be applied to varied practices and used at different sizes
- Results in **common evidence based practices** (and theory of improvement)

5WHYS
----->



Be problem-focused
and user-centered



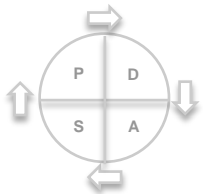
Attend to
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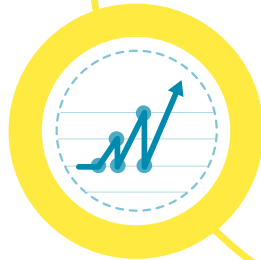
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CORE PRINCIPLES OF IMPROVEMENT

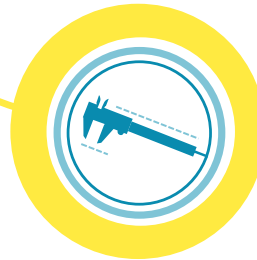
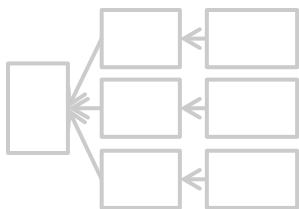
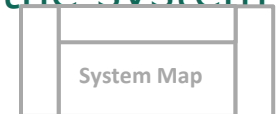
Organize as
networks



Learn through
disciplined
inquiry

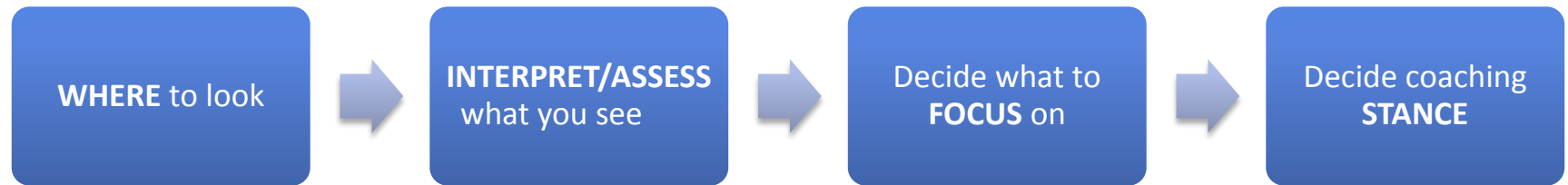


See
the system



Embrace

Coaching Improvement



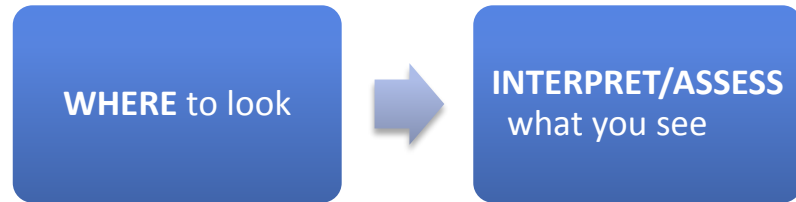
What's important?

*What's going well?
What's not?*

*What can you build on?
What would push work
forward?*

*What stance is
most appropriate?*

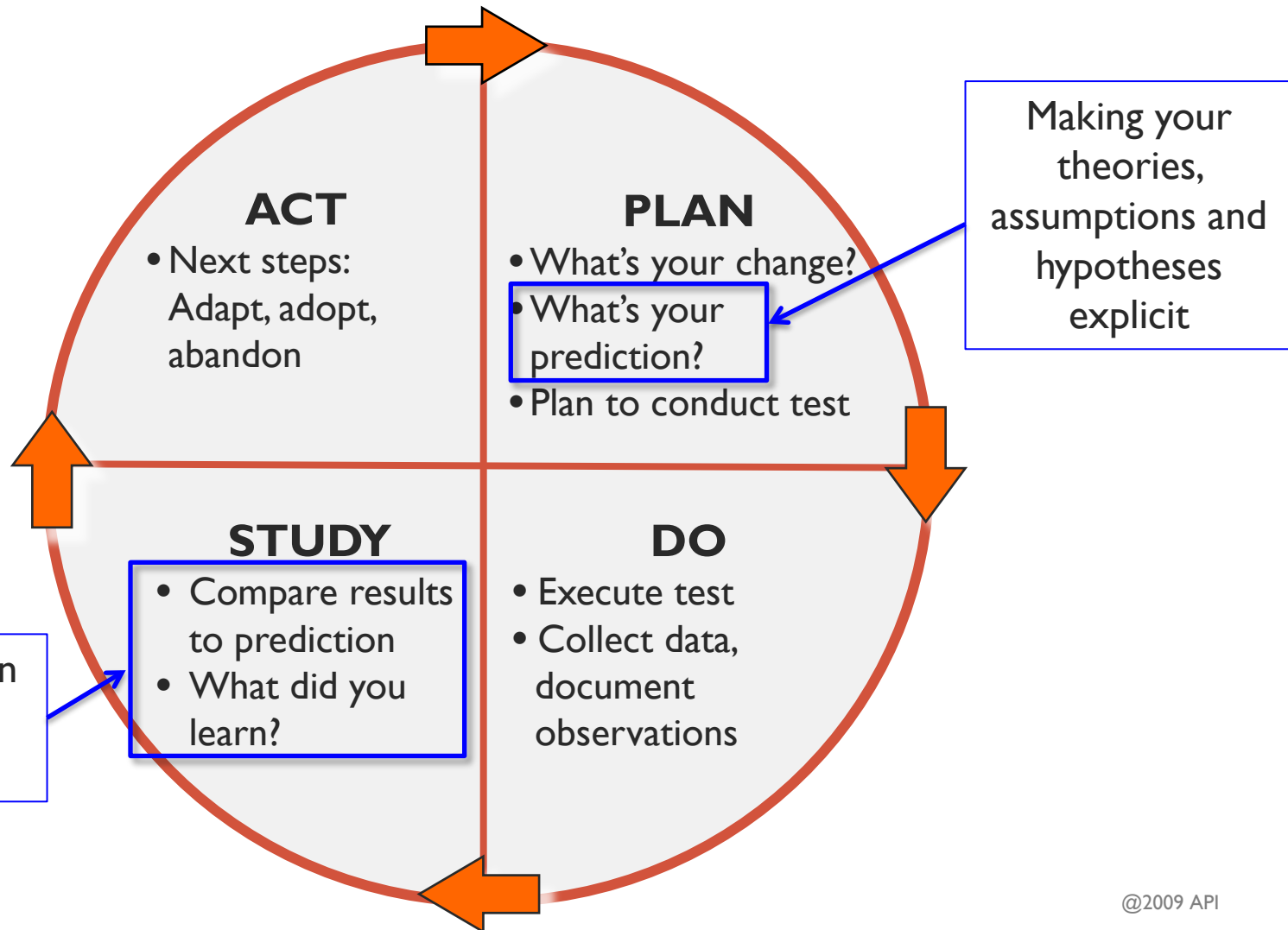
Coaching Improvement



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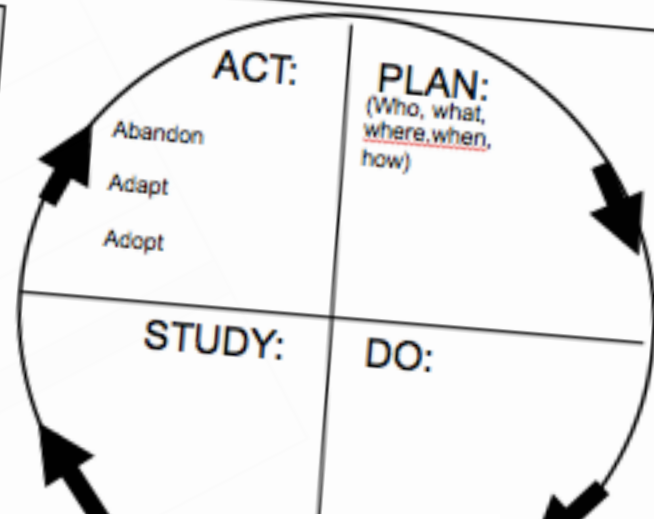
Articulating and Testing Hypotheses



Date: _____ Driver: _____
 Cycle#: _____
 What were the predictions in the previous cycle? Record any data.
 3) STUDY
 What were the predictions in the previous cycle? Record any data.
 Data: Data you'll collect to test predictions
 Predictions: Make a prediction for each question. Not optional.
 Questions you expect what will happen. What do you want to learn?
 Overall goal: To make something work better? Learn how a new innovation works? Learn how to text in a new context? Learn how to...
 All GOAL of the test?
 What is being tested?

Problem: _____
 Aim of this change: _____

The change:



Predictions:

Details: Describe the who/what/when

PDSA Worksheet

Team Name: _____ Cycle Number: _____
 Cycle start date: _____
 Cycle end date: _____

Problem: _____

PLAN: Describe the change you are testing and state the question(s) you want this test to answer (if I do x will y happen?) and your predictions.

The Change: _____

Aim of the Change: _____

Question	Prediction
1. _____	_____
2. _____	_____
3. _____	_____
4. _____	_____

How will you carry out the test and collect data to evaluate your predictions?

DO: Report what happened when you carried out the test. Describe observations, findings, problems encountered, and special circumstances.

STUDY: Compare your results to your predictions.

What happened? (Match with each Question/Prediction)
1. _____
2. _____
3. _____
4. _____

What did you learn? Any surprises?

ACT: Modifications or refinements for the next cycle; what will you do next?

WHERE to
look

ARTICULATION OF A CLEAR HYPOTHESIS

- change
- goal
- predictions

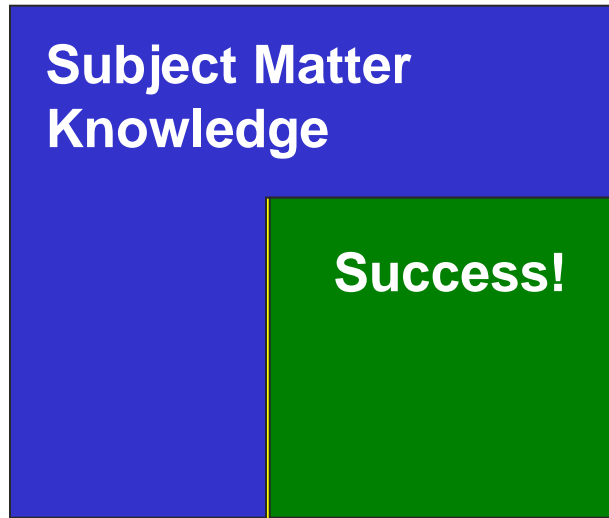


Subject Matter vs. Improvement

Subject Matter

Knowledge:

Research and professional knowledge about the content of what you are improving



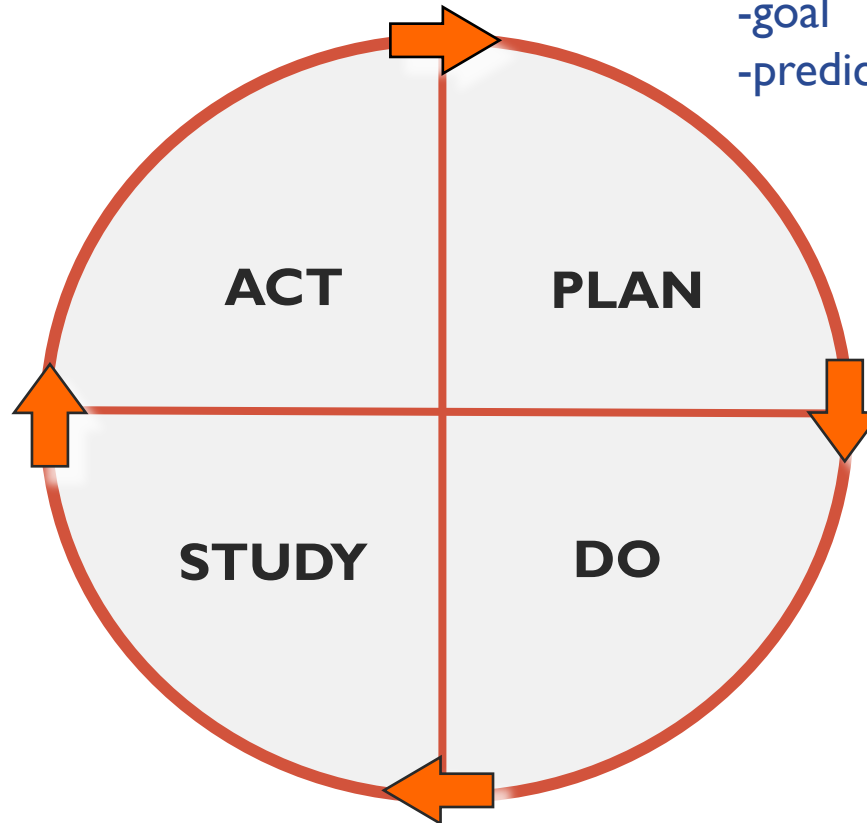
?

Improvement Knowledge: The interaction of the theories of systems, variation, knowledge, and psychology.

**WHERE to
look**

ARTICULATION OF A CLEAR HYPOTHESIS

- change
- goal
- predictions



DESIGN OF THE EXPERIMENT

- Scale of test
- Data collection

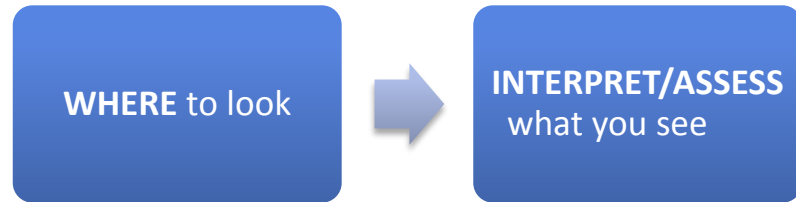
REVISE INITIAL HYPOTHESIS

- New learning and theory refinement
- Next steps

DOCUMENTATION OF LEARNING

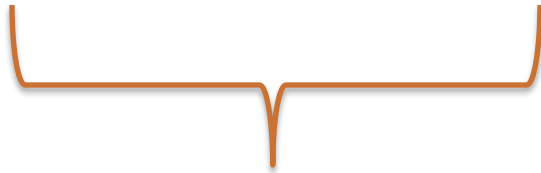
- Carry out
- Record surprises
- Compare predictions to what happened

Coaching Improvement



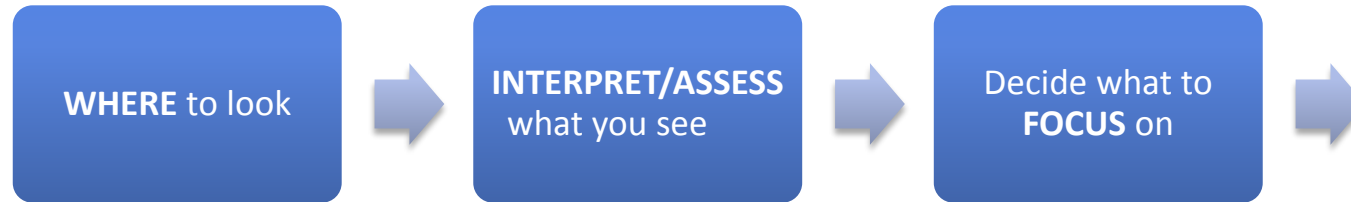
What's important?

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- ① Use the PDSA look-fors to assess two PDSAs
- ② Compare with your triad

Coaching Improvement



What's important?

*What's going well?
What's not?*

*What can you build on?
What would push work
forward?*

Level of Engagement

DEFIANT

**PASSIVE /
COMPLIANT**

**ENGAGED /
CURIOUS**

**ACTIVE /
ENTHUSIASTIC**



Developmental Trajectory

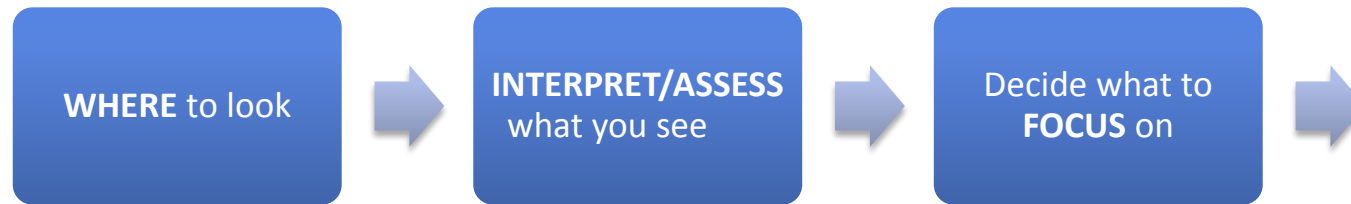
NOVICE

COMPETENT

EXPERT



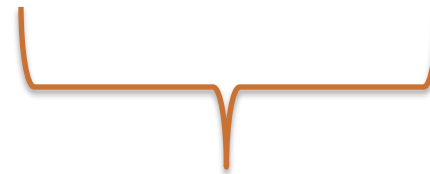
Coaching Improvement



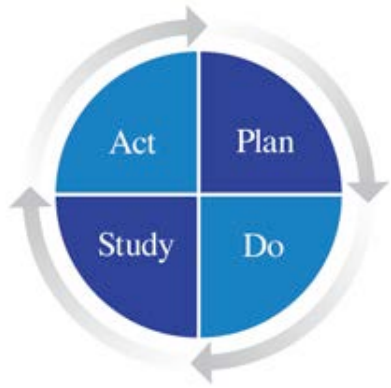
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*What can you build on?
What would push work
forward?*



- ① Choose ONE PDSA to work with as a triad
- ② Individually determine:
 - One asset you would build on
 - One specific area in which you would focus
- ③ Share your rationale with your triad



Expertise Development

NOVICE

COMPETENT

EXPERT



Personally
meaningful
learning!

Predictions

Change ideas

Rhythm
(execution)

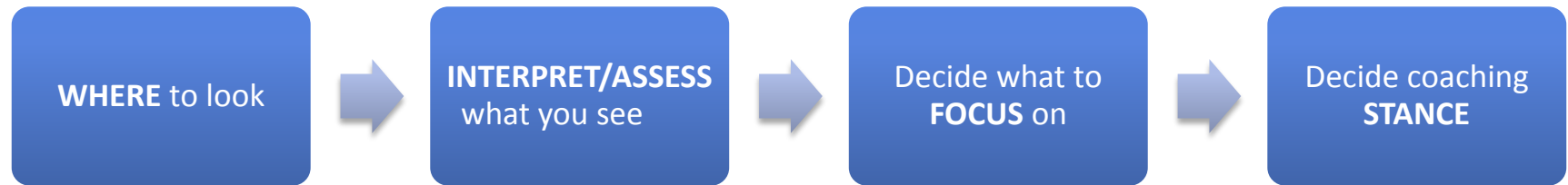
Quality change
ideas

Analysis

Tests that build

Efficiency of
testing

Coaching Improvement



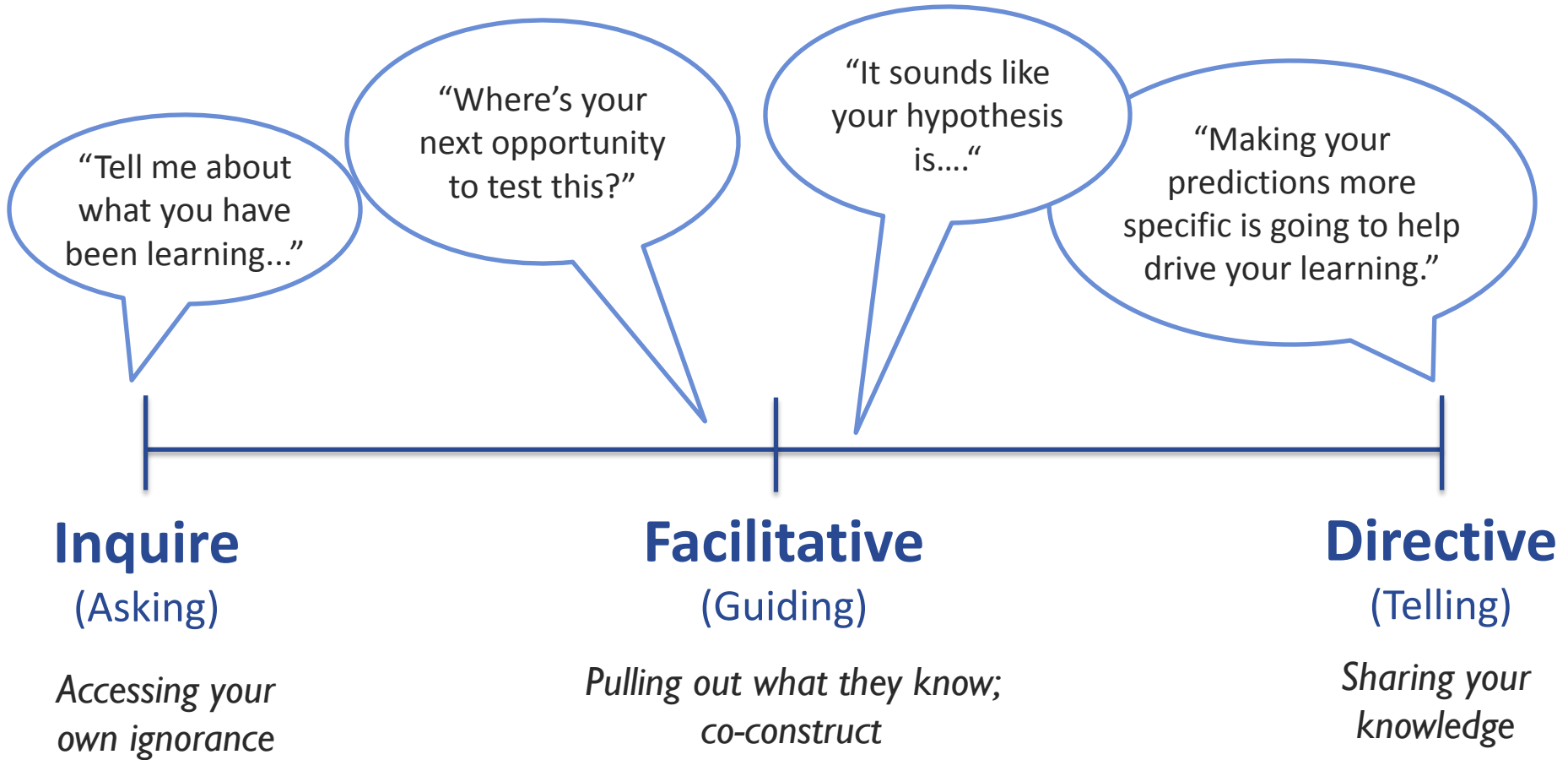
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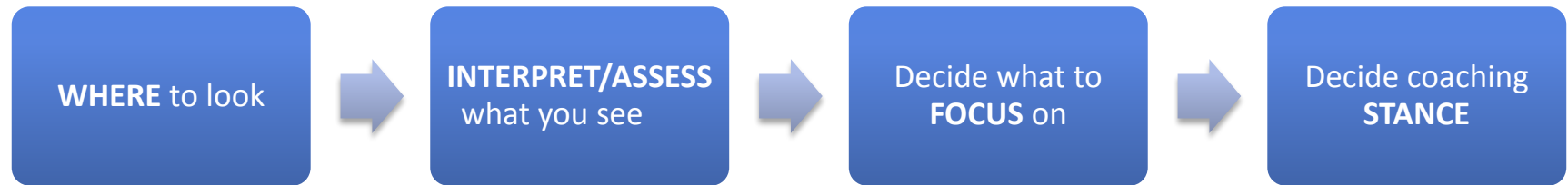
*What would push
work forward?*

*What stance is
most appropriate?*

Stances



Coaching Improvement

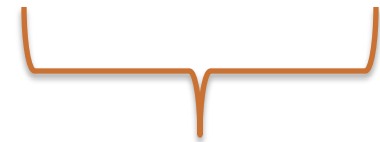


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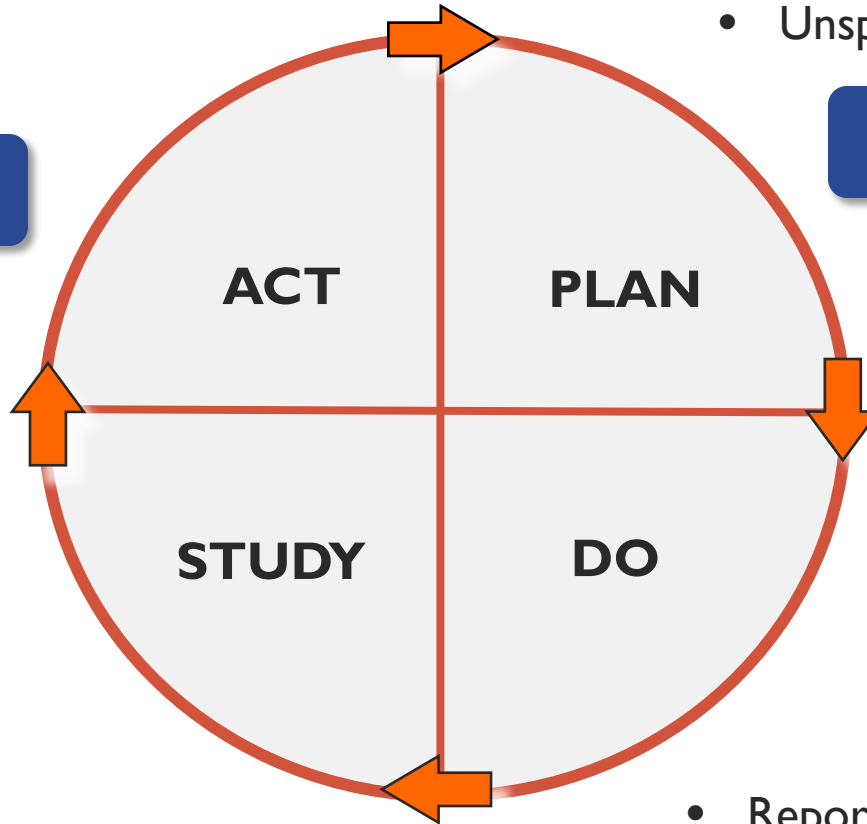
*What stance is
most appropriate?*



You have a 30 minute conversation coming up with the team. You want to get to the next PDSA.

- ① How would you structure the conversation?
- ② What stance(s) would you use in each part? (Identify and possibly roll play specific questions.)

Top 10 Common Breakdowns



- Difficulty in abstracting from what happened in the test

Draw your theory

Coaching

Cross school PDSAs

- Not strategic in testing
- Learning that doesn't "travel"
- No routine for learning
- Social settings that don't support sense-making

- Limited or vague predictions
- Unspecific change idea

Mad Libs

Facipulate PDSAs

- Difficulty identifying opportunities to learn
- No data collection sheet

3 pieces of paper

Coach as documenter

- Report doing PDSAs but no documentation



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