



Continuous Improvement Through Networked Improvement Communities



Welcome and Introductions

1. Reflect on the Previous Module

2. Aim Statement

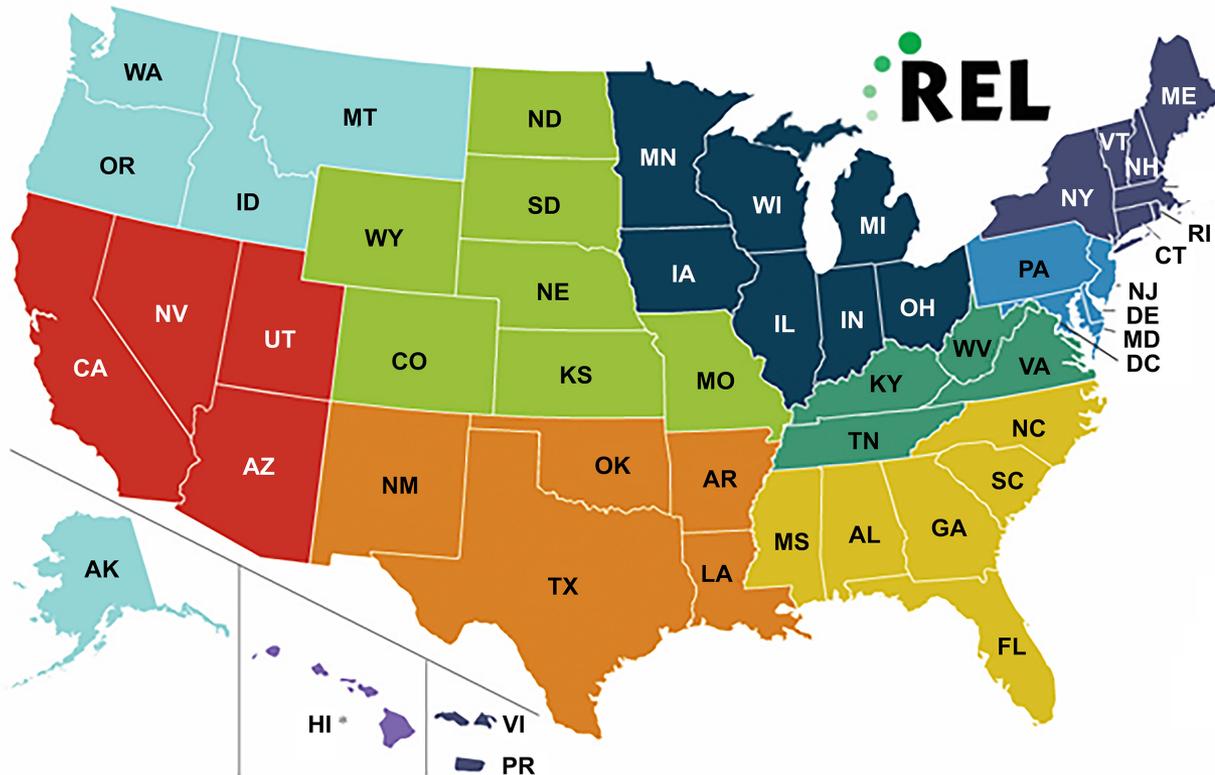
3. Primary and Secondary Drivers

4. Outcome Measures

5. PDSA Cycle

Introduction to REL Midwest

Regional Educational Laboratories (RELs)



- | | |
|---|--|
| ■ Appalachia | ■ NW |
| ■ Central | ■ Pacific* |
| ■ Mid-Atlantic | ■ SE |
| ■ Midwest | ■ SW |
| ■ NE & Islands | ■ West |

* The Pacific Region contains Hawaii pictured on the map, and American Samoa, the Commonwealth of the Northern Mariana Islands, the Federated States of Micronesia (Chuuk, Kosrae, Pohnpei, & Yap), Guam, the Republic of the Marshall Islands & the Republic of Palau not pictured on the map.

Who does REL Midwest work with?

School districts, state education agencies, and other educational organizations in Illinois, Indiana, Iowa, Michigan, Minnesota, Ohio, and Wisconsin

What does REL Midwest do?

Applied research, technical assistance, and engagement activities to help partners understand research and evidence

Why does REL Midwest do this work?

To solve practical problems and advance fundamental understandings of education challenges and processes

How does REL Midwest do this work?

REL Midwest conducts its work through collaborative research partnerships with stakeholders in Illinois, Indiana, Iowa, Michigan, Minnesota, Ohio, and Wisconsin.

To address the priorities and interests of these states, REL Midwest supports four research alliances and a networked improvement community, as well as emergent partnerships.

Types of Support REL Midwest Offers



Applied research studies that address partnerships' research questions



Events that support the dissemination and understanding of existing research



Workshops that support the use of data and research



Coaching that supports the use of data and research



Technical support such as survey, interview or observation protocol development, literature reviews, or tool development



Reviews of studies and interventions to determine level of evidence to support ESSA implementation



Ask-A-REL annotated bibliographies produced in response to stakeholder questions

Reflect

What have we accomplished so far?

1. Explored root cause analysis
2. Explored theory of action
3. Talked about inputs, activities, outputs, and outcomes

Quiz!

Reflect back on the previous module.

Quiz! Question 1

Which of the following is not part of root cause analysis?

- A. Creating a fishbone diagram
- B. Grouping and categorizing causes
- C. Identifying inputs and outcomes
- D. Creating a focused problem statement

Quiz! Question 2

True or false: A theory of action includes outcomes that were observed when implementing a change idea.

Quiz! Question 3

In the description below, identify the input, activity, output, and outcome:

I have a headache, so I drink water and take and ibuprofen. I then become hydrated and medicated, and my headache goes away.

Create an Aim Statement

Activity 1

Section Goal

Understand the aim statement and how it can be used to guide the work of an NIC that specifies inputs, outputs, and outcomes.

Theory of Action

Program Inputs What are the resources, personnel, and objectives that will lead to the outputs and outcomes?	Program Activities How will these resources, personnel, and objectives be deployed to students?	Program Outputs What kinds of consequences will the activities have? What kinds of processes are set in motion?	Outcomes How do the inputs, activities, and outputs relate to the ultimate desired outcomes?
Insert theory of action developed during coaching module 2			
Program Targets:			
Program Goal:			

Aim Statement

An **aim statement** is a written and measurable description of the desired improvement.

Aim Statement

Aim statements should include:

- A preset target population
- A metric of interest
- A change in a numerical value on the metric of interest
- A timeline on which the change should occur

Sample Aim Statements Within a Focal Area

- Seventy percent of [Focal Area] teachers will exhibit inclusive, equitable discourse strategies according to student survey data by the end of the May 2018.
- Increase by 50% the number of my high school students who agree they have access to [Focal Area] learning opportunities if they were interested by the end of February 2019.
- [Focal Area] teachers will implement active learning breaks one to two times per day by the end of the second quarter 2018.
- Increase from 20% to 50% the percentage of the use of authentic or performance-based [Focal Area] assessments by the end of April 2018.
- Decrease the occurrence of bullying and violence by 50%, annually, by May 2019.

Define the Primary and Secondary Drivers

Activity 2

Section Goal

Understand the difference between primary and secondary drivers and how change ideas can be used to guide the work of an NIC that specifies inputs, outputs, and outcomes.

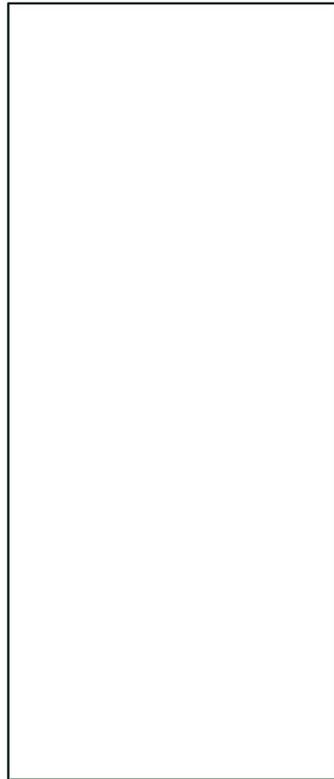
Identify Drivers

- Brainstorm all of the factors necessary to impact or achieve the aim statement.
- Group related drivers into broader thematic categories.
- Create headers for each category.

Primary Drivers

**Measurable
Improvement
Aim**

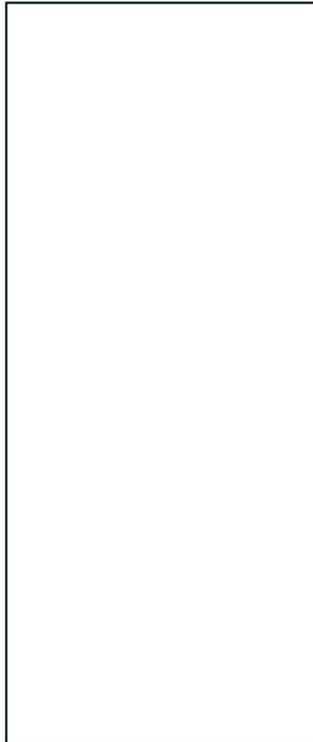
**Primary
Drivers**



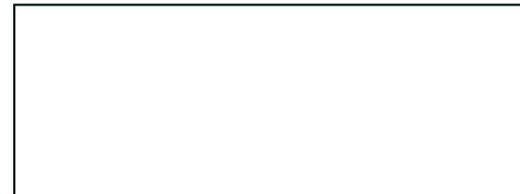
*What are your best
bets about what to
change?*

Secondary Drivers

**Measurable
Improvement
Aim**



Primary Drivers



Secondary Drivers



Change Ideas

Consider what specific strategies could address the identified root cause.

Brainstorm a list of possible strategies.

Strategies may include approaches/methods that you are already using or new ways to enhance existing strategies.

- To what extent are these strategies interdependent?
- What is the potential for high impact on the root cause?
- How do you think this change idea will work?
- What are your predictions about how this will work?



Activity: Driver Diagram

1. Select one aim statement you developed in October.
2. Using the template on Google Drive, develop a driver diagram that addresses the aim.
3. Based on the drivers, develop one change idea you feel could solve the problem related to your rubric.

Measurable Improvement Aim

Primary Drivers



Secondary Drivers



Driver Diagram Presentations

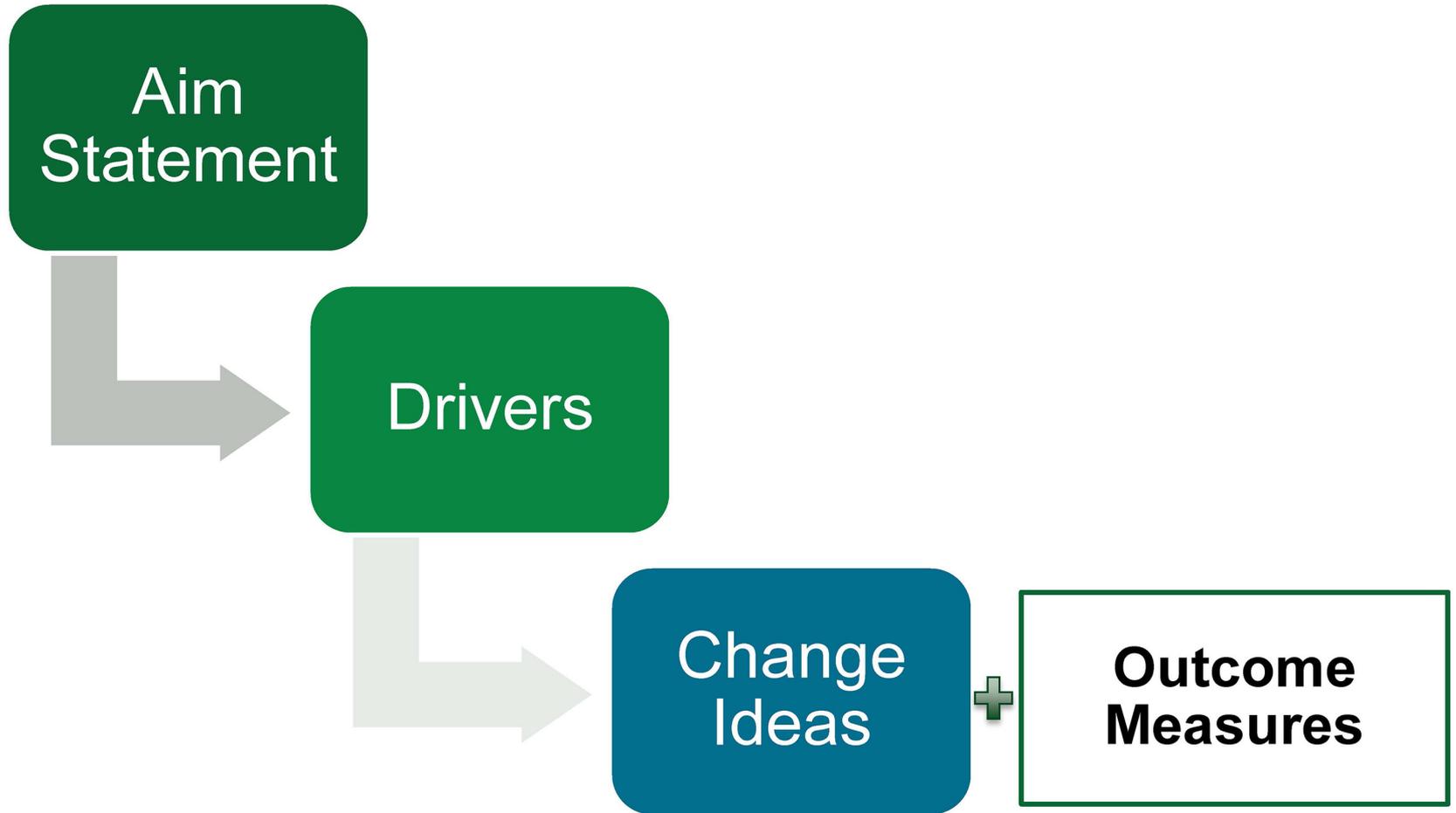
Table groups will present their driver diagrams and change ideas to the rest of the group. Your presentation should include the following:

- The rationale for selecting the driver
- The inputs necessary for the change idea
- The hypothesis for how the change idea will work and what outcomes are predicted

Take a Break

See you in 10 minutes.

Connecting the Dots



Understanding Outcome Measures

Discussion Questions



- What data will you need to study whether this change idea worked?
- What metrics do you already collect that can be used to track inputs, outputs, and outcomes in the theory of action?
- What metrics would you like to collect to track inputs, outputs, and outcomes in the theory of action?
- What would characterize success?

Planning Measures

As a group:

1. Reflect on your change idea.
2. Brainstorm what you'll need to see to determine whether the idea created the change you expect.
3. Based on that brainstorming, complete the evidence planning template.

Activity

Evidence of Impact for Direct and Indirect Outcomes	2 Weeks Into Intervention	6 Weeks Into Intervention	12 Weeks Into Intervention	One Year Into Intervention	Data Resources How can you obtain these data? What resources do you need?
Evidence 1: (Identify data point.)					
Evidence 2: (Identify data point.)					
Evidence 3: (Identify data point.)					

Plan-Do-Study-Act Cycles

**Defining Feature
of NICs: Disciplined
by the Rigor of
Improvement Science**

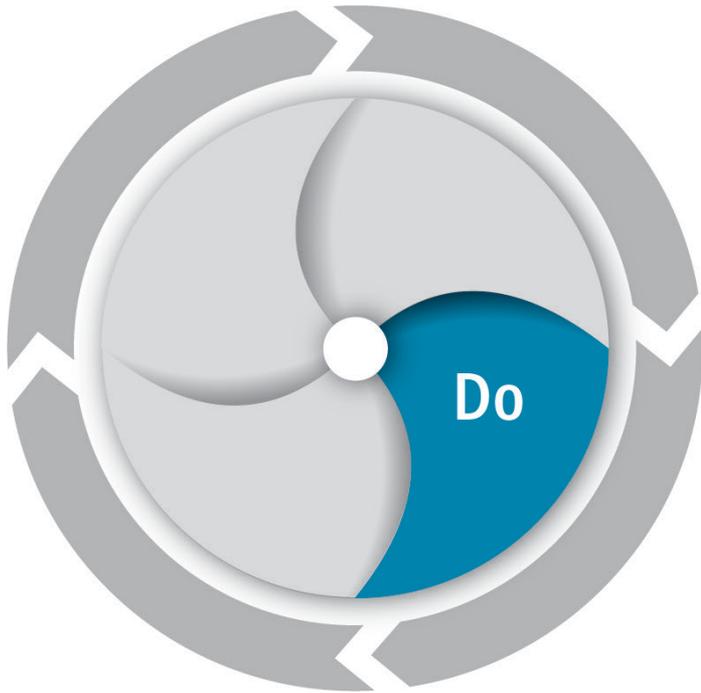
Plan

- Identify an intervention.
- Make predictions.
- Develop a plan for monitoring progress.
- Develop a plan for implementation.



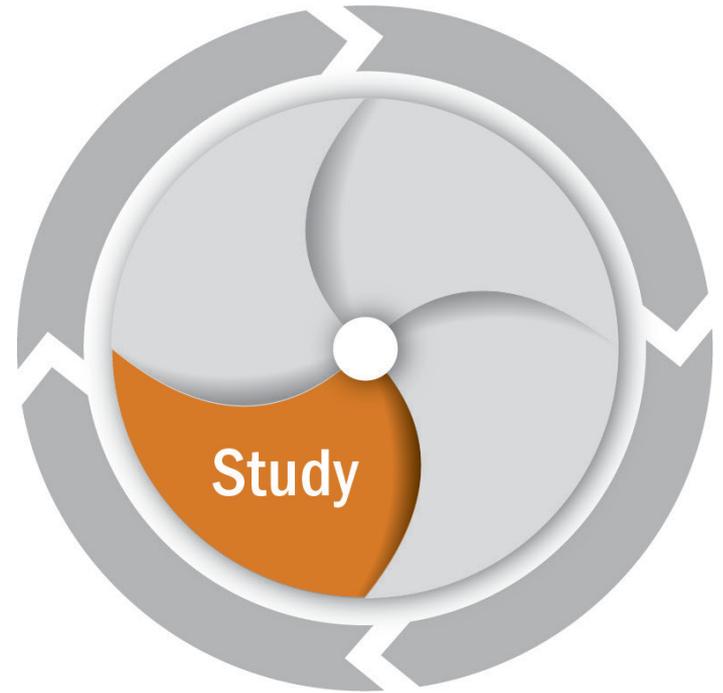
Do

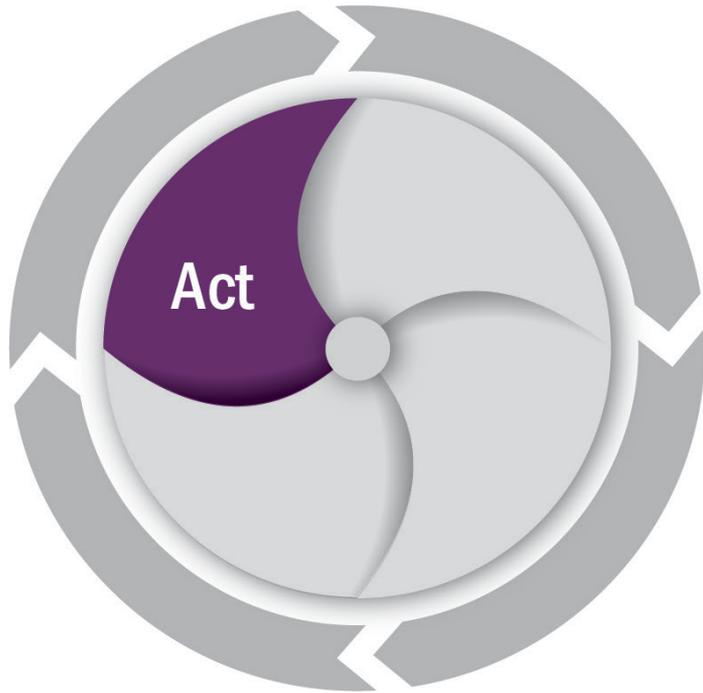
- Implement the intervention.
- Collect data to monitor improvement.



Study

- Analyze data.
- Compare what happened to predictions.





Act

- Based on the data analysis, decide how to proceed.
- Participants may want to adapt, adopt, abandon, or expand the intervention.

Repeat



**Defining Feature of NICs:
Coordinated to Accelerate
the Testing of Interventions
Across Varied Contexts**

**Share
learnings with
network
organizations
and others
outside the
network.**



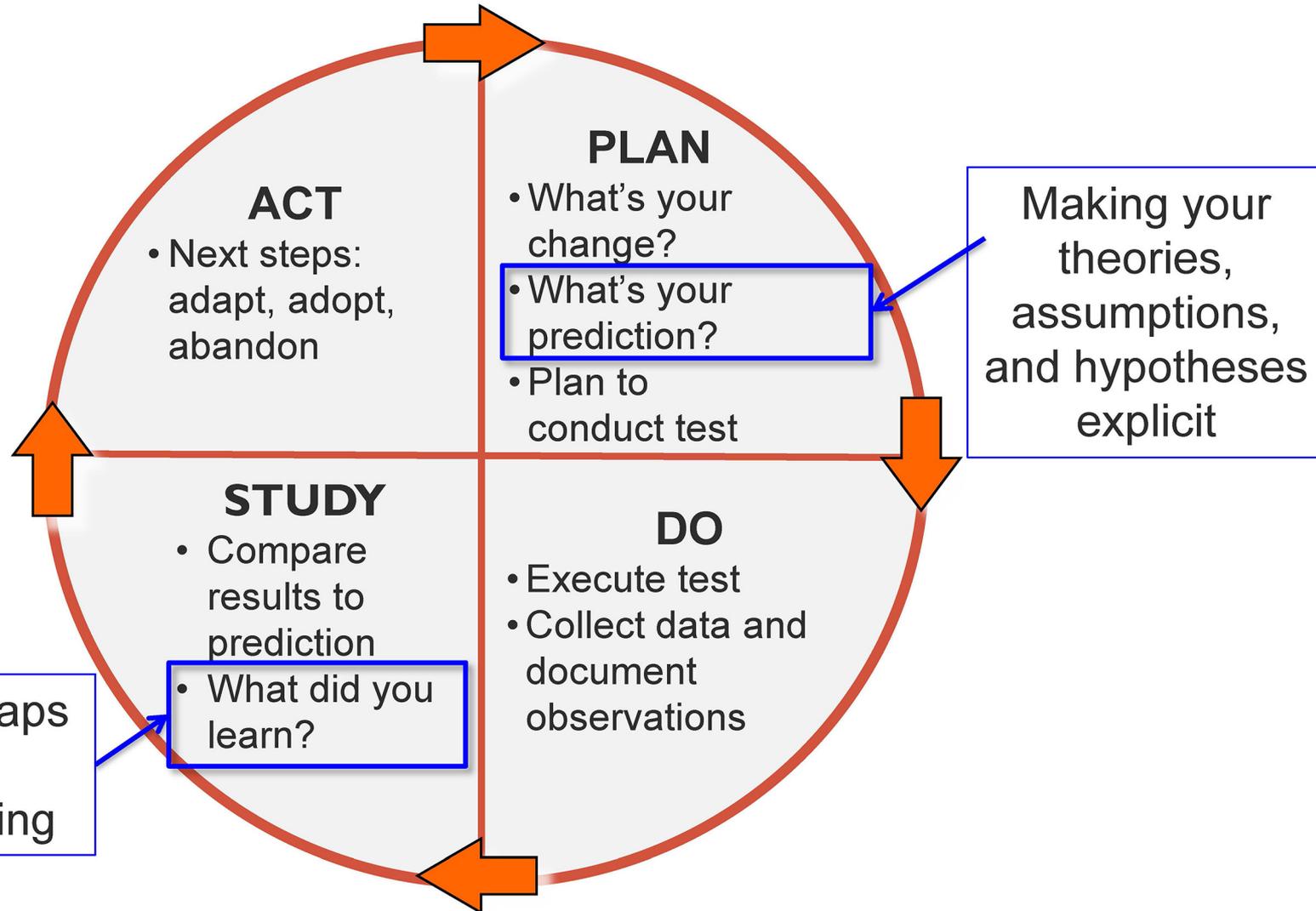
Plan-Do-Study-Act Cycle Practice

Activity 3

PDSA Your E-Mail

Explore improvement science in action. In the next activity, you'll engage in a mini-PDSA cycle to test a change idea designed to make e-mail management easier.

Improvement Science in Action: The PDSA Cycle and E-Mail



What, specifically, are we trying to accomplish?

What change might we introduce?

Efficient and effective e-mail routine

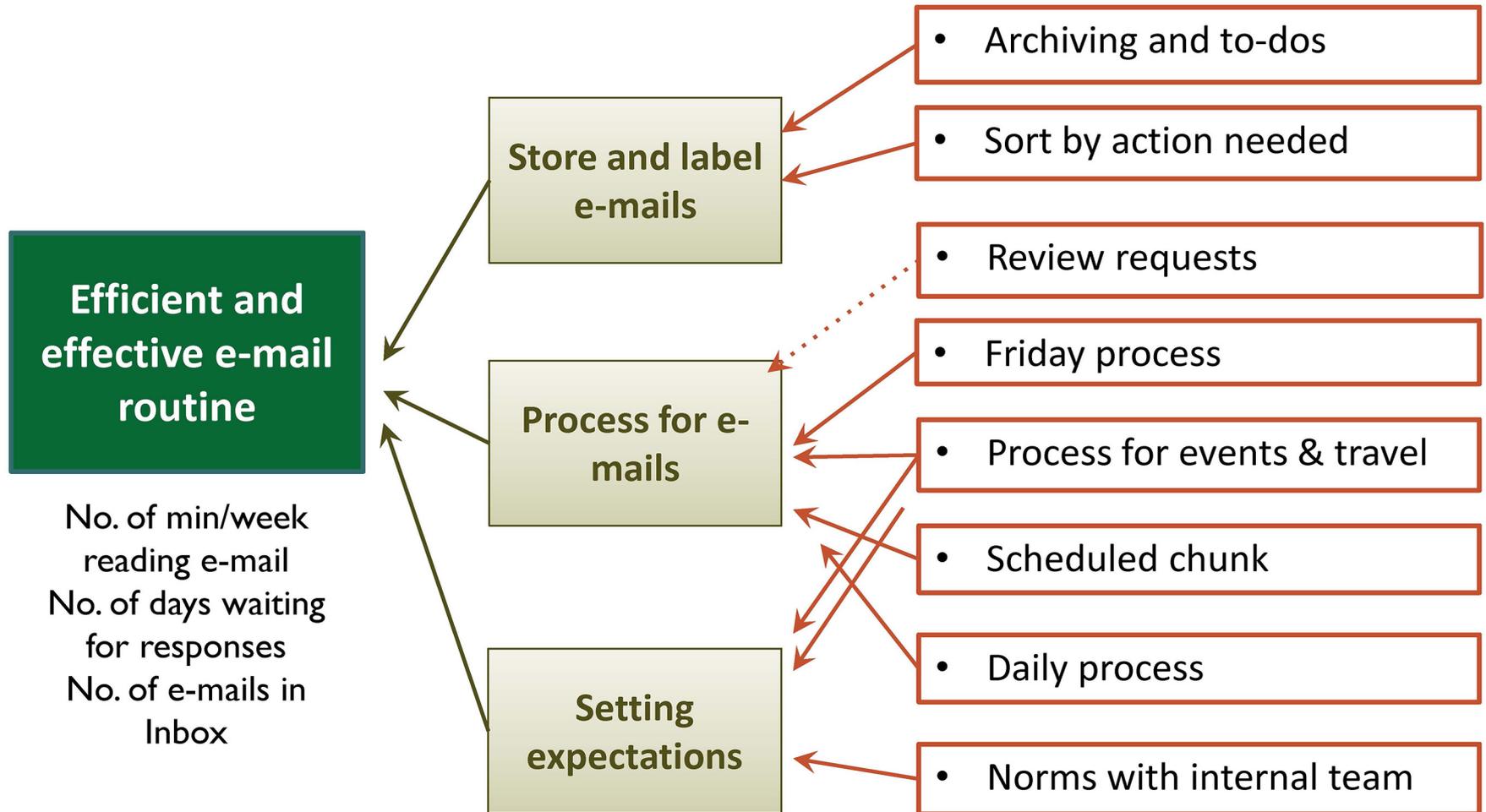
E-mail triage process



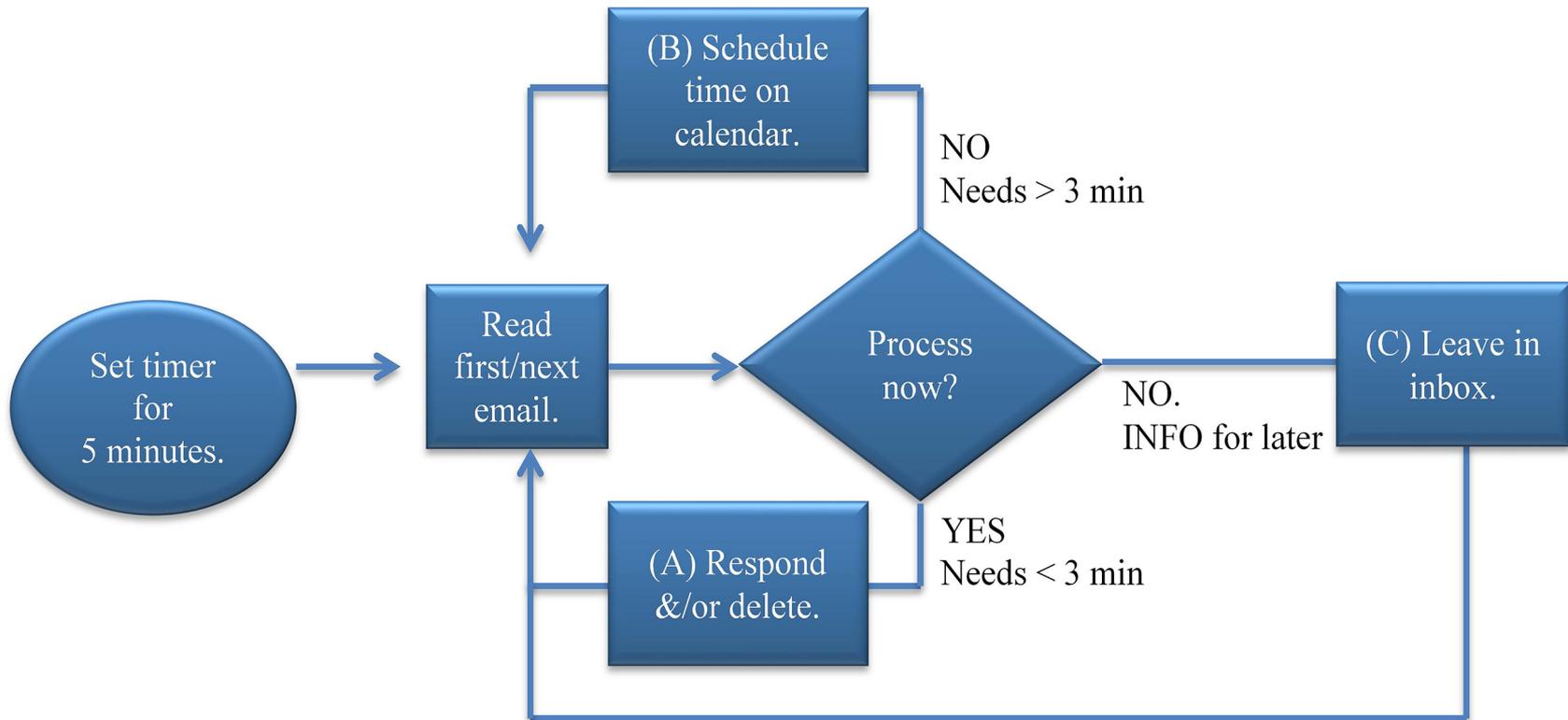
No. of min/week reading e-mail
No. of days waiting for responses
No. of e-mails in Inbox

Let's try it...on your e-mail process.

An E-Mail Change Package



Change Idea: Triage E-Mail Process



Testing the E-Mail Triage Process

Question: Is it possible to use this e-mail process to answer my e-mails? Where does it break down?

Work in groups of two or three people:

- Tester
- Data collector
- Team member

Triage Email Test #1

What change idea is being tested?	Triage email process (see attached process)
What is the overall GOAL of the test?*	Design a process that helps get to INBOX 0

1) PLAN	
Learning Questions:	Predictions:
Will you not adhere to any of the steps in the process?	
How many total emails will you go through in 5 minutes?	_____ emails
How many emails do you NOT delete/archive? What are the main reasons?	_____ emails Reasons:
What did it feel like to process emails in this way?	

3) STUDY	
What were the results?	
	→
	→
	→
	→

Setting up the test
<ol style="list-style-type: none"> 1. Team makes predictions and adds any additional learning questions 2. Tester opens their email application, closes the laptop and puts process map in front of them. 3. Data collector starts the timer & tester begins processing emails from the first email in their inbox 4. As the tester process each email they articulate what action is being taken and the data recorder records on the data collection sheet <p>After the timer stops, the team completes the STUDY and the ACT</p>

What did you learn? Compare your predictions to your results. What conclusions do you draw?

2) DO (Briefly describe what happened during the test, surprises, difficulty getting data, obstacles, successes, etc.)

4) ACT (What will you do next?)
<p>___ ABANDON (go onto a new change idea)</p> <p>___ ADAPT (make a tweak and try again)</p> <p>___ EXPAND (try this for a longer period of time)</p> <p>___ ADOPT (make this my standard process)</p>

Data Collection Sheet:

	(A) Deletes/Archives Immediately	(A) < 3 min (respond and delete)	(B) >3 (schedule)	(C) Leave to remember	Total
Tally					
Notes					

Additional observation

Implementation Planning

Key Questions for PDSA Cycles

Discuss the following in your group and share results:

- What are some potential interventions for our focus area?
- Who needs to be involved in planning? Who will be key to execute plans?
- What are the specific roles of those involved?
- How will the group/team interact, meet, and share information?
- What key resources are needed?

Successful Implementation Plans

- What makes an implementation successful?
- How will you determine success?
- What data will demonstrate success?
- Who needs to support implementation?
- What challenges do you anticipate?

Break

Plan for Implementation

Activity 4

Discussion Questions

- What will the intervention look like?
- Who will be involved?
- What are the specific roles of those involved?
- How often will the group meet to discuss the intervention?
- What is the projected timeline?

Implementation Planning

Intervention Start Date: [Date]

PDSA Cycle 1: [Start–End]

Table 1. Intervention Roles and Responsibilities

Role	Responsibility	Time Frame
<i>Example: Students</i>	<i>Daily practice</i>	<i>Daily</i>

Activity

1. Complete a SWOT analysis in your group.
2. Share the analysis with the large group.
3. Identify common themes, unexpected ideas, and opportunities for collaboration.

SWOT Analysis

	Helpful	Harmful
Internal	Strengths	Weaknesses
External	Opportunities	Threats

Next Steps and Adjourn