Continuous Improvement Workshop

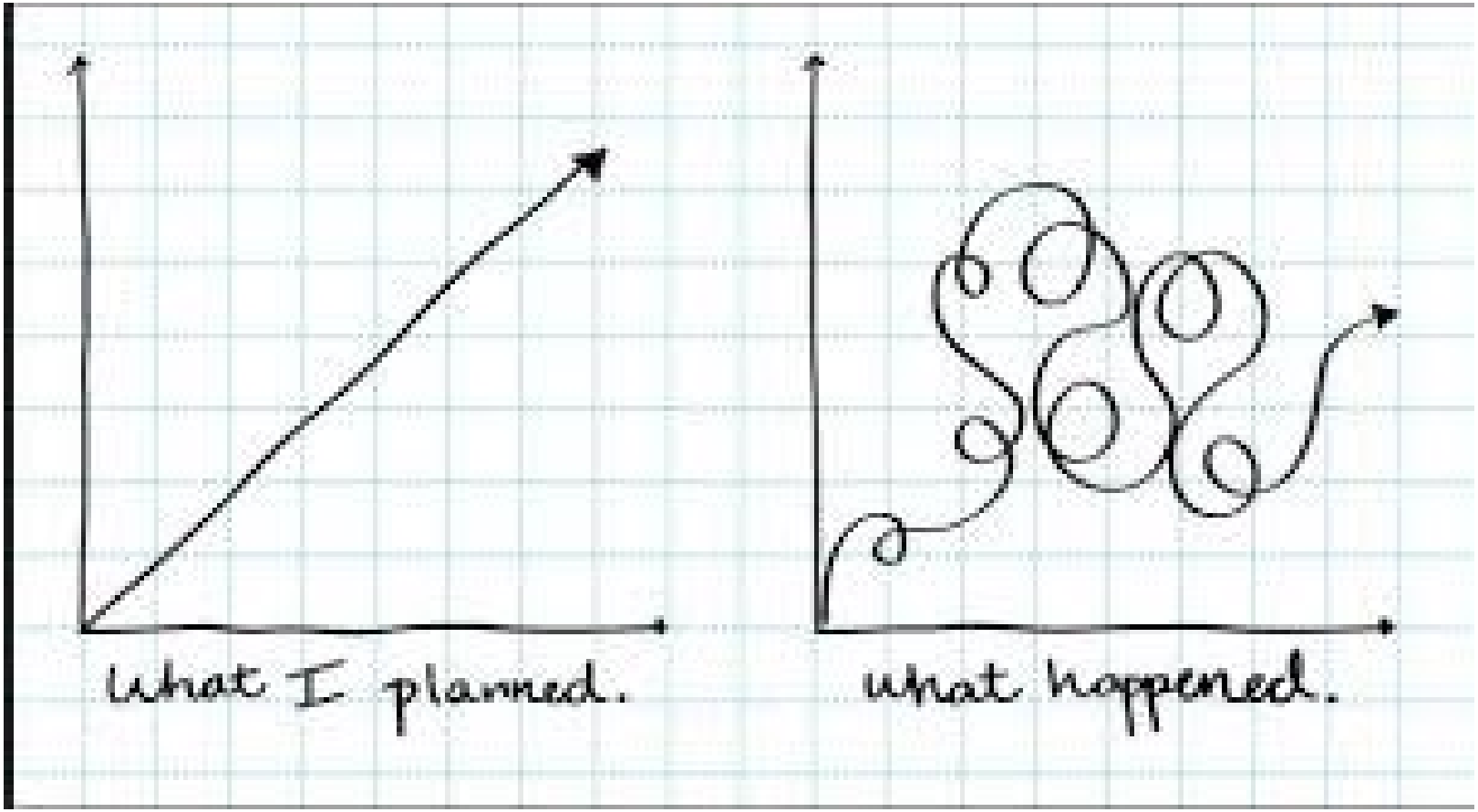
Comprehensive Needs Assessment

PDSA Cycle

October 2018

VERMONT
AGENCY OF EDUCATION

Continuous Improvement



Workshop Outcomes

GOAL: Prepare school and district leaders to engage in Comprehensive Needs Assessment and PDSA cycles toward data-informed decision-making for their 2019-2020 Continuous Improvement Plans

OBJECTIVES

- Review and clarify the steps of a Comprehensive Needs Assessment
- Develop a logical sequence of action steps for testing a change idea
- Identify baseline data, types of measures, instruments/tools, and process/outcome data to be utilized in each change idea's PDSA cycle

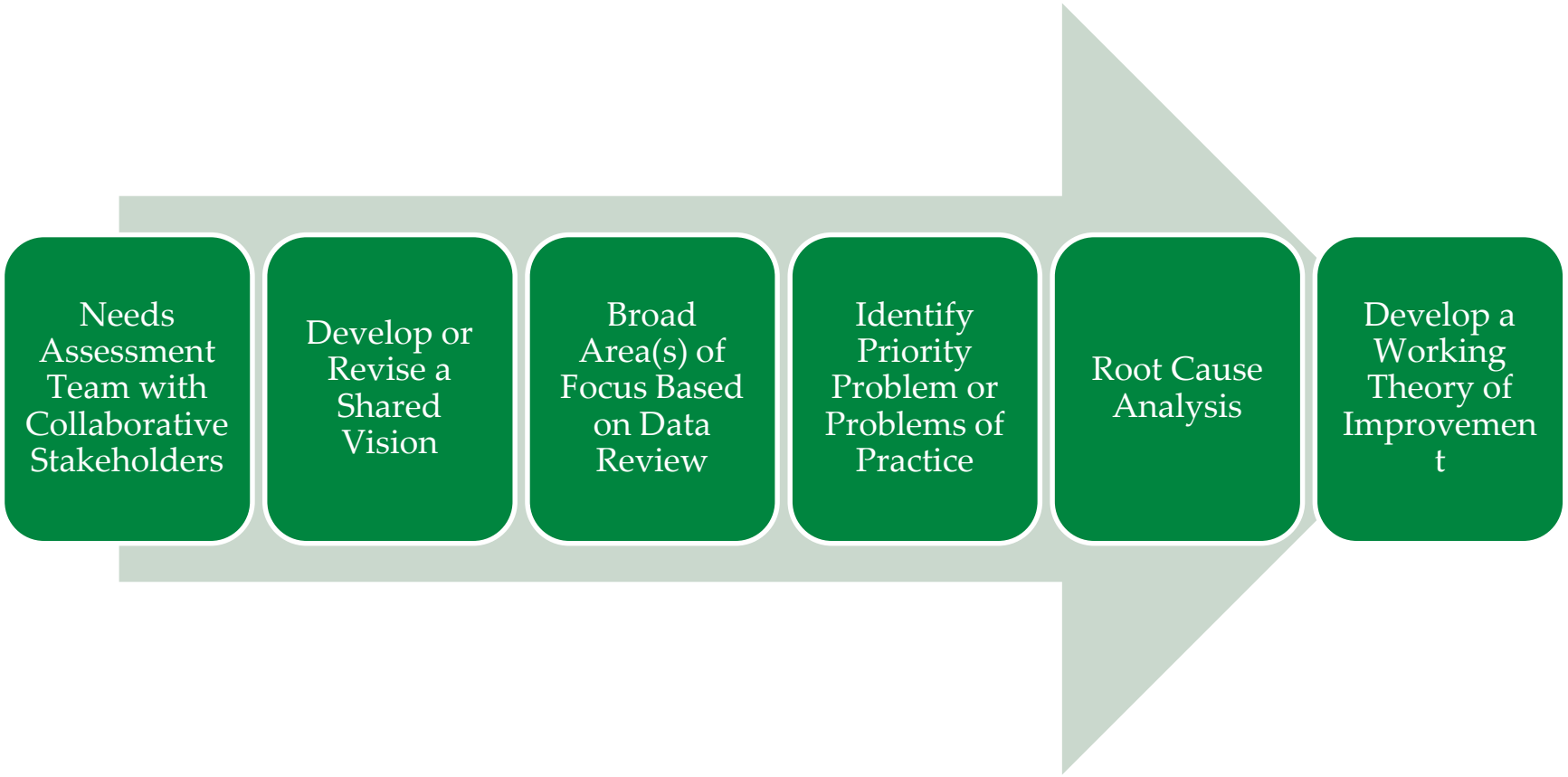
Continuous Improvement

GOAL- What are we trying to accomplish?

CHANGE IDEA- What change can we make that will be an improvement?

MEASURES- How will we know when a change is an improvement?

Comprehensive Needs Assessment



Needs Assessment Team

Collaborative Stakeholders

(Education Quality Standards pg. 14):

- School board members
- Students
- Teachers
- Administrators
- Parents
- Other community members

Shared Vision

A written statement of your team's common beliefs, values, and goals for school and student outcomes.

Shared Vision Worksheet

Comprehensive Needs Assessment Toolkit pg.

Broad Area of Focus

Conduct a broad data overview

Data Inventory Worksheet-

Comprehensive Needs Assessment Toolkit pg.

Broad Focus Areas:

- General areas of need revealed by data
- Initial direction for deeper analysis
- Influenced by Shared Vision, EQS, Annual Snapshot, Integrated Field Review

Identify Priority Problem of Practice

Examine data further:

- Collect Additional Data
- Factual Observations of Data
- Make inferences

Priority Problem of Practice → hypothesis

Root Cause Analysis

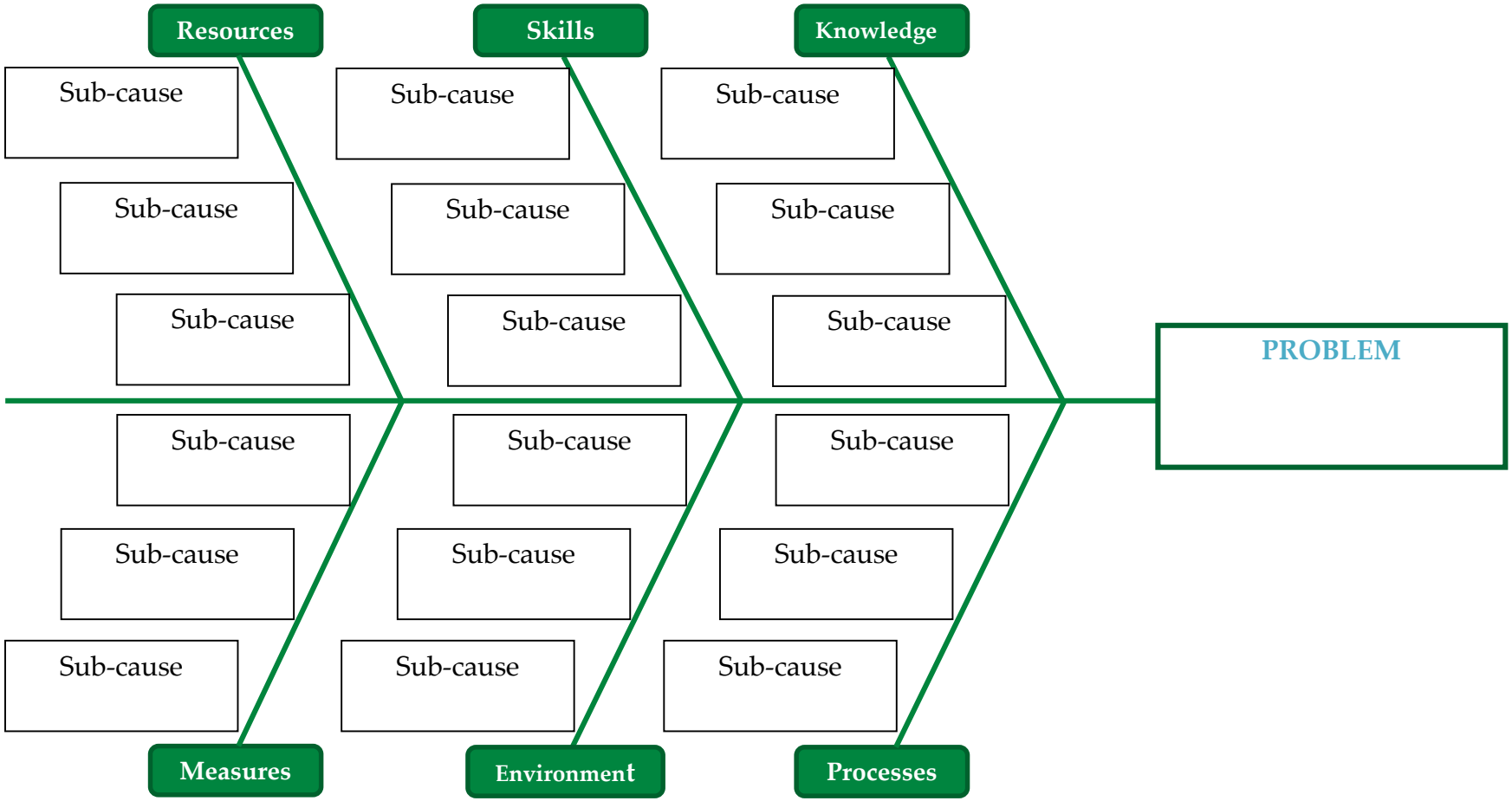
Identifies what, how, and why a problem of practice occurred and helps to prevent the problem from recurring

Root Causes are:

– Specific and reasonably identified
– Are within your control to fix
– Allow for recommendations and solutions

Tools: Fishbone and Five Whys

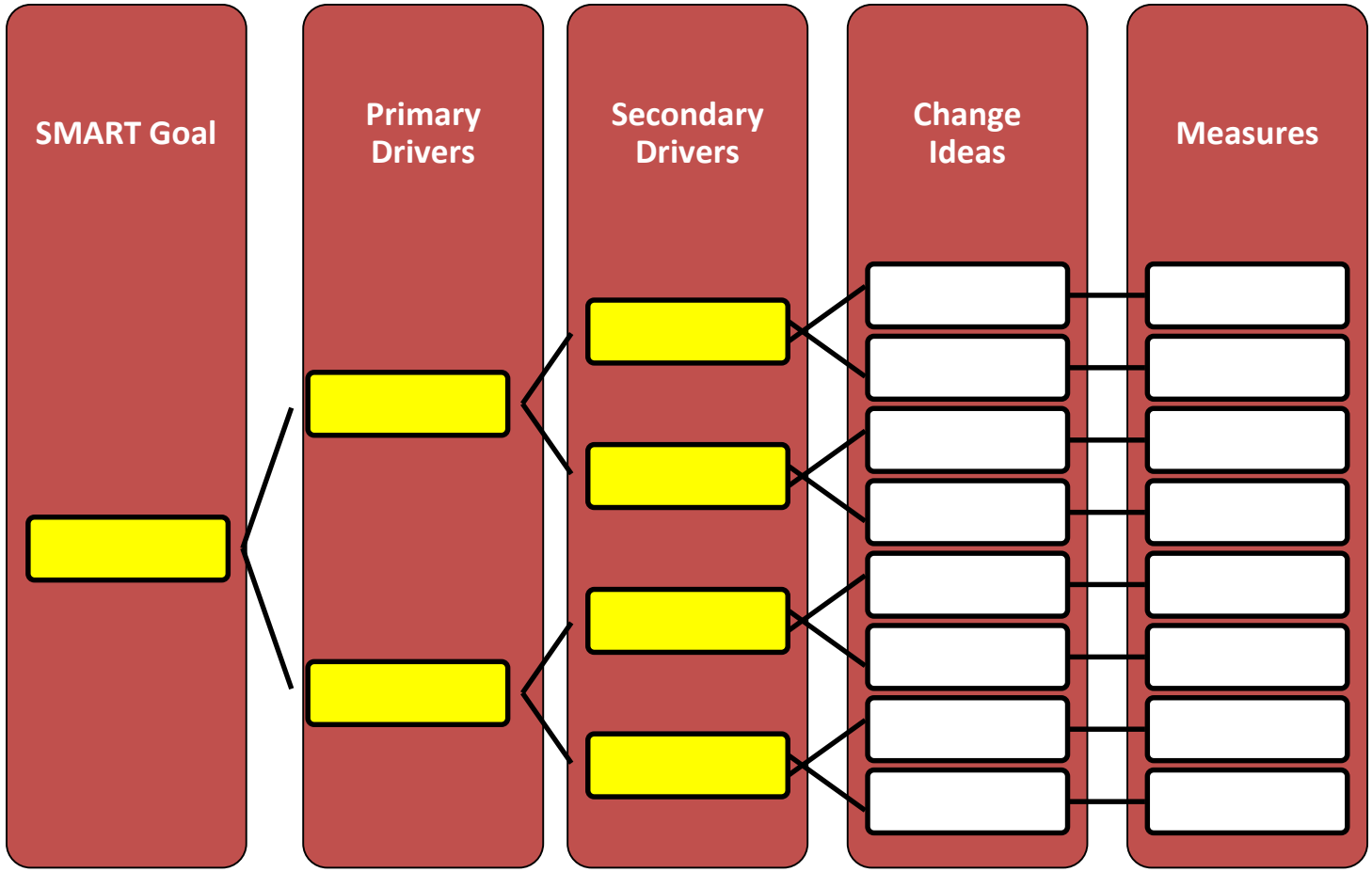
Cause and Effect: Fishbone



Five Whys Worksheet

Identified Problem of Practice:	
Why is it happening?	
1.	Supporting data:
Why is that?	
2.	Supporting data:
Why is that?	
3.	Supporting data:
Why is that?	
4.	Supporting data:
Why is that?	
5.	Supporting data:
Identified Root Cause:	

Developing a Working Theory of Improvement



Goals- Big Picture to Change Ideas

Multi-year Goals at SU/SD and School level

Year to Year benchmark Goals

Goals directly related to Root Cause Analysis

Strong SMART Goal Statements

What specifically are we trying to accomplish?

What will be improved?

How much?

By when?

For what/whom?

Critique Sample Goal Statements

1. "By this coming June, we will reduce chronic absenteeism among CHS 9th graders to zero."

1. By the end of the school year, students will feel motivated to attend school every day."

1. By May 30, all CHS faculty will have completed a phone call home for at least 5 chronically absent students. "

Critique your SMART Goal

Does it meet the criteria?

- What will be improved?
- How much?
- By when?
- For what/whom?

Specific-Measurable-Attainable-Realistic-Timebound

Drivers

A **driver** is the area of practice or a component of the system that has the greatest influence on the goal.

- **Primary Drivers-** the **broad** areas/components that have the greatest influence on the goal. (choose 2-5)
- **Secondary Drivers-** the **specific** practice/component that influences the primary driver. (can apply to more than one primary driver)

Change Ideas

What change can we make that will be an improvement?

Directly related to secondary drivers

Specific & Measurable

Actionable

Incremental (bite size)

Where do change ideas come from?

- **Research Knowledge-** What does the literature say about solving this problem?
- **Practice Knowledge-** What have other colleagues done to solve this problem?
- **Design/Creative Thinking-** In what new ways might we address this problem?

Grain Size of Change Ideas

Too Big	Just Right	Too Small
Programs	Practices	Immediate Action Steps/To Do's
Curricula	Processes	
Policies* (school discipline policy)	Policies* (in-school suspension policy)	Tools or materials outside of the process
Structures* (changing schedule to include common planning time)	Structures* (changing the schedule to include common planning time with strategies and process for collaboration)	

Measuring Change Ideas

How will we know when a change is an improvement?

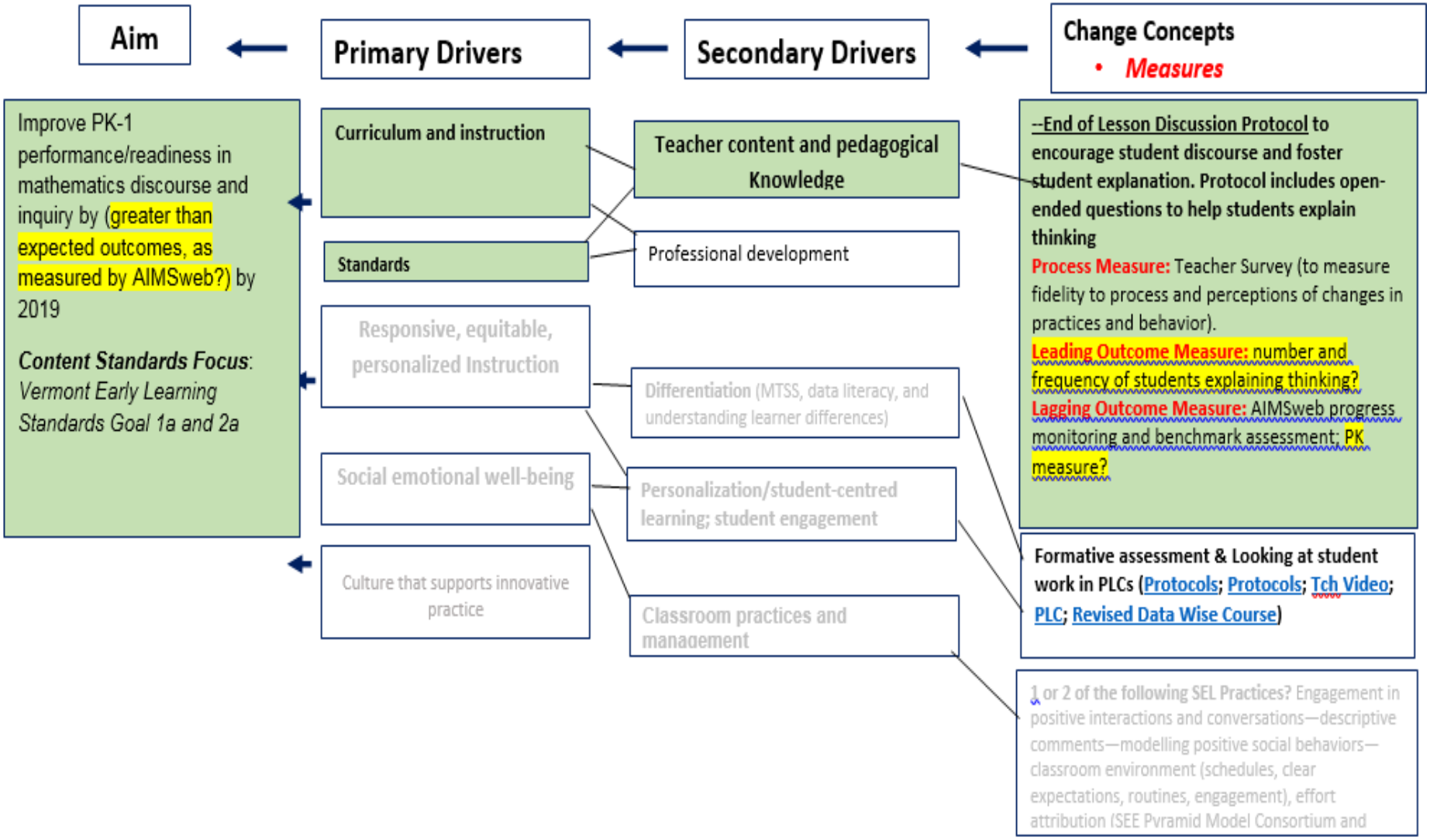
Process Measures

Outcome Measures

- Leading
- Lagging

Balancing Measures

Driver diagram Improvement focus: PK-1 for Apple Orchard Supervisory Union



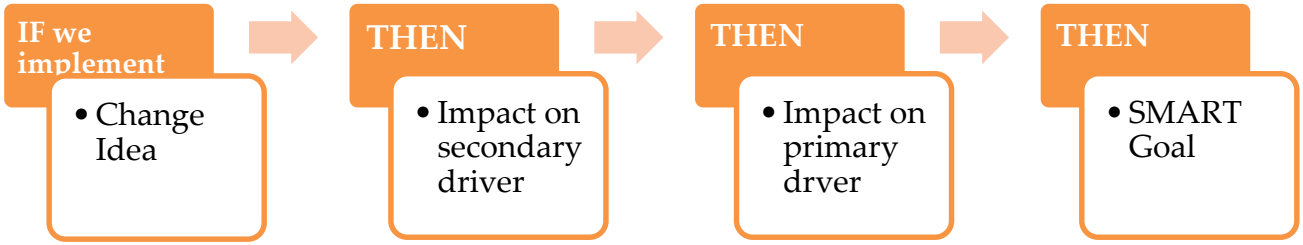
Theory of Improvement Statement

Working Theory of Improvement/Action statement:

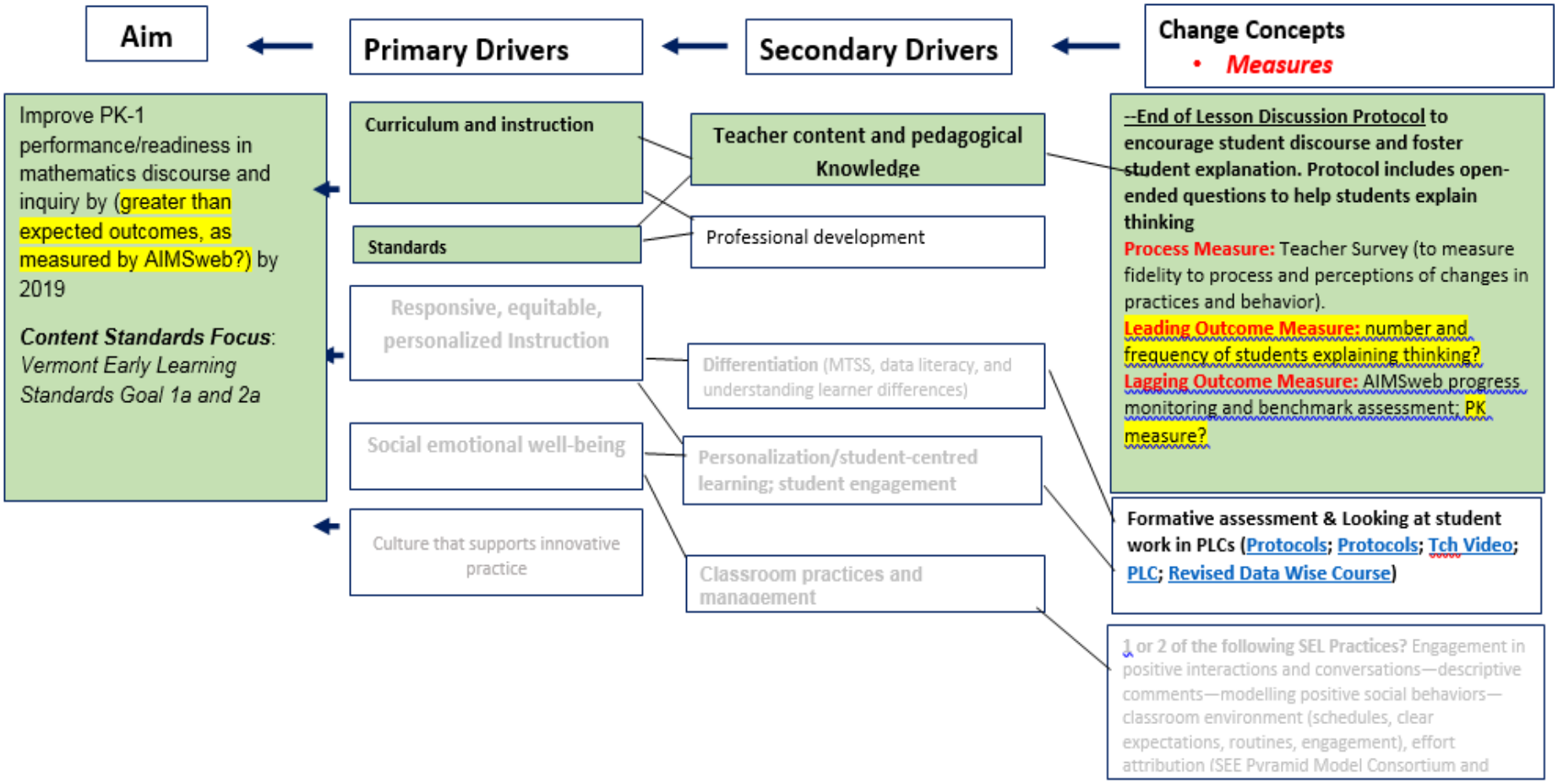
- the result you are hoping to accomplish
- how you plan to accomplish the goal
- who is responsible for making the results happen

Driver Diagram to write a Theory of Improvement/Action statement work from right to left, starting with a change idea and ending with the goal.

IF we implement (Change Idea), **THEN** (Impact on Secondary Driver), **THEN** (Impact on Primary Driver), **THEN** (SMART Goal).



Driver diagram **Improvement focus: PK-1 for Apple Orchard Supervisory Union**



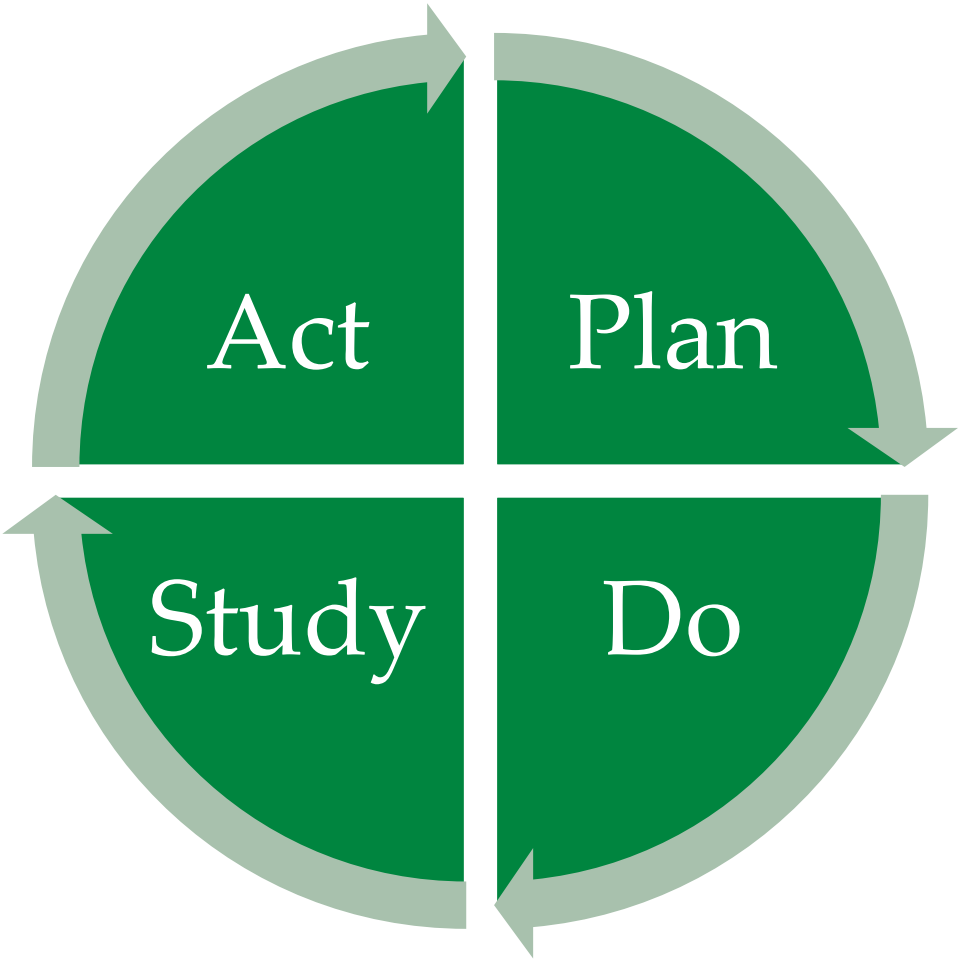
Overall Theory of Improvement: If teachers receive appropriate professional development to apply specific practices for facilitating mathematical discourse and inquiry for all students, then:

- teachers' pedagogy will improve
- they will have useful formative assessment information to effectively guide daily instruction
- student performance will improve

Theory of Improvement for the cycle: If teachers consistently apply daily inquiry discussion at the close of the mathematical lesson, then,

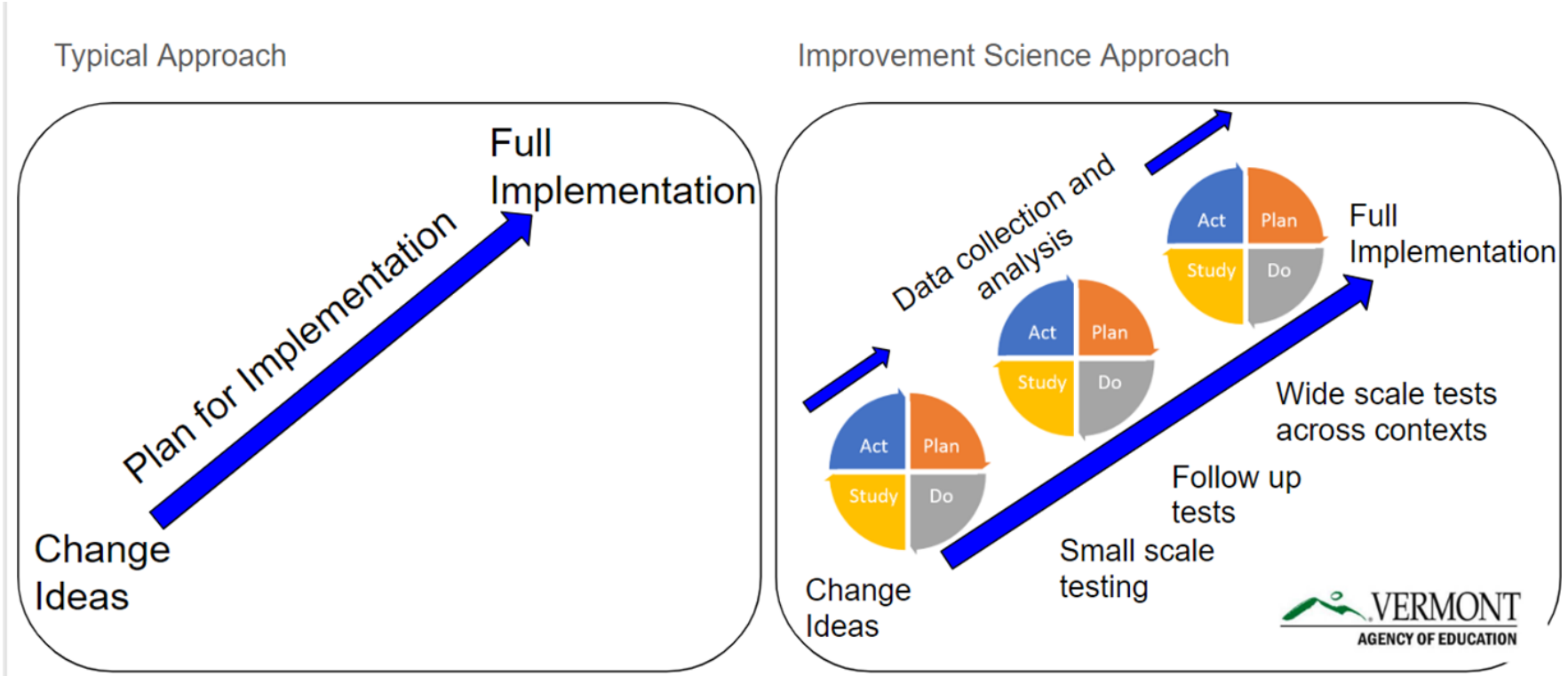
- students will be able to explain their understanding and reasoning
- teachers will have valuable formative assessment information from which they can adjust instruction appropriately
- student understanding and academic performance will improve

Plan-Do-Study-Act (PDSA)



PDSA and Change Ideas

PDSA Cycles = 4-6 weeks



Plan-Do-Study-Act Cycles

Stage	Actions	Guiding Questions
PLAN	Choose your first change idea Make a prediction Decide how you will measure progress toward your goal	What changes can we make that will result in an improvement? What do we think is going to happen? How will we monitor progress?
DO	Implement your change Collect Data	What resources or knowledge do we need?
STUDY	Analyze your results Determine necessary changes	What does the data reveal about our change? Did we improve AND are we improving enough to reach our goal
ACT	Adapt Adopt Abandon Begin next cycle	What adjustments need to be made?

Grain Size of Change Ideas

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What do you PDSA?

DON'T	DO
One time professional development	Teachers implementing specific instructional strategies learned in the professional development session
Purchasing AND Implementation of a brand new curriculum across all grade levels	Strategies embedded in the curriculum across one grade level.

Plan-Do-Study-Act Worksheet

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Plan-Do-Study-Act Worksheet

School:	Test Date and Timeframe:
Prioritized SMART Goal:	
Change idea to test:	

PLAN:

Briefly describe the test:

How will you know that this change idea is an improvement?

What do you predict will happen?

Using Measurement for Improvement

What is measured	*How* it is measured	*When* it is measured
Specific to the processes and outcomes you hope to change	**Embedded** in daily workflow	Accessible in a **timely** manner
Closely aligned to the work	Requires: - Transparency - Trust - Low stakes - Safety to take risks - Admin support	- During (Processes) - After (Outcomes)

Process Measures	Outcome Measures	Balancing Measures
Measures the implementation of a change idea	Measures achieving the final goal **Leading**- short-term formative assessments **Lagging**- long-term summative assessments (SBAC)	Measures the unintended impact of a change idea on another are of the system
How well was the change practice implemented?	*Did the change practice achieve its goal and positively impact the associated driver? How do you know?*	*Were there any unintended consequences that resulted form implementing the change practice?*

Best Types of Data for Continuous Improvement

Pre-existing data: Data already being used

Ex. Student work, coaching logs, attendance records

Observation data: Data collected from watching students or adults engaged in activities

Ex. Learning walks, classroom observations, shadowing a student

Survey data: Data collection from interviews or surveys

Ex. Exit surveys/tickets, meeting feedback, focus groups, interviews

Data collection method	Best use	Pros	Cons
Pre-existing data	Student or adult: • Knowledge • Skills • Behaviors	• Easy to collect • Already exists	• Coding of data may be required • Limited in what types of information are possible to collect
Observation	Student or adult: • Behaviors	• Can see a change practice in operation	• Requires training • Can influence participants
Survey	Student or adult: • Knowledge • Skills • Perceptions • Attitudes • Beliefs • Feelings • Behaviors	• Anonymous surveys may produce more honest responses • Easy to administer to many individuals • Closed-ended questions are easy to analyze	• Close-ended questions may miss information • Attrition is a problem for analysis • Open-ended responses need to be coded

Comprehensive Needs Assessment Toolkit
Appendix 1: Sources of School Data

Demographic	Student Outcomes	School Process	Perceptions
· School enrollment · Attendance · Graduation rate · Dropout rate · Transience · Homelessness · Migrant status · Socio-economic level · Age · Grade · Gender · Race · Ethnicity · Language · Disability · Staff characteristics · Parent profiles · *Additional*	· State assessments · Local assessments · Curriculum-based measures · Proficiency measures · Formative measures · Grades · Portfolios · College and career readiness · School climate · Student health · Behavior data · Exclusionary discipline practices · English proficiency · *Additional*	· Instructional practices · Assessment practices · Curriculum development · Curriculum alignment · Planning practices · Resources · Technology integration · Staff evaluations · Parent involvement · Leadership strategies · Grading · Data use · Scheduling · Collaboration · Hiring practices · Staff retention · Continuous improvement · Professional learning · *Additional*	· Interviews · Focus groups · Conferences · Questionnaires · Surveys · Communication records · Meeting notes · Social media posts · Media coverage · Awards · Commendations · *Additional*

Plan-Do-Study-Act Worksheet

PLAN- What, Who, When, Where

List the tasks necessary to complete this test (What)	Person responsible (Who)	When	Where
1.			
2.			
3.			
4.			
5.			
6.			

PLAN- Data Collection

Type of Data	What data will be collected and what tool will be used for the measurement?
Process Measures- Measures how well a change practice is implemented.	
Outcome Measures- Measures if the change practice achieved its aim.	

Plan-**Do**-Study-Act

Just do it.

Test the change(s)

Collect the data

Plan-Do-**Study**-Act

Was the cycle carried out as planned?

What happened during the testing phase?

What did you observe that was surprising?

What were the results?

Did the results match your prediction(s)?

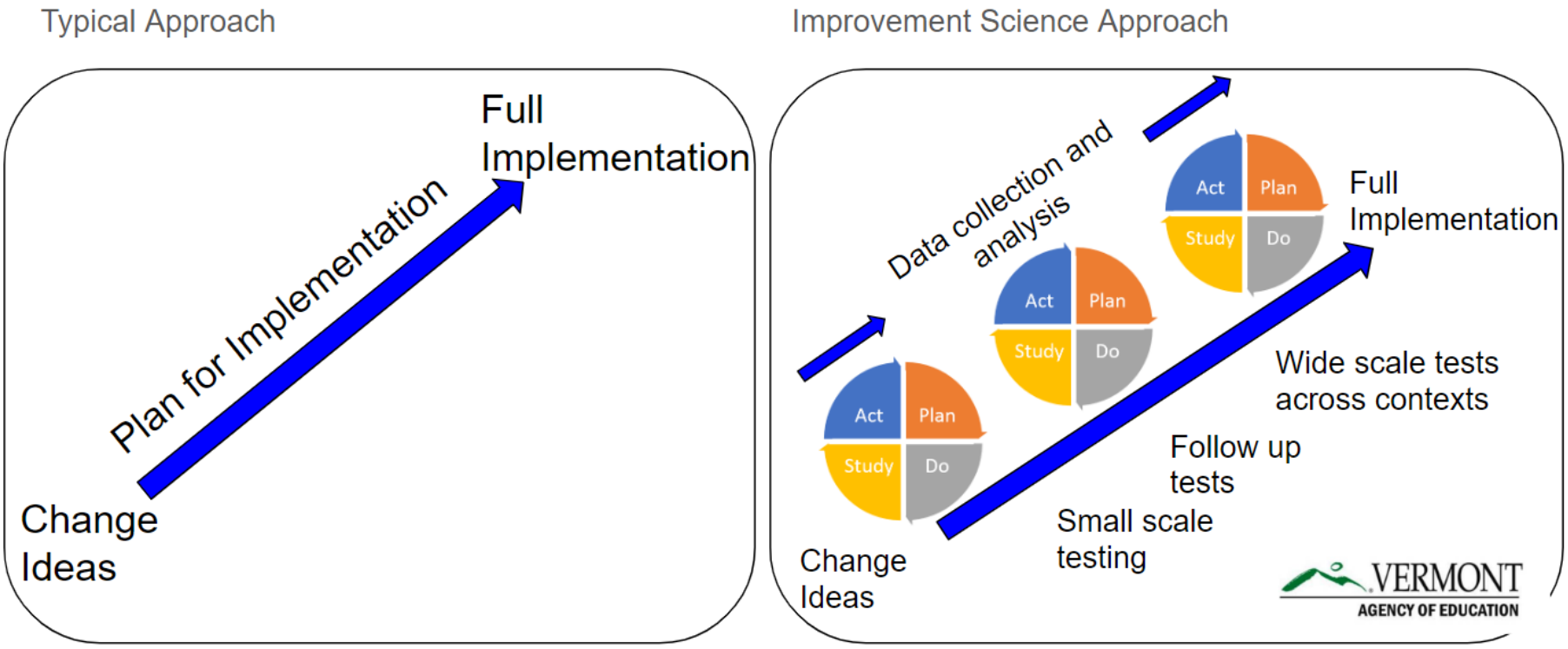
Plan-Do-Study-**Act**

Adopt

Adapt

Abandon

PDSA → Implement and Spread



Things to think about before you Implement and Spread

Actions:

-Fully implement to make small scale changes part of large scale practice

- Implement across contexts by addressing unique needs

Guiding Questions:

- Do we have full system support for this change?
- Do we have the people and resources in place to implement this change?
- How will we be providing training to ensure fidelity of implementation?
- Have we demonstrated that this change is actually an improvement?

Questions

Please contact us via email at:

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