Data Use Professional Development Series

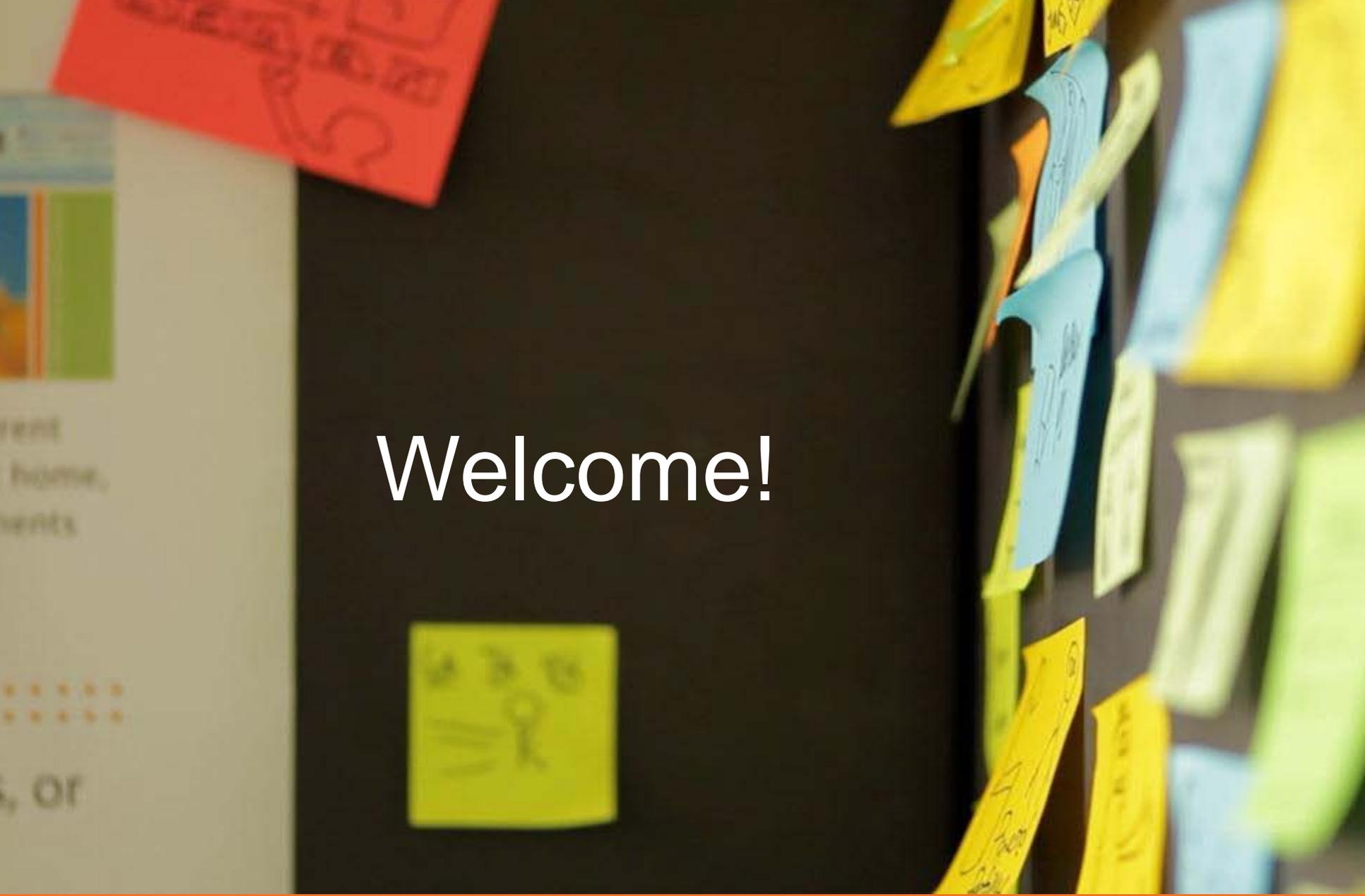## 301

Welcome!

Data Use PD by the numbers

2012-2013 Wireless Generation Becomes Amplify
- 30 Cohorts (600+ RI educators)
- 136 schools (public and charter)
- August, 2012 = 63 days of training
- September, 2012 = 25 days of training
- 5 Full Time Data Analysis Coaches
- 4 Part Time Data Analysis Coaches

2013-2014 Amplify
- 32 Cohorts (almost 700 RI educators)
- 152 schools (public and charter)
- August, 2013 = 87 days of training
- September, 2013 = 3 days of training
- 6 Full Time Data Analysis Coaches
- 1 Part Time Data Analysis Coach

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Agenda

Day 1

Welcome/Overview
Cycles of Inquiry
Data Use PD Implementation

Break
Identifying Patterns of Need
Connecting Initiatives

Lunch
Implementation Planning
Data Conversations
Questioning Techniques

Break
Data and Differentiation
Wrap-Up/Evaluations

Day 2

Welcome/Overview
Cycle of Inquiry: Practice 1
High and Low Stakes Decision
Making
Data Inventory

Break
Vision Statement
Implementation Case Studies
Integrating Initiatives

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Cycle of Inquiry: Practice 2
Root Cause Analysis

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Implementation Planning
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Day 3

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Collaboration and Transparent Data Cultures
SDLT roles and low stakes Data Conversations

Break
Data Conversations: Authentic Practice

Lunch
COI: Integration with Current Practices
Root Cause Analysis

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Norms for our time together

Professionalism:

Reasonable Bio/Tech Breaks

Mutual Respect for Time and Others

Participation:

Active Listening

Shared Talk Time

Willingness to Engage with Openness and Honesty

Problem Solving:

Solution Oriented

Other:

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Day 1 Objectives

By the end of Day 1, SDLTs will be able to:

- Define the role of an SDLT member.
- Describe the Cycle of Inquiry and how it relates to current school processes.
- Articulate the stages of the Short Cycle of Inquiry.
- Articulate the purposes of Data Conversations.
- Reframe questions using Positive Presumptions.

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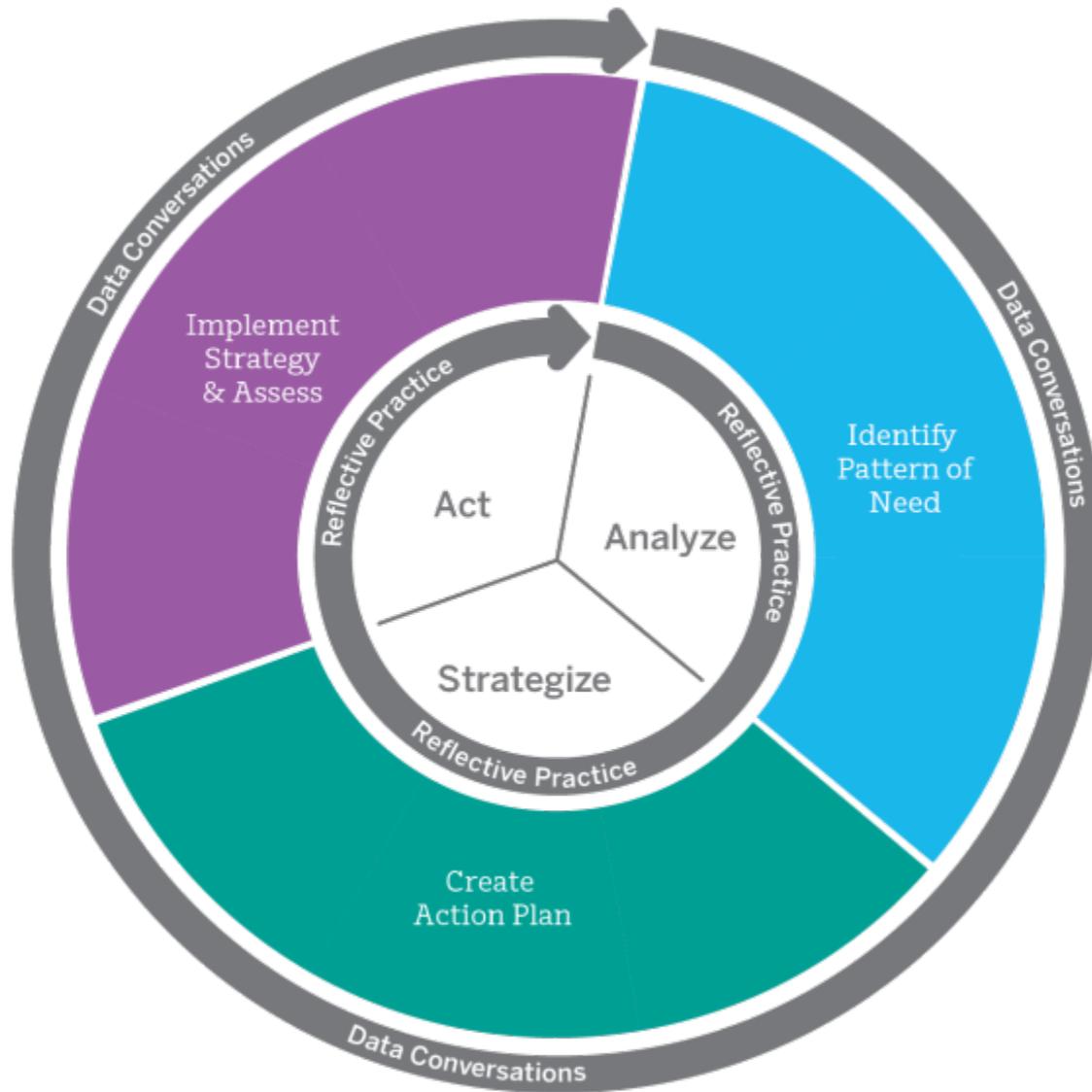Amplify insight.

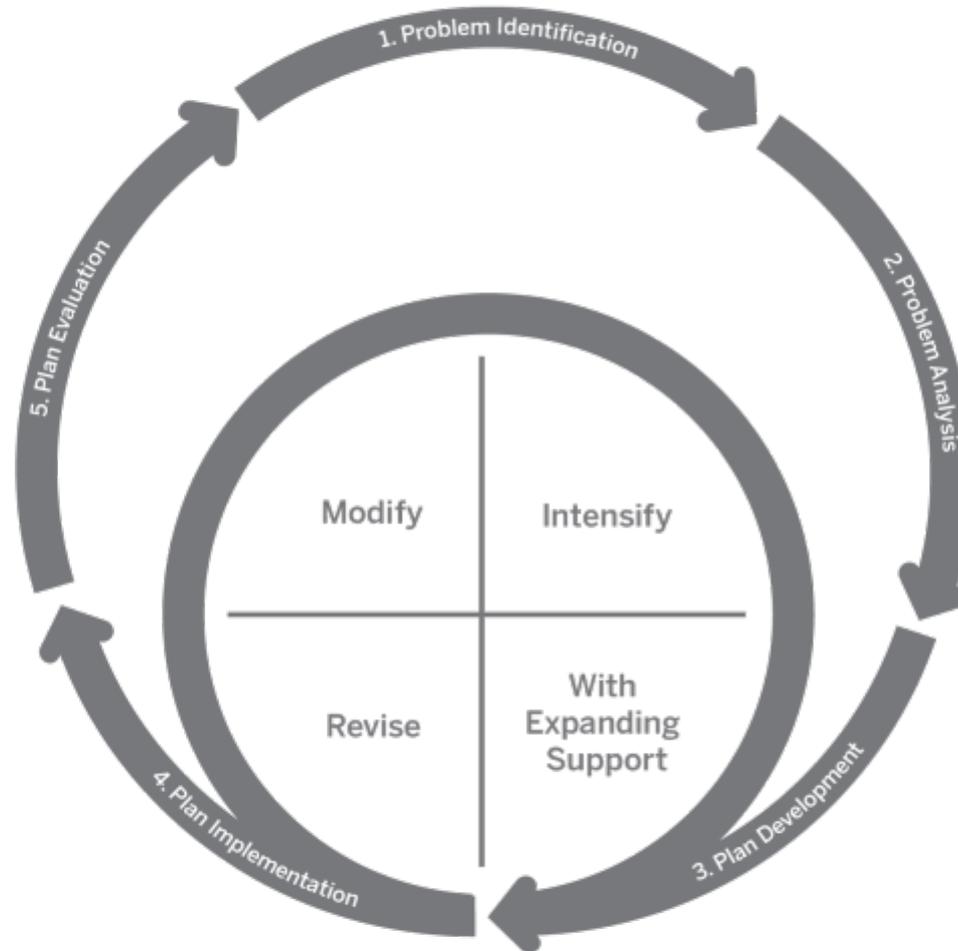# The Big Picture

- When teachers use data to make instructional decisions, what processes do they use?

- What are the gaps in understanding or knowledge that currently exist at your school?

- What are the areas we can strengthen that will help take your school's data use to the next level?

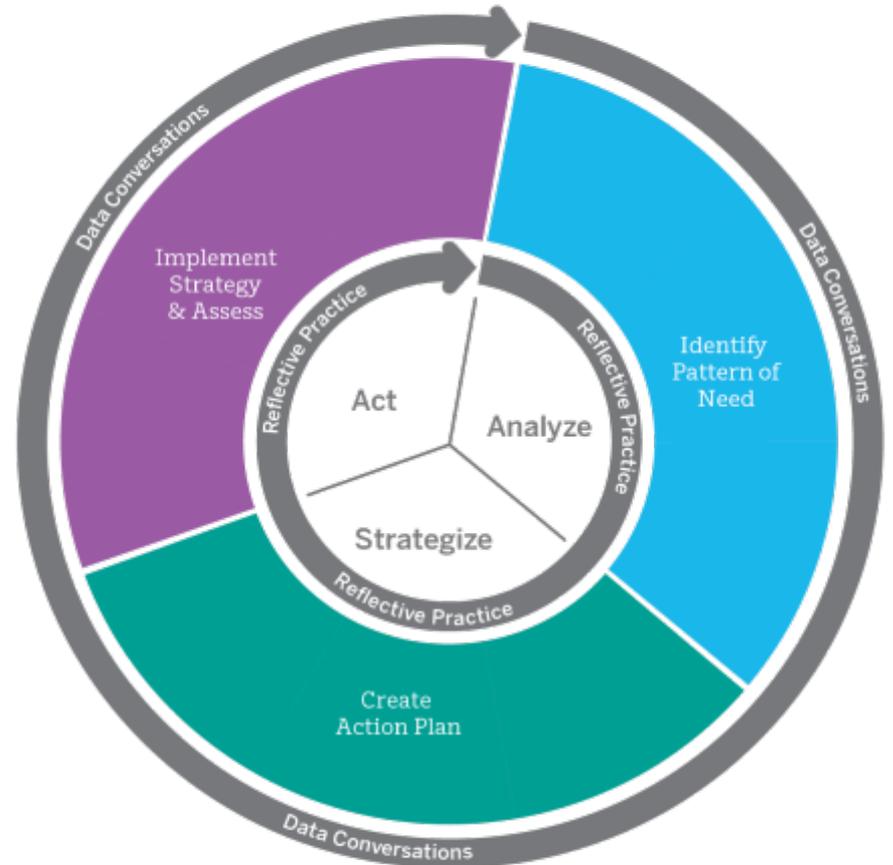Amplify insight.

Amplify insight.

Amplify insight.
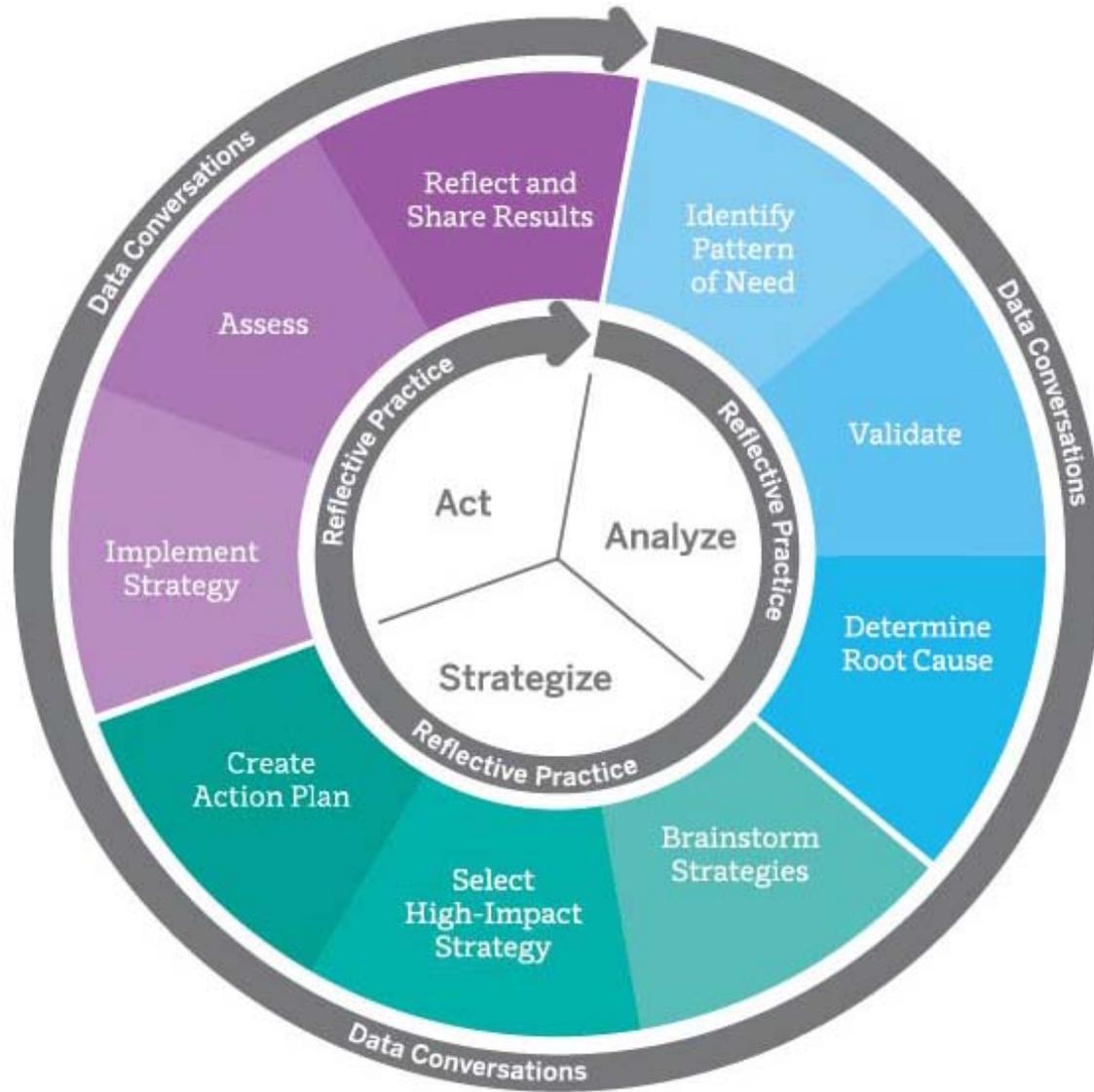
RTI Problem-Solving Process

Cycles of Inquiry
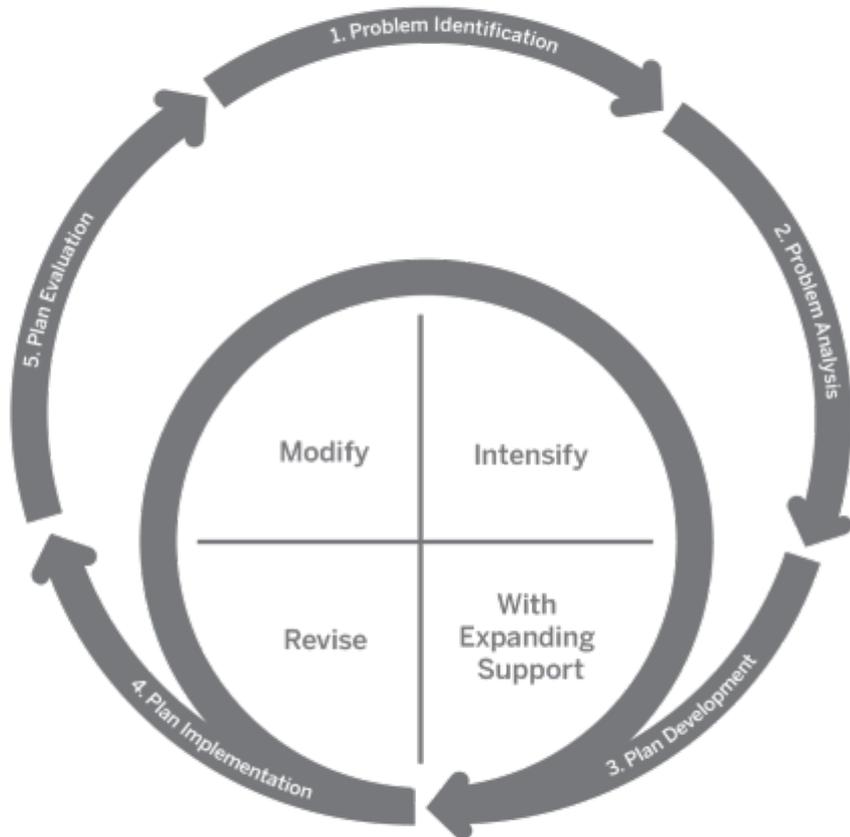
Data Use PD Implementation

Data Analysis Coach Roles and Responsibilities

- Facilitation of Data Use Workshops
  - Adapt and deliver content to meet the needs of the participants
  - Promote a safe and engaging learning environment
  - Help participants meet learning objectives
- Provide individual coaching to schools
  - Confer with school and/or principal before each site visit
  - Assist schools in reflective practice
  - Collaboratively problem solve school Data Use challenges
  - Build capacity for effective Data Use within schools

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Data Use PD Implementation

SDLT Roles and Responsibilities

- Strategize how to best enhance data-informed decision making while building upon current data practices in your school

- Develop a plan for increasing the frequency and effectiveness of data use in your school

- Introduce the Cycle of Inquiry to faculty and support them in applying it to their everyday practice

- Implement Turnkey Activities with faculty

- Collaborate with peers in applying data use practices and data analysis skills

- Prepare faculty for Data Analysis Coach site visits

- Engage in ongoing communication with Data Analysis Coach

- Create a Sustainability Plan for your school

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Turnkey Materials

Bringing this work back to your school

- Getting Started

- Analyze

- Strategize

- Act

- Data Conversations
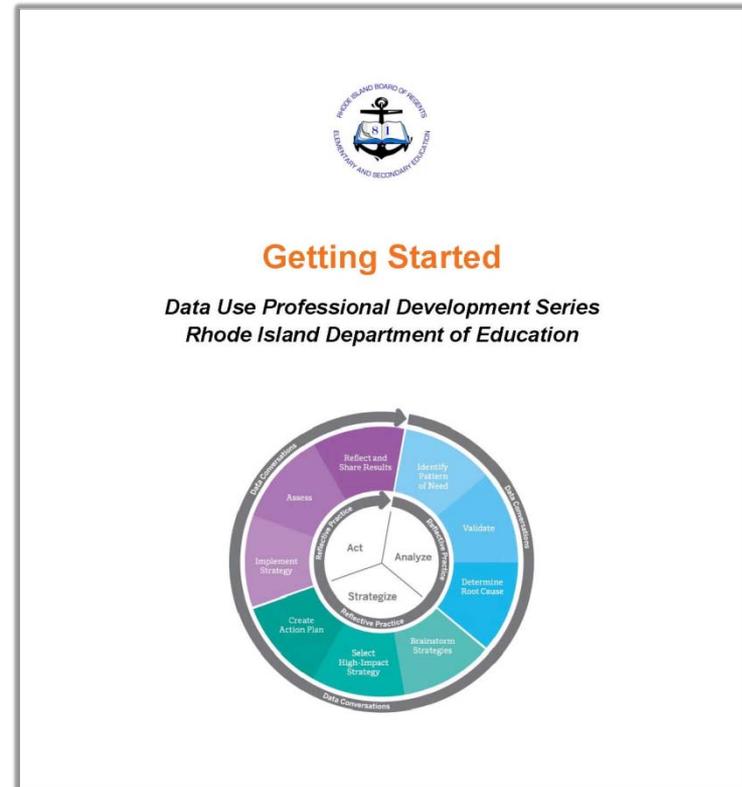
Collecting Reflection Data

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# Who is already doing this work at your school?

Summary

- Frequent low-stakes Cycles of Inquiry are at the core of the work.

- The Cycle of Inquiry focuses on using data in low stakes ways to adjust core instruction.

- SDLT members play an integral role in implementing Data Use PD in schools.

- The work will expand by building on assets already in place.

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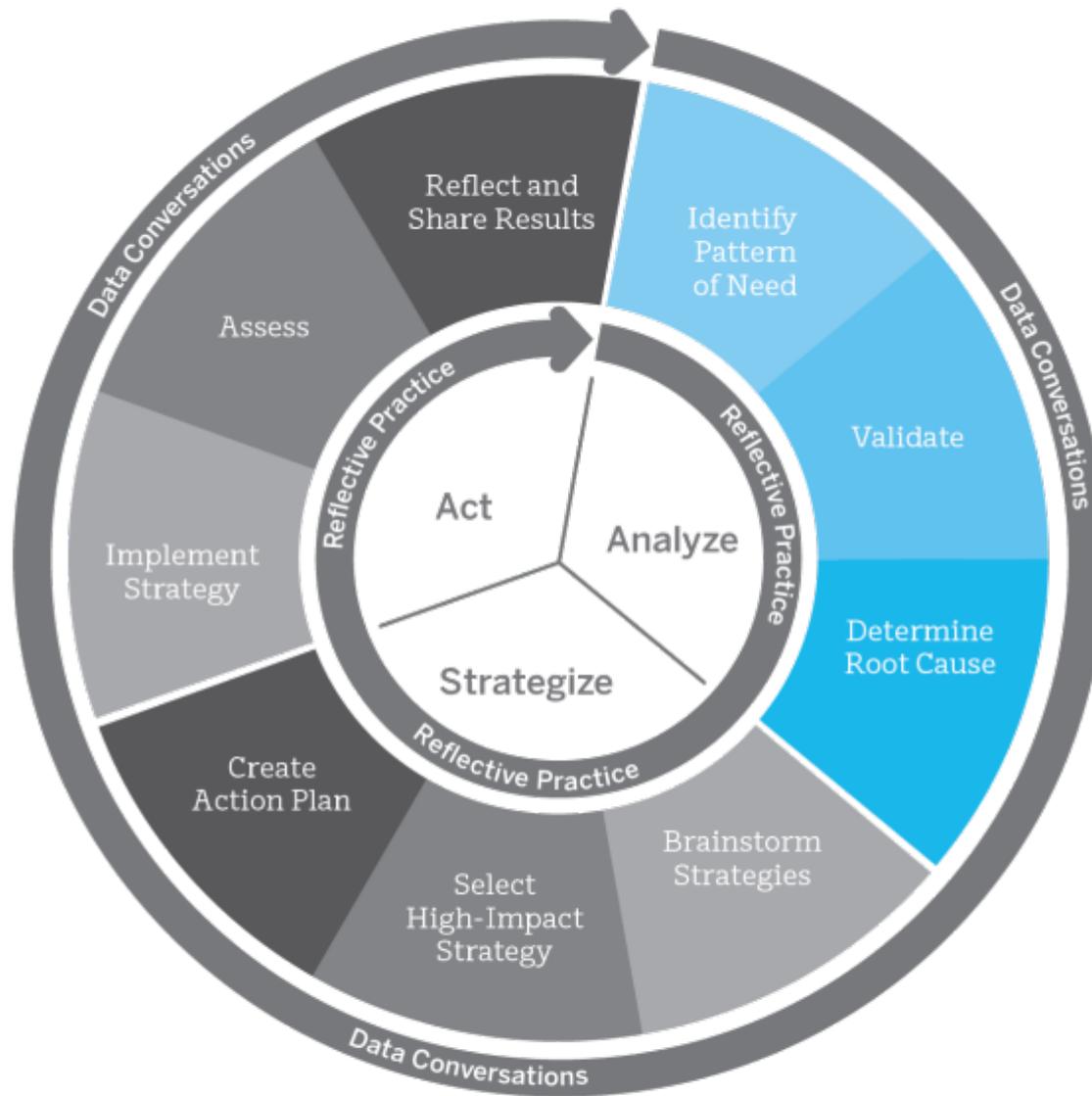
Patterns of Need:

Common results in the data for a group of students specific enough to allow you to target instruction where it is needed.

The need may be skill-based or content-based. It does not necessarily mean an area of weakness; there could be a need for enrichment or extension if the pattern indicates student strength in a particular area.

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Identifying Patterns of Need

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Initiative Integration

Data Use

Data Use

Common Core

Evaluations / SLOs

Common Core

Evaluations / SLOs

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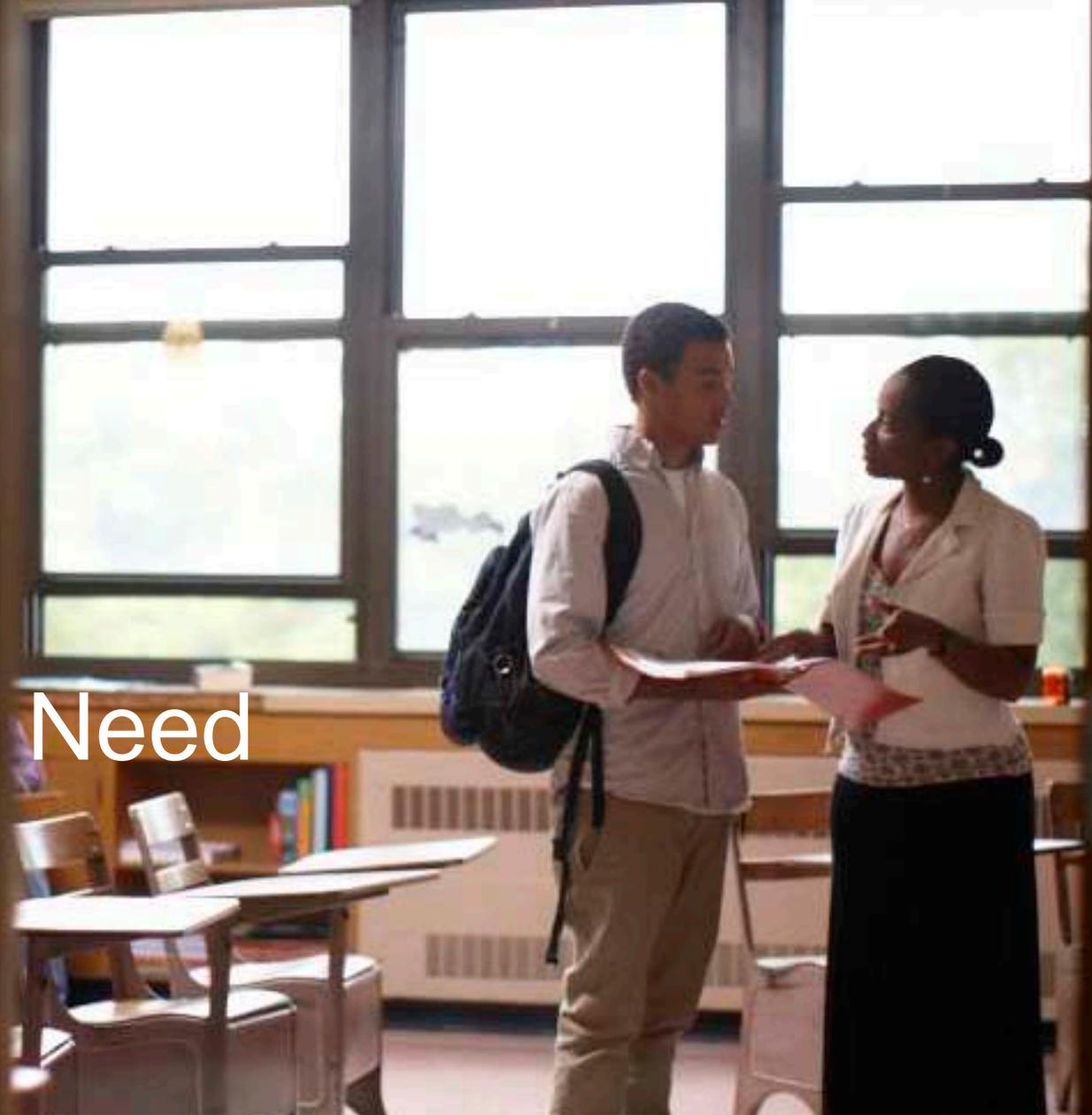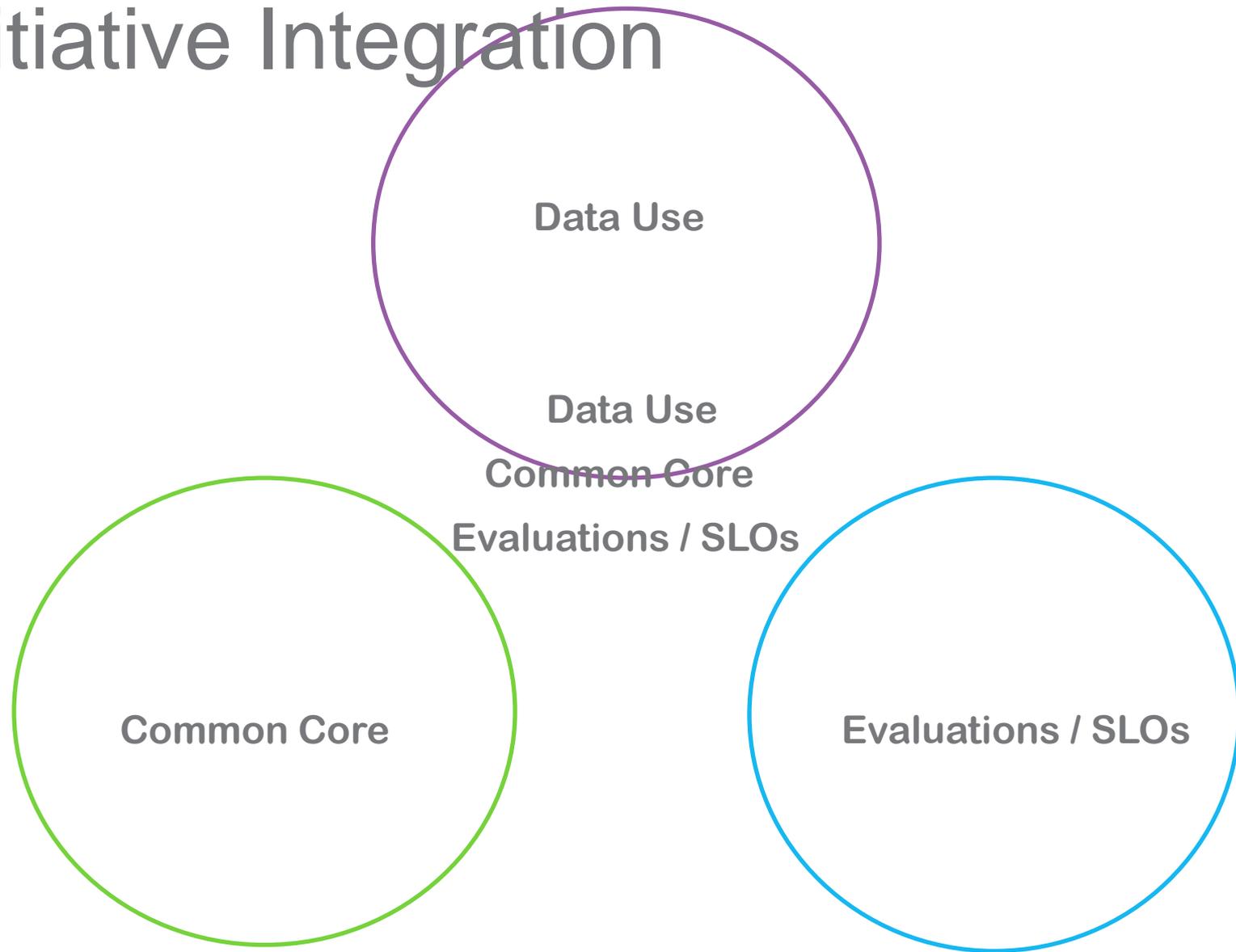
Summary

- Identifying Patterns of Need for clusters of students provides opportunities to ask big questions and examine our core teaching practice.

- Understanding the connections between initiatives creates synergies.
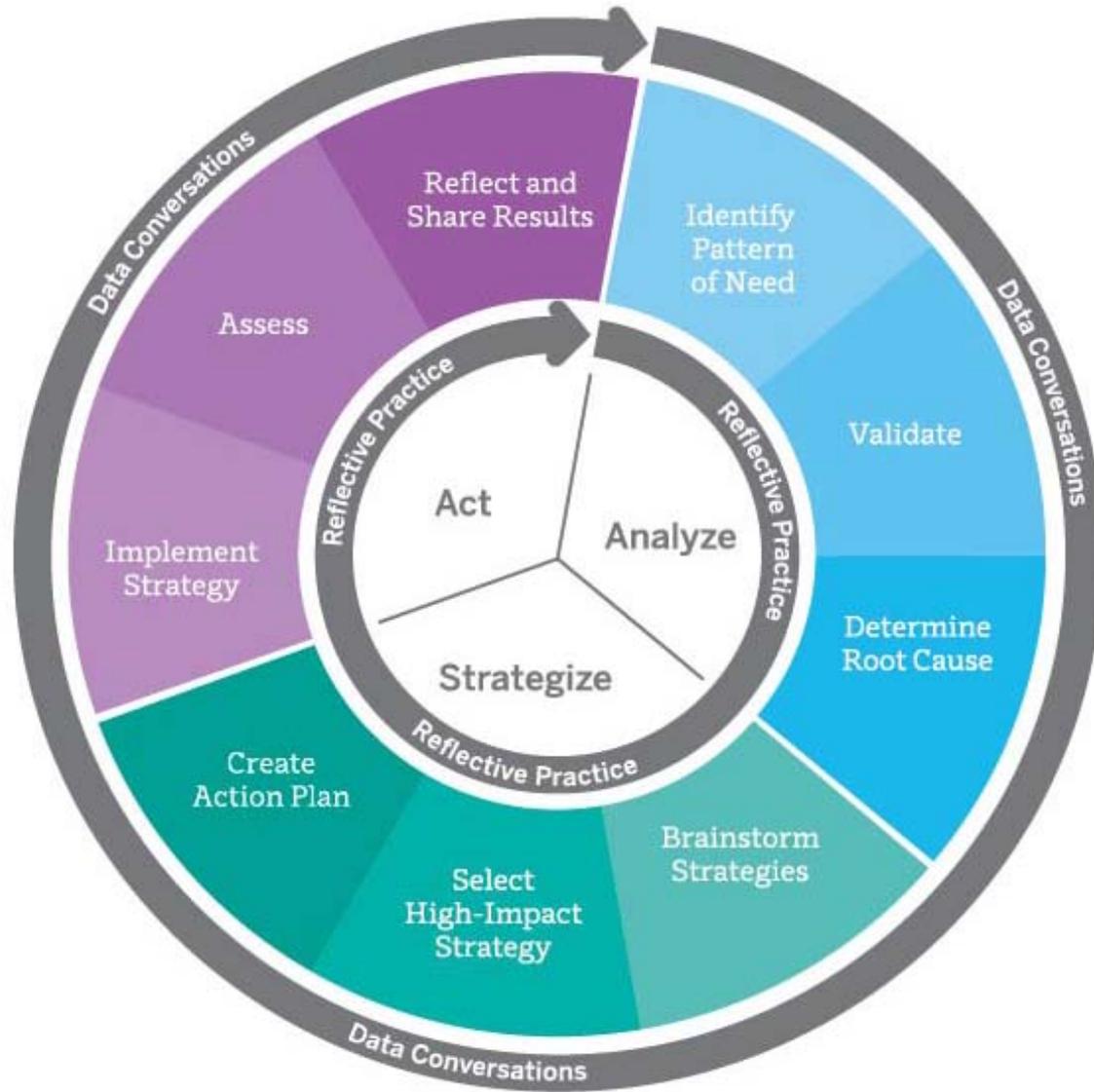
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Lunch

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Implementation Planning

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Data Conversations

Three types of Data Conversations:

- Gathering Information
- Guiding Improvement
- Finding Solutions

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Data Conversations

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Scenario

The students in Mrs. Smith's class are showing proficiency levels greater than the state, district, and school averages in reading.

The same cannot be said in math however, where her proficiency levels are behind the state, district, and school averages.

As Principal, which type of Data Conversation would you engage in with Mrs. Smith?

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Presuming Positive Intent

Finding Solutions	Is it easier for you to teach that way because your students are more focused than mine?	VS.	What strategies do you use to keep your students so focused?
Gathering Information	Is Johnny failing your class too?		I want to learn more about Johnny's performance in different content areas; how is he doing in your class?
Guiding Improvement	Are your students going to be ready for NECAP?		What strategies are you considering to prepare your students for the NECAP?

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Positive Presumptions

- Involve thinking through what you really want to know, and what assumptions you are making before you ask a question.

- Presume a positive result has already taken place; so you ask a question with this assumption already in mind.

- Presuming positive intent is not the same as "being positive".

Reframing

Negative Presumptions	VS.	Positive Presumptions
Are you going to help Frank with that math problem?		
Did you use quiz results to form these groups?		
You failed this test. What happened, you didn't study?		
Have you developed differentiated lesson plans for your students?		

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Summary

- Presuming Positive Intent makes Data Conversations more productive.

- Data is not an end all result, but the beginning of a Conversation.

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Mr. Cole is a merry old soul. His math students enjoy coming to class. His attendance rate is 98% where the rest of the school is 94%. Whenever an adult walks into his class, they see great student engagement.

The math teachers in Mr. Cole's school have developed common assessments. Mr. Cole's last few sets of test scores have been below average for his grade level, which is surprising to his principal since his students seem so interested in the class.

After receiving the most recent test scores, the following Data Conversations take place:

1. Guiding Improvement Conversation between the Principal and Mr. Cole

2. Information Gathering Conversation between Mr. Cole and one of his students

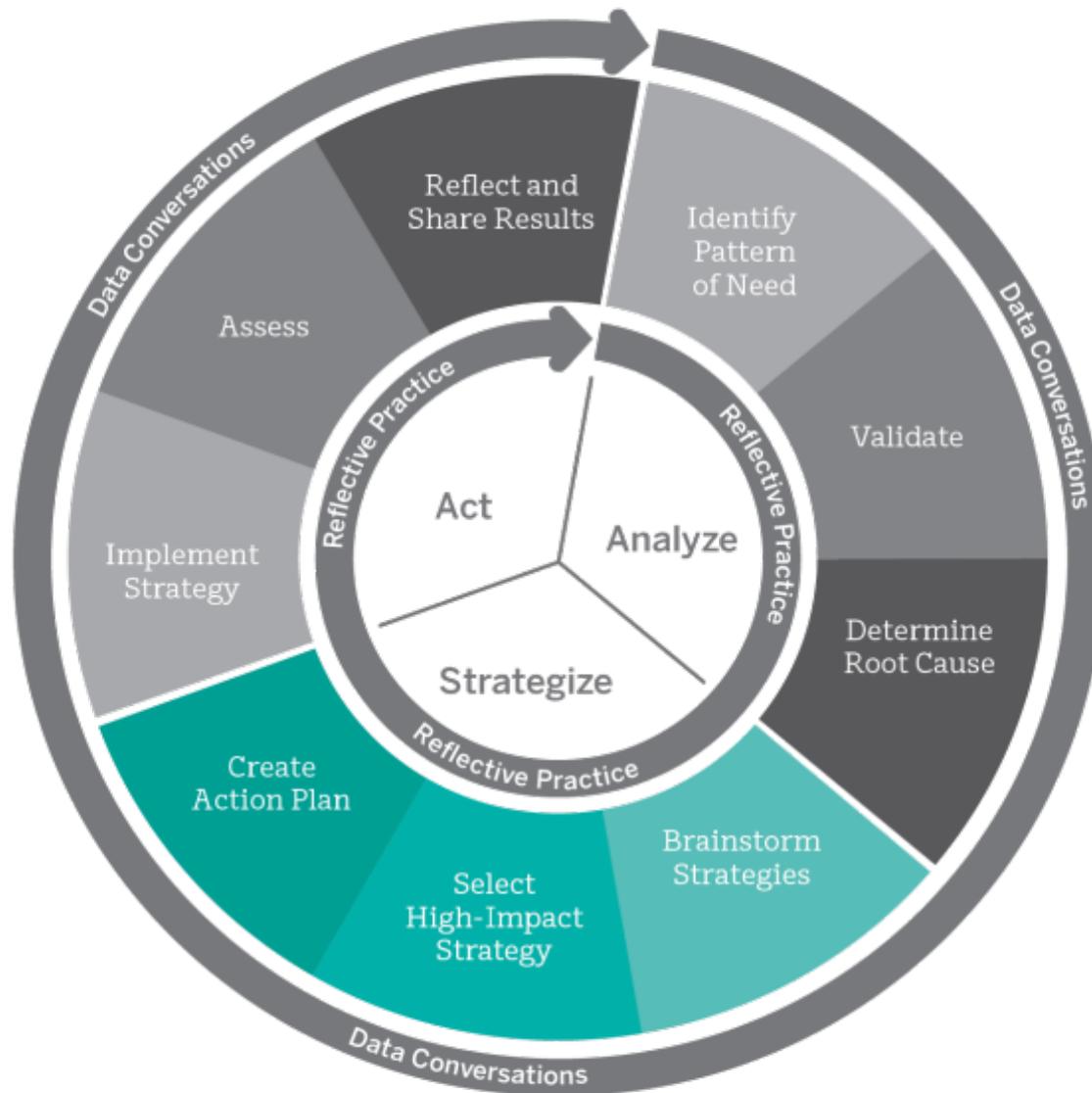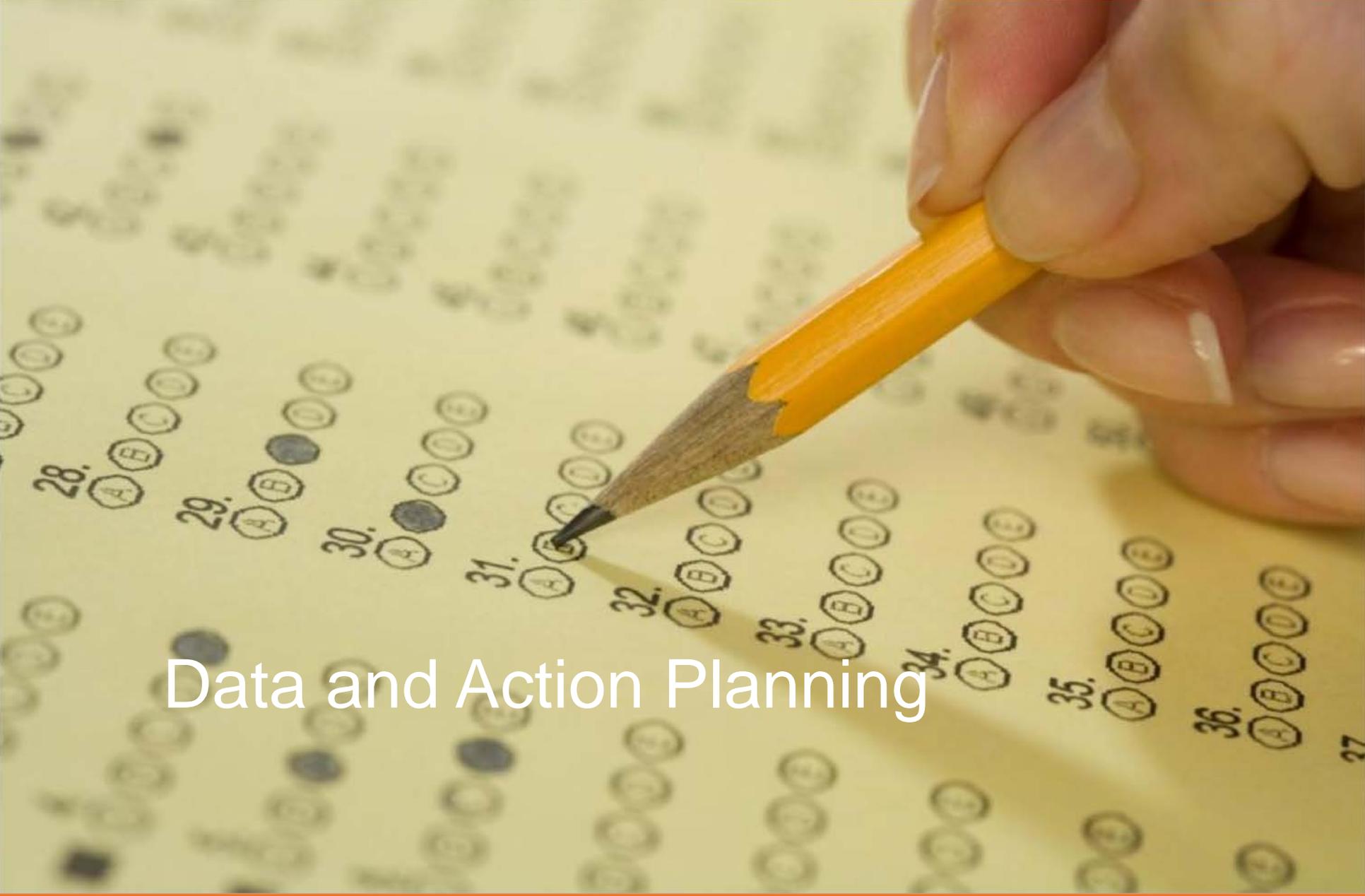3. Finding Solutions Conversation between Mr. Cole and other math teachers

Data Conversations

Logging Data Conversations

Date: Met with: ☐ Administrator ☑ Teacher ☐ Student ☐ Parent ☐Other: _____	What type of conversation did you have? ☐ Gathering information ☑ Guiding improvement ☐ Finding solutions	What step of the Cycle of Inquiry were you in? ☐ Analyze ☑ Strategize ☐ Act
	What is one question you asked during the conversation? ☑ What strategies are you considering to help your students achieve proficiency with 2-digit addition?	
What was one result of the conversation? ☑ The teacher will have students work in small groups with base 10 blocks to solve 2-digit addition problems.		

Date: Met with: ☐ Administrator ☐ Teacher ☐ Student ☐ Parent ☐ Other: _____	What type of conversation did you have? ☐ Gathering information ☐ Guiding improvement ☐ Finding solutions	What step of the Cycle of Inquiry were you in? ☐ Analyze ☐ Strategize ☐ Act
	What is one question you asked during the conversation?	
What was one result of the conversation?		

Date: Met with: ☐ Administrator ☐ Teacher ☐ Student ☐ Parent ☐ Other: _____	What type of conversation did you have? ☐ Gathering information ☐ Guiding improvement ☐ Finding solutions	What step of the Cycle of Inquiry were you in? ☐ Analyze ☐ Strategize ☐ Act
	What is one question you asked during the conversation?	
What was one result of the conversation?		

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Data and Action Planning

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Data and Differentiation

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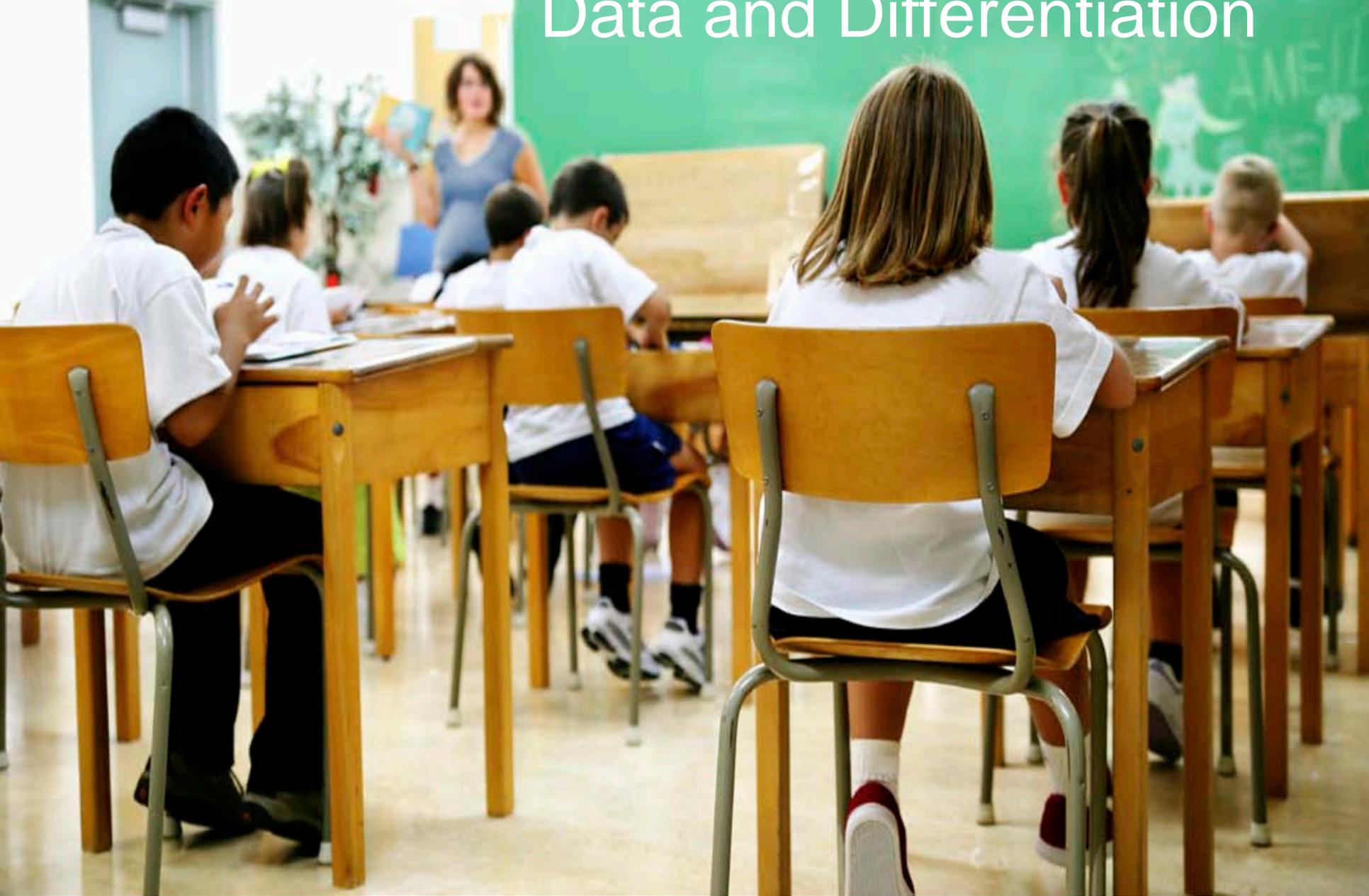
The Differentiated Classroom: Responding to the Needs of All Learners

-Carol Ann Tomlinson

Mind and Society

-Lev Vygotsky

Effective Classroom Practices Report

-National Center on Accessing the General Curriculum

"Differentiated Instruction for English Language Learners as 'Variations on a Theme"

-Middle School Journal

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Differentiation

"The idea of differentiating instruction is an approach to teaching that advocates active planning for an attention to student differences in classrooms, in the context of high quality curriculums.

Differentiation is not the same as individualization in that it doesn't suggest IEPs for each student. It suggests that there are Patterns of Need in each classroom and if we look for those patterns we can develop approaches that will open up the classroom a bit."

Carol Ann Tomlinson, The Differentiated Classroom: Responding to the Needs of All Learners

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Differentiation

"Zones of Proximal Development: Readiness to Learn. The zone is the area between the student's independent level and the next highest level the child is ready to tackle with the help of more competent teachers, and in which learning takes place."

Vygotsky, Lev, <u>Mind and Society</u>

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Differentiation

"To differentiate instruction is to recognize students' varying background knowledge, readiness, language, preferences in learning and interests; and to act responsively.

Any time we make an instructional adjustment based on a student need, we are differentiating."

Hall, T., Strangman, N., & Meyer, A., *Differentiated Instruction and Implications for UDL Implementation*

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Differentiation

"Differentiation should be achieved through small variations to a base activity, or the process may become too daunting and time-consuming for teachers. Differentiation can then become part of everyday practice rather than an occasional event."

Laura Baecher, Marcus Artigliere, David Patterson, and Adrian Spatzer, "Differentiated Instruction for English Language Learners as 'Variations on a Theme'"

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Whole Class Instruction

Strategies for Differentiating:

- Scaffolded questions

- Varying explanation of concepts/skills/content

- Start with highest level activity

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Agenda

Day 2

Welcome/Overview

Cycle of Inquiry: Practice 1

High and Low Stakes Decision Making

Data Inventory

Break

Vision Statement

Implementation Case Studies

Integrating Initiatives

Lunch

Cycle of Inquiry: Practice 2

Root Cause Analysis

Break

Data Conversations Practice

Implementation Planning

Wrap-Up/Evaluations

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Summary

- Cycles of Inquiry that begin with identifying Patterns of Need are at the core of our practice.

- Frequent, low-stakes Data Conversations are essential to building transparent data cultures.

- Differentiation can be done effectively during whole class instruction as part of a data-informed Cycle of Inquiry that begins with identifying a Pattern of Need.

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You are
here

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We are here together

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Data Use Professional Development Series

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Day 2

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Welcome back!

Reflection

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Norms for our time together

Professionalism:

       Reasonable Bio/Tech Breaks

       Mutual Respect for Time and Others

Participation:

       Active Listening

       Shared Talk Time

       Willingness to Engage with Openness and Honesty

Problem Solving:

       Solution Oriented

Other:

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Day 2 Objectives

By the end of Day 2, SDLTs will be able to:

- Categorize various data sources.
- Distinguish between High and Low Stakes decisions.
- Apply the Short Cycle of Inquiry using authentic data.
- Analyze the variety of ways in which Data Use can be implemented in schools.

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Cycles of Inquiry

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What is data?

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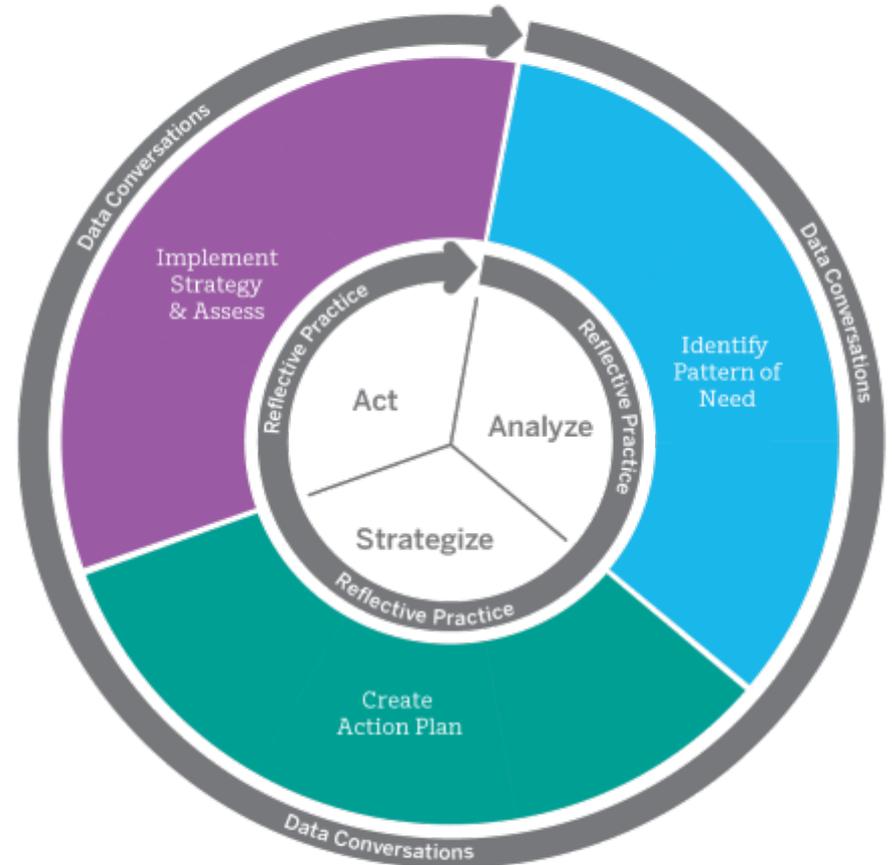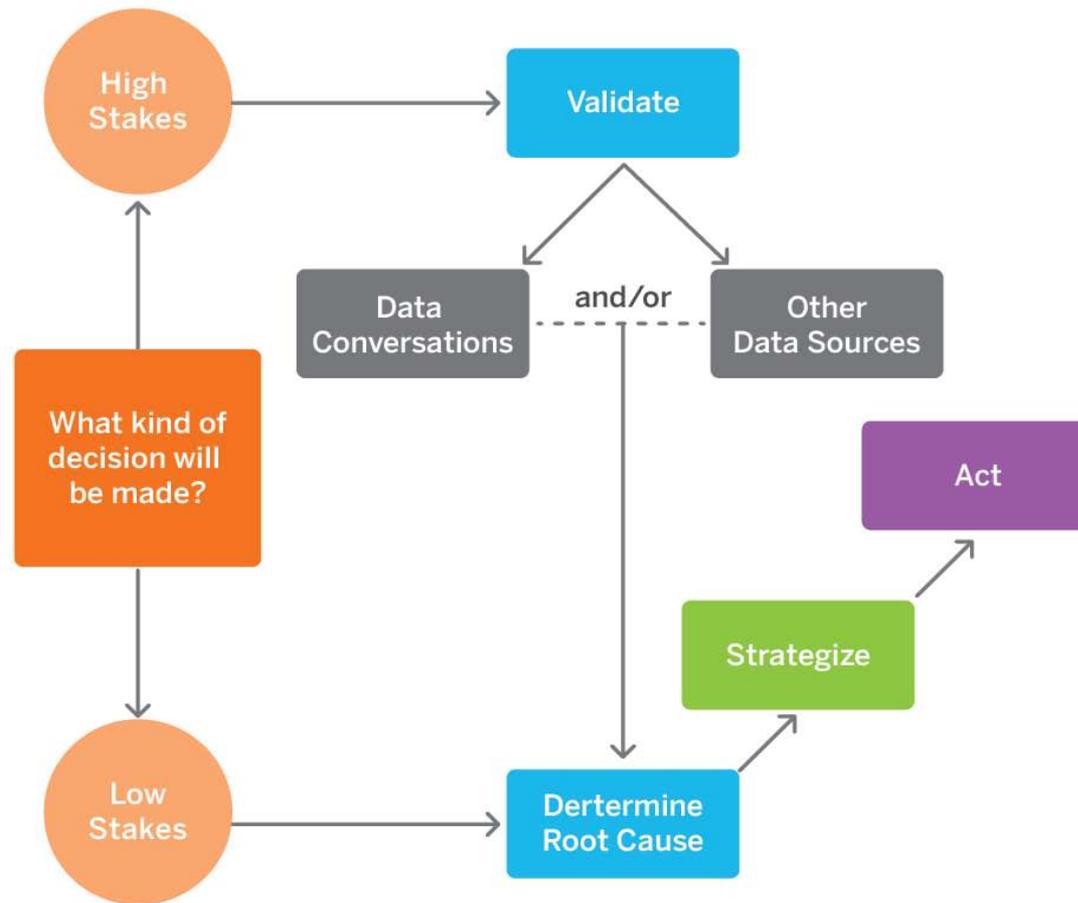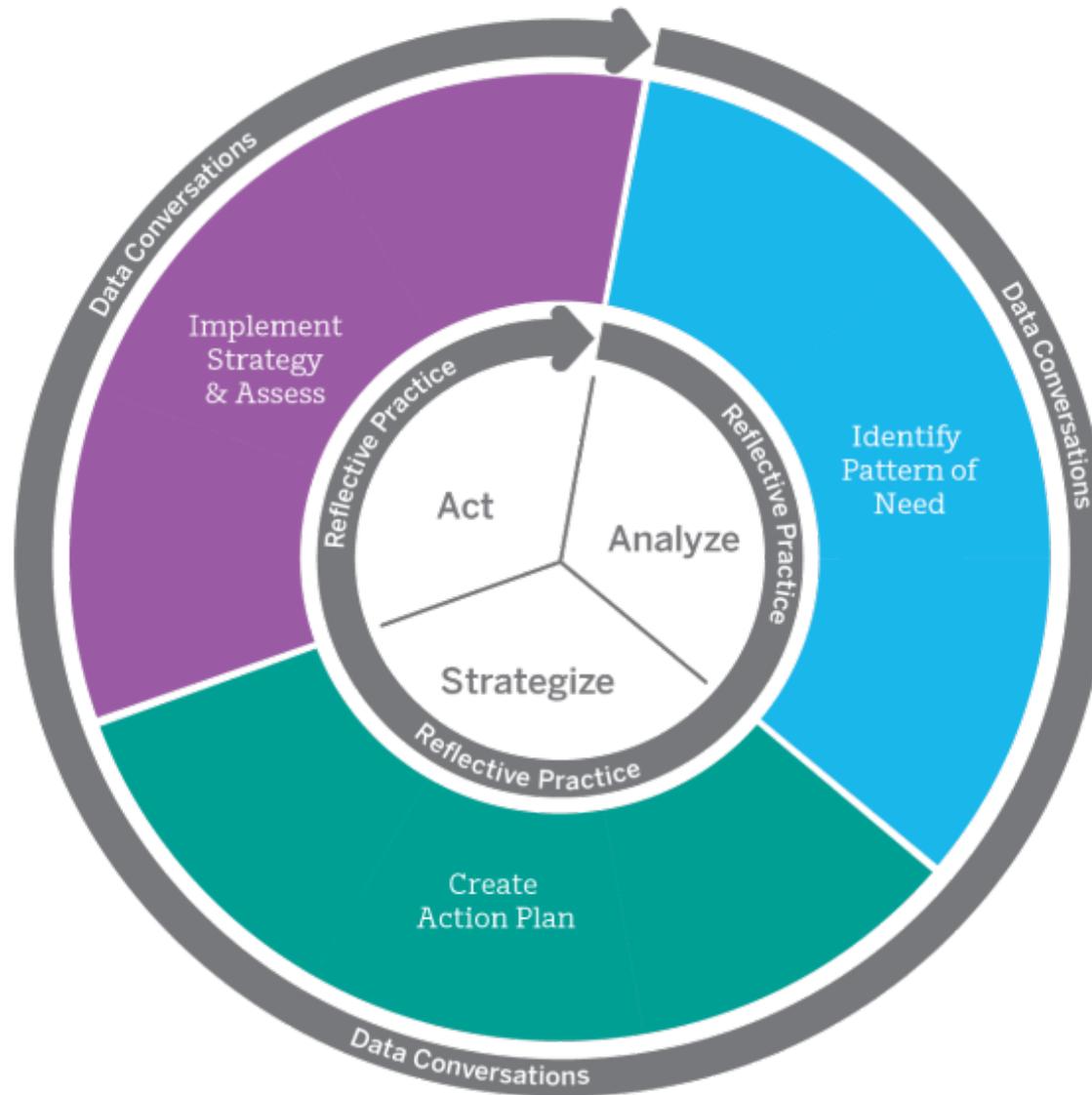
Data Quality Standards

What does good data look like?

Good data is….

- Accurate – Information is correct

- Complete – All records that should be included are there

- Unique – No duplication: one student, one record

- Timely – Information is collected as close to the time of use as possible

- Consistent – Information in multiple data systems all reflect the same thing

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What data do we use?
What data do we have?

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Data Inventory

Data Inventory Template

Student Achievement Data

Data Source	Grade Range	Content Area	When data collected / received	Who has access/ Where it is stored	Purpose	How are data currently used?	How data could be used more effectively
Example: NECAP	*3,4,5,6,7, 8,11*	*Reading, Math*			☐ Inform Instruction ☐ Screen/Identify ☐ Outcomes/ Accountability		
					☐ Inform Instruction ☐ Screen/Identify ☐ Outcomes/ Accountability		
					☐ Inform Instruction ☐ Screen/Identify ☐ Outcomes/ Accountability		

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Qualitative or Quantitative

How can qualitative data be used to drive instruction?

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Summary

- Using data to make rapid low stakes decisions about instruction can lead to quick wins for educators.

- Examining the potential risk in relation to the stakes of decisions is important for developing the habit of mind of rapid, frequent data use.

- A Data Inventory is a living document that guides the "Big Picture" of data access and use.

- Data informed decision making requires good data that is accurate and complete. Assuring data quality is a continuous process.

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Current State

Tension

Ideal Vision

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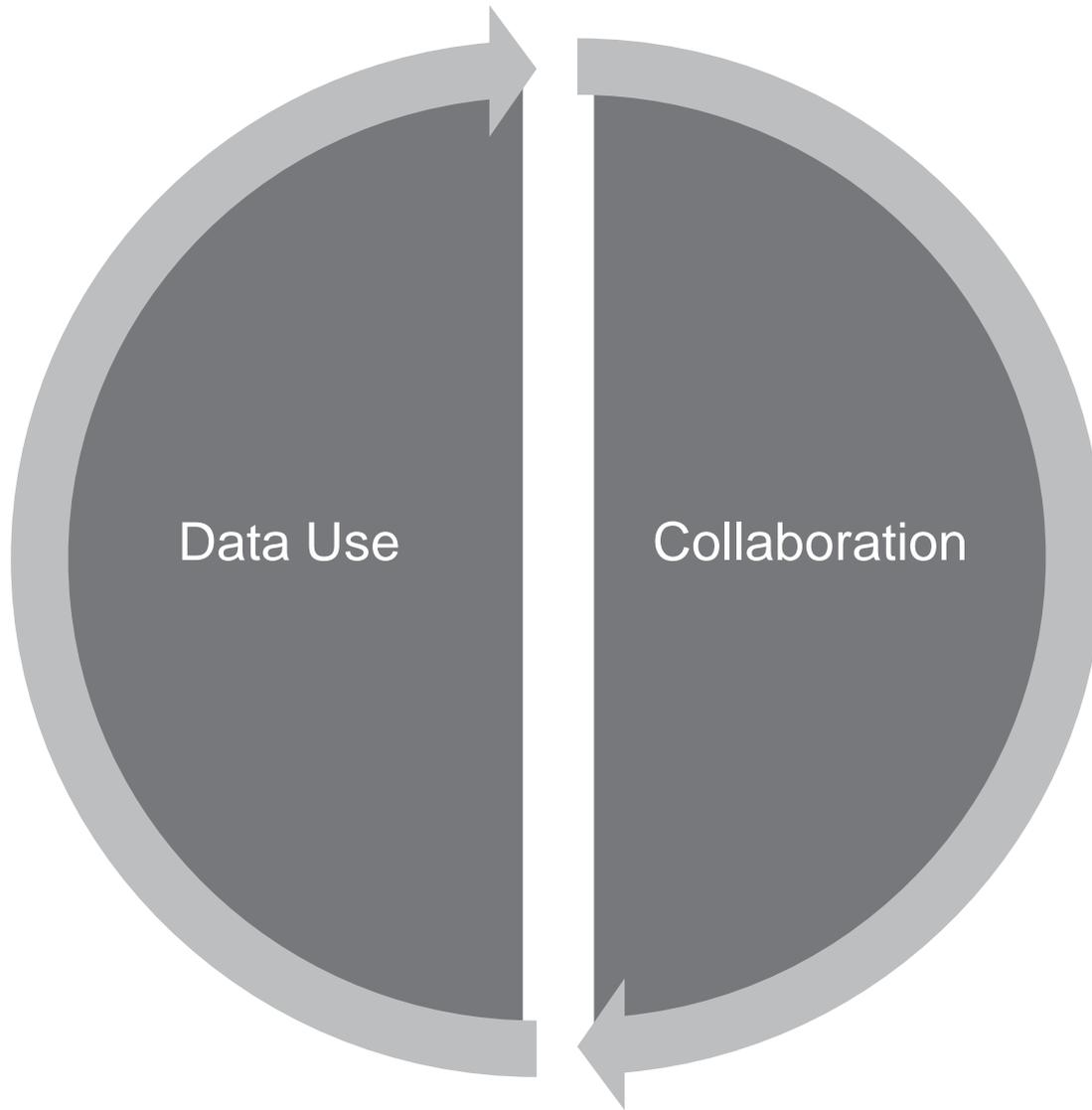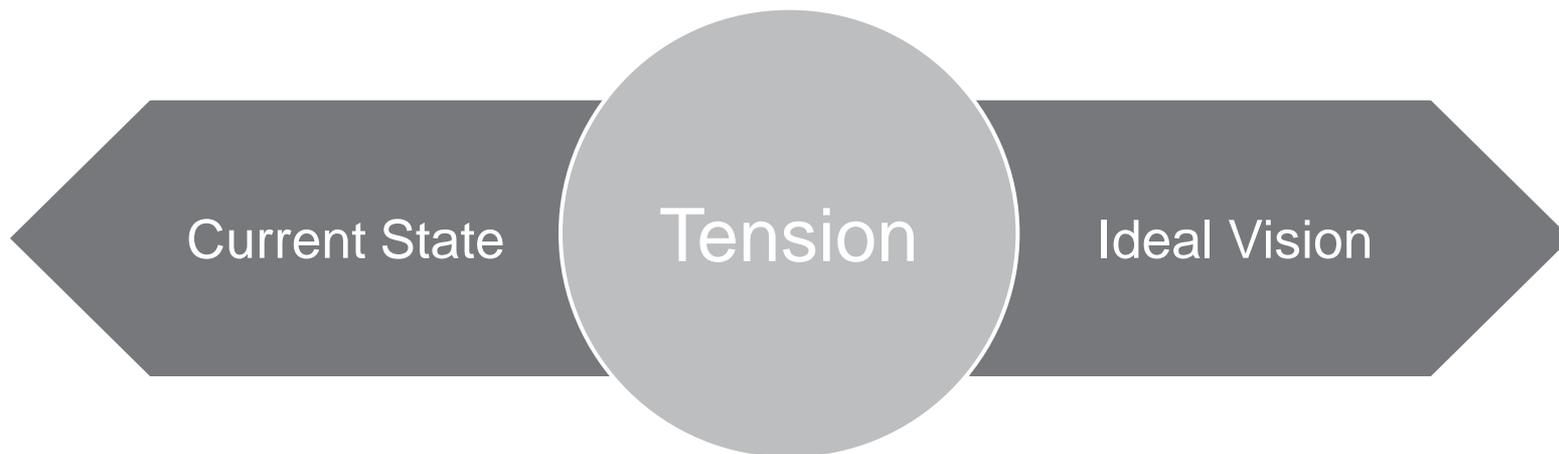
Implementation Case Studies

In what ways do SDLTs implement data use in schools?

School A

School B

School C

School D

School E

School F

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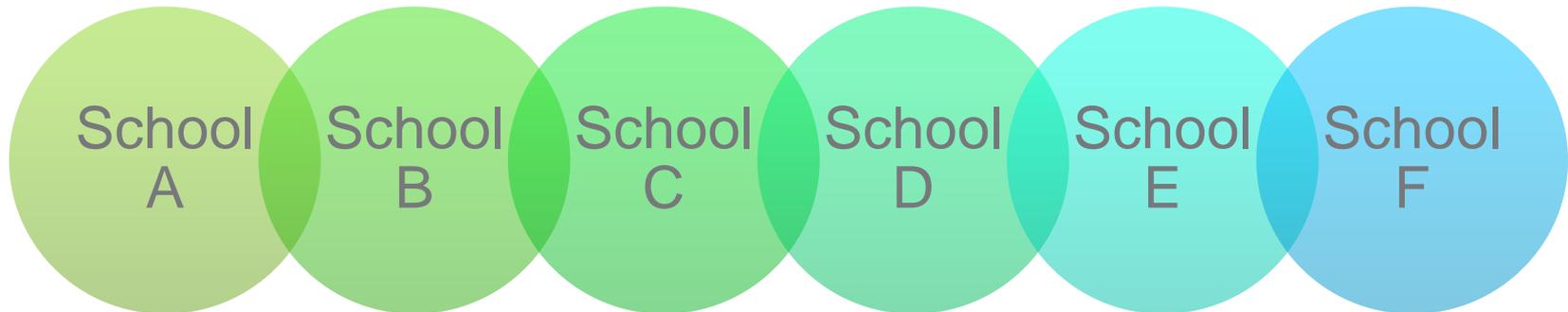
Implementation Timeline

Days 1-3

Day 4

Day 5

Day 6

Day 7

Day 8

Days 9 & 10

SDLT divides up responsibilities and develops a plan

SDLT Introduces Cycle of Inquiry and Turnkey activities

SDLT members coach teachers in applying the Cycle of Inquiry and using Data Analysis skills

SDLT continues to implement Turnkey materials and coach teachers

Sustainability Plan

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"Habits, values, and attitudes, even dysfunctional ones, are part of one's identity.

To change the way people see and do things is to challenge how they define themselves."

-Leadership on the Line

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Initiative Integration

Data Use

Common Core
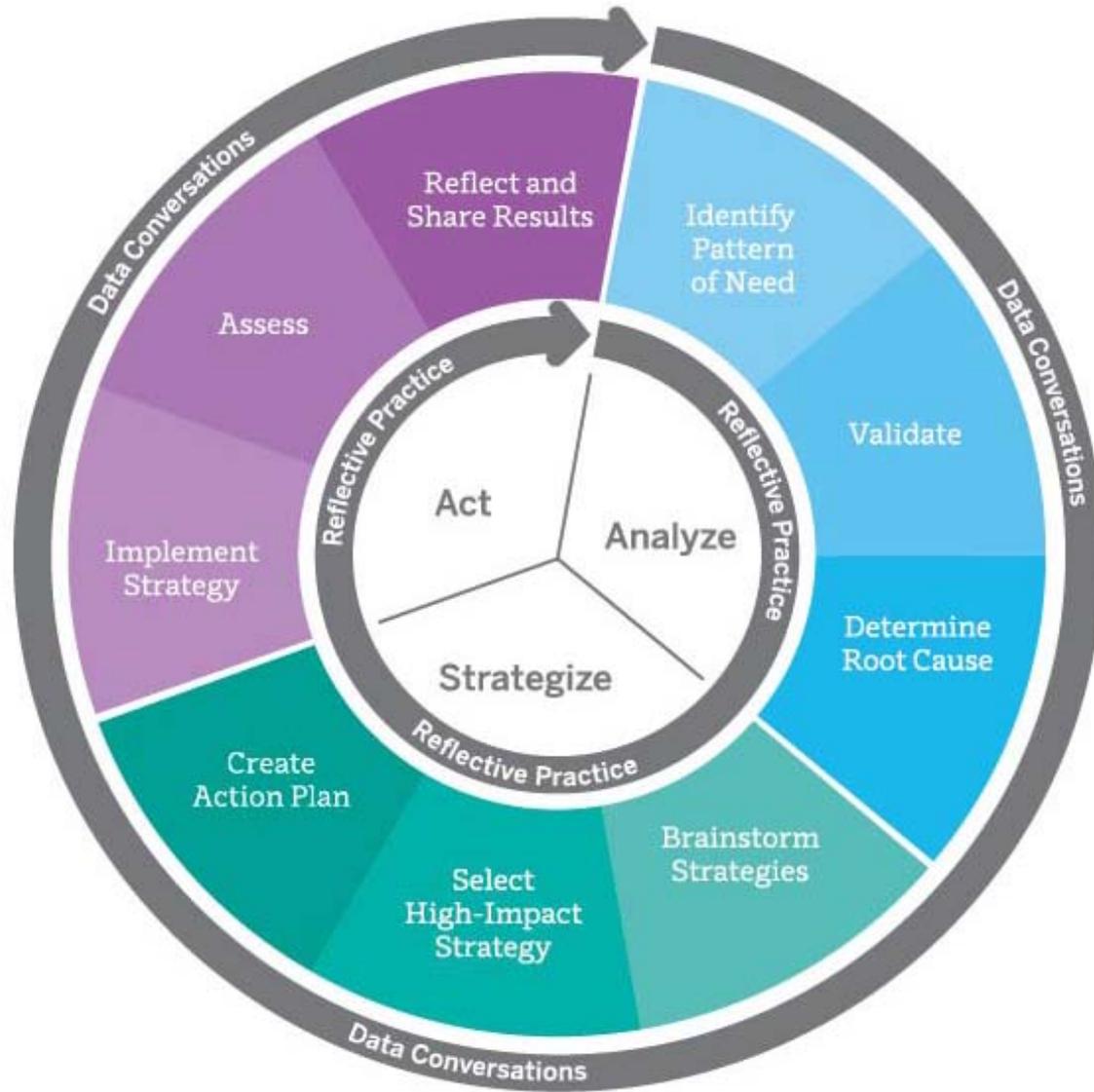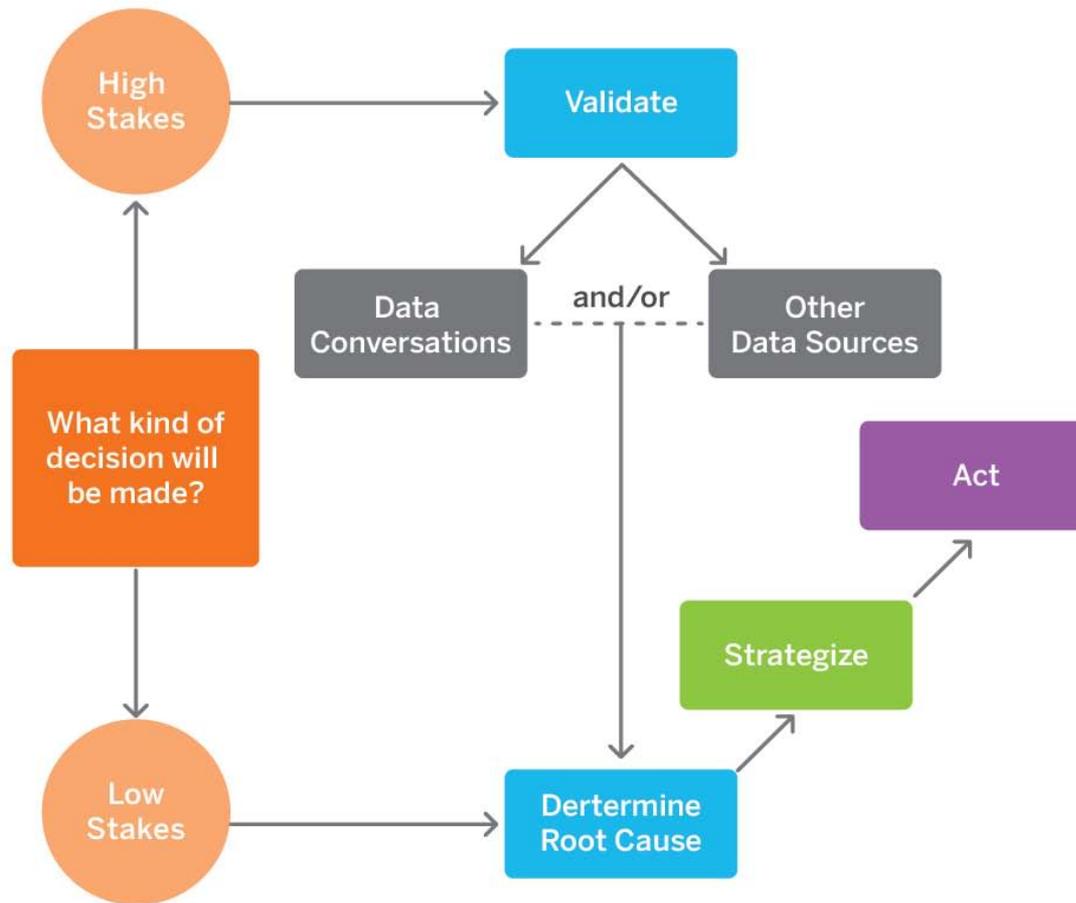
Evaluations / SLOs

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Summary

- Constructing a realistic vision for the work requires considering current reality, as well as new initiatives and how they will all work together.

- Implementation of the work looks different at different schools.

- Major change involves loss.

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Lunch

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Root Cause Analysis

Expanding Options

What else could it be?

Narrowing Down

Which are highly unlikely?
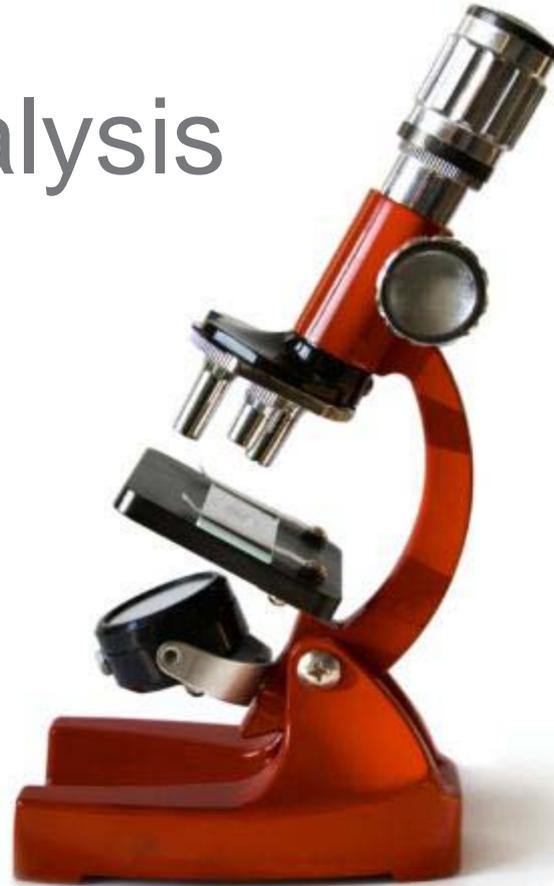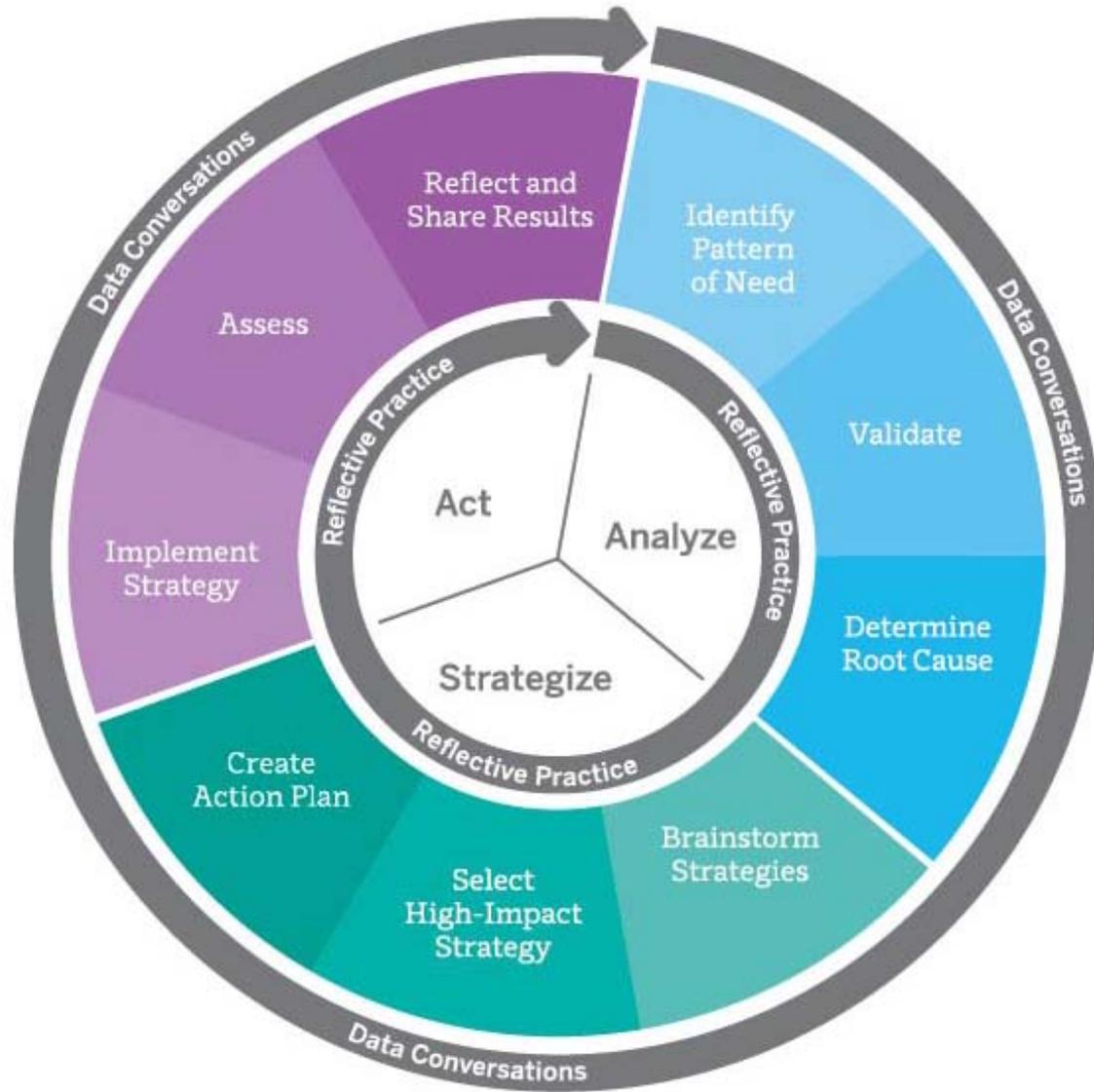
Working Hypothesis/Data for Validating

Which cause is worth further exploration? How will you know?

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Root Cause Analysis

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Summary

- The need for validation of inferences increases with the stakes of the decision.

- More Root Cause Analysis should be used when decisions are higher stakes.

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Data Conversations

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Agenda

Day 3

Welcome/Overview
Collaboration and Transparent
Data Cultures
SDLT roles and low stakes Data
Conversations

Break
Data Conversations: Authentic
Practice

Lunch
Cycle of Inquiry: Integration with
Current Practices
Root Cause Analysis

Break
Implementation Planning
Wrap-Up/Evaluations

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Summary

- Encouraging educators to make frequent low stakes adjustments to core instruction can help them develop the habit of mind of using data all the time, and can lead to quick wins.

- Higher stakes decisions require more validation, data, Data Conversations, and sometimes formal Root Cause Analysis.

Data Use Professional Development Series

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Day 3

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Welcome Back!

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Reflection

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Participation:

  Active Listening

  Shared Talk Time

  Willingness to Engage with Openness and Honesty

Problem Solving:

  Solution Oriented

Other:

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Day 3 Objectives

By the end of Day 3, SDLTs will be able to:

- Explain how Collaborative Structures support Data Use.
- Explain how Cycles of Inquiry apply to your role.
- Describe the purpose of conducting a root cause analysis.
- Articulate the purpose of Data Use as an initiative at your school and how it may be integrated with other initiatives.
- Analyze current school practices and plan next steps for Data Use implementation.

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Collaborative Structures

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Summary

- Analyzing data collaboratively yields better inferences, broader solutions, and comfort with transparency,

- It is beneficial to share best practices among SDLTs in our cohort

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Data Conversations

Three types of Data Conversations:

- Gathering Information
- Guiding Improvement
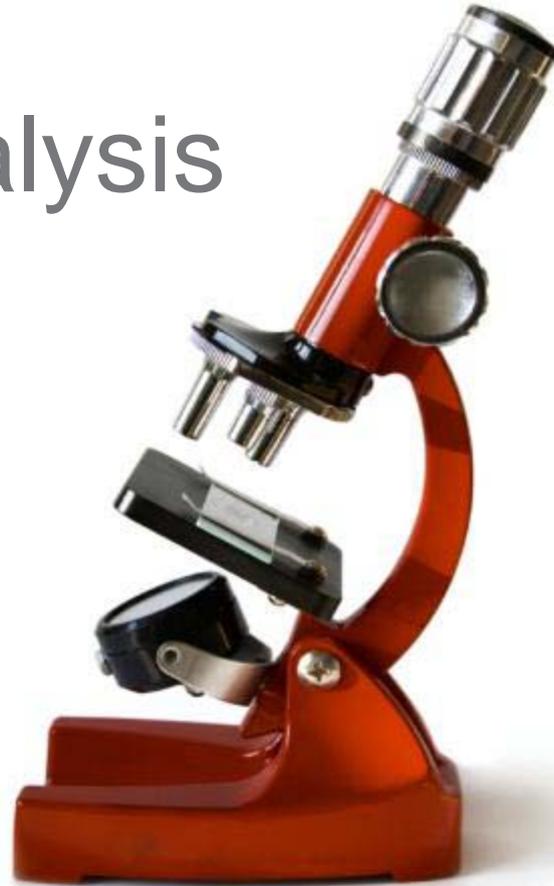- Finding Solutions

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Summary

- Good Data Conversations empower stakeholders.

- Challenges that arise within Data Conversations can be successfully addressed using questioning techniques.

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Lunch

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Root Cause Analysis

Summary

- This work will look and feel differently at different schools, and for different stakeholders.

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Implementation Planning

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Summary

- Integrating initiatives and aligning with school and district goals is essential to success.

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Agenda

Sharing Implementation Results

Constructing well-formed Data Analysis Questions

Correlation, Causation, and Triangulation using Multiple Data Types

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Reflection

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