# Data Use Professional Development Series

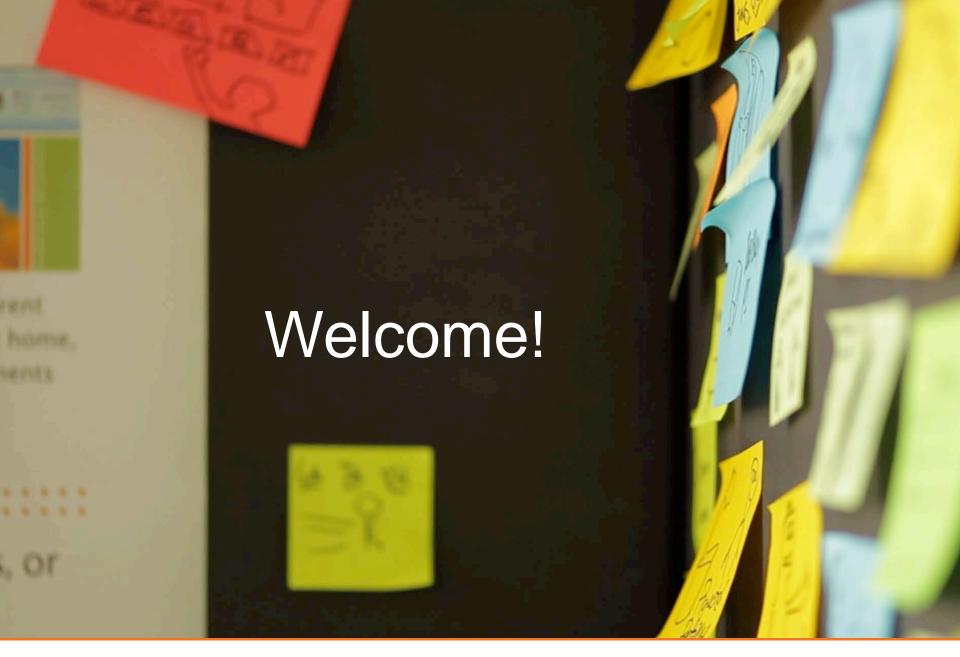
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### Data Use PD by the numbers

### 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



# Agenda

#### Day 1

Welcome/Overview
Cycles of Inquiry
Data Use PD Implementation

#### **Break**

Identifying Patterns of Need Connecting Initiatives

#### Lunch

Data Inventory
Implementation Planning

#### **Break**

Creating an Action Plan Data and Differentiation Wrap-Up/Evaluations

#### Day 2

Welcome/Overview Revisit Cycle of Inquiry Data Conversations

#### **Break**

Data Conversation Practice Models of Collaboration

#### Lunch

Stakes and Validation Cycle of Inquiry Practice Vision Statement

#### **Break**

Implementation Case Studies Goal Setting Implementation Planning Wrap-Up/Evaluations

#### Day 3

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Questioning Techniques for
Data Conversations

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Data Use and School Roles
Data Practice #2

#### Lunch

Data Transparency
Keeping it "low stakes" in a
high-stakes environment
Data Practice #3

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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:



# 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.
- Categorize various data sources.







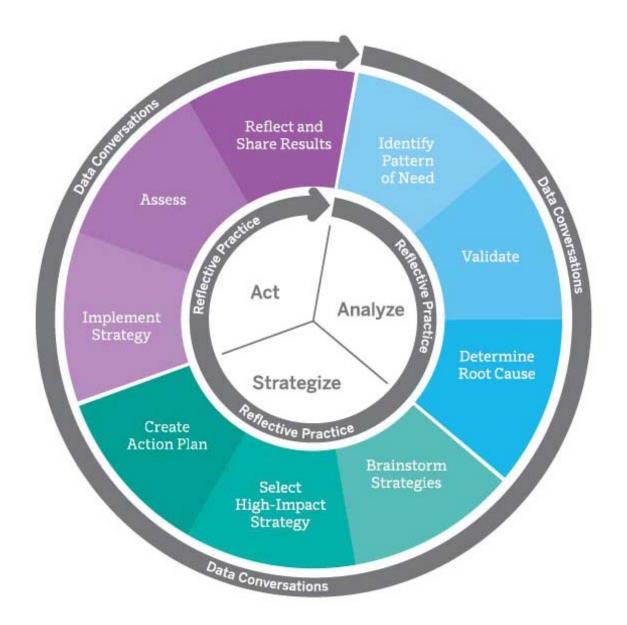




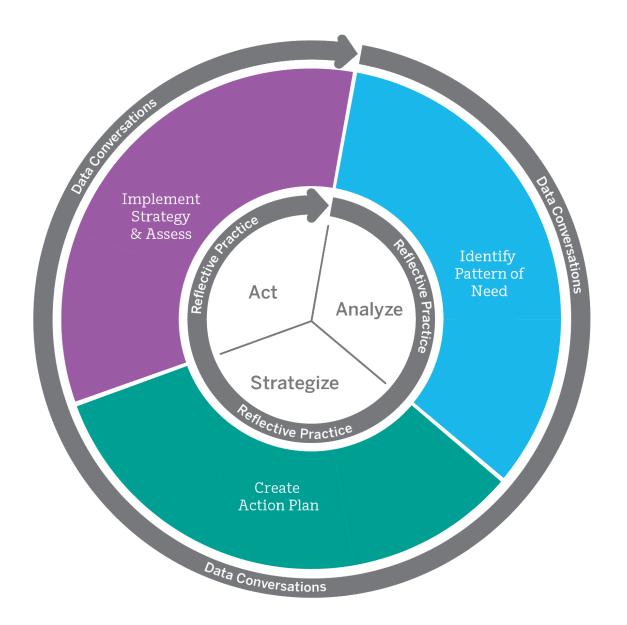
# The Big Picture

- When teachers make instructional decisions, what data do they use?
- What student and achievement information do teachers have ready access to?
- What barriers or gaps get in the way of more effective data use by teachers?



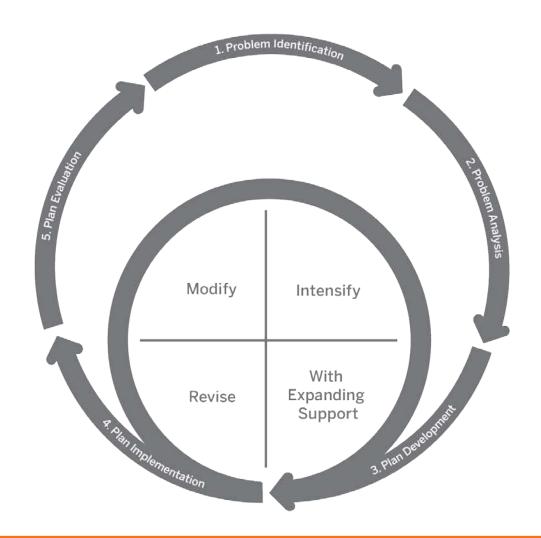






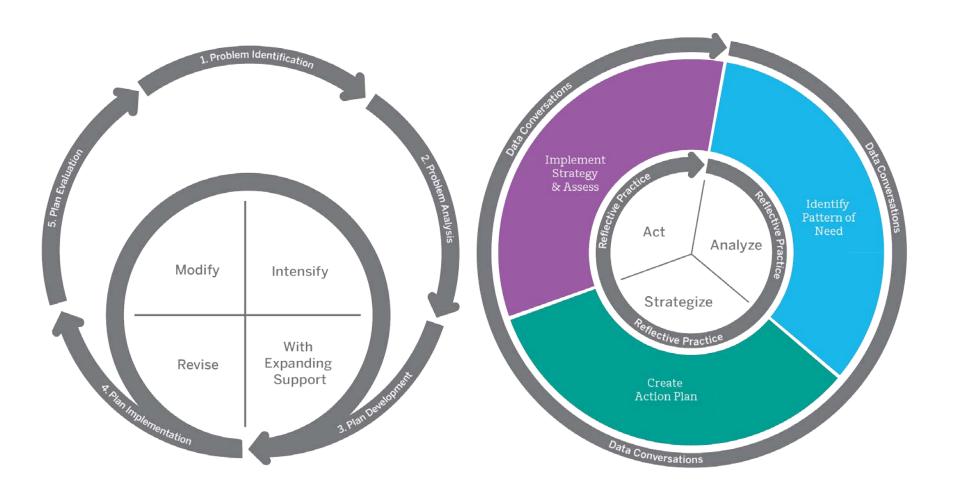


# RTI Problem-Solving Process





# 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



### Data Use PD Implementation

### SDLT Roles and Responsibilities

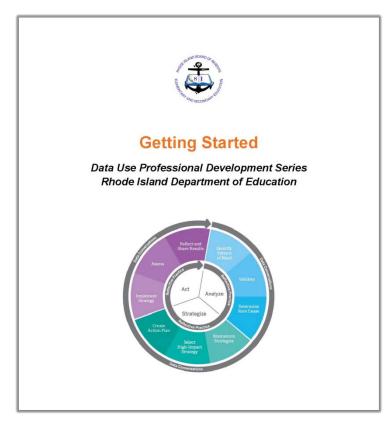
- Strategize how to best enhance data-informed decision making while building upon current data practices in your school
- Develop a plan for increasing the frequency and effectiveness of data use in your school
- Introduce the Cycle of Inquiry to faculty and support them in applying it to their everyday 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



# **Turnkey Materials**

### Bringing this work back to your school

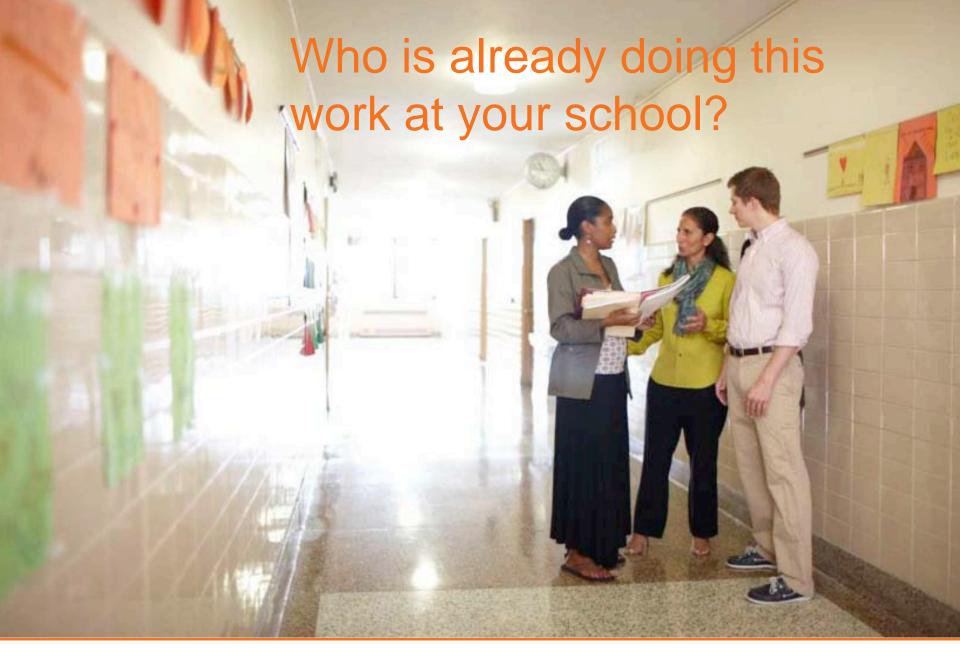
- Getting Started
- Analyze
- Strategize
- Act
- Data Conversations









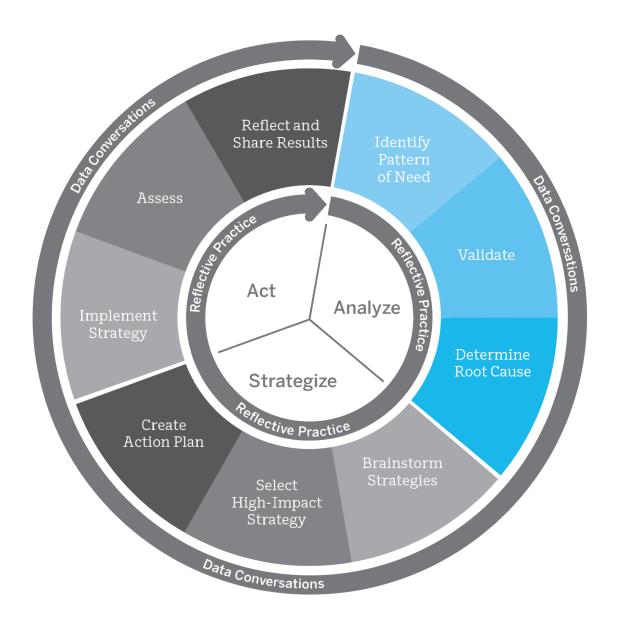




# Summary

- 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.



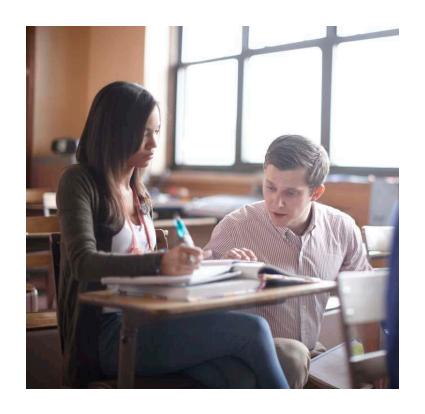




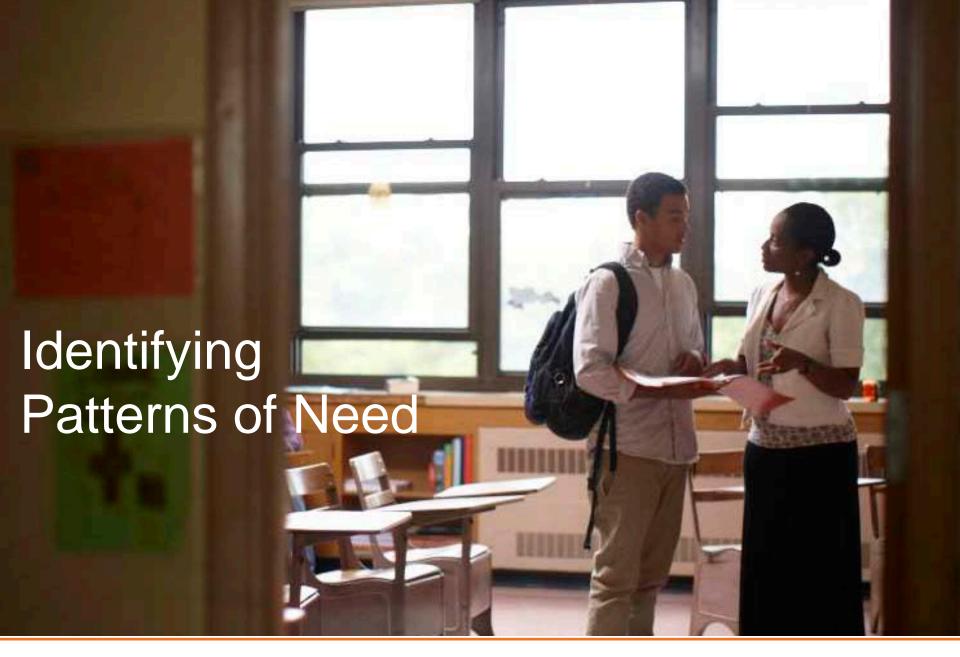
#### Patterns of Need:

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

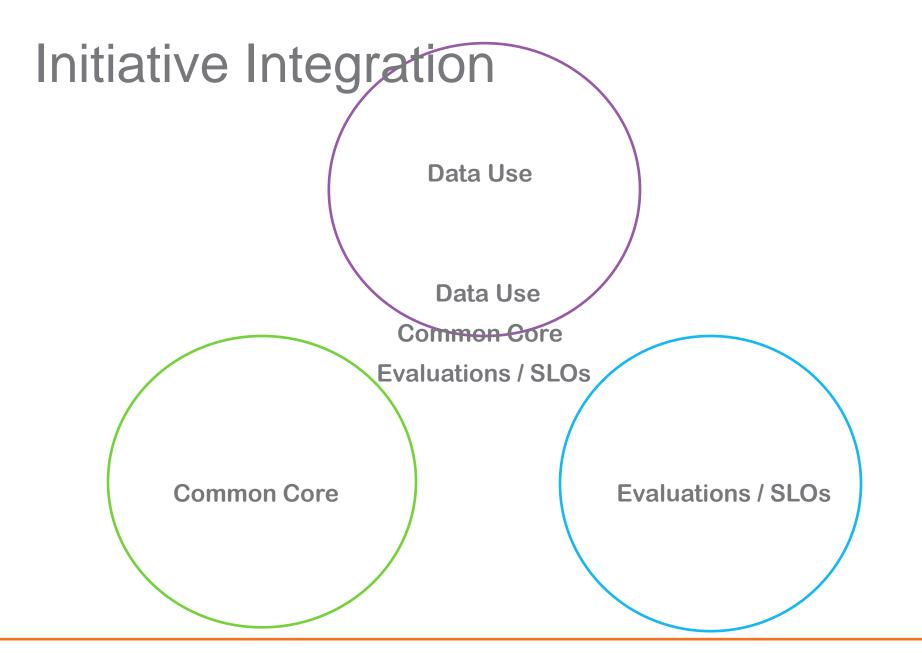
The need may be skill-based or content-based. It does not necessarily mean an area of weakness; there could be a need for enrichment or extension if the pattern indicates student strength in a particular area.













# 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.











# 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



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



# Data Inventory

### **Data Inventory Template**

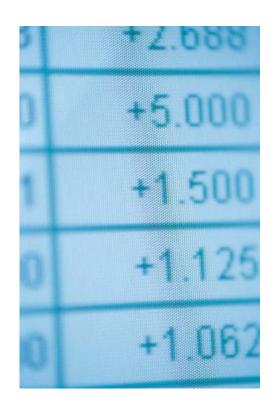
#### **Student Achievement Data**

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			<ul> <li>□ Inform         Instruction</li> <li>□ Screen/Identify</li> <li>□ Outcomes/         Accountability</li> </ul>		
					□ Inform Instruction □ Screen/Identify □ Outcomes/ Accountability		
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### Qualitative or Quantitative

How can qualitative data be used to drive instruction?





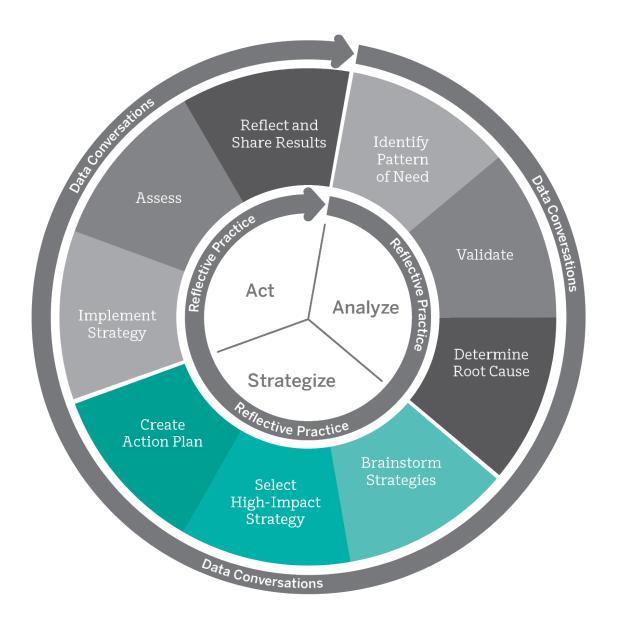




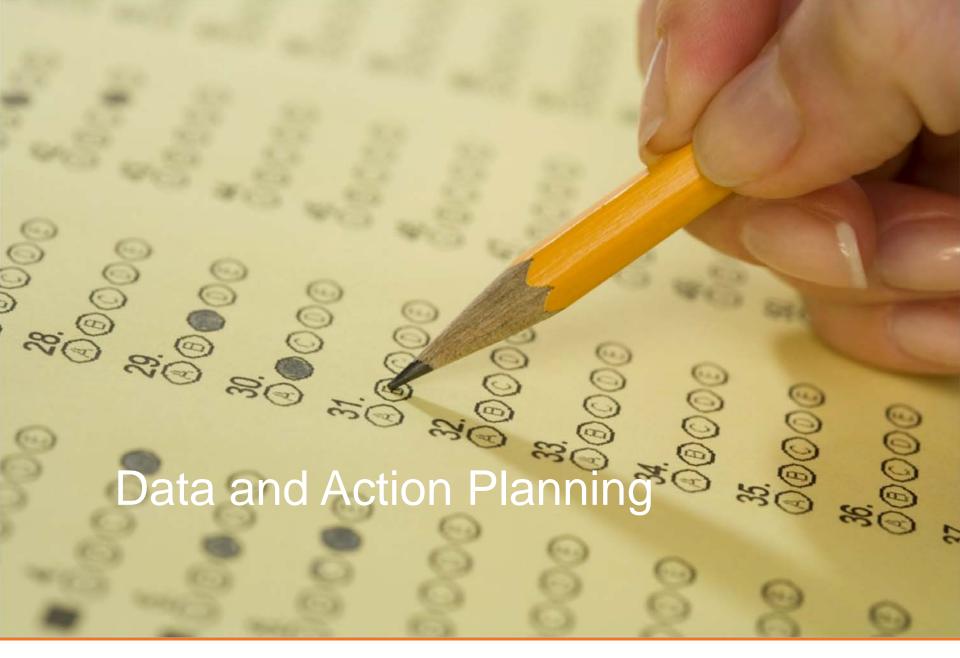
# Summary

- Turnkey Materials and Implementation Plans help SDLTs customize this work for their schools.
- 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.















# 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



"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



"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, Mind and Society



"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



"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'"



### Whole Class Instruction

### Strategies for Differentiating:

- Scaffolded questions
- Varying explanation of concepts/skills/content
- Start with highest level activity





### Summary

- Data Use will look different at our different schools, but it will begin to move us toward school-wide 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.











## Agenda

#### Day 1

Welcome/Overview
Cycles of Inquiry
Data Use PD Implementation

Break

Identifying Patterns of Need Connecting Initiatives

Lunch

Data Inventory
Implementation Planning

Break

Creating an Action Plan
Data and Differentiation
Wrap-Up/Evaluations

#### Day 2

Welcome/Overview
Revisit Cycle of Inquiry
Data Conversations

#### **Break**

Data Conversation Practice Models of Collaboration

#### Lunch

Stakes and Validation
Cycle of Inquiry Practice
Vision Statement

#### Break

Implementation Case Studies
Goal Setting
Implementation Planning
Wrap-Up/Evaluations



# Data Use Professional Development Series

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Day 2





## Agenda

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Keeping it "low stakes" in a
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Data Practice #3

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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:

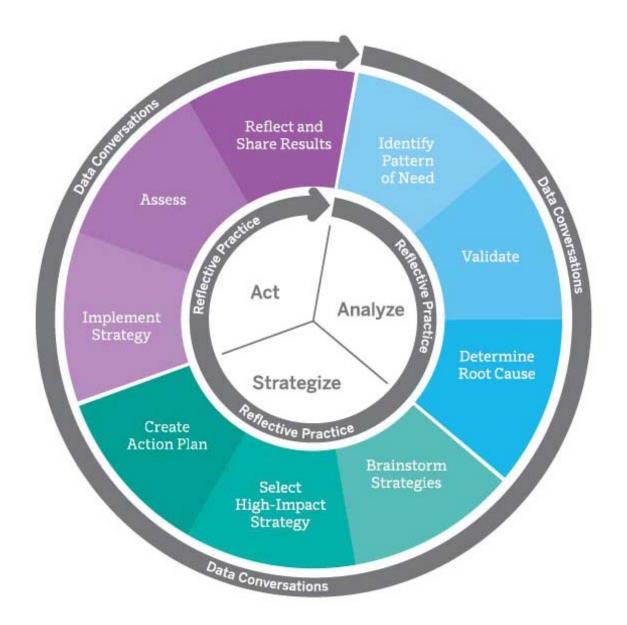


## Day 2 Objectives

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

- Articulate the purposes of Data Conversations.
- Explain how Collaborative Structures support Data Use.
- Distinguish between High and Low Stakes decisions.
- Apply the Short Cycle of Inquiry using sample data.
- Analyze the variety of ways in which Data Use can be implemented in schools.







### **Data Conversations**

### Three types of Data Conversations

- Gathering Information
- Guiding Improvement
- Finding Solutions







### 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?







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**

Date: Met with:	What type of conversation did you have?	What step of the Cycle of Inquiry were you in?
☐ Administrator	☐ Gathering information	☐ Analyze
☑ Teacher	☑ Guiding improvement	☑ Strategize
☐ Student	☐ Finding solutions	□ Act
☐ Parent	What is one question you asked during the conversation?	
Other:	☑ 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 ha problems.	ve students work in small groups with base	e 10 blocks to solve 2-digit addition
Date: Met with:	What type of conversation did you have?	What step of the Cycle of Inquiry were you in?
☐ Administrator	☐ Gathering information	☐ Analyze
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☐ Student	☐ Finding solutions	□ Act
☐ Parent	What is one question you asked during the conversation?	
Other:	_	• · · · · · · · · · · · · · · · · · · ·
What was one result	of the conversation?	



## Summary

- Data Conversations span a range of purposes and should happen throughout the Cycle of Inquiry.
- Engaging in productive, solution-oriented Data Conversations is harder than it looks.











## The Big Picture

- When teachers work together, what are they working on?
- What barriers or gaps are you finding that get in the way of more collaboration among teachers?







### Summary

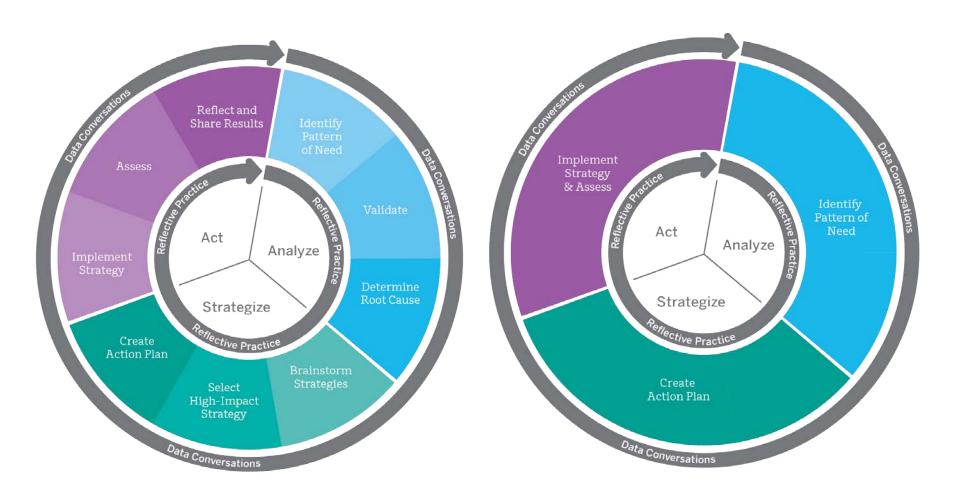
- Analyzing data collaboratively yields better inferences, broader solutions, and comfort with transparency.
- Strong structures and fixed time support a collaborative culture.





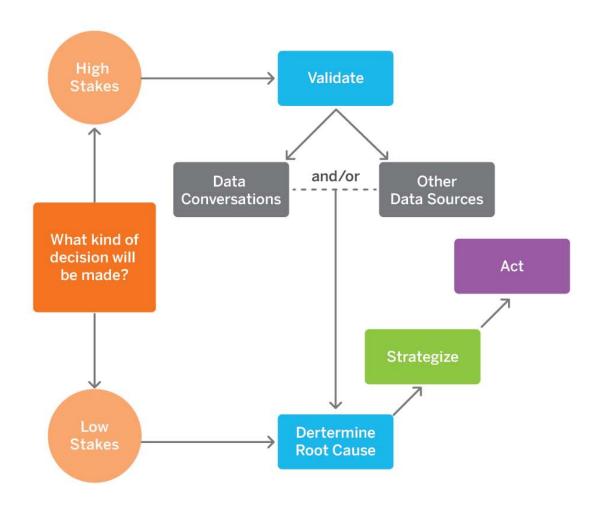


## Cycles of Inquiry





### Validation









## Summary

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

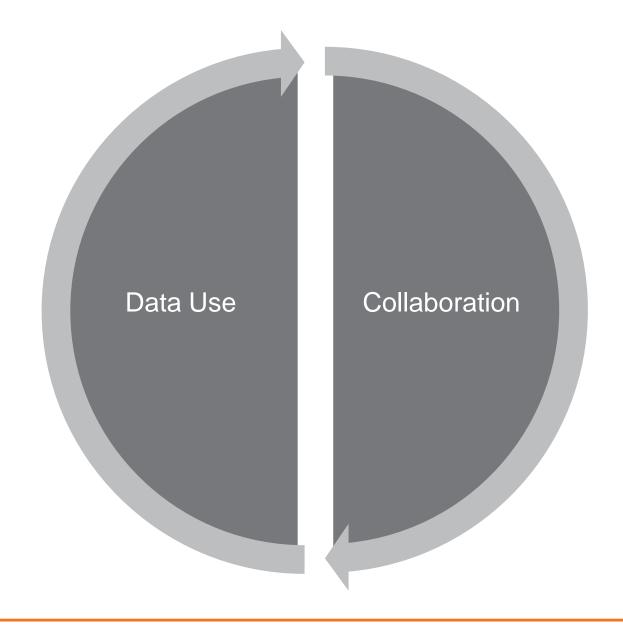


"Habits, values, and attitudes, even dysfunctional ones, are part of one's identity.

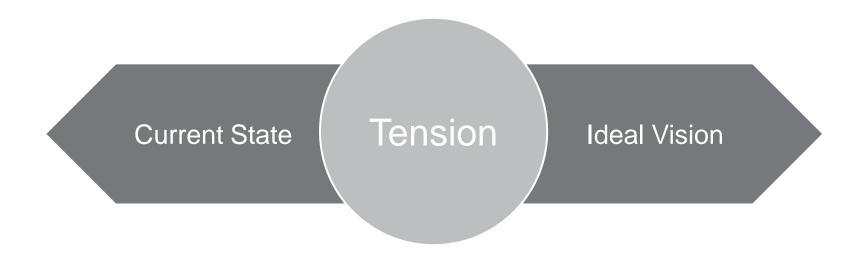
To change the way people see and do things is to challenge how they define themselves."

-Leadership on the Line





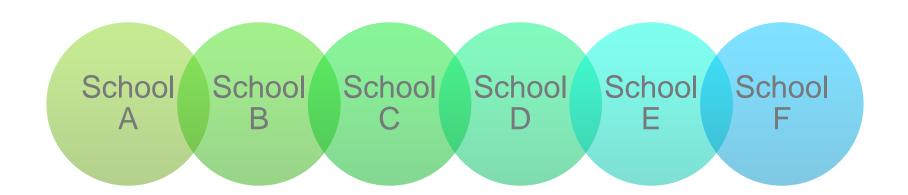






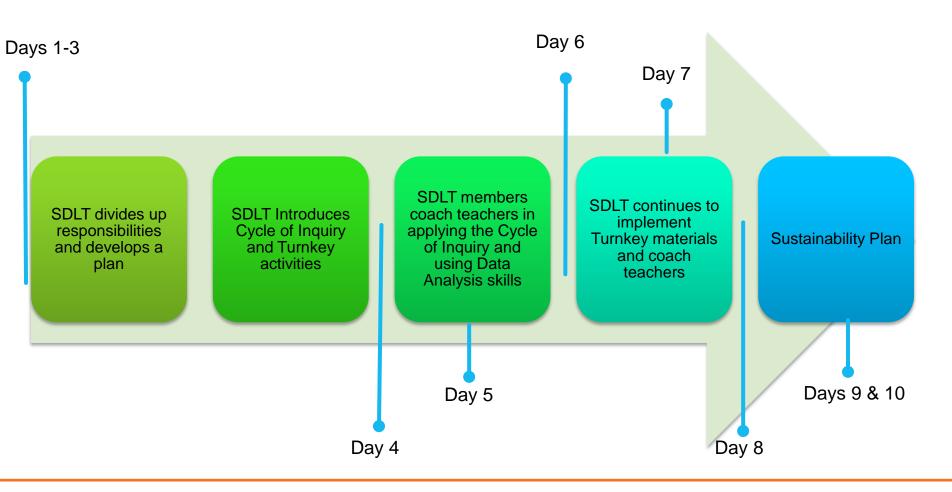
## Implementation Case Studies

In what ways do SDLTs implement data use in schools?





### Implementation Timeline

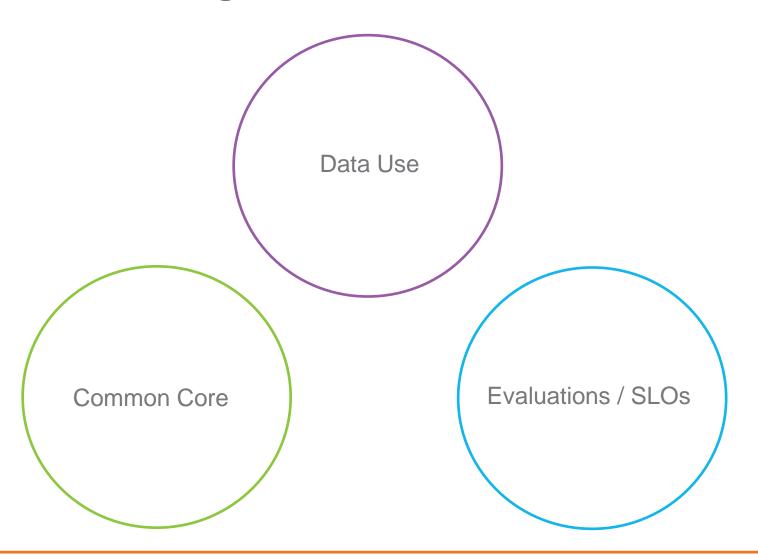








## Initiative Integration









- Even with Collaborative Structures in place, engaging in good Data Conversations might be a new habit of mind for some people to develop.
- Major change involves loss.
- Implementation of the work looks different at different schools.



## Agenda

### Day 3

Welcome/Overview

Data Practice #1

Questioning Techniques for Data Conversations

#### **Break**

Data Use and School Roles

Data Practice #2

#### Lunch

Data Transparency

Keeping it "low stakes" in a high stakes environment

Data Practice #3

#### **Break**

Implementation Planning

School Vision/Goals

Wrap-Up/Evaluations



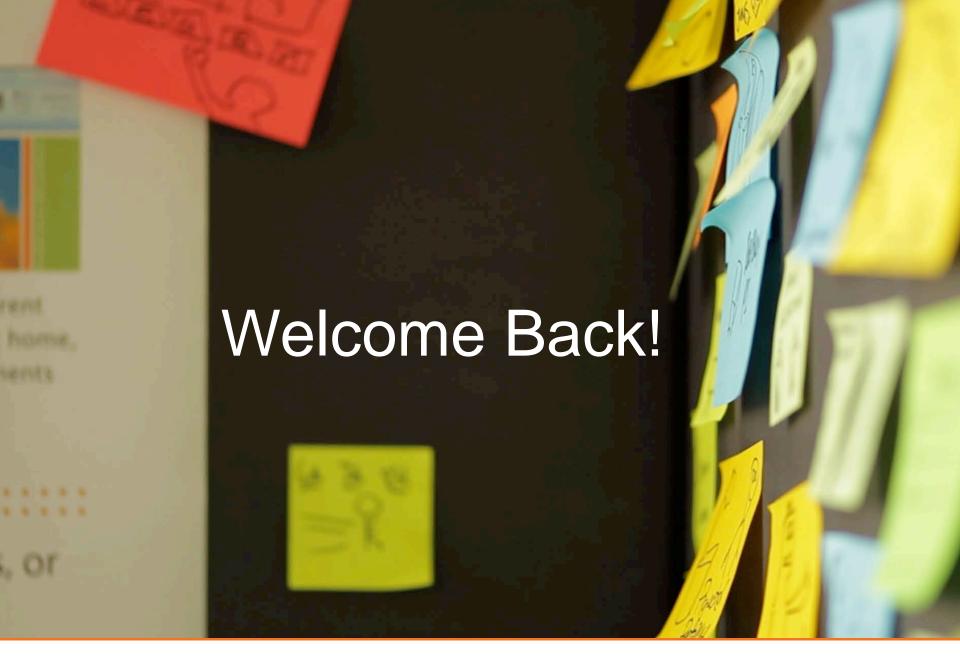




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Day 3









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### **Problem Solving:**

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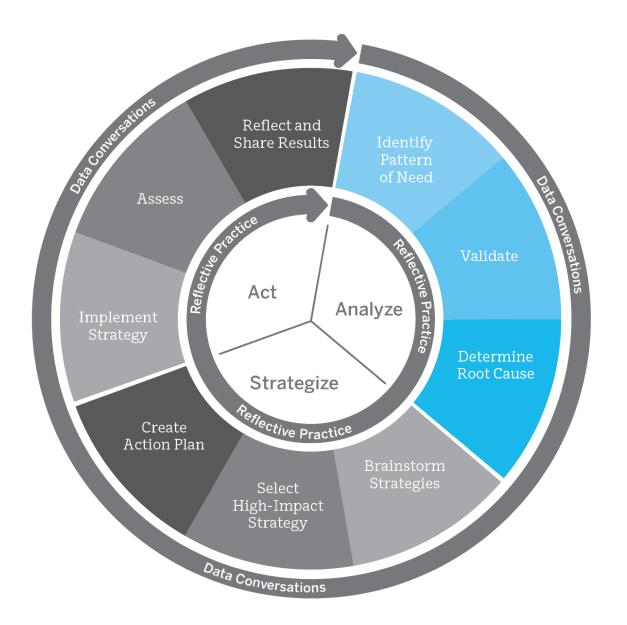


## Day 3 Objectives

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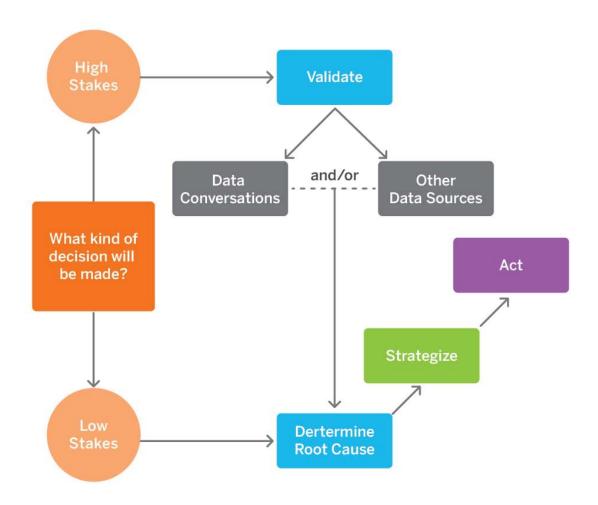
- Apply the Short Cycle of Inquiry using authentic data.
- Reframe questions using Positive Presumptions.
- Explain how Cycles of Inquiry apply to your role.
- Articulate the purpose of Data Use as an initiative at your school and how it may be integrated with other initiatives.
- Analyze current school practices and plan next steps for Data Use implementation.



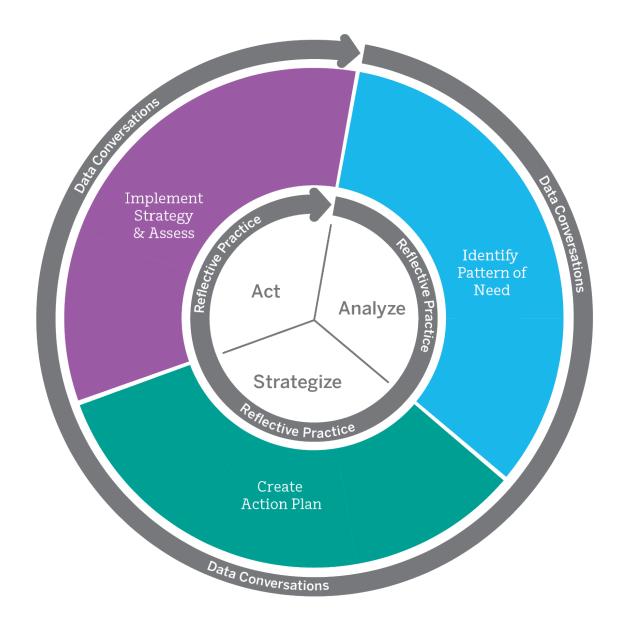




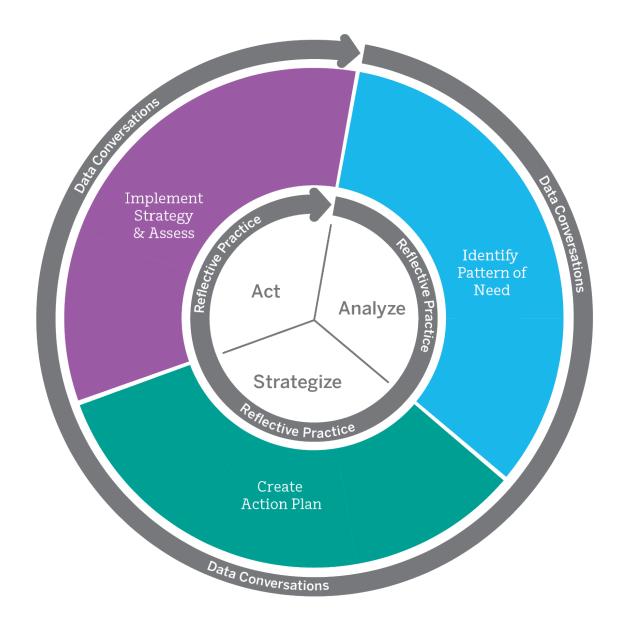
### Validation













### **Share Out**

- What will be the most intuitive part of this process for teachers?
- In which part of this process will teachers need the most support?



### **Data Conversations**

### Three types of Data Conversations:

- Gathering Information
- Guiding Improvement
- Finding Solutions



## Presuming Positive Intent

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



## 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."



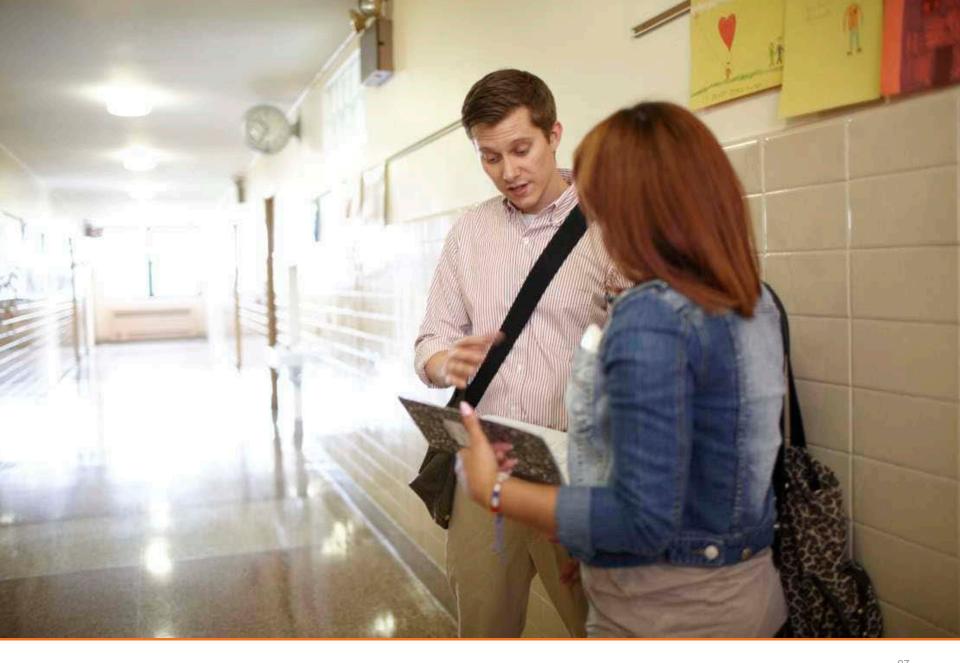
## Reframing

Negative Presumptions		Positive Presumptions
Are you going to help Frank with that math problem?	VS.	
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?		

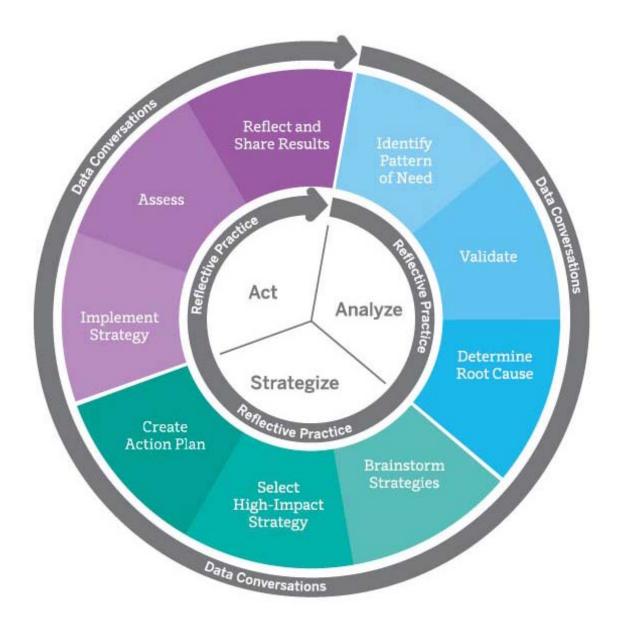


- Using the simple Cycle of Inquiry will help teachers develop the habit of mind of using data on a regular basis to inform instruction.
- Presuming Positive Intent makes Data Conversations more productive.
- Data is not an end result, but the beginning of a Conversation.



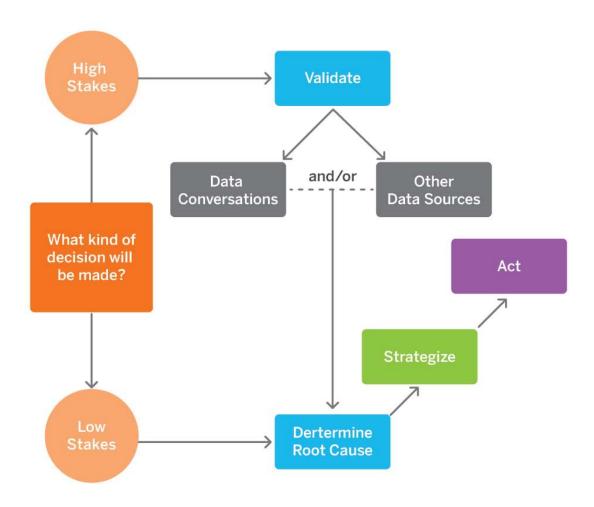




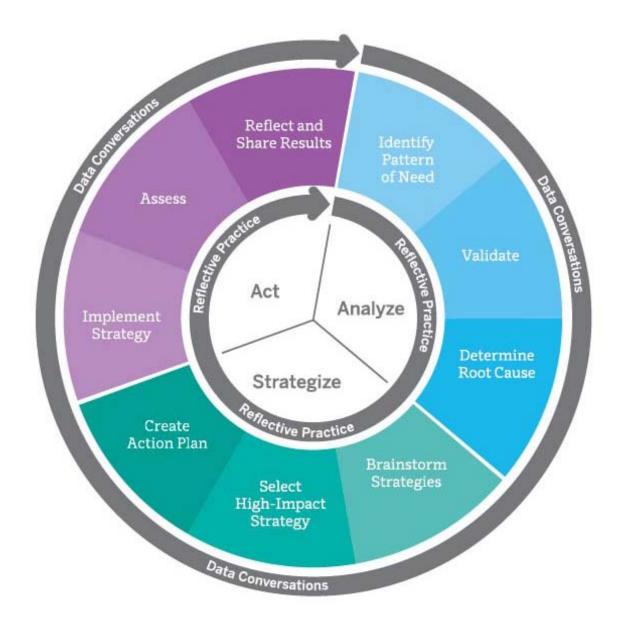




### Validation









- Your role, and the types of decisions you are making, help determine which Cycle of Inquiry to use.
- Multiple sources of data can be used to conduct short cycles of inquiry to make low stakes decisions.









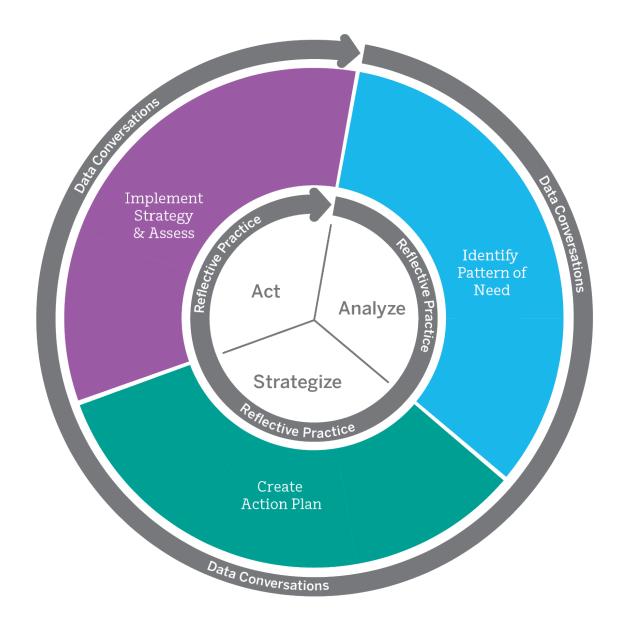














- Building a transparent data culture requires draining the stakes out of data.
- There can be things in schools that make data feel high stakes.
- Part of our role as SDLT members is to help keep data low stakes.







## Agenda

### Day 4

Sharing Implementation Results
Revisiting Data Conversations
Revisiting Initiative Integration
Inference Validation
Correlation/Causation
Triangulation/Intersection Analysis





