

Data-Driven Decision Making for School Improvement Planning

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Goals for this session:

- Consider how to examine school data to determine needs and root causes
- Understand the school improvement planning process
- Understand how to use data to drive continuous improvement

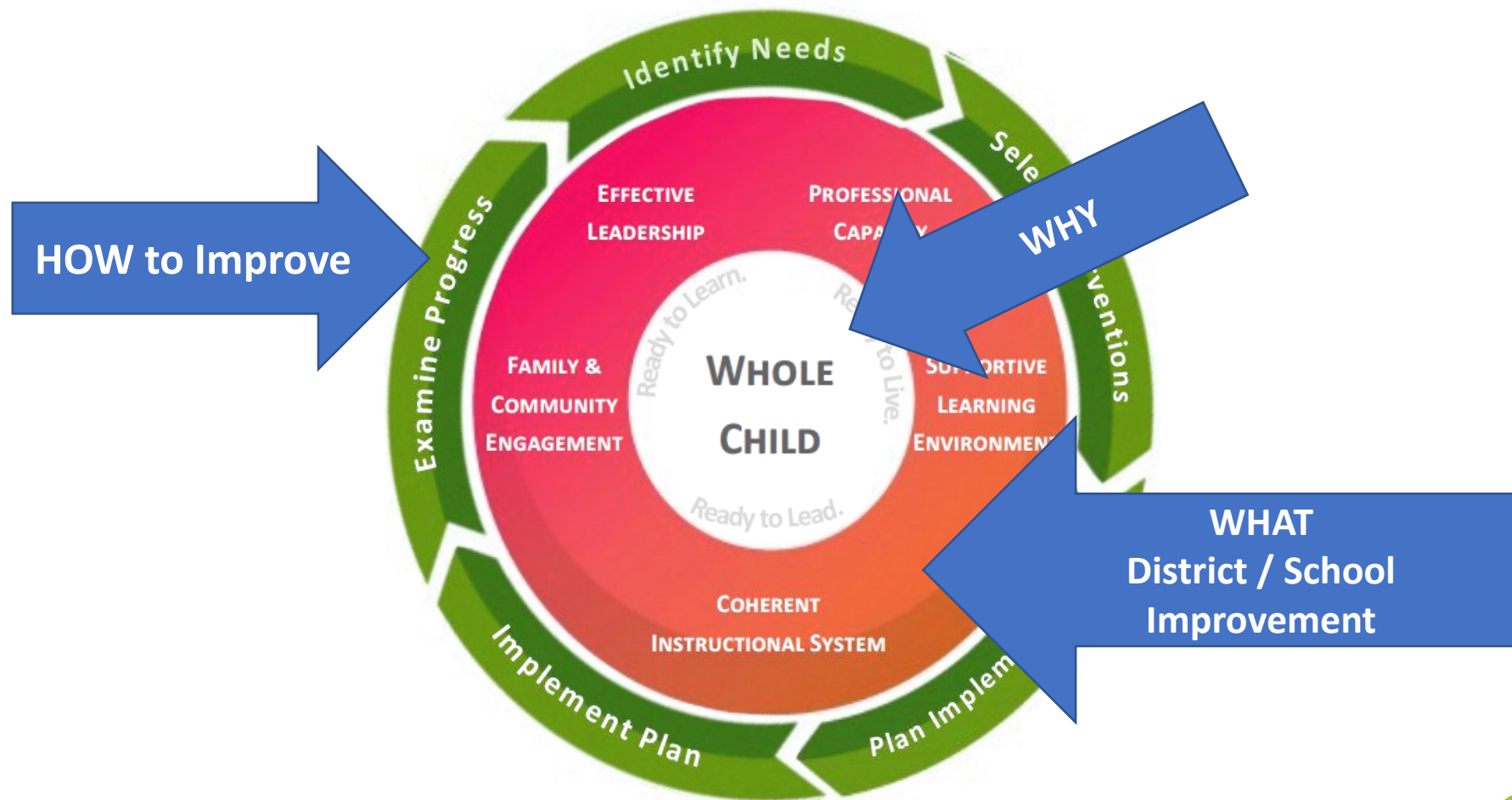
Data-driven Decision Making

What is DDDM?

Data-driven decision making refers to a school's ongoing process of collecting and analyzing multiple sources of data, including demographic, student achievement test, satisfaction, and process data to guide decisions towards improvement of the educational process.

DDDM involves making decisions that are backed up by hard data rather than making decisions that are intuitive or based on observation alone.

Georgia's Systems of Continuous Improvement



First things first!

Engage in the **process** before you engage in the **platform**.

First, conduct a comprehensive needs assessment.

Next, develop your school improvement plan.

Then, continue to collect and analyze process and performance data to drive school improvement.

Comprehensive Needs Assessment

What is a CNA?

A **needs assessment** is the ***first step*** in developing a school improvement plan. It is a process of looking at data and information about the school to develop a clear picture and understanding of what is and has been occurring at the school.

A **needs assessment** is a process to help school teams learn about the areas in which they are doing well (strengths) and the areas in need of improving (challenges).

CNA Process

- Focus on the needs assessment
- Establish the team
- Create a project plan
- Identify and collect data
- Analyze data
- Prioritize needs

Focus the Needs Assessment

Principals are ***the key players*** in the school improvement process.

Principals should clearly explain the school improvement planning process to staff, parents, and stakeholders.

The principal can set the focus for the work by asking:
What is our current state?
What is our desired state?

Establish the Team

- Who should be involved?
- Consider internal and external stakeholders.
- Develop roles and responsibilities for team members.
- Eliminate barriers to participation.

Create a Project Plan

- Scope and purpose of work
- Establish a climate of honesty and trust
- Timeline
- Deliverables
- Team members roles and responsibilities
- Identify supports for the work

Identify and Collect Data

Guiding question:

What data do we need to consider in order to make decisions about improving our school?

Quantitative

- Student performance data
- Subgroup data
- Attendance data
- Graduation/Dropout data
- Pathway completion data
- Discipline data

Qualitative

- Surveys
- Interviews
- Focus groups
- Observations
- Document analysis
- Professional learning data

Data Analysis

- A single data point or observation is not enough to determine a pattern or trend.
- A pattern or trend should be evident across multiple sources or types of data or across time.
- Triangulation is the use of multiple data types or sources to test the validity of findings.



Data Analysis

Guiding Questions:

- What is our data telling us?
- What additional (leading, real-time) data should we consider as we identify school-wide overarching needs?
- Are all subgroups of students performing at the optimal level?
- What trends and patterns are observed for all students and each sub-group? Be specific.
- What are the important trends and patterns that will support the identification of **student**, **teacher**, and **leader** needs?

Root Cause Analysis

What is “Root Cause”?

Root cause is the most basic cause that can reasonably be identified, that we have control to fix, and for which effective recommendations for prevention can be implemented.

--Excerpt from *School Leader’s Guide to Root Cause Analysis*, Preuss and Bernhardt

Root Cause Analysis

The purpose of RCA is to determine:

- What happened and why it happened.
- A course of action to reduce the likelihood of it happening again.

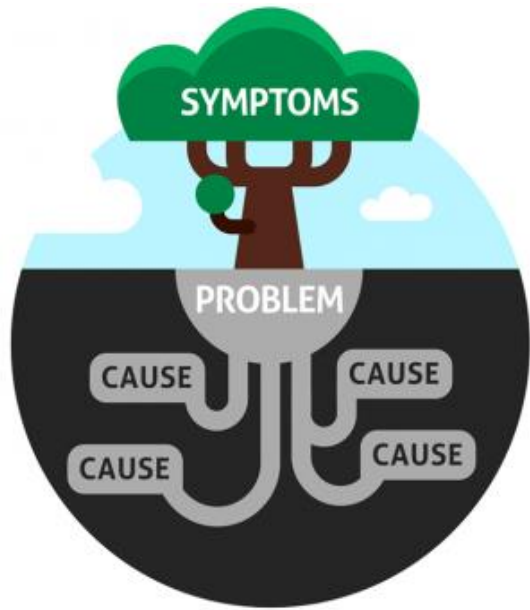
RCA Resource: GLISI toolkit <http://glisi.org/resources/leading>

Leading a Team to Analyze Root Causes Using Quality Tools

- Five Whys Analysis
- Fishbone Diagram

Why root cause analysis?

Root cause analysis helps dissolve the problem, not just the symptom. It eliminates patching and wasting effort.



Example: Success Elementary School reviewed its three-year trend data on the GA Milestones and noticed a steady decline in ELA in the proficient and distinguished learner categories.

- They have been using the same curriculum and resources to guide instruction for the past three (3) years.
- The principal and teachers attribute a change in their student population to the steady decline.
- Last year, they purchased a computer-based ELA program to address the issue.

5 Whys Process

Problem Statement: ELA performance in the proficient and above learner categories has declined for the past 3 years.

- **Why is the ELA data continuously declining?**
Our subgroups are not making growth.
- **Why are your subgroups not making growth?**
They lack prerequisite skills.
- **Why do they struggle with prerequisite skills?**
They have not received differentiated instruction to meet specific needs.
- **Why have they not received differentiated instruction?**
The traditional method of teaching is being used.
- **Why do teachers use the traditional method to teach?**
Teachers do not have a clear understanding of the differentiated instructional process.

Root Cause -vs- Contributing Factor

- **ROOT CAUSE** is a condition that produces an effect; eliminating a root cause(s) will eliminate the effect.
- **CONTRIBUTING FACTOR** is a condition that influences the effect by increasing its likelihood, accelerating the effect in time, affecting severity of the consequences, etc.; eliminating a contributing factor(s) won't eliminate the effect.

In our example, ELA scores were not declining solely because of the change in the student population, but due to the fact that teachers do not have a clear understanding on the differentiated instruction process.

Prioritize Needs

Guiding Questions:

- What needs were identified during the data analysis process?
- What specific data supports the identification of the overarching need?
- Which needs are the most urgent?
- Is the need is trending better or worse over time?
- Could root cause(s) be identified?
- What do our students need to be successful?

Now What?

Data-Driven School Improvement Plan Actions that Lead to Change



What is an Action Plan?

- An **action plan** is a detailed **plan** outlining actions needed to reach one or more goals.



Key Components of an Action Plan

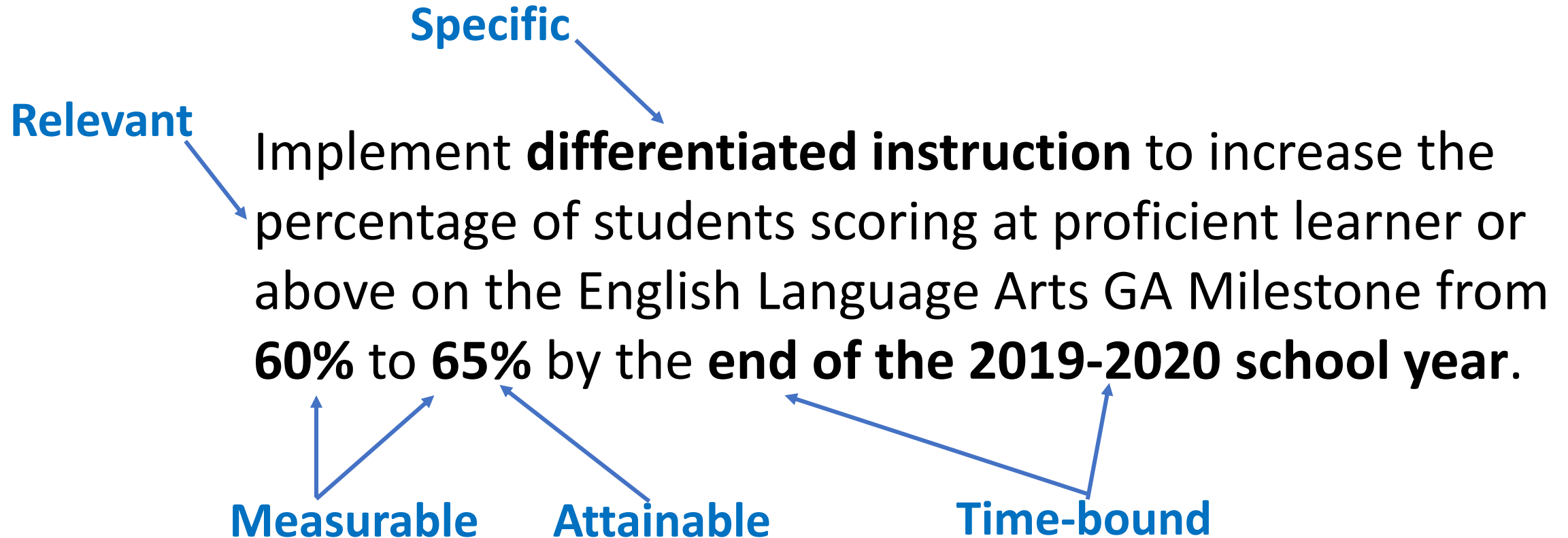
- SMART Goal(s)
- System(s) to Improve
- Specific Action Steps
- Targeted Action Steps for Subgroups
- Timeline
- Method for Monitoring
- Person Responsible
- Funding Source

Setting Goals

There are several categories of goals which may be used in school improvement but the one type which focuses on improving results and not just enhancing processes is a SMART goal. SMART is an acronym for:

Specific **M**easurable **A**ttainable **R**elevant **T**ime-bound

SMART Goal



Formula for Setting Goals

From **X** to **Y** by **when** = **GOAL**

Implement differentiated instruction to increase the percentage of students scoring at proficient learner or above on the English Language Arts GA Milestone from **60%** to **65%** by the **end of the 2019-2020 school year**.

Systems to Improve



Refer to the GA Systems of Continuous Improvement Handout

Effective Leadership

- Creating and Maintaining a School Climate and Culture Conducive to Learning
- Cultivating and Distributing Leadership
- Ensuring High Quality Instruction in All Classrooms
- Managing the School and Its Resources
- Driving Improvement Efforts

Action Steps

Guiding Questions:

- What action steps will need to be taken to address the identified goal? Be explicit.
- Do the action steps align with the GA Systems of Continuous Improvement and the structures associated with the system?
- Do the action steps identify intended outcomes so that you know what to monitor?
- What targeted supports are in place to address the identified needs of your subgroups?
- What will each of us do to increase the level of student proficiency?

Time to Practice

Directions: Review the Effective Leadership structures and develop one action step that will lead Success Elementary School toward the goal. Include the position/role of the person responsible. Write your response on chart paper and post on the wall.



Methods for Monitoring

Guiding Questions:

- Are the timelines created specific, reasonable, and incremental?
- How are you monitoring the fidelity of implementation?
- How can the monitoring ensure that the actions are impacting teacher practice and in turn student achievement?

Time to Practice

Directions: Now that you have created one action step for the goal, describe a method for monitoring the action step. Be specific. Write your response on the bottom portion of the chart paper.



Effective Leadership – Driving Improvement Efforts with Data



Plan Implementation



- Develop the implementation timeline
- Develop a set of information to be reviewed to track the implementation
- Focus on adult practices
- Establish tracking and monitoring timeline

Implement Plan



- Collect information to monitor the quality of supports being provided for the intervention.
- Consider what additional information is needed to determine if intervention is working.
- Assess the degree to which the implementation plan is being followed.
- Make real-time adjustments where/when needed.

Examine Progress



- Monitor implementation and progress against defined goals
- Identify and track progress and performance
- Use progress and performance data to determine whether the intervention should continue as is, be modified, or be discontinued
- Forecast results with data

“Leaders have to provide direction, create the conditions for effective peer interaction, and intervene along the way when things are not working as well as they could.”

— Michael Fullan

“Things get done only if the data we gather can inform and inspire those in a position to make a difference.”

—Mike Schmoker

“School improvement is not a mystery. Incremental, even dramatic improvement is not only possible but probable under the right conditions.”
– Mike Schmoker



Resources

- *School Leader's Guide to Root Cause Analysis*, Preuss & Bernhardt (2003)
- Six Steps for School Leaders to Use Data Effectively
<https://www.illuminateed.com/blog/2017/06/six-steps-school-leaders>
- Making Sense of Data-Driven Decision Making in Education: Evidence...
https://www.rand.org/content/dam/rand/pubs/occasional_papers/.../RAND_OP170.pdf
- Using Student Achievement Data to Support Instructional Decision...
www.naesp.org/sites/default/files/Student%20Achievement_blue.pdf
- The Importance of Data-Based Decision Making
https://us.corwin.com/sites/default/files/upm-binaries/25562_1204

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