Problem Solving Process

BHA Training – February 2017

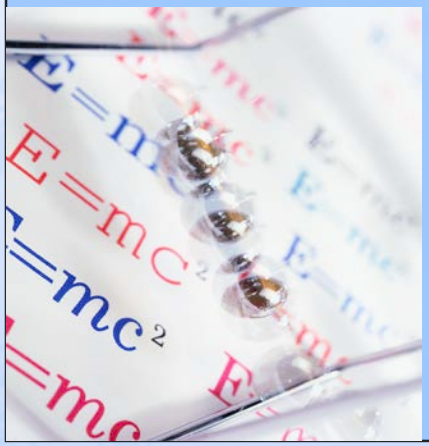
Learning Objectives

- Roles of a problem solving team
- Fluent understanding of the problem solving process

"GRANITE, WE HAVE A PROBLEM!"

https://www.youtube.com/watch?v=lTSVOnhLtCs

The significant problems we have cannot be solved at the same level of thinking with which we created them.



Albert Einstein (1879-1955)

PROBLEM SOLVING TEAMS

RESEARCH:
Teaming and Problem Solving Effects on School Staff

- ***A collaborative problem solving*** approach that is well defined improves student performance and staff satisfaction (Burns & Symington, 2002; Wickstrom, Jones, Lafleur, & Witt, 1998)
- ***Implementation of support for students*** is more likely to occur when school staff are included in the development process (Nevin, Thousand, Paloucci-Whitcomb, & Willa, 1990)
- ***It is an inefficient use of staff time to intervene at the individual student level when the problem could be handled at a group level*** (Sugai & Horner, 2002)

Problem Solving Teams Effect Student Outcomes

- Increase in time-on-task, task completion, and academic performance
- Decrease in disruptive behavior
- Effect Size of 1.15 (87% better performance)

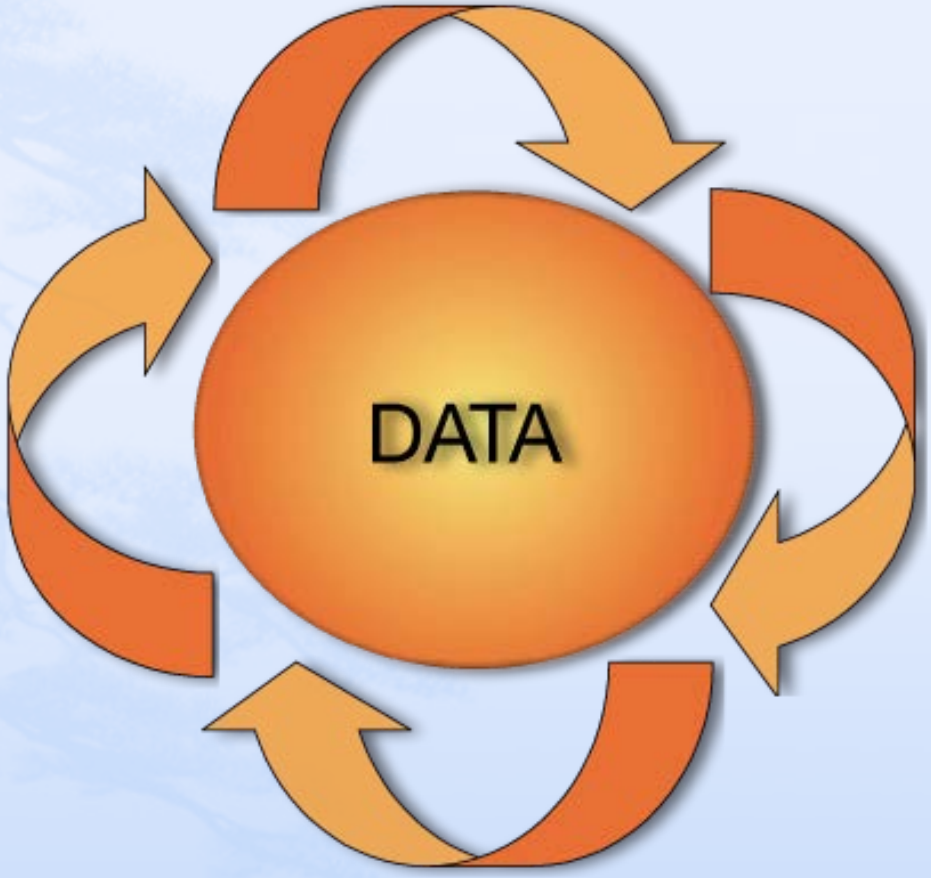
(Burns, 2002)

Examples of Problem Solving Teams

- PLC teams
- Grade level teams
- Department teams
- SST/MTSS teams
- IEP teams
- Informal “teams”- i.e. when a group of adults get together to think about how to help a student who is struggling

Problem-Solving Process

What is the problem?



Why is it happening?

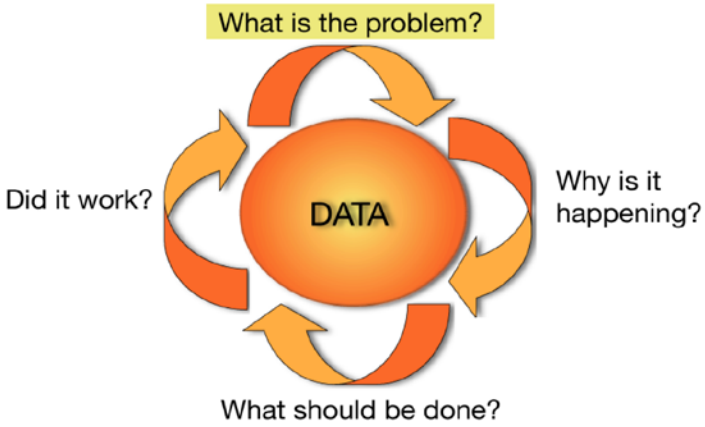
What should be done?

Did it work?

What is the problem?

Problem Identification

PURPOSE: To define the problem as the measurable difference between the desired outcome and the actual behavior or performance.

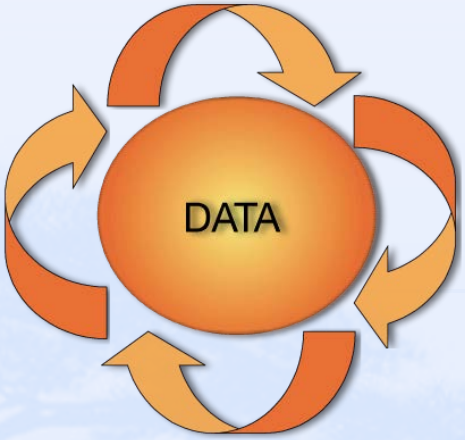


GUIDING QUESTIONS:

- What is the desired outcome?
- What is the actual performance?
- What is the difference between the two?
- If there is more than one problem, determine which is the highest priority?
- Is the problem school wide, grade level, whole class, small group, AYP subgroups, or individual?

OUTCOME CONSIDERATIONS

Academics, Social Behavior, Adults and Students

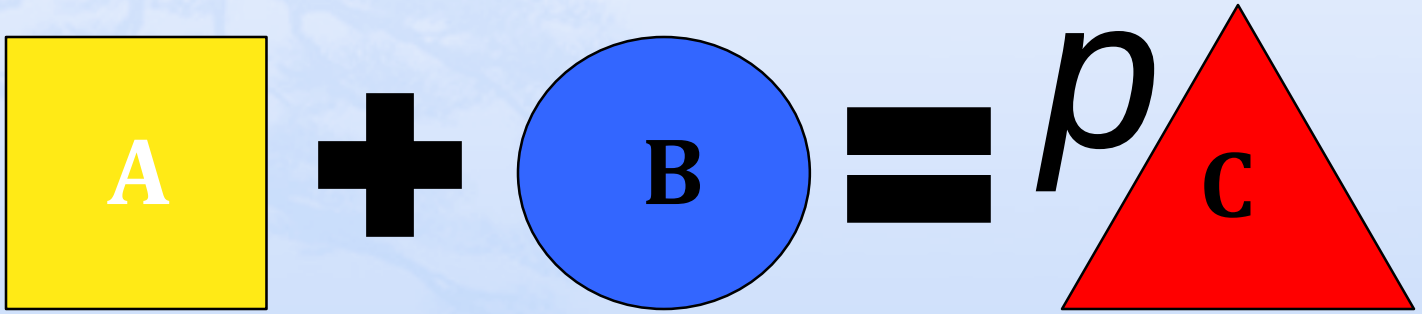


What is the problem?

Problem Identification

PURPOSE

- To define the problem as the measureable difference between the desired outcome and the actual behavior or performance.



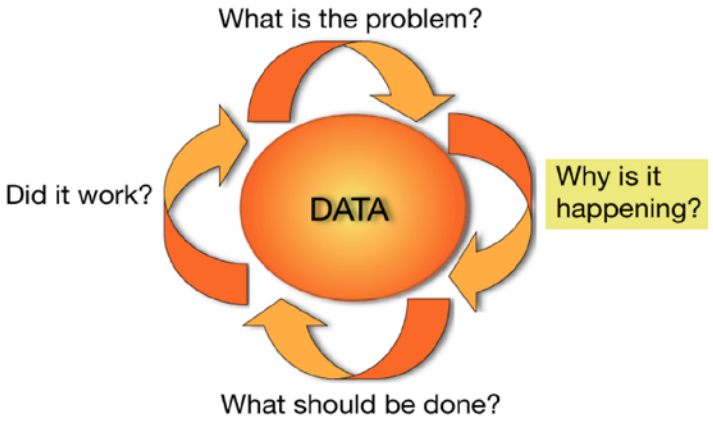
Current Performance?

What Can Be Done?

Desired Outcome?

Why is it happening?

Problem Analysis



PURPOSE: To gather relevant information in the domains of instruction, curriculum, environment and the learner(s) through the use of reviews, interviews, observations and tests to determine contributing factors to the problem.

GUIDING QUESTIONS:

Have we collected data about variables that are educationally relevant and alterable?

Is there something we could change about the

- **Instruction**
- **Curriculum,** *or*
- **Environment**

to increase the probability that learning will occur?

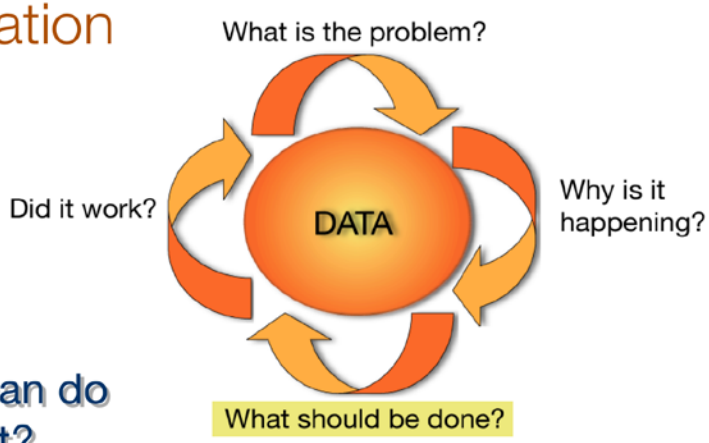
IMPORTANT CONSIDERATIONS

	Educationally Relevant & Alterable	Less Educationally Relevant & Inalterable
Known Information	**THIS IS WHAT WE WANT!**	Disregarded or Low Priority
Unknown Information	These are assessment questions	**DON'T GO HERE!**

What should be done?

Plan Development & Implementation

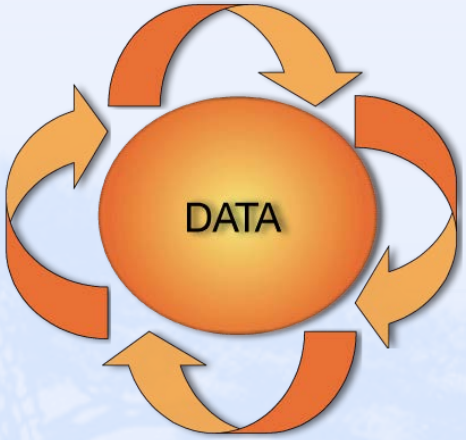
PURPOSE: To select and implement a system support or an intervention that is focused on what to teach, how best to teach it, and how to monitor progress.



What is the simplest thing we can do that has the greatest impact?

GUIDING COMPONENTS:

- System supports or interventions must be based upon data and knowledge gained through problem identification and problem analysis.
- System support or intervention plan development includes selection of a research-based practice, determination of who will be responsible for what, alignment of resources, how fidelity of implementation will be measured, how progress will be monitored, and specific scheduled decision points.
- **Progress monitoring** involves collecting, graphing and using data frequently
- **Progress monitoring** requires plan development including who, what, when, and how frequently data are collected and reviewed.



What should be done?

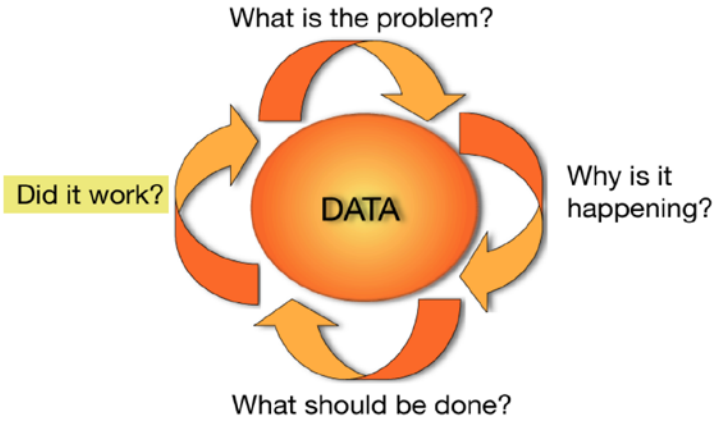
Plan Development & Implementation

What is the **SIMPLEST** thing we can do that has the greatest impact?

Did it work?

Plan Evaluation

PURPOSE: To determine the effectiveness of implemented system supports or interventions and make appropriate educational decisions.



GUIDING QUESTIONS:

- Was the system support or intervention successful?
- Does the plan require more time and monitoring or modification?
- Was the system support or intervention implemented with fidelity?
- Was the outcome met according to set criteria?
- Do we have the resources to sustain these supports?
- Do we need to go back to previous steps?
- Celebrate progress!

Problem Solving Shifts

- **Problem admiration *to* problem solution**
- **Unalterable *to* alterable**
- **Reactive to proactive**
- **Diagnosis *to* results**

Self-Reflection Activity

- Think of a problem you are dealing with (Priority Selected) and data if you have it
- #1- List the desired outcome and how you could measure that
- #2- Brainstorm resources/positive factors and obstacles
- #3- Select one obstacle to try and overcome, write in a way you can measure it
- #4- Brainstorm strategies to reduce or eliminate obstacle.

Problem Solving NEVER Ends!

- Even if you are on the right track, you'll get run over if you just sit there.

  -Will Rogers