

Turning Evidence Into Action: The Missing Link in School Improvement

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Objectives

- Discuss school improvement as action research;
- Explore how and why root cause analysis (RCA) is vitally important to the success of school improvement efforts;
- Describe steps and provide tools that can be used to conduct RCA

Warm-up: The amazing Dr. Brazer

- Consider a persistent problem in your school
- For any and all problems, the amazing Dr. Brazer will identify a solution that is guaranteed to work

A BIAS FOR SOLUTIONS

- Once a problem or performance gap is identified, we feel a great deal of pressure to act.
- Solutions may be mandated (sometimes before a problem is identified).
- Decision makers often have “preferred solutions” they advocate.

Problems persist because...

- Solutions treat the **symptoms** of problems
- Favored solutions have little connection to actual problems
- “Best practices” aren’t
 - No practice can be “best” for all students, in all schools, under all conditions

Root Cause Analysis: The Missing Link

- Root causes are the *reasons* problems exist in the first place
 - Symptoms are the visible manifestations of the problem
- Reducing or eliminating the problem requires identifying and eliminating its causes
- RCA is critical to organizational learning

Some myths to debunk

- RCA takes too much time
 - RCA takes time...but results in much more powerful and effective actions that have the best chance to reduce the problem
- RCA is too complicated
 - Understanding causes can be complex, but a step-by-step approach can greatly enhance understanding of the underlying problem (and generate valuable organizational and individual learning)

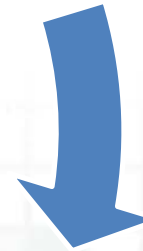
School improvement is **action research**

Collaborative
problem
diagnosis

**Root cause
analysis**

Reflective
practice and
evaluation

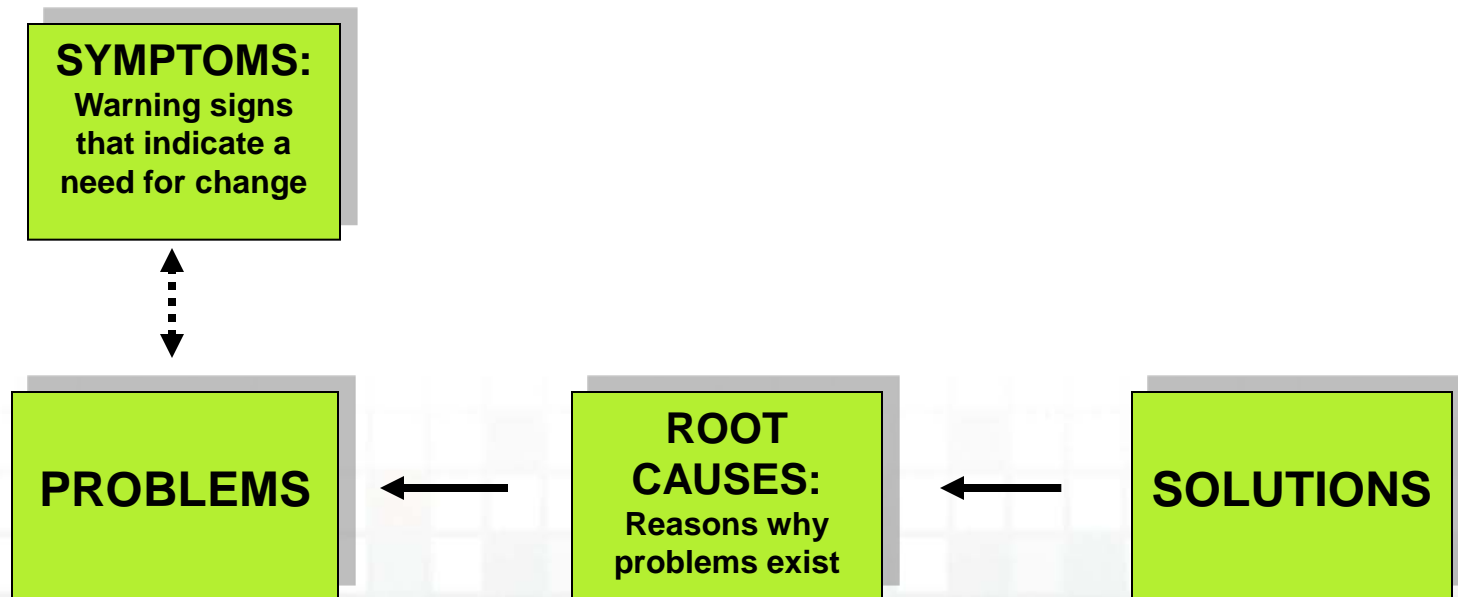
Solution
development
and action
planning



Problem diagnosis

- Change is defined by a gap
 - The “REAL”
 - The way things are right now...
 - The “IDEAL”
 - The performance you would like to see.

Problems are eliminated by treating their causes



Consider an example

- You are principal of an elementary school with 560 students in grades K-5.
- Results from the state's mandated end-of-course test shows that 35% of your third graders are not reading on grade level.
- What are some possible causes?

Some possible causes...

- Poor vocabulary
- No access to vision care
- Poor reading instruction
- Boring reading materials available in classes and/or at home
- Learning disabilities

Points to Consider About Causes

- Problems have multiple causes -- not all causes are equally important.
- Only some of these causes are controlled by the school.
 - Focusing solutions on those causes that you can influence is both effective and efficient
- “A lack of” something is not a cause, it is a solution

How do you learn about causes?

- Craft knowledge of faculty and leaders in your school
- Experiences of schools like yours in your region
- Published research
 - What is known about problems like yours in schools like yours?

Steps in conducting RCA

- Clearly define the performance gap or “problem”
- Plan your local inquiry into possible causes
- Consult the literature, as feasible
- Record possible causes
 - Identify those you have control over
- Rank order causes you can influence

Worksheet: Planning your local inquiry

Statement of the problem: Results from the state's mandated end-of-course test shows that 35% of your third graders are not reading on grade level.

Stakeholders who have direct knowledge of the problem:

Third grade teachers

Parents of third graders

Reading specialists

Methods for involving each in your inquiry about causes:

Meet with grade level team

Team members each contact 2-3 parents

Arrange meeting with leadership team

Worksheet: Recording causes

Possible cause	Hypothesis (this is a cause because...)	Evidence to support this claim:
Access to vision care	Impaired vision makes it difficult to read	Student complaints; Discussion with parents
Poor reading instruction	Quality teaching is essential to learning	Observations of third grade classes
Uninteresting reading materials in class	Students may lack motivation to read because material doesn't interest them	Discussions with teachers and a sampling of students
Weak vocabulary skills	Vocabulary is a building block to literacy	Published research; classroom assessments

Worksheet: Informal ranking of causes

Cause	Approximate percentage contribution to the problem	Evidence to support this claim
Access to vision care	15%	Data collected from parents
Poor reading instruction	35%	Observations
Uninteresting reading materials in class	20%	Discussions with students and teachers
Weak of vocabulary skills	30%	Assessment results

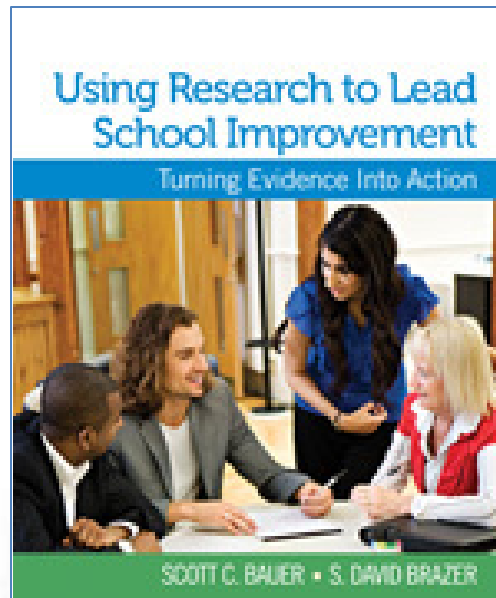
Additional tools

- Affinity diagram
 - Group process technique to mine stakeholder knowledge
- Fishbone diagram
 - Graphic organizer
- The “five why’s”
 - Brainstorming activity

KEY: Identify the *logic of action*

- This year, we will try to... (insert goal)
- By... (insert solution/action)
- Because...
 - **WHAT CAUSES WILL YOU ELIMINATE?**
 - **How will taking this action eliminate the causes?**
- What we expect to accomplish is... (what are our specific, measurable outcomes?)

For more information...



Bauer, S. & Brazer, S. (2012). Using research to lead school improvement: Turning evidence into action. Los Angeles: Sage.

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