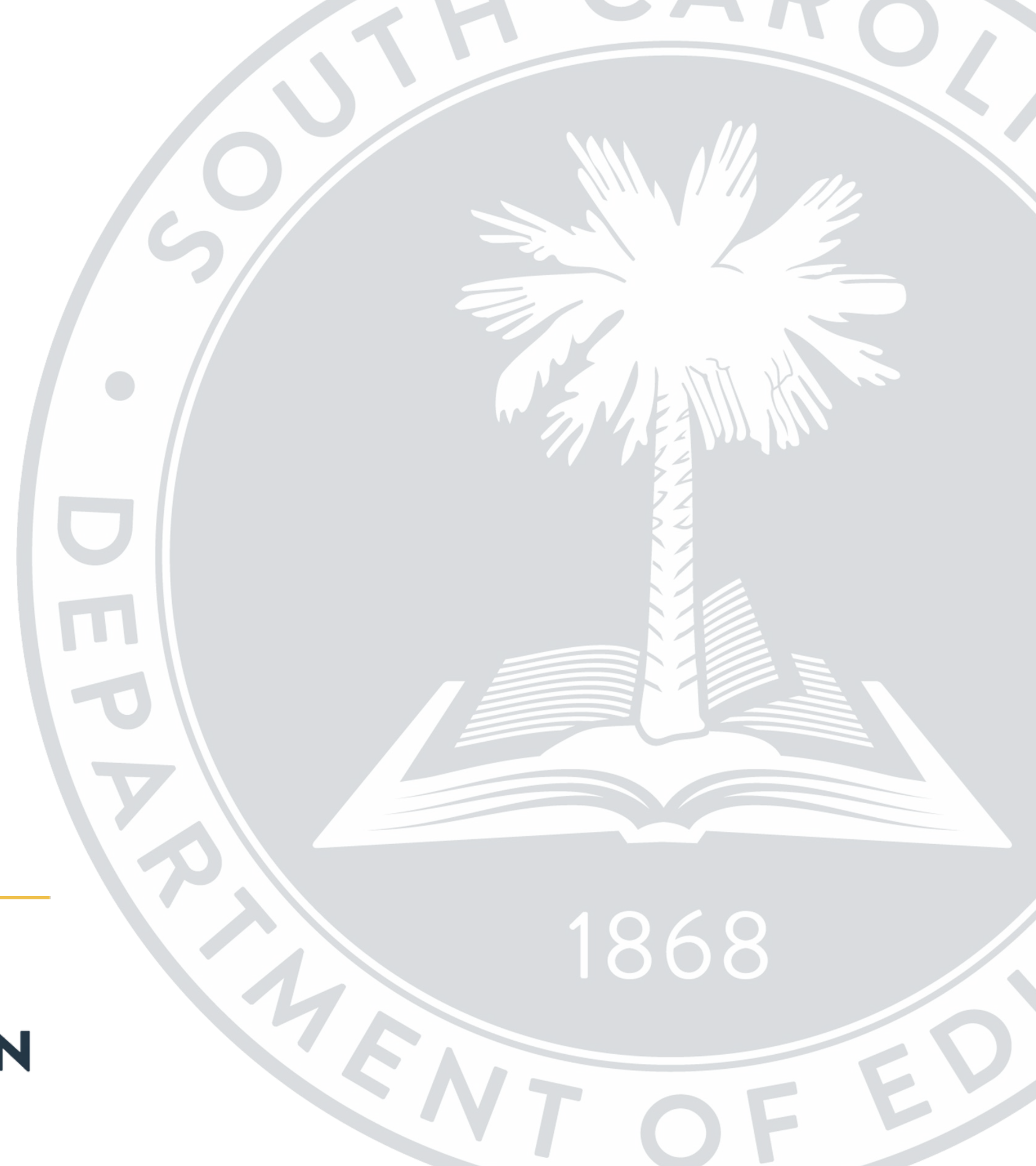


Root Cause Analysis

Innovation and
Support Team
9/23/2026



**SOUTH CAROLINA
DEPARTMENT OF EDUCATION**



Agenda

- **Definitions**
- **Needs Assessment Components**
- **The Role of Root Cause Analysis**
- **Why Use a Root Cause Analysis?**
- **Determining Root Cause**
- **Root Cause Analysis Process**
- **Resources**



IF you do the same thing over and over, and expect to get different results, . . .

It might be time to try another approach.



Let's get to the Root Cause.

Definitions

- **Root Cause (RC)** – Deepest underlying cause(s) of positive or negative symptoms within any process that, if resolved, would eliminate or substantially reduce the symptom.
- **Root Cause Analysis (RCA)** – a tool used both reactively, to investigate an adverse event that already has occurred, and proactively, to analyze and improve processes and systems before they break down (Preuss, 2003).
- **Data Analysis** – the process of gathering, reviewing, and evaluating data.
- **Symptoms** – the noticeable gap between expectations and reality; the “red flag” that draws attention to the issue.



Quality Strategic Planning: Essential Elements

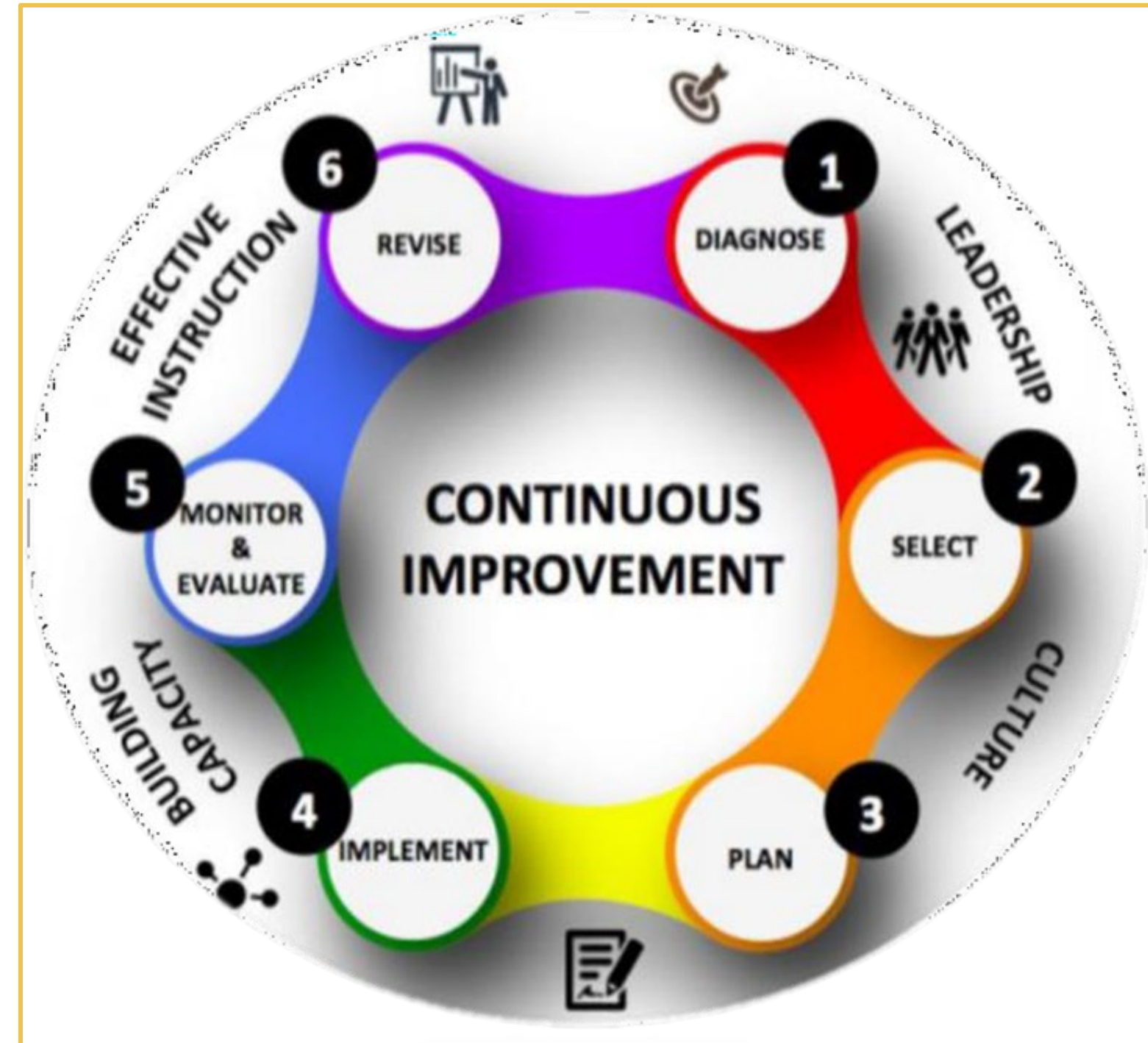
- **Needs Assessment**
- Differentiated Interventions
- Focused Improvement



School Improvement Model- Diagnose

Diagnose-Consult many sources to help determine the critical needs in the district's current operations.

- Plan and prepare for the process
- Collect and analyze data
- Use Needs Assessment Rubric to identify needs
- Prioritize the most strategic and overarching challenges
- Conduct a root cause analysis



Diagnose: Examine Educational Factors

The data analysis should include educational factors that matter for student learning:

- Aligned Curriculum & Assessments
- Effective Instruction
- Quality of Leadership
- Supports for Students and Teachers
- A Safe and Positive Climate
- Family and Community Engagement
- Equitable Access to Resources
- Subgroup Data



Common Challenges of Strategic Planning

- Lack of Time
- Insufficient Tools
- **Asking Wrong Questions-** Are you asking the deep and “tough” questions?
- **Jumping to Solutions-** Leaders often jump to the task of brainstorming solutions before truly understanding the problems to be solved.
- Ineffective Implementation and Monitoring

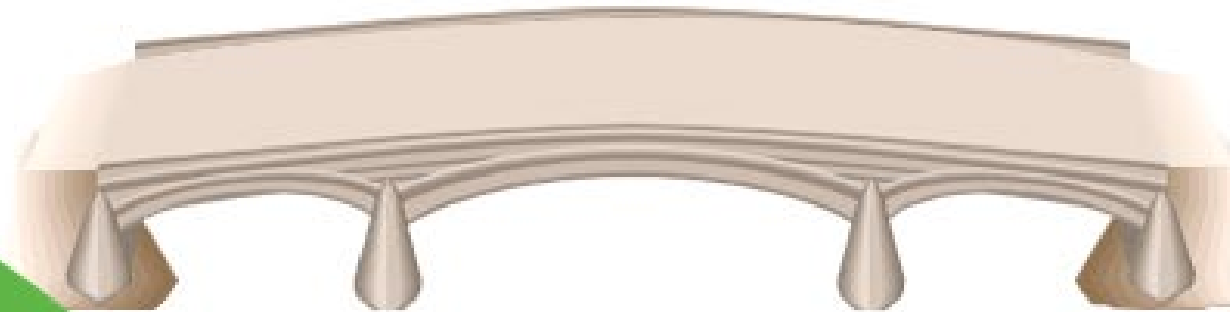


The Role of Root Cause Analysis



Priority Performance Challenges

Root Cause Analysis



Action Plan

Why Use Root Cause Analysis?

Root Cause Analysis:

- Facilitates discussion (leading to solutions)
- Helps identify the underlying problems or challenges
- Helps define the problem
- Eliminates patching (A little of this, a little of that)
- Conserves resources by providing rationale for strategic selection of interventions



Step 1: Organize Team

Team Members

- Community/Business Members
- Parents
- Principals
- Pupil Services Personnel (Counselor, Nurse, etc.)
- Professional Support Staff
- Special Education
- Students
- Teachers
- Technical Assistance Providers
- To the extent feasible, tribes and tribal organizations present in the community

Duties

- Identify Problem or Challenge (does it interfere with Special Education Service Delivery?)
- Review Data
- Analyze Data (generate questions).
- Determine baseline levels
- Determine assessment of progress



Step 2: Define Problem

State Problem clearly.

Example:

62% of students in the 4th grade scored a level of does not meet expectations (1) or approaches expectations (2) on the SC Ready reading assessment because teachers are supplementing the curriculum with items that might not be standards based.



Step 3: Conduct Data Analysis

Examine & Discuss Data

- Curricular Material
- Assessments
- Achievement data
- Classroom observations, record reviews, and other data

Conduct Data Analysis – View objectively

- Patterns
- Trends Variability

Determine Priority Areas of Need



Step 4: Determine Root Cause(s)

Strategies for Determining Root Cause: *(select one)*

- **Fish Bone.** This challenge is placed in the head of the fish. The backbone of the fish lists factors that may impact the need: context, resources, competency, and organizations.
- **The Five Whys.** A process to seek root cause by asking “why” five times **in succession.**
- **System Planning Process.** Problem solving approach asks 4 questions: Where are we now? Where are we going? How will we get there? What is holding us back?



Step 4: Determine Root Cause(s) *continued*

Indicators that you have found Root Cause:

- Agreement on a root cause.
- Cause is logical, makes sense, and provides clarity to the problem.
- Cause is something you can influence and control.
- If cause is resolved, there is realistic hope that the problem can be reduced or prevented in the future.



Step 5: Improvement Planning

Improvement plan reflects correction of noncompliance issues and sustained practices. The Improvement Plan should include:

- Logical link between root cause and improvement activities;
- Evidence-based practices;
- Short- and long-term outcomes, timelines and action steps for improvement activities.
- Personnel (and partners) identified to develop, implement, monitor,
- and evaluate the improvement activity.
- Collect Data to evaluate outcomes of improvement activities.



Step 6: Evaluate Progress

Why evaluate progress?

- Gives school a process for gathering, analyzing and using data.
- Allows school to determine whether it is effectively carrying out planned activities and the extent to which it is achieving its short-term and long-term outcomes.



Tools for Determining Root Cause

What is the underlying cause(s) of symptoms, that if resolved, would eliminate or reduce the symptom?

Examples for Determining Root Cause (select one):

- **Fish Bone.** This challenge is placed in the head of the fish. The backbone of the fish lists factors that may impact the need: context, resources, competency and organizations.
- **The Five Whys.** A process to seek root cause by asking “why” five times in succession.
- **System Planning Process.** Problem solving approach asks 4 questions: Where are we now? Where are we going? How will we get there? What is holding us back?



Fishbone Diagram

Factors and example causes:

Context includes circumstances in the community that may impact the identified need.

Resources includes the assets that your community requires to address the need.

Competency reflects the capacity of the community to address the need.

Organizations may also need to build their capacity.

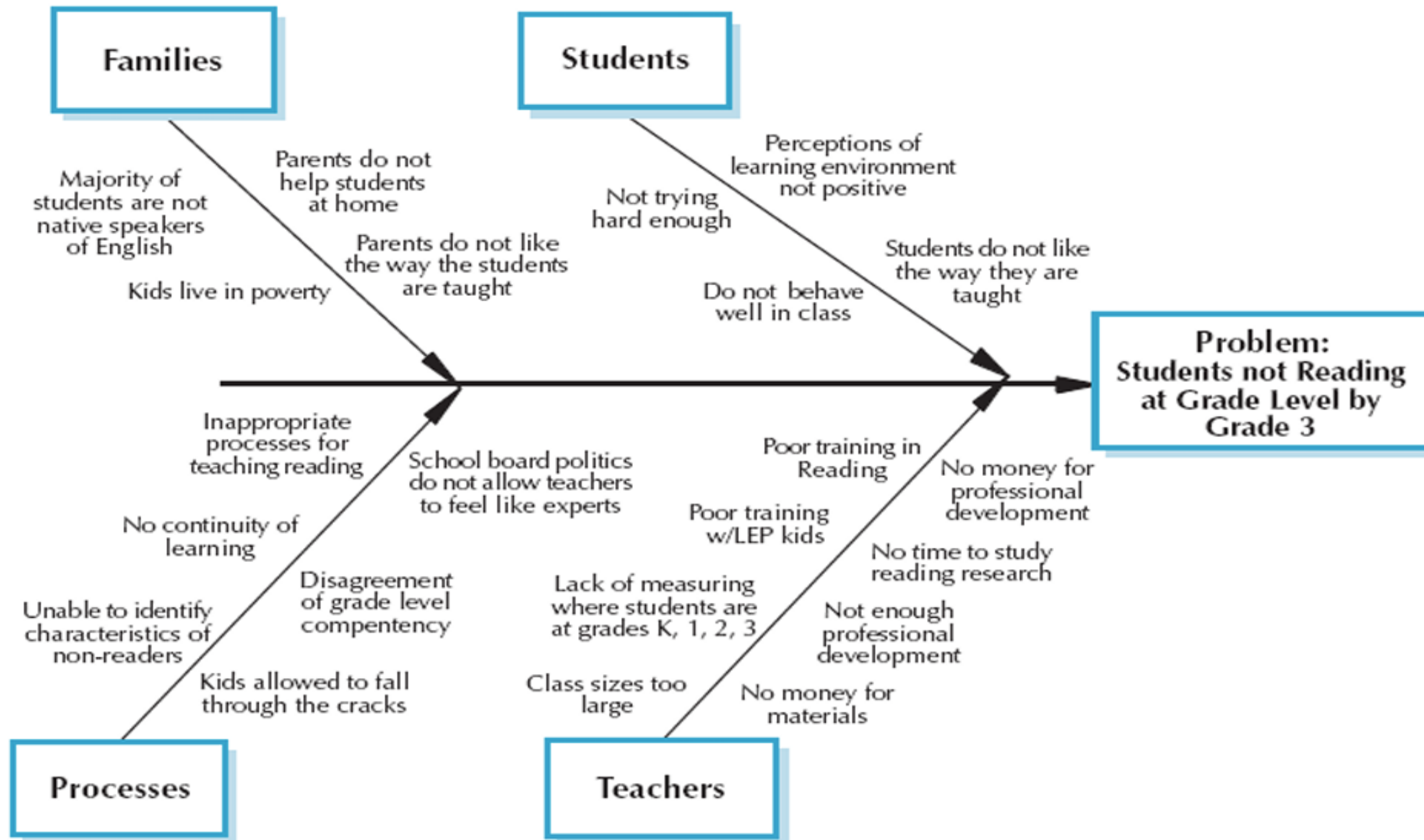


Fishbone Diagram - Continued

You should use a brainstorming process to identify potential reasons or causes for each factor. Data from experience, observation, focus groups and surveys can also be used to populate causes. Once the diagram is complete, evaluate the fishbone.



Fishbone Example



The Five Whys

Asking the question ‘Why’ 5 times, will lead you to the root cause of the problem.

Steps:

1. Write down the specific problem. Writing the problem helps team focus on the same problem.
2. Ask why the problem happens and write down the answer. Repeat 5 times – 5 ‘Whys’, until team is in agreement that problem is identified.



5 Whys (sample)

Define the Problem–Why is it happening?

Problem: Children in our community are not ready for kindergarten.

Why

- Not all children in the community are going to high-quality preschool.

Why

- There are not enough **high-quality** preschools in our community.

Why

- Preschool staff need additional training and education to provide high-quality preschool education.

Why

- Professional development opportunities are not available for preschool staff.

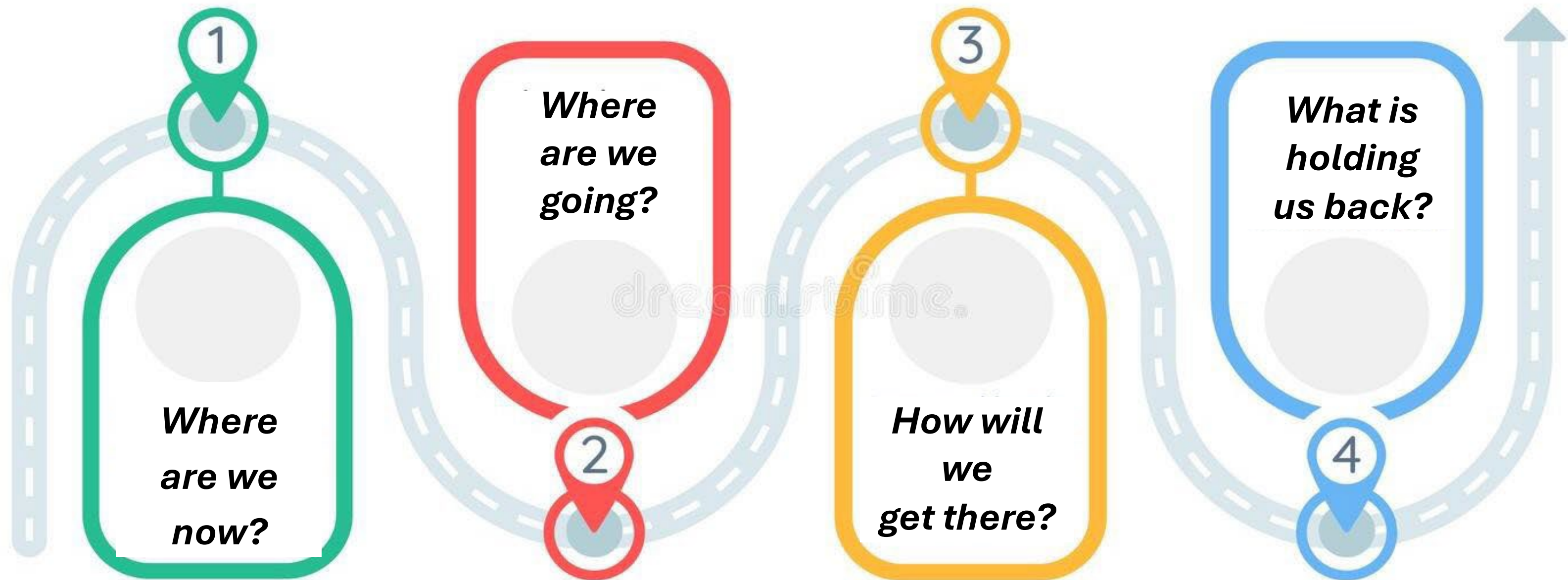
Why

- There are no agencies that provide training and professional development opportunities for staff.



System Planning Process

Problem solving approach asks 4 questions:



Problem Solving Approach

Where are we now?

- What are the facts (current data)?
- What worked well? What can be improved?

Where are we going?

- What do we want to achieve (goal)?
- What is the expected outcome?

How will we get there?

- What steps must we take to ensure we reach the outcome?
- Who are the key members of team (teachers, staff, administrators)?

What is holding us back?

- Is there support for improvement planning and implementation?
- What roadblocks must we overcome in order to reach the expected outcome?



Problem Solving Approach (sample)

Where are we now?

- 18 of 20 IEPs for HS Students w Disabilities lack Postsecondary Goals

Where are we going?

- Postsecondary Goal Statements must reflect goals after leaving HS.

How will we get there?

- Involve the Student. Career Interest Inventory. Student interests. . . .

What is holding us back?

- Making time for student to explore options after leaving HS.



Review– Core Principles

- A focused plan aligns vision, mission, and philosophy.
- The process is continuous, and the plan is a dynamic document.
- The process relies on quality, deep data interpretations.
- The process is completed in a collaborative and inclusive way.
- The process produces one focused, integrated plan that directs all work and resources.
- The process expects substantive changes in student performance and adult practices.
- Efficient communication.





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