

Leading a Team to Analyze Root Causes Using Quality Tools



**A Performance-based Learning Module
for Georgia's Educational Leaders**

Related Modules

Related GLISI Modules

Other modules related to this topic include:

- *Leading a Team to Analyze and Display Data Using Quality Tools*
 - *Leading a Team to Analyze Performance Factors*
 - *Leading a Team to Implement Graphic Organizers*
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Performance Objective(s)

Given This...	Do This...	To Meet These Criteria...
<ul style="list-style-type: none"> • A challenge, issue, or opportunity related to student achievement or organizational effectiveness • The need to identify the fundamental, “root” cause(s) of the challenge / issue, in order to identify an appropriate solution (or, in the case of an opportunity, in order to succeed in taking advantage of the opportunity) • A team of educators willing and able to contribute to the analysis session • Data related to the challenge, issue or opportunity • Tools and materials for completing the analysis, such as flip charts or other materials for recording and displaying information, markers or pens/pencils, and self-stick notes, index cards or pieces of paper that can be moved and manipulated 	<p>Conduct an analysis of the challenge/issue/opportunity, using one or more of these quality tools:</p> <ul style="list-style-type: none"> • The Five Whys Analysis • The Fishbone Diagram • The Affinity Diagram 	<ul style="list-style-type: none"> • The detailed task performance criteria listed in the Performance Checklists in the Topic Practice(s), Final Practice, and Final Assessment • GLISI’s criteria for how to work effectively as a team leader/facilitator, listed in the Performance Feedback Form(s) located in the Final Practice and Final Assessment

Module Introduction

Why is Analyzing Causes Important?

To find the right solutions for deficiencies in students' achievement, those who are working to solve the problems must determine what problem they are trying to solve, and the true causes of the problem.

Any easy trap to fall into is to jump to a solution before ensuring the right problems have been identified. Digging deep beneath the symptoms of problems exposes the root causes so that the right solutions can be applied to improve student achievement and organizational effectiveness.

In this module you will analyze root causes using each of these quality tools:

- The Five Whys Analysis
 - The Fishbone Diagram
 - The Affinity Diagram
-

When to Analyze Causes (Cues)

There are several cues that suggest the time is right to analyze causes:

- Performance data indicates that student and/or organizational performance is below standards or below goals set by the organization.
 - Performance data indicates an improvement in performance that is not readily attributed to focused efforts to improve those results.
 - The team has tried unsuccessfully in the past to solve the problem.
 - The problem or situation is complex.
 - Members of the team are prone to jump to conclusions or have strong opinions about solutions before analyzing the causes.
 - There are possibly multiple causes to a problem, and/or contributing factors to problems.
-

What Is the Leader's Role?

The leader of cause analysis guides the team through structured processes that ensure all team members can participate in examining the causes, sharing their theories regarding the contributing factors or drivers, and determining how, when and where to get the data to validate the potential causes and drivers.

The leader helps to focus the team on using a scientific approach to find underlying causes. The leader creates a climate in the group that focuses the team on systemic and process-related causes of problems, rather than placing blame or making excuses.

The leader must create conditions in which the team seeks continuous improvement in the processes and systems in their classrooms and schools, rather than blaming others or avoiding the real issues behind deficiencies.

In addition, when analyzing causes with others, it is important as the leader to allow a free flow of ideas, without discouraging the participants or allowing one or two participants or the leader to dominate the analysis.

Begin With The End in Mind

Research about effective assessment of performance tells us that the learner always performs better when they understand what they should know and be able to do. For this reason, you are encouraged to **review the Final Assessment in its entirety** in order to:

- Understand the knowledge, skills, and behaviors that are being taught and tested in this module
 - Understand the standards (performance criteria) by which your performance will be assessed
 - Gauge your current level of performance against what will be expected of you by the end of the module
 - Prioritize which areas to concentrate on as you work through the module
-

Electronic Forms

For your convenience, the forms in this module are available in electronic format in the file *Analyze_root_causes_eForms.docx*, which is available for download along with this module.

Topic 1: Five Whys Analysis

Five Whys

This process helps the team to look several layers below the surface symptoms to underlying, deeper causes.

Although the name suggests going down five levels, it is more important to go to a level that allows the team to address a cause it can take action to address.

For example, the team may not be able to address the cause of the problem that some parents do not or cannot help students with their homework, but it could change homework procedures or create a program to help students with homework.

In this topic you will:

- Conduct a Five Whys analysis to determine possible causes for a given situation
 - Determine which causes identified in the analysis are actionable
-

What Is the Leader's Role?

- Be prepared with the necessary materials and supplies
 - Schedule and communicate meeting times and locations to participants
 - Thank the participants, acknowledging everyone's worthwhile contribution to the group and commitment to future actions
-

How Do I Do It?

- Read through the steps in the step-action table (see next page)
 - Study any accompanying examples
 - Complete the practice exercise
 - Share the results with your Performance Coach
-

Step-Action Table

Step	Action
1. Collect resources	Assemble the materials needed to engage a team in this activity: pens or markers, a flipchart or erasable surface that is visible to the team
2. Assemble the team	Select the participants to engage in the activity.
3. Review the purpose	Explain that cause analysis can help identify root causes, develop better solutions and identify the data needed to verify assumptions about causes.
4. Develop a problem statement	Write a sentence or two that defines the gap in performance or the symptoms, but that does not list the causes or drivers of the problem
5. Ask Why #1	Ask why the problem occurs and write down an answer that the team will agree to take to a deeper level.
6. Ask Why #2	Ask why that driver occurs.
7. Repeat for Why #3 – #5	Continue five times or until an actionable cause has been uncovered; if no actionable cause can be identified, generate another level-one cause of the problem and repeat the process.
8. Determine data needed to verify the cause	Identify the data which could verify whether or not the cause identified truly is the cause; determine where and how to access the data. If no data can be collected, identify solutions to test on a small-scale before implementing any large scale or permanent changes.

Practice Exercise

Instructions

- Complete the steps in the Step-Action Table for this topic
 - Complete the Five Whys Analysis in Appendix A, listing results that are realistic based on the information in the practice scenario below
 - Check your work
 - Meet with your Performance Coach to review the results and decide what to do next
-

Practice Scenario

Swanson High School is a school of 1200 students in an urban area.

The school has made significant progress over the last two years in increasing the number of students who pass the state's End of Course Test (EOCT). However, over the last two years daily student attendance has averaged 73%. The superintendent has asked the leadership team of the school to come up with a solution to the daily attendance problem.

- Based on your school (or your experience with schools), craft a realistic Five Whys analysis listing possible causes for investigation in the scenario above.
 - Determine which of the causes you came up with are actionable, based on the current conditions in your school — That is, would they be actionable in your school?
 - Use the Five Whys Analysis in Appendix A to document the results.
-

Topic Practice Performance Checklist

Select one: Performer’s self-assessment Performance Coach’s observations

Performer’s Name: _____

Performance Coach’s Name: _____

Date of Performance: _____

*Check off each criterion that is observed. If the performance meets criteria with satisfactory quality, mark Yes. If not, mark No and provide feedback (use the back of the page for more space). Enter this performance into your portfolio when **all** items are marked Yes.*

Evidence	Criteria	Proficient? Give Feedback.
1. A written Problem Statement	<input type="checkbox"/> Written in two sentences or less <input type="checkbox"/> Defines the gap in performance, or the symptoms <input type="checkbox"/> Does not list the causes or drivers of the problem	<input type="checkbox"/> Yes <input type="checkbox"/> No
2. A list of potential causes	<input type="checkbox"/> Includes two or more causes <input type="checkbox"/> May contain drivers or factors contributing to the causes <input type="checkbox"/> Causes point to processes and systems – not to individuals, teams or departments <input type="checkbox"/> Statements do not infer blame or reference excuses	<input type="checkbox"/> Yes <input type="checkbox"/> No
3. One cause identified for further study	<input type="checkbox"/> Targeted cause is identified in writing <input type="checkbox"/> The group has the ability and authority to take action on this cause	<input type="checkbox"/> Yes <input type="checkbox"/> No

Evidence	Criteria	Proficient? Give Feedback.
4. A list of additional research/data to be collected to validate the causes/drivers	<input type="checkbox"/> List includes one or more types of data that could validate the assumption <input type="checkbox"/> Sources are listed for each data	<input type="checkbox"/> Yes <input type="checkbox"/> No

Topic 2: Fishbone Diagram

Fishbone Diagram

The Fishbone Diagram is used as part of a process to look at a narrowly defined problem and investigate potential underlying causes.

It is known as a Fishbone Diagram because it resembles a fish skeleton. It is also sometimes called an Ishikawa Diagram (after it's inventor, Dr. Kaoru Ishikawa) or a Cause and Effect Diagram.

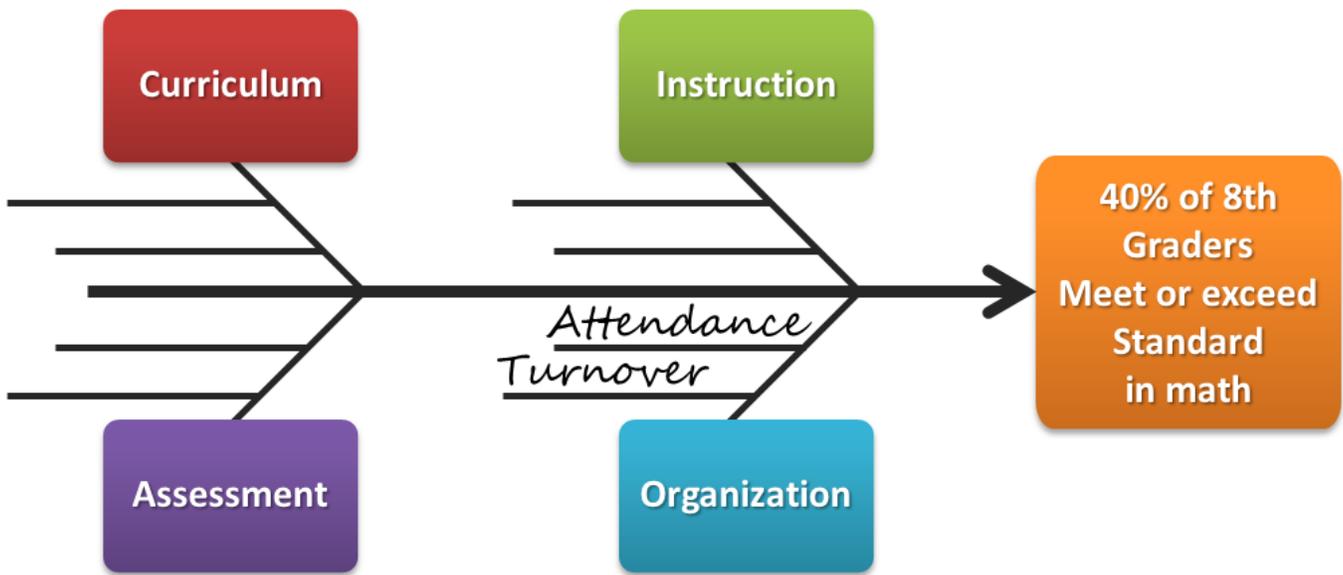
It can be used by an individual, but is most often used as part of a group analysis process.

Why Use the Fishbone Diagram?

Using the diagram helps to focus on the potential causes by providing a visual structure that organizes them. By putting possible causes on a visual diagram, you can get a picture of factors contributing to a problem and see possible relationships between problems

How Do I Do It?

- Read through the steps in the step-action table (see next page)
- Study any accompanying examples
- Complete the practice exercise
- Share the results with your Performance Coach



Step-Action Table

Step	Action
1. Plan for the Analysis Session	<p>Assemble the materials needed to engage a team in this activity:</p> <ul style="list-style-type: none"> • Pens or markers • Post-it notes • A flipchart or erasable surface that is visible to the team <p>Select the participants to engage in the activity, and schedule the event.</p>
2. Review the purpose	<p>Open the session by explaining that cause analysis can help identify root causes, develop better solutions and identify the data needed to verify assumptions about causes.</p>
3. Develop a problem statement	<p>Write a sentence or two that defines the gap in performance or the symptoms, but that does not list the causes or drivers of the problem.</p>
4. Identify the major categories in which potential causes may reside	<p>Capture four to five major, generic categories on paper.</p> <p>TIP: Try working with one of these category sets:</p> <ul style="list-style-type: none"> • Operational categories such as: people, processes, equipment, procedures, facilities, training, etc. • School-based categories such as: curriculum, instruction, assessment, tools and resources, and organizational factors. • Or, develop categories based on the main symptoms of the problem being addressed
5. Create the diagram	<p>Draw the diagram and write on it as follows, so that it appears like the sample provided below:</p> <ul style="list-style-type: none"> • Write the problem statement at the “head” of the fishbone • Draw a central line or “backbone” connecting to the head • Draw as many “bones” or lines as needed for each major category of causes (4 to 6 is ideal) • Draw a box at the end of each “bone” for the labels for the major categories • Draw the smaller bones for each of the ideas for causes in each category

Step	Action
6. Identify the potential causes in each category type	<p>List ideas for causes in each category, which will be placed on the small “bones” in each category to which they apply.</p> <p>If a cause applies to more than one category, list it in each place.</p> <p>Generate at least a dozen potential causes (at least 2 for each “bone”) and continue brainstorming for as long as the team desires.</p> <p>TIP: You may wish to have participants capture initial ideas on self-stick notes or paper for each category, rather than writing them directly onto the diagram. This allows for several processing techniques:</p> <ul style="list-style-type: none"> • Individuals can place their causes on the fishbone in silence, and/or • The facilitator can move causes around from one category to the other according to team discussion.
7. Determine relationships	<p>Draw lines between the causes on each “bone” that seem to be related.</p>
8. Agree upon the most probable cause(s)	<p>When all the possible causes have been listed, evaluate them and circle the cause(s) the group chooses as the most probable cause(s).</p> <p>IMPORTANT: Be sure to choose cause(s) that are actionable – those over which the group has some power to effect change.</p>
9. Determine what additional data is needed to verify the cause(s)	<p>Identify the data which could verify whether or not the most probable causes identified are the causes.</p> <p>Determine where and how to access the data, and make assignments for follow-up tasks.</p> <p>If no data can be collected, identify solutions to test on a small scale before implementing any large scale or permanent changes.</p>

Practice Exercise

Instructions

- Complete the steps in the Step-Action Table for this topic
 - Complete the Fishbone Diagram in Appendix B, listing results that are realistic based on the information in the practice scenario below
 - Check your work
 - Meet with your Performance Coach to review the results and decide what to do next
-

Practice Scenario

Franz Middle School is a school of 800 students in a rural area that is growing rapidly. Over the last year discipline referrals have increased dramatically. A new principal has been assigned to the school. Her superintendent has charged her with getting the discipline challenges under control. She observed that the students don't seem to know the rules and there is not a common understanding of the rules and expectations. She suspects that there are other issues that also underlie the problem. She wants to call together a group of leaders, teachers and staff to determine the causes.

- Create a fishbone diagram for the scenario above. If there are "holes" in the information you need, apply facts from your own school experience.
 - Determine which of the causes you came up with are actionable, based on the current conditions in your school.
-

Topic Practice Performance Checklist

Select one: Performer’s self-assessment Performance Coach’s observations

Performer’s Name: _____

Performance Coach’s Name: _____

Date of Performance: _____

*Check off each criterion that is observed. If the performance meets criteria with satisfactory quality, mark Yes. If not, mark No and provide feedback (use the back of the page for more space). Enter this performance into your portfolio when **all** items are marked Yes.*

Evidence	Criteria	Proficient? Give Feedback.
1. Written Problem Statement	<input type="checkbox"/> Written in two sentences or less <input type="checkbox"/> Defines the gap in performance or the symptoms <input type="checkbox"/> Does not list the causes or drivers of the problem <input type="checkbox"/> Written into the “head” of the fishbone	<input type="checkbox"/> Yes <input type="checkbox"/> No
2. Categories of Possible Causes are Identified	<input type="checkbox"/> At least 4 categories related to the problem are identified <input type="checkbox"/> Categories reflect the main symptoms of the problem being analyzed <input type="checkbox"/> Possible causes/categories are written in boxes on the end of major “bones” of the fishbone	<input type="checkbox"/> Yes <input type="checkbox"/> No

Evidence	Criteria	Proficient? Give Feedback.
3. Possible Causes are Identified and Categorized	<input type="checkbox"/> At least 3 causes are listed in each major category (12 or more total) <input type="checkbox"/> Causes may contain drivers or factors contributing to the causes <input type="checkbox"/> Causes point to processes and systems – not to individuals, teams or departments <input type="checkbox"/> Statements do not infer blame or reference excuses <input type="checkbox"/> Causes are written on smaller lines or “bones” off the major category “bone” to which they apply	<input type="checkbox"/> Yes <input type="checkbox"/> No
4. Cause Relationships Identified	<input type="checkbox"/> Lines or circles are drawn (within or across categories) to indicate which causes may be related	<input type="checkbox"/> Yes <input type="checkbox"/> No
5. Most Probably, Actionable Cause Selected	<input type="checkbox"/> One or more “most probable cause” is identified <input type="checkbox"/> Cause is actionable by this team	<input type="checkbox"/> Yes <input type="checkbox"/> No
6. Additional Data and Sources Identified	<input type="checkbox"/> Data to be collected that can validate the cause assumptions is listed <input type="checkbox"/> Sources of listed data are identified	<input type="checkbox"/> Yes <input type="checkbox"/> No

Topic 3: Affinity Diagram

Affinity Diagram

The Affinity Diagram is a tool that helps identify the most important causes of a problem – particularly when the problem is systemic or cannot easily be analyzed with a tool that examines in a more sequential way.

This tool is also called the “Relationship Diagram” because it shows the connections/relationships between causes, and it shows which causes are alike in some manner.

Why use the Affinity Diagram?

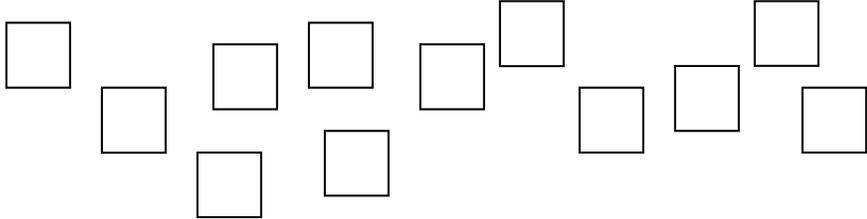
Use this tool and process:

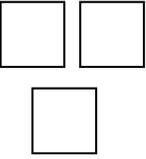
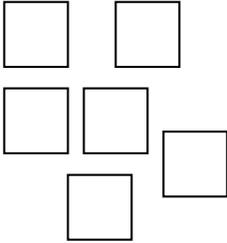
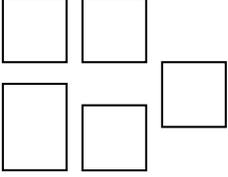
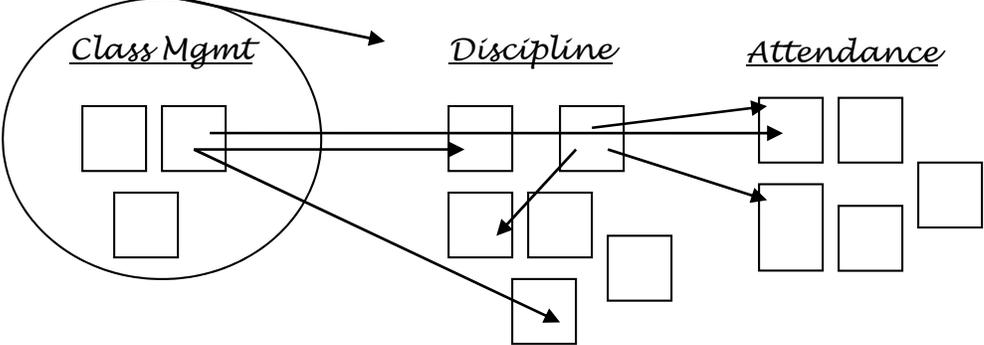
- For systemic problems and those that are not easily analyzed with other tools
 - To encourage creative thinking and “systems thinking” about a problem, in order to get below the surface issue to more systemic causes
 - To determine the major causes or drivers of a problem, so that you can then use a tool like the Fishbone Diagram (to categorize and expand the list of problems) or The Five Whys (to drill down deeper into one possible cause)
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How Do I Do It?

- Read through the steps in the step-action table (see next page)
 - Study any accompanying examples
 - Complete the practice exercise
 - Share the results with your Performance Coach
-

Step-Action Table

Step	Action
1. Plan for the Analysis Session	<p>Assemble the materials needed to engage a team in this activity:</p> <ul style="list-style-type: none"> • Pens or markers • Post-it notes • A flipchart or erasable surface that is visible to the team <p>Select the participants to engage in the activity, and schedule the event.</p>
2. Review the purpose	<p>Open the session by explaining that cause analysis can help identify root causes, develop better solutions and identify the data needed to verify assumptions about causes.</p>
3. Develop a problem statement	<p>Write a sentence or two that defines the gap in performance or the symptoms, but that does not list the causes or drivers of the problem.</p>
4. Brainstorm all issues causing or contributing to the problem	<p>Brainstorm about all the possible causes of the problem, and list each one on its own self-stick note.</p> <p>Post all of the self-stick notes onto the flip chart or board, in no particular order.</p> <p>Your workspace may look something like this:</p> <div style="text-align: center; margin-top: 20px;">  </div>

Step	Action
<p>5. Categorize the possible causes</p>	<p>Spend a few minutes “clumping” related notes together. This is usually done in silence; participants may observe each other move notes, and then come up and move them again into another group.</p> <p>If any note belongs in more than one group, make a duplicate note and add it to the other categories.</p> <p>Your workspace may now look like this:</p> <div style="display: flex; justify-content: space-around; text-align: center;"> <div style="margin: 10px;"> <p><u><i>Class Mgmt</i></u></p>  </div> <div style="margin: 10px;"> <p><u><i>Discipline</i></u></p>  </div> <div style="margin: 10px;"> <p><u><i>Attendance</i></u></p>  </div> </div>
<p>6. Indicate relationships</p>	<p>Once the “clumping” activity has stabilized, review each group and give it a title that captures the essence of the overall problem. (This title can eventually become a category for a Cause and Effect diagram, for example.)</p> <p>Now, consider each group and each note within that group. Draw lines or arrows on the diagram to indicate causes and categories that affect, contribute to each other, or are otherwise related. You might draw:</p> <ul style="list-style-type: none"> • An arrow between two causes within a category • An arrow from a cause in one category to a cause in another category • A circle around a whole category, pointing to another whole category or to a single cause in another category <p>Your workspace may now look something like this:</p> 

Step	Action
7. Determine key drivers of causes	<p>Identify the key drivers and causes by noticing which items have the most arrows coming into or out of them.</p> <p>TIP: Anything that looks like a “porcupine” is a prime candidate for further exploration!</p>
8. Select causes to collect more data	<p>Determine 1 to 3 causes to collect more data for further investigation.</p>
9. Determine data needed to verify the cause	<p>Identify the data which could provide more information about the probable causes and their contributing factors; determine where and how to access the data.</p> <p>If no data can be collected, identify solutions to test on a small scale before implementing any large scale or permanent changes.</p>

Practice Exercise

Instructions

- Complete the steps in the Step-Action Table for this topic
 - Complete the Affinity Diagram in Appendix C, listing results that are realistic based on the information in the practice scenario below
 - Check your work
 - Meet with your Performance Coach to review the results and decide what to do next
-

Practice Scenario

Abercrombie Elementary School is a school of 600 students in a high poverty area. When the state test data was received, the third grade reading scores were lower than expected. The first reaction of the school team was to search for a new reading program. The principal suspects that the problem is not entirely created by the reading program currently in place. He wants to call together a group of leaders, teachers and staff to determine the causes.

- Create a relationship diagram (Affinity Diagram) for this problem, supplementing the information above by drawing from the situation in your own school.
 - Determine which of the causes you came up with are actionable, based on the current conditions in your school
 - If you are a High School leader, substitute “Language Arts scores” on the EOCT for “reading scores” in the scenario above.
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Topic Practice Performance Checklist

Select one: Performer's self-assessment Performance Coach's observations

Performer's Name: _____

Performance Coach's Name: _____

Date of Performance: _____

*Check off each criterion that is observed. If the performance meets criteria with satisfactory quality, mark Yes. If not, mark No and provide feedback (use the back of the page for more space). Enter this performance into your portfolio when **all** items are marked Yes.*

Evidence	Criteria	Proficient? Give Feedback.
1. A written Problem Statement	<input type="checkbox"/> Written in two sentences or less <input type="checkbox"/> Defines the gap in performance or the symptoms <input type="checkbox"/> Does not list the causes or drivers of the problem	<input type="checkbox"/> Yes <input type="checkbox"/> No
2. List of Causes	<input type="checkbox"/> Causes listed on individual pieces of paper <input type="checkbox"/> Causes point to processes and systems, not blame or excuses	<input type="checkbox"/> Yes <input type="checkbox"/> No
3. Categories Identified	<input type="checkbox"/> Causes grouped into categories showing relationships <input type="checkbox"/> Title of category is listed above its grouping of causes	<input type="checkbox"/> Yes <input type="checkbox"/> No
4. Relationships Identified	<input type="checkbox"/> Arrows are drawn between causes and categories to indicate links <input type="checkbox"/> Arrows show contributing causes (arrow leaving) and causes impacted (arrows entering)	<input type="checkbox"/> Yes <input type="checkbox"/> No

Evidence	Criteria	Proficient? Give Feedback.
5. Key Causes Identified	<input type="checkbox"/> 1 – 3 primary drivers are selected for further study <input type="checkbox"/> Drivers selected are those that have the most arrows leaving them	<input type="checkbox"/> Yes <input type="checkbox"/> No
6. Additional Data to be collected Identified	<input type="checkbox"/> Data to be collected for further research of causes is listed <input type="checkbox"/> Source(s) of data are included	<input type="checkbox"/> Yes <input type="checkbox"/> No

Final Practice

Instructions

- Perform this practice, referring to the topic step-action tables as needed.
 - Complete the Final Practice Worksheet, listing results that are realistic based on the information in the practice scenario.
 - Check your work.
 - Meet with your Performance Coach to review the results and decide what to do next.
 - Completing this Final Practice requires meetings with a team of 2 - 4 peers. Prepare for these meetings by:
 - Communicating the time and location of the meeting to the participants in advance
 - Preparing and providing copies of a meeting agenda
 - Being prepared with all the necessary materials and resources
-

Practice Scenario

Work with your Performance Coach to select a challenge, issue, or opportunity affecting your organization. Use one of the three quality tools covered in this module to analyze the challenge, issue, or opportunity and determine the root causes.

Final Practice Performance Checklist

Select one: Performer’s self-assessment Performance Coach’s observations

Performer’s Name: _____

Performance Coach’s Name: _____

Date of Performance: _____

*Check off each criterion that is observed. If the performance meets criteria with satisfactory quality, mark Yes. If not, mark No and provide feedback (use the back of the page for more space). Enter this performance into your portfolio when **all** items are marked Yes and **all** Feedback Form (next form) items are marked 3 or 4 (or Not Applicable).*

Use this checklist for the Five Whys Analysis.

Evidence	Criteria	Proficient? Give Feedback.
1. A written Problem Statement	<input type="checkbox"/> Written in two sentences or less	<input type="checkbox"/> Yes
	<input type="checkbox"/> Defines the gap in performance, or the symptoms	<input type="checkbox"/> No
	<input type="checkbox"/> Does not list the causes or drivers of the problem	
2. A list of potential causes	<input type="checkbox"/> Includes two or more causes	<input type="checkbox"/> Yes
	<input type="checkbox"/> May contain drivers or factors contributing to the causes	<input type="checkbox"/> No
	<input type="checkbox"/> Causes point to processes and systems – not to individuals, teams or departments	
	<input type="checkbox"/> Statements do not infer blame or reference excuses	
3. One cause identified for further study	<input type="checkbox"/> Targeted cause is identified in writing	<input type="checkbox"/> Yes
	<input type="checkbox"/> The group has the ability and authority to take action on this cause	<input type="checkbox"/> No

Evidence	Criteria	Proficient? Give Feedback.
4. A list of additional research/data to be collected to validate the causes/drivers	<input type="checkbox"/> List includes one or more types of data that could validate the assumption	<input type="checkbox"/> Yes
	<input type="checkbox"/> Sources are listed for each data	<input type="checkbox"/> No

Use this checklist for the Fishbone Diagram.

Evidence	Criteria	Proficient? Give Feedback.
1. Written Problem Statement	<input type="checkbox"/> Written in two sentences or less	<input type="checkbox"/> Yes
	<input type="checkbox"/> Defines the gap in performance or the symptoms	<input type="checkbox"/> No
	<input type="checkbox"/> Does not list the causes or drivers of the problem	
	<input type="checkbox"/> Written into the “head” of the fishbone	
2. Categories of Possible Causes are Identified	<input type="checkbox"/> At least 4 categories related to the problem are identified	<input type="checkbox"/> Yes
	<input type="checkbox"/> Categories reflect the main symptoms of the problem being analyzed	<input type="checkbox"/> No
	<input type="checkbox"/> Possible causes/categories are written in boxes on the end of major “bones” of the fishbone	

Evidence	Criteria	Proficient? Give Feedback.
3. Possible Causes are Identified and Categorized	<input type="checkbox"/> At least 3 causes are listed in each major category (12 or more total) <input type="checkbox"/> Causes may contain drivers or factors contributing to the causes <input type="checkbox"/> Causes point to processes and systems – not to individuals, teams or departments <input type="checkbox"/> Statements do not infer blame or reference excuses <input type="checkbox"/> Causes are written on smaller lines or “bones” off the major category “bone” to which they apply	<input type="checkbox"/> Yes <input type="checkbox"/> No
4. Cause Relationships Identified	<input type="checkbox"/> Lines or circles are drawn (within or across categories) to indicate which causes may be related	<input type="checkbox"/> Yes <input type="checkbox"/> No
5. Most Probably, Actionable Cause Selected	<input type="checkbox"/> One or more “most probable cause” is identified <input type="checkbox"/> Cause is actionable by this team	<input type="checkbox"/> Yes <input type="checkbox"/> No
6. Additional Data and Sources Identified	<input type="checkbox"/> Data to be collected that can validate the cause assumptions is listed <input type="checkbox"/> Sources of listed data are identified	<input type="checkbox"/> Yes <input type="checkbox"/> No

Use this checklist for the Affinity Diagram.

Evidence	Criteria	Proficient? Give Feedback.
1. A written Problem Statement	<input type="checkbox"/> Written in two sentences or less	<input type="checkbox"/> Yes
	<input type="checkbox"/> Defines the gap in performance or the symptoms	<input type="checkbox"/> No
	<input type="checkbox"/> Does not list the causes or drivers of the problem	
2. List of Causes	<input type="checkbox"/> Causes listed on individual pieces of paper	<input type="checkbox"/> Yes <input type="checkbox"/> No
	<input type="checkbox"/> Causes point to processes and systems, not blame or excuses	
3. Categories Identified	<input type="checkbox"/> Causes grouped into categories showing relationships	<input type="checkbox"/> Yes <input type="checkbox"/> No
	<input type="checkbox"/> Title of category is listed above its grouping of causes	
4. Relationships Identified	<input type="checkbox"/> Arrows are drawn between causes and categories to indicate links	<input type="checkbox"/> Yes <input type="checkbox"/> No
	<input type="checkbox"/> Arrows show contributing causes (arrow leaving) and causes impacted (arrows entering)	
5. Key Causes Identified	<input type="checkbox"/> 1 – 3 primary drivers are selected for further study	<input type="checkbox"/> Yes <input type="checkbox"/> No
	<input type="checkbox"/> Drivers selected are those that have the most arrows leaving them	
6. Additional Data to be collected Identified	<input type="checkbox"/> Data to be collected for further research of causes is listed	<input type="checkbox"/> Yes <input type="checkbox"/> No
	<input type="checkbox"/> Source(s) of data are included	

Final Practice Feedback Form (page 1 of 2)

Performer's Name: _____

Performance Coach's Name: _____

Date of Performance: _____

*Use the rubric below to rate **only** the cross-cutting leadership skills on this page (including write-ins). Enter this performance into your portfolio when **all** Performance Checklist (previous form) items are marked Yes and **all** Feedback Form (this form) items are marked 3 or 4 (or Not Applicable).*

Performance Levels			
1	2	3	4
Emerging Needs Study and Practice <i>Few/none of desired behaviors were adequately displayed.</i>	Developing Needs Practice <i>Some but not all of the desired behaviors were adequately displayed.</i>	Proficient Meets Criteria and Expectations <i>All desired behaviors were displayed and performed correctly.</i>	Distinguished Could be Used as a Model to Teach Others

Eligible for Portfolio

How effective was the performer in these Cross-Cutting Skills?		Rating				
1.	Facilitating group interaction and managing participation	1	2	3	4	n/a
2.	Assisting the group to meet task criteria	1	2	3	4	n/a
3.	Modeling appropriate leadership behaviors	1	2	3	4	n/a
4.	Teaching others how to perform the tasks	1	2	3	4	n/a
5.	Presenting information clearly and concisely	1	2	3	4	n/a
6.	Leveraging technology to increase effectiveness	1	2	3	4	n/a
7.	Motivating others to achieve success	1	2	3	4	n/a
8.	Using group processes to achieve desired results	1	2	3	4	n/a
9.	Other:	1	2	3	4	n/a

Turn the page to provide additional written feedback (required).

Final Practice Feedback Form (page 1 of 2)

Performer's Name: _____

Performance Coach's Name: _____

Date of Performance: _____

If any element was rated less than 3, what needs to be done to score a 3? To score a 4?

What greatest strengths did the leader exhibit through this performance?

What could be done to improve this leader's performance? Include any criteria on the Performance Checklist that were missed. Be specific.

Were there any significant issues that must be rectified (by additional practice and assessment) before entering this evidence into the Portfolio?

Final Assessment

When Can I Take the Final Assessment?

Complete the Final Assessment when you are able to sufficiently execute the module’s performance objective(s) according to the:

- Task-related criteria on the Final Assessment Performance Checklist
- Cross-cutting leadership skills on the Performance Feedback Form

When you take the Final Assessment — either as someone who takes it to “test out” of the module or as someone who has worked through the topics and Final Practice — the underlying assumption is that you are a competent, experienced, performer. This means that the Final Assessment does not include any “helps,” such as step-action tables or worksheets.

When Can I Add the Final Assessment to My Portfolio?

Has your Final Assessment performance met all the criteria on the Final Assessment Performance Checklist and earned at least a 3 on all of the cross-cutting skills on the Final Assessment Feedback Form?

Yes	No
<p>Add these items to your Portfolio and talk to your Performance Coach about next steps:</p> <ul style="list-style-type: none"> • Final Assessment Performance Checklist • Final Assessment Feedback Form • Module Progress Tracker page • Additional artifacts such as documents, slides, video tapes, participant feedback forms, etc. 	<p>Do the following as needed before attempting the Final Assessment again when you are ready:</p> <ul style="list-style-type: none"> • Obtain performance feedback from your Performance Coach • Review relevant topics in the module • Repeat Topic Practices and/or the Final Practice • Pursue additional learning, training and experience

**Final Assessment
Instructions**

1. Gain permission from your supervisor, sponsor, or Performance Coach to complete the Final Assessment in a school setting.
2. Schedule the date, time and location of your session — one that works for you, your Performance Coach, and other participants.
3. Invite a group of 2 - 4 volunteers to assist you. Ideally, you should invite your real work team. (If you are an aspiring leader, this may be a team that you would lead once you enter the leadership role. For an incumbent leader, it should reflect the team or type of team that you are currently leading.)
4. Review the following with your Performance Coach:
 - Task-related criteria on the Final Assessment Performance Checklist
 - Cross-cutting leadership skills on the Performance Feedback Form
 - Final Assessment Scenario (on the next page)
5. Prepare any other materials or information that you and your participants need to have with you on the day of the activity.
6. Perform the Final Assessment as follows:
 - In a real school or district setting
 - With a team of teachers, staff, or other leaders as appropriate
 - Observed by your Performance Coach
7. Retain artifacts from your performance (documents, slides, etc.)
8. Obtain feedback from your Performance Coach about your performance, and discuss next steps.

**Final Assessment
Scenario**

Work with your Performance Coach to select a challenge, issue, or opportunity affecting your organization. Use one of the three quality tools covered in this module to analyze the challenge, issue, or opportunity and determine the root causes.

Final Assessment Performance Checklist

Select one: Performer’s self-assessment Performance Coach’s observations

Performer’s Name: _____

Performance Coach’s Name: _____

Date of Performance: _____

*Check off each criterion that is observed. If the performance meets criteria with satisfactory quality, mark Yes. If not, mark No and provide feedback (use the back of the page for more space). Enter this performance into your portfolio when **all** items are marked Yes and **all** Feedback Form (next form) items are marked 3 or 4 (or Not Applicable).*

Use this checklist for the Five Whys Analysis.

Evidence	Criteria	Proficient? Give Feedback.
1. A written Problem Statement	<input type="checkbox"/> Written in two sentences or less	<input type="checkbox"/> Yes
	<input type="checkbox"/> Defines the gap in performance, or the symptoms	<input type="checkbox"/> No
	<input type="checkbox"/> Does not list the causes or drivers of the problem	
2. A list of potential causes	<input type="checkbox"/> Includes two or more causes	<input type="checkbox"/> Yes
	<input type="checkbox"/> May contain drivers or factors contributing to the causes	<input type="checkbox"/> No
	<input type="checkbox"/> Causes point to processes and systems – not to individuals, teams or departments	
	<input type="checkbox"/> Statements do not infer blame or reference excuses	
3. One cause identified for further study	<input type="checkbox"/> Targeted cause is identified in writing	<input type="checkbox"/> Yes
	<input type="checkbox"/> The group has the ability and authority to take action on this cause	<input type="checkbox"/> No

Evidence	Criteria	Proficient? Give Feedback.
4. A list of additional research/data to be collected to validate the causes/drivers	<input type="checkbox"/> List includes one or more types of data that could validate the assumption	<input type="checkbox"/> Yes
	<input type="checkbox"/> Sources are listed for each data	<input type="checkbox"/> No

Use this checklist for the Fishbone Diagram.

Evidence	Criteria	Proficient? Give Feedback.
1. Written Problem Statement	<input type="checkbox"/> Written in two sentences or less	<input type="checkbox"/> Yes
	<input type="checkbox"/> Defines the gap in performance or the symptoms	<input type="checkbox"/> No
	<input type="checkbox"/> Does not list the causes or drivers of the problem	
	<input type="checkbox"/> Written into the “head” of the fishbone	
2. Categories of Possible Causes are Identified	<input type="checkbox"/> At least 4 categories related to the problem are identified	<input type="checkbox"/> Yes
	<input type="checkbox"/> Categories reflect the main symptoms of the problem being analyzed	<input type="checkbox"/> No
	<input type="checkbox"/> Possible causes/categories are written in boxes on the end of major “bones” of the fishbone	

Evidence	Criteria	Proficient? Give Feedback.
3. Possible Causes are Identified and Categorized	<input type="checkbox"/> At least 3 causes are listed in each major category (12 or more total) <input type="checkbox"/> Causes may contain drivers or factors contributing to the causes <input type="checkbox"/> Causes point to processes and systems – not to individuals, teams or departments <input type="checkbox"/> Statements do not infer blame or reference excuses <input type="checkbox"/> Causes are written on smaller lines or “bones” off the major category “bone” to which they apply	<input type="checkbox"/> Yes <input type="checkbox"/> No
4. Cause Relationships Identified	<input type="checkbox"/> Lines or circles are drawn (within or across categories) to indicate which causes may be related	<input type="checkbox"/> Yes <input type="checkbox"/> No
5. Most Probably, Actionable Cause Selected	<input type="checkbox"/> One or more “most probable cause” is identified <input type="checkbox"/> Cause is actionable by this team	<input type="checkbox"/> Yes <input type="checkbox"/> No
6. Additional Data and Sources Identified	<input type="checkbox"/> Data to be collected that can validate the cause assumptions is listed <input type="checkbox"/> Sources of listed data are identified	<input type="checkbox"/> Yes <input type="checkbox"/> No

Use this checklist for the Affinity Diagram.

Evidence	Criteria	Proficient? Give Feedback.
1. A written Problem Statement	<input type="checkbox"/> Written in two sentences or less	<input type="checkbox"/> Yes
	<input type="checkbox"/> Defines the gap in performance or the symptoms	<input type="checkbox"/> No
	<input type="checkbox"/> Does not list the causes or drivers of the problem	
2. List of Causes	<input type="checkbox"/> Causes listed on individual pieces of paper	<input type="checkbox"/> Yes <input type="checkbox"/> No
	<input type="checkbox"/> Causes point to processes and systems, not blame or excuses	
3. Categories Identified	<input type="checkbox"/> Causes grouped into categories showing relationships	<input type="checkbox"/> Yes <input type="checkbox"/> No
	<input type="checkbox"/> Title of category is listed above its grouping of causes	
4. Relationships Identified	<input type="checkbox"/> Arrows are drawn between causes and categories to indicate links	<input type="checkbox"/> Yes <input type="checkbox"/> No
	<input type="checkbox"/> Arrows show contributing causes (arrow leaving) and causes impacted (arrows entering)	
5. Key Causes Identified	<input type="checkbox"/> 1 – 3 primary drivers are selected for further study	<input type="checkbox"/> Yes <input type="checkbox"/> No
	<input type="checkbox"/> Drivers selected are those that have the most arrows leaving them	
6. Additional Data to be collected Identified	<input type="checkbox"/> Data to be collected for further research of causes is listed	<input type="checkbox"/> Yes <input type="checkbox"/> No
	<input type="checkbox"/> Source(s) of data are included	

Final Assessment Feedback Form (page 1 of 2)

Performer's Name: _____

Performance Coach's Name: _____

Date of Performance: _____

*Use the rubric below to rate **only** the cross-cutting leadership skills on this page (including write-ins). Enter this performance into your portfolio when **all** Performance Checklist (previous form) items are marked Yes and **all** Feedback Form (this form) items are marked 3 or 4 (or Not Applicable).*

Performance Levels			
1	2	3	4
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Eligible for Portfolio

How effective was the performer in these Cross-Cutting Skills?		Rating				
1.	Facilitating group interaction and managing participation	1	2	3	4	n/a
2.	Assisting the group to meet task criteria	1	2	3	4	n/a
3.	Modeling appropriate leadership behaviors	1	2	3	4	n/a
4.	Teaching others how to perform the tasks	1	2	3	4	n/a
5.	Presenting information clearly and concisely	1	2	3	4	n/a
6.	Leveraging technology to increase effectiveness	1	2	3	4	n/a
7.	Motivating others to achieve success	1	2	3	4	n/a
8.	Using group processes to achieve desired results	1	2	3	4	n/a
9.	Other:	1	2	3	4	n/a

Turn the page to provide additional written feedback (required).

Final Assessment Feedback Form (page 1 of 2)

Performer's Name: _____

Performance Coach's Name: _____

Date of Performance: _____

If any element was rated less than 3, what needs to be done to score a 3? To score a 4?

What greatest strengths did the leader exhibit through this performance?

What could be done to improve this leader's performance? Include any criteria on the Performance Checklist that were missed. Be specific.

Were there any significant issues that must be rectified (by additional practice and assessment) before entering this evidence into the Portfolio?

Appendix A: Five Whys Analysis

Problem Statement:	

Why is this occurring?	

Why is this occurring?	

Why is this occurring?	

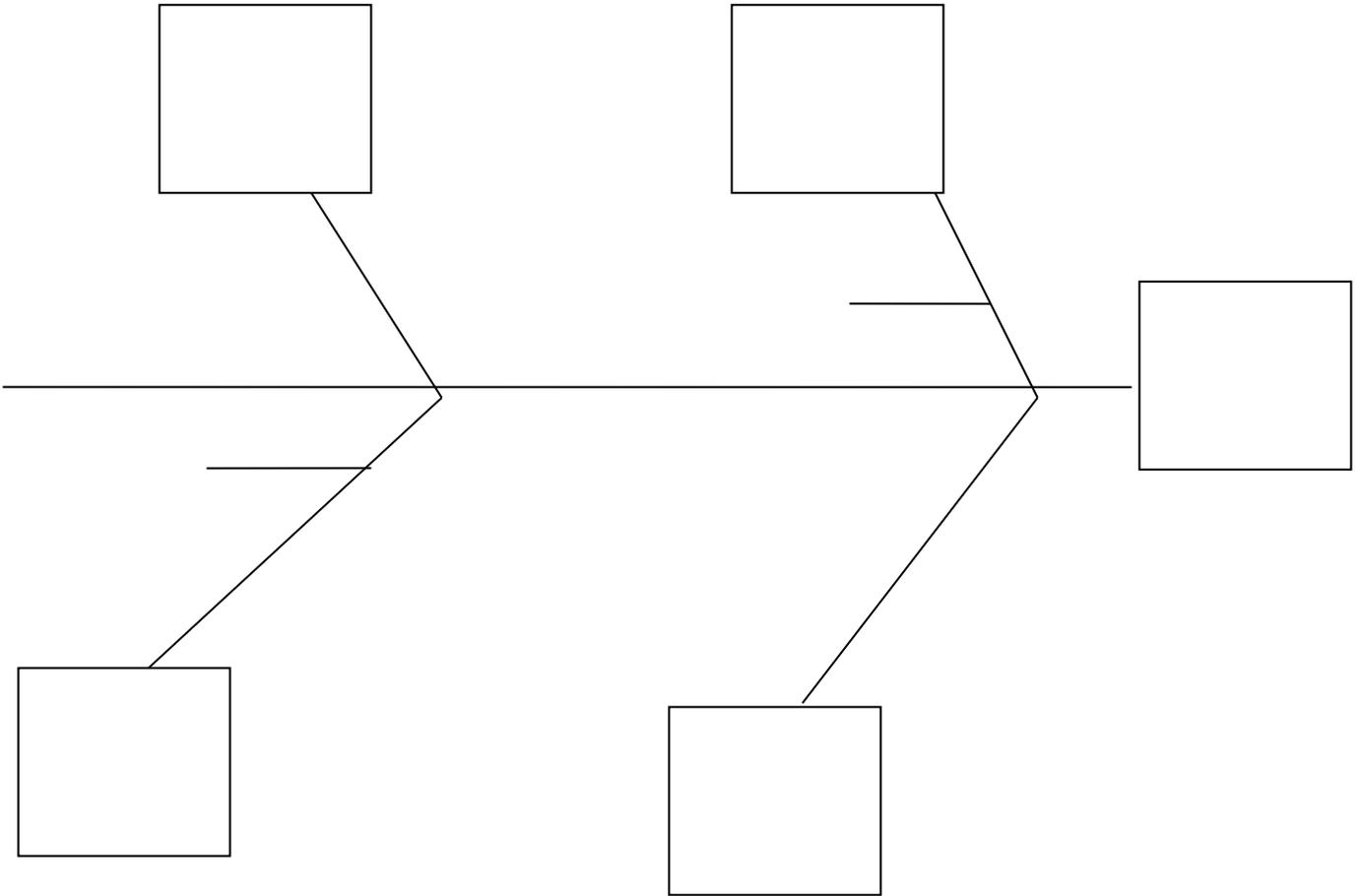
Why is this occurring?	

Why is this occurring?	

Actionable Cause:	

Additional Data Needed	Source?

Appendix B: Fishbone Diagram



Most Probable Cause:	

Additional Data Needed to Validate	Source?

Appendix C: Affinity Diagram

Problem Statement:	
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Category 1:	Category 2:	Category 3:	Category 4:

1-3 Probable Drivers:	
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Additional Research / Data Needed	Source(s)?

Recommended Reading and Resources

Bernhardt, V. (1998). *Data Analysis for Comprehensive Schoolwide Improvement*. Larchmont, NY: Eye on Education.

Change, R. & Dalziel, D. (1999). *Continuous Improvement Tools in Education*. Houston, TX: American Productivity and Quality Center.

Conzemius, A. & O'Neill, J. (2002). *SMART School Teams*. Bloomington, IN: National Educational Service (NES).

Goal/QPC. (1992). *The Memory Jogger for Education*. Salem, NH: Goal/QPC.

Acknowledgments

JoAnn Brown	Program Director, Rising Stars, Georgia Leadership Institute for School Improvement
Dr. Gale Hulme	Executive Director, Georgia Leadership Institute for School Improvement
Pam Henderson	Operations Manager, Georgia Leadership Institute for School Improvement
Drake Highlander	Lead Instructional Design Contractor, Georgia's Leadership Institute for School Improvement