Root Cause Analysis Toolkit

Root Cause Analysis Tools

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Data Narrative Outline

Data Narrative Elements	
Description of School and Process for Data Analysis: • A brief description of the school to set the context. • The general process for developing the UIP. • A description of who participated in the analysis of the school's performance data.	
Review of Current Performance: • The school accountability status (plan type assignment). • Indicators and sub-indicators where school performance did not meet state and federal expectations. • Indicators and sub-indicators where school performance did not meet local expectations.	

Data Narrative Elements

Review of Current Performance (continued)

- **The magnitude of school performance challenges over-all.**

- **Reflection on how current performance compares to the targets established in the prior year's plan and why (also captured in the Progress Monitoring of Prior Year's Performance Targets worksheet).**

Data Narrative Elements

Trend Analysis:

- **Description of the data that was considered (including local data sources, metrics and measures) in identifying performance trends.**

- **Notable performance trends (also captured in the Data Analysis Worksheet).**

- **How the team determined which trends were notable (e.g. To what were each of the trends in school performance compared?).**

Data Narrative Elements

Priority Performance Challenges:

- **The process that was used to prioritize the performance challenges.**

- **The performance challenges that are the highest priority to address immediately.**

- **For each priority, what makes it important to address immediately.**

Data Narrative Elements

Root Cause Analysis:

- **Root cause(s) associated with each priority performance challenge (also captured in the Data Analysis Worksheet).**

- **How the root causes were identified.**

- **The additional data that was reviewed to validate the root causes.**

Planning for Root Cause Analysis and Finalizing the Data Narrative

Root Causes Analysis

Tasks	Current Status	Who/When	Materials/Tools
Develop planning team background regarding Root Cause Analysis.			
Inventory data (other than performance data) to be used as part of root cause analysis.			
Determine what data will be reviewed prior to or as part of root cause analysis.			
Determine what data are available to use in validating root causes.			
Consider external review results (if applicable).			

Tasks	Current Status	Who/When	Materials/Tools
Generate explanations (brainstorm), and categorize and summarize explanations.			
Narrow (eliminate explanations over which you have no control) and prioritize.			
Deepen thinking to get to root cause(s).			
Validate with other data.			
Capture root causes in the Data Analysis Worksheet and the Data Narrative.			
Describe (in writing) the process used to identify root causes, and how they were validated in the Data Narrative.			

Finalizing the Data Narrative

Tasks	Current Status	Who/When	How	Materials/Tools
Clarify critical elements of the data narrative (Data Narrative Outline).				
Collect notes about the data analysis processes (identifying notable trends, prioritizing performance challenges, identifying root causes).				
A small group (or individual) generates a draft of data narrative.				
Reach consensus among all planning participants that the narrative tells the "data story" for the school and meets state criteria.				
Revise data narrative as needed.				

Data Intersection Questions

What type of data would you need to gather to be able to answer these questions?

Demographics – Enrollment, Attendance, Drop-Out Rate, Ethnicity, Gender, Grade Level

Perceptions – Perceptions of Learning Environment, Values and Beliefs, Attitudes, Observations

Student Learning – Standardized Tests, Norm/Criterion-Referenced Tests, Teacher Observations of Abilities, Authentic Assessments

School Processes – Discipline Plan, District Curriculum, Student Services, G/T Plan, Observation and Monitoring of Classroom Practices

Guiding Questions	Data Section Type/Intersection of Types
Do students who participate in extra math help perform better than those who don't get the extra help?	
Do newly adopted district strategies to support English Learners correlate with improved instruction? Better outcomes for English learners?	

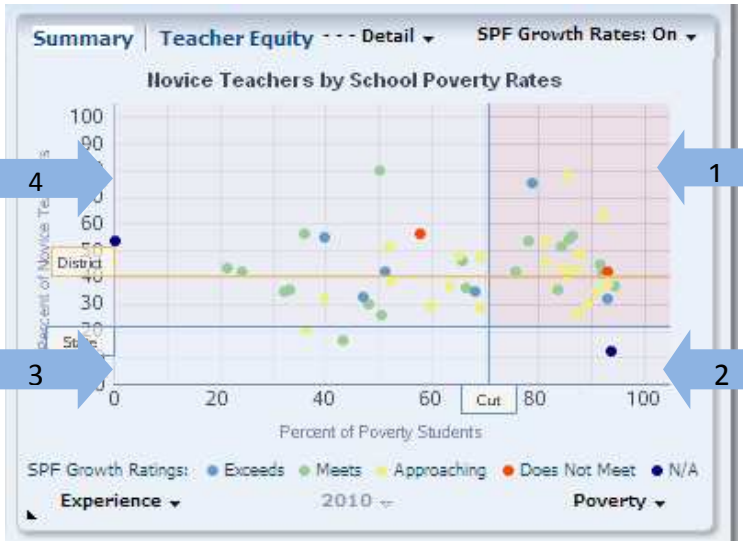
Interpreting Equitable Distribution of Teacher Data

Graphical Displays on www.schoolview.org

The graphic below applies a performance lens to the teacher equity data. This display quickly identifies schools with similar teacher and student demographics that may be achieving different results. It also allows trends across schools within the district to become apparent. When "Experience" is selected as the teacher equity measure, the schools in the upper right-hand quadrant should be looked at more closely. Schools within this area have a high percentage of novice teachers (y-axis) compared to the state mean (horizontal blue line) and are serving a high percentage of free and reduced lunch or minority students (depending on the x-axis that you select using the toggle at the bottom right-hand of the graph). The yellow and red dots within this area represent schools that are approaching (yellow) or not meeting (red) academic growth expectations as defined by the School Performance Framework. Next, look at the green and blue dots in the lower right-hand quadrant. These schools are meeting (green) or exceeding (light blue) growth expectations.

Schools within this quadrant have a **high** percentage of novice teachers and are serving a **lower** percentage of FRL students.

4



1

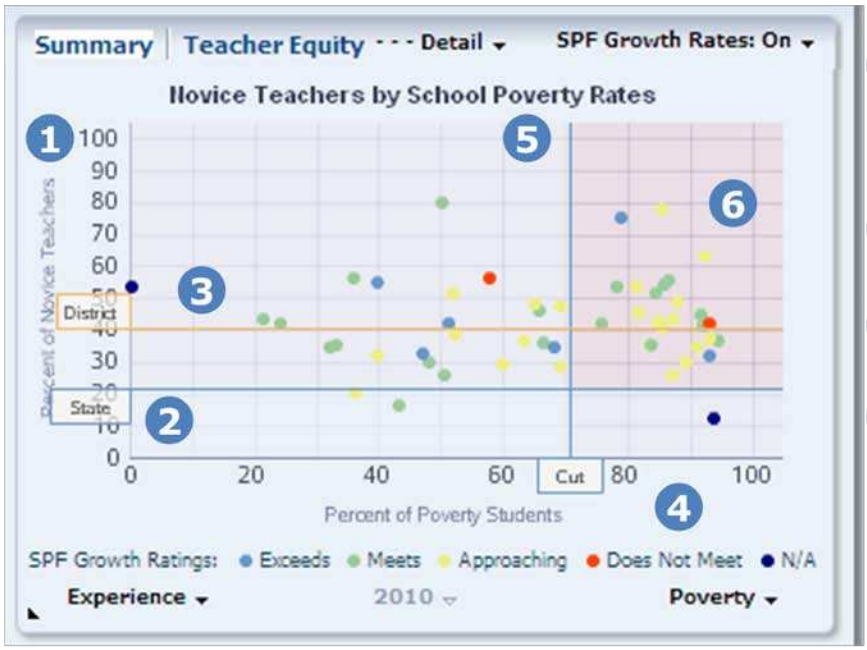
Schools within this quadrant have a **high** percentage of novice teachers and are serving a **high** percentage of FRL students. The graph focuses attention on this quadrant.

Schools within this quadrant have a **low** percentage of novice teachers and are serving a **lower** percentage of FRL students.

3

2

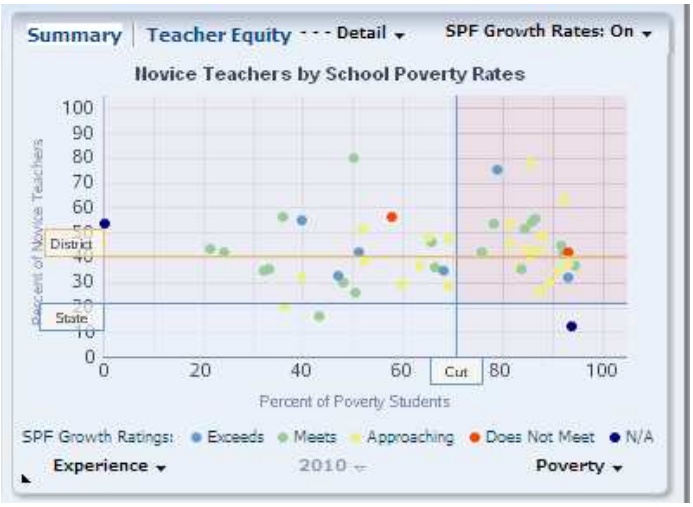
Schools within this quadrant have a **low** percentage of novice teachers and are serving a **high** percentage of FRL students.



1. The y-axis represents percentage of novice teachers, those less than three years of total teaching experience.
2. The horizontal blue line represents the state's mean percentage of notice teachers.
3. The red line represents the average percentage of novice teachers within your district.
4. The x-axis represents percentage of free and reduced lunch students, a proxy for poverty.
5. The vertical red line represents the top quartile for poverty for secondary schools.
6. The dots represent schools. The colors represent the overall growth rating on SPF.

Practice

Use the equitable teacher distribution graph below to answer the questions that follow:

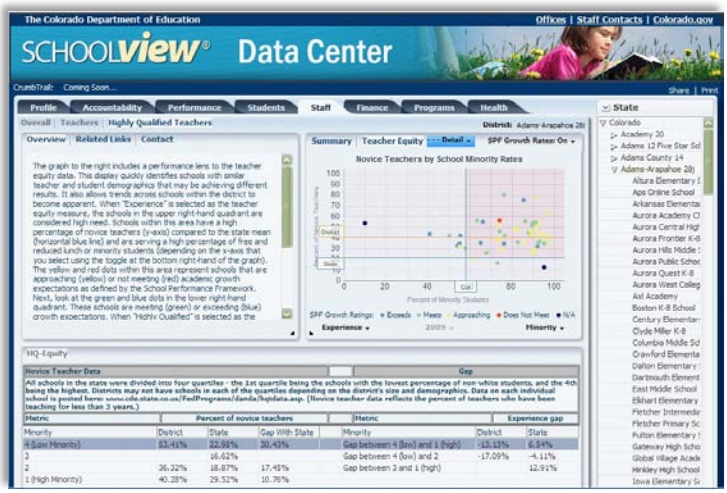


Question	Answer
1. How does the experience level of teachers within this district compare to the state overall?	
2. Are patterns evident in the relationship between the percent of novice teachers in the school and the poverty level of students in the school? Describe any patterns.	
3. Do any schools "jump out" at you because they are high performing? Describe teacher experience and student poverty at the high performing schools.	
4. Do any schools "jump out" at you because they are low performing? Describe teacher experience and student poverty at the low performing schools.	
5. Are patterns evident in the SPF growth ratings for the school and the experience level of the teachers? Between the SPF growth ratings for the school and the poverty level of students within the school? Describe any patterns.	
6. Are there any schools that you'd want to investigate further? Why?	

Interpreting Your Equitable Distribution of Teacher Data

Question	Answer
1. How does the experience level of teachers within this district compare to the state overall?	
2. Are patterns evident in the relationship between the percent of novice teachers in the school and the poverty level of students in the school? Describe any patterns.	
3. Do any schools "jump out" at you because they are high performing? Describe teacher experience and student poverty at the high performing schools.	
4. Do any schools "jump out" at you because they are low performing? Describe teacher experience and student poverty at the low performing schools.	
5. Are patterns evident between the SPF growth ratings for the school and the experience level of the teachers? Between the SPF growth ratings for the school and the poverty level of students within the school? Describe any patterns.	
6. Are there any schools that you'd want to investigate further? Why?	

Accessing Equitable Distribution of Teacher Data on Schoolview.org



Directions on how to access the data:

(1) Go to http://www.schoolview.org/performance.asp.
(2) Click on "SchoolView Data Center" and then select your district from the right hand navigation.
(3) Click on the "Staff" tab, and then select the "Teacher Equity" sub-tab. This will provide you will the summary level data.
(4) To select the detail level, click on the drop down next to "Summary" and you will get the "Detail" level option.

Purpose:

- Help districts and schools look at their human capital assets across schools and even statewide.
- Meet the "Equitable Distribution of Teachers" requirements in ESEA. Districts must consider the distribution of teachers by examining teacher qualifications and experience with school attributes (including student poverty and minority %s).
- CDE has added the growth ratings from the School Performance Frameworks for additional context. Pay particular attention to the top right hand quadrant in the graph. This is where schools that are not making adequate growth AND that have a higher percentage of inexperienced teachers are located.
- The intent is NOT to require districts to remove teachers, but to ask questions and dig deeper. Notice the questions in the top left hand corner of the screen.
- This data is available publicly for all districts.

Support:

- Contact Lisa Medler (medler_l@cde.state.co.us) with additional questions.

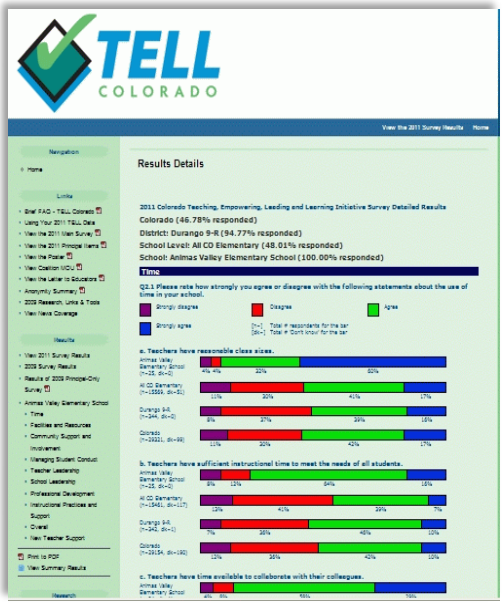
Accessing TELL Colorado Survey Data

Directions: Go to www.tellcolorado.org

Description: Biennial statewide survey of school-based staff (teachers and leadership) on their perceptions of the teaching and learning conditions in their schools. Participation is voluntary and anonymous. Districts and schools that get at least 50% participation have access to their own data. The survey was recently completed in Jan/Feb 2011; that data is now publicly available through the website.

Purpose:

- Provide schools, districts and state policymakers with data on teaching and learning conditions.
- The intent is to provide additional data to support school improvement efforts and inform state level education policy. It provides additional information for discussion and gives potential suggestions on areas that deserve attention in a school environment.
- The data is NOT intended to negatively sanction or criticize individuals.
- Questions focus on: time, facilities and resources, community support and involvement, managing student conduct, teacher leadership, school leadership, professional development, instructional practices and support, future employment plans, new teacher support and district support for school leadership.



Support:

- A facilitator's guide is available to help schools unpack their own data.
- Schools and districts that have access to their own data can download reports (see figure) and spreadsheets.
- Contact Lisa Medler (medler_l@cde.state.co.us) with additional questions.

TEACHING FOR LEARNING

Standard 1: Standards and Instructional Planning. The school implements a curriculum that is aligned to Colorado Academic Standards and ensures rigorous, effective instructional planning.

Indicator 1.a. Standards-Based Focus. Teachers plan instruction based on the district's curriculum aligned with Colorado Academic Standards and grade-level expectations.	2.00
Indicator 1.b. Guaranteed and Viable Curriculum. Teachers consistently plan instruction to ensure a guaranteed and viable curriculum is provided.	1.86
Indicator 1.c. Instructional Planning. Instructional planning is frequently collaborative and leads to instruction that is coherent and focused on student learning.	1.89

Standard 2: Best First Instruction. Instructional staff members provide aligned, integrated, and research-based instruction that engages students cognitively and ensures that students learn to mastery.

Indicator 2.a. Standards-Based Instruction. Instructional staff consistently implements standards-based instructional practices.	1.67
Indicator 2.b. Instructional Context. Instructional practices and resources are in place to facilitate and support effective teaching and learning.	2.00
Indicator 2.c. Instructional Practices. Teachers consistently use instructional strategies informed by current research to raise student achievement and close achievement gaps.	1.50
Indicator 2.d. Meeting Individual Needs. Instructional staff uses developmentally, culturally, and linguistically appropriate instructional strategies to meet the diverse needs of all students.	1.60
Indicator 2.e. Students as Learners. Teachers empower students to share responsibility for, and be actively engaged in, their learning.	1.38

Standard 3: Assessment of & for Learning. The school uses multiple measures and assessment strategies to continuously inform instruction to meet student needs, measure student progress toward and mastery of grade-level expectations, and improve instruction.

Indicator 3.a. Use of Assessment and Data. Teachers use multiple sources of data and consistent, high quality assessment practices to guide school, department, grade-level, and classroom decisions.	1.62
Indicator 3.b. Assessment for Learning. Formal and informal assessment data are analyzed during the learning process to modify instructional strategies or content to meet the needs of learners.	1.80
Indicator 3.c. Assessment of Learning. School leadership and instructional staff use multiple sources of summative assessment data to evaluate student learning and instructional effectiveness.	1.50

Standard 4: Tiered Support. The school implements a comprehensive system of tiered academic and behavioral support to enable students to master grade-level expectations.

Indicator 4.a. System of Tiered Supports. The school implements a system of tiered support within the rigorous, standards-based system of teaching and learning.	1.60
Indicator 4.b. Multiple Learning Opportunities. Students who do not learn effectively through best first instruction are provided multiple opportunities to learn, first within their classroom, grade-level team, and/or department, and then beyond the classroom.	2.00
Indicator 4.c. Family and Community Partnerships. The school develops and sustains family and community partnerships to share responsibility for student success.	2.75

ORGANIZING FOR RESULTS

Standard 5: Leadership. School leadership ensures the school functions as a learning organization focused on shared responsibility for student success and a rigorous cycle of teaching and learning.

Indicator 5.a. Expectations for Excellence. School leadership holds and communicates explicit high expectations for the performance of students and adults.	2.00
Indicator 5.b. Instructional Leadership. School leadership focuses on improving and supporting effective teaching and learning.	2.00
Indicator 5.c. School Efficiency and Effectiveness. School administrators develop and align systems, processes, and resources to establish and sustain an effective teaching and learning environment.	2.00
Indicator 5.d. Capacity Building. School leadership continually builds school capacity to impact student and staff success.	2.14
Indicator 5.e. Knowledge and Skills. School leadership demonstrates knowledge and skills in the areas of academic performance, learning environment, and organizational effectiveness.	1.50

Standard 6: Culture and Climate. The school functions as an effective learning community and supports a climate conducive to performance excellence for students and staff.

Indicator 6.a. Academic Expectations. School leadership and staff demonstrate the belief that all students can learn at high levels.	1.14
Indicator 6.b Inclusive Learning Environment. Support for the physical, cultural, and socio-economic needs of all students reflects a commitment to equity and an appreciation of diversity.	2.00
Indicator 6.c. Safe and Orderly Environment. The physical condition of the school and a school-wide understanding of behavioral expectations ensure students and staff experience a safe, orderly, and supportive environment.	2.71
Indicator 6.d. Trust and Respect. The school demonstrates an inclusive culture of mutual trust, respect, and positive attitudes that supports the personal growth of students and adults.	2.14

Standard 7: Effective Educator. School leadership actively develops a high quality professional staff through professional learning, supervision, evaluation, and commitment to continuous improvement.

Indicator 7.a. High Quality Staff. The school implements processes that support recruitment and retention of high quality professional staff.	2.25
Indicator 7.b. Supervision and Evaluation. The school implements supervision and evaluation processes designed to improve professional practice, instruction, and student success.	2.25
Indicator 7.c. Professional Learning. Instructional staff members and school leadership participate in continuous, high-quality, research-informed professional learning.	2.33
Indicator 7.d. Impact of Professional Learning. Professional learning is monitored and evaluated to ensure it supports the work of the school and improves teacher effectiveness.	2.00

Standard 8: Continuous Improvement. The school implements a mission-driven cycle of continuous improvement that optimizes learning and ensures organizational effectiveness.

Indicator 8.a. School Mission and Goals. The school's vision, mission and goals are meaningful, clearly communicated, and used to provide a sense of purpose, direction, and identity for the school community.	3.00
Indicator 8.b. Cycle of Continuous Improvement. The school engages in a sustained cycle of continuous improvement focused on student achievement.	1.20
Indicator 8.c. Improvement Planning. School leadership and staff use an inclusive, thoughtful, and thorough process to write, implement, monitor, evaluate, and adjust the school's Unified Improvement Plan (UIP).	1.17

Resources available from CDE to support Root Cause Analysis

Tool	Description
English Language Learners Walk Through and Program Review Tool	The Office of Language, Culture and Equity charged a task force to develop a tool for schools, districts and other agencies to address equitable access to instruction for all English learners. It is recommended that the Walk Through and Program Review Tool be used in a collaborative fashion involving classroom teachers, school and district leaders, and Colorado Department of Education leaders.
Positive Behavior Implementation Support Framework	The PBIS framework relies on data to make effective and efficient determinations of the quality of implementation. The Benchmarks of Quality (BoQ) and Schoolwide Evaluation Tool (SET) are utilized to monitor fidelity of universal school-wide PBIS implementation. Additional tools are also available to monitor more targeted and intensive level support systems. The PBIS framework also provides training and support on utilization of a problem solving process to support intervention planning for students.
Policies and Practices Related to Student Failure and Dropping Out: Tools and Resources	The format of the inventory identifies a policy or practice, the potential negative effect on students, and possible alternatives to the policy or practice. It allows the user to identify whether or not the policy or practice is a perceived problem and what action should be taken locally. Local administrators and school board members are encouraged to use this inventory to gain information to help design local plans for at-risk student services.
RtI Implementation Rubrics	The RtI Implementation Rubrics are designed to assist districts, schools, and educators with the implementation of RtI. The tools provide the means to reflect on policies and practices from the classroom level, to the school district, and state level in order to continually improve outcomes for students. These tools are intended to be used statewide and provide needed support in a continuous improvement cycle. The rubrics can also assist districts in their work toward accomplishing their goal of systemic change for increased student achievement.
Self-Assessment for Building a Healthy Human Capital System in Schools and Districts	This instrument is designed for districts and schools to identify their readiness stage related to building a healthy human capital system and develop strategies to address needs, or refine best practices.
TELL Colorado	The Teaching, Empowering, Leading and Learning (TELL) Colorado Survey is an online, anonymous survey of all licensed public school educators in Colorado's public schools, designed to garner Colorado's public school educators' perception of their school environments. TELL Colorado was administered Jan. 31-Feb. 28, 2011. The survey will be administered again in 2013.

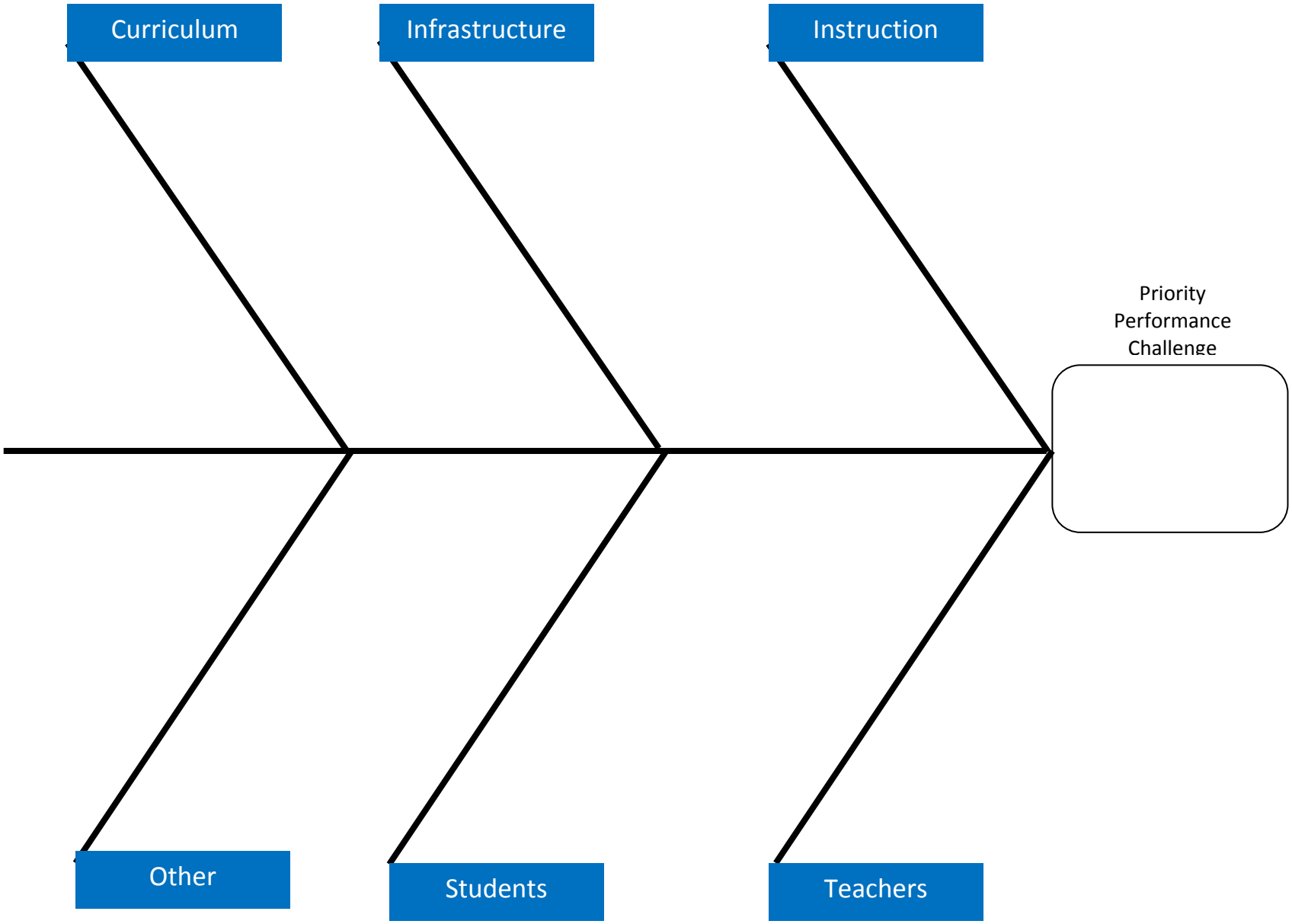
Inventory of Data Sources other than Student Performance Data

MEASURE/ REPORT(S)	REPORTS/ DATA VIEWS	Admin-istration LEVEL(S)	WHEN AVAILABLE	SUBJECT	FOCUS	METRICS	QUESTIONS

Inventory of Data Sources other than Student Performance Data

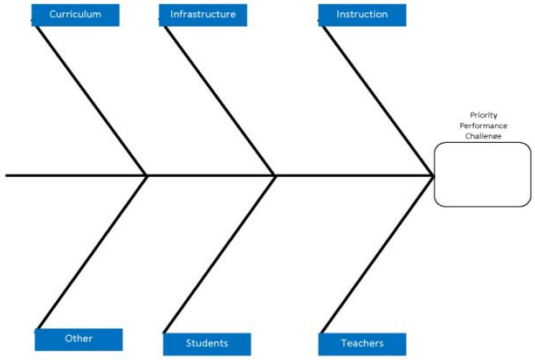
LEGEND

MEASURE	Name of instrument used to collect the data (e.g. student safety survey, classroom walkthroughs, etc.)
REPORTS/ VIEWS	List of data views or reports that are available
Admin LEVEL(S)	Level at which the measure is administered (district, school, classroom)
WHEN AVAILABLE	When (what date or dates) will the data be available
SUBJECT	Description of who the data is being collected from and/or about (e.g. 6th grade classrooms, students on IEPs, all math teachers, 3rd grade parents, etc.)
FOCUS	What is the focus -- what is being measured?
METRICS	The statistics that will be reported (satisfaction level, frequency, etc.)
QUESTIONS	What questions this data will help team members to answer (e.g. To what degree has the intervention been implemented)


Curriculum
Infrastructure
Instruction
Priority
Performance
Challenge
Other
Students
Teachers

Using a Tree Diagram to Brainstorm within Categories

Purpose: A tree diagram can be used to structure the thinking of a group when they want to brainstorm within pre-defined categories. Within the context of Unified Improvement Planning, this strategy can structure team brainstorming about explanations for their priority performance challenges.



Materials: Large paper, flip chart page, or dry erase board; markers, pens, and sticky notes.

Steps:

1. Clarify the question that will focus the brainstorming activity

The question that will focus brainstorming activity when using this strategy to brainstorm explanations for priority performance challenges should be some variation of: Why do we have the performance challenges we have identified as a priority? What adult actions help to explain this pattern of performance?

2. Identify the pre-defined categories the team will use

Several different options are available to use as the "pre-defined" categories within which to brainstorm causes of school or district performance challenges. These include:

- Levels of Root Causes (Preuss, 2003)
- Marzano Factors (various Marzano publications)
- Causal Theories (Wellman & Lipton, 2012)

Teams can select from these options, or come up with their own categories.

3. Set up the "Tree Diagram"

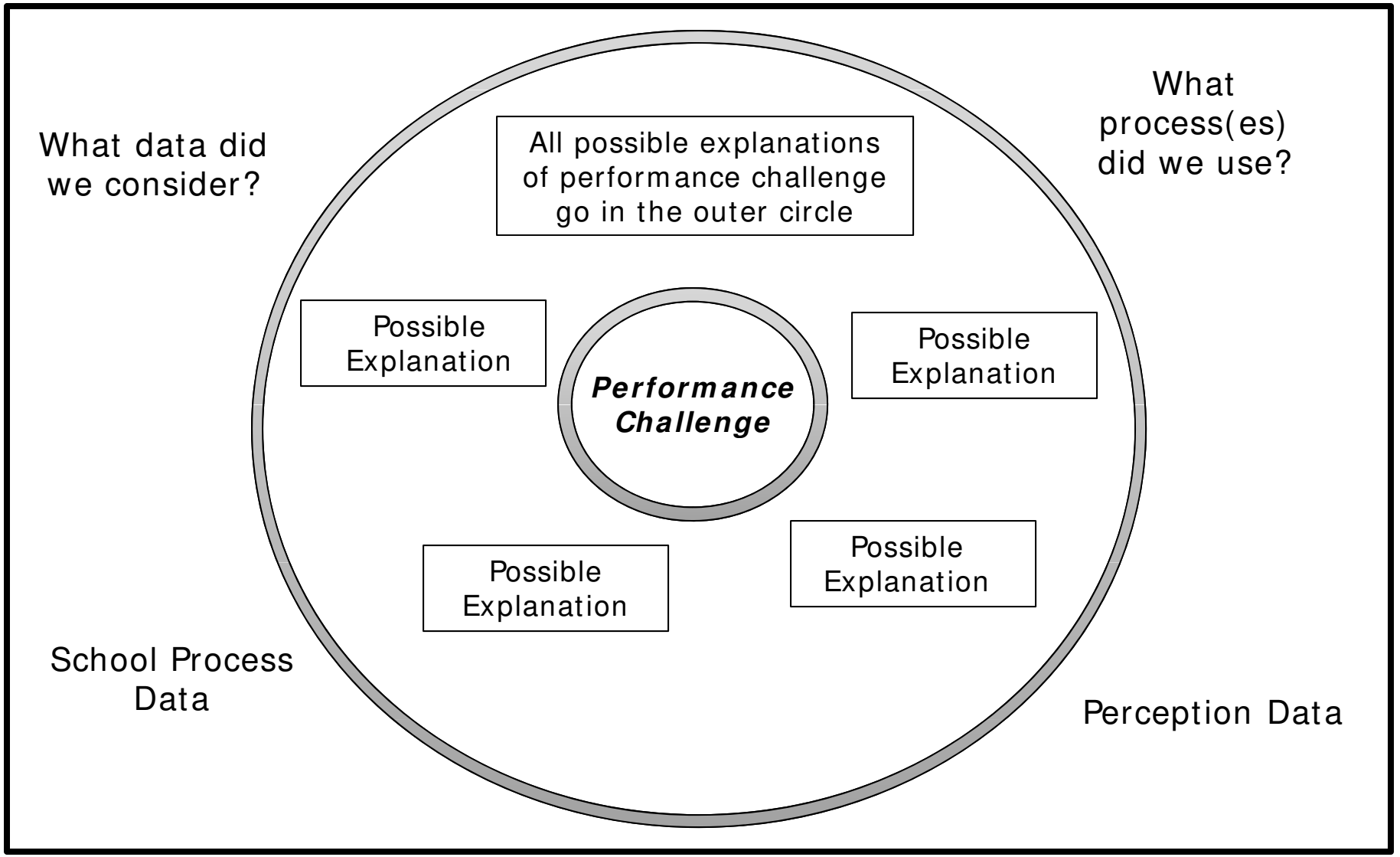
Once categories have been determined, the team can develop the Tree Diagram that they will use to brainstorm. This can be drawn on a large sheet of paper, dry erase board, flip chart page, etc. See example on this page. Each pre-defined category should be added to a branch of the tree diagram. One branch should be reserved for "other".

4. Brainstorm within categories

Each team member independently captures their ideas on sticky notes (one idea per sticky note) then posts them on the "branch" of the tree where he/she believes they belong.

5. Summarize within categories

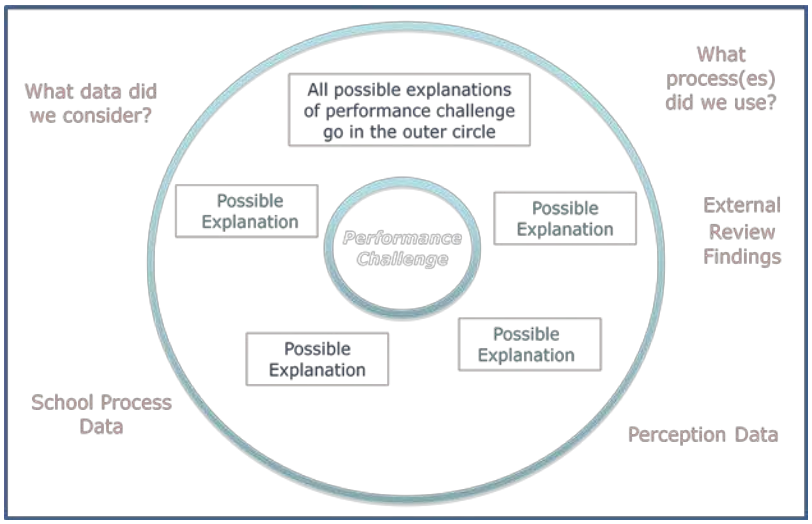
After each team member has placed their ideas within the categories, then the group should create a short description summarizing the explanations for each category.



Circle map used with permission from Thinking Maps, Inc. Specific training required before implementing Thinking Maps. For more information, visit www.thinkingmaps.com.

Using a Circle Map to Brainstorm and then Categorize

Purpose: A circle map diagram can be used to structure the thinking of a group when they want to brainstorm and then group their ideas into categories. Within the context of Unified Improvement Planning, this strategy can structure team brainstorming about explanations for their priority performance challenges.



Materials: Large paper, flip chart page, or dry erase board; markers, pens, and sticky notes.

Steps:

1. Clarify what will focus the brainstorming activity

When using this strategy to brainstorm explanations for priority performance challenges, the priority performance challenge will focus the brainstorming activity.

2. Set up the "Circle Map"

The Circle Map includes three elements – a large circle, a smaller circle within that circle, and a frame (drawn around the outside of both circles). See example on this page. This can be drawn on a large sheet of paper, dry erase board, flip chart page, etc. Once these elements have been drawn, the priority performance challenge that is the focus of the brainstorming activity should be written in the center of the smaller circle.

3. Create a Frame

Identify what will "frame" the brainstorming. What additional data has the group reviewed (e.g. school process data, perception data)? Write these inside the frame and outside the large circle.

4. Focused Brainstorming

Around the center circle, team members will brainstorm all of the possible causes of that performance challenge. Using sticky notes, team members will list (one per note) possible causes of the priority performance challenge. During this process, it will be important to ensure every idea is captured and all "voices" are in the conversation. At this stage more is better. Then team members should post their sticky notes on the circle map (inside the outer circle, but outside the inner circle).

5. Categorize and Summarize

Next, the team will consider the causes that were identified and sort ideas into natural themes by asking: what ideas are similar? Is this idea connected to any other? To do this, team members will work in silence with each person moving sticky notes around to create groupings. Team members should keep moving notes until a consensus is reached. Then the group will discuss the groupings:

- If some ideas don't fit into any theme, leave as a stand-alone idea.
- If some fit more than one, create a copy and put in both groups.

Finally, the team should create a short 3-5 word description for each grouping.

Research-Based Factors that influence Student Performance

(from various books by Robert Marzano)

School Factors

- Guaranteed and Viable Curriculum
- Challenging Goals and Effective Feedback
- Parent and Community Involvement
- Safe and Orderly Environment
- Collegiality and Professionalism

Teacher Factors

Instructional Strategies

(Based on: The Art and Science of Teaching; Classroom Instruction That Works; Classroom Instruction That Works with English Language Learners; Classroom Instruction That Works with Technology; Building Academic Background Knowledge with Wide Area Reading and Vocabulary Instruction)

- Identifying Similarities and Differences
- Summarizing and Note Taking
- Reinforcing Effort and Providing Recognition
- Homework and Practice
- Nonlinguistic Representations
- Cooperative Learning
- Setting Objectives and Providing Feedback
- Generating and Testing Hypotheses
- Cues, Questions, and Advance Organizers

Classroom Management Strategies

(Based on: The Art and Science of Teaching; Classroom Management That Works)

- Establishing and Enforcing Rules and Procedures
- Carrying out disciplinary actions
- Maintaining effective teacher and student relationships
- Maintaining an appropriate mental set for management

Classroom Curriculum Design

- Identify specific types of knowledge required
- Structure tasks to facilitate construction of meaning
- Plan multiple exposure to and complex interactions with knowledge

Criteria for Narrowing Explanations

After your planning team has generated explanations of the performance data, and before you begin planning next steps, it's a good idea to check your thinking again. Below are indicators and critical questions to help you get to the best possible explanations.

Step 1: Eliminate explanations that are not within our control

First, your team needs to eliminate explanations that do not lie within the control of the school/district and put these explanations aside. The following questions could help with this process.

- ✓ Over what do we believe we have control (e.g., students completing homework, parents supporting their students, etc,)?
- ✓ What factors are beyond our influence?
- ✓ Would others agree? Are we thinking too broadly, too narrowly, or accurately?

Step 2: Evaluate the quality of your explanations (reach consensus on which ones to keep)

The following criteria can be applied by your team to evaluate the current list of explanations and to whittle your list down to the "best" thinking available across the team. Use the questions below each criteria to help check the thinking of your team. Eliminate explanations that fail to meet these criteria.

Criteria: The explanation derives logically from the data

- ✓ Can we articulate the connection(s) we see between the data and our explanation(s)?
- ✓ Does our explanation reflect a genuine situation, but one that is not related to this data?
- ✓ Can we tell the story of how our explanation could lead to the patterns we see in our data?

Criteria: The explanation is specific enough to be testable

- ✓ Is the language specific enough to be clear to someone who was not part of our discussion?
- ✓ Are there any vague terms?
- ✓ Can we describe how we would test the explanation?

Criteria: The explanation is plausible

- ✓ Does any research support this thinking?
- ✓ If we base any planning steps on this explanation, do we anticipate meaningful results?

Step 3: Clarify the language used in your explanations

Consider the following questions to clarify remaining explanations.

- ✓ Do our explanations make sense to someone else reading or hearing them for the first time?
- ✓ Is our explanation complex enough to help us to better understand a complex situation?
- ✓ What other questions do our explanations lead us to in order to make the picture more complete?
- ✓ Does this explanation identify an area of concern?

The Five Whys: Root Cause Identification

For each explanation, ask the question "Why?" and answer, "Because ____." Repeat this five times, asking why of whatever the "because" answer is. Stop asking "Why?" when you reach consensus on the root cause of the issue.

Explanation

_____ _____

_____ _____

_____ _____

1. Why?

Because:

2. Why?

Because:

3. Why?

Because:

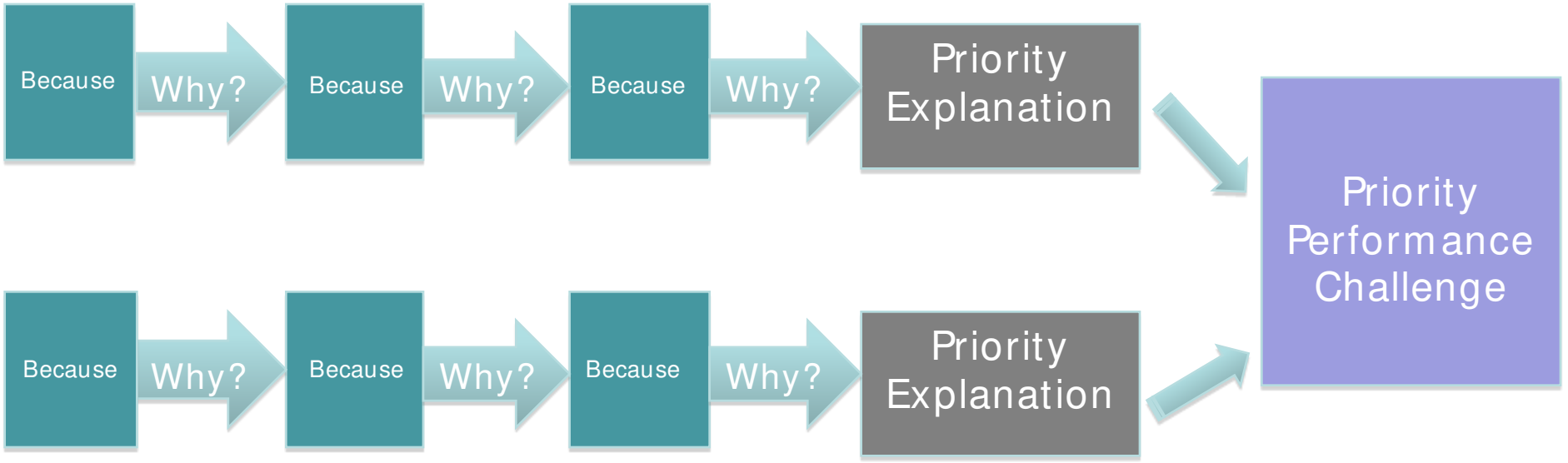
4. Why?

Because:

5. Why?

Because:

Getting to Root Cause



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Validate Root Causes

Performance Challenge: _____

Possible Root Cause(s)	Questions to Explore	Data Sources 	Validation

Worksheet #2: Data Analysis

Directions: This chart supports planning teams in recording and organizing observations about school-level data in preparation for writing the required data narrative. Planning teams should describe positive and negative trends for all of the four performance indicators using at least three years of data and then prioritize the performance challenges (based on notable trends) that the school will focus its efforts on improving. The root cause analysis and improvement planning efforts in the remainder of the plan should be aimed at addressing the identified priority performance challenge(s). A limited number of priority performance challenges is recommended (no more than 3-5); a performance challenge may apply to multiple performance indicators. At a minimum, priority performance challenges must be identified in any of the four performance indicator areas where minimum state and federal expectations were not met for accountability purposes. Furthermore, schools are encouraged to consider observations recorded in the "last year's targets" worksheet. Finally, provide a brief description of the root cause analysis for any priority performance challenges. Root causes may apply to multiple priority performance challenges. You may add rows, as needed.

Performance Indicators	Description of Notable Trends (3 years of past state and local data)	Priority Performance Challenges	Root Causes
Academic Achievement (Status)			

Performance Indicators	Description of Notable Trends (3 years of past state and local data)	Priority Performance Challenges	Root Causes
Academic Growth			

Performance Indicators	Description of Notable Trends (3 years of past state and local data)	Priority Performance Challenges	Root Causes
Academic Growth Gaps			
Post Secondary & Workforce Readiness			