

A Guide for Implementing a Learning Team Framework and Using a Six-Step Process to Address School Improvement Challenges

Introduction

This guide provides information on the purpose and function of the learning team framework and the six-step process to address school improvement challenges. It is important to note that the exact structure of this framework will have to be adapted to fit the needs of individual schools; however, this guide provides a general framework along with the purpose and function of the framework.

Purpose

The learning team framework and six-step process help schools take ownership of the school improvement process, as they are responsible for identifying and addressing school improvement challenges. They are leading the school improvement process; the process is not being done to them.

This process engages all faculty and staff in continuous improvement by placing them in learning teams. Each learning team will use the six-step process to address challenges specific to their classroom and the entire school.

This process creates a continuous improvement culture. Because schools own the problem and all faculty are involved in the process, it sets the stage for developing a culture of continuous improvement. By involving the entire school, this process embeds a structure for continuous improvement that can sustain faculty and staff turnover and changes in leadership.

This process makes professional development an ongoing process and not a one-time event. Professional development needs are identified in direct relation to the challenges the school is addressing. PD is provided continuously as needed and is implemented immediately. The process also makes professional development immediately relevant by supporting “just in time” delivery.

The process gives schools a structure for identifying, addressing and evaluating school improvement challenges. It can be overwhelming to identify challenges and take action to address them. The learning team framework provides a structure for doing the work, and the six-step process provides a step-by-step process to really think through challenges, address them, evaluate the results and make modifications to keep improving.

Finally, the process integrates the delivery of teacher development, principal development, school coaching, teacher-leaders and district support into a set of services designed to change school and classroom practices.

Key Features

- Data are used to inform the entire process, from identifying the problem and its root causes to selecting strategies and evaluating results.
- The process is used to set both performance and process goals. Performance goals are related to changes in student achievement. Process goals are related to changes in school and classroom practices.
- Both outcomes and implementation are evaluated, enabling schools to distinguish between strategies that are not working because they are not the right strategies and strategies that are not working because they were not implemented well.
- The cyclical process allows for refinement. Instead of implementing a strategy, deciding it did not work, and moving on to another strategy, schools are able to determine why a strategy is not working and make adjustments in order to meet their goals.
- The process can be used for all challenges — large and small. For example, the process can be used to address major challenges such as low graduation rates, which may require implementation of early warning identification and intervention systems, more rigorous curricula, and ninth-grade academies. It can also be used to address smaller challenges such as mathematics students struggling with a particular concept or career/technical students struggling to read technical materials.

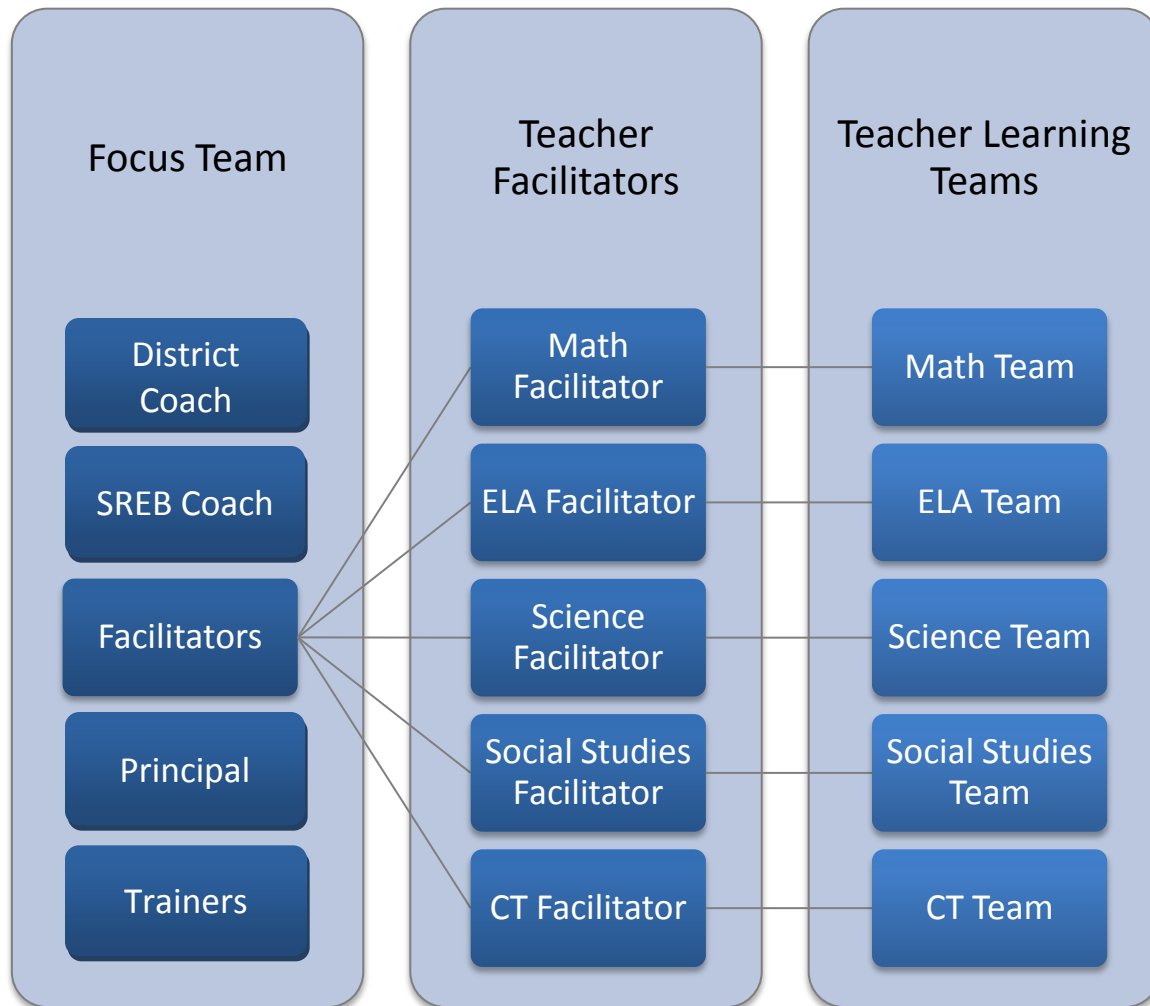
Learning Team Framework

A learning team framework organizes the entire faculty into teams through which they engage in continuous improvement. Teacher learning teams can be organized in many ways — content area teams, grade level teams, interdisciplinary teams, etc. The teacher learning teams use the six-step process, led by a teacher facilitator, to identify, address and evaluate problems related to their area.

Each teacher learning team is led by a teacher facilitator. The teacher facilitator guides the teacher learning team through the six-step process. The teacher facilitators for each learning team also meet and comprise a teacher facilitator team. They work together to improve their facilitation of the six-step process and to address collaboratively issues they may be having with their learning teams' progress.

The teacher facilitators are also members of the focus team, which is comprised of the facilitators, the principal, a district coach, an SREB coach and trainers. The focus team is responsible for overseeing the learning team system and using the six-step process to develop improvement plans. As a result, the learning team framework can be the vehicle of implementation. The members of the focus team assist teacher facilitators with their work, conduct classroom observations with feedback and may attend teacher learning team meeting to assist with the process.

Learning Team Framework



Six-Step Process

Addressing school improvement challenges requires a cyclical, data-driven process. Once a school recognizes that a problem exists, there are six steps they can take to address the problem: identify the problem, identify possible causes, set goals, select strategies, take action and evaluate results.

Step 1: Identify the problem

The first step is to identify the problem. This includes taking ownership of the problem and making a commitment to address it. Specificity is critical when defining the problem. For example, having “a graduation rate problem” is too broad. Instead, the specific problem may be that the graduation rate not only is low, but has remained flat or decreased in recent years. Furthermore, perhaps a majority of the dropouts left school in the ninth-grade grade.

It is important to distinguish between performance problems and process problems. *Performance problems* are those relating to student performance — student achievement, graduation rates, failure rates, etc. *Process problems* are the school and classroom practices and issues that are leading to the performance problems.

Step 2: Identify possible causes

The second step is to identify possible causes. Commonly known as root cause analysis, this step involves identifying all of the factors that might contribute to the problem. What are the process problems leading to the performance problems? What are the factors causing the process problems? It is also necessary to identify the major factors that are most responsible for the problem. It may not be possible or desirable to address all of the causes of the problem. Instead, the school will want to address a couple of factors that are most responsible for the problem.

Continuing the graduation rate example, perhaps a series of factors are responsible — unengaging instruction, lack of an early warning identification and intervention system, poor transitions from the middle grades to high school, little guidance, no extra help and poor career/technical opportunities. While all of these factors are responsible, a few might be identified as the major factors and will be addressed — unengaging instruction, transition from middle grades to high school and lack of an early warning identification and intervention system. Not only can these factors be addressed and refined, but other factors can be addressed in subsequent years.

Step 3: Set goals

The third step is to set goals. Now that the problem has been clearly identified and the possible causes have been detailed, it is time to set goals for what the school wants to accomplish. Both performance and process outcomes should be identified. *Performance outcomes* are what the school wants to obtain in terms of student achievement, graduation rates, failure rates, etc. *Process outcomes* are what the school wants to obtain in terms of changes in school and classroom practices. It is necessary to be specific when setting goals. For example, “increase

math achievement” is insufficient. A better goal is “to increase the percentage of students passing the Algebra I end-of-course assessment on the first attempt by 10 percent each year.” Finally, the school must determine what will be measured to evaluate whether or not the goal was met.

Continuing the graduation rate example, perhaps the school sets the following goal: increase the school’s graduate rate by five percent each year. Process outcomes include: 1) all teachers use engaging instructional techniques; 2) a ninth-grade academy is in place; and 3) an early warning identification and intervention system is in place. Measures to collect include: 1) developing and using a classroom observation form to assess use of engaging instructional techniques; 2) collecting student and teacher survey data on classroom experiences; and 3) collecting data on dropouts, course failures, attendance and discipline referrals.

Step 4: Select strategies

The fourth step is to select strategies to implement in an effort to achieve the stated goals. What strategies are available? What resources and support are already in place? What are the advantages and disadvantages to each? What are the obstacles and solutions? What resources are required? What professional development is necessary to enable faculty and staff to implement the selected strategies effectively? What would ideal implementation look like? How will implementation be measured? Considering these questions will help the school assess each strategy and select one or more strategies that, given all information available, are most likely to result in a successful outcome.

Continuing the graduation rate example, perhaps the school discusses a variety of possible strategies using the questions above. Ultimately, it decides to implement three strategies to address the lack of engaging instructional techniques (project-based learning, real-world assignments and cooperative learning); four strategies to address the lack of a ninth-grade academy (middle grades to high school transition program, success as the only option policy, organize teachers into teams and have a low student-to-teacher ratio); and two strategies to address the lack of an early warning identification and intervention system (develop a student data system to track at-risk indicators and create an intensive extra help program to get at-risk students back on track).

Step 5: Take action

The fifth step is to take action: assign tasks and responsibilities; provide necessary professional development; implement selected strategies; document implementation; monitor progress; collect data for evaluation. Few problems are owned by only one or a few people. The school community must work together to solve its problems.

Continuing the graduation rate example, the school assigned a teacher facilitator to lead a team of teachers to implement each of the three major strategies: modeling and supporting teachers in using engaging instructional techniques, the ninth-grade academy, and the early warning identification and intervention system. A detailed plan is created describing who is responsible for what actions and the date by which they will be completed. Professional development also is

provided. All teachers participate in a webinar on engaging instructional techniques. A team is sent to a ninth-grade academy workshop. A consultant meets with a team to develop an early warning identification and intervention system. A detailed plan for who participates in what professional development is created along with a plan for follow-up activities. Implementation is also documented. A team (principal, assistant principal, guidance counselor, three teachers) conducts classroom observations. Student and teacher surveys are administered. Samples of student work are collected and reviewed. Regular meetings are scheduled with a leadership team and teacher leaders to review progress and make adjustments. Data are collected (attendance, discipline referrals, course failures, dropouts).

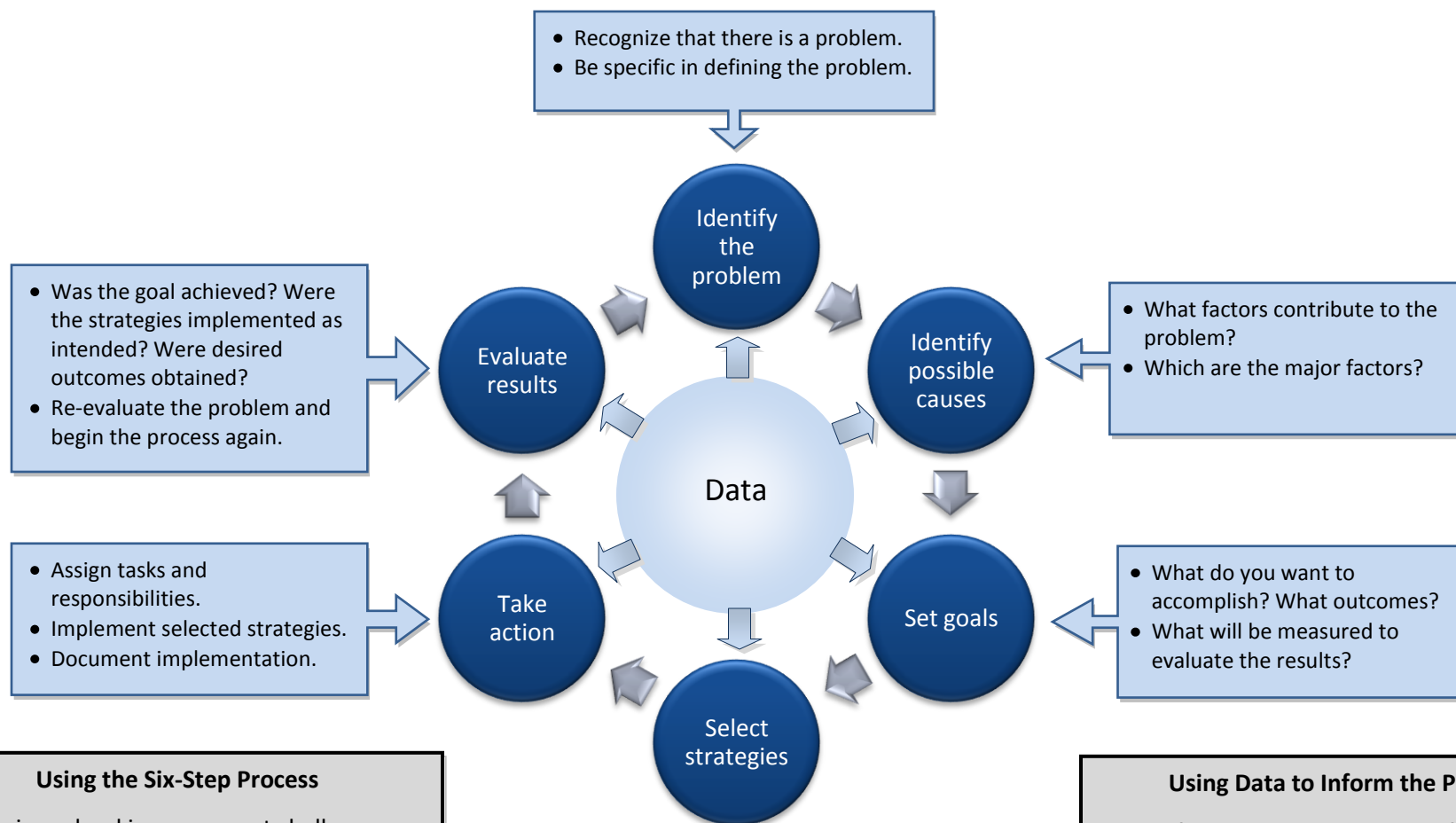
Step 6: Evaluate results

The final step is to evaluate results. The school reviews the data it has collected and determines if the goal was achieved. Were the strategies implemented as intended? Were desired outcomes obtained? The problem is reevaluated and the process begins again.

Continuing the graduation rate example, the school found that the goal was only partially met — the graduation rate increased by only two percent and the ninth-grade dropout rate decreased by three percent. The goal of a five percent increase in the graduation rate was not met. When determining if the strategies were implemented as intended, the school determined that they were not. Only 25 percent of teachers implemented the engaging instructional techniques well while 75 percent reverted to their old methods of teaching. The ninth-grade academy teacher teams worked well, but the transition program was not implemented in time. Grading policies that allowed success as the only option started to pick up in the second semester. With regards to the early warning system, the identification component was in place and the intervention system was effective for 50 percent of attendees.

The school decided to provide additional follow-up professional development on engaging instructional techniques, create demonstration classrooms with the teachers who implemented the strategies well, and have the teacher learning teams focus on adding one technique to instruction each six-week period. The ninth-grade academy will improve its transition program and explore adding catch-up courses. The early warning system will continue as implemented previously and will be monitored for possible improvements. Finally, the school will explore improving its relationship with the local technology center to provide better career/technical opportunities to students.

Six-Step Process for Addressing School Improvement Challenges



Using the Six-Step Process

Addressing school improvement challenges requires a cyclical, data-driven process. After recognizing that a problem exists, schools must clearly define the problem, identify possible causes, set goals, select strategies, take action and evaluate results. The process repeats itself, either by re-evaluating the problem and starting the process again or by continuing on to address a new problem.

Using Data to Inform the Process

Data informs the entire process, from identifying the problem and its root causes to selecting strategies and evaluating results. Useful sources of data include:

- HSTW* Assessment, including *HSTW* Student and Teacher Surveys
- HSTW* Ninth-Grade Student Survey
- Middle Grades Assessment, including *MMGW* Student and Teacher Surveys

Sample Template for Using the Six-Step Process

School: _____

Step 1: Identify the problem	
Performance problem(s):	Evidence:
Process problem(s):	Evidence:

Step 2: Identify possible causes	
List of possible causes:	Evidence:
Major causes:	Evidence:

Step 3: Set goals	
Performance goal(s):	Measures:
Process goals(s):	Measures:

Step 4: Select strategies	
Strategy 1:	
Resources required:	Professional development needed:
Implementation measures:	Special considerations:
Strategy 2:	
Resources required:	Professional development needed:
Implementation measures:	Special considerations:
Strategy 3:	
Resources required:	Professional development needed:
Implementation measures:	Special considerations:

Step 5: Take action		
Steps:	Timeline:	Person(s) Responsible:

Step 6: Evaluate results	
Implementation	Outcome(s)
Data:	Data:
Were strategies implemented as intended?	Were the goals obtained?
Changes to be made:	New goal(s):

Guiding Questions for Using the Six-Step Process to Address Mathematics Challenges

Step 1: Identify the problem.

Use available data to examine and determine the nature of the mathematics achievement problem. Be specific in identifying the problem — narrow down the specific kind(s) of mathematics achievement and students involved.

- Review student achievement on standardized tests, such as state assessments, ACT and SAT, Work Keys, *HSTW* and Middle Grades Assessments, and college placement exams.
- Disaggregate data by student group, noting gaps in achievement by race/ethnicity, gender, socioeconomic status and other characteristics. Document gaps between current achievement levels and college- and career-readiness standards.
- Review school-based data, such as Algebra I failure rates; AP offerings, participation and passage rates; formative and summative assessment results; and postsecondary mathematics remediation rates.
- Consider other sources of information, such as samples of student work, teacher feedback and classroom observations.

Step 2: Identify possible causes.

Discuss and determine the factors that are contributing to the problem. Identify the major factor(s) that are causing the problem. When identifying possible causes, consider the following questions:

- Are all mathematics courses teaching state standards effectively? Are courses being taught to college- and career-ready levels?
- Are all teachers utilizing formative and summative assessments effectively? What are the breadth and depth of standards being assessed? Are all essential standards being assessed appropriately?
- Are teachers utilizing effective instructional planning techniques? Are teachers collaborating? Are weekly lesson plans being developed? Are daily lesson cycles being developed? Are lessons planned around themes and units?
- Is classroom management a problem? Are classrooms orderly? Is teaching time maximized? Are students on task? Do students come to class prepared?
- What instructional strategies are most frequently used in mathematics classes? Are they teacher- or student-centered strategies? Are they engaging students effectively in the content? Are they effective in developing student mastery of the content?
- On which standards are teachers struggling to develop student mastery? Why are teachers struggling? What primary teaching strategies are being used to teach those standards?
- Are students engaged in the content, instruction and their work? Are they engaged intellectually, emotionally, socially and behaviorally?
- Are students practicing literacy (reading and writing) skills in mathematics classes? Are they keeping notebooks of their math work? Are literacy strategies embedded in mathematics instruction?
- Are grading and grade-recovery policies functioning appropriately? In students' grades, what weight is given to homework, projects, assessments and other tasks? What is the procedure for grade recovery? How many students pass summative assessments but still receive failing grades?

- What is the extent of principal oversight and involvement with mathematics instruction? How frequently does the principal visit the classroom, observe and provide feedback?
- How frequently do mathematics teachers meet together to plan lessons; review lesson plans, student assignments and assessments; and offer peer support for improvement?
- How much support for mathematics is provided by the district? Has the district created pacing guides or district-wide formative and summative assessments?
- Are extra-help opportunities adequate and effective? Is extra help provided by the classroom teacher?
- Do teachers believe all students can master the content? Do they believe they have the capacity to help all students master the content?

Step 3: Set goals.

Now that the problem and causes have been identified, set goals for what you want to accomplish. Identify the desired outcomes. For each outcome, determine what will be measured to evaluate the results. Set both outcome goals (what you want students to achieve) and process goals (what you want to be implemented). As you set goals, consider the following questions:

- What do you want students to accomplish, both in aggregate and by group? For example, what percentage of students do you want to pass state assessments in the first year, the second year, etc? What percentage of students do you want to perform at the Proficient and Advanced levels? What percentage of students do you want to pass various mathematics courses each year? Do you want to see students engaged in class work? Do you want to see them complete math portfolios?
- What do you want teachers to accomplish? Do you want to see weekly instructional plans focused around certain standards and with planned daily lesson cycles? Do you want to see literacy strategies and other proven instructional strategies embedded in instruction? Do you want to see standards-based instruction and grading? Do you want to see multi-step authentic math problems that require students to apply a range of mathematics skills? Do you want to see teachers use those problems to diagnose students' weaknesses in their understanding, reasoning and procedural skills? Do you want to see teachers using both formative and summative assessments?
- What do you want the school administration to accomplish? Do you want to see a schoolwide policy implemented to ensure failure is not an option? Do you want to see schoolwide assessments at the end of each unit and grading period? Do you want to see professional development aligned to teacher and student needs?

Step 4: Select strategies.

Select strategies to achieve the defined goals. Determine what relevant strategies are available. List the advantages and disadvantages of each, including obstacles, solutions and resources required. Select the most promising, research-based strategies to achieve your goal. Discuss what ideal implementation would like. For each selected strategy, determine how fidelity of implementation will be measured. As you select strategies for implementation, consider the following mathematics strategies:

- Develop or adapt templates for weekly (or longer) planning periods.
- Each month, have teachers identify the content they will teach in the next month and provide necessary training on effective strategies for teaching that content.

- Plan instructional time using a backward assessment design to decide what you expect as evidence that students have mastered standards.
- Engage students in solving authentic, real-world problems.
- Utilize technology in instructional techniques.
- Align assessments (formative and summative) and assignments to state standards and college- and career-readiness standards.
- Develop common formative and summative assessments.
- Develop and implement a grading policy in which teachers reteach materials until students have mastered the content.
- Develop strategies to make homework a continuation of the learning process. Address the role of homework in grading policies.
- Schedule weekly one-hour planning meetings for teams of mathematics teachers to allow them to share and provide feedback on their instructional planning.

Step 5: Take action.

Develop a plan and take action to implement the selected strategies. Utilize mathematics facilitators and teacher learning teams to implement strategies and collect data to evaluate implementation and results.

- Conduct monthly focus team meetings to review and adjust implementation.
- Name and train a school-based mathematics facilitator for grade six, grades seven and eight, grades nine and 10, and grades 11 and 12. (In small schools, one facilitator can be trained for middle grades and one for high schools.) Provide three days of initial training and one and a half days of additional training monthly.
- Have the math facilitators conduct weekly instructional planning meetings with mathematics teacher learning teams. The facilitators will be responsible for the agenda and minutes detailing the agreed-upon actions to be taken. These meetings will allow teachers to develop an instructional plan that uses several days to cover a standard or a group of standards with daily lesson cycles. These will be reviewed by the principal, math trainer, district and *HSTW/MMGW* coach with feedback provided.
- Have teachers participate in monthly webinars to provide curriculum and instruction professional development as needed.
- Create demonstration classrooms where teachers can observe various strategies and techniques.
- Have the principal conduct weekly meetings with the math facilitators. The principal will be responsible for the agenda and minutes detailing the agreed-upon actions to be taken.
- Have the principal conduct weekly classroom observations and provide feedback to teachers.
- District and SREB coaches will conduct monthly coaching visits to classrooms.
- The SREB coach will conduct monthly meetings with the facilitators to review the learning teams' progress.

Step 6: Evaluate Results.

Review all data and information collected. Determine if the goals were achieved. Determine if the strategies were implemented as intended. Determine if the desired outcomes were obtained. If any goals or outcomes were not obtained, re-evaluate the problem and begin the process again. While evaluating results, consider the following data:

- Students' perspectives on the instructional strategies they are experiencing and their level of engagement
- Teachers' perspectives of their teaching strategies, planning process and the results they are obtaining
- Classroom observations, meeting minutes, teacher feedback
- Student achievement data (see data listed in Step 1)

Guiding Questions for Using the Six-Step Process to Address Literacy Challenges

Step 1: Identify the problem.

Use available data to examine and determine the nature of literacy achievement and its impact on achievement in core academic and elective courses. Be specific in identifying the problem — narrow down the specific kind(s) of literacy achievement and students involved.

- Review student’s reading and academic achievement on standardized tests, such as state assessments, ACT and SAT, Work Keys, *HSTW* and Middle Grades Assessments, AP exams, EOC tests, school/district benchmark assessments, and college placement exams.
- Disaggregate data by student group, noting gaps in achievement by race/ethnicity, gender, socioeconomic status and other characteristics. Document gaps between current achievement levels and college- and career-readiness standards.
- Review school-based data, such as failure rates; AP offerings, participation and passage rates; formative and summative assessment results; and postsecondary reading and writing remediation rates.
- Consider other sources of information, such as samples of student work, student attendance rates, teacher feedback, student perception data and classroom observations.

Step 2: Identify possible causes.

Discuss and determine the factors that are contributing to the problem. Identify the major factor(s) that are causing the problem. When identifying possible causes, consider the following questions:

- Are all courses addressing state standards effectively? Are courses being taught to college- and career-ready levels?
- Are teachers utilizing items on formative and summative assessments to determine the students’ ability to read, interpret and analyze content materials?
- What are the breadth and depth of the reading standards being assessed? Are all essential standards being assessed appropriately?
- Are all teachers aware of their students’ reading and writing proficiencies?
- Are all teachers effectively embedding reading and writing strategies into their instruction?
- Are all teachers aware of the different types of reading students must do to fully understand their subject area’s content?
- Are all teachers developing pointed writing tasks/prompts to have students read a range of materials and demonstrate their understanding of content materials, organize information and present it in a coherent manner?
- Are all teachers using holistic scoring rubrics to score writing tasks? Are content knowledge and writing skills represented in the scoring mechanism?
- Are all teachers using higher-level questioning techniques to engage students in deeper understanding of content subject area material?
- Are all teachers facilitating meaningful discussions around content area materials to engage students in the social component of literacy?
- Are teachers from common disciplines and courses meeting together at least weekly to:
 - develop plans for using literacy strategies to enhance both students’ ability to read and interpret content materials and their understanding of the materials?
 - unpack standards and use literacy strategies to aid students in mastering them

- show how they will be embedding literacy strategies into their instructional strategies to accomplish their student's mastery of standards?
- debrief after implementation of literacy strategies into their instructional plans?
- Are teachers planning lesson cycles, developed around themes and units, that include literacy learning activities within the content area?
- Is classroom management a problem? Are classrooms orderly? Are teachers practicing bell-to-bell teaching?
- What instructional strategies are most frequently used in all classrooms? Are they teacher- or student-centered strategies? Are all teachers effective in engaging students using reading and writing for learning in the content area?
- Are students engaged intellectually, emotionally, socially and behaviorally in the content, instruction and their work?
- Are students entering grade six or nine reading below grade level? Is there a catch-up or double-dosing program in place to move those students to grade-level reading?
- Are students who fail a required academic course due to skill-level deficiency provided with an opportunity to build those skills prior to retaking the failed class?
- Are grading and grade recovery policies functioning appropriately in all courses? In students' grades, what weight is given to homework, projects, assessments and other tasks? What is the procedure for grade recovery? How many students pass summative assessments but still receive failing grades?
- What is the extent of principal oversight and involvement with literacy instruction? Is the principal providing instructional leadership with respect to literacy in all content areas? How often does the principal visit classrooms, observe and provide feedback concerning literacy?
- How does the district support embedding literacy into all courses? Does the district provide sample lessons, pacing guides, writing prompts, or formative and summative assessments for each course?
- Are extra-help opportunities adequately and effectively engaging students in reading and writing for learning in each content area?
- Do teachers believe all students can master the content? Do they believe they have the capacity to help all students master the content?

Step 3: Set goals.

Now that the problem and causes have been identified, set specific literacy goals for what you want to accomplish. Identify the desired outcomes. For each outcome, determine what will be measured to evaluate the results. Set both outcome goals (what you want students to achieve) and process goals (what you want to be implemented). As you set goals, consider the following questions:

- What do you want students to accomplish, both in aggregate and by student groups? For example, what increases would you like to achieve in the percentages of students who pass state assessments exams in the first year, the second year, etc? What would you like to achieve in the percentages of students who perform at the Proficient and Advanced levels on the reading strands of various state and college-readiness exams? What percentage of students do you want to pass various courses each year? What type of increase would you like to achieve in the amount of reading and writing for learning taking place in each content area? (For example, you may state this goal in terms of time spent reading and

writing in ways that advance both reading and content achievement.) Do you want to see student complete writing portfolios in all classes?

- What do you want teachers to accomplish? Do you want teachers to produce weekly instructional plans focused on specific literacy and content-area standards with planned daily lesson cycles? What type of literacy strategies and standards-based instructional strategies do you expect to see across content areas? Will you expect all teachers to use higher-level writing tasks that require students to more deeply interact with and understand content-specific materials? Will these writing products be used to assess students' content understanding and their writing skills? Do you want to see teachers using both formative and summative assessments?
- What do you want the school administration to accomplish? Do you want building administration to receive literacy leadership training? Do you a schoolwide literacy initiative that engages students in doing a short writing piece in every course each week, a major writing piece each semester, reading a certain amount of related materials, and producing a written piece to indicate their depth of understanding of the materials? Will leaders expect all teachers to become proficient in using reading and writing strategies to advance students learning? Do you want to see a schoolwide policy implemented to ensure failure is not an option? Do you want to see professional development aligned to teacher and student needs?

Step 4: Select strategies.

Select strategies to achieve the defined goals. Determine what relevant strategies are available. List the advantages and disadvantages of each, including obstacles, solutions and resources required. Select the most promising, research-based strategies to achieve your goal. Discuss what ideal implementation would like. For each selected strategy, determine how fidelity of implementation will be measured. As you select strategies for implementation, consider implementing the following research-based recommendations:

- Train teachers from all content areas to embed reading and writing into each class by developing prompts that require students to read, research and synthesize information in their own words. Teachers should receive professional development on creating rubrics that assess both the writing skills and content knowledge demonstrated in such assignments and on providing feedback and reteaching until students meet standards.
- Set a schoolwide goal for all students to read a certain number of books (or their equivalent) each year across subject areas, and increase the goal until all students read at least 25 books annually.
- Set a schoolwide goal for students to complete at least one short writing assignment each week in every course and to write at least one long research paper each year in every course. Longer writing assignments should be appropriately designed for the subject matter and should give students ample opportunities to research, organize information and compile it into a paper to demonstrate their own learning.
- Develop the school's supply of reading materials in the library and/or media center to ensure the school has books that apply to both male and female students. Take steps to greatly increase the circulation of books and quality of online materials that students are expected to read.

Step 5: Take action.

Develop a plan and take action to implement the selected strategies. Utilize literacy facilitators (one to two per content area, depending on the size of each department and the school) and teacher learning teams to implement strategies and collect data to evaluate implementation and results.

- Establish a focus team composed of leaders from each core academic, practical arts, fine arts and physical arts area to meet at least monthly and review and adjust implementation of the literacy plan and strategies.
- Name and train a school-based literacy facilitator for each content area (including fine, practical and physical arts). (In larger high schools, teams may need to be further divided by grade level.) Literacy facilitators should be carefully chosen and should be recognized as exemplarily teachers in their discipline field. Provide facilitators with three to five days of initial training and one day of follow-up each month as needed. The literacy facilitator should not be an administrator and does not need to be a department chair.
- Have each facilitator conduct weekly instructional planning meetings with their teacher learning teams to identify and implement strategies for improving reading and writing across the curriculum. The facilitators will be responsible for the agenda and minutes detailing the agreed-upon actions to be taken. These meetings should provide opportunities for teachers to present the content standards they will address in the following week; discuss how they plan to embed literacy strategies into the instruction in ways that advance both content area and reading achievement; and summarize what worked well during the previous week, what did not work, and areas of needed improvement. The meetings also should guide teachers in developing an instructional plan that uses several days to cover a standard or a group of standards with daily lesson cycles. These will be reviewed by the principal, facilitator, and district and *HSTW/MMGW* coach with feedback provided.
- Have teachers participate in monthly webinars that provide curriculum and instruction professional development based on what teachers believe they need help with to more effectively embed literacy strategies into their instruction.
- Create demonstration classrooms where teachers can observe various strategies and techniques.
- Have the principal conduct weekly meetings with the facilitators. The principal will be responsible for the agenda and minutes detailing the agreed-upon actions to be taken.
- Have the principal and his or her administrative team conduct weekly classroom observations and provide feedback to teachers.
- District and SREB coaches will conduct at each monthly coaching visit to classrooms.
- The SREB coach will conduct monthly meetings with facilitators to review the learning teams' progress and to identify the challenges that need to be addressed at future webinars, monthly trainings, and monthly meetings with principals and district leaders.

Step 6: Evaluate Results

Review all literacy achievement data and other sources of information, both quantitative and qualitative. Determine if the goals were achieved, if the strategies were implemented with fidelity and if the desired outcomes were obtained. If any goals or outcomes were not satisfied, reevaluate the problem and begin the process again. When evaluating results, be sure to consider the following data:

- Increase in a percentage of students meeting goals on state assessments and college-readiness exams
- Improvements in course grades, student attendance, behavior and teacher attendance
- Students' perspectives on opportunities in all classes to read and write for learning
- Teachers' perspectives on the extent in which they have changed how they're teaching and classroom assessments to emphasize using reading and writing strategies to advance student achievement
- Facilitators' perspectives on the effectiveness of their training
- Teachers' perspectives on whether the school provided a structure that made it possible for them to conduct weekly instructional planning meetings to focus on better use of literacy strategies
- Increases in use of formative assessments
- Classroom observation data from coaches and principals

Levels of Data Analysis

Adapted from *Data Analysis for Continuous School Improvement* by Victoria Bernhardt

Level 1: Snapshots of Measures

- Demographic data — descriptive information about the school community, such as enrollment, attendance, grade level, ethnicity, gender and native language
 - How many students are enrolled in the school this year?
- Perceptions data — what students, parents, staff and others think about the learning environment
 - How satisfied are parents, students and/or staff with the learning environment?
- Student learning — the outcomes of our educational system in terms of standardized test results, grade point averages, standards assessments and authentic assessments
 - How did students at the school score on a test?
- School processes — what the system and teachers are doing to get the results they are getting
 - What programs are operating in the school this year?

Bernhardt's additional levels are as follows:

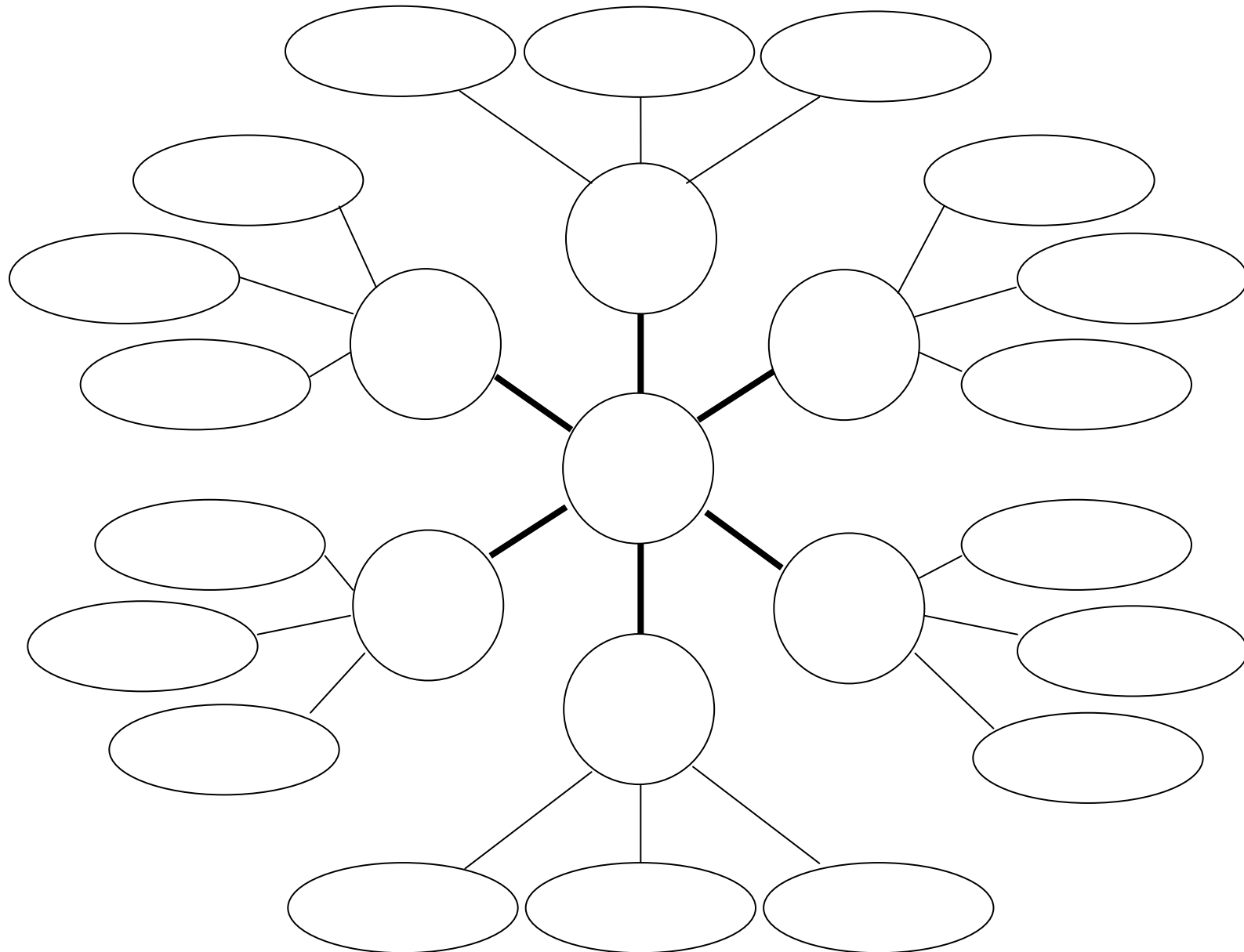
- **Level 2: Measures, Over Time**
- **Level 3: Two or More Variables Within Measures**
- **Level 4: Two or More Variables Within One Type of Measure, Over Time**
- **Level 5: Intersection of Two Types of Measures**
- **Level 6: Intersection of Two Measures, Over Time**
- **Level 7: Intersection of Three Measures**
- **Level 8: Intersection of Three Measures, Over Time**
- **Level 9: Intersection of All Four Measures**
- **Level 10: Intersection of All Four Measures, Over Time**

As you move through the levels, you begin to deal with the complex ways in which all four types of measures interact over time. Each level builds on the previous one to show how past data and intersections of measures provide more comprehensive information than a single measure of data taken for one year. Level 10 leads you to the ultimate question:

Based on whom we have as students, how they prefer to learn, and what programs they are in, are all students learning at the same rate?

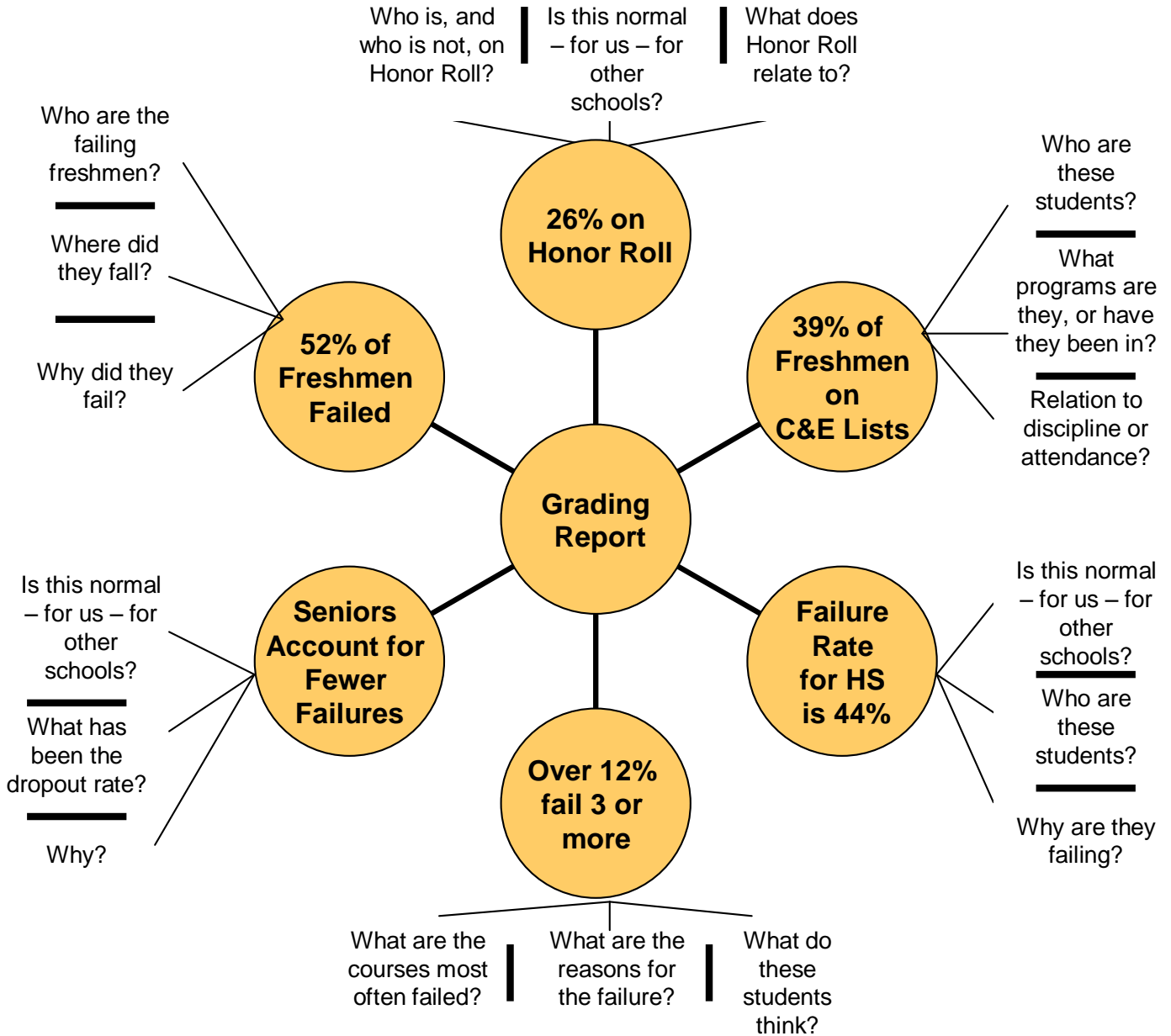
See *Data Analysis for Continuous School Improvement* by Victoria Bernhardt (Chapter 3) for more information about these levels.

Data Wheel Template



Example of Completed Data Wheel

What questions do I have about what I see?

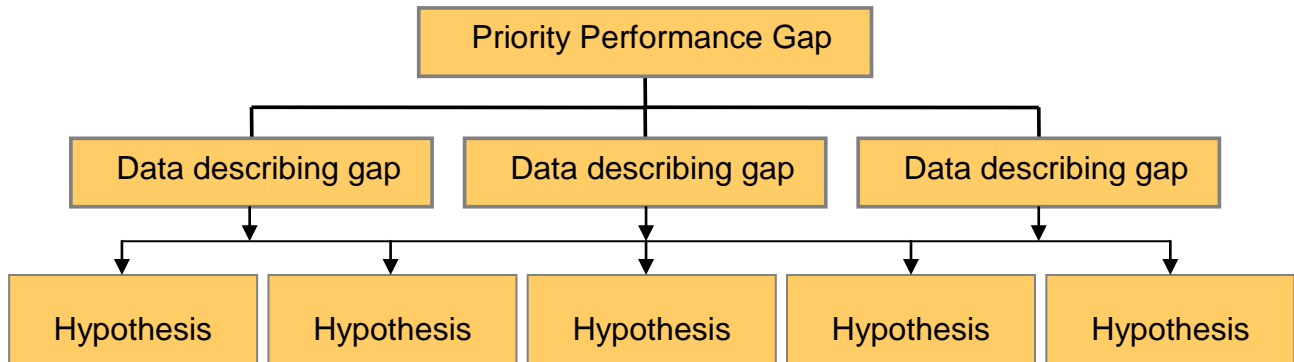


Source: Adapted from Preuss, P. G. (2003). *School leader's guide to root cause analysis: Using data to dissolve problems*. Larchmont, NY: Eye On Education.

Diagnostic Tree Process

Excerpt from the Root Cause Analysis Leadership Module

Diagnostic Tree



Top Level — Priority Performance Gap: The key problem, or “red flag,” you identified

Second level — Data Describing Gap: Describe the gap in as much detail as possible: include who (e.g., boys in the bottom quartile), when (e.g., seventh grade) and how (e.g., an average of 10 or more absences per term, an average score of ___ on year-end state standardized test). Information in this second level often corresponds to the four Fs (failure to attend, failure to engage, failure to perform, failure to persist) and includes such variables as academic history, course-taking patterns, discipline record, gender, ethnicity, attendance, participation in various activities/programs, number of years in school.

Next level — Hypotheses: Brainstorm hypotheses, based in part on what you’ve learned about the 4E school and classroom practices. Consider the following factors:

- **Curriculum:** Alignment (with standards) of content and testing; balance (in time and detail) allocated to each standard
- **Instruction and Assessment:** Instructional strategies, methods of assessment, materials, time, classroom setting, methods, student groupings, engagement strategies, extra help
- **System processes:** Things such as staffing, professional development, recruiting, hiring, teacher assignments/placement, teacher certification/experience, supervision, scheduling, budgeting, guidance, transportation services, food services, promotion/retention policies
- **School culture:** An often overlooked category that includes publications, school appearance, what is discussed and celebrated, space allocation, parent involvement, etc

Source: Adapted from Preuss, P. G. (2003). *School leader’s guide to root cause analysis: Using data to dissolve problems*. Larchmont, NY: Eye On Education.

Identifying Red Flag Issues

Goal: To identify one high-priority performance gap (red flag) that the team would like to reduce/eliminate. Note that this does not mean you are ignoring other areas, just that you are using a representative sample for action research; any changes you make in school or classroom practices will probably positively affect other groups, subject areas or grade levels.

Step	Process	Facilitator Guidelines
1	Present one of the data sets related to failing to attend, failing to engage, failing to perform and failing to persist.	<ul style="list-style-type: none"> ➤ Make sure everyone understands the format of the data set and the content that it contains.
2	Study the data set individually and record your answers to the question, "What do these data seem to tell us?"	<ul style="list-style-type: none"> ➤ Allow about five minutes. ➤ Ask the group to work silently at this time and to refrain from asking questions about the data.
3	Record individual responses.	<ul style="list-style-type: none"> ➤ Ask groups to share individual responses. Record their observations on a flipchart. ➤ Allow about 10 minutes. Challenge the group to make sure that all insights are included.
4	Repeat steps 2 and 3 for two other data sets.	<ul style="list-style-type: none"> ➤ Keep track of time and make sure you have data sets prepared for each session.
5	Identify the six most important responses.	<ul style="list-style-type: none"> ➤ Distribute five dot stickers to each participant. ➤ Ask participants to place dots on the most important responses. (In prioritizing items, team members should consider the degree to which a change would support the school improvement plan and the potential for impact.) They may place their dots on five different items, or they may place more than one (or even all) of their stickers on a single item. ➤ When all dots are posted, organize a group exploration of the results.

Step	Process	Facilitator Guidelines
6	Answer the question, "What else do we need to know?"	<ul style="list-style-type: none"> ➤ Create a new flipchart containing the top six items, allowing space by each one for questions. ➤ For each of the six items, ask them to identify questions about what is <i>not</i> shown in the data. ➤ As before, allow a few minutes for silent reflection, then ask group members to report out as you record their points next to the appropriate item. (You may do this as a bulleted list or as a concept map.)
7	Identify the three most important questions for each item.	<ul style="list-style-type: none"> ➤ Ask each team member to vote, with a show of hands, on their three top questions. ➤ Tally the results on the flipchart.
8	Choose the one area of performance gap that you wish to explore further through additional analysis.	<ul style="list-style-type: none"> ➤ Provide six sticky notes to each participant. ➤ Ask them to write the numbers 1 – 6 on these sticky notes, one number per note. In prioritizing items, team members should consider the degree to which a change would support the school improvement plan and the potential for impact. ➤ Ask participants to place their Post-its on the flipchart, with "1" on the most important item, "2" on the second most important item, etc. ➤ When participants have completed posting their notes, tally the results. The item with the lowest score is considered the most important to the group. ➤ Make sure that you have consensus by asking the group for a show of hands answering "yes," to the following question: "Whether or not you think this is the most important issue, are you willing to support the group in choosing this issue for immediate exploration and problem solving?" If everyone raises his/her hand, you have consensus. If not, ask any dissenters, "What would it take for you to support the group decision?" Work through the issues, then vote again. (See next page for more information.) ➤ See if you can answer any of the questions related to this issue, using the data you have.

Source: Adapted from Preuss, P. G. (2003). *School leader's guide to root cause analysis: Using data to dissolve problems*. Larchmont, NY: Eye On Education.

Rules for Building Consensus

Consensus is based on the term “to consent” as in “to grant permission.” To arrive at consensus is to give permission to go along with the total group (the majority). The implication of consensus is that an individual can negotiate the terms by which he or she will grant his or her permission. Each individual has the right and obligation to make his or her terms known.

Consensus Means...

- All group members contribute.
- Everyone's opinions are heard and encouraged.
- Differences are viewed as helpful.
- All members share in the final decision.
- All members agree to take responsibility for implementing the final decision.

Consensus Does NOT Mean...

- The vote must be unanimous.
- The result is everyone's first choice.
- Conflict or resistance will be overcome immediately.

Assumptions:

- All people are free to make choices.
- All people are free to disagree and voice an opinion.
- Freedom means that people engage in action by choice.
- Compromise is not necessary.

Commitments/Procedures

- I will explain my perception of the issue.
- I will discuss my feelings.
- I will discuss my needs/goals concerning the issue.
- I will listen and respect other opinions.
- I will grant permission to the majority, with a minority report.
- I will implement the decision.

Source: Adapted from Arbuckle, M. A., & Murray, L. B. (1989). *Building systems for professional growth: An action guide*. Andover, MA: Laboratory for Educational Improvement of the Northeast and Islands. Learning Innovations at WestEd. Reprinted with permission.

Getting Additional Data: Thought Joggers

1 Consider the following general questions as you prepare to further define your red flag. Write the answers down and make sure everyone on the team agrees.

- **Who** will use the additional data we collect? **Who** needs to know the results of any analyses?
- **What** kinds of data are still needed? **What** resources are available to collect and analyze the data?
- **When** do we collect the data? **When** is the information needed?
- **Where** can we find the data?
- **Why** is this data not currently available?
- **How** is the information to be used after the data have been analyzed?

2 Consider the data you need related to **student learning**, particularly if you need to disaggregate data and if you need to combine different types of data. To collect additional data on student learning, try looking at school records that document student learning over time.

- | | |
|--|--|
| <input type="checkbox"/> standardized tests | <input type="checkbox"/> performance assessments |
| <input type="checkbox"/> standards-based assessments | <input type="checkbox"/> authentic assessments |
| <input type="checkbox"/> norm-referenced tests, diagnostic tests | <input type="checkbox"/> teacher-made tests |
| <input type="checkbox"/> criterion-referenced measures | <input type="checkbox"/> teacher-assigned grades |
| | <input type="checkbox"/> other: |

- 3 Consider collecting data on **school processes** and relating them to student learning in order to test your hypotheses. To help collect additional data on school processes, use a flow chart or other graphic organizer to visualize procedures and major steps in the process.

instructional strategies
learning strategies
instructional time
scheduling
instructional location
student-teacher ratio
student work
professional development
leadership
technology
partnerships

assessment
classroom management
discipline strategies
class size
student groupings
enrollment in courses, programs
policies and procedures
teacher assignments, placements
classroom practices
extracurricular programs
other:

- 4 Consider additional measures of **demographics**. To collect additional data on demographics, try looking at data on teacher quality, such as by teachers' gender, ethnicity, number of years teaching experience, licensure and credentials, turnover, attendance and professional development. Collect additional and relevant community information such as population trends, community resources, business partnerships, community involvement in the schools. Additional parent information you may want to collect includes involvement in child's learning, home language, educational levels and employment.

enrollment
attendance
drop-out rate
retention rate
graduation rate
promotion rate
ethnicity
gender
grade level

mobility
free/reduced lunch
language fluency
program participation
concurrent enrollment participation
discipline indicators
safety
other:

Homework: Defining/Refining the Red Flag Issue

Directions: The goal of this assignment is to help you further the work your team started in identifying a red flag issue.

Part I: Gather data as needed to answer the questions that you generated related to your red flag. In the course of doing this work, you may add, delete or revise these questions. You may even redefine your red flag issue. Try to use a variety of data gathering techniques in order to triangulate your data.

You may find the need to include other people on your team, especially those that are related in some way to the red flag issue. For example, if your focus is on students in the Special Education Department, you'll want to involve faculty members and/or parents on your team. If so, you may want to invite them to attend the next training. Let the appropriate person (trainer or training coordinator) know about the addition to the roster.

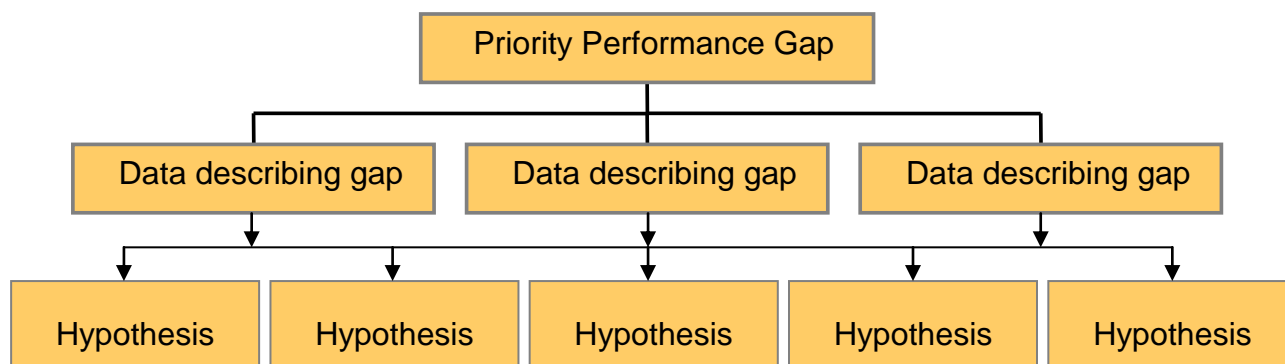
Part II: Compile the data that you gather and bring it to the next training session. You should be prepared to set up a booth in a "data fair" that shows the information that you gathered and how it helped you further define your red flag issue.

Part III: Prepare a ten-minute summary of your work for the next training session.

Part IV: Obtain at least one team copy of the following book. Pages 66–83 explain in detail a process we'll be using for root cause analysis; and this section also includes many examples that may provide insights. You should read this part of the book prior to coming to the next training session. One of you will have to facilitate the root cause analysis process for your team. Determine who that facilitator will be.

- Preuss, P. G. (2003). *School leader's guide to root cause analysis: Using data to dissolve problems*. Larchmont, NY: Eye On Education.

Diagnostic Tree



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Source: Adapted from Preuss, P. G. (2003). *School leader's guide to root cause analysis: Using data to dissolve problems*. Larchmont, NY: Eye On Education.

The Diagnostic Tree Process

Goal: To clearly define the problem and identify hypotheses about the root cause of the problem, and to check these hypotheses using data.

Step	Process	Facilitator Guidelines
1	Label the top level of the tree.	<ul style="list-style-type: none"> ➤ You should use the priority gap area that the group identified through the process "Identifying Red Flag Issues," (page 24). ➤ Make sure everyone understands this problem and has agreed to tackle it.
2	Identify data that further defines the problem.	<ul style="list-style-type: none"> ➤ Ask participants to look through data and see if the problem statement can be refined by specifying who, when and how the problem manifests itself. ➤ If you do not have the data needed to completely define the problem, put question marks on the items and assign someone to get the answers.
3	Individually record your answers to the question, "What are some possible contributing factors related to a 4E culture, based on practices we identified in Day One?"	<ul style="list-style-type: none"> ➤ Allow about five minutes. ➤ Ask the group to work silently at this time.
4	Record individual responses.	<ul style="list-style-type: none"> ➤ Go around the table, asking each person to contribute a hypothesis. ➤ Accept all answers without judgment or comment at this time — you want to encourage as many responses as possible. ➤ Record hypotheses on a flipchart. Sort them by the five categories on the bottom level of the diagnostic tree. ➤ Allow about 10 minutes. Challenge the group to make sure that all insights are included. Make sure all branches are addressed.

Step	Process	Facilitator Guidelines
5	Discuss and prioritize.	<ul style="list-style-type: none"> ➤ Ask participants to discuss each of the hypotheses. Make sure each one is clear. ➤ If there are more than about seven items in any branch, prioritize them, or combine them with others, as appropriate.
6	Decide how to investigate the hypotheses.	<ul style="list-style-type: none"> ➤ Discuss how each item should be investigated, what data are needed and how the data will be developed and used to see its relation to the cause of the priority issue. ➤ Consider all different types of data collection, including, but not limited to, interviews, observation, surveys, student achievement data and school document analysis. ➤ Use the worksheets on the following pages to record this information in the first two columns. ➤ Depending on the number of team members, you may want to subdivide into smaller groups and assign each group several hypotheses to discuss.
7	Create a project work plan.	<ul style="list-style-type: none"> ➤ Use the worksheets on the following pages to record who will investigate, and by what date (last two columns). ➤ Set a time for a team meeting to report findings. It should be within four weeks.
8	Meet and refine decision tree.	<ul style="list-style-type: none"> ➤ Based on the group's investigations, cross out hypotheses that have been shown to be untrue, record new hypotheses, write in areas that still need exploration and otherwise refine the decision tree. ➤ See pages 71 – 79 in the Preuss book for examples of how to further the process.

General Tips:

- Keep the work moving forward. Do not get bogged down when you can't find information or you find avenues outside of your control.
- Do not wait for the completion of the verification process to begin deeper investigation.
- It is important to share the work, receive feedback and integrate feedback.
- There is value in reflection, dialogue and capturing new ideas.

Source: Adapted from Preuss, P. G. (2003). *School leader's guide to root cause analysis: Using data to dissolve problems*. Larchmont, NY: Eye On Education.