TO: Members of the State Board of Education
FROM: Karen B. Salmon, Ph.D.
DATE: September 24, 2019
SUBJECT: Root Cause Analysis in Comprehensive Support and Improvement Schools

PURPOSE:
The purpose of this agenda item is to provide an overview of the root cause analysis process and to share outcomes from the root cause analysis process facilitated in comprehensive support and improvement (CSI) schools.

BACKGROUND/HISTORICAL PERSPECTIVE:
The Maryland Every Student Succeeds Act (ESSA) Consolidated Plan requires schools identified as CSI to complete specific actions to improve school performance. CSI schools must:

1. Complete a needs assessment.
2. Have a root cause analysis completed by an external party.
3. Use the outcomes of the needs assessment and root cause analysis to inform the development of an intervention plan. The intervention plan must be written in partnership with the school community and identify evidence-based interventions that will be implemented to address the root cause(s) of school performance problems. The intervention plan must be approved by the school, school system, and the Maryland State Department of Education (MSDE).
4. Use curriculum vetted by the MSDE.
5. Participate in customized professional learning experiences and leadership coaching as part of the Leading for School Improvement Institute.
6. Participate in on-site and virtual progress monitoring visits by the MSDE.
7. Develop a sustainability plan and have it approved by the school, local school system, and MSDE.

CSI schools have three years to exit CSI status. Schools that do not exit CSI status will receive more rigorous interventions from the MSDE.
EXECUTIVE SUMMARY:

The MSDE established a memorandum of understanding with the University of Maryland College Park to facilitate the root cause analysis process in CSI schools. The University of Maryland College Park partnered with the American Institutes for Research (AIR) to develop a Root Cause Analysis Facilitator Guide. The Facilitator Guide was developed to promote consistency in the root cause analysis process. It outlined the steps and protocols each facilitator was required to use with stakeholders to identify problems of practice and prioritize root causes. The Facilitator Guide was used to train researchers, data analysts, and education practitioners from Morgan State University, Bowie State University, Johns Hopkins University, University of Maryland College Park, and other organizations to conduct the root cause analysis process.

From March – May 2019, root cause analysis facilitators met with stakeholders in CSI schools to analyze data, identify a problem of practice, brainstorm causal factors, identify root causes, and prioritize root causes for interventions. Stakeholders included but were not limited to central office and school leadership, teachers, parents, students, local community leaders, local exclusive bargaining representatives, and business representatives. The University of Maryland College Park developed reports that identified root causes of school performance problems and recommendations for improvement.

CSI schools are required to develop intervention plans that address root causes identified in the root cause analysis report. Intervention plans must be developed with stakeholders and approved by the school, local school system, and MSDE. The MSDE will provide support and monitor plan implementation to ensure schools make progress toward improvement.

ACTION:

For information only. No actions required.

Attachments (5)
Attachment I – Root Cause Analysis PowerPoint
Attachment II – Comprehensive Support and Improvement School List
Attachment III – Root Cause Analysis Facilitators Guide
Attachment IV - Example Root Cause Analysis Report
Attachment V – Root Cause Analysis Summary Table
Root Cause Analysis
Process and Outcomes for Comprehensive Support and Improvement Schools

STATE BOARD MEETING
September 24, 2019
Comprehensive Support and Improvement Schools

Comprehensive support and improvement schools that participated in the root cause analysis process were the lowest achieving 5% of Title schools and high schools that did not graduate one third or more of their students.

<table>
<thead>
<tr>
<th>Baltimore City</th>
<th>Anne Arundel County</th>
<th>Prince George’s County:</th>
</tr>
</thead>
<tbody>
<tr>
<td>31 Schools</td>
<td>2 Schools</td>
<td>3 Schools</td>
</tr>
<tr>
<td>• 5 Elementary Schools</td>
<td>• 1 Alternative School Serving Grades K-12</td>
<td>3 High Schools</td>
</tr>
<tr>
<td>• 8 Elementary/Middle Schools</td>
<td>• 1 Evening High School with 6 Different Locations Around the County</td>
<td>• 2 Comprehensive</td>
</tr>
<tr>
<td>• 2 Middle Schools</td>
<td>• 1 Alternative</td>
<td>• 1 Evening/Saturday</td>
</tr>
<tr>
<td>• 6 Middle/High Schools</td>
<td>Serving Grades K-12</td>
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</tr>
<tr>
<td>• 10 High Schools</td>
<td>6 Different Locations Around the County</td>
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<tr>
<td>➢ 1 Alternative</td>
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</table>
### Comprehensive Support and Improvement Schools (CSI): Requirements and Timeline

<table>
<thead>
<tr>
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<tbody>
<tr>
<td>• Vet Math and English Language Arts Curricula</td>
<td>• Revise Curricula and Implement Revisions</td>
<td>• Demonstrate Improvement</td>
</tr>
<tr>
<td>• Complete Needs Assessment</td>
<td>• Develop and Implement Intervention Plan</td>
<td>• Develop Sustainability Plan</td>
</tr>
<tr>
<td>• Facilitate Root Cause Analysis</td>
<td>• Measure Progress</td>
<td>• Exit CSI Status or Enter More Rigorous Improvement Status</td>
</tr>
<tr>
<td>• Begin Planning for Interventions</td>
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</table>

- **Customized Professional Learning and Leadership Coaching Provided through the Leading for School Improvement Institute.**
- **Technical Assistance and Monitoring Provided by Title I.**
Root Cause Analysis:
Addressing the underlying causes of school performance problems

- Required for all CSI Schools
- Conducted by an external party
  University of Maryland College Park
- Funded by MSDE (Title I) for the 2018-2019 School Year
- Must include stakeholders in the process (central office staff, school administrators, teachers, parents, community partners, etc.)
Jennifer Rice, Ph.D.
Dean and Professor
College of Education
University of Maryland College Park

Segun Eubanks, Ed.D.
Director, Center for Educational Innovation and Improvement
College of Education
University of Maryland College Park
Overview of Root Cause Analysis (RCA)

- RCA emerged from fields of systems engineering and is widely used in any number of disciplines.
- RCA is a part of the Improvement Science model designed to engage schools in deeply examining and understanding why a problem exists and what causes the problem.
- The four-step RCA process facilitated in CSI schools:
  - Identifying the Problem
  - Brainstorming Causal Factors
  - Analyzing Underlying Causes to Identify Root Causes
  - Prioritizing Root Causes for Intervention
School Stakeholder Involvement

- School Principals and Assistant Principals
- Parent(s)
- Local Community Leaders
- Local Employer Leaders (Business Community)
- Local Government Leaders
- Central Office Staff Members (i.e Principal Supervisor, Content Specialists)
- School Teachers
- Student(s)
- Other School Staff
- Exclusive Bargaining Representative
Tools and Training for Root Cause Analysis

I. Engaging the School Community/Building Trust
II. School Improvement Overview
III. Reviewing and Analyzing Data
IV. Crafting Problems of Practice
V. Identifying Root Causes: Protocols and Exercises
VI. Prioritizing Interventions
Data Analysis for each CSI School

Data Sources:

- Maryland State Report Card
- Needs Assessment Report
- Current and Prior School Improvement Plans
- Additional School and District Data

Driving Questions:

- What do successful student outcomes look like?
- Where are the gaps (specific grades, subjects, subgroups?)
- What data points support this as being a major gap?
- Why was the school identified as a CSI school, and how is that reflected in the data?
Root Cause Analysis Process for CSI Schools

**Preparation and Training**
- 29 facilitators and faculty advisors.
- Facilitation protocols and guides.
- Trained all facilitators.
- Scheduled two days in each of the 36 CSI schools.

**Field Work**
- Every school identified one problem of practice related to their CSI designation.
- Every school identified 3-5 root causes of low performance.
- Every school brainstormed possible solutions.

**Research and Report Writing**
- Results of each school’s RCA analyzed.
- 36 school reports developed to document the process and outcomes.
- Evidence-based recommendations to support school improvement.

**Cross Case Analysis**
- Analysis of trends across all 36 CSI schools.
- Set of recommendations focused on addressing systemic challenges and was the state can support CSI schools.
- Support MSDE School Improvement Institutes.

Data Analysis, Research, and Knowledge and Skills of Stakeholders in the Process
Root Causes: A Few Themes Across Schools

- Insufficient Time and Effectiveness of Professional Learning
- Inadequate Academic Intervention or Differentiation for the Range of Students Served
- Inadequate Resources and Knowledge to Address Social Emotional Needs of Students
- High Rates of Teacher Attrition/Turnover
- Poor School Climate and Quality of Student and Teacher Relationships
- Low Levels of Trust between Families and Schools
General Recommendations

- Professional Learning/Coaching for Teachers and School Leaders
- Social Emotional Learning Supports and/or Wraparound Services
- Differentiated Instruction and Materials
- Family Engagement
- Academic Interventions and/or Credit Recovery
- Career Education Pathways
- Progress Monitoring and Effective Use of Data
- Expanded Learning Opportunities for Students
- School Culture and Climate
Next Steps

Root Cause Analysis
- Release Final Reports
- Begin Cross Case Analysis
- Support School Systems to Address Root Causes

Intervention Plans
Support Central Office and School Leaders in:
- Identifying Interventions
- Ascertaining Readiness
- Developing Plans
- Monitoring Implementation

Curriculum Vetting
- Release Final Reports
- Support Central Office Leaders in Improving Curricula and Instructional Materials

Professional Learning
Align and Leverage Resources Across MSDE to Support School Improvement
Root Cause Analysis Tools and Online Training
Available on the Maryland Resource Hub
www.marylandresourcehub.com/root-cause-analysis

An essential step in the school improvement process is conducting a root cause analysis to uncover core causes of school performance problems. The Maryland State Department of Education collaborated with the University of Maryland College Park, Center for Educational Innovation and Improvement to develop a Root Cause Analysis Facilitator Guide. Figure 1. The guide supports the implementation of the root cause analysis process.

There are four steps in the root cause analysis process:
1. Craft a Problem Statement Based on Data
2. Brainstorm Causal Factors
3. Analyze Underlying Causes to Identify Root Causes
4. Prioritize Root Causes for Intervention

The Root Cause Analysis Facilitator Guide explains each step in detail and provides worksheets that can be downloaded to guide the process.

Online Training
Using Root Cause Analysis to Inform School Improvement Planning

The online training provides information on how to conduct a root cause analysis to inform school improvement. School leaders, staff, and other stakeholders will learn why root cause analysis is an essential element of school improvement and how to use Maryland’s resources to facilitate the root cause analysis process.
The Maryland Every Student Succeeds Acts (ESSA) Consolidated State Plan requires schools identified for comprehensive support and improvement (CSI) to engage in the root cause analysis process. CSI schools that participated in the root cause analysis were the lowest achieving five percent of Title I schools and high schools that did not graduate one third or more of their students based on the four year adjusted cohort graduation rate.

The table below identifies CSI schools, grades served, and reason for identification.

<table>
<thead>
<tr>
<th>Local School System</th>
<th>School Name</th>
<th>Grades Served</th>
<th>Reason for Identification</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Anne Arundel</td>
<td>Anne Arundel Evening High School</td>
<td>9 to 12</td>
<td>Graduation Rate</td>
</tr>
<tr>
<td>2. Anne Arundel</td>
<td>Phoenix Academy</td>
<td>K to 12</td>
<td>Graduation Rate</td>
</tr>
<tr>
<td>3. Baltimore City Public Schools</td>
<td>Academy for College and Career Exploration</td>
<td>9 to 12</td>
<td>Graduation Rate, Low Performing</td>
</tr>
<tr>
<td>4. Baltimore City Public Schools</td>
<td>Achievement Academy at Harbor City High School</td>
<td>9 to 12</td>
<td>Graduation Rate</td>
</tr>
<tr>
<td>5. Baltimore City Public Schools</td>
<td>Alexander Hamilton Elementary School</td>
<td>PK to 5</td>
<td>Low Performing</td>
</tr>
<tr>
<td>6. Baltimore City Public Schools</td>
<td>Augusta Fells Savage Institute of Visual Arts</td>
<td>9 to 12</td>
<td>Graduation Rate</td>
</tr>
<tr>
<td>7. Baltimore City Public Schools</td>
<td>Barclay Elementary/Middle School</td>
<td>PK to 8</td>
<td>Low Performing</td>
</tr>
<tr>
<td>8. Baltimore City Public Schools</td>
<td>Benjamin Franklin High School at Masonville Cove</td>
<td>9 to 12</td>
<td>Graduation Rate</td>
</tr>
<tr>
<td>9. Baltimore City Public Schools</td>
<td>Bluford Drew Jemison STEM Academy West</td>
<td>6 to 12</td>
<td>Low Performing</td>
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<tr>
<td>10. Baltimore City Public Schools</td>
<td>Booker T. Washington Middle School</td>
<td>6 to 8</td>
<td>Low Performing</td>
</tr>
<tr>
<td>11. Baltimore City Public Schools</td>
<td>Calverton Elementary/Middle School</td>
<td>PK to 8</td>
<td>Low Performing</td>
</tr>
<tr>
<td>12. Baltimore City Public Schools</td>
<td>Cherry Hill Elementary/Middle School</td>
<td>3 to 8</td>
<td>Low Performing</td>
</tr>
<tr>
<td>Local School System</td>
<td>School Name</td>
<td>Grades Served</td>
<td>Reason for Identification</td>
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</tr>
<tr>
<td>13. Baltimore City Public Schools</td>
<td>ConneXions: A Community Based Arts School</td>
<td>6 to 12</td>
<td>Low Performing</td>
</tr>
<tr>
<td>14. Baltimore City Public Schools</td>
<td>Digital Harbor High School</td>
<td>9 to 12</td>
<td>Graduation Rate</td>
</tr>
<tr>
<td>15. Baltimore City Public Schools</td>
<td>Dr. Nathan A. Pitts-Ashburton Elementary/Middle School</td>
<td>PK to 8</td>
<td>Low Performing</td>
</tr>
<tr>
<td>16. Baltimore City Public Schools</td>
<td>Eutaw-Marshburn Elementary School</td>
<td>PK to 5</td>
<td>Low Performing</td>
</tr>
<tr>
<td>17. Baltimore City Public Schools</td>
<td>Excel Academy at Francis M. Wood High School</td>
<td>6 to 12</td>
<td>Graduation Rate</td>
</tr>
<tr>
<td>18. Baltimore City Public Schools</td>
<td>Forest Park High School</td>
<td>9 to 12</td>
<td>Graduation Rate</td>
</tr>
<tr>
<td>19. Baltimore City Public Schools</td>
<td>Fort Worthington Elementary/Middle School</td>
<td>K to 8</td>
<td>Low Performing</td>
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<tr>
<td>20. Baltimore City Public Schools</td>
<td>Harlem Park Elementary/Middle School</td>
<td>PK to 8</td>
<td>Low Performing</td>
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<tr>
<td>21. Baltimore City Public Schools</td>
<td>Independence School Local I High School</td>
<td>9 to 12</td>
<td>Graduation Rate</td>
</tr>
<tr>
<td>22. Baltimore City Public Schools</td>
<td>Lockerman Bundy Elementary School</td>
<td>PK to 5</td>
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<td>23. Baltimore City Public Schools</td>
<td>Matthew A. Henson Elementary School</td>
<td>PK to 5</td>
<td>Low Performing</td>
</tr>
<tr>
<td>24. Baltimore City Public Schools</td>
<td>National Academy Foundation</td>
<td>6 to 12</td>
<td>Low Performing Graduation Rate</td>
</tr>
<tr>
<td>25. Baltimore City Public Schools</td>
<td>New Era Academy</td>
<td>9 to 12</td>
<td>Graduation Rate</td>
</tr>
<tr>
<td>26. Baltimore City Public Schools</td>
<td>Patterson High School</td>
<td>9 to 12</td>
<td>Graduation Rate</td>
</tr>
<tr>
<td>27. Baltimore City Public Schools</td>
<td>Pimlico Elementary/Middle School</td>
<td>PK to 8</td>
<td>Low Performing</td>
</tr>
<tr>
<td>Local School System</td>
<td>School Name</td>
<td>Grades Served</td>
<td>Reason for Identification</td>
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<tr>
<td>28. Baltimore City Public Schools</td>
<td>Reach! Partnership School, The</td>
<td>9 to 12</td>
<td>Graduation Rate</td>
</tr>
<tr>
<td>29. Baltimore City Public Schools</td>
<td>Reginald F. Lewis High School</td>
<td>9 to 12</td>
<td>Graduation Rate</td>
</tr>
<tr>
<td>30. Baltimore City Public Schools</td>
<td>Renaissance Academy</td>
<td>9 to 12</td>
<td>Graduation Rate</td>
</tr>
<tr>
<td>31. Baltimore City Public Schools</td>
<td>Robert W. Coleman Elementary School</td>
<td>PK to 5</td>
<td>Low Performing</td>
</tr>
<tr>
<td>32. Baltimore City Public Schools</td>
<td>Vanguard Collegiate Middle School</td>
<td>6 to 8</td>
<td>Low Performing</td>
</tr>
<tr>
<td>33. Baltimore City Public Schools</td>
<td>William Pinderhughes Elementary and Middle School (now called Sandtown-Winchester Achievement Academy)</td>
<td>PK to 8</td>
<td>Low Performing</td>
</tr>
<tr>
<td>34. Prince George’s County Public Schools</td>
<td>High Point High School</td>
<td>9 to 12</td>
<td>Graduation Rate</td>
</tr>
<tr>
<td>35. Prince George’s County Public Schools</td>
<td>Northwestern High School</td>
<td>9 to 12</td>
<td>Graduation Rate</td>
</tr>
<tr>
<td>36. Prince George’s County Public Schools</td>
<td>Northwestern Evening High School</td>
<td>9 to 12</td>
<td>Graduation Rate</td>
</tr>
</tbody>
</table>
Root Cause Analysis
This facilitator guide contains protocols designed to engage school leaders and stakeholders in the early steps of a root cause analysis process from identifying a specific, actionable problem and its root causes to prioritizing the root causes for importance and feasibility to address in the school’s continuous improvement efforts.

The time frames provided are estimates to guide the specific planning and facilitation. Activities may be shortened or lengthened based on participants’ needs, understandings, and familiarity with the content. Appendices A and B provide two sample agendas: Appendix A is a sample agenda for crafting the problem statement and Appendix B is a sample agenda for identifying and prioritizing the causal factors. Appendix C contains a list of the school stakeholders that are required to participate in the causal system analysis process.

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Craft a Problem Statement Based on Data

STEP GOAL(S):
1. Determine a problem statement to drive analysis of root causes.
2. Identify stakeholders for large-group workshops.

STEP OUTPUT(S):
- Problem statement
- Participant list for stakeholder root cause analysis (RCA) workshop

MATERIALS:
- School and local school system data
- Problem statement worksheet (Figure 2)
- Successes and challenges questions/worksheet

PARTICIPANTS:
- School leadership team
- Local school system leader (i.e. principal supervisor, school improvement lead)
- Optional: School stakeholder team (See Appendix C)

Part 1. Review School Data and Results

<table>
<thead>
<tr>
<th>60 minutes</th>
<th>Materials:</th>
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<tbody>
<tr>
<td></td>
<td>School Report Card</td>
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<td></td>
<td>Needs Assessment Report</td>
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<tr>
<td></td>
<td>Current and Prior School Improvement Plans</td>
</tr>
<tr>
<td></td>
<td>Additional School and District Data</td>
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</tbody>
</table>

Directions: Guide participants through conversation to understand their current data and previous performance and indicators with attention focused on the factors related to their identification as a Comprehensive Support and Improvement (CSI) school.

1. Following the discussion of each data source, prompt participants to reflect on and capture their key thoughts and takeaways for that data source.
2. Once all data sources have been examined, have participants reflect on themes and similarities among the data sources that stand out to them.

Driving Questions:
- What do successful student outcomes look like, and where are the biggest gaps between what you would like to see and where you are currently?
- Where is this not happening, and to what extent is it not happening (are there specific grades, subjects, subgroups, etc.)?
- Why was the school identified as a CSI school, and how is that reflected in the data?
- What data points support this as being a major gap?
FIGURE 1. DATA FINDINGS

<table>
<thead>
<tr>
<th>Data Source</th>
<th>Key Takeaways (2-3)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Needs Assessment</td>
<td>80% of African-American students scored a level 1 or 2 on state assessments. Level 1 is “did not yet meet expectations” and level 2 is “partially met expectations”.</td>
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</table>

Themes Across Data Sources

<table>
<thead>
<tr>
<th>African-American students in 3rd and 5th grade have 8 times higher incident of out-of-school suspension.</th>
</tr>
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<tbody>
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</tbody>
</table>
| Remaining Questions

Part 2. Categorize Problem Areas and Develop Themes

<table>
<thead>
<tr>
<th>45 minutes</th>
<th>Materials</th>
<th>School Report Card</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Needs Assessment Report</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Current and Prior School Improvement Plans</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Additional School and District Data</td>
</tr>
</tbody>
</table>

Directions: School leadership and University of Maryland facilitators discuss the themes evident in the data and how these themes relate to the criteria for prioritizing recommendations that will be determined in the end of the process. The key consideration in this step is selecting problems for focus that will lead to investigating issues key to achieving notable improvement in student outcomes related to the reasons for which the school was identified as a CSI school.

- Discuss major themes evident in the data as they relate to the school's identification as a CSI school.
- Consider the number of priorities that have arisen during the previous discussion and how related they are to each other. Priorities and themes in the data may need to be consolidated toward larger scope issues or prioritized to focus on a single problem statement that has a systemic organizational reach.
  - Why has this emerged as a theme?
  - How many criteria does this theme meet?
  - Which themes are rising to the top for you? Why?
STEP 1

- Rank themes based on their alignment to criteria and discussion results. Add ranking to themes table from Part 1.

Criteria for Prioritizing Problem Statements:
- How important is the problem to addressing our needs?
  - Student outcomes will be improved.
  - Teacher efficacy will be increased.
  - Organizational systems will be improved.
- How feasible is it to address this problem?
  - Available resources are adequate.
  - Available staff and capacity are adequate (or can be developed through training and recruitment).
  - Support and buy-in are sufficient.
- How aligned is the problem to our need?
  - Problem is related to the reason the school identified as a CSI school.
  - Problem can be addressed by effective selection and implementation of evidence-based practices.

Part 3. Craft Problem Statement

<table>
<thead>
<tr>
<th>30 minutes</th>
<th>Materials:</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Problem Statement Guidance</td>
</tr>
<tr>
<td></td>
<td>Problem Statement Examples</td>
</tr>
</tbody>
</table>

Directions: School leadership and University of Maryland facilitators craft a problem statement that describes the overall scope of the highest ranked problem themes uncovered in the review of district and school data. The problem statement will focus the analysis of root causes.

1. Use the problem statement guidance (Figure 2) to guide participants through a discussion of how their identified priorities align with the conditions of a problem statement.
2. Write a problem statement that describes the conditions to capture an agreed-upon problem statement.

Problem Statement Criteria:
An effective problem statement describes a problem:
- Who is impacted?
- What is the focus?
- Where the problem occurs?
- When the problem occurs (grade level, education process)?
- Gap or connection; the problem statement can be explicitly connected to the reason for engaging in the investigation.

Note of caution: When discussing “who” in crafting the problem statement, avoid blaming individuals or groups. Focusing on who experiences the problem instead of who causes it (1) doesn’t blame individuals or stakeholder groups (engaged in the process) and (2) avoids diagnosing root causes prematurely.
Problem Statement Examples:

Example: In Grades 3–8, 82% of students did not score at the Meets or Exceeds on the English language arts (ELA) statewide assessment.

Non-example: Our students are not meeting expectations on state assessments.

Example: Multiple data sources indicate that a high percentage of students in the English language learner (ELL) and special education subgroups in Grades 9–12 are not meeting college and career readiness standards.

Non-example: ELL and individualized education program (IEP) students are performing below their peers.

FIGURE 2. PROBLEM STATEMENT GUIDANCE

Well-developed problem statements set the stage for a successful root cause analysis. These statements may describe a situation, issue, barrier, impediment, or challenge that a school must address to meet its obligation to its community and to prepare students to be contributing citizens, or it may define a gap between current reality and desired performance.

<table>
<thead>
<tr>
<th>Condition</th>
<th>Condition Present? (Y/N)</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>To whom does it happen?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>What is the nature of the problem? What happened?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Where and when does it occur?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Is there a defined gap?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>How does it affect or connect to our desired state?</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Step Output. Problem Statement:

Student (whom) achievement (what) in English language arts at all grades (where and when) is 15% to 25% lower than average on district and state assessments (gap).
Brainstorm Causal Factors

**STEP GOALS:**
1. Determine factors contributing to the occurrence of the problem statement.
2. Identify themes that organize brainstormed “factors” to drive further investigation into the underlying causes.

**STEP OUTPUT(S):**
- Causal factor categories/statements

**MATERIALS:**
- Problem statement
- Post-its
- Markers and pens
- Fishbone diagram

**PARTICIPANTS:**
- School leadership team
- Local school system representative (i.e. principal supervisor, school improvement lead, etc.)
- School and community stakeholder
- School stakeholder team (See Appendix C)

### Data and Problem Statement Review

<table>
<thead>
<tr>
<th>30 minutes</th>
<th>Materials:</th>
<th>Data Sources</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Problem Statement</td>
<td>Problem Statement Guidance Results</td>
</tr>
</tbody>
</table>

**Directions:** Share process and agreed-upon problem statement and allow time for participant understanding and reflection.

1. Share data and process used to determine agreed-upon problem statement.
2. Share problem statement and guidance results.
3. Small groups discuss problem statement.

**Discussion Question:** How does this problem statement reflect what you care about at your table? Were the relevant data included in the discussion? If not, write down what questions you still have and hold on to it for later in the day.

4. Small-group share out:
   - One way the statement connected with the people at your table
   - One question you still have (if you have a question) about the problem statement

5. Whole-group discussion.
# Part 1. Brainstorm Causal Factors

<table>
<thead>
<tr>
<th>45 minutes</th>
<th>Materials:</th>
<th>Post-its Pens</th>
</tr>
</thead>
</table>

**Directions:** Brainstorm individual factors contributing to the existence or recurrence of the problem statement.

In small groups of five to eight participants each:

1. Individually brainstorm and write individual factors/possible causes on Post-it Notes (one causal factor per Post-it). Allow three to five minutes for this activity.
2. Pass all Post-its to the left, review Post-its, and brainstorm additional causal factors. Allow another five minutes.
3. Repeat a third rotation.

**About brainstorming:**

4. Remind participants to keep these criteria in mind throughout this activity:
   a. Record a single idea on a single Post-it note.
   b. Avoid naming solutions.
   c. Avoid blaming people.
   d. Focus on what is under the school’s control.
   e. Use statements, not questions.
5. It is important to keep in mind that in brainstorming, “more is better,” and “there is no such thing as a bad idea.”
6. The next steps in this process will focus on organizing and analyzing causal factors to determine what is most likely and feasible to inform future action. For now, we are generating ideas.

---

# Part 2. Organize Causal Factors to Identify Themes

<table>
<thead>
<tr>
<th>45 minutes</th>
<th>Materials:</th>
<th>Fishbone Diagram (Chart Paper and Marker) Post-its With Ideas From Part 1</th>
</tr>
</thead>
</table>

**Directions:** Small groups organize causal factors into categories or themes of related factors using a fishbone diagram (see Figure 2). The large group discusses all identified themes and combines or consolidates themes across groups to create a single set of causal factor themes.

1. There is no single “right way” to complete this step; here are some ideas on how to approach this activity:
   a. **Read aloud.** Distribute individual factors among all participants. Take turns reading aloud to the group, asking clarifying questions as needed. Group members discuss ideas about related factors and possible categories.
   b. **Read silently.** Distribute individual factors among all participants. Participants read their Post-its silently and individually share thoughts on emerging themes with group. Group members share and discuss ideas about possible categories.
   c. **Group sort.** This is often the choice for “standing groups.” Participants organically read factors and collaboratively discuss possible categories. Participants ask clarifying questions as needed and move around Post-its as needed. Participants break into smaller groups to review the initial categories and reconvene as a large group to confirm that the initial categories work and exchange Post-its as necessary.
3. Large-group carousel to review all identified themes and causal factors informing these themes. Participants can contribute to other groups' work by adding:
   a. Questions for clarification
   b. Additional factors to support the theme
   c. Possible areas of overlap to other themes
4. Small groups revisit original poster and look for areas of needed consolidation across themes.

FIGURE 3. FISHBONE DIAGRAM TEMPLATE

Part 3. Craft Causal Factor Statements

30 minutes
Materials: Complete Fishbone Diagram With Themes Causal Factor Statement Guidance

Directions: Small groups craft a statement that describes the overall condition or factor described by the selected “theme” that is contributing to the problem statement. Each “theme” of factors organized previously in Part 2 is crafted in to a single causal factor statement. Small groups share out their draft statements, and other groups have the chance to ask clarifying questions.

1. Participants review the causal factors and discuss how this theme relates back to the problem statement or how it relates to why the school has been identified as a CSI school.
2. Complete the causal factor statement guidance (Figure 3) and draft a statement.
3. Repeat Steps 1 and 2 as many times as needed/as time allows for each group’s set of themes. Large groups may want to break in half to work through more statements more quickly.
4. Small groups share out their results, and other groups may ask clarifying questions.
Well-developed causal factor statements describe the theme for further investigation to describe the similarities and conditions across the causal factors within the theme. These statements summarize the main points and rationale for combining the causal factors as a theme.

<table>
<thead>
<tr>
<th>Condition</th>
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<th>Description</th>
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<td></td>
<td></td>
</tr>
</tbody>
</table>

**Step Output, Causal Factor Statements:**

*Example: High rates of absence during the testing window in grades 3-5 impact student preparation for state testing.*

*Non-example: Students don’t come to school.*
Analyze Underlying Causes to Identify Root Causes

**STEP GOALS:**
1. Determine underlying cause(s) that address the identified problem statement.
2. Identify which underlying causes are primary “root” cause(s).

**STEP OUTPUT(S):**
- List of root and contributing causes

**MATERIALS:**
- 5 Whys protocol (Figure 5)
- Root versus contributing cause decision tree (Figure 6)
- Root cause list (Figure 7)

**PARTICIPANTS:**
- School leadership team
- Local school system leader (i.e. principal supervisor, school improvement lead)
- School and community stakeholder

**Part 1. Determine Underlying Causes**

<table>
<thead>
<tr>
<th>30 minutes</th>
<th>Materials:</th>
<th>Causal Factor Statements (on Posters or Displayed on Screen)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Stickers or Markers (for Voting)</td>
<td></td>
</tr>
</tbody>
</table>

**Directions:** Discuss each potential cause (causal factor statement) identified through Step 2 that will be used to explore underlying cause(s) and (if necessary) prioritize potential causes for order of exploration.

1. Group facilitator reads each potential cause aloud, participants ask questions for clarification. Note that this step is first about ensuring understanding; this step is not about building consensus or determining priority.
2. Revisit consolidation step “organize contributing factors to identify themes” (if necessary).
3. Individuals vote to prioritize causal factor statements for further investigation in Part 2, Dig Deeper, and facilitator selects top prioritized statements to drive the next round of activity.
Part 2. Dig Deeper for Root Causes

### Directions
Explore potential causes for underlying cause(s) using the 5 Whys questioning protocol. Once the underlying cause of one potential cause has been determined, repeat the process with the next prioritized potential cause (causal factor statement).

1. Create new groups, assigning one group to ensure that participants are in new mixed groups so that each small group from Step 2 has been reconfigured and the new groups include representation from all (or most) of the previous groups to the extent possible. Determine group size and configuration based on the number of participants and number of potential causes to explore.
2. Facilitator uses the 5 Whys protocol with each potential cause, recording responses from participants. If more than one possible response is offered, come to agreement on the “most likely” response to continue to investigate, recording the additional responses in case they need to be revisited later.
3. At the end of the 5 Whys questioning for each potential cause, group arrives at a consensus on a final statement describing the underlying cause.

### FIGURE 5. 5 WHYs ORGANIZER

<table>
<thead>
<tr>
<th>Causal Factor Statement:</th>
<th>POSSIBLE EXPLANATIONS</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>High rates of absence during the testing window in grades 3-5 impact student preparation for state testing.</strong></td>
<td></td>
</tr>
<tr>
<td><strong>GUIDING QUESTION</strong></td>
<td><strong>POSSIBLE EXPLANATIONS</strong></td>
</tr>
<tr>
<td>Why do we have this challenge?</td>
<td>First Response:</td>
</tr>
<tr>
<td>Note: During this phase of the process, ask the question “why” until arriving at the underlying cause.</td>
<td>Why is that the case?</td>
</tr>
<tr>
<td></td>
<td>Why is that the case?</td>
</tr>
<tr>
<td></td>
<td>Why is that the case?</td>
</tr>
<tr>
<td></td>
<td>Why is that the case?</td>
</tr>
<tr>
<td></td>
<td>Why is that the case?</td>
</tr>
<tr>
<td><strong>Underlying Cause:</strong></td>
<td></td>
</tr>
<tr>
<td>The school does not publicize the importance of testing and prepare families for it.</td>
<td></td>
</tr>
</tbody>
</table>
Part 3. Determine Root versus Contributing Causes

<table>
<thead>
<tr>
<th>30 minutes</th>
<th>Materials:</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Root versus Contributing Cause Decision Tree</td>
</tr>
<tr>
<td></td>
<td>Root Cause List</td>
</tr>
</tbody>
</table>

Directions: Determine which underlying causes are root causes that must be addressed through implementation priorities and contributing causes that may inform necessary actions.

1. Facilitator introduces the decision tree flow chart and reviews the questioning process leading to a determination of root versus contributing cause.
2. Group examines each final statement using the decision tree questioning protocol.
3. Each underlying cause statement is assessed as either a root or a contributing cause and captured within the worksheet (Figure 6).
4. Participants complete the worksheet template by asking additional questions related to each cause (Figure 7).

Figure 6. Root versus Contributing Cause

Would the problem have occurred if the cause had not been present?

Yes

Will the same problem happen again if the cause is corrected?

Yes

Will correction of the cause lead to similar events?

Yes

No

No

Root Cause

### FIGURE 7. ROOT CAUSE LIST

<table>
<thead>
<tr>
<th>Underlying Cause Statement</th>
<th>Is this a root (R) or contributing (C) cause?</th>
<th>What data should we review or analyze related to this cause?</th>
<th>How will we obtain and review the data?</th>
</tr>
</thead>
</table>
| The school does not publicize the importance of testing and prepare families for it. | C | School assembly plans  
Parent communications | By asking parents in survey  
By asking students in survey |
Prioritize Root Causes for Intervention

STEP GOAL(S):
1. To prioritize the root causes for the importance of impacting student outcomes and feasibility of implementation to inform integration into school improvement plans.

STEP OUTPUT(S):
- Priority root causes for recommendations

MATERIALS:
- Stickers or markers

PARTICIPANTS:
- School leadership team
- Local school system leader (i.e. principal supervisor, school improvement lead)
- School and community stakeholder

Part 1. Criteria for Prioritization

<table>
<thead>
<tr>
<th>20 minutes</th>
<th>Materials:</th>
<th>None</th>
</tr>
</thead>
</table>

Directions: Participants review and come to a consensus on criteria for prioritizing root causes.

- Present and discuss criteria for prioritizing root causes for participant reflection and feedback.
- Come to a final consensus as a group on what constitutes a root cause most critical to move forward to recommendations.

Criteria for Prioritizing Root Causes:

- How important is the problem to addressing our needs?
  - Student outcomes will be improved.
  - Teacher efficacy will be increased.
  - Organizational systems will be improved.

- How feasible is it to address this problem?
  - Available resources are adequate.
  - Available staff and capacity are adequate (or can be developed through training and recruitment).
  - Support and buy-in are sufficient.

- How aligned is the root cause to our need?
  - Root cause is related to the reason the school identified as a CSI school.
  - Root cause can be addressed by effective selection and implementation of evidence-based practices.
### Part 2. Individually Prioritize

**20 minutes**

**Materials:**
- Chart Paper With Final Root Causes
- Completed Root Cause List Worksheets
- Stickers or Pens

**Directions:** Identify those root causes that are most likely to lead the school toward the identification of effective evidence-based practices.

1. Participants vote on root causes to identify which ones are the priorities to address through implementation based on the criteria in Part 1.
2. Organize and prioritize root causes according to participant voting.

### Part 3. Generate Preliminary Recommendations for Improvement

**20 minutes**

**Materials:** None

**Directions:** Priorities will lead to the group’s recommendations for improvements that inform the final root cause analysis report.
APPENDIX A.
SAMPLE AGENDA—CRAFTING A PROBLEM STATEMENT
AGENDA

<table>
<thead>
<tr>
<th>Time</th>
<th>Activity</th>
</tr>
</thead>
<tbody>
<tr>
<td>8:30–8:45 a.m.</td>
<td>Welcome and Introductions</td>
</tr>
<tr>
<td>8:45–9:00 a.m.</td>
<td>Overview of the Root Cause Analysis Process</td>
</tr>
<tr>
<td>9:00–10:00 a.m.</td>
<td>Review School Data Results</td>
</tr>
<tr>
<td>10:00–10:15 a.m.</td>
<td>Break</td>
</tr>
<tr>
<td>10:15–11:00 a.m.</td>
<td>Categorize Problem Areas and Develop Themes</td>
</tr>
<tr>
<td>11:00–11:30 a.m.</td>
<td>Craft Problem Statement</td>
</tr>
<tr>
<td>11:30–11:45 a.m.</td>
<td>Next Steps and Adjourn</td>
</tr>
</tbody>
</table>

APPENDIX B.
SAMPLE AGENDA—IDENTIFY CAUSAL FACTORS
AGENDA

<table>
<thead>
<tr>
<th>Time</th>
<th>Activity</th>
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<tbody>
<tr>
<td>8:30–8:45 a.m.</td>
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</tr>
<tr>
<td>8:45–9:00 a.m.</td>
<td>Overview of Root Cause Analysis</td>
</tr>
<tr>
<td>9:00–9:30 a.m.</td>
<td>Review Data and Problem Statement</td>
</tr>
<tr>
<td>9:30–9:45 a.m.</td>
<td>Break</td>
</tr>
<tr>
<td>9:45–10:30 a.m.</td>
<td>Brainstorm Causal Factors</td>
</tr>
<tr>
<td>10:30–11:15 p.m.</td>
<td>Organize Causal Factors to Identify Themes</td>
</tr>
<tr>
<td>11:15–11:45 p.m.</td>
<td>Craft Causal Factor Statements</td>
</tr>
<tr>
<td>11:45–12:45</td>
<td>Lunch</td>
</tr>
<tr>
<td>12:45–1:00 p.m.</td>
<td>Review Causal Factor Statements</td>
</tr>
<tr>
<td>1:00–1:30 p.m.</td>
<td>Determine Underlying Causes</td>
</tr>
<tr>
<td>1:30–2:30 p.m.</td>
<td>Dig Deeper for Root Causes</td>
</tr>
<tr>
<td>2:30–2:45 p.m.</td>
<td>Break</td>
</tr>
<tr>
<td>2:45–3:15 p.m.</td>
<td>Determine Root versus Contributing Factors</td>
</tr>
<tr>
<td>3:15–3:50 p.m.</td>
<td>Criteria for Prioritization</td>
</tr>
<tr>
<td>3:35–3:55 p.m.</td>
<td>Individually Prioritize</td>
</tr>
<tr>
<td>3:55–4:15 p.m.</td>
<td>Generate Preliminary Recommendations for Improvement</td>
</tr>
<tr>
<td>4:15–4:30 p.m.</td>
<td>Next Steps and Adjourn</td>
</tr>
</tbody>
</table>

APPENDIX C.
STAKEHOLDER GROUP REQUIREMENTS

Mandatory stakeholder participants are listed below. Add other participants based on individual school team composition, which should be driven by school context/need (i.e. school’s with a high special education population should have a special education representative on the team)

- Principals
- Parents
- Local Community Leaders
- Local Employer Leaders (Business Community)
- Local Government Leaders
- Central Office Staff Members (i.e. Principal Supervisor, Content Specialists)
- Teachers
- School Staff
- The Exclusive Bargaining Representative
How to Use This Tool

The Root Cause Analysis tool is divided into four parts, one for each step of the process. Each step describes the purpose of that step, the result of the step, and provides any worksheets required for that step, with brief directions for the worksheet. The final piece of the section is a place to capture the final output of the step.

The root cause analysis process is carried out through a combination of small- and large-group activities. Each set of activities produces a result for that group and activity. Each small group should choose a notetaker to capture an official record of the activity result for that group and a timekeeper to help keep the group activities on track. The facilitator will combine the small-group results from each step to create a single comprehensive version.

This tool is best used in combination with the Root Cause Analysis Tool: Facilitator Guide.

Terminology

**Problem Statement**—Concise description of the problem or issue that needs to be addressed

**Causal Factors**—Discrete issues or causes contributing to the occurrence of the problem being addressed

**Causal Factor Statements**—Describes a theme evident in the causal factors that needs further investigation to understand the underlying causes of the problem that must be addressed

**Underlying Causes**—Causes of the problem that must be addressed that are deeper than the obvious symptoms

**Contributing Causes**—Causes underlying the initial problem that may be significant or relevant but do not need to be addressed in order to resolve the initial problem

**Root Causes**—The critical cause underlying the initial problem that must be addressed in order to resolve the problem and prevent it from recurring
Craft a Problem Statement

Determine the scope of the overarching problem(s) of practice that will inform the school’s efforts to realize its desired state and based on the available school, local school system, and state data. Discuss individual data sources, and, once all data sources have been examined, reflect on themes and similarities among the data sources.

<table>
<thead>
<tr>
<th>Data Source</th>
<th>Key Takeaways (2–3)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Needs Assessment</td>
<td>80% of African-American students scored a level 1 or 2 on state assessments. Level 1 is “did not yet meet expectations” and level 2 is “partially met expectations”.</td>
</tr>
<tr>
<td></td>
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<td></td>
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</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Themes Across Data Sources</th>
<th>Ranking (Part 2)</th>
</tr>
</thead>
<tbody>
<tr>
<td>African-American students in 3rd and 5th grade have 8 times higher incident of out-of-school suspension.</td>
<td></td>
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<tr>
<td></td>
<td></td>
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<td></td>
<td></td>
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</tr>
</tbody>
</table>

Remaining Questions
Discuss major themes across data sources as they relate to the reason for the school's identification as a CSI school. Use the discussion to determine what area(s) of focus are most likely to have an impact on student outcomes through adult behaviors and actions. Craft a problem statement that reflects this focus area and provides a direction for the root cause analysis.

<table>
<thead>
<tr>
<th>Condition</th>
<th>Condition Present? (Y/N)</th>
<th>Description</th>
</tr>
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<tbody>
<tr>
<td>To whom does it happen?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>What is the nature of the problem? What happened?</td>
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<td></td>
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<td>Where and when does it occur?</td>
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<tr>
<td>Is there a defined gap?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>How does it affect or connect to our desired state?</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Step Output. Problem Statement:**

Student (whom) achievement (what) in English language arts at all grades (where and when) is 15% to 25% lower than average on district and state assessments (gap).
Brainstorm Causal Factors

Capture the collective knowledge and capacity of the people in the room by brainstorming causal factors that may contribute to the occurrence of the problem statement. Using the Post-it Notes on your table, identify individual factors related to the overall problem statement.

- Brainstorm individual factors on notes.
- Pass notes to left, review the notes, and add any additional causal factors (repeat this step one more time).
- Share brainstormed notes across the group, removing duplicates.

Organize the factors into like groupings or themes and populate the fishbone for the overall problem statement. On the fishbone diagram, the problem statement becomes the top organizational level, or the “head”; the themes become the intermediate organizational level, represented by rectangles; and the individual causal factors (captured on notes) are represented by the arrows.
Craft causal factor statements that describe the overall condition or themes contributing to the problem statement. Each theme represented on the fishbone diagram is crafted into a single causal factor statement.

Well-developed causal factor statements describe the theme for further investigation to describe the similarities and conditions across the causal factors within the theme. These statements summarize the main points and rationale for combining the causal factors as a theme.

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<td>Why or to what extent is this an issue?</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Step Output. Causal Factor Statements:**

*Example: High rates of absence during the testing window in grades 3-5 impact student preparation for state testing.*

*Non-example: Students don’t come to school.*
Analyze Underlying Causes to Identify Root Causes

Analyze the causal factor statements to determine underlying causes of the problem statement. Identifying the underlying causes ensures that issues have moved past surface “symptoms” to deeper “causes.” This step is repeated for each (or as many as possible) of the causal factor statements.

Causal Factor Statement:
High rates of absence during the testing window in grades 3-5 impact student preparation for state testing.

<table>
<thead>
<tr>
<th>GUIDING QUESTION</th>
<th>POSSIBLE EXPLANATIONS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Why do we have this challenge?</td>
<td>First Response:</td>
</tr>
<tr>
<td>Note: During this phase of the process, ask the question “why” until arriving at the underlying cause.</td>
<td>Why is that the case?</td>
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<tr>
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<td>Why is that the case?</td>
</tr>
<tr>
<td>Why is that the case?</td>
<td></td>
</tr>
</tbody>
</table>

Underlying Cause:
The school does not publicize the importance of testing and prepare families for it.
The underlying causes may or may not be the root cause that is driving the conditions and factors leading to the existence and persistence of the problem statement. Use the questions within the decision tree flow chart to determine whether each underlying cause statement is a root or contributing cause and capture the results in the root cause list.

**Graphical Representation:**

- **Contributing Cause**
  - Would the problem have occurred if the cause had not been present? 
    - Yes
    - No
  - Will the same problem happen again if the cause is corrected? 
    - Yes
    - No
  - Will correction of the cause lead to similar events? 
    - Yes
    - No

- **Root Cause**

**Table:**

<table>
<thead>
<tr>
<th>Underlying Cause Statement</th>
<th>Is this a root (R) or contributing (C) cause?</th>
<th>What data should we review or analyze related to this cause?</th>
<th>How will we obtain and review the data?</th>
</tr>
</thead>
<tbody>
<tr>
<td><em>The school does not publicize the importance of testing and prepare families for it.</em></td>
<td>C</td>
<td>School assembly plans, Parent communications</td>
<td>By asking parents in survey, By asking students in survey</td>
</tr>
</tbody>
</table>
Prioritize Root Causes for Intervention

Prioritize the root causes for intervention to ensure that these root causes that become recommendations for intervention are important and feasible. The prioritized root causes lead to discussion of the school’s recommendations for the root cause analysis report. Prioritization is determined based on individual participant voting.

Criteria for prioritizing root causes:

• How important is the problem to addressing our needs?
  - Student outcomes will be improved.
  - Teacher efficacy will be increased.
  - Organizational systems will be improved.

• How feasible is it to address this problem?
  - Available resources are adequate.
  - Available staff and capacity are adequate (or can be developed through training and recruitment).
  - Support and buy-in are sufficient.

• How aligned is the root cause to our need?
  - Root cause is related to the reason the school is identified as a CSI school.
  - Root cause can be addressed by effective selection and implementation of evidence-based practices.

<table>
<thead>
<tr>
<th>Final Output. Prioritized Root Causes (Recommended Areas for Improvement):</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
</tr>
<tr>
<td>2</td>
</tr>
<tr>
<td>3</td>
</tr>
</tbody>
</table>
This Root Cause Analysis Facilitator Guide was developed by the College of Education’s Center for Educational Innovation and Improvement at the University of Maryland, College Park. The guide was developed under contract with the Maryland State Department of Education to support the state’s implementation of its *Every Student Succeeds Act* state plan and school improvement across the state.

Specifically, partners in the Office of Leadership Development and School Improvement and the Division of Curriculum, Instructional improvement and Professional Learning - Title I Program Improvement and Family Support Branch.

Maryland State Department of Education
Office of Leadership Development and School Improvement
Division of Curriculum, Instructional improvement and Professional Learning - Title I Program Improvement and Family Support Branch.

This report is available on the Center for Educational Innovation and Improvement website at: www.education.umd.edu/research/centers/ceii

The Center for Educational Innovation and Improvement at the University of Maryland, College Park supports faculty in the College of Education as well as across campus in developing new and innovative approaches that advance public education and enhance educational opportunities for children and young adults in Maryland and the region. The Center serves as an incubator for infusing improvement science into schools and school systems and for bringing together researchers and Pre-K-12 educators to focus on creating innovative initiatives that advance teaching, leadership and learning.

Special thanks to the State Support Network and the Center on Great Teachers and Leaders at the American Institutes for Research for providing technical assistance, content expertise, and tool development support during the creation of these resources.
Findings of Root Cause Analysis for Comprehensive Support and Improvement Schools

Eutaw-Marshburn Elementary School

June 2019
This report was prepared by the University of Maryland College Park Center for Educational Innovation and Improvement at the College of Education and in partnership with the Bowie State University College of Education and the Morgan State University School of Education & Urban Studies. The Root Cause Analysis process was facilitated by Dr. Susan De La Paz and Dr. Danielle Bierzynski who also co-authored this report.

This report was developed with federal Title I funds and are considered open source.
The purpose of this report is to share outcomes of a Root Cause Analysis (RCA) conducted to support Eutaw Mashburn in identifying underlying causes of school performance problems. The report provides an overview of the RCA process, school profile, problem statement, root cause analysis and recommendations to address the root causes.

The Maryland Every Student Succeeds Act (ESSA) Consolidated State Plan requires schools that have been identified for comprehensive support and improvement (CSI) to engage in a root cause analysis process facilitated by a third party. CSI schools are the lowest achieving five percent of Title I schools; high schools that do not graduate one third or more of their students; or schools that have federal school improvement grants (SIG). Eutaw-Mashburn was identified as a CSI school because it is one of the lowest achieving five percent of Title I schools. Outcomes of the root cause analysis must be used to inform the development of intervention plans to improve school performance.

CSI schools that were identified in the 2018-2019 school year have three years to exit CSI status. CSI school leaders will receive a leadership coach to support the development and implementation of the intervention plan. CSI principals are required to participate in the Leading for School Improvement Institute, which provides customized professional learning experiences to support school improvement. CSI principals are also required to engage in monitoring visits by the Maryland State Department of Education to ensure that progress is being made toward school improvement goals.

The Maryland State Department of Education (MSDE) established a memorandum of understanding with the University of Maryland College Park to facilitate the RCA process. The University of Maryland College Park collaborated with the American Institutes for Research (AIR) to develop RCA tools and train field teams. Field teams consisted of researchers, data analysts, and education practitioners from Morgan State University, Johns Hopkins University, Bowie State University, and other organizations. Field team members worked with CSI school staff and stakeholders to complete the RCA process. MSDE will support each school to engage in a long-term continuous improvement process that includes analysis of RCA outcomes, development and implementation of interventions, and evaluations of employed interventions. As part of this process, CSI schools were first required to go through a needs-assessment process that was used to drive the RCA work.
RCA Process for CSI Schools

A Root Cause Analysis Facilitator Guide was developed to promote consistency in the root cause analysis process. The Facilitator Guide contains protocols designed to engage school leaders and stakeholders in identifying a specific problem and prioritizing root causes for the problem.

There was a four step process used to facilitate the root cause analysis:

1. Craft a Problem Statement Based on Data
2. Brainstorm Causal Factors
3. Analyze Underlying Causes to Identify Root Causes
4. Prioritize Root Causes for Intervention

The root cause analysis process translates the successes and challenges identified through the CSI needs assessment into priorities to inform actionable improvement planning. The work with schools was staged in three steps: 1) identify the problem; 2) identify the root causes; 3) draft a school report with recommendations for improvement.

First, the RCA facilitator team worked with the school leadership team to craft a problem statement in a half-day meeting. Using the available school, school system, and state data, the school team selected a problem that related to their CSI status and provided a direction for the root cause analysis.

Second, the facilitators returned to the school for a full-day meeting with the school’s stakeholder team to better understand the root causes of the problem. Once the stakeholders worked through the process of determining the root causes, they prioritized those root causes based on importance, feasibility, and alignment to CSI status.

As a third and final step, the RCA facilitator team created school-specific reports with recommendations for addressing the problem and root causes in improvement planning.
An RCA starts with asking the question: What problem do we face that, if solved or mitigated, would most effectively lead to desired outcomes (in this case, significant improvement in student outcomes that would lead to the school being removed from CSI status)? This “Problem Statement” is then studied and interrogated by a team of stakeholders through the RCA process that answers questions such as:

- Why do we get our current outcomes?
- Who are the people involved in this problem?
- What policies, procedures, or rules contribute to this problem?
- What resources are currently engaging with this problem?
- What environmental issues impact this problem?

This process leads to a small number of “root causes” to the problem designed to help school stakeholders design strategies and programs that are more likely to lead to significant improvement for students. In addition, the process includes conducting research on the problem and prioritized root causes and recommending evidence-based strategies for improvement.
II. SCHOOL PROFILE

School Name:
Eutaw-Marshburn Elementary School
1624 Eutaw Place, Baltimore, MD 21217
(410) 396-0779
Total Number of Teachers: 18

### Student Demographics

<table>
<thead>
<tr>
<th></th>
<th>Total Students</th>
<th>Asian</th>
<th>Black</th>
<th>Hispanic/Latino</th>
<th>White</th>
<th>Other</th>
<th>% Economically Disadvantaged</th>
<th>% English Learners</th>
<th>% Students with Disabilities</th>
</tr>
</thead>
<tbody>
<tr>
<td>Students</td>
<td>296</td>
<td>&lt;10</td>
<td>288</td>
<td>&lt;10</td>
<td>&lt;10</td>
<td>&lt;10</td>
<td>86.61%</td>
<td>&lt;5%</td>
<td>16.72%</td>
</tr>
</tbody>
</table>

Eutaw-Marshburn Elementary School
MSDE School Report Card for K-5

<table>
<thead>
<tr>
<th>Academic Progress</th>
<th>School Quality and Student Success</th>
<th>Academic Achievement</th>
<th>Progress in Achieving English Language</th>
</tr>
</thead>
<tbody>
<tr>
<td>Student Growth Percentile in Math</td>
<td>31</td>
<td>Students Not Chronically Absent</td>
<td>% Proficient in Math</td>
</tr>
<tr>
<td>Student Growth Percentile in English Language Arts</td>
<td>26</td>
<td>Access to Well Rounded Curriculum</td>
<td>Average Performance Math</td>
</tr>
<tr>
<td>Credit for Well Rounded Curriculum N/A</td>
<td>0%</td>
<td>% Proficient in English Language Arts</td>
<td>0%</td>
</tr>
<tr>
<td>Earned Points</td>
<td>6/30</td>
<td>Earned</td>
<td>% Proficient Points</td>
</tr>
<tr>
<td>Earned Points</td>
<td>3.6/20</td>
<td>Earned</td>
<td>Points</td>
</tr>
</tbody>
</table>

To view this school’s full report card, visit www.mdreportcard.org
Description of the Process

The first step in the RCA process was to convene a half-day meeting that was facilitated by a two-member RCA facilitator team. Eutaw-Marshburn Elementary School convened on April 2, 2019 for Day 1 of the RCA process. The convening included the school leadership team, consisting of a local school system leader (i.e. principal supervisor, school improvement lead) and other key school staff. The primary goal of this meeting was to craft a “Problem Statement” that would drive the root cause analysis. A Problem Statement is defined as a statement describing a situation, issue, barrier, impediment, or challenge that a school must address to significantly improve students outcomes related particularly to those outcomes that led to the school being identified as CSI.

The goals of the first day were to 1) determine a problem statement to drive the analysis of root causes; and 2) identify stakeholders for day two of the RCA.

The Instructional Leadership Team (ILT) met for half a day on April 2nd, 2019 to examine Eutaw-Marshburn school-level data and to select a Problem of Practice. The ILT included the following stakeholders: Tiffany Cole (Principal), Nicole Scruggs (Data Monitoring and Compliance Specialist), Erica Robinson (Literacy Lead), Darnise Mickey (3rd grade teacher), Fareeha Waheed (special education teacher), Bernadette Samaco (Pre-K teacher/lead).

The primary data sources reviewed were the MSDE CSI Needs Assessment Report, the MD State School Report Card, School Climate Survey data, and qualitative date from school stakeholders.

Problem Statement Criteria

Participants arrived at a problem statement by examining how CSI schools were identified; using data to understand why the school received CSI status; organizing data trends into themes; evaluating the feasibility of addressing those themes; and prioritizing addressable themes to identify the RCA area of focus. The problem statement was crafted based on the following criteria:

1. **How important is the problem to addressing our needs?**
   Importance is determined by whether student outcomes will be improved, teacher efficacy is increased, and/or organizational systems will be improved.

2. **How feasible is it to address this problem?**
   Feasibility is defined by the availability of adequate resources, staff, and capacity, and whether there is sufficient support and buy-in.

3. **How aligned is the problem to our needs?**
   The problem statement must be related to the reason the school was identified as a CSI school. Also the school must be able to address the problem and its root causes by the effective selection and implementation of evidence-based practices.
Day One Summary

Participants reviewed each set of school data and flagged the school’s low academic performance in both English Language Arts (ELA) and math as significant concerns, in combination with high rates of student chronic absenteeism and minimal growth from the beginning to the end of the year. Additionally, they noted that their school enrolled a disproportionately high number of students with disabilities. What emerged initially from the review of the school-level data was a complex picture of the many at-risk factors that characterize their students, which lead to the array of low academic outcomes. The Eutaw-Marshburn team also described positive gains such as some increase in math scores and lower suspension rates due to incorporating restorative practices at their school. Parents overall, based on the parent survey, have a positive view of the school. While there were many themes that emerged from the data review, with many of the themes being factors outside of the school’s control, what was glaring was the need to focus on ELA instruction and performance on state assessment. The ILT generated a draft problem statement that focused on ELA proficiency.

<table>
<thead>
<tr>
<th>Data Source</th>
<th>Key Takeaways</th>
</tr>
</thead>
<tbody>
<tr>
<td>MD School Report Card</td>
<td>• Historically low performing in literacy.</td>
</tr>
<tr>
<td></td>
<td>• Most students are 1-2 grade levels below in math and 2 or more grade levels below in ELA.</td>
</tr>
<tr>
<td>Needs Assessment</td>
<td>• School resources scored the “lowest” at 90.7%.</td>
</tr>
<tr>
<td></td>
<td>• Decrease in enrollment (a new school opened close by).</td>
</tr>
<tr>
<td></td>
<td>• Chronic absentee rate has improved but is worse among students who receive Tier 3 services. Students who need instruction the most attend the least.</td>
</tr>
<tr>
<td>Parent Survey</td>
<td>• New families are pleased with school culture; highest dimension is safety 98.8% - students don’t feel safe outside but they feel safe in the school.</td>
</tr>
<tr>
<td></td>
<td>• Administration is rated positively; people have clear understanding of what is happening.</td>
</tr>
<tr>
<td>Themes Across Data Sources (Topics) (1 being high priority)</td>
<td>Ranking</td>
</tr>
<tr>
<td>Students have increased performance in math relative to literacy (problem is that literacy is low and stagnant)</td>
<td>1</td>
</tr>
<tr>
<td>Many parents do not have adequate capacity/supports to facilitate student success (see absenteeism rate); however parental engagement has increased</td>
<td>2</td>
</tr>
<tr>
<td>Poverty is a contributing factor to student academic achievement</td>
<td>3</td>
</tr>
<tr>
<td>Parents trust school (safe) and suspension rates decreased; perhaps this could be capitalized on to increase engagement in some way</td>
<td>NA</td>
</tr>
</tbody>
</table>
III. PROBLEM STATEMENT

Final Problem Statement

In grades 3-5, 83.7% of students did not score at the meets or exceeds level on the 2018 state assessment for English language arts.

Evidence Base for Problem Statement

This section represents a brief research summary of the evidence related to the significance and/or impact of the Problem Statement identified above.

Reading outcomes are hugely important for students to master. The National Assessment of Educational Progress (NAEP) is the only assessment that measures what U.S. students know and can do in various subjects across the nation, states, and in some urban districts. Also known as The Nation’s Report Card, NAEP has provided important information about how students are performing academically since 1969. In 2017, the percentage of fourth grade students in Maryland who performed at or above the NAEP Proficient level was 40% and the percentage of students in Maryland who performed at or above the NAEP Basic level was 69 (National Center for Educational Statistics, 2018). In contrast, the percentage of students in Baltimore City who performed at or above the NAEP Proficient level was 13% in 2017, and 39% performed at or above the NAEP Basic level. These results have real consequences for students as reading performance is highly correlated to future earnings (Hanushek and Woessmann, 2008).

IV. ROOT CAUSE ANALYSIS OF THE PROBLEM STATEMENT

Day 2 Summary

Eutaw-Marshburn Elementary School convened on April 9, 2019 for day two of the RCA process. Day two was devoted to working with the same core school leadership team members as well as additional stakeholders to identify and prioritize the root causes of the problem so the causes could be addressed in the school improvement planning efforts. Refer to Appendix A for the full list of participants.

The stakeholder team started the day by reviewing the draft Problem of Practice Statement and modifying the finalized version. The stakeholder team was then divided into three smaller groups through which each group generated ideas as to what factors contribute to the problem of low literacy performance. Each group created a Fishbone Diagram to represent their thinking. Each Fishbone was shared and combined into one composite Fishbone, organized into themes, and a causal factor statement was crafted for each theme. Using the “5 Whys Activity,” stakeholders were encouraged to dig deeper into causal factor statements in order to arrive at underlying causes. Underlying causes were then collectively ranked in order to arrive at a prioritized list of root causes.

Specifically, the goals for Day two included:

• Determine factors contributing to the problem statement.
• Identify underlying causes of the problem and determine which underlying causes are primary “root” causes.
• Prioritize root causes for the importance of impacting student outcomes and the feasibility of implementing strategies to address them.
### IV. ROOT CAUSE ANALYSIS OF THE PROBLEM STATEMENT

#### Causal Factors
The “Fishbone” diagram represents the stakeholder group’s initial assessment of all of the individual factors contributing to the existence or recurrence of the problem statement.

**Eutaw-Marshburn Fishbone: Exploring Causes**

<table>
<thead>
<tr>
<th>Curriculum Alignment</th>
<th>Preparation</th>
<th>Environment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Not the right/or enough intervention at the primary level to fill the gap in meeting basic reading skills</td>
<td>Most students are reading 2 or more grade levels below when entering each grade</td>
<td>Because sometimes it’s too loud in the class and when the teacher is talking we can’t hear her</td>
</tr>
<tr>
<td>Having the PRC being changed every year to new things on the test</td>
<td>Students not ready for the test, and them trying to remember what they were taught.</td>
<td>Testing at the end of the school year when EMES third floor is often very warm most likely has an effect on ELA testing</td>
</tr>
<tr>
<td>Primary curriculum is not aligned or is not rigorous enough; disconnect between primary and intermediate grades Amplify, iReady, and state assessment</td>
<td>Teachers that have to help students who need support.</td>
<td>The cause of the problem is heat in the classrooms</td>
</tr>
<tr>
<td>Some kids are scared to ask for help when they don’t understand something</td>
<td>Attendance at school may be affecting continuous progress in ELA</td>
<td>Technology may not be available in students’ homes in a way that supports ELA improvement</td>
</tr>
<tr>
<td>They may have gotten stressed and stopped working on the test</td>
<td>Students and parents are involved in the remembering of the test in reading and math.</td>
<td>Technology may be problematic - issues at school with quality or quantity of available software programs</td>
</tr>
<tr>
<td>Some students rush because they get bored; we have a tutoring website and some students don’t take that seriously</td>
<td>If homework assignments are structured to support testing models but are not completed by students, ELA progress will most likely be affected</td>
<td>(blank)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Student Motivation</th>
<th>Home/School</th>
<th>Technology</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

0% of students in grades 3-5 at Eutaw-Marshburn Elementary School reached proficiency in ELA as measured by the state assessment.
IV. ROOT CAUSE ANALYSIS OF THE PROBLEM STATEMENT

Eutaw-Marshburn Fishbone: Exploring Causes

0% of students in grades 3-5 at Eutaw-Marshburn Elementary School reached proficiency in ELA as measured by the state assessment.

**Resources Staff and Materials**
- Misaligned resources (interim assessments, curriculum)
- Prescribed resources do not always work
- Availability of resources - laptop computer readiness; community partners can support

**Staffing - Human Resources**
- Lack of adequate staffing to address needs of lower level students
- Additional support staff to take on more classes so that teachers can observe each other
- Consistent staffing

**Professional Learning**
- To better understand how to deliver interventions effectively
- New curriculum can take time to build skills; not knowing how to strategically modify the curriculum
- Professional development around ELA for all content areas/teachers so it is part of the school culture

**Student Motivation**
- Motivation (some students)

**Student Readiness**
- Offering exposure to variety of texts and ways of thinking about tests
- Exposure to structure of statewide assessments
- Lack of tier 2 interventions to move students forward

**Family Engagement**
- Family training of how standards are supported in class
- Supporting parents to help support their children
- How to we teach families so that their learning continues? Family support and engagement are needed to link at home learning to school

**Student Attendance/Chronic Absence**
- Student attendance/chronic absence

**Exposure to Structure of Statewide Assessment**
- Exposure to structure of statewide assessments

**Lack of Tier 2 Interventions to Move Students Forward**
- Lack of tier 2 interventions to move students forward

**Family Support and Engagement**
- How to we teach families so that their learning continues? Family support and engagement are needed to link at home learning to school
IV. ROOT CAUSE ANALYSIS OF THE PROBLEM STATEMENT

Eutaw-Marshburn Fishbone: Exploring Causes

**Policy Structures and Resources**
- Few in-school supports; availability of high quality teachers and teacher development; administrator effectiveness
- Lack of funding; technology; lack of resources for curriculum improvement
- Lack of improvement science & consistent data tracking; need smaller class sizes
- Teacher understanding of the demands of content standards and how to deliver effective instruction to students

**Students**
- Some students are reading 2 or more grade levels when entering each grade
- Limited exposure to early literacy skills
- Student motivation and drive for literacy success
- High rates of tardiness

**Engagement**
- Parents and students do not understand how important testing is
- Teacher self-efficacy: Do teachers see themselves as agents of change?
- There is a need for more parent workshops about testing
- Teachers’ commitment to parent communication and parent engagement

**Instruction**
- Low attendance
- Parents aren’t working with their kids

**Environment**
- Student-teacher relationships
- Teachers’ commitment to parent communication and parent engagement

**Relationships**
- Classroom environment including socio-emotional support from teachers

---

0% of students in grades 3-5 at Eutaw-Marshburn Elementary School reached proficiency in ELA as measured by the state assessment.
IV. ROOT CAUSE ANALYSIS OF THE PROBLEM STATEMENT

Root Causes

Following several group exercises, the stakeholder group came to consensus on the priority root causes. These are the causes most critical to addressing the problem based on the criteria of importance, feasibility, and alignment.

Prioritized Root Causes

<table>
<thead>
<tr>
<th>Final Output. Prioritized Root Causes:</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Students have little exposure to social-emotional skills to help them cope with academic pressure.</td>
</tr>
<tr>
<td>2. Teachers have gaps in knowledge of interventions at lower grades to address challenges in upper grades. Many teachers did not learn how to teach phonics, something that many students need.</td>
</tr>
<tr>
<td>3. The school needs more consistent and intensive cycles of professional learning and data cycles as it relates to tracking reading growth from K-5.</td>
</tr>
</tbody>
</table>

Evidence Base for Root Causes

The consequences of not being socially and behaviorally ready for Kindergarten are real. According to the Baltimore Education Research Consortium (Bettencourt, Gross, & Ho, 2016), as recently as in 2015, 52% of Baltimore City Public Schools’ kindergarteners were entering school without sufficient social-behavioral skills needed to learn. These are the readiness skills children need to follow directions, comply with the rules, manage emotions, solve problems, organize and complete tasks, and get along with others. Poor educational outcomes included being retained in grade, receiving additional services and supports through an Individualized Education Plan (IEP) or 504 plan, and being suspended or expelled from school.

According to a review of social-emotional learning (SEL) literature conducted by the What Works Clearinghouse (WWC), there have been many studies that have been done about SEL that have had positive outcomes (O’Conner, De Feyter, Carr, Luo, and Romm, 2017). However, while there is a strong evidence base for restorative practices (International Institute for Restorative Practices) with reduced suspension rates, the field has not yet established clear recommendations with respect to other SEL interventions that relate to coping with academic pressure. For example, social skills training (which is a collection of practices that utilize a behavioral approach to teaching preschool children age-appropriate social skills and competencies, including communication, problem
IV. ROOT CAUSE ANALYSIS OF THE PROBLEM STATEMENT

solving, decision making, self-management, and peer relations) was found to have no discernible effects on cognition and positive effects on social-emotional development and behavior for children with disabilities in early education settings.

Second, there is national data on the problems associated with poor reading instruction. As previously noted, NAEP data show that only 36% of 4th grade students scored at or above proficiency in reading in 2017. The Institute of Educational Sciences’ What Works Clearinghouse (WWC) released a Practice Guide for Principals and Teachers, focused on recommendations for foundational skills to support reading for understanding in kindergarten through 3rd grade (Foorman et al., 2016). In this practice guide, the WWC reports that to develop literacy, “students need instruction in two related sets of skills: foundational reading skills and reading comprehension skills (p. 1).” Without teaching foundational reading and reading comprehension skills, they will continue to struggle with building fluency, decoding words, and developing academic language. The National Reading Panel (NRP) found that instruction to increase reading fluency in particular (which is built through developing academic language and decoding) is “critical to both reading comprehension and future reading success” (2000, p. 2) While there is much more involved in teaching reading, what is important to note is that in order for students to become proficient readers, effective reading instruction needs to be present at the early elementary level and by extension, throughout later grades, for struggling readers.

Third, when it comes to teacher professional development (PD), improved teaching and learning are most effective when they are tailored to the individual needs of teachers. Additionally, PD is more effective when it is collaborative and inquiry based (Center on Instruction). Such collaborative structures are typically led by instructional coaches, often through professional communities of practice. Instructional coaching provides teachers with the support they need to build collective leadership and continuously improve teacher instructional capacity and student learning. Sailors and Shanklin (2010) note that in order to raise literacy levels, schools and districts began investing in coaches to improve teaching instruction. Furthermore, Sailors and Shanklin highlight a growing body of research that points to the positive impact that instructional coaching has on improving teacher instruction on literacy and in turn, increasing student achievement in reading.
V. RECOMMENDATIONS FOR IMPROVEMENT

Brainstormed Ideas for Improvement Planning from Stakeholders

At the conclusion of day two, the stakeholders had a brief opportunity to brainstorm ideas and strategies that might help to address the root causes identified. This brainstorming activity asked participants to list any good ideas they have. These ideas were not prioritized or identified as formal recommendations to the school.

To address social-emotional learning:
- Integrate social emotional resources such as CASEL into curriculum
- Obtain support in implementing restorative coaching
- Include wellness rooms or restorative corners in classrooms where students can go to decompress and get acclimated to school
- Identify habits of mind that could be highlighted at regular intervals

To address teaching reading at all grade levels
- Train all teachers K-5 in reading instruction (Fundations)
- Integrate intervention teachers to support Tier 2 and Tier 3 instruction
- Support out-of-school training for teachers
- Build in opportunities for teachers to visit other schools that are similar to Eutaw-Marshburn Elementary School
- Provide workshops that address individual teacher needs
- Incorporate a targeted coaching model
- Teacher-to-teacher observations; peer feedback - identify focus areas
- Enlist support of community partners and parents to support literacy

To address effective professional development in reading instruction
- Analyze data from instructional planning
- Purposeful professional learning cycles
- Incorporate data cycles where student work is analyzed and teachers can collaborate on real-time changes that can be made to improve student outcomes

Brainstormed Ideas for Improvement Planning from Stakeholders

Final recommendations for this report have been developed by the University of Maryland College Park in consultation with RCA facilitators and leaders at MSDE. Recommendations were developed using the following process:
- Reviewing the ideas, notes, and stakeholder perspectives gathered throughout the Root Cause Analysis process;
- Conducting a scan of the research literature related to the problem statement and prioritized root causes identified throughout the process. While a comprehensive research analysis was outside the scope of this project, the team reviewed research using the standards of evidence model outlined in the Every Student Succeeds Act (ESSA) to offer research that had moderate or strong evidence of effectiveness (Level 2 or Level 1 on the ESSA framework);
- Compiling, organizing and categorizing over 150 recommendations submitted by RCA facilitators.

These recommendations are offered by the University of Maryland College Park in consultation with MSDE. They represent only a portion of the potential strategies and interventions that will become a part of the school’s three-year intervention plan developed in concert with MSDE.
Implement Social Emotional Learning (SEL) to explicitly teach SEL skills focused on self-awareness, self-management, social-awareness, relationship skills, responsible decision-making.

Employ a robust Social Emotional Learning (SEL) program that is inclusive of all school-based staff, including but not limited to, administrators, teachers, school social workers, guidance counselors, and para-professionals. Effective school based social-emotional learning programs are comprised of five major components:

1. Self-awareness
2. Self-management
3. Social awareness
4. Relationship skills
5. Responsible decision making (CASEL, 2012).

These competencies are more impactful when they are set in an environment in which organizational culture, climate, and conditions all support social-emotional learning (Durlak et al., 2011).

One goal of SEL programs is to improve the quality of interactions among individuals in schools and within classrooms; therefore, school-level social processes are important to examine when considering an SEL program. Moreover, some evaluation studies find that within low-income urban communities, school climate may be particularly salient (Aber et al., 1998; Hughes et al., 2005). Though CASEL endorses the use of evidence-based SEL programs in the context of systemic schoolwide and districtwide approaches (Devaney et al., 2006), it is necessary for a systemic approach to SEL programming to entail integration of SEL across school activities, both in and outside of the classroom, and even reaching into the community.
V. RECOMMENDATIONS FOR IMPROVEMENT

<table>
<thead>
<tr>
<th>Recommendations</th>
<th>Domain of Rapid School Improvement</th>
</tr>
</thead>
<tbody>
<tr>
<td>Provide strong literacy instruction in English Language Arts courses and across the curriculum.</td>
<td>Instructional Transformation</td>
</tr>
</tbody>
</table>

Research suggests that for students to become fluent readers they need to build both foundational reading skills and comprehension skills.

Key components for improving reading skills include:

- Explicit instruction of academic language
- Instruction on decoding words, word parts, and letter sounds
- Reading multiple sentences daily
- The use of reading comprehension strategies
- The use of textual organizational structures
- An engaging and context rich setting for reading (National Reading Panel, 2000; Foorman et al., 2017; Shanahan, 2010)

The instruction of reading must extend beyond the language arts classroom or lesson. Teaching students the function and structure of language as they are used in multiple content areas and domains is also part of a robust literacy program. While this focus has typically been focused on the secondary level, building a foundation for literacy in the content areas is important for future success in multiple subjects (Moss, 2005).
## V. RECOMMENDATIONS FOR IMPROVEMENT

<table>
<thead>
<tr>
<th>Recommendations</th>
<th>Domain of Rapid School Improvement</th>
</tr>
</thead>
<tbody>
<tr>
<td>Maximize professional learning focused on planning, instruction, and improving learning conditions for students with a focus on data-based decision making to monitor student progress.</td>
<td>Instructional Transformation</td>
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<tr>
<td></td>
<td>Talent Development</td>
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</tbody>
</table>

Establish or significantly strengthen a school-wide cycle of professional learning—coaching, observations, and team planning—that includes an aligned focus across core instructional activities. Several studies link teacher professional learning with improvements in instruction and quality of learning environments (Vescio, Ross, & Adams, 2008). Professional learning opportunities are most effective when they are part of coherent school-wide efforts that link content, assessments, and reflection, rather than episodic professional workshops (Akiba & Liang, 2016). Two effective professional learning strategies include professional learning communities and job-embedded professional learning.

**Professional Learning Communities:** Teachers need time spent planning and learning with colleagues in collaborative planning time and/or professional learning communities (PLCs) that are focused on teaching and learning not on administrative or organizational demands. Research shows that PLCs are most successful when they are designed and supported with specific attention to leadership, group dynamics, trust and respect (Vangrieken et al., 2017). PLCs can form around topics that teachers can explore together, plan for, and build upon together using peer observations and deeper capacity-building on areas of need, such as social emotional learning or trauma-informed teaching. Authentic PLCs include the following features:

- Dedicated time for the PLC
- Are led by teachers and based on specific needs of students
- Are supported by school leaders with training and development activities

**Job Embedded Professional Development:** Research emphasizes the importance of professional learning that emphasizes explicit strategies for conducting active teaching, assessment, observation, and reflection rather than includes abstract discussions (Darling-Hammond & Richardson, 2009).
### V. RECOMMENDATIONS FOR IMPROVEMENT

<table>
<thead>
<tr>
<th>Recommendations</th>
<th>Domain of Rapid School Improvement</th>
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</thead>
<tbody>
<tr>
<td>Adopt a school-wide progress monitoring system that uses data to track key academic indicators in order to identify and intervene with students who are at risk of falling off track.</td>
<td>Turnaround Leadership Culture Shift</td>
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</tbody>
</table>

Monitoring and integrating multiple aspects of student data that can be used to direct implementation of student support strategies is an essential foundation for an effective progress monitoring system. Often schools establish inquiry teams and monitoring cycles to address monitoring needs, which include: attendance, student performance at progress reporting periods, and on-track status for graduation (Gallimore et al., 2009). A comprehensive and well coordinated monitoring system of multiple indicators helps produce a complete picture of a student’s progress that can help predict student failure before it occurs. The following steps should be considered in establishing an effective data management system:

- **Analyze attendance data to identify students who are at risk of chronic absenteeism.** Create a school wide attendance action plan that establishes a set of prescribed interventions/actions for teachers when students are absent and provides incentives for students with favorable attendance records.

- **Require each grade level team to identify students in danger of failing at the midway point of each marking period and who are falling one or more grade levels behind.** Develop a personalized support plan for identified students that includes specific interventions/actions, person(s) responsible and specific timeframes to provide the necessary academic supports for students to pass all courses (Carlson, Borman & Robinson, 2011).
Collaboratively with the local school system representatives and stakeholders, comprehensive support and improvement (CSI) school teams will develop intervention plans that identify SMART (Specific, Measurable, Achievable, Realistic, Time-bound) intervention goals with measurable annual outcomes and progress indicators that will guide schools toward meeting annual targets and exit criteria in three years. The outcomes of the root cause analysis must be used to inform the development of the SMART intervention goals and identification of evidence-based strategies included in the intervention plan. Any evidence-based strategy must meet the Every Student Succeeds Act (ESSA) evidence requirements (level 1, 2, or 3). Intervention plans will be approved by the school, school system, and the Maryland State Department of Education (MSDE), and monitored annually by staff from the local school system and the MSDE. Additional information and resources are available on the MSDE Resource Hub
https://www.marylandresourcehub.com/

APPENDICES

Appendix A: List of Stakeholders

<table>
<thead>
<tr>
<th>Name</th>
<th>Day 1</th>
<th>Day 2</th>
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<tbody>
<tr>
<td>Tiffany Cole</td>
<td>April 2, 2019</td>
<td>April 8, 2019</td>
</tr>
<tr>
<td>Nicole Scruggs</td>
<td></td>
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<tr>
<td>Bernadette Samaco</td>
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<td>Fareeha Waheed</td>
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<td>Darnice Mickey</td>
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<td>Erica Robinson</td>
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<td>Heidi Herzog</td>
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<td>Chrystie Adams</td>
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<tr>
<td>Stephon Shorter</td>
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<td>Kimberly Dudley</td>
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<tr>
<td>Tenne Thrower</td>
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<tr>
<td>Lebrie Walker</td>
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<tr>
<td>Zaire Boyd</td>
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<td>Principal</td>
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<tr>
<td>Data Monitoring and Compliance Specialist</td>
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<tr>
<td>Pre-K teacher/lead</td>
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<td>Special Education teacher</td>
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<td>3rd grade teacher</td>
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<tr>
<td>Literacy Lead</td>
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<tr>
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<td>Literacy Lead</td>
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<tr>
<td>Parent Volunteer</td>
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<tr>
<td>Brown Memorial Park Avenue Presbyterian Volunteer Coordinator</td>
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<td>Child First Authority Program Associate</td>
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<td>Judy Center, Maryland State Department of Education</td>
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<tr>
<td>Family Community Engagement Specialist</td>
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<td>Math Academic Content Liaison</td>
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<tr>
<td>Parent</td>
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<tr>
<td>4th grade student</td>
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<tr>
<td>4th grade student</td>
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Appendix B: Bios of Facilitators

**Dr. Danielle Bierzynski** has been in education for 15 years. She has served as a product manager at an educational technology start-up, where she researched the problems that English Language Arts (ELA) teachers face in the classroom and identified solutions to those challenges. Dr. Bierzynski started her work as an 8th grade ELA teacher in her hometown of Brooklyn, NY and then taught 4th, 5th, and 6th grade students in D.C. public schools through an experiential education non-profit called Live It Learn It. She served as an instructor of secondary education at the George Washington University (GWU) while working on her doctorate. Additionally, she developed curricular materials and designed professional development for 6-12 grade ELA teachers in DC Public School System as a manager of professional development and curriculum. Dr. Bierzynski has served as a reviewer and has presented at several conferences, including the American Educational Research Association (AERA). She earned her B.A. from American University, her M.A. from Brooklyn College, and her Ed.D. from GWU. Dr. Bierzynski is excited to continue working with schools across the country to identify their biggest challenges and supporting them in helping students achieve personal and academic success.

**Dr. Susan De La Paz** is Professor of Special Education at the University of Maryland. She has worked for 23 years with general and special education teachers, developing and testing writing interventions, recognizing that a significant percentage of students are at-risk for school failure or limited postsecondary outcomes due to poor literacy skills. She has spent much of this time working alongside middle school teachers and principals, building on their experiences and addressing their challenges by developing interventions that improve student learning. Dr. De La Paz has worked with the Prince George’s County Public Schools, for the past 12 years, with science and social studies district leaders, teachers, and students.
Appendix C: Citations of research


APPENDICES

INTERVENTION CITATIONS:


Institute of Education Sciences, U.S. Department of Education.


The [Maryland Every Student Succeeds Act (ESSA) Consolidated Plan](#) requires schools identified for comprehensive support and improvement (CSI) to have a root cause analysis conducted by a third party. The Maryland State Department of Education established a memorandum of understanding with the University of Maryland College Park to facilitate the root cause analysis process in CSI schools. The root cause analysis process was facilitated from March – May 2019. The table below provides a draft summary of problem statements, prioritized root causes, and recommendations for each CSI school that participated in the root cause analysis process.

<table>
<thead>
<tr>
<th>School Name</th>
<th>Local School System</th>
<th>Problem Statement</th>
<th>Prioritized Root Causes</th>
<th>Recommendations</th>
</tr>
</thead>
</table>
| 1. Anne Arundel Evening Academy | Anne Arundel        | 65% of students (n=249) are chronically absent. | - Some students have limited knowledge about the importance of attending and completing high school and how it impacts academic success.  
- Many students struggle with the transition to an alternative evening high school, which requires a sense of belonging and community building among teachers, faculty, staff, and families. | - Adopt a school-wide progress monitoring system that uses data to track key academic indicators in order to identify students who are at risk of falling off track.  
- Develop or expand a mentor program to ensure every student at risk of failure has an advocate in the building.  
- Expand career-related curricular programming, pathways, and opportunities for students. |
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<tr>
<th>School Name</th>
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<th>Prioritized Root Causes</th>
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</thead>
</table>
| 2. Phoenix Academy                  | Anne Arundel        | The level of instruction in core content areas is insufficient to accelerate learning to graduation. | • Lack of standard procedures to train new staff and mentor new and struggling educators.  
• Inconsistent responses to discipline in the classroom and schoolwide procedures are not cohesive or consistent.  
• Difficulty recruiting and retaining certified teachers as alternative schools can seem like daunting places for new teachers. | • Maximize professional learning focused on planning, instruction, and improving learning conditions for students.  
• Implement Social Emotional Learning (SEL) to explicitly teach SEL skills focused on self-awareness, self-management, social-awareness, relationship skills, and responsible decision-making.  
• Invest in professional learning opportunities and support for principal’s development as an effective instructional leader. |
| 3. Academy for College and Career Exploration | Baltimore City | More than 95% of students in grades 6-12 are not meeting college and career-ready standards. | • Inadequate support for teachers focused on instructional effectiveness.  
• Inadequate academic intervention and differentiation.  
• Inconsistent implementation of schoolwide accountability and expectations. | • Adopt student-centered, active-learning instructional practices across all classrooms.  
• Provide high-quality differentiated instruction in all general education classes.  
• Invest in professional learning opportunities and support for principal’s development as an effective turnaround leader. |
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<tr>
<th>School Name</th>
<th>Local School System</th>
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<th>Recommendations</th>
</tr>
</thead>
<tbody>
<tr>
<td>4. Achievement Academy @ Harbor City High</td>
<td>Baltimore City</td>
<td>97% of students are chronically absent, including many that are enrolled but never attend.</td>
<td>• Lack of supports for social emotional learning.&lt;br&gt;• Low expectations for students throughout the community.&lt;br&gt;• Lack of focus on employability training to prepare graduates.</td>
<td>• Implement Social Emotional Learning (SEL) to explicitly teach SEL skills focused on self-awareness, self-management, social-awareness, relationship skills, and responsible decision-making.&lt;br&gt;• Develop or expand a mentor program to ensure every student at risk of failure has an adult advocate in the building.&lt;br&gt;• Expand career-related curricular programming, pathways, and opportunities for students.</td>
</tr>
<tr>
<td>5. Alexander Hamilton Elementary School</td>
<td>Baltimore City</td>
<td>For students in grades K-5, academic growth is insufficient to meet grade level proficiency.</td>
<td>• Lack of social emotional and other supports for students and inadequate family connections that communicate high expectations throughout.&lt;br&gt;• Inadequate research-based interventions and materials to support differentiation.&lt;br&gt;• Insufficient opportunities for professional learning that allow teachers to practice in real-time or with others to grow instructional practice.</td>
<td>• Implement one or more research-backed strategies to promote positive school climate, including positive discipline, conflict management, anti-bullying, and/or positive youth development.&lt;br&gt;• Maximize professional learning focused on planning, instruction, and improving learning conditions for students.&lt;br&gt;• Invest in professional learning opportunities and support for principal’s development as an effective turnaround leader.</td>
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| 6. Augusta Fells Savage Institute of Visual Arts | Baltimore City | 50% of students are not passing 2 or more core courses. | • Instructional practices do not reflect high academic expectations throughout the building.  
• Students are unaware of their progress in class and how they can improve to pass courses.  
• Inadequate and inconsistent progress monitoring for on-track performance. | • Adopt student-centered, active-learning instructional practices across all classrooms.  
• Use data-based decision-making to improve instruction and student achievement.  
• Adopt a school-wide progress monitoring system that uses data to track key academic indicators in order to identify students who are at risk of falling off track. |
| 7. Barclay Elementary and Middle School | Baltimore City | In grades 3-5, 90% of students and in grades 6-8 less than 95% of students are not proficient on state assessments in either math or reading. | • Teachers lack knowledge of how to differentiate the curriculum and instructional methods to meet student needs.  
• Teachers lack support and resources to balance academic and socio-emotional learning needs of students.  
• There is a lack of effective communication pathways for teachers to share their understandings of students’ needs with other teachers, parents, and community partners.  
• Trusting relationships among the school, families, and community does not exist. | • Provide high-quality differentiated instruction in all general education classes.  
• Implement Social Emotional Learning (SEL) to explicitly teach SEL skills focused on self-awareness, self-management, social-awareness, relationship skills, and responsible decision-making.  
• Enlist parents and families as academic partners in student learning. |
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<tr>
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<th>Recommendations</th>
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</table>
| 8. Benjamin Franklin High School  | Baltimore City      | 45% of students in grades 9-11 (53% of 9th grade; 40% of 10th grade; 37% of 11th grade) failed two or more core academic courses. | • Teachers do not receive quality professional learning to consistently implement quality instruction.  
• There is not a clear system of monitoring to determine the effectiveness of professional learning and collaborative planning.  
• The school does not adequately address social and emotional obstacles of students. | • Maximize professional learning focused on planning, instruction, and improving learning conditions for students.  
• Implement Social Emotional Learning (SEL) to explicitly teach SEL skills focused on self-awareness, self-management, social-awareness, relationship skills, and responsible decision-making.  
• Adopt a schoolwide progress monitoring system that uses data to track key academic indicators in order to identify students who are at risk of falling off track. |
| 9. Bluford Drew Jemison STEM Academy West | Baltimore City  | In grades 6-12, more than 93% of students did not score at the meets or exceeds level on the 2018 state assessment for English language arts. | • Lack of cohesion and connection to the school's identity, mission, vision, values, and expectations for students and staff.  
• Teachers lack the knowledge and skills to differentiate their instructional methods to meet diverse learner needs.  
• Instructional and behavioral supports for students are not consistent across content areas. | • Invest in professional learning opportunities and support for principal's development as an effective Instructional Leader.  
• Provide high-quality differentiated instruction in all general education classes.  
• Maximize professional learning focused on planning, instruction, and improving learning conditions for students. |
<table>
<thead>
<tr>
<th>School Name</th>
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</table>
| 10. Booker T. Washington (Middle School) | Baltimore City     | In grades 6-8, 40% of teachers are not yet tenured or certified, and 80% of students are testing two years or more below grade level in English language arts and mathematics. | • New leaders lack support to help build cohesion and capacity within the building.  
• Curriculum lacks interventions and strategies to meet the needs of the student population, particularly students performing below grade level.  
• Lack of knowledge and professional skills of teachers, especially new teachers impedes student learning. | • Invest in professional learning opportunities and support for principal's development as an effective turnaround leader.  
• Provide high-quality differentiated instruction in all general education classes.  
• Maximize professional learning focused on planning, instruction, and improving learning conditions for students. |
| 11. Calverton Elementary and Middle School | Baltimore City     | Students in grades 3-8 are performing at 2.4% proficiency in English language arts as compared to 17.8% proficiency rates in English language arts across the district. | • Teachers do not have the curricular bridge between where students are (performing significantly below grade level) and where the curriculum says they should be.  
• Teachers lack strategies to scaffold and differentiate instruction to students who are performing below grade level.  
• The school does not have adequate resources, strategies, supports, or personnel in place to address social emotional needs of students and families beyond the classroom. | • Use data-based decision-making to improve instruction and student achievement.  
• Provide strong literacy instruction in English Language Arts courses and across the curriculum.  
• Implement Social Emotional Learning (SEL) to explicitly teach SEL skills focused on self-awareness, self-management, social-awareness, relationship skills, and responsible decision-making. |
# Comprehensive Support and Improvement Schools
## Root Cause Analysis Summary

<table>
<thead>
<tr>
<th>School Name</th>
<th>Local School System</th>
<th>Problem Statement</th>
<th>Prioritized Root Causes</th>
<th>Recommendations</th>
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</table>
| 12. Cherry Hill Elementary/Middle School | Baltimore City     | Over 80% of students in grades 3-8 did not meet state proficiency requirements and iReady growth targets in English language arts. | • School-wide behavior systems, expectations, and norms are not consistently implemented which negatively impacts instruction, school culture and climate.  
• Schoolwide professional learning does not focus on building teacher knowledge and skillset.  
• Data is used by teachers inconsistently to understand and address students’ needs. | • Implement research-based strategies to promote positive school climate, including positive discipline, conflict management, anti-bullying, and/or positive youth development.  
• Maximize professional learning focused on planning, instruction, and improving learning conditions for students.  
• Use data-based decision-making to improve instruction and student achievement. |
| 13. ConneXions: A Community-Based Arts School | Baltimore City     | More than 96% of students in grades 6-8 and 83% of students in grades 9-12 are not meeting college and career readiness standards for English language arts measured by state assessment. | • There is a school culture of low accountability and inconsistent or nontransparent schoolwide systems.  
• School lacks the capacity to support teacher instructional development in math, English language arts, differentiated instruction, and supporting students with special needs.  
• School lacks full access to curriculum and professional learning experiences provided by Baltimore City Public School System.  
• School lacks needed technology capability (devices, internet connectivity, IT management). | • Invest in professional learning opportunities and support for principal’s development as an effective turnaround leader.  
• Invest in access to acquire the entire curriculum and professional learning experiences provided by Baltimore City Public Schools.  
• Invest in instructional technology and professional learning to support effective implementation. |
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</table>
| 14. Digital Harbor High School | Baltimore City      | Multiple data sources indicate that 29% of students at Digital Harbor High School are not on grade level status. | - Some staff do not have a deep understanding of standards and curriculum and have not received adequate training to develop their curricular knowledge.  
- Some staff lack deep knowledge of effective instruction, especially pedagogical knowledge to support improving the performance of students.  
- Some teachers have low expectations of student performance or do not believe their teaching practices influence student performance. | - Maximize professional learning focused on planning, instruction, and improving learning conditions for students.  
- Adopt student-centered, active-learning instructional practices across all classrooms. Provide professional learning experiences to support effective implementation.  
- Provide credit recovery to ensure opportunities for students to get back on track after failing a course.  
- Adopt a school-wide progress monitoring system that uses data to track key academic indicators in order to identify students who are at risk of falling off track.  
- Adopt student-centered, active-learning instructional practices across all classrooms. |
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</table>
| 15. Dr. Nathan A. Pitts - Ashburton Elementary and Middle School | Baltimore City | In grades 3-8, 91% of students did not score at the meets or exceeds proficiency level on state assessments in English language arts. | • Teachers lack the resources and knowledge to engage students in rigorous and differentiated tasks.  
• The school lacks clear systems and structures to clearly map and plan instruction across grade levels.  
• The school has limited resources and stakeholders to support student socio-emotional needs. | • Maximize professional learning focused on planning, instruction, and improving learning conditions for students.  
• Provide high-quality differentiated instruction in all general education classes.  
• Implement coordinated “wraparound” supports for all students, which are customized to meet the specific needs of the school community. |
| 16. Eutaw Mashburn Elementary School | Baltimore City | In 2017-2018, 0% of students in grades 3-5 demonstrated proficiency on state assessments in English language arts. | • Lack of support for students social emotional skills to help them cope with academic pressures.  
• Teachers have gaps in knowledge of interventions at lower grades to address challenges in upper grades. Many teachers did not learn how to teach phonics, something that many students need.  
• Reading growth progress for K-5 students over the course of the year is not well known or consistently tracked. | • Implement Social Emotional Learning (SEL) to explicitly teach SEL skills focused on self-awareness, self-management, social-awareness, relationship skills, and responsible decision-making.  
• Provide strong literacy instruction in English Language Arts courses and across the curriculum.  
• Maximize professional learning focused on planning, instruction, and improving learning conditions for students.  
• Use data-based decision-making to improve instruction and student achievement. |
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<th>Local School System</th>
<th>Problem Statement</th>
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</table>
| 17. Excel Academy @ Francis M. Wood | Baltimore City       | Disengagement in class work across all grade levels (grades 7-12) adversely impacts student attendance (98% absenteeism rate), academic performance (97% of students did not pass 2 or more courses), and graduation rates. | - Traditional, paced high school curriculum and instruction lacks relevancy to students’ lives.  
- Poor school-student relationships.  
- High teacher apathy leads to high teacher burnout and turnover.  
- Inadequate student in-take and case management processes.  
- Traditional discipline system does not fit an alternative school student population. | - Expand career-related curricular programming, pathways, and opportunities for students.  
- Develop or expand a mentor program to ensure every student at risk of failure has an adult advocate in the building.  
- Adopt student-centered, active-learning instructional practices across all classrooms. |
| 18. Forest Park High School | Baltimore City       | The discrepancies between the desired graduation rate of 67% and the actual graduation rate of 63.97% can be attributed to overall engagement of school-based staff. | - School improvement goals and expectations of staff are not detailed or documented.  
- High rates of attrition amongst teachers makes it difficult to gain momentum.  
- School has few services and wraparround supports for students. | - Adopt student-centered, active-learning instructional practices across all classrooms.  
- Invest in professional learning opportunities and support for principal's development as an effective Turnaround Leader.  
- Conduct a community asset mapping exercise to identify supports to provide wraparround services. |
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</table>
| 19. Fort Worthington Elementary and Middle School | Baltimore City      | In grades 3-8, 93% of students did not meet proficiency on the 2018 state assessment for English language arts. | • Low rates of teacher efficacy in grades 3-8 negatively impact instruction and student assessment performance.  
• Students in grades 3-8 are entering each grade level with increasing gaps between their skills and required grade-level skills in English language arts.  
• Individualized academic interventions are not in place to meet the needs of each student.                                                                 | • Maximize professional learning focused on planning, instruction, and improving learning conditions for students.  
• Provide strong literacy instruction in English language arts courses and across the curriculum.  
• Provide supplemental academic support during school hours. |
| 20. Harlem Park Elementary and Middle School     | Baltimore City      | Low teacher attendance and inconsistency with planning and delivering high-quality instruction is resulting in low student achievement in English language arts (5%) and math (<5%) as measured on state assessments. | • Insufficient support for teachers, especially new teachers leading to low attendance.  
• Low teacher skill to differentiate instruction.  
• Low teacher expectations for student learning.  
• Poor relationship building between the school and families.                                                                 | • Maximize professional learning focused on planning, instruction, and improving learning conditions for students.  
• Provide high-quality differentiated instruction in all general education classes.  
• Enlist parents and families as academic partners in student learning. |
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</table>
| 21. Independence School Local I High School | Baltimore City | 41.7% of students are graduating with a certificate of program completion and 0% of graduating students have demonstrated proficiency in either math or English language arts as measured by state assessments. | • The school does not use a curriculum that is linked to state standards (as a Charter School, it does not have free access to BCS curriculum) nor one that guides implementation of project-based learning instructional strategies that are part of the school’s mission.  
• Students do not have access to required courses, and school does not offer summer school to keep students engaged and on-track for college and career readiness; in addition, students do not receive college and coursework guidance.  
• Students do not receive social and emotional support that can help them handle in-school pressures and out-of-school traumas. | • Maximize professional learning focused on planning, instruction, and improving learning conditions for students.  
• Provide extended learning and instructional time in English language arts and mathematics in the form of an extended school day, extended school year including summer, or Saturday school.  
• Adopt student-centered, active-learning instructional practices across all classrooms.  
• Implement Social Emotional Learning (SEL) to explicitly teach SEL skills focused on self-awareness, self-management, social-awareness, relationship skills, and responsible decision-making. |
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<tbody>
<tr>
<td>22. Lockerman Bundy</td>
<td>Baltimore City</td>
<td>In grades 3-5, 83.7% of students did not score at the meets or exceeds level on the 2018 state assessment for English language arts.</td>
</tr>
</tbody>
</table>

**Prioritized Root Causes**

- Quality of teacher instruction is not being systematically assessed nor is ongoing support being offered to help develop teacher capacity.
- Teachers and support staff lack depth of knowledge about reading acquisition (brain development, physical development, skill development) that leads to a lack of targeted academic supports and inconsistent intervention practices.
- Lack of support among all stakeholders to support student social and emotional learning.
- Time and space have not been allocated/scheduled at defined intervals to communicate and strategize around current data and practices to address high student absences and tardiness.

**Recommendations**

- Use data-based decision-making to improve instruction and student achievement.
- Provide strong literacy instruction in English language arts courses and across the curriculum.
- Maximize professional learning focused on planning, instruction, and improving learning conditions for students.
- Implement Social Emotional Learning (SEL) to explicitly teach SEL skills focused on self-awareness, self-management, social-awareness, relationship skills, and responsible decision-making.
### Comprehensive Support and Improvement Schools
#### Root Cause Analysis Summary

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</table>
| 23. Matthew A. Henson Elementary School | Baltimore City      | In grades 3-5, 95% of students did not score at meets expectations or exceeds expectations on the state assessment in English language arts. | • English language arts staff do not have sufficient knowledge and capacity to differentiate literacy instruction based on the needs of each student.  
• Lack of trust among all stakeholders to support student success.  
• Lack of consistent incentives (intrinsic/extrinsic) and data analysis processes to increase student attendance.                                                                 | • Provide strong literacy instruction in English language arts courses and across the curriculum. Use data-based decision-making to improve instruction and student achievement.  
• Enlist parents and families as academic partners in student learning.  
• Use data-based decision-making to improve instruction and student achievement. |
| 24. National Academy Foundation       | Baltimore City      | Student achievement across all grade levels and graduation rates are below district expectations. | • Professional learning does not focus on actionable lessons skills that can be taken into the classroom.  
• Teachers and administrators have not calibrated their understanding and execution of the progressive discipline policy.  
• Students and staff have a lack of information or misinformation about the courses students need to graduate on time.                                                                 | • Maximize professional learning focused on planning, instruction, and improving learning conditions for students.  
• Adopt a school-wide progress monitoring system that uses data to track key academic indicators in order to identify students who are at risk of falling off track.  
• Adopt student-centered, active-learning instructional practices across all classrooms. |
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| 25. New Era Academy  | Baltimore City      | An array of data sources indicate that 47.4% of all students are not graduating on time within their four-year cohort. This low rate holds across multiple student groups.                                                 | • Teachers do not have the resources and skills to support diverse student needs in the classroom.  
• High rate of adverse childhood experiences impact student attendance.                                                                                                        | • Provide high-quality differentiated instruction in all general education classes.  
• Implement coordinated “wraparound” supports for all students, which are customized to meet the specific needs of the school community.  
• Develop or expand a mentor program to ensure every student at risk of failure has an adult advocate in the building.                                                                                                                      |
| 26. Patterson High School | Baltimore City      | Data indicates a high percentage of students are chronically absent, highly mobile, over-aged and/or under-credited impacting their ability to graduate on time.                                                                 | • Teachers and staff are not equipped to support students who live in poverty and/or have experienced trauma.  
• Poor school climate wherein students and teachers are isolated and disconnected.  
• The school support of teacher professional learning is insufficient.                                                                                           | • Implement Social Emotional Learning (SEL) to explicitly teach SEL skills focused on self-awareness, self-management, social-awareness, relationship skills, and responsible decision-making.  
• Implement one or more research-backed strategies to promote positive school climate, including positive discipline, conflict management, anti-bullying, and/or positive youth development.  
• Maximize professional learning focused on planning, instruction, and improving learning conditions for students.                                                                                                                   |
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| 27. Pimlico Elementary and Middle School | Baltimore City | More than 93% of students in 3-8 are not proficient on state assessments in English language arts and math assessments. | • Teachers lack resources and capacity to provide appropriate differentiation for students.  
• Socio-emotional learning needs of students are not addressed through current programs and curricula.  
• There is a lack of trust among the school, families, and the community. | • Provide high-quality differentiated instruction in all general education classes.  
• Implement Social Emotional Learning (SEL) to explicitly teach SEL skills focused on self-awareness, self-management, social-awareness, relationship skills, and responsible decision-making.  
• Enlist parents and families as academic partners in student learning. |
| 28. Reginald F. Lewis High School | Baltimore City | 81% of students are chronically absent. | • Teacher instability and instruction result in weak staff/student relationships.  
• Poor academic performance leads to student disengagement in courses and testing.  
• There is a lack of effective intake and induction process.  
• Transportation challenges leads to high levels of absence and tardiness. | • Adopt student-centered, active-learning instructional practices across all classrooms.  
• Provide credit recovery to ensure opportunities for students to get back on track after failing a course.  
• Adopt a school-wide progress monitoring system that uses data to track key academic indicators in order to identify students who are at risk of falling off track. |
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| 29. Renissance      | Baltimore City      | Graduation rate is currently 44%, which is part of a five-year downward decline and reflects students’ lack of preparedness for college and careers. | • Teachers lack sufficient support in developing content knowledge and pedagogy to meet students where they are and prepare students for the demands of graduation.  
  • The school does not have a culture that fosters shared accountability and responsibility with all stakeholders that includes knowledge and understanding of shared data, practices, and policies, which impacts graduation rates.  
  • The school has a negative reputation which impacts retention of high-quality teachers. | • Maximize professional learning focused on planning, instruction, and improving learning conditions for students.  
  • Adopt student-centered, active-learning instructional practices across all classrooms.  
  • Implement research-based strategies to promote positive school climate, including positive discipline, conflict management, anti-bullying, and/or positive youth development.  
  • Adopt a school-wide progress monitoring system that uses data to track key academic indicators in order to identify students who are at risk of falling off track. |
### Comprehensive Support and Improvement Schools

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| 30. Robert W. Coleman Elementary School | Baltimore City     | Although other English Language Arts assessments are showing growth in student achievement, only 2.5% of students in grades 3-5 scored at the meets or exceeds expectation level on the 2018 state assessment for English language arts. | - Teachers have varying levels of pedagogical and content knowledge and understanding of how to address social emotional needs in the classroom.  
- There is low engagement and a lack of positive communication between parents and the school to ensure that all stakeholders are informed and engaged.  
- Mental health services are limited within the school community and are not used effectively.  
- Students are not familiar with the technology that is used to administer the state assessment and there is limited technology access in the building. | - Maximize professional learning focused on planning, instruction, and improving learning conditions for students.  
- Provide strong literacy instruction in English language arts courses and across the curriculum.  
- Enlist parents and families as academic partners in student learning.  
- Implement Social Emotional Learning (SEL) to explicitly teach SEL skills focused on self-awareness, self-management, social-awareness, relationship skills, and responsible decision-making.  
- Invest in technology and high-quality instructional technology practices. |
| 31. The Reach! Partnership School     | Baltimore City     | Academic performance on all measures is negatively affected by chronic absenteeism across grades 9-12. | - Parents are less involved in school activities nor do they know how to academically support their child or support their child’s career aspirations. | - Enlist parents and families as academic partners in student learning.  
- Provide supplemental academic support during school hours. |
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| 32. William Pinderhughes Elementary and Middle School (now called Sandtown-Winchester Achievement Academy) | Baltimore City | In grades 3-8, approximately 90% of students did not score at meets or exceeds expectation levels on the statewide assessments in English language arts and math. | • Teachers do not have the pedagogical or content knowledge to support the differentiated learning needs of students, resulting in poor student engagement and students’ poor academic progression.  
• School does not address students’ socio-emotional needs as a part of its work. | • Implement Social Emotional Learning (SEL) to explicitly teach SEL skills focused on self-awareness, self-management, social-awareness, relationship skills, and responsible decision-making.  
• Provide high-quality differentiated instruction in all general education classes.  
• Implement Social Emotional Learning (SEL) to explicitly teach SEL skills focused on self-awareness, self-management, social-awareness, relationship skills, and responsible decision-making.  
• Enlist parents and families as academic partners in student learning. |
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| 33. Vanguard Collegiate Middle School | Baltimore City      | 6th grade students at Vanguard Collegiate are significantly behind grade level in English language arts and math as demonstrated by their scores on state assessments. | • The current curriculum does not have space or time for interventions to occur in content areas.  
• 6th grade students are not fully supported during their transition to middle school, particularly as they confront conflicting values, systems, and structures from their community and previous school experiences.  
• Teachers have not had a chance to see the curriculum work (for students who are multiple grade levels behind) and consequently question the appropriateness of the curriculum for Vanguard students. | • Provide high-quality differentiated instruction in all general education classes.  
• Provide extended learning and instructional time in English language arts (ELA) and mathematics in the form of an extended school day, extended school year including summer, or Saturday school.  
• Maximize professional learning focused on planning, instruction, and improving learning conditions for students. |
| 34. High Point High School         | Prince George's      | Multiple data sources indicate that a high percentage of English Learner students are not meeting Maryland College and Career Readiness Standards nor are they graduating in four years. | • There are multiple flaws in the enrollment and crediting system policies and procedures.  
• Instructional programming is not well aligned to the needs of English Learners.  
• The student body has many undiagnosed and unmet socio-emotional needs particularly as related to recent immigration experiences and socio-economic disadvantages. | • Adopt a school-wide progress monitoring system that uses data to track key academic indicators in order to identify students who are at risk of falling off track.  
• Provide high-quality differentiated instruction in all general education classes.  
• Implement Social Emotional Learning (SEL) to explicitly teach SEL skills focused on self-awareness, self-management, social-awareness, relationship skills, and responsible decision-making. |
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<td>35. Northwestern High School</td>
<td>Prince George's</td>
<td>High rates of chronic absenteeism (44% overall with higher rates for English Learners and students with special needs) contribute to low student achievement and graduation rates.</td>
<td>• Instructional and behavioral supports for students are not consistent across the school.</td>
<td>• Provide high-quality differentiated instruction in all general education classes.</td>
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<td>• Lack of cohesion and connection to the school's identity, mission, vision, values, and expectations for students and staff.</td>
<td>• Invest in professional learning opportunities and support for principal's development as an effective instructional leader.</td>
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<td>• Instruction is not consistently high-quality or connected to real life experiences.</td>
<td>• Adopt student-centered, active-learning instructional practices across all classrooms.</td>
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<tr>
<td>36. Northwestern Evening Academy</td>
<td>Prince George's</td>
<td>In grades 9-12, 77% of students were absent 10 or more school days during the 2017-2018 school year.</td>
<td>• There is a lack of an engaging and relevant curriculum.</td>
<td>• Maximize professional learning focused on planning, instruction, and improving learning conditions for students.</td>
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<td>• Instruction and instructional practices lack innovation.</td>
<td>• Invest in professional learning opportunities and support for principal's development as an effective instructional leader.</td>
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<td>• Low expectations shared across the school community.</td>
<td>• Adopt student-centered, active-learning instructional practices across all classrooms.</td>
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<td>• Physical environment (facilities) may not contribute to student engagement and learning.</td>
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