Findings and Results of Root Cause Analysis for Comprehensive Support and Improvement Schools

Forest Park High School

September, 2019

MORGAN STATE UNIVERSITY

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COLLEGE OF EDUCATION

CENTER FOR EDUCATIONAL INNOVATION AND IMPROVEMENT

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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. Mary E. Dilworth and Dr. Stephanie Timmons Brown, who also co-authored this report.

I. INTRODUCTION

The purpose of this report is to share to outcomes of a Root Cause Analysis (RCA) conducted to support Forest Park High School 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) 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). Forest Park High School was identified as a CSI school due to low graduation rates. 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 also 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 (MSDE) to ensure that progress is being made toward school improvement goals.

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 all CSI schools to go through an RCA process. MSDE will support each school to engage in a long-term continuous improvement process that includes RCA analyses, recommended 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.

I. INTRODUCTION

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:

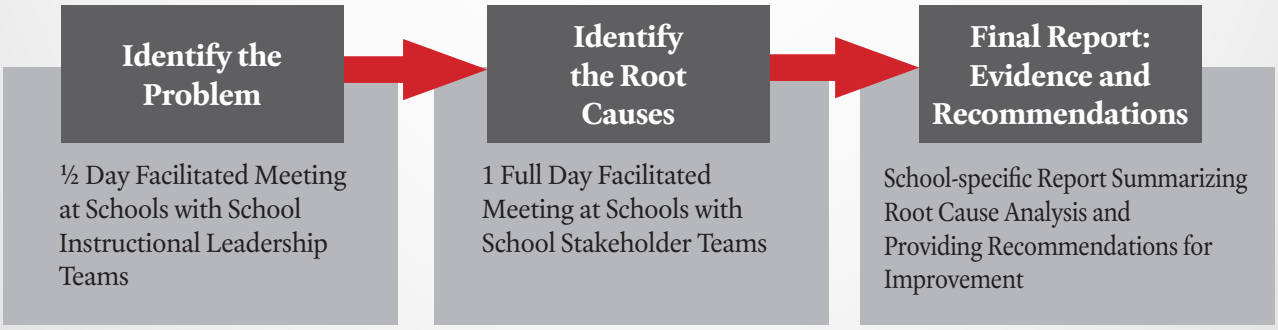
1. Craft a Problem Statement Based on Data
2. Brainstorm Causal Factors
3. Analyze Underlying Causes to Identify Root Causes
4. Prioritize Root Causes for Intervention

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 team worked with school leadership teams 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 relates to their CSI status and provides 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 teams created these school-specific reports with recommendations for addressing the problem and root causes in improvement planning.



I. INTRODUCTION

An RCA starts with asking the question: What problem do we face that, if solved or mitigated, would most effectively lead to our 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 these 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 led 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 will include conducting research on the problem and prioritized root causes and recommending evidence-based strategies for improvement.

II. SCHOOL PROFILE

School Name: Forest Park High School
3701 Eldorado Avenue, Baltimore, MD 21207
(410) 396-6387

Total teachers: 33

Student Demographics								
Total Students	Asian	Black African Americans	Hispanic/ Latino	White	Other	% Economically Disadvantaged	% English Learners	% Students with Disabilities
623	<10	527	76	13	<10	57.33%	13.53%	18.04%

Forest Park High School MSDE School Report Card Profile for 9-12									
Academic Achievement		School Quality and Student Success		Graduation Rate		Progress in Achieving English Language Proficiency		Readiness for Postsecondary Success	
% Proficient in Mathematics	0.9%	Students Not Chronically Absent	10.9%	Four-Year Adjusted Cohort Graduation Rate	64.8%	% English Learners Making Progress Toward Learning English	52.3%	Credit for Well Rounded Curriculum	99%
Average Performance Mathematics	1.6								
% Proficient in English Language Arts (ELA)	4.2%	Access to Well Rounded Curriculum	44.2%	Five-Year Adjusted Cohort Graduation Rate	64.1%			On Track in Ninth Grade for Graduation	30.7%
Average Performance ELA	1.6								
Earned Points	5.3	Earned Points	5.4	Earned Points	9.7	Earned Points	5.2	Earned Points	6.5
Total Earned Percent:				35%					

To view this school's full report card, visit www.mdreportcard.org

III. PROBLEM STATEMENT

Description of the Process

The Forest Park High School administrative and instructional leadership team met for one half-day on April 24, 2019 to examine school-level data and to craft a problem statement. The group included the principal, two assistant principals, a Title 1 specialist, and an instructional leadership administrator. The meeting was facilitated by a two-member RCA team.

The team had two goals: review the school-level data to highlight the primary challenges for the school and craft a problem statement. Two data sources were reviewed, the MSDE CSI Needs Assessment Report and the Baltimore City Public Schools (BCPS) School Profile.

Forest Park has been designated as a CSI school given its four-year graduation rate of 63.97 percent. Participants' review of the data indicated that imprecise teacher attendance records and accountability measures are primary contributors to the CSI designation. Greater clarity is necessary regarding the mission and purpose of Forest Park's 21st Century Community Learning Center designation to enable stakeholders to effectively align their programs with the school's needs and schedule.

During the day one discussion, attendees identified a number of issues facing their school. Topics that dominated the conversation included:

- Stakeholder Engagement: Forest Park is designated a 21st Century Community Learning Center. Although the common goal of greater student achievement is clear, there is a lack of clarity on the roles, responsibilities, and authority for staff, parents, community partners, and students.
- Human Capital: Late notice for teacher absences and tardiness play a significant role in student engagement. In addition, the faculty has a "revolving door" wherein new teachers from alternative route certification programs with two-year work commitments leave the profession and inexperienced teachers join the faculty.
- English Language Learners (ELL): When the school merged with Northwestern High School, enrollment included a significant increase in ELL students. The leadership team speculated that this enrollment shift impacted overall test performance, absenteeism, and graduation rates.

Problem Statement Criteria

Participants arrived at a problem statement by examining how CSI schools were identified; by using data to understand why the school received CSI status; by organizing data trends into themes; by evaluating the feasibility of addressing those themes; and by 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 should be related to the reason the school was identified as a CSI school. Also the school should be able to address the problem and its root causes by the effective selection and implementation of evidence-based practices.

III. PROBLEM STATEMENT

Key Data Themes

Data Source	Key Takeaways
MSDE CSI Needs Assessment Report	Chronic student absenteeism reflects inconsistent staff engagement (e.g., merging classes, many substitute teachers).
BCPS School Profile	The graduation rate of 63.97 percent is just below the BCPS minimum expectation of 67 percent.
BCPS Professional Expectations Rubric	Expectations and benchmarks for staff and other stakeholders are not clearly defined and communicated.
MSDE CSI Needs Assessment Report	Teacher attrition, primarily caused by early career and limited-contract teachers, disrupts efforts to establish a teaching and learning community.

Themes Across Data Sources (Topics) (1 being highest priority)	Ranking
Staff Engagement	1
Expectations and Benchmarks	2
Teacher Attrition	3

III. PROBLEM STATEMENT

Final Problem Statement

The discrepancies between the desired graduation rate of 67 percent and the actual graduation rate of 63.97 percent can be attributed to overall engagement of school-based staff.

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.

Research suggests that school staff behaviors have a significant influence on student engagement (Skinner & Belmont, 1993). Additionally, academic and social engagement are key predictors of high school success, including achievement and completion (Lee & Burkam, 2003; Wang & Holcombe, 2010). Nguyen, Cannata, and Miller (2018) found that student engagement varies by the environment created by the school and teacher, and by the learning opportunities teachers create in their classrooms. Thus, research suggests that staff engagement could be related to low graduation rates.

IV. ROOT CAUSE ANALYSIS OF THE PROBLEM STATEMENT

The Forest Park High School stakeholder team met for the second day of the RCA process on May 1, 2019. The same leadership team members from day one participated in the second day. They were joined by a number of content area teachers and another assistant principal (see Appendix A for the full list).

The stakeholder team started the day by reviewing the draft problem statement and modifying the final version. The stakeholder team then divided into three groups that generated causal influences defined in the following categories: accountability, teacher attrition, and standard operating procedures (see causal factors below). Each group created a "Fishbone Diagram" to represent their thinking, which was shared and combined into one composite fishbone. The finalized fishbone reflected the group's perceptions on a host of issues. The team focused on factors over which they had agency to improve. Using the "5 Whys Activity," stakeholders were encouraged to dig deeper into the causal factor statements by asking "why" questions 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:

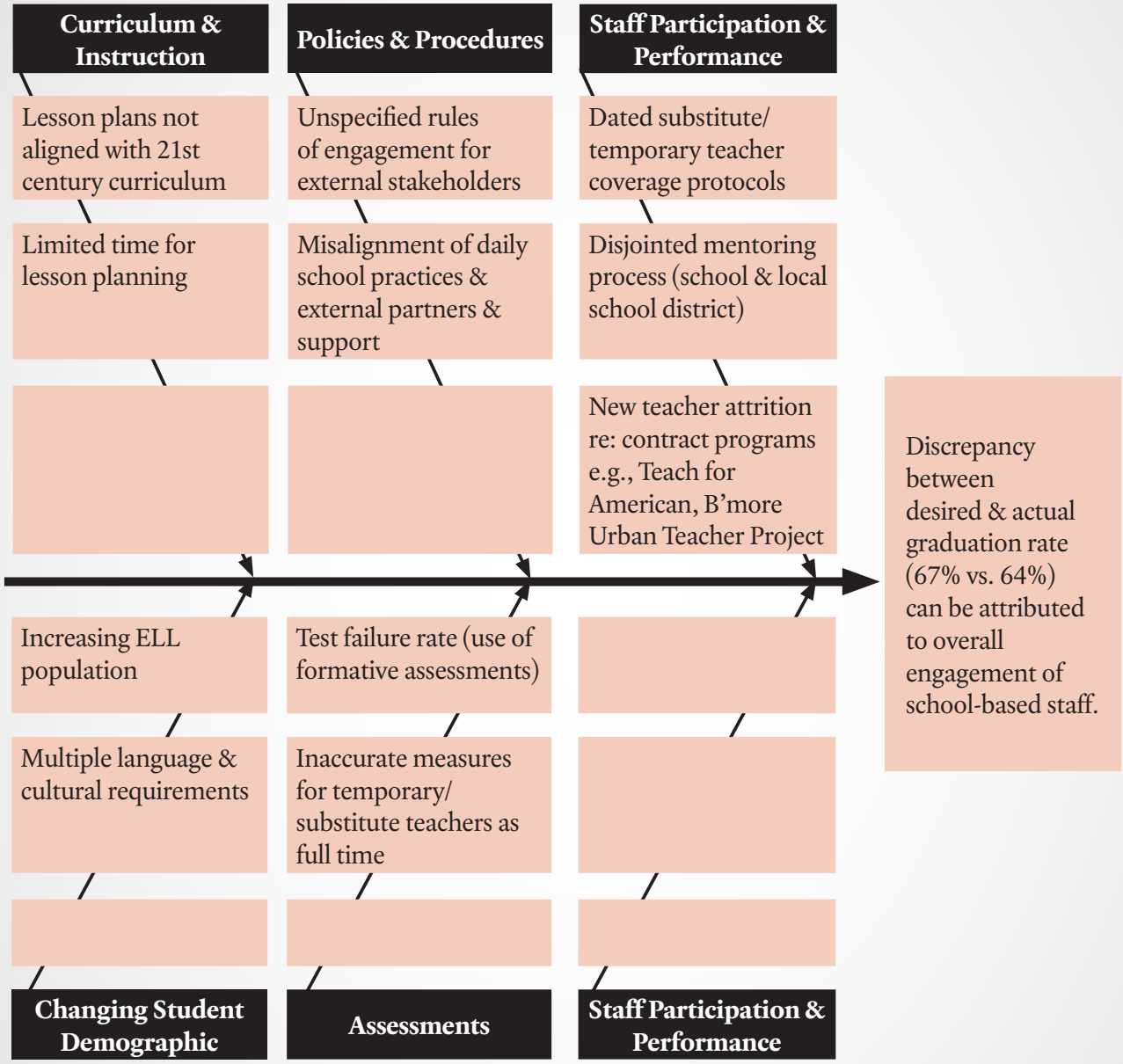
- Determine factors contributing to the problem statement.
- Identify underlying causes of the problem and determine which underlying causes are primary "root" causes.
- Prioritize the root causes for the importance of impacting student outcomes and the feasibility of implementing strategies to address them.

Casual 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.

IV. ROOT CAUSE ANALYSIS OF THE PROBLEM STATEMENT

Forest Park High School Fishbone: Exploring Causes



IV. ROOT CAUSE ANALYSIS OF THE PROBLEM STATEMENT

Prioritized 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.

Final Output. Prioritized Root Causes:	Ranking
School improvement goals and expectations of staff are not detailed or documented.	1
School has too few services and wraparound supports for students.	2
High rates of attrition amongst teachers make it difficult to gain momentum.	3

Evidence Base for Prioritized Root Causes

A school or school system can be regarded as highly reliable when a number of conditions and characteristics are in place. These include a finite set of clear goals, shared at all organizational levels; a shared belief across the levels that failure to achieve those goals would be disastrous; and an ongoing alertness to surprises or lapses. Small failures that can cascade into major academic problems must be monitored carefully. In addition, a school must have the building and maintenance of powerful databases. These databases should be:

(a) Relevant to core goals and rich in triangulation on key dimensions;

(b) Real-time available (i.e., before failures cascade); and

(c) Regularly cross-checked by multiple, concerned groups.

Finally, a school needs the extension of formal, logical decision analysis as far as extant knowledge allows. Many regularly repeating tasks should move into becoming standard operating procedures, with initiatives in place that identify flaws in standard operating procedures and honor the flaw finders (Datnow & Stringfield, 2000).

The revolving door of new pre-kindergarten-12 teachers is a challenge facing school districts throughout the nation. This turnover rate is particularly prevalent for teachers in urban and low-performing schools and for teachers of color, in particular (Sutcher, Darling-Hammond, & Carver-Thomas, 2019). A number of factors serve to enhance the retention of new and early career teachers, including initial and ongoing preparation, a positive school environment, and mentoring and induction.

- Beginning-teacher attrition causes many urban students to encounter a revolving door of inexperienced teachers, which impedes student achievement and school reform (Ingersoll, May, & Collins, 2019).

IV. ROOT CAUSE ANALYSIS OF THE PROBLEM STATEMENT

- School districts are continually spending human and fiscal resources on teacher recruitment when the emphasis should be on retaining those teachers who have the skills and dispositions to teach successfully in urban schools (Waddell, 2010).
- Principals can increase teacher retention through building professional relationships in which teachers feel valued, encouraging teacher-teacher interaction, and involving teachers in school decisions (Waddell, 2010).

V. RECOMMENDATIONS FOR IMPROVEMENT

Recommendations for Evidence-Based Improvement

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 UMD/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 improvement plan developed in concert with the MSDE Title I office.

V. RECOMMENDATIONS FOR IMPROVEMENT

RECOMMENDATION	Four Domains Domain of Rapid School Improvement[1]
Adopt student-centered, active-learning instructional practices across all classrooms. Although a considerable amount of research literature on effective learner-centered instructional practices is available, two leading researchers who represent the current field are Deborah Ball and Robert Marzano. Both Ball's "High-Leverage" practices and Marzano's spotlighted strategies are research-vetted frameworks that could be useful starting points with teachers. The first strategy for improvement is the elevation of instructional practices across classrooms to engage students as active agents of their own learning. Researchers highlight the importance of activating students' "voice" and "choice" in enlivened classroom learning and engagement, as well as designing and delivering lessons that reflect students' cultural knowledge and experiences and are connected to their adolescent lives (Dary, Pickeral, Shumer, & Williams, 2016; Pyle & Wexler, 2012; Bridgeland, Dilulio, & Morison, 2006). Examples of such instructional strategies include student goal-setting, student-led discussions, and student voting (www.marzanoresearch.com; www.teachingworks.org). Other research-based engagement strategies include the following: project-based learning inquiry-based learning that allows students time to delve deeply into questions and content, relevance-making connections to the real world outside of school, high expectations through rigorous content, students engaged in their own progress monitoring, and students exercising choices (Taylor & Parsons, 2011).	*Instructional Transformation*

[1]*The MSDE uses the Center on School Turnaround at WestEd's Four Domains for Rapid School Improvement: A Systems Framework as a framework for continuous improvement. The framework identifies four areas as central to rapid and significant improvement: turnaround leadership, talent development, instructional transformation, and culture shift. The recommendations in this report are aligned to the four domains as a way to organize and frame the improvement efforts. For more information: https://centeronschoolturnaround.org.*

V. RECOMMENDATIONS FOR IMPROVEMENT

RECOMMENDATION	Four Domains Domain of Rapid School Improvement[1]
Invest in professional learning opportunities and support for principal's development as an effective turnaround leader. The research literature clearly indicates that leadership is important to student achievement and other school-based outcomes. However, in chronically low-performing schools, a specialized set of leadership skills are required that extend beyond the traditional management role of principals. To engage as an effective leader in the most challenging school conditions, principals must become equipped as transformational, turnaround leaders (Leithwood, Louis, Anderson, & Wahlstrom, 2008; Herman et al., 2017). To become an effective turnaround leader, principals need training and development across a range of skills, including: • Setting and reinforcing high expectations of all teachers and staff; • Distributing instructional leadership responsibilities and opportunities to effective teachers; • Focusing on goal setting and strategic planning ("Driving for Results"); • Establishing data collection, monitoring, and analysis; • Enlisting others in adopting changes to routines, structures, and processes; • Using adaptive problem-solving; and • Cultivating a school culture and climate conducive for academic success. Just as teachers grow best through job-embedded, authentic professional learning supports, so, too, do school leaders. The research on professional learning indicates that collaborative cohorts and coaching are two high leverage strategies through which principals can be supported in acquiring new leadership skills (Sutcher, Podolsky, & Espinoza, 2017). Additionally, there are a variety of evidence-based turnaround leadership frameworks and tools that can be adapted as resources for principals who are developing as effective change agents, including WestEd's Four Domains for Rapid School improvement (https://www.centeronschoolturnaround.org/wp-content/uploads/2018/03/CST_Four-Domains-Framework-Final.pdf), American Institute for Research's (AIR) District and School Improvement Center (www.air.org/center/district-and-school-improvement-center), the Public Impact's School Turnaround Core Competencies (https://publicimpact.com/school-turnarounds), and New Leaders' Transformational Leadership Framework (www.newleaders.org).	*Culture Shift*

V. RECOMMENDATIONS FOR IMPROVEMENT

RECOMMENDATION	Four Domains Domain of Rapid School Improvement[1]
Conduct a community asset mapping exercise. Kretzmann and McKnight (1996) developed the concept of "asset-based community development" that recognizes the community's social capital, places priority on using a community's resources, and places emphasis on principles of empowerment. This concept of "community asset mapping" can engage members of the school in identifying the resources that are already easily available. School staff should consider adopting the community asset mapping approach to enhance their professional learning community. Through this process, school-based staff will be able to leverage and share their skills, knowledge, and ability with peers and others, e.g., mentoring early career and substitute teachers (Beaulieu, 2002; Kerka, 2003; Griffin & Farris, 2010).	

V. RECOMMENDATIONS FOR IMPROVEMENT

RECOMMENDATION	Four Domains Domain of Rapid School Improvement[1]
Implement coordinated "wraparound" supports for all students, which are customized to meet the specific needs of the school community. Research indicates that integrated student supports are associated with positive student outcomes. School-based supports can lead to improvements in students' attendance, behavior, social well-being, and academic achievement (Moore & Emig, 2014; Maier, Daniel, Oakes, & Lam, 2017; McDaniels, 2018). An essential component of such services is having the school-based personnel available to coordinate with other community agencies and organizations. All students would then be provided with the services that they need to overcome out-of-school learning barriers (The Maryland Commission on Innovation and Excellence in Education). Integrated student supports should provide coordination, outreach, and some direct staffing and programming for each of the following categories: 1) mental health, vision, dental, and medical services; 2) food, housing, and transportation assistance; 3) school-embedded school social workers, counselors, and psychologists; and 4) on-site childcare (secondary schools only). Well-developed resources are available to assist educators in transforming their schools into the community model, including the interactive Community School Playbook from the Partnership for the Future of Learning (https://www.communitiesinschools.org/our-model), the Coalition for Community Schools' interactive guide, Scaling Up School and Community Partnerships: The Community Schools Strategy (www.communityschools.org/ScalingUp), and Communities in Schools' Integrated Student Supports model (www.communitiesinschools.org/our-model).	*Culture Shift* *Turnaround Leadership*

VI. CONCLUSION AND NEXT STEPS

Collaboratively with the Local School System (LSS) and stakeholders, Comprehensive Support and Improvement (CSI) school teams will develop intervention plans that identify SMART (Specific, Measurable, Attainable, Relevant, Timely) 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, LSS, and the Maryland State Department of Education (MSDE), and monitored annually by staff from the LSS and the MSDE. Additional information and resources are available on the MSDE Resource Hub. https://www.marylandresourcehub.com/

APPENDICES

Appendix A: List of Stakeholders

Day 1
April 24, 2019

Name	Position
Starletta Jackson	*Instructional Leadership Executive Director*
Lisa Donmoyer	*Staff Specialist, Title I Office, BCPS*
Suze Nathalie	*Assistant Principal*
Monica Dailey	*Principal*
Troy Mitchell	*Assistant Principal*

Day 2
May 1, 2019

Name	Position
Starletta Jackson	*Instructional Leadership Executive Director*
Tyler Pruitt	*English as a Second Language Teacher*
Roger Lucas	*Physics Teacher*
Alison Snow	*Mathematics Teacher*
Dr. Muti Juliet	*PRIDE Lead Teacher*
Jermaine Dunn	*Physical Education Teacher*
Sean Markley	*Automotive Teacher*
Heather Bradley	*Assistant Principal*
Monica Dailey	*Principal*
Suze Nathalie	*Assistant Principal*
Troy Mitchell	*Assistant Principal*

APPENDICES

Appendix B: Bios of Facilitators

Dr. Mary E. Dilworth's career is centered on teacher quality and preparation, with a keen focus on racial/ethnic and linguistic diversity and equity issues. She is an advisor to a number of nonprofit education organizations and institutions and has led a host of education policy, research, and program initiatives as vice-president of the National Board for Professional Teaching Standards, senior vice-president of the American Association of Colleges for Teacher Education and as a visiting professor and director of the Center for Urban Education at the University of the District of Columbia.

Dilworth has written, edited, and contributed to scores of scholarly books, articles, policy and research reports, and essays. Her recent contributions include: the 2018 edited book, Millennial Teachers of Color (Harvard Education Press); a 2018 Urban Review article, Understanding the Black Teacher Through Metaphor; the report, Time for a Change: Diversity in Teaching Revisited; and a chapter in the International Guide to Student Achievement.

Her professional memberships include American Educational Research Association, Phi Delta Kappa, and Association for Education Finance and Policy. She is a member of the Theory Into Practice editorial board. Dilworth currently chairs the District of Columbia Higher Education Licensure Commission, and has held a number of elected and appointed positions on boards and commissions including: the American Educational Research Association, the Educational Testing Service, the National Education Association, the American Federation ofTeachers, and the Ford Foundation. She earned Bachelor of Arts and Master of Arts degrees from Howard University and a doctorate from Catholic University of America, each in the field of education.

Stephanie Timmons Brown is the executive director of the Maryland Institute for Minority Achievement and Urban Education and assistant clinical faculty in the College of Education at UMD. She has served as the principal investigator (PI) or co-PI on several grants, including two National Science Foundation grants, one National Institutes of Health research grant, one National Security Agency grant, and several state grants. She has developed, implemented, and studied educational programs designed to transition underrepresented minority (URM) students into college, with a particular emphasis on science, technology, engineering, and mathematics-related college majors and careers. Over the past twelve years and through school and community partnerships, she has worked with multiple Prince George's County and Baltimore City schools to develop programs to help underserved students realize their academic potential and embrace their academic identities. She also mentors and advises several undergraduate and graduate students, advising students on academic courses, their research, and academic integration. Her research interests include understanding effective strategies to increase the college awareness of URM middle school and high school students, to help underserved minority students persist and graduate from higher education institutions, and to determine how URM parents' use their social capital to help their students navigate the college application process. Dr. Timmons Brown holds a Bachelor of Science from the University of California Berkeley and a PhD in educational policy from the University of Virginia.

APPENDICES

Appendix C: Citations of research

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