



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

William Pinderhughes Elementary & Middle School*

September, 2019

*Now called Sandtown-Winchester Achievement Academy



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. Jubria Lewis and Jocelyn Odónna, who also co-authored this report.

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I. INTRODUCTION

The purpose of this report is to share outcomes of a Root Cause Analysis (RCA) conducted to support William Pinderhughes Elementary/Middle School in identifying underlying causes of school performance problems. The report provides an overview of the RCA process, school profile, problem statement, the RCA conducted at the school, 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 an RCA process facilitated by a third party. CSI schools are defined as follows: the lowest achieving 5 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. William Pinderhughes Elementary/Middle School was identified as a CSI school as one of the lowest achieving 5 percent of Title I schools. Outcomes of the RCA 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 will be required to participate in the Leading for School Improvement Institute, which provides customized professional learning experiences to support school improvement. CSI principals will be 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.

The 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 to develop RCA tools and train field teams. Field teams consisted of researchers, data analysts, and education practitioners from Bowie State University, Morgan State University, Johns Hopkins 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 outcomes, recommended interventions, and evaluations of employed interventions. As part of this procedure, 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

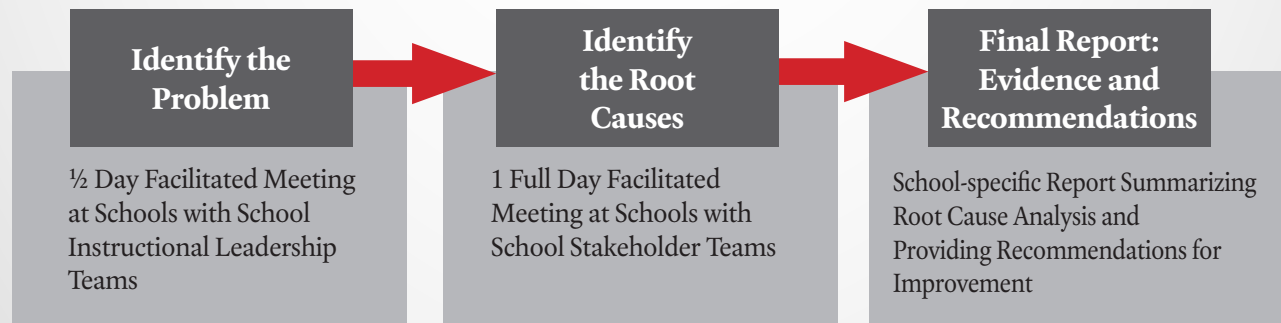
The root cause analysis process translates the successes and challenges identified through the CSI needs assessment into priorities to inform actionable improvement planning. The work with schools was staged in three steps: 1) identify

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: William Pinderhughes Elementary/Middle School
 701 Gold St, Baltimore, MD 21217
 (410) 396-0800

Total Teachers: 15

Student Demographics								
Total Students	Asian	Black African Americans	Hispanic/Latino	White	Other	% Economically Disadvantaged	% English Learners	% Students with Disabilities
263	<10	251	<10	<10	<10	78.57%	<5%	15.12%

William Pinderhughes Elementary MSDE School Report Card Profile for Pre-kindergarten-5							
Academic Progress		School Quality and Student Success		Academic Achievement		Progress in Achieving English Language Proficiency	
Student Growth Percentile in Math	29	Students Not Chronically Absent	59.6%	% Proficient in Math	10%	% English Learners Making Progress Toward Learning English	N/A
Student Growth Percentile in ELA	36			Average Performance Math	1.8/5.0		
Credit for Well Rounded Curriculum N/A	0%	Access to Well Rounded Curriculum	4.8%	% Proficient in ELA	5%		
				Average Performance ELA	1.8/5.0		
Earned Points:	7.0/30	Earned Points:	1.5/25	Earned Points:	4.4/20	Earned Points:	N/A
Total Earned Percent:				28%			

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

II. SCHOOL PROFILE

William Pinderhughes Middle School MSDE School Report Card Profile for 6-8

Academic Progress		School Quality and Student Success		Academic Achievement		Progress in Achieving English Language Proficiency	
Student Growth Percentile in Math	57	Students Not Chronically Absent	55.3%	% Proficient in Math	5.7%	% English Learners Making Progress Toward Learning English	N/A
Student Growth Percentile in ELA	79.5			Average Performance Math	2.0/5.0		
Credit for Well Rounded Curriculum N/A	85.3%	Access to Well Rounded Curriculum	2.9%	% Proficient in ELA	20.9%		
				Average Performance ELA	2.5/5.0		
Earned Points:	22.6/28	Earned Points:	1.3/25	Earned Points:	5.8/20	Earned Points:	N/A
Total Earned Percent:				28%			

III. PROBLEM STATEMENT

Description of the Process

A half-day meeting facilitated by a two-member RCA team was convened at William Pinderhughes Elementary/Middle School convened on April 4, 2019 for day one of the RCA process. Members included the school leadership team, consisting of a local school system leader (i.e., principal supervisor, school improvement leader), and other key school staff. The primary goal of this meeting was to craft a “problem statement” that would drive the RCA. A problem statement is defined as a statement describing a situation, issue, barrier, impediment, or challenge that a school must address to significantly improve student outcomes, related particularly to those outcomes that led to the school being placed on the CSI list.

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

Problem Statement Criteria

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 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.

Day One Summary

The instructional leadership team and supporting stakeholders at Pinderhughes examined school-level data during the RCA process for day one. The two primary data sources available for review were the MSDE CSI Needs Assessment Report, which included iReady®, Dynamic Indicators of Basic Early Literacy Skills (DIBELS), and state assessment data, and the Maryland State School Report Card.

Consensus around the following key topics developed:

- Academic achievement is widely varied within grade levels, and performance problems compound yearly when students who are behind do not catch up. Teachers need support in differentiating their instruction and making curricular decisions regarding pacing.
- Home support is necessary yet communicating to students’ needs to parents is difficult. Moreover, it may be difficult for parents to support student outcomes with students’ literacy rates being so low.
- Absenteeism and tardiness rates are high.

III. PROBLEM STATEMENT

Key Data Themes

Data Source	Key Takeaways
<ul style="list-style-type: none"> • iReady Mathematics and Literacy Assessment • DIBELs • MSDE CSI Needs Assessment Report • Maryland State School Report Card • State Assessments Data • Parent Survey 	<ul style="list-style-type: none"> • Only 2.9% of eighth graders earned credit for a well-rounded curriculum because they were not enrolled in health. Only 4.8% of fifth graders earned credit in fine arts, physical education, health, and computational learning.
	<ul style="list-style-type: none"> • In the elementary school, over 90% of students were not proficient on the state assessments in either mathematics or ELA. The average performance in 2018 was 1.8/5 for both subjects. In the middle school, success rates were higher for ELA: 21% of students were proficient in ELA. However, only 6% of students were proficient in mathematics.
	<ul style="list-style-type: none"> • Elementary school students showed low percentiles for growth in mathematics (29%) and ELA (36%). • Middle school students showed low growth in mathematics (57%).
	<ul style="list-style-type: none"> • Only a small percentage of parents are engaged and responsive.
	<ul style="list-style-type: none"> • Chronic tardiness and absenteeism are problems throughout the elementary and middle schools.

Themes Across Data Sources (Topics) (1 being highest priority)	Ranking
In elementary school, 90% of students are not proficient in mathematics, and 95% are not proficient in ELA.	1
In elementary school, 71% of students are not showing growth in mathematics, and 64% are not showing growth in ELA.	2
In middle school, 94% of students are not proficient in mathematics, and 80% are not proficient in ELA.	3
44% of middle school students and 40% of elementary school students are chronically absent.	4
The school has limited access to a well-rounded curriculum for elementary and middle school students.	5

III. PROBLEM STATEMENT

Final Problem Statement

In grades 3-8, approximately 90 percent of students did not score at meets or exceeds expectations on the statewide assessments in ELA and mathematics.

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.

Strong reading and mathematics outcomes are unquestionably important for students to achieve. The National Assessment of Educational Progress (NAEP) is the only assessment that nationally measures what US students know and can do in various subjects. Also known as The Nation's Report Card, NAEP has provided

important information about how students are performing in mathematics and reading since 1969. In 2017, the percentage of fourth grade students in Maryland who performed at or above the NAEP proficient level was 35 percent in reading and 40 percent in mathematics. The percentage of students in Maryland who performed at or above the NAEP basic level was 67 percent in reading and 79 percent in mathematics (NAEP, 2018). Performing significantly lower, in 2017 the percentage of students in Baltimore City who performed at or above the NAEP proficient level was 13 percent in reading and 14 percent in mathematics, and those who performed at or above the basic level was 50 percent in reading and 52 percent in mathematics (NAEP, 2017a & 2017b). These results have real consequences for students – both ELA and mathematics performances are strongly correlated to future earnings (Hanushek & Woessmann, 2008).

IV. ROOT CAUSE ANALYSIS OF THE PROBLEM STATEMENT

Day Two Summary

William Pinderhughes Elementary/Middle School convened on May 2, 2019 for day two of the RCA process. Day two was devoted to working with the school's stakeholder team (see Appendix A) to identify and prioritize the root causes of the problem so the causes could be addressed in the school's improvement planning efforts. Stakeholders began the day by reviewing the problem statement developed by the instructional leadership team on day one. Following this review, they comprehensively brainstormed causal factors that contributed to the problem using a "Fishbone" activity. Individual causal factors were then 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 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

William Pinderhughes Elementary and Middle School Casual Factors



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
The school lacks continuous professional learning, observation, and coaching on high-impact instructional practices to meet the needs of students.	1
Social emotional learning (SEL) needs are not addressed through current programs and curriculum.	2
There is a lack of trust amongst the school, families, and the community.	3

Evidence Base for Prioritized Root Causes

Improving students' academic outcomes is paramount at Pinderhughes Elementary/Middle School. Through the RCA process, the Pinderhughes stakeholder team identified three critical areas of weakness that, if addressed, according to the research, have the potential to dramatically influence student performance. The first root cause the school team prioritized was the lack of continuous professional learning, observation, and coaching on high impact instructional practices to appropriately meet students' diverse academic needs. The school team identified the challenge in providing differentiated instruction that would remediate and accelerate learning as the root cause of students' poor test scores in both ELA and mathematics, as well as the cause for great teacher frustration and burnout.

Adding to this picture and entangled in this problem are students' unmet socio-emotional needs. Over 90 percent of students and families at Pinderhughes experience economic disadvantage, and the student body experiences a very high

level of mobility. Teachers must grapple with employing the best tools to simultaneously meet the students' socio-emotional needs and the highly differentiated student academic needs. Through the RCA process, the stakeholder team identified the need to better tailor both academic and socio-emotional interventions to meet students' specific needs. Research supports this two-pronged direction.

Researchers agree that differentiated instruction is a highly complex teaching skill that is practiced in how teachers prepare, enact, and evaluate lessons, and when done effectively, can dramatically promote K-12 literacy and numeracy abilities (Deunk, Doolaard, Smalle-Jacobse, & Bosker, 2015). Teachers' abilities to support their students' SEL skills (e.g., attention, behavioral, and emotional regulation; conflict resolution; socialization) has been shown to critically support academic achievement over time (McCoy, Roy, & Sirkman, 2013; Raver et al., 2011). Because of their wide-ranging impact, there is growing political and consumer support for teaching socio-emotional skills during elementary school (Bierman et al., 2010; Hughes, Cavell, Meehan, Zhang, & Collie, 2005).

IV. ROOT CAUSE ANALYSIS OF THE PROBLEM STATEMENT

Finally, research shows unequivocally that engaging families is important in supporting students' success (Fantuzzo, McWayne, Perry, & Childs, 2004; Jeynes, 2005). Thus, as Pinderhughes begins to pour attention into meeting students' differentiated academic needs and SEL skills, Pinderhughes must see families' buy-in of these new foci as indispensable. Of the

many different ways that families can support students, the highest predictor of academic performance is families supporting students' "academic socialization" – the support of students' future visions and the belief that school is important to achieving these visions (Jeynes, 2005).

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 Improvement¹

Provide high-quality differentiated instruction in all general education classes.

Instructional Transformation

Differentiated instruction serves a wide range of student abilities and needs in a single classroom. Studies suggest that differentiated classrooms produce similar or better results in reading compared to traditional classrooms (Connor et al., 2009; Reis, McCoach, Little, Muller & Kaniskan, 2011; Tieso, 2002).

Research suggests that high-quality differentiated instruction includes the following features: 1) identification of each students' learning needs based on student performance data; 2) whole group instruction with various levels of examples and explanations, and subgroup instruction targeted at individualized students' skill levels with different levels and kinds of explanation and practice; 3) regular (informal and formal) assessment of student learning to identify new needs and goals following initial adjustment of instruction; and 4) continuous responsive adjustment of both what is taught and how it is taught based on the latest student assessment data (Alsalamah, 2017; Prast, Van de Weijer-Bergsma, Kroesbergen, & Van Luit, 2015; van Geel et al., 2019).

Although much differentiation can occur through small and large group instruction in the regular classroom, some instruction may need to be more individualized based on student needs and will lead to pull-out interventions. Toward this end, randomized control trials on Computer Assisted Instruction programs, such as through TutorMate, have shown remarkably positive results on elementary students reading performance (Kortecamp, Harper, & Green, 2016).

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 Improvement¹

Implement SEL to explicitly teach SEL skills focused on self-awareness, self-management, social-awareness, relationship skills, and responsible decision-making.

Culture Shift

Employ a robust SEL program that is inclusive of all school-based staff, including but not limited to, administrators, teachers, school social workers, guidance counselors, and paraprofessionals. Effective school based SEL 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 components are more impactful when they are set in an environment in which organizational culture, climate, and conditions all support SEL (Durlak, Weissberg, Dymnicki, Taylor, & Schellinger, 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, Jones, Brown, Chaudry, & Samples, 1998; Hughes et al., 2005). Though the Collaborative for Academic, Social, and Emotional Learning endorses the use of evidence-based SEL programs in the context of systemic schoolwide and districtwide approaches (Devaney, O'Brien, Resnick, Keister, & Weissberg, 2006), it is necessary that a systemic approach to SEL programming entails integration of SEL across school activities, both in and outside of the classroom, and even reaching into the community.

V. RECOMMENDATIONS FOR IMPROVEMENT

RECOMMENDATION

Four Domains
Domain of Rapid
School Improvement¹

Enlist parents and families as academic partners in student learning.

Culture Shift

Research has proven that family engagement matters tremendously to student academic success across all populations. Family involvement has been shown to benefit children from diverse ethnic and economic backgrounds in particular. For example, low-income African American children whose families maintained high rates of parent participation in elementary school were shown to be more likely to graduate from high school (Fantuzzo et al., 2004; Krieder, 2006).

In order to enlist parents as academic partners, schools should start by providing information and training for families to support high expectations for their children's education. These shared academic expectations for children's education should be rooted in the recognition of the value of education. Therefore, schools that are effective in partnering with parents need to actively invite parents to team with teachers and other staff in communicating and reinforcing these shared values at home as well as in school (Flamboyan Foundation, 2018).

Evidence-based family engagement practices that support academic success and reinforce high academic expectations include parents reading regularly at home with their children, parents regularly communicating with their children about their school experiences, and parental participation in school activities and functions (Jeynes, 2005). Home visits can foster families' understandings of the importance of these supports. Efforts should also acknowledge and integrate the funds of knowledge of student's families into the school environment (Wilder, 2014; Mapp & Kuttner, 2013).

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, 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, 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 4, 2019	Name	Position
	Tracey Pratt	<i>Gilmore School Principal and principal starting next school year</i>
	Sonya Goodwyn	<i>Instructional Leadership Executive Director, Principal Supervisor</i>
	Latitia Fields	<i>Fourth and Fifth Grade ELA/Social Studies Teacher</i>
	Noreen Smith	<i>Community School Coordinator</i>
	LaTosha Hilton	<i>Educational Associate</i>
	Megan Kashdin	<i>Title 1 Coordinator</i>
	Tenn Thrower	<i>CSI Family and Community Engagement Specialist</i>
Day 2 May 2, 2019	Name	Position
	Tracey Pratt	<i>Gilmore School Principal and principal starting next school year</i>
	Sonya Goodwyn	<i>Instructional Leadership Executive Director, Principal Supervisor</i>
	Latitia Fields	<i>Fourth and Fifth Grade ELA/Social Studies Teacher</i>
	Shamell Carter	<i>Middle School ELA Teacher</i>
	Shaleshea March	<i>ELA Teacher</i>
	Erika Hall	<i>Instructional Leadership Teams Chairperson, Technology and Intervention Educator</i>
	Noreen Smith	<i>Community School Coordinator</i>
	LaTosha Hilton	<i>Educational Associate</i>
	Amber Clemmons	<i>Literacy Academic Content Liaison</i>
	Megan Kashdin	<i>Title 1 Coordinator</i>
	Tenne Thrower	<i>CSI Family and Community Engagement Specialist</i>

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Appendix B: Bios of Facilitators

Dr. Jubria Lewis

received a Bachelor of Science degree in Secondary Education from Louisiana State University (Baton Rouge) and a Master of Arts degree from Howard University in Educational Administration and Policy.

Currently, Lewis serves as the Director of School Improvement for The SEED Foundation. Prior to joining SEED, Lewis served for eight years as the Principal of Mary McLeod Bethune Day Academy Public Charter School. Lewis received his EdD at Howard University in Educational Leadership and Policy Studies.



Jocelyn Odón

received a Bachelor of Fine Arts degree in education and in writing, literature, and publishing from Emerson College; a Master of Arts degree in English Literature

from Georgetown University; and a teaching certification from the District of Columbia. Currently, she is a PhD candidate in the Department of Teaching and Learning, Policy and Leadership at UMD. She is also an adjunct professor in the Department of English at Prince George's Community College. Prior to pursuing her PhD, Odón was a high school English teacher for thirteen years.



APPENDICES

Appendix C: Citations of research

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