

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

Barclay Elementary and Middle School



September, 2019





EDUCATION

CENTER FOR EDUCATIONAL INNOVATION AND IMPROVEMENT



TABLE OF CONTENTS

I.	Introduction	1
II.	School Profile	4
III.	Problem Statement	6
IV.	Root Cause Analysis of the Problem Statement	9
V.	Recommendations for Improvement	12
VI.	Appendices	16

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Morgan State University School of Education & Urban Studies. The Root Cause Analysis process was facilitated by Dr. Jubria Lewis and Jocelyn Odóna, 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 Barclay Elementary/Middle 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). Barclay Elementary/Middle School was identified as a CSI school because its English Language Arts (ELA) and mathematics scores were in the lowest achieving 5 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 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.

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 (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 UMD/BSU/MSU 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 UMD/BSU/MSU 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: Barclay Elementary and Middle School (0054) 2900 Barclay Street Baltimore, MD 21218 (410) 396-6387

Student Demographics								
Total Students	Asian	Black African Americans	Hispanic/ Latino	White	Other	% Economically Disadvantaged	% English Learners	% Students with Disabilities
461	<10	398	31	12	<10	69.06%	7.4%	11.54%

Barclay Elementary School MSDE School Report Card Profile for Prekindergarten-5									
Academic Progress School Quality Succ			School Quality and Student Success		Academic Achievement		chieving En- ge Proficiency		
Student Growth Percentile in Math	42	Students Not Chronically Absent	Students Not Chronically Absent	Students Not Chronically Absent	71.10/	% Proficient in Math	11.6%	% English Learners Making Progress	
Student Growth Percentile in ELA	52				51.1%	Average Performance Math	2.1/5.0		54.5%
Credit for Well	00/	Access to Well 0% Rounded Curriculum	0% n	% Proficient in ELA	11.6%	Learning English			
Curriculum N/A	070			Average Performance ELA	2.2/5.0				
Earned Points:	12.5/30	Earned Points:	1/25	Earned Points:	5.4/20	Earned Points:	5.5/10		
Total Earned Percent:					32	.%			

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

II. SCHOOL PROFILE

Barclay Middle School MSDE School Report Card Profile for 6-8							
Academic	e Progress	School Quality and Stu- dent Success		Academic Achievement		Progress in Achieving English Language Profi- ciency	
Student Growth Percentile in Math	40	Students	56.200	% Proficient in Math	5.1%		
Student Growth Percentile in ELA	41	Chronically Absent	56.2%	Average Performance Math	1.7	% English Learners Making Progress	N/A
Credit for Well	69.8% 1	Access to Well	05.20/	% Proficient in ELA	7.2%	Learning English	
Curriculum N/A		Rounded Curriculum	93.370	Average Performance ELA	1.8		
Earned Points:	12.1/28	Earned Points:	10.5/25	Earned Points:	4.2/20	Earned Points:	N/A
Total Earned Percent:					32	%	

III. PROBLEM STATEMENT

Description of the Process¹

The first step in the RCA process was to convene a half-day meeting that was facilitated by a twomember RCA team. Barclay Elementary and Middle School convened on April 2, 2019 for day one 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 can be 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 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.

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

Problem Statement Criteria

Participants arrived at a problem statement by examining how CSI schools were identified; 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.

Day One Summary

Barclay Elementary/Middle School was designated as a CSI school because of students' low academic performance on the state assessments. The school is in the lowest 5 percent of Title I schools in the state of Maryland.

The instructional leadership team and supporting stakeholders at Barclay met for half a day on April 2, 2019 to examine Barclay's school-level data and to define a problem statement. 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), the state assessments, and the Maryland State School Report Card.

By examining the DIBELS (K-2) and iReady (3-8) scores for reading, participants noted that the percentage of students above or on grade level decreased in kindergarten, but significantly increased each year after that from first to eighth grade. Despite this success, the percentage of students more than two grade levels below still increased from kindergarten through eighth grade, resulting in 73 percent of students reading more than two grade levels below when they graduated Barclay in eighth grade. Mathematics teachers shared that poor literacy contributed to poor mathematics performance as well, and there was agreed sentiment that early literacy skills should

¹ See Appendix for agenda for ½ day meeting and list of stakeholder contact information.

III. PROBLEM STATEMENT

certainly be a focus area.

In addition, the group discussed contributing causes to chronic absenteeism. This discussion included the difficulty gaining buy-in regarding the importance of attendance from parents of preschool-aged children, and the lack of strong structures to track students who regularly attend but who were approaching the 10 percent absence mark.

Finally, the team noted that the school lost many points on the report card for students not having access to a well-rounded curriculum, but that this could be easily addressed in scheduling.

IReady • DIBELsThe School Quality and Student Success indicator showed that 0% of fifth graders were earning credits for science, social studies, fine arts, physical education, and health. For middle school, 70 % of eighth graders were earning credits in rearts, physical education, health, and computational learning.• DIBELs • Needs Assessment • Needs Assessment • Needs Assessment • Needs Assessment • Parent SurveyThe Academic Achievement indicator showed that in grades six to eight, success rates were lower, such that more than 93% of students were not proficient in mathematics or ELA. In grades six to eight, success rates were lower, such that more than 93% of students were not proficiency indicator showed that there were fewer than thirty students who were English Language Learners (ELLS). Most of these students were in the elementary school, and 55% of these students were making progress toward learning English. Not enough ELL students were manting the graders were english Language Learners (ELLS). Most of these students were making progress in learning English, and this takeaway was an are of success to ward learning English. Not enough ELL students were math at students in the years to come.Infew of elementary students were in the elementary school and 55% of these students were making progress to come.Infew of elementary students and 5.1% of middle school students proficient on mathematics assessments1.6% of elementary students and 5.1% of middle school students proficient on ELA state assessments1.6% of elementary students and 7.2% of middle school students chronically absent249% of elementary students in fifth graders not enrolled in health349% of elementary students in fifth graders not enrolled in health3 <th>Data Source</th> <th>Key lakeaways</th> <th></th>	Data Source	Key lakeaways				
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ELL proficiency needs to be maintained 5	Insufficient numbers of parents reported satisfaction with school 4					

III. PROBLEM STATEMENT

Final Problem Statement

Ninety percent of students (grades three to five) and 95% of students (grades six to eight) did not meet or exceed proficiency on the state assessments in mathematics and ELA.

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

IV. ROOT CAUSE ANALYSIS OF THE PROBLEM STATEMENT

Day Two Summary

The Barclay School stakeholder team met for the second day of the RCA process on April 9, 2019. The same core instructional leadership team from Barclay participated in the second day of the process, but were joined by four community partners, including an after-school program director, the community school coordinator, the Johns Hopkins STEM program liaison, a former parent, and an additional district administrator from Baltimore City Public Schools (BCPS) (see Appendix A for the full list).

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.

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 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.

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

Barclay Elementary and Middle School Casual Factors



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
Teachers lack the skills to know how to differentiate the curriculum and how to differentiate their instructional methods to meet student needs.	1
Teachers lack support and resources to balance academic and socio-emotional learning needs of students.	2
Teachers lack effective communication pathways that would enable them to share their understandings of students' needs with other teachers, with parents, and with community partners.	3
Trusting relationships among the school, families, and community do not exist.	4

Evidence Base for Prioritized Root Causes

Improving students' academic outcomes is paramount at Barclay Elementary/Middle School. Through the RCA process, the Barclay school stakeholder team identified three critical areas of weakness that, according to the research, if addressed, have the potential to dramatically influence student performance. The first root cause the school team prioritized was the school's inability to appropriately meet students' diverse academic needs. Students' iReady literacy data showed that students' knowledge by third grade spans multiple grade bands and by the eighth grade, this widening gap has nearly doubled. Teachers concurred with this picture, vociferously lamenting their inability to meet each students' individualized needs, particularly as they attempt to keep up with the state-mandated pacing guide, as well as prepare students with the skills and knowledge they will need to respond to the challenging demands of the state assessments. The school team identified the inability to differentiate instruction as the root cause of students' poor test

scores in both mathematics and ELA, 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. Sixty-nine percent of students and families at Barclay experience economic disadvantage. Furthermore, the student body experiences a very high level of mobility, with approximately 37 percent of students having moved to or from Barclay during the school year. These experiences predictably lead to psychological traumas and unmet emotional needs that students bring to school, which exacerbates teachers' inabilities to meet 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. Due to increased global movement, academic differences within a single grade band has become an increasing challenge for teachers worldwide and a major focus area of research. Researchers agree that differentiated instruction is a highly complex teaching skill that is practiced when teachers prepare lessons, enact lessons, and evaluate lessons, and if done effectively, can dramatically promote K-12 numeracy and literacy abilities (Deunk, Doolaard, Smale-Jacobse, & Bosker, 2015).

Adding to this picture, teachers' abilities to support their students' socio-emotional learning (e.g., attention, behavioral and emotional regulation, conflict resolution, social skills) has been shown to critically support academic achievement over time (McCoy, Roy, & Sirkman, 2013; Raver et al., 2011). Because of their wideranging impact, there is growing political and consumer support for teaching socio-emotional skills during elementary school. Thus, teachers' ability to integrate socio-emotional learning into differentiated instruction becomes another area where high-quality training and implementation support is needed. As overall school culture has been shown to moderate the impacts of social emotional learning (SEL) programs on student outcomes, addressing how these new classroom instructional practices are part of the framework of school culture is also critical (Bierman et al., 2010; Hughes, Cavell, Meehan, Zhang, & Collie, 2005).

Finally, research shows unequivocally that engaging families is important in supporting students' success (Fantuzzo, McWayne, Perry, & Childs, 2004; Jeynes, 2005). Thus, as Barclay begins to pour attention into differentiated and socio-emotional learning skills, Barclay must view 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"—families' support of students' future visions and their 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 UMD/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

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

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 sub-group instruction targeted at individuated 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 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 TutorMate, have shown remarkably positive results on elementary students' reading performance (Kortecamp, Harper, & Green, 2016).

¹The 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.

Four Domains of Rapid School Turnaround¹

Instructional Transformation

V. RECOMMENDATIONS FOR IMPROVEMENT

RECOMMENDATION	Four Domains of Rapid School Turnaround ¹
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 para-professionals. Effective school-based SEL programs are comprised of five major components:	
 Self- awareness Self-management Social awareness Relationship skills 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, Cavell, Meehan, Zhang, & Collie, 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

Enlist parents and families as academic partners in student learning.

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, McWayne, Perry, & Childs, 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 want to be 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 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 students, 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 recognize and integrate the funds of knowledge of student's families into the school environment (Wilder, 2014; Mapp & Kuttner, 2013).

Four Domains of Rapid School Turnaround¹

Culture Shift

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 evidencebased 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

	Name	Position
	Armanda Carr	School Principal
	Alexia Lotts McCain	Assistant Principal
	Andrea James	Kindergarten Teacher
Day 1	Kelli Strickland	English Language Arts Teacher Lead
April 2, 2019	Zilma Oliver	Seventh-Eighth grade English Language Arts Teacher
	Vonda Johnson	Special Education Lead
	Sarah Dedman	First Grade Teacher
	Pablo Koropecky	Mathematics Teacher
	Mack Jones	School Turnaround Specialist
	Name	Position
	Armanda Carr	School Principal
	Alexia Lotts McCain	Assistant Principal
	Andrea James	Kindergarten Teacher
Day 2	Kelli Strickland	English Language Arts Teacher Lead
April 9, 2019	Zilma Oliver	Seventh-Eighth grade English Language Arts Teacher
	Vonda Johnson	Special education Lead
	Sarah Dedman	First grade Teacher
	Pablo Koropecky	Math Teacher
	Tanya Richardson	Preschool Teacher and Union Representative
	Christine Newman	Johns Hopkins STEM Program Liaison
	Joanne Robinson	Former Parent; Community Representative
	Danista Hunt	Executive Director for Child First Authority
	Emily Nelson	Community School Coordinator
	Lisa Donn Moyer	Title 1 Office Liaison
	Mack Iones	School Turnaround Specialist

APPENDICES

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 Odóna received a B.F.A. in education and in writing, literature and publishing from Emerson College; an M.A. 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 the University of Maryland. She is also an adjunct professor in the Department of English at Prince George's Community College. Prior to pursuing her Ph.D., Odóna was a high school English teacher for thirteen years.

APPENDICES

Appendix C: Citations of research

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