



Findings of Root Cause Analysis for Comprehensive Support and Improvement Schools

Academy for College
and Career Exploration

September, 2019



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 Dan Brown and Brian Rahman, who also co-authored this report.

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I. INTRODUCTION

The purpose of this report is to share the outcomes of a Root Cause Analysis (RCA) conducted to support Academy for College and Career Exploration 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). The Academy for College and Career Exploration (ACCE) was identified as a CSI school because of 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.

The Maryland State Department of Education (MSDE) established a memorandum of understanding with the University of Maryland College Park to facilitate the RCA process. The University of Maryland College Park collaborated with the American Institutes for Research (AIR) to develop RCA tools and train field teams. Field teams consisted of researchers, data analysts, and education practitioners from Morgan State University, Johns Hopkins University, Bowie State University, and other organizations. Field team members worked with 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

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 the outcomes that we currently do?
- 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: Academy for College and Career Exploration
 1300 W 36th St, Baltimore MD 21211
 (410) 396-7607

Total teachers : 36

Student Demographics								
Total Students	Asian	Black African Americans	Hispanic/Latino	White	Other	% Economically Disadvantaged	% English Learners	% Students with Disabilities
513	<1%	94%	1%	4%	0%	Not Reported	NR	NR

Academy for College and Career Exploration High 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	32	Students Not Chronically Absent	31.73%	% Proficient in Math	0%	% English Learners Making Progress Toward Learning English	N/A
Student Growth Percentile in ELA	14			Average Performance Math	1.4		
Credit for Well Rounded Curriculum N/A	65.8%	Access to Well Rounded Curriculum	5.3%	% Proficient in ELA	1.3%		
				Average Performance ELA	1.2		
Earned Points	6.5/28	Earned Points	1.5/25	Earned Points	2.6/20	Earned Points	N/A
Total Earned Percent:				24%			

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

II. SCHOOL PROFILE

Academy for College and Career Exploration 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	5.9%	Students Not Chronically Absent	21.5%	Four-Year Adjusted Cohort Graduation Rate	63.9%	% English Learners Making Progress Toward Learning English	25%	Credit for Well-Rounded Curriculum	98.7%
Average Performance Mathematics	1.7								
% Proficient in English Language Arts (ELA)	2.8%	Access to Well Rounded Curriculum	26.3%	Five-Year Adjusted Cohort Graduation Rate	67.9%			On Track in Ninth Grade for Graduation	44.9%
Average Performance ELA	1.5								
Earned Points	5.5/30	Earned Points	3.6/25	Earned Points	10.5/15	Earned Points	2.5	Earned Points	7.2/10
Total Earned Percent:				24%					

III. PROBLEM STATEMENT

Description of the Process

The first step in the RCA process was to convene a half-day meeting that was facilitated by a two-member root cause analysis team. ACCE convened on April 29, 2019 for day one of the RCA process. The convening included the school leadership team, consisting of local school system leaders (i.e., principal supervisor, school instructional lead) and other key school staff (see Appendix A for complete list). 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.

Data sources:

- School profile
- School report card
- School parent survey

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.

Day One Summary

ACCE was designated as a CSI school because of the middle school’s low academic performance on state assessments (it is in the lowest 5 percent of schools in Maryland) and the high school’s low graduation rates.

The first RCA workshop focused on identifying and prioritizing problems at ACCE. The improvement team identified a diverse list of issues, including curriculum, instruction, school-wide systems, testing culture, and social-emotional challenges, among others. Although the group did not immediately coalesce around a specific problem, it quickly became clear that student achievement needed to be addressed during the second workshop since almost all students in the school failed to meet proficiency benchmarks on the state assessment.

III. PROBLEM STATEMENT

Key Data Themes

Data Source	Key Takeaways
MSDE Report Card	<ul style="list-style-type: none">• Low achievement on state assessment
MSDE Report Card	<ul style="list-style-type: none">• Low graduation rate
MSDE Report Card	<ul style="list-style-type: none">• High rate of chronic absenteeism

Themes Across Data Sources (Topics) (1 being highest priority)	Ranking
Student achievement	1
Attendance/school culture	2
Graduation rate/ninth grade on-track	3
Well-rounded curriculum	4
Teachers	5
Suspensions	6

III. PROBLEM STATEMENT

Final Problem Statement

More than 95 percent of students in grades 6-12 are not meeting college and career-ready standards.

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.

Low student achievement is a significant national problem and it is the central problem that ACCE is facing. This problem is influenced by multiple factors that are both inside and outside of the control of schools. However, school-based factors do play a significant role in student achievement (Rivkin, Hanushek, & Kain, 2005).

MSDE categorized 64.2 percent of students at ACCE as “economically disadvantaged.” Research demonstrates that being economically disadvantaged typically has a negative effect on student achievement, meaning that communities like the one served by ACCE commonly struggle with low student achievement (Sirin, 2005).

MSDE classified 25.9 percent of students at ACCE as having disabilities. Research shows that students with disabilities attain significantly lower levels of academic performance than the average student. In addition, African American students are identified with disabilities 40 percent more often than the national average and are twice as likely to receive diagnoses for emotional disturbance. Because 91.8 percent of ACCE’s student population is classified by MSDE as Black/African American, this research demonstrates the scope of the problem of low-student achievement for communities across the country like ACCE’s (Swanson, 2008).

Despite the challenges facing ACCE, there is sufficient evidence that schools serving disadvantaged communities can achieve at higher levels. The effective schools research from the 1970s and 1980s demonstrated that when disadvantaged students have access to high quality schools, their academic achievement improves (Lezotte, 2001). More recent research conducted by the University of Chicago Consortium on School Research strengthens this important finding and identifies school leadership as the key lever to catalyze improvement (Bryk, Sebring,

IV. ROOT CAUSE ANALYSIS OF THE PROBLEM STATEMENT

Day Two Summary

ACCE convened on May 3, 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 that the school's improvement planning efforts could address these causes.

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" diagram. They posted their ideas on chart paper, and conducted a gallery walk to ensure that everyone had a chance to read the full scope of ideas. 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 by asking "why" questions in order to arrive at underlying causes. Underlying causes were then collectively ranked 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.

Six causal factor themes were identified: teaching and learning, school policies and procedures, attendance, social-emotional needs, staff commitment and capacity, and test culture.

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

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
Inadequate support for teachers related to instructional effectiveness.	1
Inadequate academic Intervention and differentiation.	2
Inconsistent implementation of schoolwide accountability and expectations.	3

Evidence Base for Prioritized Root Causes

#1: Inadequate Instructional Support

A broad and strong research base demonstrates that quality instructional coaching has positive effects on student achievement. ACCE's lack of a robust instructional support system, identified by participating stakeholders as the most important root cause leading to low student achievement, is indeed supported by research as a critical piece of support for student learning.

#2: Inadequate Academic Intervention and Differentiation

As a parallel root cause to #1, the lack of individualized supports for students was a consensus choice among participating stakeholders and is well supported by research as a hindrance to student achievement.

Research shows that weak instructional quality negatively impacts student achievement (Kraft, Blazar, & Hogan, 2018). At ACCE, lack of coaching for teachers and lack of academic interventions for students share a strong evidence base for being root causes that lead to low student achievement.

#3: Inconsistent Implementation of Schoolwide Accountability and Expectations

Research demonstrates that accountability for teachers as professionals is important for maintaining a functioning school environment that supports high student achievement. Levitt, Janta, and Wegrich (2008) state, "The main positive aspects of accountability described in the literature are: democratic control, maintaining and/or enhancing the legitimacy and integrity of public governance, performance enhancement and support, plus a catharsis function when investigating cases of failure, error or wrong-doing" (pg. viii). These findings apply at the systems level and the school level. When accountability systems are not implemented or maintained, then legitimacy and integrity of leadership is degraded, performance and support decreases, and efforts to understand or investigate failure are hampered (Hamilton, Stecher, Russell, Marsh, & Miles, 2008; The Wallace Foundation, 2013).

Stakeholders agreed that a missing emphasis on equity in school processes, as well as limited awareness of anti-bias education among teachers, contributed to lower student achievement. The evidence demonstrates that teachers working with students from different races and ethnicities from their own, can, without the benefit of training or understanding to mitigate their implicit biases, negatively impact student achievement (Gershenson, Holt, & Papageorge, 2016).

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 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

Adopt student-centered, active-learning instructional practices across all classrooms.

Instructional Transformation

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).

¹The Maryland State Department of Education uses the Center on School Turnaround at WestEd’s Four Domains of Rapid School Improvement 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

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 sub-group 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 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).

V. RECOMMENDATIONS FOR IMPROVEMENT

RECOMMENDATION

Four Domains Domain of Rapid School Improvement¹

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

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).

Talent Development

*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, 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 29, 2019	Name	Position
	Starletta Jackson	<i>Instructional Lead</i>
	Molly Carr	<i>Instructional Leadership Team Member</i>
	Brittany Horne	<i>Brittany Horne</i>
	Jamie Sterlacci	<i>Educational Associate</i>
	Jada Byron	<i>English Teacher</i>
	Elizabeth Gordon	<i>Biology Teacher, Science Lead</i>
	Michael Steel	<i>Mathematics Team Lead</i>
Yasmeen Davis	<i>Baltimore City Public Schools Staff Specialist</i>	
Nicholas D'Ambrosio	<i>Principal</i>	
Day 2 May 3, 2019	Name	Position
	Abby Baldwin	<i>Community School Coordinator</i>
	Reverend Bonnie McCubbin	<i>Community Partner</i>
	William Moeller	<i>Baltimore Teachers Union Representative</i>
	James Randle	<i>Partner (Targeted Leadership)</i>
	C. Smith-McCall	<i>Parent</i>
		<i>Student</i>
		<i>Student</i>
		<i>Parent</i>
	Drew Smith	<i>Instructional Lead</i>
Starletta Jackson	<i>Instructional Leadership Team Member, Teacher</i>	
Molly Carr	<i>Educational Associate</i>	
Brittany Horne	<i>Educational Associate</i>	
Jamie Sterlacci	<i>Educational Associate</i>	
Jada Byron	<i>English Teacher</i>	
Elizabeth Gordon	<i>Biology Teacher, Science Lead</i>	
Michael Steel	<i>Mathematics Team Lead</i>	
Yasmeen Davis	<i>Baltimore City Public Schools Staff Specialist</i>	
Nicholas D'Ambrosio	<i>Principal</i>	

APPENDICES

Appendix B: Bios of Facilitators

Dan Brown, taught for eight years in New York City and Washington, DC, earning National Board Certification for Adolescence and Young Adults/English Language Arts. He previously served as Co-Director of Educators Rising, a national association for aspiring teachers, and was a Washington Teaching Ambassador Fellow at the US Department of Education.

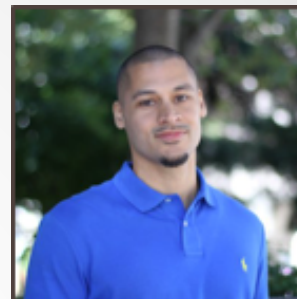


Brown currently serves as a consultant for education organizations, including AIR, the Council of Chief State School Officers, and the National Council on Teacher Quality. He conducts classroom observations for qualitative site reviews for the District of Columbia Public Charter School Board. He also has Danielson Framework for Teaching certification to conduct K-12 observations accurately and reliably.

Brown's writing has appeared in Educational Leadership, Phi Delta Kappan, the Boston Globe, and Education Week, among other publications. He currently serves on the National Board of Directors for Family, Career and Community Leaders of America, and on the Educator Micro-credential Advisory Board for Digital Promise.

Brown holds degrees from Teachers College, Columbia University, and New York University. He lives in Prince George's County with his wife and two children, who attend the county's public schools.

Brian Rahaman is an experienced educator, school leader, school improvement specialist, and entrepreneur. Brian currently serves as the Director of Program Design at The SEED Foundation. In this role, he focuses on developing programs and systems to improve student outcomes. Prior to joining SEED, Brian served in a variety of roles in both Washington, DC, and Chicago, IL, schools, including as a principal, assistant principal, and a school turnaround specialist.



School improvement has been a theme throughout Brian's career. He is committed to closing the achievement gap through the improvement of low-performing schools. Brian is currently completing a dissertation at the University of Pennsylvania focused on diagnosing and solving student achievement problems in low-performing schools.

In addition to his work in schools, Brian is also the founder and Chief Executive Officer of Family Development Services, a social service agency based in Nebraska.

APPENDICES

Appendix C: Citations of research

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