Findings of Root Cause Analysis for Comprehensive Support and Improvement Schools

ConneXions: A Community-Based Arts School

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MORGAN STATE UNIVERSITY

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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 Rahaman, 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 ConneXions: A Community Based Arts 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). ConneXions was identified as a CSI school because it is one of 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.

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

I. INTRODUCTION

RCA Process for CSI Schools

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

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

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

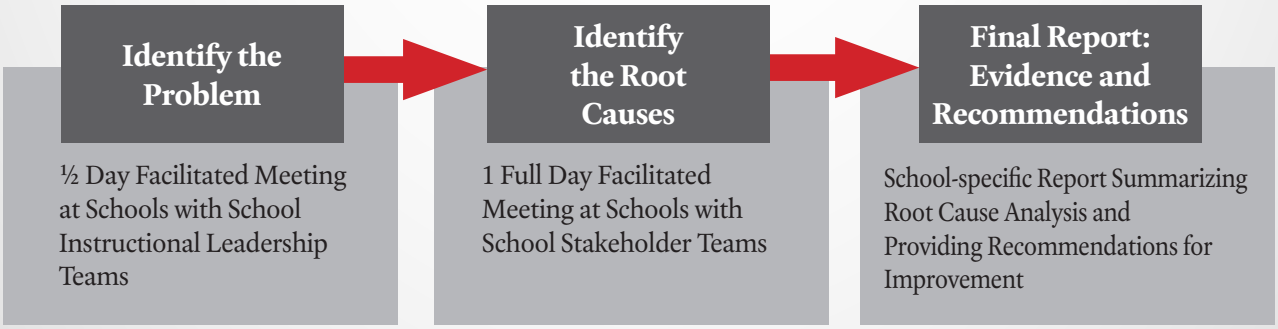
The root cause analysis process translates the successes and challenges identified through the CSI needs assessment into priorities to inform actionable improvement planning. The work with schools was staged in three steps: 1) identify the problem; 2) identify the root causes; 3) draft a school report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

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

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

As a third and final step, the RCA teams created these school-specific reports with recommendations for addressing the problem and root causes in improvement planning.

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: ConneXions: A Community Based Arts School
2801 N. Dukeland St, Baltimore, MD 21216
(410) 396-6387

Total teachers: 30

Student Demographics								
Total Students	Asian	Black African Americans	Hispanic/ Latino	White	Other	% Economically Disadvantaged	% English Learners	% Students with Disabilities
481	<10	471	<10	<10	<10	67.48%	>5%	28.28%

ConneXions: A Community Based Arts School Middle School MSDE School Report Card Profile 6-8							
Academic Progress		School Quality and Student Success		Academic Achievement		Progress in Achieving English Language Proficiency	
Student Growth Percentile in Math	34	Students Not Chronically Absent	71.5%	% Proficient in Math	0.6%	% English Learners Making Progress Toward Learning English	N/A
Student Growth Percentile in ELA	33.5			Average Performance Math	1.6		
Credit for Well Rounded Curriculum N/A	87.9%	Access to Well Rounded Curriculum	0%	% Proficient in ELA	3.5%		
				Average Performance ELA	1.7		
Earned Points:	10.1/28	Earned Points:	5.5/25	Earned Points:	3.6/20	Earned Points:	N/A
Total Earned Percent:				31%			

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

II. SCHOOL PROFILE

ConneXions: A Community Based Arts School 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	6.8%	Students Not Chronically Absent	50.2%	Four-Year Adjusted Cohort Graduation Rate	70.5%	% English Learners Making Progress Toward Learning English	39.3%	Credit for Well-Rounded Curriculum	83%
Average Performance Mathematics	1.6								
% Proficient in English Language Arts (ELA)	16.7%	Access to Well Rounded Curriculum	35.8%	Five-Year Adjusted Cohort Graduation Rate	77.3%			On Track in Ninth Grade for Graduation	46.1%
Average Performance ELA	2								
Earned Points	7.2/30	Earned Points	4.6/25	Earned Points	10.9/15	Earned Points	3.9/10	Earned Points	5.8/10
Total Earned Percent:				31%					

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 RCA team. The ConneXions team convened on April 5, 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 the specific student 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 ConneXions team analyzed a variety of data from the MSDE CSI Needs Assessment Report, the Maryland State School Report Card, and the school survey in order to identify potential problems. Some of the specific data points that were included in the analysis are listed below:

- State assessment performance (ELA and mathematics)
- Attendance
- Access to a well-rounded curriculum
- Graduation rates
- Course performance
- Achievement of students receiving special education services
- Parent satisfaction survey
- Measures of Academic Progress (MAP®) assessment (language, reading, mathematics)
- Teacher quality

Once the potential problems were identified, the team prioritized the problems based on a set of criteria (see next section).

Problem Statement Criteria

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

1. *How important is the problem to addressing our needs?*

Importance is determined by whether student outcomes will be improved, teacher efficacy is increased, and/or organizational systems will be improved.

2. *How feasible is it to address this problem?*

Feasibility is defined by the availability of adequate resources, staff, and capacity, and whether there is sufficient support and buy-in.

3. *How aligned is the problem to our needs?*

The problem statement should be related to the reason the school was identified as a CSI school. Also the school should be able to address the problem and its root causes by the effective selection and implementation of evidence-based practices.

III. PROBLEM STATEMENT

Day One Summary

The first RCA meeting focused on identifying and prioritizing the problems at ConneXions. Although a wide variety of issues was raised during the discussion, a major theme underlying many of the problems was a lack of clear expectations and school-wide systems to support the implementation of those expectations. This underlying problem was noted in virtually every area of the school, including attendance, curriculum and instruction, professional learning, and school culture. The final problem statement focused on low state assessment scores, but it was clear at the end of day one that school-wide systems needed to be explored further on day two.

Key Data Themes

Data Source	Key Takeaways
MAP	• MAP results are declining over the course of the year. • MAP administration rates are very low in the high school.
Maryland State School Report Card	• Graduation rates are too low. In addition, readiness for postsecondary education or "everyday living after high school" is too low, exemplified in the statement "we're graduating them but we're not preparing them. They have the paper, but they don't have the skills."
MSDE CSI Needs Assessment Report	• Percentage of teachers (36 percent) teaching one or more classes outside their subject specialization is high and has been increasing.

Themes Across Data Sources (Topics) (1 being highest priority)	Ranking
State assessment achievement is too low.	1
Ninth grade on-track rate to graduation is too low.	2
Absenteeism is too high.	3
Mathematics achievement is too low.	4

III. PROBLEM STATEMENT

Final Problem Statement

More than 96 percent of students in grades 6-8 and 83 percent of students in grades 9-12 are not meeting college and career readiness standards for ELA and mathematics as measured by state assessments.

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 ConneXions 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 (RAND Corporation, 2012).

Sixty-seven percent of students at ConneXions are categorized by MSDE as "economically disadvantaged." Research demonstrates that economic disadvantage typically has a negative effect on student achievement, meaning that communities like the one served by ConneXions commonly struggle with low student achievement (Sirin, 2005).

Twenty-eight percent of students at ConneXions are classified by MSDE as having disabilities. Research shows that students with disabilities attain significantly lower levels of academic performance than the average student. Also, 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 (Swanson, 2008). Because the ConneXions 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 ConneXions's.

Despite the challenges facing ConneXions, sufficient evidence exists 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, Allensworth, Luppesco, & Easton, 2010).

IV. ROOT CAUSE ANALYSIS OF THE PROBLEM STATEMENT

Day Two Summary

ConneXions convened on April 9, 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 collectively 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.

Specifically, the goals for Day Two included the following:

- 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.

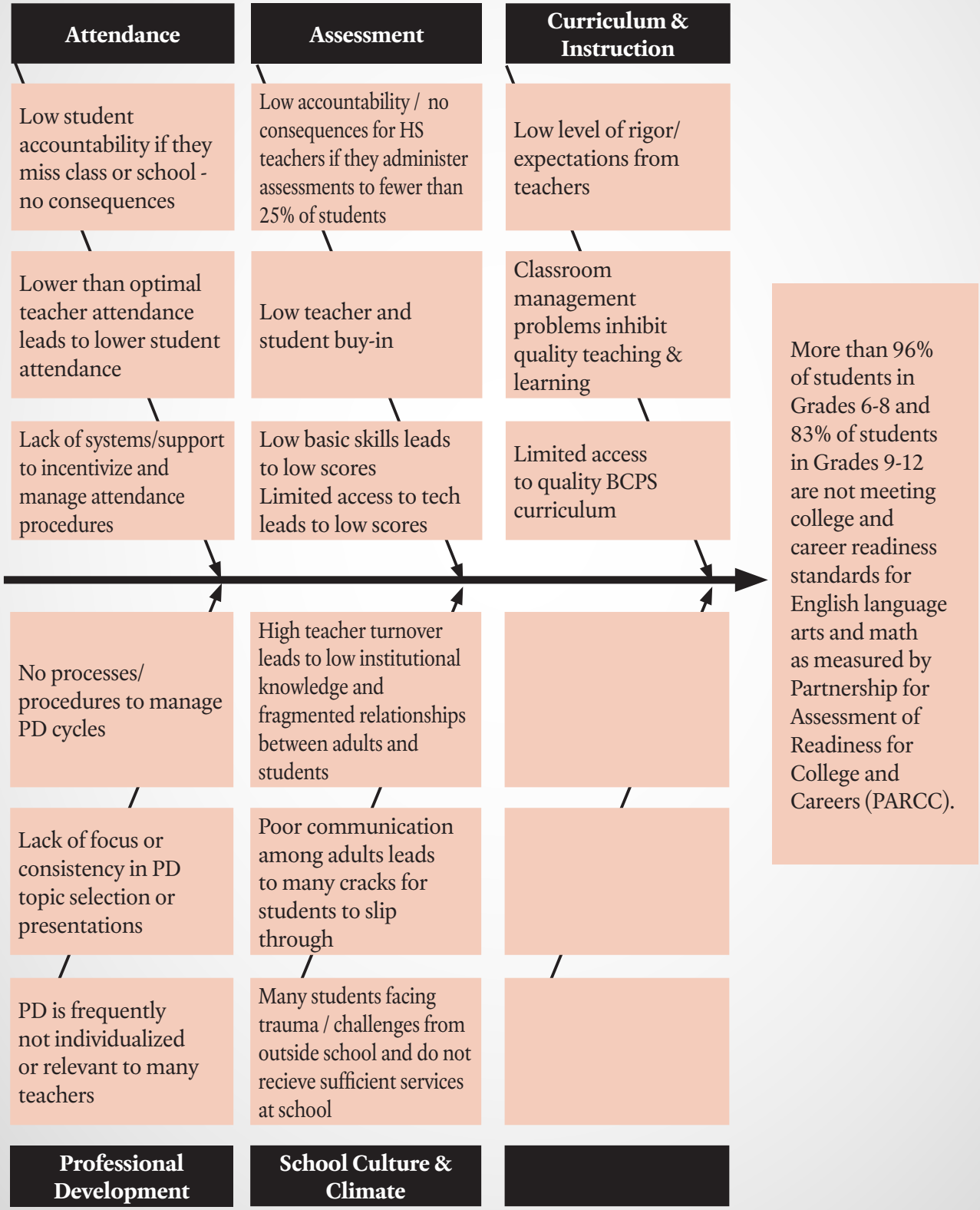
The workshop began by confirming the problem statement. The stakeholder group then brainstormed potential causes, posted their ideas on chart paper, and conducted a gallery walk to ensure that everyone had a chance to read the full scope of ideas. The group organized the causes into themes and then wrote causal factor statements to capture the essence of each category. A total of four causal factors were identified: attendance; school culture; professional learning; and curriculum, instruction, and assessment. The group used a tool developed by Daniel Duke of the University of Virginia to prioritize the root causes and then finished the workshop by brainstorming improvement ideas.

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

ConneXions: A Community Based Art School - Fishbone: Exploring Causes



IV. ROOT CAUSE ANALYSIS OF THE PROBLEM STATEMENT

Prioritized Root Causes

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

Final Output. Prioritized Root Causes:	Ranking
The school has a culture of low accountability and inconsistent or nontransparent schoolwide systems.	1
The school lacks the capacity to support teacher professional learning in mathematics, ELA, differentiated instruction, and instruction of students with special needs.	2
The school lacks full access to the curriculum and professional learning experiences provided by Baltimore City Public Schools (BCPS).	3
The school does not have technology capabilities (devices, internet connectivity, and information technology (IT) management).	4

Day Two Summary

As predicted, the conversation during day two often came back to the need for clear expectations, effective systems, and accountability for maintenance and enforcement of these systems. A lack of systems seemed to be a school-wide problem, impacting virtually every aspect of the school. Stakeholders had to prioritize those systems that are most important to the school's improvement. Because ConneXions was identified as a CSI school due to low student achievement, a focus on developing systems that directly impact the teaching and learning process made sense. For example, the team had major concerns about the quality of the curriculum in the school. More than one out of every three teachers does not submit lesson plans, and the school's approach to curriculum development has led to fundamental questions about the content of curriculum and its alignment to state standards.

Evidence Base for Prioritized Root Causes

Research demonstrates that accountability for teachers as professionals is important for maintaining a functioning school environment that supports high student achievement. The RAND Corporation states that "(T)he 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" (Levitt, Janta, & Wegrich, 2008, p. 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, Lin Russell, Marsh, & Miles, 2008; The Wallace Foundation, 2013).

V. RECOMMENDATIONS FOR IMPROVEMENT

Brainstormed Ideas for Improvement Planning from Stakeholders

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

- Add more staff (two instructional coaches, two special educators, two deans [for the middle and high schools], one ELA instructional specialist, one mathematics instructional specialist, two social workers or psychologists, and four para-educators).
- Provide leadership coaching for the principal, specifically around communicating the school's instructional vision, and developing and maintaining school-wide systems and processes.
- Develop, implement, and maintain accountability systems for teachers.
- Develop, implement, and maintain initiatives to promote attendance in every class.
- Increase technological infrastructure (broadband connectivity, access to devices, IT support, and training for teachers on technological integration).
- Purchase access to comprehensive BCPS curriculum. As a charter school, ConneXions is currently only accessing the limited, free part of a "freemium" model.

Recommendations for Evidence-Based Improvement

Final recommendations for this report have been developed by the University of Maryland College Park in consultation with RCA facilitators and leaders at MSDE. Recommendations were developed using the following process:

- Reviewing the ideas, notes, and stakeholder perspectives gathered throughout the Root Cause Analysis process;
- Conducting a scan of the research literature related to the problem statement and prioritized root causes identified throughout the process. While a comprehensive research analysis was outside the scope of this project, the team reviewed research using the standards of evidence model outlined in the Every Student Succeeds Act (ESSA) to offer research that had moderate or strong evidence of effectiveness (Level 2 or Level 1 on the ESSA framework);
- Compiling, organizing and categorizing over 150 recommendations submitted by UMD/RCA facilitators.

These recommendations are offered by the University of Maryland College Park in consultation with MSDE. They represent only a portion of the potential strategies and interventions that will become a part of the school's three-year improvement plan developed in concert with the MSDE Title I office.

V. RECOMMENDATIONS FOR IMPROVEMENT

RECOMMENDATION	Four Domains Domain of Rapid School Improvement[1]
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*

V. RECOMMENDATIONS FOR IMPROVEMENT

RECOMMENDATION	Four Domains Domain of Rapid School Improvement[1]
Invest in a curriculum and professional learning opportunities that are aligned with the Maryland College and Career Ready Standards. The evidence base for investing in high-quality curriculum and accompanying professional learning is moderate. Research shows that high-quality curriculum can positively impact student achievement, although teachers commonly use a mix of formal (published curriculum) and informal (self-created, borrowed) curricular materials with students. According to stakeholders at ConneXions, they lack basic access to a comprehensive curriculum, which limits their ability to deliver high-quality instruction. However, they also report a lack of instructional quality management and oversight systems, which is covered in the first recommendation on leadership capacity.	*Instructional Transformation*

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

V. RECOMMENDATIONS FOR IMPROVEMENT

RECOMMENDATION	Four Domains Domain of Rapid School Improvement[1]
Invest in instructional technology and professional learning to support effective implementation. The evidence base for strengthening the school's technological resources and capacity is moderate. State assessments–upon which CSI placement is determined–are computer-based, so it is essential for students to have sufficient digital literacy to perform competently on the assessments. Digital literacy will ensure that test results accurately reflect students' academic skills and knowledge at the time of the assessment administration. In a 2012 report, the Friday Institute at North Carolina State University found that only 12 percent of teachers "fully integrated digital tools and resources in a learner-centered approach, placing an emphasis on student action and higher-level thinking" (Spires & Bartlett, 2012, p. 4). Based on input from stakeholders, that figure is surely lower at ConneXions, due largely to limitations related to connectivity (access to high speed Internet), resources (devices, software), and implementation support (high-quality, job-embedded professional development, ongoing IT management). These limitations negatively impact the delivery of high-quality teaching and learning, leading to lower college and career readiness, and low achievement results on state assessments.	*Instructional Transformation*

VI. CONCLUSION AND NEXT STEPS

Collaboratively with the Local School System (LSS) and stakeholders, Comprehensive Support and Improvement (CSI) school teams will develop intervention plans that identify SMART (Specific, Measurable, Attainable, Relevant, Timely) intervention goals with measurable annual outcomes and progress indicators that will guide schools toward meeting annual targets and exit criteria in three years. The outcomes of the root cause analysis must be used to inform the development of the SMART intervention goals and identification of evidence-based strategies included in the intervention plan. Any evidence-based strategy must meet the Every Student Succeeds Act (ESSA) evidence requirements (level 1, 2, or 3). Intervention Plans will be approved by the school, LSS, and the Maryland State Department of Education (MSDE), and monitored annually by staff from the LSS and the MSDE. Additional information and resources are available on the MSDE Resource Hub. https://www.marylandresourcehub.com/

APPENDICES

Appendix A: List of Stakeholders

Day 1

Name	Position
Sidney Brooks	*Principal*
Jeff Harris	*Director of Student Support*
Sabourah Abdunati	*Education Associate (Title I Mathematics)*
Yasmeen Davis	*Staff Specialist (BCPS Central Office)*
Jodi Faye	*Education Associate (Curriculum Coach/Lead)*
Diedre Dawkins	*Arts Director*
Tori Koch	*Eighth Grade Mathematics Teacher*

Day 2

Name	Position
Sidney Brooks	*Principal*
Jeff Harris	*Director of Student Support*
Sabourah Abdunati	*Education Associate (Title I Mathematics)*
Yasmeen Davis	*Staff Specialist (BCPS Central Office)*
Jodi Faye	*Education Associate (Curriculum Coach/Lead)*
Diedre Dawkins	*Arts Director*
Tori Koch	*Eighth Grade Mathematics Teacher*
Ivan Chestnut	*Parent*
Civ Jones	*Advocate Community Partner*
Wendi Bengerd	*Reading Specialist*
Dr. Ron Howell	*Operator*
Jessica McLeod	*Assistant Principal*
Matt Langley	*Individualized Education Plan Chair*
Abdul Salaam	*Community Partner*
Dr. Iris Jackson	*Community Partner*
Griesha Graham	*Community Partner*
E. Ethridge	*Operator*

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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