Findings of Root Cause Analysis for Comprehensive Support and Improvement Schools

Phoenix Academy

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This report was prepared by the University of Maryland College Park Center for Educational Innovation and Improvement at the College of Education and in partnership with the Bowie State University College of Education and the Morgan State University School of Education & Urban Studies. The Root Cause Analysis process was facilitated by Dr. Kelli D. Cummings and Dr. Ebony Terrell Shockley, who also co-authored this report.

I. INTRODUCTION

The purpose of this report is to share outcomes of a Root Cause Analysis (RCA) conducted to support Phoenix Academy in identifying underlying causes of school performance problems. The report provides an overview of the RCA process, school profile, problem statement, the RCA conducted at the school, and recommendations to address the root causes.

The Maryland Every Student Succeeds Act (ESSA) Consolidated State Plan requires schools that have been identified for comprehensive support and improvement (CSI) engage in an RCA process facilitated by a third party. CSI schools are defined as follows: the lowest achieving 5 percent of Title I schools, high schools that do not graduate one third or more of their students, or schools that have federal school improvement grants. Phoenix Academy was identified as a CSI school due to low graduation rates. Outcomes of the RCA must be used to inform the development of intervention plans to improve school performance.

CSI schools that were identified in the 2018-2019 school year have three years to exit CSI status. CSI school leaders will receive a leadership coach to support the development and implementation of the intervention plan. CSI principals will be required to participate in the Leading for School Improvement Institute, which provides customized professional learning experiences to support school improvement. CSI principals will be required to engage in monitoring visits by the Maryland State Department of Education (MSDE) to ensure that progress is being made toward school improvement goals.

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

III. PROBLEM STATEMENT

Key Data Themes

Data Source	Key Takeaways
Maryland State School Report Card	The group as a whole expressed valid concern with four-year cohort graduation rates in the context of alternative school accountability. Concerns were raised regarding issues of transportation. Phoenix students may live in any part of Anne Arundel County and that leads to long bus rides. If students do not have access to their own car, parental support, or a school bus, no other ready options are available to get them to the campus.
MSDE CSI Needs Assessment Report and School Data	School leaders also identified concerns with the resources available to support instruction across content areas. At present, the school has more non-teaching than teaching staff, which has resulted in some teachers having to pick up a new preparation time or teach outside their own area of expertise. Also important to the stakeholders is that most teachers would have special education certification.
MSDE CSI Needs Assessment Report	Student attendance and absence were discussed as another potential area affecting graduation rates. Absences are driven by many factors outside of the school's control. Students at Phoenix may be the breadwinners for their families or live independently. These circumstances require them to work when not in school. Contributing to this, if students are ill or have to be out in the morning for appointments, many of them do not have a way to get to and from school.
MSDE CSI Needs Assessment Report	Phoenix Academy leaders acknowledged that, in addition to the concerns about recruiting, teachers in the school experience burnout and high rates of stress.

Themes Across Data Sources (Topics) (1 being highest priority)	Ranking
Instruction in the Content Areas	1
Teacher Stress and Burnout	2
Absenteeism	3

III. PROBLEM STATEMENT

Day one of the RCA process with Phoenix Academy resulted in deep dialogue around rich data, varied perspectives, and additional resources that were shared with the facilitators. In total, the group identified six potential problem areas of focus for the analysis:

1) Instruction in the content areas
2) Absenteeism and attendance
3) Bridge projects
4) Penalization for transit
5) Teacher-stress and special educator time
6) Graduation metrics (e.g., students may enroll at the school at any time)

After holding a vote by blind ballot, the team members agreed on three interrelated themes as listed in the table above. While working to build the problem statement, leaders acknowledged that attendance rates may be improved by focusing on instruction in the content areas and reducing teacher stress, thus leading to the final problem statement.

Final Problem Statement

The level of instruction in core content areas is insufficient to accelerate learning to graduation.

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.

Phoenix Academy's problem statement is feasible, within the school's control, and, if changed, would likely lead to improved outcomes for teachers and students. The statement also represents a widespread issue across the nation. Teacher experience and certification interact in several ways with initial job placements that often continue to disadvantage high-poverty schools (Rice, 2010). Although inexperienced teachers are equally effective in high- or low-poverty schools, those who are successful in high-poverty schools tend to either move to a low-poverty school or experience high rates of burnout. Rice also describes high-poverty schools as being "doubly disadvantaged" when it comes to teacher experience (p. 4). Such schools have both higher rates of inexperienced teachers along with a smaller effect associated with their experienced teachers. Certainly, challenges with recruitment, retention, and managing teacher workloads and stress are key components to the problem that Phoenix Academy identified.

Potential solutions to the problem may include policy changes, but more likely will focus on professional learning interventions, which are critical for high-poverty schools. Identifying effective professional learning components is difficult already, but particularly so at the secondary level. One of the most comprehensive reviews of professional learning interventions was conducted by Guskey and Yoon (2009) who reviewed 1,343 studies and found only nine met the standards for valid evidence as offered by the What Works Clearinghouse (WWC). Even more troubling, no studies in the pool met WWC criteria at the secondary level. Nonetheless, Guskey and Yoon do identify recommendations from their work that offer the best knowledge currently available about effective ways to establish professional learning. These are discussed in the final section of the report.

In short, the problems identified by Phoenix Academy are common among alternative schools, particularly those that are high-poverty. These problems are significant and likely to affect the school's academic outcomes and teacher turnover, which can continue to recur in a cycle.

IV. ROOT CAUSE ANALYSIS OF THE PROBLEM STATEMENT

Day Two Summary

Phoenix Academy convened on June 4, 2019 for day two of the RCA process. Day two was devoted to working with the school's stakeholder team to identify and prioritize the root causes of the problem so the causes could be addressed in the school's improvement planning efforts. Eighteen people attended the day two meeting (see Appendix A).

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 were then 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:

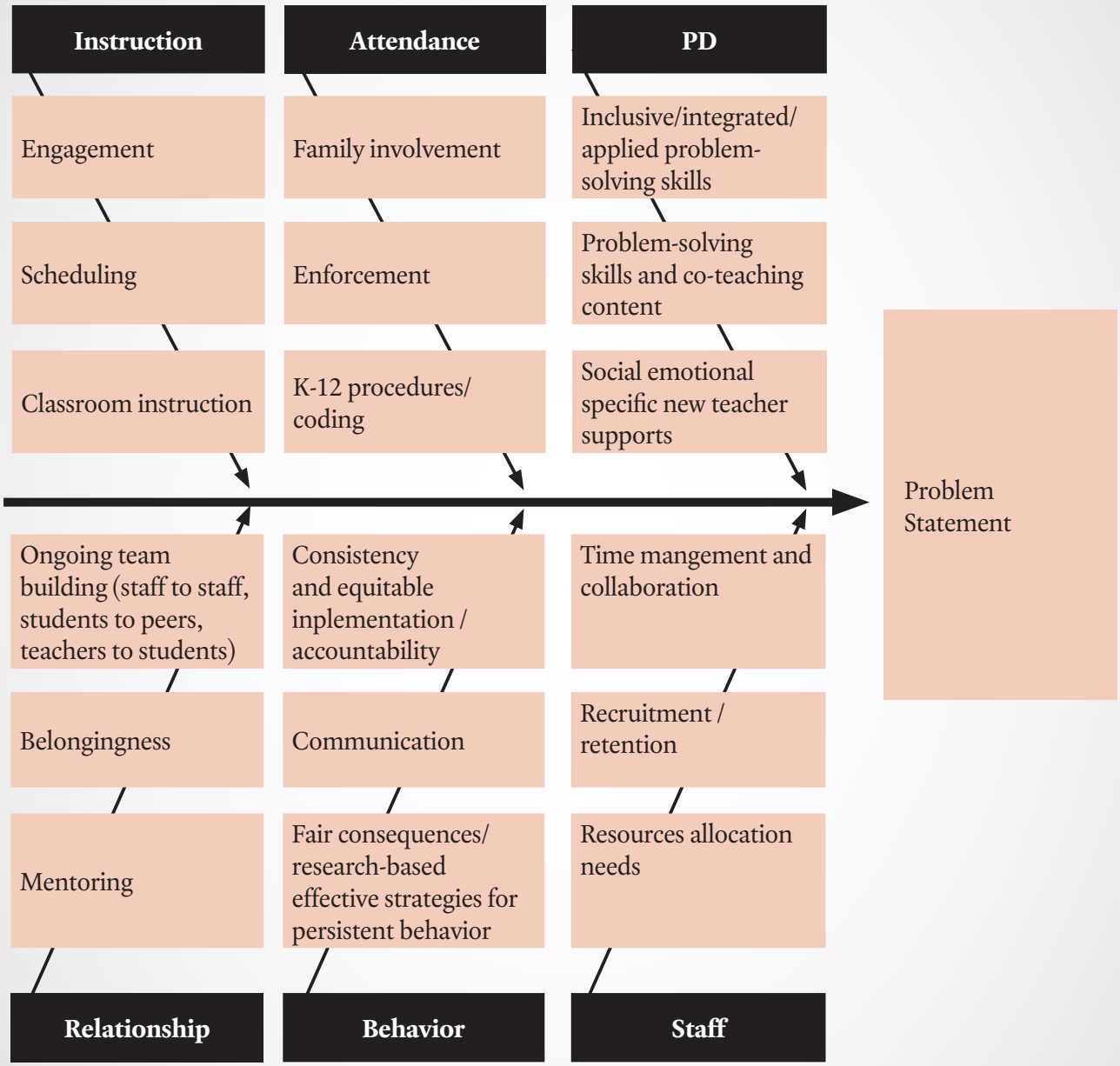
- Determining factors that contribute to the problem statement,
- Identifying underlying causes of the problem and determining which underlying causes are primary "root" causes, and
- Prioritizing the root causes based on the importance of impacting student outcomes and the feasibility of implementing strategies to address them.

Casual Factors

The "Fishbone" diagram represents the stakeholder group's initial assessment of all of the individual factors contributing to the existence or recurrence of the problem statement.

IV. ROOT CAUSE ANALYSIS OF THE PROBLEM STATEMENT

Phoenix Academy 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 lacks standard procedures to train new staff and mentor new and struggling educators.	1
Schoolwide procedures are not cohesive or consistent, including inconsistent responses to discipline in the classroom.	2
The school experiences difficulty recruiting and retaining certified teachers. Alternative schools can seem like daunting places for new teachers.	3

Evidence Base for Prioritized Root Causes

The Connecticut State Department of Education (2018) evidence-based practice guide was used as a reference to determine the evidence base of all root causes in this report.

Professional Learning and Mentoring. The educators at Phoenix Academy were clear and direct in identifying needs in professional learning and mentoring. During the discussions, the facilitators found that many of the hypothesized root causes could, in fact, be addressed through a concerted focus on professional learning and mentoring. Several educators at the school had already developed a plan to scale up professional learning, evaluate it, and enhance opportunities for mentoring and coaching. The evidence basis for professional learning is generally strong, but varies according to its specificity. In addition, most of the evidence for professional learning activities is focused at the elementary level. As an example, instructional coaching and mentoring, which provide individualized, consistent support for new or struggling teachers (Teemant, 2014), have moderately strong evidence for transforming teaching over time. Unfortunately, to date, these claims have only been evaluated with students in grades K-6. As Guskey and Yoon (2009) note, however, this lack of evidence does not mean such practices are ineffective. The field is just lacking high-quality studies in this area and with a high school population. Based on the data currently available, at least two practices have support for demonstrating a strong rationale in grades 9-12. The first is providing structured opportunities and consistent time for teachers to collaborate and plan (Gates Foundation, 2014). The second practice involves providing continuous, job-embedded opportunities for professional learning that are tied to school needs (Corwin & National Education Association, 2017). Key to both approaches is involving educators in their own and their colleagues' learning, using data to plan and evaluate the support, and considering professional learning practices as part of continuous school improvement efforts.

IV. ROOT CAUSE ANALYSIS OF THE PROBLEM STATEMENT

Consistency in Implementation and Support, and Behavior. Phoenix Academy stakeholders currently use an evidence-based practice to support student behavior school-wide, Positive Behavioral Interventions and Supports (PBIS) (Flannery, Frank, Kato, Doren, & Fenning 2013). The system breaks down in its the consistency of implementation. The PBIS technical assistance site (https://www.pbis.org/school/high-school-pbis) highlights how high school contexts interact with effective implementation. The site encourages schools to consider school size, culture, and developmental level in order to fine-tune their system. Refocusing on collecting high-quality data, reinvigorating leadership, and increasing opportunities for communication will assist with bringing about more consistency (Flannery & Kato, 2016).

Staffing. As Rice (2010) noted, low-poverty schools are most likely to be staffed by teachers with fewer than three years of experience. This pattern of unequal distribution is similar for other metrics of teacher knowledge. Teachers from low-poverty schools are more likely to have lower test scores, lack a regular license, and are less likely to have advanced teaching certification (Clotfelter, Ladd, Vigdor, & Wheeler, 2007). Although teacher experience does not always indicate higher teacher quality, high-poverty schools and, by extension, alternative schools are clearly disadvantaged in the hiring process. Potentially higher order policy decisions could be put in place to make sure Phoenix receives more applicants or more experienced teachers, but the school itself will still most likely have to address issues of bringing new teachers up to speed through professional learning and mentoring.

V. RECOMMENDATIONS FOR IMPROVEMENT

Brainstormed Ideas for Improvement Planning from Stakeholders

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:

Instructional Supports

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

These recommendations 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 PLANNING

RECOMMENDATION	Four Domains Domain of Rapid School Improvement[1]
Maximize professional learning focused on planning, instruction, and improving learning conditions for students. Establish or significantly strengthen a school-wide cycle of professional learning–coaching, observations, and team planning–that includes an aligned focus across core instructional activities. Several studies link teacher professional learning with improvements in instruction and quality of learning environments (Vescio, Ross, & Adams, 2008). Professional learning opportunities are most effective when they are part of coherent school-wide efforts that link content, assessments, and reflection, rather than episodic professional workshops (Akiba & Liang, 2016). Two effective professional learning strategies include professional learning communities and job-embedded professional learning. *Professional Learning Communities:* Teachers need time spent planning and learning with colleagues in collaborative planning time and/or professional learning communities (PLCs) that are focused on teaching and learning not on administrative or organizational demands. Research shows that PLCs are most successful when they are designed and supported with specific attention to leadership, group dynamics, trust, and respect (Vangrieken, Meredith, Packer, & Kyndt, 2017). PLCs can form around topics that teachers can explore together, plan for, and build upon together using peer observations and deeper capacity-building on areas of need, such as social emotional learning or trauma-informed teaching. Authentic PLCs include the following features: • Dedicated time for the PLC • Teacher-led and based on specific needs of students • Supported by school leaders with training and development activities *Job Embedded Professional Learning:* Research emphasizes the importance of professional learning that emphasizes explicit strategies for conducting active teaching, assessment, observation, and reflection rather than just abstract discussions (Darling-Hammond & Richardson, 2009).	*Talent Development* *Instructional Transformation*

V. RECOMMENDATIONS FOR IMPROVEMENT PLANNING

RECOMMENDATION	Four Domains Domain of Rapid School Improvement[1]
Implement social emotional learning (SEL) to explicitly teach SEL skills focused on self-awareness, self-management, social-awareness, relationship skills, and responsible decision-making. Employ a robust SEL program that is inclusive of all school-based staff, including but not limited to, administrators, teachers, school social workers, guidance counselors, and paraprofessionals. Effective school-based SEL programs are comprised of five major components: **1.** Self- awareness **2.** Self-management **3.** Social awareness **4.** Relationship skills **5.** Responsible decision making (CASEL, 2012). These components are more impactful when they are set in an environment in which organizational culture, climate, and conditions all support SEL (Durlak, Weissberg, Dymnicki, Taylor, & Schellinger, 2011). One goal of SEL programs is to improve the quality of interactions among individuals in schools and within classrooms; therefore, school-level social processes are important to examine when considering an SEL program. Moreover, some evaluation studies find that within low-income urban communities, school climate may be particularly salient (Aber, Jones, Brown, Chaudry, & Samples, 1998; Hughes, 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, Resnik, Keister, & Weissberg, 2006), it is necessary that a systematic approach to SEL programming entails integration of SEL across school activities, both in and outside of the classroom, and even reaching into the community.	*Culture Shift*

[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 PLANNING

RECOMMENDATION	Four Domains Domain of Rapid School Improvement[1]
Invest in professional learning opportunities and support for principal's development as an effective instructional leader. The importance of the principal as the leader for instruction across the school has been clearly established in the research literature over the last several decades. However, school leaders experience difficulty either focusing the bulk of their time and capacity on leading instruction in their schools, and/or they have not (yet) developed the skills and knowledge to effectively guide the elevation of instructional practice with their teachers. In schools where the consistency and quality of instruction is variable, the research suggests that by focusing on directly supporting teaching and classroom learning, the principal can directly contribute to improved student outcomes (Neumerski, 2012; Grissom, Loeb, & Master, 2013; Knapp, Copeland, Honit, Plecki, & Portin, 2010). To become an effective instructional leader, principals need training and development across a range of skills, including: • Re-orienting their daily calendar to prioritize their time in classrooms for observations and instructional feedback • Acquiring deep knowledge of all components of high-quality instruction and lesson planning • Vetting curriculum for standards alignment and quality • Providing targeted feedback and coaching to teachers to drive instructional improvement • Analyzing classroom data and work to monitor students' growth and to guide instruction • Developing and leading differentiated professional learning events for teachers 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, a variety of evidence-based instructional leadership frameworks and tools can be adapted as resources for principals who are developing as instructionally-focused leaders (www.k-12leadership.org; www.wallacefoundation.org).	*Talent Development* *Turnaround Leadership*

VI. CONCLUSION AND NEXT STEPS

Collaboratively with the Local School System (LSS) and stakeholders, 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 RCA 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 ESSA evidence requirements (Level 1, 2, or 3). Intervention plans will be approved by the school, LSS, and the MSDE, and monitored annually by staff from the LSS and the MSDE. Additional information and resources are available on the MSDE Resource Hub. https://

APPENDICES

Appendix A: List of Stakeholders

Day 1

Name	Position
Olivia Richardson	*School Counselor*
Erin Quigley	*School Psychology*
Joanne Amaro	*Spanish Teacher/Equity Liaison*
Merlene Clarke	*Principal*

Day 2

Name	Position
Brandon Gulley	*Crisis Interventionist*
Marilyn Shine	*Special Education Teacher*
Phillip Elliott	*Community Member*
Erin Quigley	*School Psychologist*
Joanne Amaro	*Spanish Teacher/Equity Liaison*
Roxanne Massarelli	*Special Education Teacher*
Lauren Bolin	*School Psychologist*
Sharon Whitney	*English Lead Teacher*
JoAnne Foster	*Media Specialist*
Liz Lamon-Taylor	*Behavior Technician*
Olivia Richardson	*School Counselor*
Merlene Clarke	*Principal*
Margaret Scott	*Assistant Principal*
	Student
	Student
Ronda Hass	*Parent*

APPENDICES

Appendix B: Bios of Facilitators

Dr. Ebony Terrell Shockley: Associate Clinical Professor and Director of the Office of Teacher and Leader Education for the Department of Teaching and Learning, Policy and Leadership at UMD. Dr. Shockley researches under-represented students and their teachers in STEM, exceptional education, and literacy contexts using sociocultural and culturally responsive frameworks. A component of her work includes directing the Master of Education with Certification program. At UMD she teaches content area reading, science methods, digital literacy, and an improvement science doctoral course. Prior to working at UMD, she served as the Professional Development Chair for Maryland Society for Educators of Technology for several years and traveled around the state leading professional development sessions to school districts. Her K-12 experience includes working in a large diverse school district where she taught biology, ESOL, and reading, including in an alternative evening high school. She has also served as an administrator and Instructional specialist for high schools and Title I schools.

Dr. Kelli D. Cummings: Assistant Professor of Special Education at UMD. Her research interests lie at the intersection of data-based decision-making and intensive intervention planning. She conducts studies to evaluate and improve the reliability, validity, and accuracy of assessment tools that are used to evaluate student progress. She also focuses on areas of school improvement (e.g., multi-tiered system of supports) in academics and behavior. All of her work is guided through the lens of implementation science, which is the "...scientific study of methods to promote the systematic uptake of research findings and other evidence-based [interventions] into routine practice" (Eccles & Mittman, 2006). Even efficacious practices that do not take into account school need, education policy, or the infrastructure required to implement the practice at scale are likely to result in low levels of adoption (Horner et al., 2014). Additionally, interventions without formal mechanisms for data-based decision-making are less likely to be sustained and reach students from diverse backgrounds. Given recent shifts in policy, funding, and practice-based educational research priorities, Dr. Cummings believes it is critical that special education leaders are equipped to conduct research and develop practices that are scalable, and lead to socially important, sustainable outcomes.

APPENDICES

Appendix C: Citations of research

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