



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

## Excel Academy at Francis M. Wood High School

September, 2019



COLLEGE OF  
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 |

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 Reem Labib and Dr. Jean Snell, 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 Excel Academy 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). Excel Academy was identified as a CSI school due to low graduation rates. Outcomes of the root cause analysis should 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

## RCA Process for CSI Schools

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

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

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

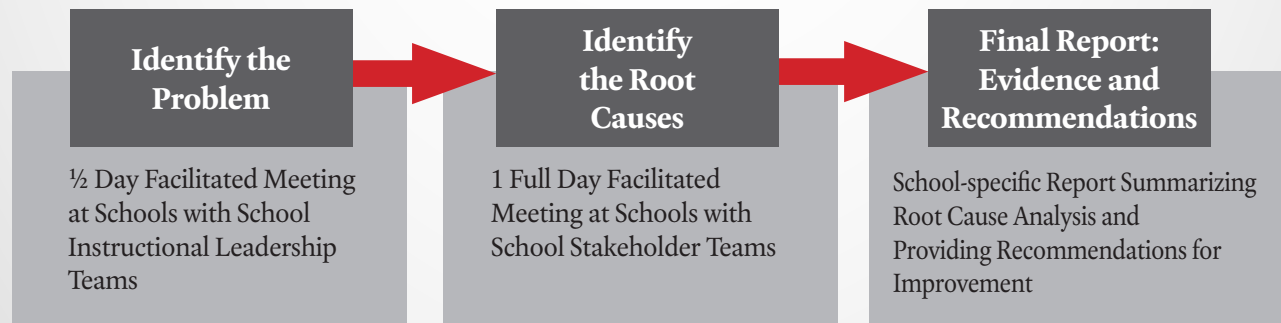
The root cause analysis process translates the successes and challenges identified through the CSI needs assessment into priorities to inform actionable improvement planning. The work with schools was staged in three steps: 1) identify

the problem; 2) identify the root causes; 3) draft a school report with recommendations for improvement.

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

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

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



## I. INTRODUCTION

An RCA starts with asking the question: What problem do we face that, if solved or mitigated, would most effectively lead to our desired outcomes (in this case significant improvement in student outcomes that would lead to the school being removed from CSI status)? This “Problem Statement” is then studied and interrogated by a team of stakeholders through the RCA process that answers questions such as:

- Why do we get these outcomes?
- Who are the people involved in this problem?
- What policies, procedures, or rules contribute to this problem?
- What resources are currently engaging with this problem?
- What environmental issues impact this problem?

This process led to a small number of “root causes” to the problem designed to help school stakeholders design strategies and programs that are more likely to lead to significant improvement for students. In addition, the process will include conducting research on the problem and prioritized root causes and recommending evidence-based strategies for improvement.

## II. SCHOOL PROFILE

**School Name:** Excel Academy at Francis M. Wood High School  
 1001 W. Saratoga St, Baltimore, MD 21223  
 (410) 396-1290

Total Teachers: 26

| Student Demographics |       |                         |                 |       |       |                              |                    |                              |
|----------------------|-------|-------------------------|-----------------|-------|-------|------------------------------|--------------------|------------------------------|
| Total Students       | Asian | Black African Americans | Hispanic/Latino | White | Other | % Economically Disadvantaged | % English Learners | % Students with Disabilities |
| 544                  | <10   | 535                     | <10             | <10   | <10   | 74.56%                       | 5%                 | 22.35%                       |

### Excel Academy at Francis M. Wood 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                 | 1.4% | Students Not Chronically Absent    | *%   | Four-Year Adjusted Cohort Graduation Rate | *%     | % English Learners Making Progress Toward Learning English | N/A | Credit for Well Rounded Curriculum                         | 100% |  |        |
| Average Performance Mathematics             | 1.7  |                                    |      |   |        |  |     |  |      |  |        |
| % Proficient in English Language Arts (ELA) | 3.2% | Access to Well Rounded Curriculum  | *%   | Five-Year Adjusted Cohort Graduation Rate | *%     |  |     | % English Learners Making Progress Toward Learning English | N/A  | On Track in Ninth Grade for Graduation | 8%     |
| Average Performance ELA                     | 1.5  |                                    |      |   |        |  |     |  |      |  |        |
| Earned Points                               | /30  | Earned Points                      | 5/25 | Earned Points                             | 3.5/15 | Earned Points  | N/A |  |      | Earned Points                          | 7.2/10 |
| Total Earned Percent:                       |      |                                    |      | *%  |        |  |     |  |      |  |        |

*\* This information was not available on either the [www.mdreportcard.org](http://www.mdreportcard.org) website or visible on the downloaded report card provided.*

To view this school's full report card, visit [www.mdreportcard.org](http://www.mdreportcard.org)

## 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 primary purpose 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 for the first RCA meeting were twofold: 1) to review the school-level data in order to highlight the leading challenges for the school; 2) to identify a priority challenge area as the Problem of Practice, and to craft a Problem Statement.

### 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

The leadership team met for a half-day on April 3, 2019 to examine Excel Academy’s school-level data and to identify a problem statement. The team included content-area lead teachers (e.g., social studies, special education), as well as the school social worker, staff developer, assistant principal, and principal. In addition, two collaborative partners participated in the process who were representatives from the local business and university communities (see Appendix A for the full list of participants).

The two primary data sources available for review were the MSDE CSI Needs Assessment Report and the Maryland State School Report Card. The School Climate Survey data for Excel Academy was not available for inclusion in this analysis. Excel Academy was designated as a CSI school due to their low four-year adjusted graduation rate of 20.7 percent. Participants’ review of both sets of school data flagged the school’s high dropout rates and low graduation rates as significant concerns, in combination with the high rates of students’ chronic absenteeism, mobility, and course failure.

Excel Academy is an alternative placement school for students in grades 7-12 who require additional support beyond what is provided in a traditional school setting. The Excel educators noted that many of their students have been incarcerated or are involved with the juvenile justice system, are homeless or in foster care, or have children to support. Stakeholders reported that many of their students have undiagnosed mental health

### III. PROBLEM STATEMENT

issues related to trauma, abuse, and violence. The opening RCA conversation with the leadership team revealed the depth of the challenges facing Excel students outside of school, which, in turn, affect their school performance. After looking

across the school data, many of the Excel team members expressed how they all share one unifying concern regarding the school's low graduation rate: student disengagement.

#### Key Data Themes

| Data Source   | Key Takeaways   |
|---|---|
| <b>Maryland State School Report Card</b>                    | <ul style="list-style-type: none"> <li>• 20.7 percent graduation rate</li> <li>• 3.2 percent ELA proficiency on the state assessment</li> <li>• 1.4 percent mathematics proficiency on the state assessment</li> </ul>  |
| <b>MSDE CSI Needs Assessment Report (Quantitative Data)</b> | <ul style="list-style-type: none"> <li>• 95 percent student mobility rate</li> <li>• 97 percent of students are not passing two or more courses</li> <li>• 22 percent of students have disabilities</li> <li>• 98 percent chronic absenteeism</li> </ul>  |
| <b>MSDE CSI Needs Assessment Report (Challenges)</b>        | <ul style="list-style-type: none"> <li>• Teacher vacancies in core content areas, teacher retention is lacking</li> <li>• Teacher observations and evaluations needed</li> <li>• Low percentage of highly qualified teachers (currently, teachers are conditional, uncertified, out-of-area, inexperienced, inadequate)</li> <li>• Lack of professional learning opportunities for teachers</li> <li>• Poor student intake process</li> <li>• Low parent engagement</li> <li>• Inadequate programming and pathways for alternative student population</li> <li>• Not enough focus on student learning and achievement and classroom data</li> </ul> |



### III. PROBLEM STATEMENT

| Themes Across Data Sources (Topics) (1 being highest priority) | Ranking |
|--|---------|
| Low Student Engagement   | 1       |
| Chronic Absenteeism  | 2       |
| Low Academic Achievement                                       | 3       |

#### Final Problem Statement

*Students' disengagement in classwork across all grade levels (7-12) adversely impacts student attendance (98 percent absenteeism rate), academic performance (97 percent of students did not pass two or more courses), and graduation rates (19 percent).*

#### 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.

The federal Department of Education is closely monitoring district graduation rates as part of the push to increase the national graduation rate from 70 percent or less in some parts of the country, to 90 percent across the country. Leading up to this new policy directive, over the past several decades researchers have called attention to and analyzed the magnitude of the nation's dropout problem (Mac Iver 2010; Hammond, Linton, Smink, & Drew, 2007; Dynarski et al., 2008). The research on high school dropouts corroborates what the data at Excel Academy indicates, that students who drop out and do not graduate from high school

are those students who have disengaged from schooling. A leading study from the Gates Foundation characterized students' decision to drop out as a "slow process of disengagement" versus a sudden decision made in a single day (Bridgeland, Dilulio, & Morison, 2006). Similarly, in a meta-analysis of the research literature on dropout factors and programs, researchers indicate that students' disengagement from academics, extracurriculars, and their school peers is strongly correlated with the greater likelihood of them dropping out of school (Hammond et al., 2007).

For educators working in alternative schools, the issue of student engagement is paramount. The Department of Education defines alternative schools as those "designed to address the needs of students that typically cannot be met in regular schools" or as schools for "students at risk of educational failure" (Dynarski et al., 2008). The emerging research literature on alternative education cites the same indicators of student disengagement that are prominent in the dropout literature. In short, the dropout prevention research overlaps with the alternative education research in spotlighting the importance of student engagement to improved student outcomes, including graduation (Quinn, Poirier, Faller, Gable, & Tonelson, 2006; Foley & Pang, 2006; Wilkerson, Afacan, Yan, Justin, & Datar, 2015).

## IV. ROOT CAUSE ANALYSIS OF THE PROBLEM STATEMENT

### Day Two Summary

The Excel Academy stakeholder team met for the second day of the RCA process on April 8, 2019. The same core instructional leadership team from Excel participated in the second day of the process. In addition, community partners from University of Maryland Baltimore County (UMBC) and University of Maryland at Baltimore, student and parent representatives, and two school system administrators from Baltimore City Public Schools (BCPS) joined the second day. Please see Appendix A for the full list of participants.

The goals for the second RCA meeting were threefold: 1) to finalize the problem statement, 2) to generate a prioritized list of root causes, 3) to solicit ideas for improvement. The stakeholder team started the day by reviewing the draft problem statement and modifying the finalized version to extend the parameters of the problem from students' classroom engagement to their broader school engagement. The stakeholder team was then divided into two smaller groups through which each group generated ideas as to what factors contributed to the problem of student absenteeism. Each group created a

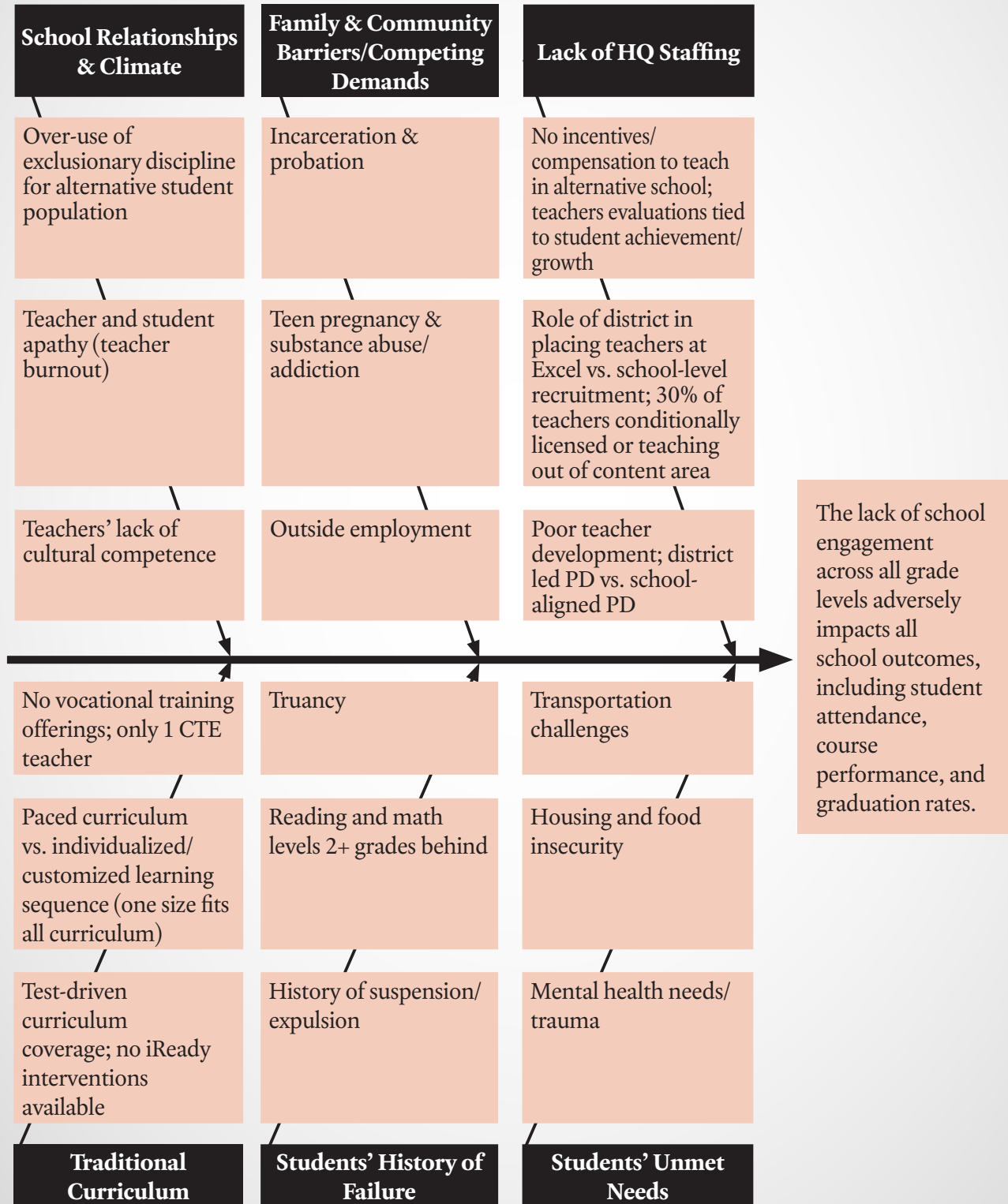
“Fishbone Diagram” to represent their thinking, which was shared and combined into one composite Fishbone. The finalized Fishbone reflected the group's perceptions that the challenge of student engagement was influenced both by out-of-school factors, such as competing demands and students' history of school failure, as well as the in-school factors, such as the traditional curriculum and not enough high-quality staffing. The Fishbone Diagram included exploration of causal factors that were located both inside and outside of schools. When the team prioritized the root causes through the “5 Whys” exercise and conducted a whole group discussion and voting regarding their prioritized causes, stakeholders zeroed in on the factors over which they had agency to improve. At the close of the second day, stakeholders were eager to consider potential solutions to the challenges that they had touched on during the two days of analysis.

### 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

## Excel Academy Fishbone Diagram



## 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 |
|--|---------|
| Traditional, paced high school curriculum and instruction are irrelevant to students' lives.   | 1       |
| Poor school-student relationships and a poor school climate are evident throughout the school. | 2       |
| Inadequate student in-take and case management processes are currently in place.               | 3       |
| Trusting relationships among the school, families, and community do not exist.                 | 4       |
| The traditional discipline system does not fit an alternative school student population.       | 5       |

### Evidence Base for Prioritized Root Causes

The research literature on student engagement is broad and is anchored by the science of motivation. Research has shown that individual needs are a “mediator” between students and school or classroom engagement (Fredericks, Blumenfeld, & Paris, 2004; van Eck, Johnson, Bettencourt, & Johnson, 2017). The educators at Excel report that it is a daily challenge for their students to ensure that their own basic needs are met. The research confirms that students’ unmet needs can be a barrier to engagement. These needs can include “real life events” and “stresses,” such as housing instability, health concerns, transportation, and childcare, which may all get in the way of students’ engaging with school (Brundage, Castillo, & Batsche, 2017; Bridgeland et al., 2006; van Eck et al., 2017). Still, what is equally prominent in the research is the identification and analysis of the in-school factors that educators can more directly influence that

also contribute to students’ engagement.

One leading finding in the research literature on educational engagement is the primacy of relationships between students and teachers (Larson, Shernoff, & Bempoechat, 2014; Hammond et al., 2007; Quinn et al., 2006). In an analysis of the High School Survey of Student Engagement, researchers reported that one in three students are disengaged from class because they do not have adequate interaction with their teacher(s) (Yazzie-Mintz, 2006). Yazzie-Mintz, the lead researcher for the study, underscores this finding by asserting the importance of students having a connection with at least one adult in the school community in order to engage (Dary, Pickeral, Shumer, & Williams, 2016, Yazzie-Mintz, 2006). In a different National Education Longitudinal Study on high school dropouts, one-third of the participants reported that they did not get along with their teachers, and a quarter expressed that they did not feel like they “belonged” at school (Hammond et al., 2007).

## IV. ROOT CAUSE ANALYSIS OF THE PROBLEM STATEMENT

Just as this research base points to the presence of quality relationships with teachers as a foundation for student engagement, the research literature on alternative schools also highlights how one of the purported distinguishing features of alternative schools is the strong, close quality of relationships between students and teachers (Quinn et al., 2006; Foley & Pang, 2006). The educators at Excel recognized through the RCA process that the quality of student-teacher relationships needs to be improved in order to more effectively engage their students in the daily demands of the classroom, thereby making it one of their prioritized root causes.

The other lead finding in both the research literature on student engagement and alternative schools is that the curriculum and instruction need to be relevant to students' lives in order for many of them to stay engaged (Fredericks et al., 2004). Students have signaled this sense of disconnect in study after study when they report that they "don't like school" and that they are "bored" in school (Hammond et al., 2007; Yazzie-Mintz, 2006). In the High School Survey of Student Engagement, two out of three students reported being bored in school every day, and these respondents indicated that they were bored because the material was not "interesting" or "relevant" to them (Yazzie-Mintz, 2006). Similarly, in a Gates-funded study on high school dropouts, participants reiterated how school was uninteresting and "boring," and they asserted that the classes in high school did not teach them information that they could use or apply to their lives (Bridgeland et al., 2006). Other researchers

have concluded that student engagement is influenced strongly by whether or not the classroom environment is student-centered and requires "active" learning (Dary et al., 2016).

In a localized study on BCPS dropouts, the researchers noted that "overage and under-credited" students, such as those enrolled at Excel Academy, are "unlikely to be successful in regular high school" and that "more non-traditional options" for completing and earning a high school degree "would be helpful" (Mac Iver, 2010). Similarly, the research literature on alternative schools suggests that in order to raise graduation rates, many of the traditional structures of the comprehensive high school need to be adapted to provide students more flexibility (Izumi, Shen, & Xia, 2015; Foley & Pang, 2006). One alternative education researcher asserts: "It appears that the educational system adopted at traditional schools is an ineffective practice for alternative high schools for at risk students. Students in alternative high schools have already had a difficult experience [in school]; to continue the same arrangements for these students does not appear to work" (Izumi et al., 2015). The educators at Excel Academy acknowledged through the RCA process how the traditional curriculum and program offerings at their school, as well as the inconsistent quality of instruction across too many classrooms, do not work for their at-risk, alternative student population. They expressed their desire to explore how to change their instructional models and academic programming to better meet the interests and needs of their students.

## 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.

To address *Traditional Curriculum and Instruction*:

- Offer on-site GED preparation. Implement career and technical education pathways and job training opportunities.
- Utilize project-based learning.
- Establish a student resource room with current technology for individualized learning.
- Expand credit-recovery options for students.

To address *High Teacher Burnout and Turnover*:

- Enlist current teachers and students to become involved in school-level teacher recruitment.
- Engage students in creating school marketing materials.
- Develop partnerships with local universities that have teacher-preparatory programs to place student teachers at the school. Develop a recruitment pipeline.

To address *Inadequate Student In-Take and Case Management Systems and Processes*:

- Improve coordination with the district re-engagement office regarding student in-take processes.
- Develop a “check-in/check-out” process for all students.
- Hire a staff person to serve as the family liaison/engagement coordinator. Engage parents more directly in student in-take (provide a parent welcome packet).

- Incorporate social workers, special education teachers, and special education liaison staff into student in-take and case management processes.
- Maximize Infinite Campus platform.
- Connect incoming students with other students.

To address *Punitive School Discipline System*:

- Implement a school-wide restorative justice and alternative discipline system.

### 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<sup>1</sup>

#### **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 et al., 2016; Pyle & Wexler, 2012; Bridgeland et al., 2006). Examples of such instructional strategies include student goal-setting, student-led discussions, and student voting ([www.marzanoresearch.com](http://www.marzanoresearch.com); [www.teachingworks.org](http://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).

<sup>1</sup>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<sup>1</sup>

#### **Expand career-related curricular programming, pathways, and opportunities for students.**

#### *Instructional Transformation*

In an effort to make learning more relevant to students, schools should deliberately align curriculum and program offerings to the worlds of work and academics. Effective strategies include career electives, career academies, and more fully developed career pathways or certificate programs (Dynarski et al., 2008; Rumberger et al., 2017; Pyle & Wexler, 2012). Many of the research studies in dropout prevention agree that the integration of career and technical education with academic content is a proven strategy to engage students in school (Loera, Nakamoto, Oh, & Rueda, 2013; Plank, DeLuca, & Estacion, 2008).

The RCA team recommends expanding access to high-quality career and technical education programs such as P-TECH, Apprenticeship Maryland, and National Academy Foundation (NAF academies). More robust partnerships with local businesses should be explored from which the school can then develop collaborative learning experiences, career or resume coaching, job shadowing, and internships and mentorships. Additionally, Excel Academy can expand its career education offerings to include the integration of project-based learning assessments, exposure to a variety of occupational fields, and guided practice opportunities in developing skills that can be applied in vocational settings.



## V. RECOMMENDATIONS FOR IMPROVEMENT

### RECOMMENDATION

### Four Domains Domain of Rapid School Improvement<sup>1</sup>

**Develop or expand a mentor program to ensure every student at risk of failure has an adult advocate in the school.**

*Culture Shift*

Pairing students with an adult mentor or advocate gives at-risk students a positive role model in the building who can provide progress checks against key academic benchmark and graduation requirements, as well as serve as a conduit for referring students to other services as needed. Programs that provide this level of individual monitoring and feedback have been documented to have positive effects on school persistence for low-income urban students (Harris & Kiyama, 2015; Mitchell & Stewart, 2012). This type of intervention has also been demonstrated to be effective for students with disabilities (Pyle & Wexler, 2012).

*Turnaround  
Leadership*

Built into this recommendation is the need to develop an accessible list of support services that mentors can use as a resource bank with students, as it is not reasonable to expect that mentors are able to combat all student needs. Such mentoring programs should focus on authentic goal setting for students that is related to college and career readiness. In addition, researchers recognize that effective mentoring and advocacy require orientation and training for those who serve in the role as mentors, including teachers and other school staff (Dynarski et al., 2008; Rumberger et al., 2017).

## V. RECOMMENDATIONS FOR IMPROVEMENT

### RECOMMENDATION

### Four Domains Domain of Rapid School Improvement<sup>1</sup>

**Implement one or more research strategies to promote positive school climate, including positive discipline, conflict management, anti-bullying, and positive youth development.**

*Culture Shift*

The Department of Education has conceptualized school climate as broadly consisting of the domains of safety, engagement, and environment. These domains encompasses students’ perceptions of inclusion and belonging, incidents of bullying and the response of students and educators, school connectedness, peer to peer relationships as well as relationships between teachers and students, school discipline practices, and the state of the physical facilities. According to the National Center on Safe Supportive Learning Environments, “the strength of the linkages between school climate and academic achievement make it essential that all students have the opportunity to attend schools that provide a safe and supportive environment where they can thrive and fully engage in their studies” ([www.safesupportivelearning.ed.gov](http://www.safesupportivelearning.ed.gov)).

To address concerns regarding school climate, there are many resources available to educators that can guide efforts to foster a more inclusive and supportive school environment for all students, including Teaching Tolerance ([www.tolerance.org/professional-development/school-climate](http://www.tolerance.org/professional-development/school-climate)) and the National Center on Safe and Supportive Learning Environment ([safesupportivelearning.ed.gov/scirp/action-guides](http://safesupportivelearning.ed.gov/scirp/action-guides)). In schools with indicators that the school climate needs to be improved, a wide variety of factors can contribute to poor climate conditions, and conversely, a wide range of strategies exist to address such conditions. These research-based strategies include:

- 1) Adopting school-wide alternative, positive discipline systems with clear and well-supported expectations and consequences for student behavior, such as Restorative Justice (Augustine et al., 2018; [www.alternativesyouth.org/programs/restorative-justice](http://www.alternativesyouth.org/programs/restorative-justice)), or PBIS (Epstein, 2008; [www.pbis.org](http://www.pbis.org)).
- 2) Mandating anti-bullying training for all educators and staff. Training should define what constitutes bullying and how to recognize when it is happening to students so they can effectively intervene ([www.stopbullying.gov](http://www.stopbullying.gov); [www.teachingtolerance.org](http://www.teachingtolerance.org)).
- 3) Implementing conflict resolution strategies or a school-wide program ([creducation.net/teachers](http://creducation.net/teachers)).
- 4) Integrating practices from the “Positive Youth Development” approach into the management of school co-curricular activities and student clubs: ([youth.gov/youth-topics/positive-youth-development](http://youth.gov/youth-topics/positive-youth-development)).

## 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

|                                      | <b>Name</b>                   | <b>Position</b>   |
|--------------------------------------|-------------------------------|---|
| <b>Day 1</b><br><b>April 3, 2019</b> | Emily Bivona                  | <i>Special Education Chair</i>                              |
|                                      | Frank Anderson                | <i>Community Partner (UMBC)</i>                             |
|                                      | Adria Pollack                 | <i>School Social Worker</i>                                 |
|                                      | Lawrence Russell              | <i>Social Studies Lead</i>                                  |
|                                      | John Horvath                  | <i>Specials Lead</i>  |
|                                      | Greg Holden                   | <i>Staff Developer</i>                                      |
|                                      | Shelly Higgins                | <i>Teacher</i>  |
|                                      | Monica Williams Truitt        | <i>Assistant Principal</i>                                  |
|                                      | Robyn DeWees                  | <i>Community Partner (Northrop Grumman)</i>                 |
|                                      | Dr. Patrick Harris            | <i>Principal</i>  |
| <b>Day 2</b><br><b>April 8, 2019</b> | <b>Name</b>                   | <b>Position</b>   |
|                                      | Emily Bivona                  | <i>Special Education Chair</i>                              |
|                                      | Frank Anderson                | <i>Community Partner (UMBC)</i>                             |
|                                      | Sarah Dexter-Thornton         | <i>ELA Lead</i>   |
|                                      | Adria Pollack                 | <i>School Social Worker</i>                                 |
|                                      | Lawrence Russell              | <i>Social Studies Lead</i>                                  |
|                                      | John Horvath                  | <i>Specials Lead</i>  |
|                                      | Greg Holden                   | <i>Staff Developer</i>                                      |
|                                      | Shelly Higgins                | <i>Teacher</i>  |
|                                      | Monica Williams Truitt        | <i>Assistant Principal</i>                                  |
|                                      | Tenne Thrower                 | <i>BCPS</i>   |
|                                      | Megan Kashdin                 | <i>BCPS</i>   |
|                                      | Brian Sturdivant              | <i>Community Partner (University of Maryland Baltimore)</i> |
|                                      | Lakea Jones                   | <i>Parent Representative</i>                                |
|                                      | <i>Student Representative</i> |   |
|                                      | Dr. Patrick Harris            | <i>Principal</i>  |

## APPENDICES

### Appendix B: Bios of Facilitators

**Reem Labib M.Ed.** is the Founder and President of EDspired, a global education consultancy. Reem's work is currently focused on school transformation primarily in the US and the Middle East. Reem has participated as a team member in school quality reviews for twelve years, evaluating schools serving students in grades pre-kindergarten-12. She has served as head of schools, supervising multiple principals; principal of an inclusive arts-infused elementary school; and also as deputy director of professional development for a school district. Reem has a Master in Education with a specialization in curriculum and instruction and a focus on multicultural education.

**Specialties:** school transformation, leadership development, coaching, charter schools, special education



**Jean Snell, PhD** is a Senior Faculty Specialist for the Center for Educational Innovation and Improvement at UMD. Over the last twenty years, Dr.



Snell has engaged with educators to help develop their capacity to close the achievement gap and to foster high quality teaching and learning conditions for all students. As an independent educational consultant, Jean provided leadership coaching to school and teacher leaders and qualitative data evaluation services to school and program administrators. Dr. Snell has served as a certified Lead Inspector with Teacher Prep Inspection (TPI-US), a curriculum developer and teacher trainer for Educators Rising, a classroom evaluator for the Washington, DC, Public Charter School Board, and a Leadership Coach with Ed Fuel and Leading Educators. Previously, she launched the Leading Educators teacher leadership fellowship program in Washington, DC, as the regional executive director, directed the Maryland Master's Certification program at UMD, and served as one of the founding program directors for the Center for Educational Leadership at the University of Washington. Jean earned her doctorate in Education Policy at the University of Washington, as well as the Danforth Leadership school administrator credential. She began her career in education as a secondary English teacher.

## APPENDICES

### Appendix C: Citations of research

Bridgeland, J. M., Dilulio, J. J., & Morison, K. B. (2006). *The silent epidemic: Perspectives of high school dropouts*. Washington, DC: Civic Enterprises. www.civicerprises.net.

Brundage, A. H., Castillo, J. M., & Batsche, G. M. (2017). *Reasons for chronic absenteeism among secondary students*. Tallahassee, FL: Florida State Department of Education.

Dary, T., Pickeral, T., Shumer, R., & Williams, A. (2016). *Weaving student engagement into the core practices of schools: A national dropout prevention center position paper*. Clemson, SC: National Dropout Prevention Center/Network. www.dropoutprevention.org.

Dynarski, M., Clarke, L., Cobb, B., Finn, J., Rumberger, R., & Smink, J. (2008). *Dropout prevention: A practice guide* (NCEE 2008-4025). Washington, DC: National Center for Educational Evaluation and Regional Assistance, Institute of Education Sciences, US Department of Education. Retrieved from <http://ies.ed.gov/ncee/wwc>.

Foley, R., & Pang, L. (2006). Alternative education programs: Program and student characteristics. *The High School Journal* (Feb/March), 10-21.

Fredericks, J. A., Blumenfeld, P. C., & Paris, A. H. (2004). School engagement: Potential of the concept, state of evidence. *Review of Educational Research*, 74(1), 59-109.

Hammond, C., Linton, D., Smink, J., & Drew, S. (2007). *Dropout risk factors and exemplary programs: A technical report*. Clemson, SC: National Dropout Prevention Center/Network. www.dropoutprevention.org.

Izumi, M., Shen, J., & Xia, J. (2015). Determinants of graduation rate of public alternative schools. *Education and Urban Society*, 47(3), 307-327.

Larson, R. W., Shernoff, D. J., & Bempoechat, J. (2014). Epilogue: A new paradigm for the science and practice of engaging young people. *National Society for the Study of Education*, 113(1), 323-337.

Mac Iver, M. A. (2010). *Gradual disengagement: A portrait of the 2008-09 dropouts in Baltimore city schools*. Baltimore, MD: Baltimore Education Research Consortium. www.baltimore-berc.org.

Pyle, N., & Wexler, J. (2012). Preventing students with disabilities from dropping out. *Intervention in School and Clinic*, 47(5), 283-289.

Quinn, M. M., Poirier, J. M., Faller, S. E., Gable, R. A., & Tonelson, S. W. (2006). *An examination of school climate in effective alternative programs*. Washington, DC: Heldref Publications.

Taylor, L., & Parsons, J. (2011). Improving student engagement. *Current Issues in Education*, 14(1), 1-31.

Tyler, J. H., & Lofstrom, M. (2009). Finishing high school: Alternative pathways and dropout recovery. *The Future of Children*, 19(1), 77-96.

Wilkerson, K. L., Afacan, K., Yan, M., Justin, W., & Datar, S. D. (2015). Academic remediation-focused alternative schools: Impact on student outcomes. *Remedial and Special Education*, 37(2), 67-77.

Yazzie-Mintz, E. (2006). *Voices of students on engagement: A report on the 2006 HSSSE*. Bloomington, IN: Center for Evaluation and Education Policy. <http://ceep.indiana.edu/hssse>.

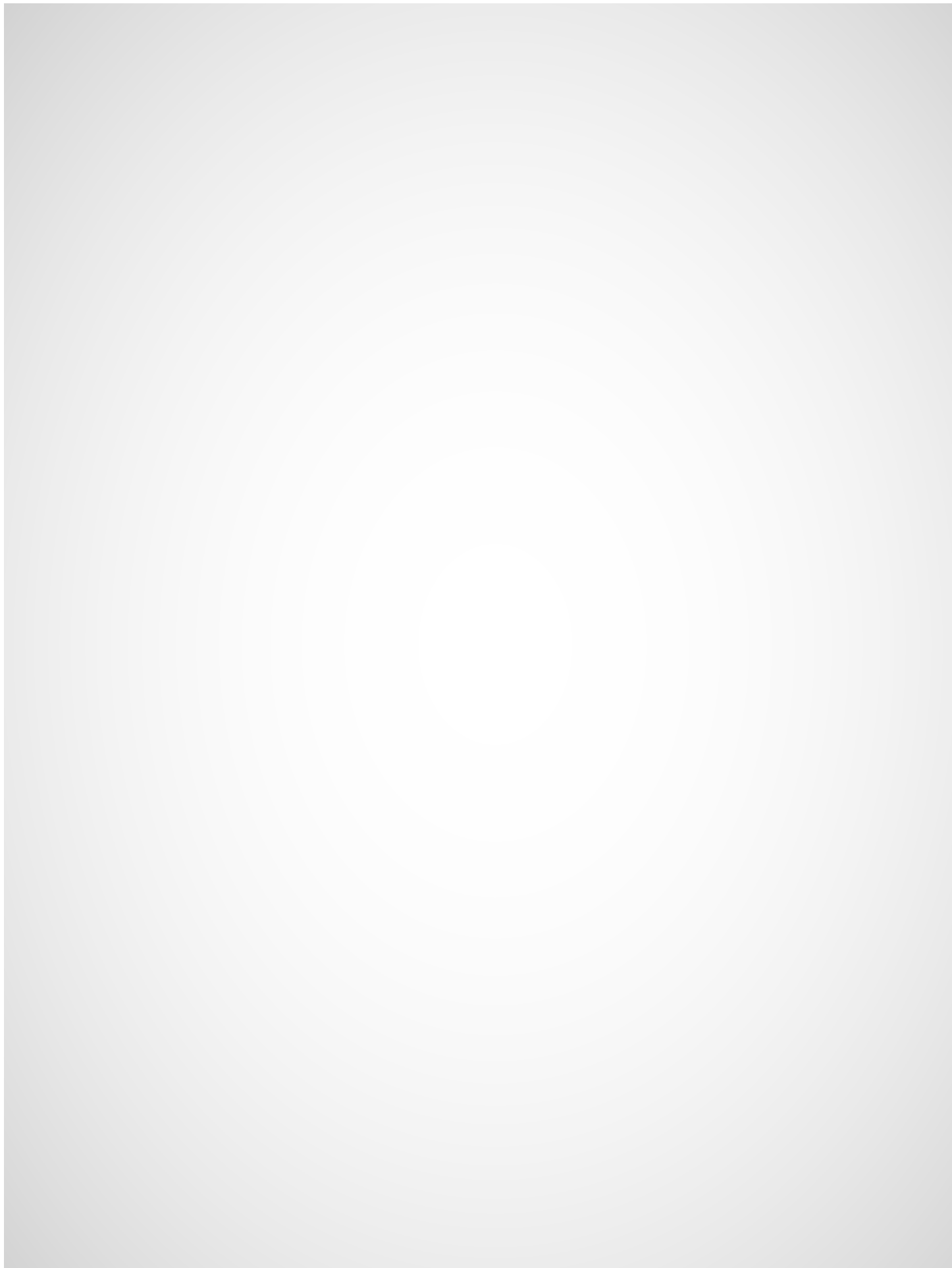
### INTERVENTION CITATIONS

Augustine, C. H., Engberg, J., Grimm, G.E., Lee, E., Wang, E. L., Christianson, K., & Joseph, A. A. (2018). *Can Restorative Practices Improve School Climate and Curb Suspensions? An Evaluation of the Impact of Restorative Practices in a Mid-Sized Urban School District*. Santa Monica, CA: RAND Corporation.

## APPENDICES

### INTERVENTION CITATIONS

- Dynarski, M., Clarke, L., Cobb, B., Finn, J., Rumberger, R., & Smink, J. (2008). *Dropout prevention: A practice guide* (NCEE 2008-4025). Washington, DC: National Center for Educational Evaluation and Regional Assistance, Institute of Education Sciences, US Department of Education. Retrieved from <http://ies.ed.gov/ncee/wwc>.
- Harris, D. M., & Kiyama, J. M. (2015). The role of school and community-based programs in aiding Latina/o high school persistence. *Education and Urban Society, 47*(2), 182-206.
- Loera, G., Nakamoto, J., Oh, Y. J., & Rueda, R. (2013). Factors that promote motivation and academic engagement in a career technical education context. *Career and Technical Education Research, 38*(3), 173-190.
- Mitchell, A. B., & Stewart, J. B. (2012). The effects of culturally responsive mentoring on the high school to college matriculation of urban African American males. *Spectrum: A Journal on Black Men, 1*(1), 79-93.
- Plank, S., DeLuca, S., & Estacion, A. (2008). High school dropout and the role of career and technical education. *Sociology of Education, 81*, 345-370.
- Pyle, N., & Wexler, J. (2012). Preventing students with disabilities from dropping out. *Intervention in School and Clinic, 47*(5), 283-289.
- Rumberger, R., Addis, H., Allensworth, E., Balfanz, R., Bruch, J., Dillon, E., Duardo, D., Dynarski, M., Furgeson, J., Jayanthi, M., Newman-Gonchar, R., Place, K., & Tuttle, C. (2017). *Preventing dropout in secondary schools (NCEE 2017-4028)*. Washington, DC: National Center for Education Evaluation and Regional Assistance (NCEE), Institute of Education Sciences, US Department of Education.
- Yazzie-Mintz, E. (2006). *Voices of Students on Engagement: A Report on the 2006 HSSSE*. Bloomington, IN: Center for Evaluation and Education Policy. <http://ceep.indiana.edu/hssse>.

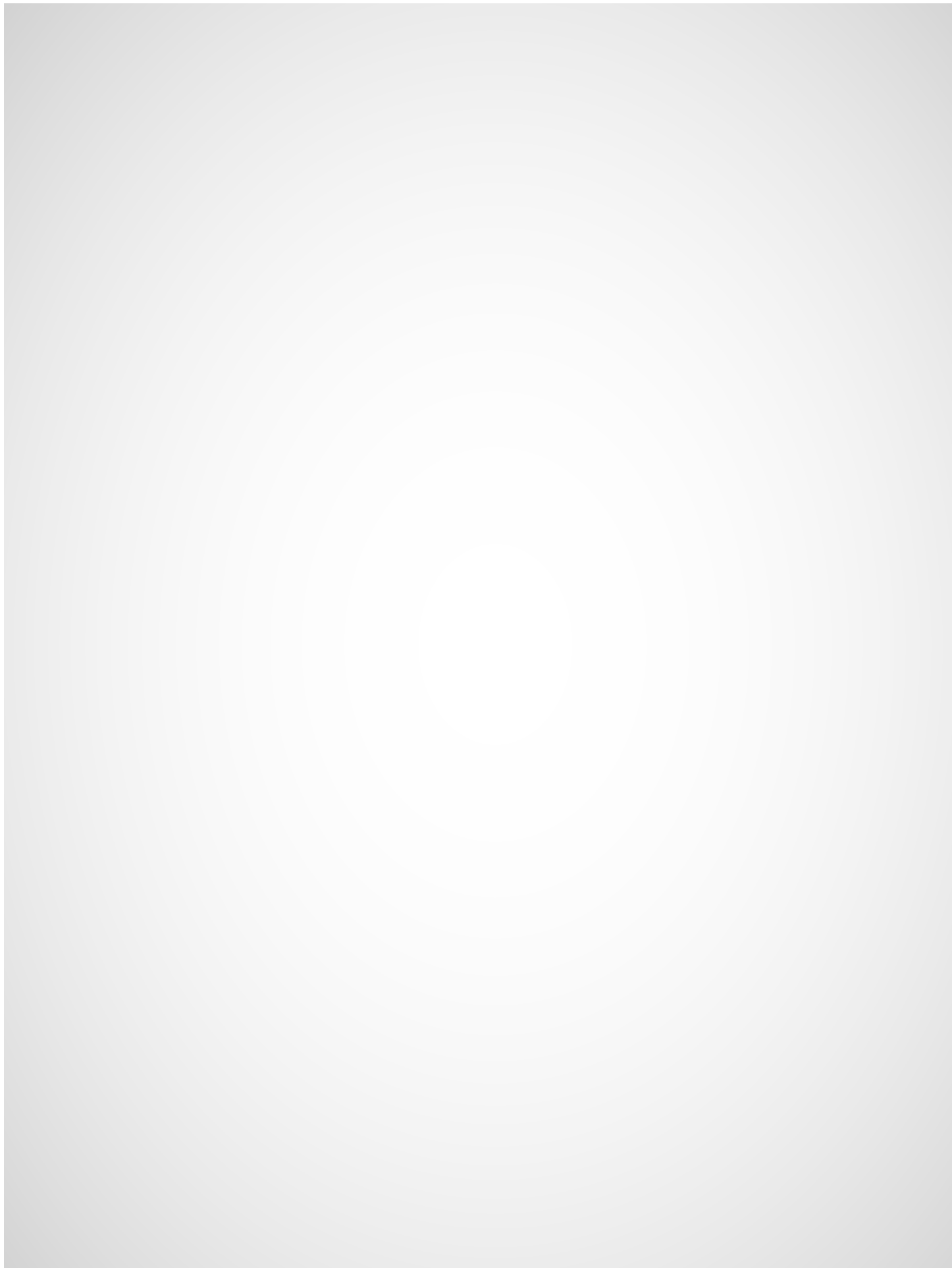


The first part of the text discusses the importance of maintaining accurate records in a laboratory setting. It emphasizes the need for clear labeling and organization of samples and equipment. The author notes that proper record-keeping is essential for ensuring the reliability and reproducibility of experimental results. This section also touches upon the importance of safety protocols and the role of documentation in identifying and preventing accidents.

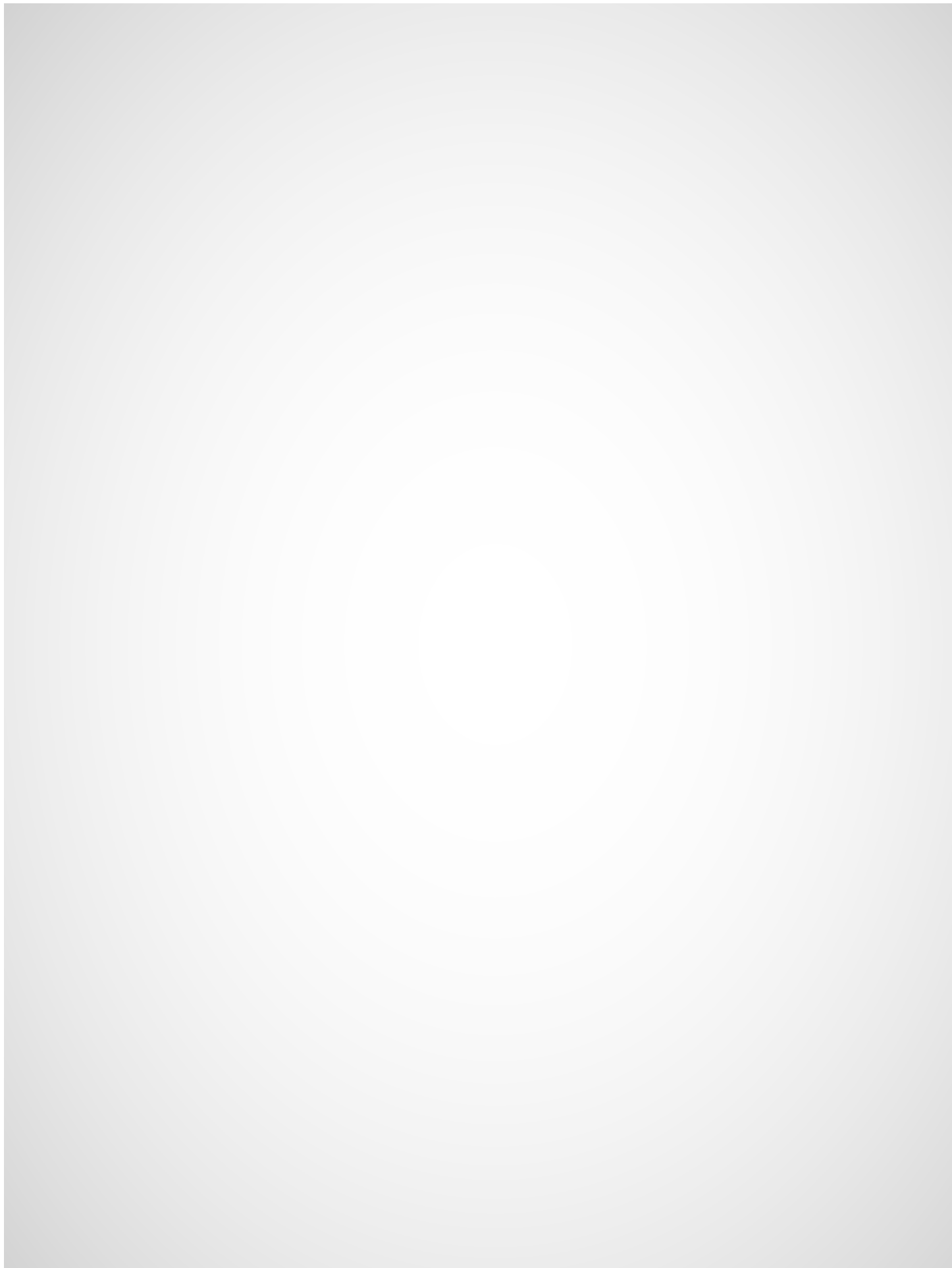
The second part of the text delves into the specific challenges of data management in a research environment. It highlights the growing volume of data generated by modern experiments and the need for efficient storage and retrieval systems. The author discusses various software solutions and hardware configurations that can help researchers manage their data effectively. Additionally, the text addresses the issue of data security and the importance of protecting sensitive information from unauthorized access.

In the final section, the author provides practical advice for researchers on how to integrate record-keeping and data management into their daily workflow. This includes suggestions for creating standardized templates and protocols, as well as tips for staying organized and up-to-date. The author concludes by emphasizing that while these tasks may seem tedious, they are crucial for the success of any scientific endeavor.









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