

ABSTRACT

Title of Dissertation: LITERACY FOR STUDENTS WITH
DISABILITIES IN THE MIDDLE GRADES:
AN EXPLORATION OF SELF-EFFICACY,
DATA-BASED, GOAL SETTING AS A
LITERACY INTERVENTION

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Education

Literacy is an essential life skill, and adolescents need strong literacy skills to succeed in secondary schools and beyond. Low literacy achievement in the middle grades puts students, particularly students with disabilities (SWD), at a disadvantage heading into high school and can lead to negative outcomes such as dropping out.

The intention of this mixed method, sequential exploratory study is to understand how a self-efficacy, data-based, goal setting intervention, designed to improve reading skills among struggling readers in middle school (grades 6-8), was implemented and perceived by teachers during a pilot run of the intervention in the fall of 2019. The students receiving the intervention included those with disabilities and Individual Education Programs (IEPs), as well as other students with low literacy scores. The intervention was implemented by English Language Arts (ELA) teachers at three middle schools in the southern region of a suburban school system in Maryland. This research will focus specifically on the implementation of the

intervention with students with IEPs. The purpose is to determine if, how, and how often the intervention was implemented (frequency and intensity) by the ELA teachers in the three identified middle schools in the district and to explore more deeply 4 teachers' perceptions about the intervention implementation process and impact in one of the three middle schools.

LITERACY FOR STUDENTS WITH DISABILITIES IN THE MIDDLE GRADES:
AN EXPLORATION OF SELF-EFFICACY, DATA-BASED, GOAL SETTING AS
A LITERACY INTERVENTION

by

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Dedication

This dissertation is dedicated to my incredible family. To Mike, my husband, for unending support through countless hours of encouragement, feedback, and picking up the slack when I was immersed in dissertation writing. I could not have embarked on this journey without you. To my children, Fynn and Sydney, who kept me motivated these past four years with the question, “Are you a doctor yet?” I am so very proud of each of you and know that you both have bright futures ahead. Finally, to my parents, Ritchard and Deborah, for instilling in me the value of education and the perseverance to never give up on my dreams.

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Table of Contents

Dedication	ii
Acknowledgements	iii
Table of Contents	iv
List of Tables	vi
List of Figures	vii
List of Abbreviations	viii
Section 1: Introduction.....	1
A. Problem Statement	1
B. Evidence Supporting the Problem.....	11
<i>National Reading Achievement of Students with Disabilities</i>	11
<i>NAEP Reading Achievement for Students with Disabilities in Maryland</i>	14
<i>MCAP/PARCC Reading Achievement for Students with Disabilities in Maryland</i>	18
<i>Grades 6-8 Reading Achievement for Students with Disabilities in District A Public Schools</i>	19
<i>Grades 6-8 Reading Achievement for Students with Disabilities at School A</i>	26
<i>Understanding Testing Accommodations for Students with Disabilities</i>	28
<i>Consequences of Not Addressing the Problem</i>	30
C. Theory of Action	33
<i>Student Specific Characteristics</i>	34
<i>Curriculum</i>	37
<i>Interventions</i>	44
<i>Assessment Tools</i>	49
<i>Teacher Capacity</i>	51
<i>Theory of Action Statement</i>	55
D. Past and Current Initiatives to Improve Reading Achievement of Middle Grade Students with Disabilities	66
<i>National Initiatives to Improve Reading for Students with Disabilities</i>	66
<i>District A Initiatives to Improve Reading for Students with Disabilities</i>	67
<i>School A Initiatives to Improve Reading for Students with Disabilities in Grades 6-8</i>	70
E. Proposed Investigation	73
Section 2: Study Design.....	79
A. Purpose Statement.....	79
B. Aim Statement.....	80
C. Description of Proposed Study.....	81
D. Design of Proposed Study.....	83
E. Research Questions	84
<i>Methods</i>	85
<i>Data Analysis</i>	92
F. Summary.....	95
Section 3: Results and Conclusions	96
A. Results.....	96

<i>Survey Results</i>	97
<i>Summary of Survey Key Findings</i>	102
<i>Interview Results</i>	104
<i>Summary of Interview Key Findings</i>	114
<i>Analytic Memos</i>	117
<i>Document Analysis</i>	118
B. <i>Conclusions</i>	119
<i>Research Question #1</i>	119
<i>Research Question #2</i>	122
C. <i>Implications for District A and School A</i>	127
<i>Implication 1: Need for Evaluation of the Intervention</i>	128
<i>Implication 2: Listen to Teachers Early in Planning</i>	129
<i>Implication 3: Identify and Prepare Structures and Supports</i>	130
<i>Implication 4: Developing Students' Literacy Self-efficacy</i>	131
D. <i>Summary</i>	132
Appendices	134
Appendix A	134
Appendix B	135
Appendix C	136
Appendix D	138
Appendix E	139
Appendix F	140
Appendix G	141
Appendix H	148
Appendix I	149
Appendix J	152
Appendix K	156
Appendix L	160
Appendix M	161
Appendix N	162
Appendix O	165
Appendix P	168
Appendix Q	170
Bibliography	174

List of Tables

Table 1: 2019-2020 NWEA MAP Growth Reading Assessment for SWD at School A	6
Table 2: 2019-2020 NWEA MAP Growth Reading Assessments for SWD at School E	7
Table 3: 2019-2020 NWEA MAP Growth Reading Assessments for SWD at School F	7
Table 4: 2019-2020 NWEA MAP Growth Reading Assessments for Grade 6 SWD at School A	8
Table 5: 2019-2020 NWEA MAP Growth Reading Assessments for Grade 7 SWD at School A	9
Table 6: 2019-2020 NWEA MAP Growth Reading Assessments for Grade 8 SWD at School A	10
Table 7: 2015-2019 PARCC/MCAP ELA Grade 8	21
Table 8: 2015-2019 PARCC/MCAP ELA Grade 7	22
Table 9: 2015-2019 PARCC/MCAP ELA Grade 6	23
Table 10: 2018 MCAP/PARCC ELA Proficiency Rates Grades 3, 5, 8, and 10	25
Table 11: Comparison Between Academic Self-Concept and Academic Self-Efficacy	60
Table 12: Survey Results for Questions 4-6.....	99
Table 13: Key Findings from Survey.....	103

List of Figures

Figure 1: District A and School A MAP Reading for SWD.....	5
Figure 2: National Grade 4 Reading Gap for All Students and Students with Disabilities (2017)	13
Figure 3: National Grade 8 Reading Gap for All Students and Students with Disabilities (2017)	14
Figure 4: Maryland Grade 4 Reading Gap for All Students and Students with Disabilities (2017)	16
Figure 5: Maryland Grade 8 Reading Gap for All Students and Students with Disabilities (2017)	17
Figure 6: NAEP Grade 4 and 8 Students with Disabilities Reading Exclusion Rates (2017)	18
Figure 7: Root Cause Analysis	34
Figure 8: Adolescent Reading Theory Model	38
Figure 9: Driver Diagram	56
Figure 10: Theory of Action Chain	75
Figure 11: Sequential Exploratory Design Study	77
Figure 12: Theory of Action Timeline	83

List of Abbreviations

BOY Beginning of Year

ELA English Language Arts

EOY End of Year

MAP Measure of Academic Progress

MOY Middle of Year

NWEA Northwest Evaluation Association

SLD Specific Learning Disability

SWD Students with Disabilities

Section 1: Introduction

A. Problem Statement

As a literacy coach at School A in District A, I have witnessed the negative impacts of low literacy achievement on students with disabilities (SWD) in the middle grades, particularly regarding their beliefs about their abilities related to specific literacy tasks (self-efficacy). In my experience, students with disabilities' low self-efficacy, compounded with a deficient literacy foundation, and lack of motivation or purpose, have contributed to the low literacy achievement outcomes evidenced on state standardized assessments and district benchmarks.

Literacy is a critical skill for life. American youth need strong literacy skills to succeed in school and beyond. Students who do not acquire these skills find themselves at a serious disadvantage in social settings, as civil participants, and in the working world (Biancarosa & Snow, 2006; Blackorby & Sekino, 2010; Lichtenstein & Blackorby, 1995; Winn & Behizadeh, 2011). The long-term impacts of low literacy achievement have been well documented (Graham, 2013, Kutner, 2007, Moats, 2002; Quinn, Rutherford, Leone, Osher, & Poirier, 2005; Wendt, 2013). Adolescents and young adults with low literacy skills are at a substantial disadvantage compared to their literacy proficient peers in an everchanging global dynamic (Deschler & Hock, 2006; Wagner, Newman, Cameto, Levine, & Garza, 2006). Yet approximately eight million young people between fourth and twelfth grade struggle to read at grade level with about a

quarter of all 4th, 8th, and 12th grade students scoring “below basic” in reading on the National Assessment of Educational Progress (NAEP, 2017).

According to the findings from the National Longitudinal Transition Study 2 (NLTS2, 2005), students with disabilities’ low literacy achievement is directly linked to high school dropout rates, the school to prison pipeline, unemployment, and low-income levels (Wagner, Newman, Cameto, Levine, & Garza, 2006). As of 2018, 85% of all high school students nationally graduated from high school, yet only 65% of students with disabilities graduated with a high school diploma (National Center for Educational Statistics, 2020). Students with disabilities have consistently lower rates of high school graduation. For example, in 2019, only 64% of SWD in Maryland graduated with a high school diploma, and in 2017 and 2018 that number was 67%. These percentages suggest that more than 30% of secondary-aged students with disabilities in the state of Maryland are failing to attain a high school diploma within 4 years (MSDE, 2019).

Low literacy achievement in the middle grades puts students with disabilities at an academic disadvantage heading into high school and can lead to negative outcomes such as dropping out. School A was identified as a middle school in need of additional support based on low state and district test scores. For example, state standardized reading assessment data from 2015-2019, indicated that the percentage of students with disabilities in Grade 8 at School A who met or exceeded proficient, as defined as achieving a performance level of 4 or 5 on the Maryland state standardized English Language Art (ELA) assessment, never exceeded 7% (MD Report Card, 2019). Although other middle schools in District A have low reading

achievement scores for 8th grade SWD, School A was the only middle school in the district without any of the 17 Grade 8 students with disabilities scoring at proficient in 2019, and School A was one of two middle schools in the district that showed no improvement on the ELA state assessment for SWD in Grades 6 and 7 (MD Report Card, 2019). When the district received state funds from the Striving Readers' Comprehensive Literacy (SRCL) Grant in 2018, I was hired as a literacy coach to support School A's improvement initiatives to increase literacy achievement outcomes for all students, particularly SWD, economically disadvantaged (ED), English language learners (ELL), and African American (AA).

School A is one of six middle schools in District A, with an enrollment of 605 students as of 2019. In the 2019 school year, School A reported 10% of their students as having a disability, and over half (54%) of these SWD were identified as having a Specific Learning Disability (SLD) or attention disorders as categorized by Other Health Impairment (OHI). Specific Learning Disabilities refers to brain-based disorders that result in learning challenges in particular skills areas such as reading or math (NCLD, 2019). According to the National Center for Learning Disabilities (NCLD), the general term SLD includes students with dyslexia, dysgraphia, dyscalculia, and/or other language-based learning disabilities, and notes that SLD is "one of the 13 categories of disabilities covered by IDEA; a disorder—unrelated to intelligence, motivation, effort, or other known causes of low achievement—that makes a child struggle in certain areas of learning, such as reading, writing, or doing math" (NCLD, 2019, p. 35). Literacy is a major area of underachievement for students with SLD.

As will be discussed in greater detail, there were numerous potential factors contributing to the low literacy achievement of SWD at School A. Among the identified causes explored are the lack of vetted curriculum, misaligned interventions and assessment tools, teacher capacity, and student specific characteristics, such as a lack of motivation and self-efficacy. Students' literacy self-efficacy will be a specific area of focus for this paper and is understood to be a student's belief in his or her ability to accomplish specific literacy tasks (Bandura, 1997).

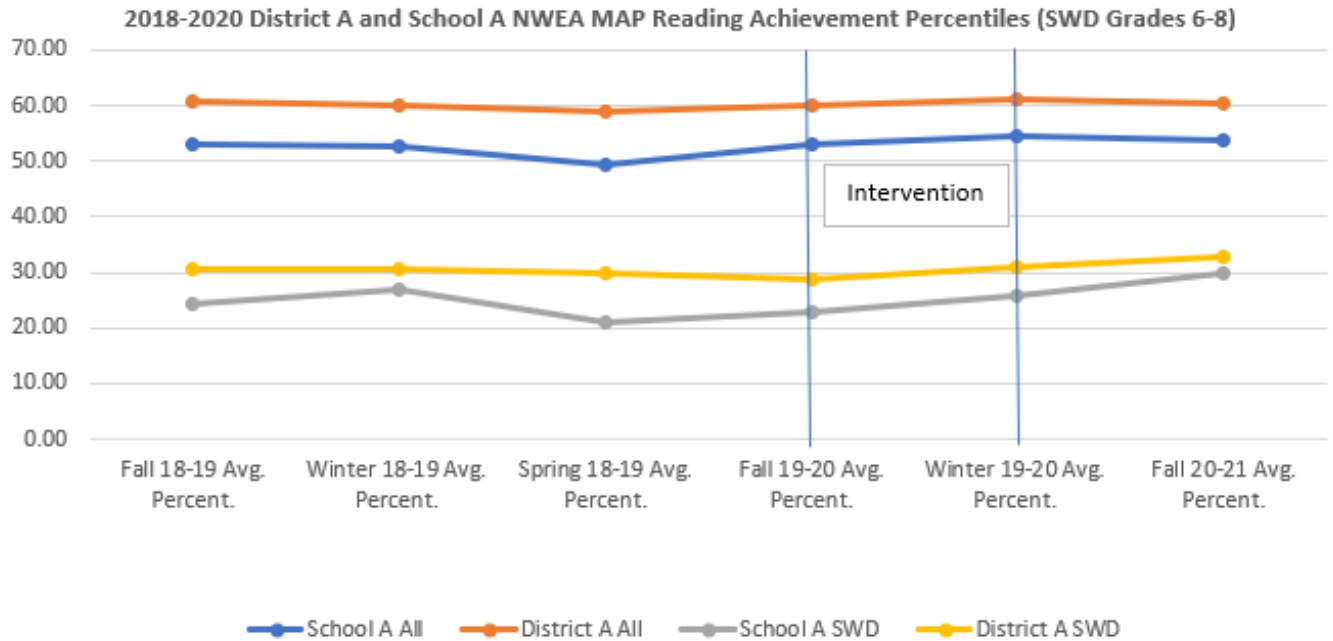
School A piloted a self-efficacy, data-based, goal setting intervention targeting specific literacy tasks in the fall of 2019. Initial findings suggest that there was growth in literacy achievement on the Northwest Evaluation Association (NWEA) Measure of Academic Progress (MAP) Growth: Reading assessment for SWD in the middle grades at School A as indicated in Figure 1 after the intervention was piloted. NWEA MAP Growth: Reading achievement percentiles steadily rose for SWD in the subsequent assessment administrations, suggesting that the intervention had some benefit. The implementation of the data-based, goal setting intervention pilot was not mandatory at School A but was recommended for ELA teachers to institute.

Figure 1 shows the achievement percentiles on the NWEA MAP Growth: Reading assessment for the testing administrations spanning from the fall of 2018 through fall of 2020 for all students and SWD in District A and at School A. The intervention pilot took place between the fall 2019 and winter 2020

administrations of the MAP reading test. Students with disabilities at School A showed an increase in achievement after the intervention was piloted.

Figure 1

District A and School A MAP Reading for SWD



Note. Data retrieved from District A, 2020.

Data disaggregation by grade level indicate that SWD at School A made gains in their overall scores as outlined in Table 1. The average reading growth for Grade 6 SWD on the winter 2019 NWEA MAP Growth: Reading assessment was over 5 points, Grade 7 SWD increased over 4 points, while Grade 8 SWD made the most growth with over 12 points. This data indicate that the intervention may have merit as a worthwhile practice for improving SWDs’ literacy outcomes.

Table 1

2019-2020 NWEA MAP Growth Reading Assessment for SWD at School A

<i>School A Grade Level</i>	<i>SWD NWEA MAP: Reading Growth BOY-MOY (+/- change in overall score)</i>
6	+5.26
7	+4.31
8	+12.55

Note. Data retrieved from NWEA MAP, 2020.

Tables 2 and 3 illustrate SWD reading growth at Schools E and F over the same time frame from fall 2019 to winter 2020. The self-efficacy, data-based, goal setting intervention was available to all middle schools in District A, yet not all schools participated in the intervention pilot. Schools E and F were selected as comparisons to School A as they both had access to the intervention pilot and have similar student populations as School A. Growth was evidenced in all grades at Schools E and F, with the exception of Grade 6 at School E, yet the growth was not as consistent or considerable as School A's growth across all grade levels. These data can serve as district comparisons when considering NWEA MAP: Reading growth at School A post intervention pilot.

Table 2

2019-2020 NWEA MAP Growth Reading Assessments for SWD at School E

<i>School E Grade Level</i>	<i>SWD NWEA MAP: Reading Growth BOY-MOY (+/- change in overall score)</i>
6	-0.90
7	+0.75
8	+3.77

Note. Data retrieved from NWEA MAP, 2020.

Table 3

2019-2020 NWEA MAP Growth Reading Assessments for SWD at School F

<i>School F Grade Level</i>	<i>SWD NWEA MAP: Reading Growth BOY-MOY (+/- change in overall score)</i>
6	+3.42
7	+4.20
8	+0.86

Note. Data retrieved from NWEA MAP, 2020.

Student specific data from School A is also included to provide an understanding of the students who received the intervention at School A. Although the intervention was available to all students at School A, students identified in the tables below were specifically targeted in each grade level to participate in the

intervention pilot based on achievement in the lowest quartile on the fall 2019 MAP Growth: Reading assessment. Tables 4, 5, and 6 identify students with disabilities in grades 6-8 who received the intervention, as well as student specific characteristics including race (African American-AA, H-Hispanic, MR-Multi Race, W-White), economically disadvantaged (ED), and English language learners (ELL). Post intervention MAP Growth: Reading scores indicate that many of the SWDs' scores increased on the winter 2020 administration in grades 6, 7, and 8.

Table 4

2019-2020 NWEA MAP Growth Reading Assessments for Grade 6 SWD at School A

<i>Grade 6 Students</i>	<i>Race</i>	<i>Economically Disadvantaged</i>	<i>English</i>	<i>Fall</i>	<i>Winter</i>	<i>Fall</i>
			<i>Language Learner</i>	<i>2019 Score</i>	<i>2020 Score</i>	<i>2020 Score</i>
Student A	AA	Yes	No	171	186	191
Student B	AA	Yes	No	175	198	198
Student C	AA	Yes	No	175	166	169
Student D	AA	No	No	175	192	^a
Student E	AA	No	No	177	183	184
Student F	MR	No	No	187	199	230
Student G	W	No	No	190	203	197
Student H	AA	No	No	191	203	^a
Student I	W	No	No	193	199	206

Note. Data retrieved from NWEA MAP, 2020.

^aNo test data available for this student.

Table 5*2019-2020 NWEA MAP Growth Reading Assessments for Grade 7 SWD at School A*

<i>Grade 7 Students</i>	<i>Race</i>	<i>Economically Disadvantaged</i>	<i>English Language Learner</i>	<i>Fall 2019 Score</i>	<i>Winter 2020 Score</i>	<i>Fall 2020 Score</i>
Student A	AA	Yes	No	177	191	193
Student B	AA	No	No	181	189	181
Student C	AA	No	No	193	186	206
Student D	W	Yes	No	194	199	199
Student E	H	No	No	195	203	^a
Student F	H	No	Yes	196	212	191
Student G	AA	Yes	No	200	207	196

Note. Data retrieved from NWEA MAP, 2020.^aNo test data available for this student.

Table 6*2019-2020 NWEA MAP Growth Reading Assessments for Grade 8 SWD at School A*

<i>Grade 8 Students</i>	<i>Race</i>	<i>Economically Disadvantaged</i>	<i>English</i>	<i>Fall</i>	<i>Winter</i>	<i>Fall</i>
			<i>Language Learner</i>	<i>2019 Score</i>	<i>2020 Score</i>	<i>2020 Score</i>
Student A	W	No	No	178	217	^a
Student B	W	No	No	179	199	178
Student C	W	No	No	186	197	184
Student D	AA	Yes	No	191	205	194
Student E	AA	Yes	No	194	200	^a
Student F	AA	No	No	195	204	^a
Student G	W	Yes	No	201	210	222

Note. Data retrieved from NWEA MAP, 2020.^aNo test data available for this student.

The intention of this research is to understand how the self-efficacy, data-based, goal setting intervention was implemented by ELA teachers at School A in the fall of 2019 to determine *if*, *how*, and *how often* the intervention was implemented (frequency and intensity) and explore teachers' perceptions about the intervention implementation process and potential reasons for the increase in post-intervention NWEA MAP reading scores. Research includes a survey for ELA teachers at Schools A, E, and F (middle schools with similar student populations in District A) to determine the frequency and intensity of the intervention implementation, in addition to interviews with ELA teachers at

School A to explore teachers' perceptions of the intervention and potential implications. Data obtained will be used to generate critical information about the intervention to inform future literacy practices in the middle grades at School A.

B. Evidence Supporting the Problem

National Reading Achievement of Students with Disabilities

As noted in the introduction, students identified as SLD represent one of the 13 categories of disabilities covered by IDEA (The Individuals with Disabilities Education Act), the federal law governing the education of students with disabilities. IDEA is the federal law that enacts protections and ensures a free and appropriate public education (FAPE) for students with disabilities. The IDEA defines SLD as “a disorder in one or more of the basic psychological processes involved in understanding or using language, spoken or written, that may manifest itself in an imperfect ability to listen, think, speak, read, write, spell, or do mathematical calculations” (NCES, 2020).

The SLD category of disability accounted for approximately 33% of all students receiving special education services in the United States under the IDEA during the 2018-2019 school year (NCES, 2020). According to the NCES data, more students ages 3–21 received special education services under IDEA for SLD than for any other type of disability. The next two most frequent categories served under IDEA during the 2018-2019 school year were students identified

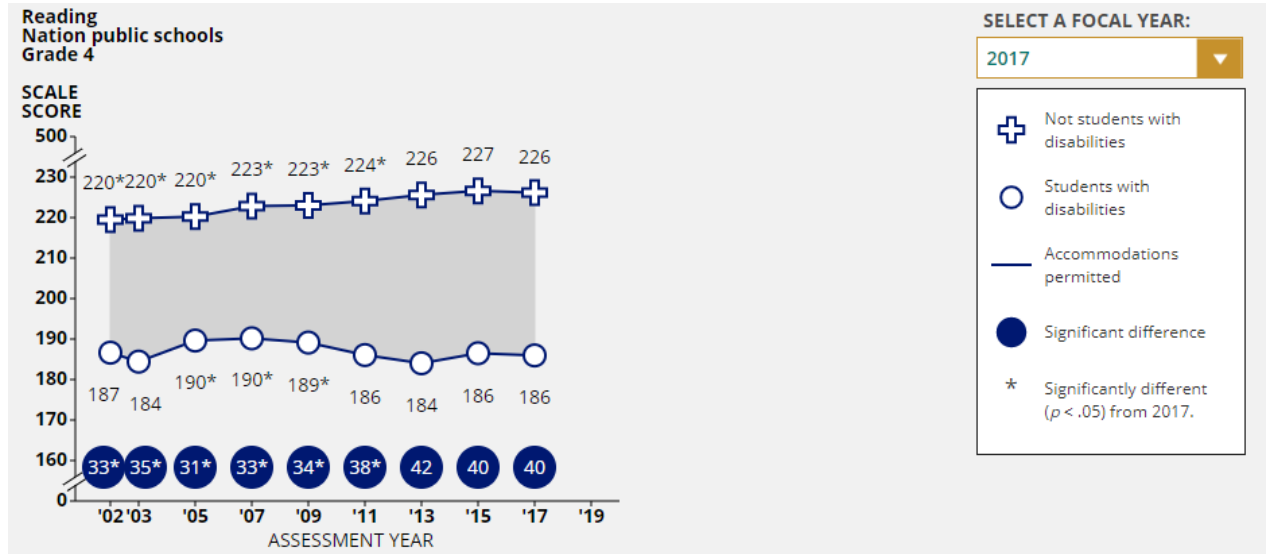
with Speech or Language Impairments (19%), and those with Other Health Impairments (typically including those with attention disorders) at 15%.

Thurlow, and others, have noted that students with disabilities, who are provided with the appropriate supports, instruction, and high expectations, will make adequate literacy progress in alignment with their nondisabled peers (Thurlow, 2002; Allor, Roberts, Cheatham, & Otaiba, 2014; Wei, Blackorby, & Schiller, 2011). However, trend data from the National Assessment of Educational Progress (NAEP) indicates that the subgroup of students identified as having a disability continue to struggle with literacy achievement (NAEP, 2017). The 2017 NAEP Report Card indicates that students with disabilities performed at a lower level than their nondisabled counterparts on both the 4th and 8th grade reading assessments. The NAEP assessment results are reported on a scale from 0-500 in reading for grades 4 and 8, and achievement levels are identified as NAEP Basic, NAEP Proficient, and NAEP Advanced (NAEP, 2020). Figure 2 highlights the national 4th grade reading achievement gap range (36-point average scale score difference) between all students and students with disabilities from 2002-2017 with average scale scores flatlined at 187. This data indicates that the literacy achievement gap is already a factor for these students prior to entering middle school. Figure 3 indicates that although there was a rise in reading achievement scale scores nationally for Grade 8 SWD (224 to 231) from 1998-2017, the scale scores for SWD remain well below that of students without disabilities with a 43-point average scale score difference between the two groups. Students with disabilities are entering *and* leaving middle school

with low literacy achievement, placing SWD at a significant disadvantage entering high school and perpetuating the cycle of low literacy achievement for this group of students.

Figure 2

National Grade 4 Reading Gap for All Students and Students with Disabilities (2017)

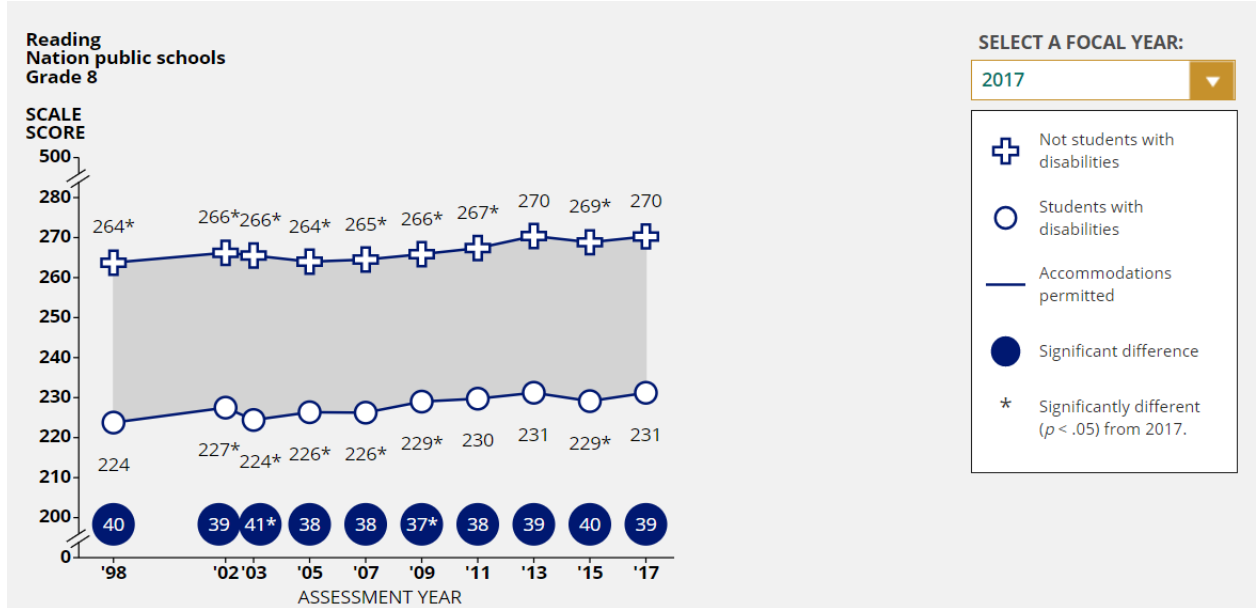


Note. Data retrieved from National Assessment for Educational Progress (NAEP),

https://www.nationsreportcard.gov/dashboards/achievement_gaps.aspx.

Figure 3

National Grade 8 Reading Gap for All Students and Students with Disabilities (2017)



Note. Data retrieved from National Assessment for Educational Progress (NAEP),

https://www.nationsreportcard.gov/dashboards/achievement_gaps.aspx.

NAEP Reading Achievement for Students with Disabilities in Maryland

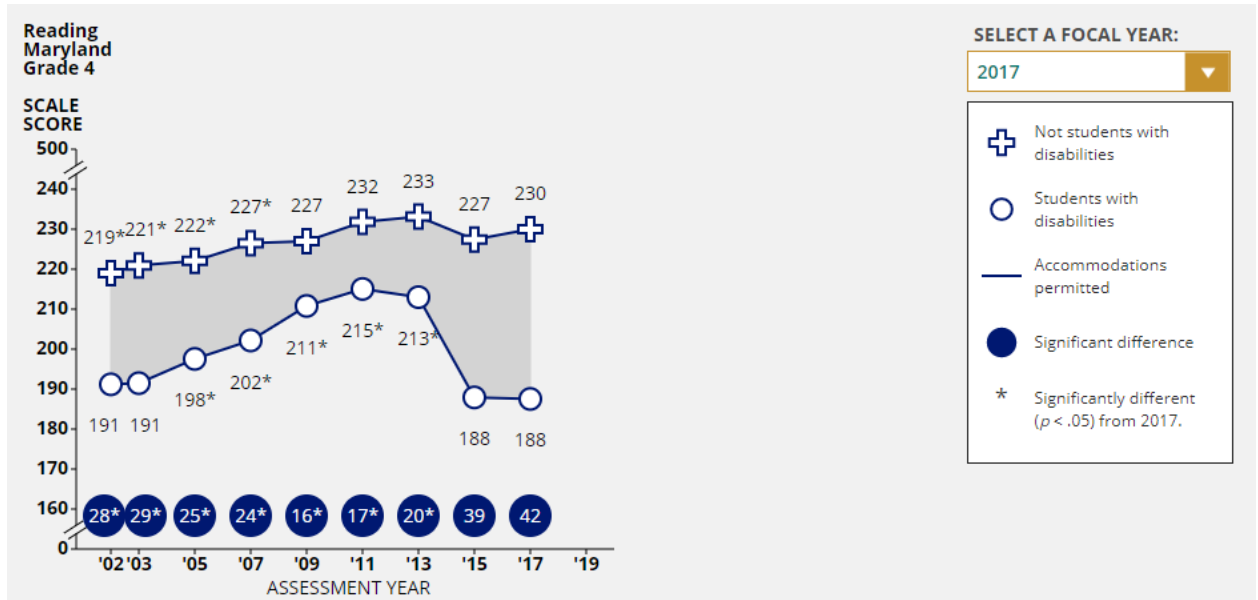
According to the National Center on Educational Outcomes Data Analytics (2019), students with IEPs' NAEP reading proficiency in Grade 8 ranges from 0% proficient (Mississippi) to 52.2% proficient (Nebraska). Even in states with relatively high levels of reading proficiency for SWD, such as Nebraska, the data suggest that SWD across the country continue to struggle to read proficiently. Maryland has 16.3% of 8th grade students with IEPs meeting proficiency in reading on the NAEP, placing students with disabilities in Maryland in the low average range for students with disabilities nationally.

In 2017, Grade 4 students with disabilities in Maryland had the largest achievement gap yet, with a 42-point scale score difference (Figure 4) as compared to students without disabilities (NAEP, 2017). Grade 8 students with disabilities scored an average of 33 points below their nondisabled peers in Grade 8 on the NAEP. Although there are years in which the gap was reduced to a 22-point difference, in 2017 the gap increased, once again, to a 38-point difference (Figure 5). This data confirms that SWDs' literacy achievement lags behind the achievement of their nondisabled peers considerably at both the national and state level, well before these students enter middle school, as well as throughout their middle school years. Without addressing the root of this problem, policies and systems will continue to fail students with disabilities, establishing a precedent for literacy struggles throughout students' secondary schooling experience.

Figure 4

Maryland Grade 4 Reading Gap for All Students and Students with Disabilities

(2017)



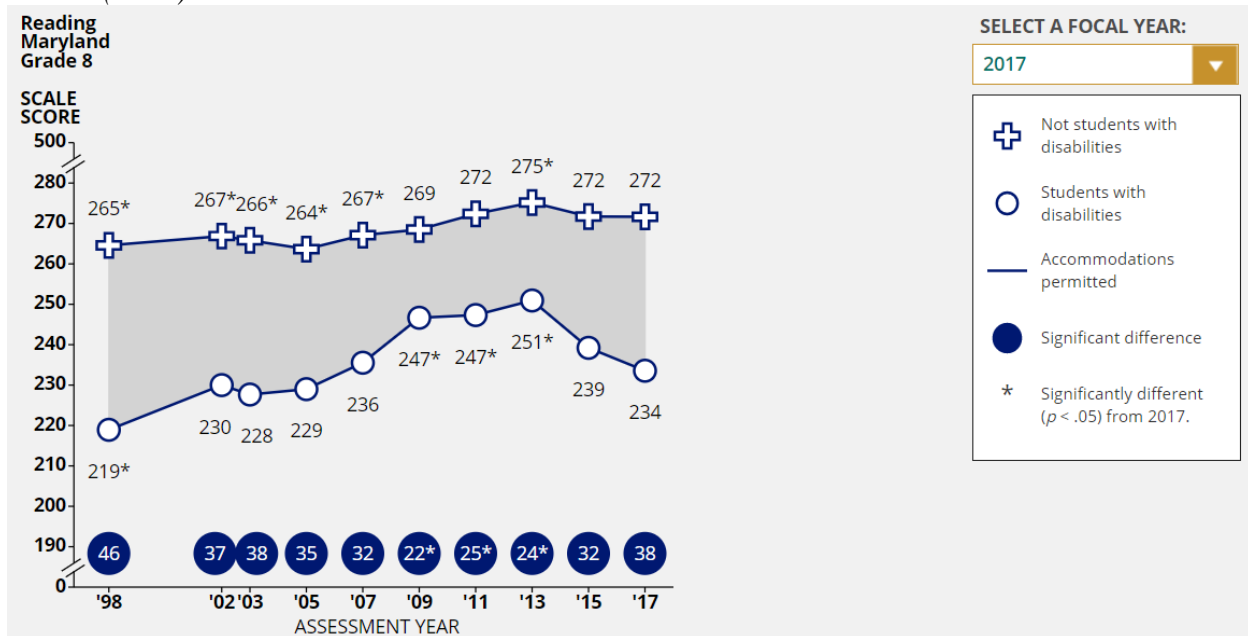
Note. Data retrieved from National Assessment for Educational Progress (NAEP),

https://www.nationsreportcard.gov/dashboards/achievement_gaps.aspx.

Figure 5

Maryland Grade 8 Reading Gap for All Students and Students with Disabilities

(2017)



Note. Data retrieved from National Assessment for Educational Progress

(NAEP), https://www.nationsreportcard.gov/dashboards/achievement_gaps.aspx.

Figures 4 and 5 show the reading achievement gap, in grades 4 and 8 respectively, between all students and students with disabilities through 2017.

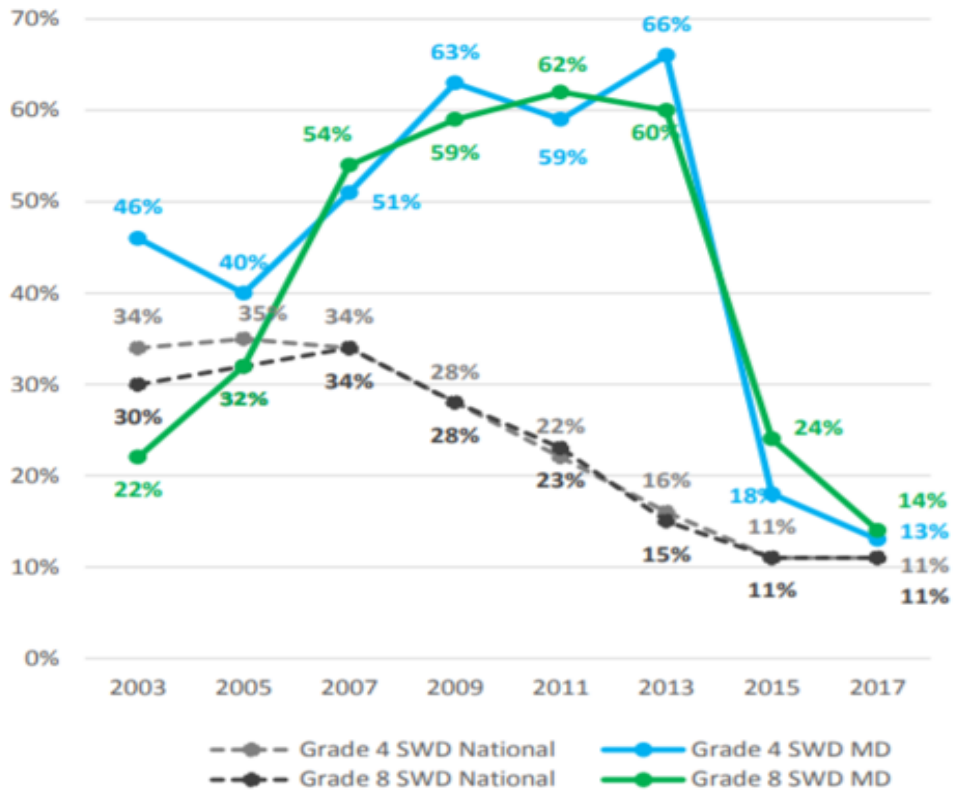
There appears to be a closing of the achievement gap between 2009-2013.

However, as depicted in Figure 6 below, Maryland’s exclusion rates for students with disabilities on the 4th and 8th grade NAEP reading assessments for 2007-2013 ranged from 51% to 66%. The appearance of closing the reading gap during those years is a result of excluding students with disabilities from the NAEP assessment. According to the 2017 *Overview of National Assessment of*

Educational Progress (NAEP) Results, Maryland corrected the issue and met the inclusion goal in all categories, grades, and subjects in 2017 on the NAEP.

Figure 6

NAEP Grade 4 and 8 Students with Disabilities Reading Exclusion Rates (2017)



Note. Data retrieved from National Assessment for Educational Progress (NAEP),

https://www.nationsreportcard.gov/dashboards/achievement_gaps.aspx.

MCAP/PARCC Reading Achievement for Students with Disabilities in Maryland

Reading achievement in Maryland is measured by the Maryland Comprehensive Assessment Program, formerly known as the Maryland’s Partnership for Assessment of Readiness for College and Careers

(MCAP/PARCC) English Language Arts tests. Although in 2019 the name of the assessment changed from PARCC to MCAP, the framework of the assessment remained the same. These tests are administered in grades 3-10. On the 2019 MCAP/PARCC administration, 44% of all Grade 4 students scored proficient on the English Language Arts assessment, while only 10% of Grade 4 SWD scored proficient. In Grade 8, 45% of all students scored proficient on the English Language Arts MCAP/PARCC assessment, and only 7% of Grade 8 SWD scored proficient (Maryland Report Card, 2019). Participation rates were considered for SWD in grades 6-8 (approximately 7,000-8,500 SWD in each grade statewide) in Maryland on MCAP/PARCC from 2017-2019. Rates ranged from 95% -100%, which met or exceeded the state's target set at 95% participation for SWD (MSDE, 2019).

Students with disabilities in both 4th and 8th grades are achieving literacy proficiency at a significantly lower rate than students without disabilities, with the trend data for both grades indicating that this problem has persisted since 2015 as neither group has achieved literacy proficiency above 10% (Maryland Report Card, 2019). As with the national and state NAEP data, MCAP/PARCC data indicates that students with disabilities are continuing to lag students without disabilities in reading proficiency from elementary through middle school.

Grades 6-8 Reading Achievement for Students with Disabilities in District A Public Schools

District A is a county-wide school system with 16,115 students enrolled in the 2019-2020 school year from pre-kindergarten through Grade 12. There are

currently 1,511 SWD in the district with all 13 disability categories represented. In Grade 8 there are 1,238 students, and of those students 96 (7%) are identified as SWD. The district has been experiencing low literacy achievement in students with disabilities compared to nondisabled students in the middle grades (6-8) as indicated through MCAP/PARCC data for the past five years. Grade 8 SWD in District A are demonstrating 11.1% reading proficiency (scoring at levels 4/5 on the state assessment) compared to 6.9% for Grade 8 SWD state-wide (Maryland Report Card, 2019). Although District A Grade 8 SWD are demonstrating greater reading proficiency than the state average, when the percentage of proficient SWD is disaggregated by school, we see a very distinct divide with SWDs' proficiencies between the middle schools in the district. As indicated in Tables 7, 8, and 9, Schools B, C, and D are the schools with the highest percentages of middle grade SWD demonstrating reading proficiency and are located in the northern end of the county, while Schools A, E, and F are the schools with the lowest percentages of middle grade SWD demonstrating reading proficiency and are located in the southern end of the county. Many members of the District A community feel that there is an inequitable divide of resources within the district with greater resources and support available to students in the northern end of the district, resulting in higher literacy achievement outcomes for those students.

The geographical locations of the district's middle schools are important to note as the socioeconomic climate of District A is distinctly different in the northern end of the district compared to the southern end. According to the

United States Census Bureau (2019), the mean annual household income in the northern end of District A is \$86,000 higher than the mean annual household income in the southern end of the district. Although this is not the problem of practice being addressed in this paper, it is an important factor to consider when reviewing access to literacy interventions, resources, and supports to improve achievement outcomes for students with disabilities within the district.

Table 7

2015-2019 PARCC/MCAP ELA Grade 8

Middle School	2015	2016	2017	2018	2019
	ELA %	ELA %	ELA %	ELA %	ELA %
	Proficient	Proficient	Proficient	Proficient	Proficient
	(MCAP)	(MCAP)	(MCAP)	(MCAP)	(MCAP)
School A	6.7	≤ 5	≤ 5	≤ 5	0
School B	≤ 5	6.7	5.9	11.8	17.6
School C	10	0	0	≤ 5	23.1
School D	≤ 5	≤ 5	15.8	7.7	11.1
School E	≤ 5	≤ 5	≤ 5	0	6.7
School F	0	8.3	≤ 5	≤ 5	5.6

Note. Data from Maryland Report Card, <https://reportcard.msde.maryland.gov/>.

Table 8*2015-2019 PARCC/MCAP ELA Grade 7*

Middle School	2015	2016	2017	2018	2019
	ELA %	ELA %	ELA %	ELA %	ELA %
	Proficient	Proficient	Proficient	Proficient	Proficient
	(MCAP)	(MCAP)	(MCAP)	(MCAP)	(MCAP)
School A	≤ 5	5.6	≤ 5	≤ 5	7.1
School B	21.4	5.9	13.3	31.3	7.1
School C	9.1	0	8.3	35.3	15.4
School D	19.0	≤ 5	≤ 5	14.3	6.3
School E	≤ 5	≤ 5	≤ 5	≤ 5	≤ 5
School F	≤ 5	≤ 5	≤ 5	≤ 5	14.3

Note. Data from Maryland Report Card, <https://reportcard.msde.maryland.gov/>

Table 9*2015-2019 PARCC/MCAP ELA Grade 6*

Middle School	2015	2016	2017	2018	2019
	ELA %	ELA %	ELA %	ELA %	ELA %
	Proficient	Proficient	Proficient	Proficient	Proficient
	(MCAP)	(MCAP)	(MCAP)	(MCAP)	(MCAP)
School A	≤ 5	12.0	≤ 5	≤ 5	≤ 5
School B	15.0	11.1	14.3	15.8	6.3
School C	27.3	6.7	23.5	15.4	14.3
School D	13.0	≤ 5	≤ 5	10.5	10.5
School E	≤ 5	≤ 5	7.7	≤ 5	≤ 5
School F	≤ 5	≤ 5	≤ 5	5.6	≤ 5

Note. Data from Maryland Report Card, <https://reportcard.msde.maryland.gov/>.

^aStudents with disabilities who participate in the MCAP/PARCC assessments are diploma-bound and identified with brain-based difficulties such as learning disabilities, specific learning disabilities, diagnosed attention disorders, processing disorders, and other related disorders that impact learning, according to the guidelines established in the Maryland Assessment, Accessibility, and Accommodations Policy Manual (MSDE, 2017). Students with significant cognitive disabilities, who are not pursuing Maryland College and Career Ready Standards, and who take the Alternate Assessment based on Alternate Academic Achievement Standards, are not included in the data.

The literacy achievement for students with disabilities in District A is particularly troublesome at the secondary level with 5% of Grade 8 SWD

demonstrating reading proficiency on MCAP/PARCC in 2018 and only a slightly higher percentage of SWD achieving reading proficiency (8.6%) in Grade 10 as shown in Table 10 (Maryland Report Card, 2019). Trend data from the Maryland Report Card, indicate that SWD in Grades 6 through 8 in District A are not making sufficient progress in literacy achievement to read proficiently and close the literacy gap between all students and SWD. This is consistent with the low literacy achievement of SWD identified within the state NAEP and MCAP/PARCC data. Students with disabilities are the subgroup consistently demonstrating the lowest reading proficiency in elementary and secondary grades at the national, state, and district level.

Table 10*2018 MCAP/PARCC ELA Proficiency Rates Grades 3, 5, 8, and 10*

<i>DISTRICT A Literacy Achievement</i>				
Specialized Populations/ Subgroups	Grade 3 ELA % Proficient	Grade 5 ELA % Proficient	Grade 8 ELA % Proficient	Grade 10 ELA % Proficient
All Students	56.3%	52%	57%	65.5%
Students with IEPs	14.9%	≤ 5%	≤ 5%	8.6%
African American	39.7%	36.2%	34.5%	44.7%
FARMS	35%	28.3%	33%	41.8%

Note. Data from Maryland Report Card

(<https://reportcard.msde.maryland.gov/Graphs/#/Assessments/ElPerformance/1EL/3/6/3/1/04/XXXX/2019>)

^aThe MCAP/PARCC participation rates for SWD in District A at each grade level for the 2019 MCAP/PARCC met the state’s 95% participation target for SWD (Maryland Report Card, 2019).

District A recently began administering the Northwest Evaluation Association (NWEA) Measure of Academic Progress (MAP) Growth benchmark assessment for the literacy areas of reading literature, reading informational texts, and vocabulary. The assessment was adopted district-wide in 2019 yet select middle and high schools began piloting the assessment in 2017. This computer

adaptive assessment provides information for teachers on specific standards students are ready to develop in each literacy area (literature, informational, and vocabulary), longitudinal growth score (RIT-Rasch unit), as well as projected proficiency on MCAP/PARCC. The NWEA MAP Projected Proficiency Report (winter 2020) indicated that Schools B, C, and D in the northern end of the district had approximately 50% of their middle grade students on track to meet MCAP/PARCC reading proficiency Levels 4/5, while only 30% of middle grade students in Schools A, E, and F in the southern end of the district were on track to meet reading proficiency (NWEA, 2020). These MCAP/PARCC projections from NWEA MAP highlight the differences in literacy achievement between the northern and southern middle schools in District A and include both students with and without disabilities as the projection data is unable to be disaggregated by subgroups. Other than teacher created formative assessments, NWEA MAP is the only reading benchmark given to students in the middle grades.

Grades 6-8 Reading Achievement for Students with Disabilities at School A

School A is located mid-county at the unofficial divide between the northern and southern ends of the county. School A serves 605 students in Grades 6-8. As of 2019, there were 209 students in Grade 6, 197 students in Grade 7, and 199 students in Grade 8. Of the 605 students, 187 (31%) were identified as economically disadvantaged (ED), 62 (10%) were identified as SWD (with 52% being dually classified as SWD and ED), and an additional 57 (9%) students with 504 plans. The school also houses three regional programs including the Intensive Structured Learning Environment (ISLE), Structured Learning

Environment (SLE), and English Language Learners (ELL). The ISLE and SLE regional programs support students in the district who have been primarily diagnosed with autism and have IEPs that require structured and consistent learning environments, while the ELL program supports students whose first language is not English. Typically, students in the ELL and SLE programs are diploma-bound and participate in the state standardized assessments and county benchmarks, while ISLE students are typically non-diploma bound and participate in the state's alternate assessments.

In 2019, School A SWDs in Grade 6 were less than 5% proficient on the ELA MCAP/PARCC, while 33% of non-disabled students achieved proficiency (Levels 4 and 5). In the same year, Grade 7 SWDs were 7% proficient, while their nondisabled counterparts were 46.8% proficient. Also, in 2019, the ELA MCAP/PARCC data indicated Grade 8 SWDs reading proficiency was 0%, while nondisabled students were 57.5% proficient (Maryland Report Card, 2019). School A's participation rates for SWD at each grade level (6-8) for the 2019 MCAP/PARCC met the state's 95% participation target for SWD (Maryland Report Card, 2019).

Although Maryland waived the state standardized testing requirements for the spring of 2020 due to COVID-19, the NWEA MAP Reading projections for Grade 8 students based on the winter 2020 MAP administration at School A (for students with and without disabilities) indicated that approximately 70% of the students would not achieve reading proficiency on the MCAP/PARCC, with only 30% of the students on track for scoring a Level 4 or 5 (NWEA, 2020). School

A is not preparing SWD for the rigorous literacy expectations required of them in the middle grades and certainly not for the complex reading tasks that will be expected of these students in high school across various disciplines.

The literacy achievement at School A for SWD has been a concern within the district for many years as it is one of three middle schools within the district with consistently low literacy achievement outcomes. When District A received state funds for the Striving Readers' Comprehensive Literacy (SRCL) Grant in 2018, the district funded three literacy coaches to strategically support struggling learners at identified schools. I was appointed as a literacy coach in grades 6-8 at School A to address the low literacy achievement for specific subgroups of students, including students with disabilities. Additional interventions, resources, and support (as will be discussed in greater detail) have been provided to School A over the years, but SWD continue to be the lowest performing group of students in the school.

Understanding Testing Accommodations for Students with Disabilities

Interpreting NAEP data, as well as other large-scale assessment scores, requires awareness of testing accommodations that are provided to students with disabilities to level the playing field for them. Many times, SWD are unable to participate in assessments the same way as their nondisabled peers.

Accommodations are changes in materials or procedures that provide access to instruction and assessments for students with disabilities. The IDEA mandates that testing and instructional accommodations must be considered during IEP planning and development, are intended to provide students with disabilities the

opportunity to learn without the barrier of their disabilities and be able to show what their knowledge and skills are rather than the effects of their disabilities (Fuchs, Fuchs, & Capizzi 2005; Thurlow, 2002). Accommodations are typically categorized in four ways: presentation, response, setting, and timing/scheduling (Maryland Assessment, Accessibility & Accommodations Manual, 2017). Some examples of accommodations within these four categories for SWD include: assistive technology, paper-based assessment (rather than computer-based), text-to-speech, speech-to-text, human reader, human scribe, monitor test response, and extended time (Maryland Assessment, Accessibility & Accommodations Manual, 2017).

Due to the varying impact a student's disability may have on the ability to express what the student knows and is able to do, administrators and educators are often presented with challenges to include SWD in assessments and interpret the results (Fuchs, Fuchs, & Capizzi, 2005). Fuchs et al (2005) purports that "for many students, accommodations are necessary to provide a true measure of a student's knowledge" (p. 2). Fuchs et al (2005) also recognize that there is not a universal set of standard accommodations that will benefit students with learning disabilities; some accommodations are more beneficial than others, depending on students' learning difficulties.

The NAEP, state, and local assessments define which accommodations are permitted for which tests. Allowable accommodations are any changes to the standard assessment procedures that allow SWD access in a way that does not alter the concepts being measured. The NAEP allows specific accommodations

for students with disabilities on its reading assessments. If a SWD's IEP does not indicate testing accommodations, the student is administered NAEP without accommodations. If a SWD's IEP specifies these testing accommodations, the student will be included in the NAEP sample for testing. However, if the student requires accommodations beyond those specified by NAEP policy, the student is excluded from NAEP testing. NAEP policy also specifies students with disabilities should only be excluded from NAEP testing if they have been identified in their IEP as having significant cognitive disabilities requiring an alternate assessment based on alternate achievement standards. NAEP policy states that no more than 5% of all students should be excluded from testing for a 95% inclusion rate and 85% inclusion of those students identified as Students with Disability (SWD) and English Language Learners (NAEP, 2020). The NAEP Testing and Reporting on Students with Disabilities Policy Statement from the National Assessment Governing Board indicates that as many students as possible should participate in the National Assessment with accommodations, as needed, without altering the content or knowledge assessed (NAEP, 2020).

Consequences of Not Addressing the Problem

The consequences of not addressing low literacy achievement for students with disabilities in the middle grades are serious. According to the National Longitudinal Transition Study 2 (NLTS2) that was mentioned earlier, outcomes for students with disabilities represent some of the weakest postschool outcomes of any subgroup, including being the least likely to (a) leave high school with a diploma, (b) be involved in organized community groups, and (c) be engaged in

work, postsecondary education, or work preparation (NLTS2, 2005). NLTS2 also identified SWD as students most likely to be living on their own and parenting within two years of graduating high school.

According to the National Center for Education Statistics (NCES) for the 2017-2018 school year, approximately 73% of SWD nationally, ages 14-21 receiving services under IDEA, exited school with a regular high school diploma, while 10% of SWD received a certificate of completion (alternate certificate based on modified curriculum standards), and 16% of SWD dropped out (NCES, 2020). The National Center for Learning Disabilities (NCLD) also reports that one in five students with different learning needs (that include those with a learning disability) experience the following outcomes: are retained at least once, suspended more than peers, are three times as likely to drop out of school, enroll in college at half the rate as their peers (with only four in ten completing college), fifty percent are unemployed, and one in two have been involved in the justice system (NCLD, 2019).

Developing proficient literacy skills is important for all students. Lower levels of reading achievement are linked to poor school outcomes with approximately 20% of the lowest level readers dropping out of high school prior to their junior year (Dalton, Glennie, Ingels, & Wirt, 2009). In the 2003 National Assessment of Adult Literacy, results indicated that adults with higher literacy levels were more likely to be employed full-time and less likely to be out of the labor force than adults with lower literacy levels, and adults with lower literacy levels generally earned lower incomes (Kutner, 2007).

The 2019 MSDE issued document *Maryland 4-Year Adjusted Cohort Graduation and Dropout Rates* identifies the graduation rates for SWD from 2017-2019 as follows: in 2019, 63.52% of SWD graduated with a high school diploma compared to 66.8% of SWD in 2018 and 67.41% in 2017 (MSDE, 2019). The 2019 graduation rate for District A's SWD was 67.12%, down from 73.61% in 2018, and 77.46% in 2017. Over the past 3 years in District A, the number of SWD that are graduating from high school is declining, suggesting that the district is not adequately meeting the needs of adolescent students with disabilities at the secondary level.

The focus on early prevention and reading remediation in the primary grades in District A does not serve those students with disabilities in School A currently experiencing reading difficulties. As School A struggling readers wrestle with the increase in reading complexity and discipline specific reading skills in the middle grades, their reading achievement and self-efficacy around specific reading tasks suffers greatly as evidenced on state and district reading assessments. Unfortunately, this paradox perpetuates a cycle in which School A's struggling readers engage in reading avoidance because reading is challenging and taxing, which adversely impacts their exposure to vocabulary, sentence structure, text organization, and concepts of academic language (Moats, 2002).

Middle grade students are expected to read proficiently and possess the vocabulary and comprehension skills necessary to comprehend complex, discipline specific texts (McCay, Vaughn, & Neal, 2001). However, middle

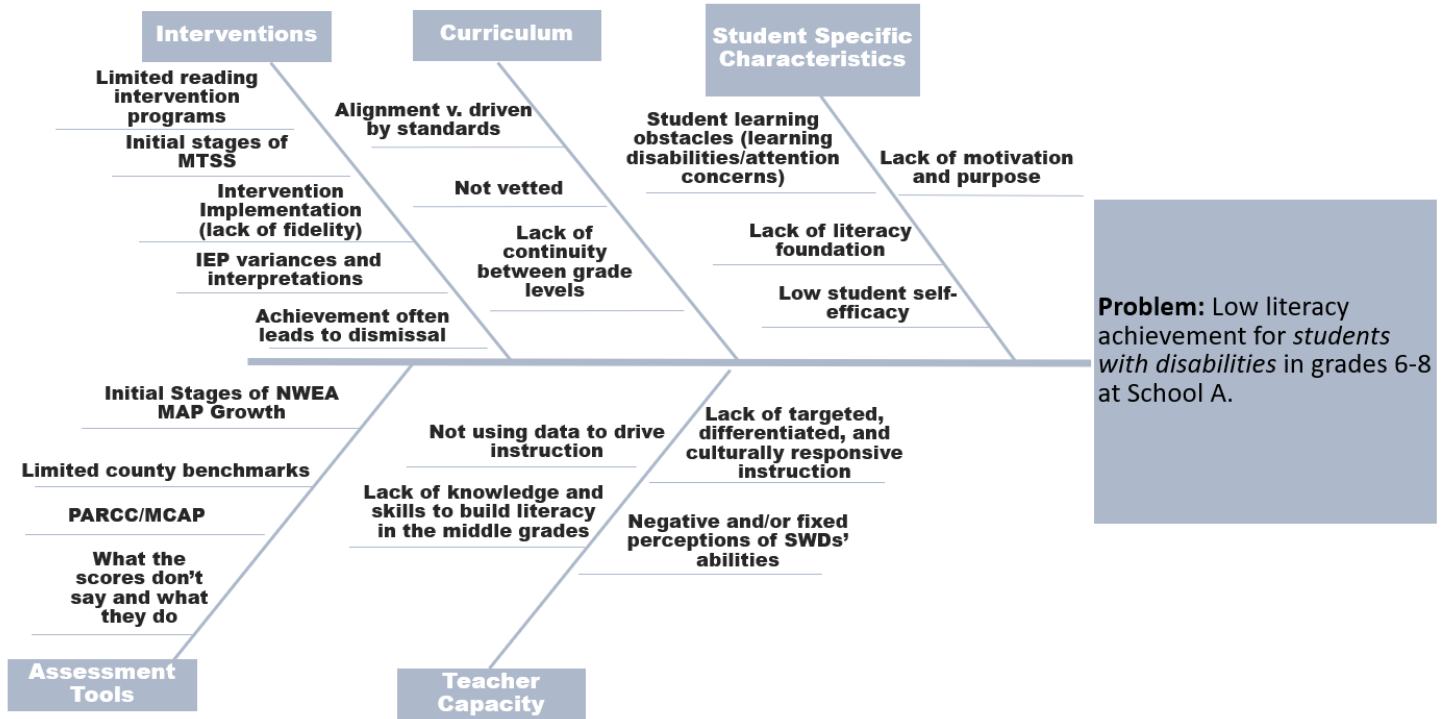
grade students at School A with reading deficiencies in word recognition/decoding, comprehension, or both tend to fall further behind with each passing year. These students make little or no progress in their reading growth, lose motivation to tackle reading tasks that seem insurmountable, and embark on their high school experience at a disadvantage in reading (McCay et al, 2001).

C. Theory of Action

When considering the possible root causes of low literacy achievement for students with disabilities at School A, numerous factors were considered. After conducting a root cause analysis, district components such as inadequate interventions, unvetted curriculum, student specific characteristics, misaligned assessments, and teacher capacity were identified as the primary factors related to low literacy achievement for students with disabilities in grades 6-8.

Figure 7

Root Cause Analysis



Student Specific Characteristics

For middle grade students with SLD, similar to their non-disabled peers, the reading demands of the subject matter curriculum become greater, yet SWD often do not have well-developed foundational reading skills. Many students with reading difficulties experience deficiencies in word recognition, comprehension, or both (Joseph & Schisler, 2009; Gough & Tunmer, 1986; Moats, 2002; Moats & Tolman, 2019). The sources of reading difficulties for middle grade students are diverse and should be addressed through differentiated approaches targeting students' specific needs (Cirino, Romain, Barth, Tolar, Fletcher & Vaughn, 2013; Vaughn, Roberts, Capin, Miciak, Cho, & Fletcher, 2019).

Students with reading difficulties may experience slow or inaccurate phonological processes, as well as difficulties with orthographic, semantic, and memory processes (Miller-Shaul, 2005; Moats, 2002; Moats & Tolman, 2019). Students with disabilities' learning may be affected by a slower rate of learning and weaker functioning in the affected areas of learning, as well as comorbid associations such as attention deficit or mental health concerns (McDowell, 2018). McDowell (2018) identifies additional negative impacts for students with learning difficulties such as maladjusted curriculum (curriculum alignment does not meet the student at the student's ability level), learning problems in one area affecting other areas (i.e., weak literacy impacting learning in math, science, and social studies), maladaptive adjustment (such as disruptive or anti-social coping strategies or substance abuse), and a decrease in motivation over time.

Students' sense of inefficacy is a major hindrance to students' ability to learn to read (Tabassam & Grainger, 2002; Perkins & Body 2016). According to Bandura (1994), there are numerous school practices and educational experiences that promote the conversion of education into inefficacy, including practices such as ability grouping, whole group instruction with the same material for all students, and teacher feedback comparing students' performances to others. Lack of self-efficacy, or inefficaciousness, means that students do not believe in their capabilities to master certain academic tasks or establish rigorous academic aspirations (Caprara, Fida, Vecchione, Del Bove, Vecchio, Barbaranelli, & Bandura, 2008). Bandura (1986) alleged that if students believe they are inefficacious, they believe they are powerless over situations, develop anxiety

towards the task which results in students engaging in avoidance behaviors to remove themselves from a potentially difficult situation altogether.

Consequently, inefficacious students become reluctant to try tasks that they may be capable of completing because they feel that the task is too great a challenge for their capabilities. Long term inefficacy negatively affects academic endeavors, often resulting in detrimental activities or behaviors that further detract from academic success (Bandura, Barbaranelli, Caprara, & Pastorelli, 1996; Swanson, 2004; Ross, Perkins, & Bodey, 2016). Students with disabilities frequently have lower levels of academic achievement, as well as social-emotional difficulties, resulting in persistent, and often adverse, academic learning experiences which negatively impact their self-efficacy (Lackaye, Margalit, Ziv, & Ziman, 2006).

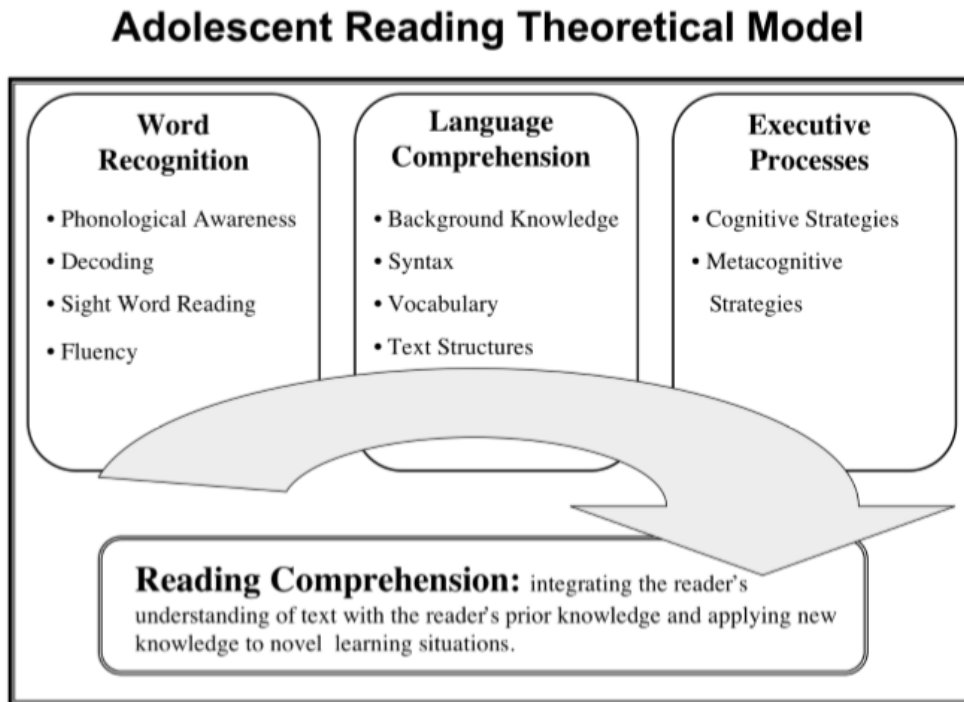
Additionally, Claude Steele's stereotype threat theory posits that students' achievement in school is directly linked to the way students identify with school and the social pressures asserted on specific student groups (Steele, 1997). Steele theorizes that student groups with negative connotations (i.e., students with disabilities, economically disadvantaged, race, gender) lack a strong sense of identity in the schoolhouse, suffer from low self-efficacy, resulting in poor literacy achievement and standardized test performance (Steele, 1997). Increasing students' self-efficacy will remove the barrier that students with disabilities are not able to perform at the same academic level as nondisabled students (Bandura, 1997; Klassen, 2002).

Curriculum

When considering the curriculum framework for students in the middle grades, standards-driven content, in alignment with the Simple View of Reading (Gough & Tunmer, 1986) and Adolescent Reading Theoretical Model (Deschler & Hock, 2006), should be the driving forces in a comprehensive approach as they address each of the critical components for adolescent reading success. The Simple View of Reading identifies two major areas of reading difficulty for all students: word identification deficits and deficits in reading comprehension. These areas of difficulty can occur in isolation, or simultaneously, and are likely to be distributed differently among SWD depending on the nature and severity of their disability (Schulte, Stevens, Elliot, Tindal, & Nese, 2016). The Simple View of Reading recognizes that the components of word identification and comprehension are equally important in the reading process. According to Biancarosa and Snow (2006), approximately 70% of older readers require some form of reading remediation, and their most common problem is that they are not able to comprehend what they read. Adolescents and young adults not only need to develop reading skills, but they also need to develop the ability to decipher and comprehend challenging texts and effectively communicate socially and electronically (Wendt, 2013). The literacy curriculum for students in the middle grades should provide for a strong literacy foundation as identified in the Simple View of Reading and follow the tenets of adolescent reading development such as those outlined in the Adolescent Reading Theoretical Model.

Figure 8

Adolescent Reading Theoretical Model



Note. Retrieved from Deshler & Hock, *Adolescent Literacy: Where We Are – Where We Need to Go.* p.22.

The Adolescent Reading Theoretical Model is a balanced approach to integrating the Simple View of Reading (word recognition and language comprehension) with executive processes (cognitive and metacognitive strategies) to achieve overall reading comprehension for adolescent students (Deschler & Hock, 2006). Systematic instruction in phonological awareness, phonics (letter-sound-correspondences and decoding), and the application of these skills in reading and writing is critical for improving literacy outcomes, not only for young children, but also for adolescents with reading difficulties (Galuschka, Ise, Krick, & Schulte-Korne, 2017; Moats & Tolman, 2019).

Curriculum in the middle grades should continue to reinforce foundational

literacy to ensure struggling readers have a firm grasp on word recognition. Yet many districts, including District A, discontinue instruction in this domain as students advance into the middle grades and focus curriculum efforts solely on making meaning from texts. Without foundational word recognition skills, students in the middle grades are presented with an even greater challenge to read and understand discipline-specific texts because they struggle to simply read the words on the page (Nelson, Alexander, Williams, & Sudweeks, 2014).

Without adequate language comprehension, adolescent students will struggle to read and understand complex, content-specific texts with challenging domain-specific vocabulary. Evidence-based vocabulary instructional practices such as explicit vocabulary instruction, text-based vocabulary instruction, and morphology-based instruction should be included in the middle grade curriculum as they are important for all students but essential for students with disabilities (Swanson, Vaughn & Wexler, 2017). District A's middle grades literacy curriculum only supports text-based vocabulary instruction and does not include morphology-based instruction at all.

Executive processes including cognition and metacognition become more critical in the reading comprehension process as students begin to automatize their word recognition skills. The process of automatizing word recognition typically occurs in upper elementary, but students with reading difficulties tend to automatize their word recognition skills much later than proficient readers, depending on the nature and severity of their disability (Steensel, Oostdam, Gelderen, & Schooten, 2016). Metacognition also develops later in students, and

the relationship between metacognition and literacy achievement changes as students progress into adolescence and utilize higher order strategy skills (Baker, 2005). By integrating cognitive and metacognitive strategies, reading becomes an active process that requires word identification, language comprehension, and executive functioning processes that are necessary to read for meaning and learning. The Adolescent Reading Theoretical Model significantly increases the reader's ability to integrate understanding of text with prior knowledge, and then be able to apply that knowledge to new learning situations (Deschler & Hock, 2006).

Throughout the early elementary years, most districts, including District A, focus curriculum efforts on developing basic literacy skills, including a foundation in phonological awareness, phonics, word recognition, and language comprehension. Students in the intermediate grades develop general comprehension strategies, explore common word meanings, and increase reading fluency. Typically, by the end of middle school, students have established the cognitive stamina for more complex routines and responses to include literary analysis, research simulation tasks, and extended discourse (Fagella-Luby, Graner, Deschler, & Drew, 2012).

District A's curriculum is based on the The Maryland State curriculum, which provides the guidance and direction for what students should know and be able to do at each grade level in alignment with the Maryland Content Standards and Maryland Assessment Program. In 2010, the Maryland State Board of Education (MSDE) adopted the Maryland College and Career-Ready Standards

(MCCRS) for English Language Arts, Literacy in History/Social Studies, and Literacy in Science/Technical Subjects. With the adoption of the MCCRS, the English Language Arts Department at MSDE facilitated the formation of educator teams from across the state to participate in the creation of clarification statements for the Common Core Standards from Pre-K through grade 12. Educators from the local systems worked together to create clarification statements that reflect the instructional shifts necessary to achieve the Common Core State Standards. The clarification statements detail the skills necessary for students to demonstrate proficiency in each grade level standard in reading literature, reading informational text, writing, and language. These clarifications are an integral part of the Maryland College and Career-Ready Standards Curriculum Toolkit. (MSDE, 2019).

Although each district is responsible for implementing curriculum in alignment with the Common Core State Standards, there is often a disconnect between grade levels, districts, and states regarding program implementations, assessment alignment, interpretation of standards, and teacher qualifications (Bogard & Takanishi, 2005). Bogard et al (2005) suggest that early elementary experiences require alignment and coordination of experiences that are age-appropriate, systematic, consistent, and taught by skilled professionals. Alignment is defined as sequentially organizing standards, curricula, and assessments, while coordination is described as a shared vision for specific goals to be accomplished within a designated time frame (Bogard & Takanishi, 2005). Providing aligned curricula in the middle grades would likely increase learning

as students are already familiar with the structures and routines of the learning activities from their elementary experience (Pianta, 2003). A lack of curriculum alignment prevents students from making meaningful and necessary learning connections when faced with incongruent and unrelated content, reducing students' abilities to apply what has been taught across settings and contents (International Literacy Association and National Council of Teachers of English, 2017).

The District A curriculum for students in the middle grades is intended to focus on the balanced integration of the five language processes including: reading, writing, speaking, listening, and viewing language and literature for the purpose of transferring the knowledge and skills learned to everyday situations both in and out of school environment (District A, 2019). Although this is a well-intentioned approach, the lack of instruction in basic literacy for students with reading difficulties in the middle grades is commonplace in District A. Many secondary teachers struggle with how to ensure the grade level curriculum is accessible to all students, while simultaneously providing reading remediation to their struggling readers. Oftentimes, this leads teachers in District A to prioritize the curriculum demands, and pacing requirements, over differentiating instruction to target the varied needs of struggling learners.

District A has been in the continuous process of developing and revising curriculum aligned with MCCRS. District A's curriculum is typically developed by content supervisors in conjunction with teams of teachers and teacher specialists, as the district does not employ curriculum writers. Many of the

district's curriculum writing teams meet after the contractual school day or during the summer months. Although the teachers who develop curriculum on these teams are well-intentioned, most have not received formal training in curriculum theory, principles, design, and development to support consistency within the continuity of learning from the primary grades through the secondary grades.

Much of District A's curriculum is developed in isolation, lacking integration, alignment, and coordination between content areas and/or between grade levels, with considerable emphasis placed on state standardized testing outcomes. According to Hargreaves (2003), rather than fostering creativity and higher order thinking, more and more school systems, like District A, are micromanaging curriculum through a tunnel vision approach to test scores, achievement targets, and accountability measures at specific grade levels rather than an aligned and coordinated approach for long-lasting and sustainable growth. Many school system curriculum reforms that rely on teachers' voluntary efforts, such as District A's, do not have long-lasting effectiveness or encourage only partial commitment by those teachers who were involved in the reform efforts (Hargreaves, 2003). Handelzalts (2009) points out that systems attempting to utilize teacher teams to generate curriculum need common curriculum experiences in their collaboration efforts to effectively generate curriculum that influences students' achievement with long-lasting outcomes for all students.

Interventions

According to Greene and Winters (2005), evidence-based literacy interventions are just as critical for secondary students as for elementary students considering that almost 40% of high school graduates lack the reading and writing skills that employers value, and nearly 30% of high school graduates who enroll in colleges and universities require remedial assistance. Of even greater concern is that nationally almost a quarter of all 4th, 8th and 12th grade students score at the “below basic” level in reading on the National Assessment of Educational Progress (NAEP), and although 84% of all high school students graduate from high school nationally, only 65% of students with disabilities graduate (National Center for Educational Statistics, 2016). Reading achievement data indicate that many students with, and at-risk for, reading disabilities require more intensive interventions (Austin & Vaughn, 2018; Vaughn, Wexler, Roberts, Barth, Cirino, Romain, Francis, Fletcher, & Denton, 2011).

Students’ ability to read can be affected by a disability with word recognition, comprehension (linguistic/language), or both. As students’ progress from early elementary through middle grades, the emphasis shifts from word recognition instruction to making meaning of texts. If students in the middle grades lack either component, intervention needs to be considered. Students who do not receive appropriate, targeted intervention will move on to subsequent grades with significant, unaddressed deficits (Deschler & Hock, 2006; Moats, 2002; Vaughn, Roberts, Capin, Miciak, Cho, Fletcher, 2019).

Even students who do receive quality interventions during their early years may still encounter additional learning difficulties as curriculum becomes more rigorous in the middle grades. Biancarosa and Snow (2006) posit that making sure ongoing literacy development is occurring is a more challenging task in the middle grades and high school due to the fact that secondary literacy skills are more complex and multifaceted than in the primary grades, and adolescents are generally less motivated and interested in school-based reading than student in the primary grades.

McDowell (2018) outlines the necessary principles for successful intervention remediation which include explicitly teaching each skill through a systematic, multisensory approach (appropriate developmental sequence) that is flexible and responsive to students' individual needs. Interventions need to be utilized and generalized so students are able to apply what they learn in broader contexts outside the intervention (Vaughn & Fuchs, 2012). Repetition and frequency of application are also critical principles in that students need repeated exposure and practice to solidify concepts (Moats & Tolman, 2019; Swanson, Vaughn, & Wexler, 2017). Finally, the intervention needs to incorporate progress monitoring and immediate, specific feedback for students (Vaughn & Fuchs, 2012, Vaughn, Wexler, Roberts, Barth, Cirino, Romain, Francis, Fletcher, & Denton, 2011). Middle and high school educators need to consider explicit, systematic, basic reading skills instruction to teach phonics, sight words, oral reading fluency, and comprehension to adolescents with reading difficulties in order to support reading proficiency at the secondary level (Joseph & Schisler,

2009; Vaughn, Wexler, Roberts, Barth, Cirino, Romain, Francis, Fletcher, & Denton, 2011).

District A is in the early stages of implementing a Multi-Tiered System of Supports (MTSS) to promote data-driven decision making and positive student academic and behavior outcomes. MTSS includes Response to Intervention (RtI) and Positive Behavioral Interventions and Supports (PBIS) to generate safe and positive school climates and improved academic outcomes (Ziomek-Daigle, Goodman-Scott, Cavin, & Donohue, 2016). In accordance with MTSS, and as required through MSDE, District A now has a universal screener (NWEA MAP Growth) for reading for Kindergarten through Grade 12 and is developing a continuum of evidence-based practices for universal supports for all students (Tier 1), selected interventions for some students (Tier 2), and more intensive interventions for a few students (Tier 3) (Cook, Lyon, Kubergovic, Wright, & Zhang, 2015). This is a new framework in the district, and training for school-based administrators and supervisors is still in the initial stages.

Over the years, District A interventions have primarily centered on reading remediation at the elementary level. According to Johnson and Smith (2008), District A is not alone in that the majority of districts struggle with reading intervention protocols that primarily target elementary grades with few reading interventions having the same research base supporting their implementation in the middle grades. District A has relatively few programs that promote proactive measures and/or remediation at the middle school level, and the limited interventions available often do not meet the specific needs of students with

reading difficulties, yet students are placed in an intervention because it is the “closest match” or is simply the only program that is available during the period the student is scheduled for intervention.

Students’ Individualized Education Programs (IEP) are an essential element in providing students with a free and appropriate public education (FAPE) and play a critical role in the interventions students receive based on goals, supports, and services such as the co-teaching service delivery model (Gartin & Murdick, 2005; Weiss & Rodgers, 2020). The co-teaching service delivery model utilizes a general education teacher and a special education teacher in the same classroom to simultaneously provide instruction for students to access both the general education curriculum and specially designed instruction (SDI) in compliance with students’ IEPs (Weiss & Rodgers, 2020; Wexler, Kearns, Hogan, Clancy, & Shelton, 2020).

According to Wexler et al (2020), it is crucial for content-area teachers and special education teachers at the secondary level to incorporate evidence-based literacy practices into their instruction to meet the needs of the struggling readers in their co-taught classes. District A has provided many trainings on co-teaching models for both general education teachers and special education teachers, yet the relationship between the general education and special education teachers is unique and varied, resulting in a wide range of functional and dysfunctional co-teaching practices. There is also limited planning time available for the general education teacher and special education teacher to plan for instruction together, as planning periods often do not align due to scheduling constraints.

Variances in, and interpretations of, students' IEPs can also result in a lack of literacy achievement for students with reading difficulties. Oftentimes, IEP goals lack individualization, specificity, and/or alignment to students' present levels (Hedin & DeSpain, 2018). According to Jung (2007), IEP goals and objectives should be specific so that all IEP team members know exactly what skill is being targeted and what the expectation is. Ambiguous goals and objectives may be interpreted very differently by providers. Writing specific, measurable, attainable, IEP goals is another area that District A's Department of Special Education has been providing training on, as it has been problematic within the district for years. A final, yet significant, consideration affecting students with disabilities' reading achievement data is that once an IEP team determines students no longer qualify for special education services under IDEA, students are exited from special education (MSDE, 2019). This results in a perpetual cycle of low reading achievement data for the subgroup of students with disabilities.

Educators' responsibility is to ensure that every student is able to advance beyond basic literacy skills to explore more rigorous and rewarding literacy skills such as reading purposefully, figuring out word meanings (morphology), and integrating new information with prior knowledge through targeted interventions and reading self-efficacy (Guthrie & Wigfield, 2000; Vaughn, Wexler, Roberts, Barth, Cirino, Romain, Francis, Fletcher, & Denton, 2011). As classrooms become more diverse in terms of the types of learners in the general education setting, instructional practices that benefit all students, including SWDs, will be

invaluable to general education teachers. When all teachers actively support the use of targeted reading interventions, SWDs have the potential for greater literacy growth (Katims & Harris, 1997, Vaughn & Fuchs, 2012).

Assessment Tools

Many districts, including District A, feel pressure to perform well on state mandated standardized tests. Data from these tests are often used to make decisions about students' placement in remedial reading classes, without considering an array of assessment data to pinpoint students' specific reading needs (Dennis, 2009). Standardized tests often put students in categories from below basic to advanced, yet these categories tell teachers very little about how to differentiate instruction to meet the heterogeneous needs of the students in their classes (Dennis, 2008; Vaughn & Fuchs, 2012). Vaughn and Fuchs (2012) further posit that a multi-stage screening process can contribute to a more comprehensive analysis of students with disabilities' reading remediation needs. Current assessment practices lack the level of information that teachers need to target instruction most effectively (Snow & Biancarosa, 2003; Roehrig et al, 2008).

The use of proper diagnostic and progress monitoring assessments need to be considered when analyzing intervention practices including placement, effectiveness, growth, and transfer of literacy skills for students in the middle grades (Roehrig et al, 2008). Snow and Biancarosa (2003) argue that in addition to better implementation of instructional reforms through improved professional development, there is a need for more comprehensive assessments of later

reading ability. Standardized measures of reading comprehension are typically not the best assessment tools to drive instruction largely because of the focus on lower-level comprehension skills and use of short, excerpted texts. Most standardized measures do not ask students to analyze a text or synthesize across multiple texts (Snow & Biancarosa, 2003). Standardized tests also do not assess for students' metacognition, making them unhelpful as diagnostic tools when teachers suspect a breakdown somewhere along the line with comprehension processes (Schoenbach, Greenleaf, & Murphy, 2012). Without the development of better assessments that address the sources of comprehension and its breakdown, implementing targeted interventions and specific instructional strategies will continue to be challenging and ineffective.

As noted earlier, District A recently adopted NWEA's MAP Growth benchmark assessment in 2017 for middle and high school students (and in 2019 for Kindergarten-Grade 5) to measure growth in the areas of reading literature, reading informational texts, and vocabulary. This computer adaptive assessment provides data for teachers on specific standards students are ready to develop in each literacy area, which can drive instruction and interventions, as well as monitor students' progress between administrations. Students scoring in the lowest quartile on MAP Growth: Reading (below the 25th percentile) are identified as at-risk and their progress is monitored through general and/or special education instruction. As noted previously, this is a relatively new assessment platform for District A, and many teachers are still developing proficiency in analyzing the data and utilizing the data to inform instructional

practices. This is the only reading benchmark given to students at the secondary level, although students who are referred to the Student Services Team (SST), or IEP team, may be administered additional assessments such as informal reading inventories, decoding surveys, and/or phonological awareness tests.

According to MTSS and RtI implementation practices, though, students should be administered brief and frequent assessments in the area of risk, in addition to the universal screener, to ensure appropriate remediation and responsiveness to intervention (Fuchs & Fuchs, 2006, Vaughn & Fuchs, 2012; Stevenson, 2017). Curriculum-based measures (CBM), such as letter naming/sound fluency, word identification fluency, oral reading fluency (ORF), reading comprehension (RC), and maze (multiple choice cloze) passages provide data on students' specific reading needs, and are useful for progress monitoring targeted skills (Stevens, 2017). District A may benefit from utilizing CBMs, in addition to NWEA MAP reading benchmarks and state standardized testing (PARCC/MCAP), as a more comprehensive approach to screening and monitoring students with disabilities reading skills as students progress through the middle grades (Baker, Biancarosa, Park, Bousselot, Smith, Baker, Kame'enui, Alonzo, & Tindal, 2014).

Teacher Capacity

The teaching of foundational reading has been primarily relegated to elementary teachers, with minimal preparation for middle grade teachers to meet the reading needs of adolescent students (Snow, 2002). There are myriad barriers to addressing the needs of adolescent students in the area of literacy

development, but according to Shanahan and Shanahan (2008) none are more critical than the preparation of a teaching force that can assess for, and implement, appropriate literacy instruction for a variety of disciplinary literacy tasks. Teacher preparation programs should be preparing prospective teachers to integrate theory and practice in a way that allows them to make decisions to meet the needs of the diverse learners they serve (Darling-Hammond, 2014).

Although reading is usually considered a set of basic skills generalized for a variety of texts, teachers in the middle grades need to develop more advanced literacy skills within their specific discipline (Shanahan & Shanahan, 2008). Common practices that occur in elementary schools such as core reading classes for all students, targeted remedial reading/interventions for struggling readers, and extensive professional development on literacy development are unusual practices at the secondary level (Shanahan & Shanahan, 2012). English Language Arts teachers of middle and high school grades often are not required to take courses in their preparatory programs on foundational reading instruction, and secondary teachers often struggle to support the students with reading difficulties in their classes (Shanahan & Shanahan, 2008).

Students with strong early reading skills (decoding/high frequency word recognition) do not necessarily develop advanced reading skills automatically as they progress through the grades (Zygouris-Coe, 2012). Students need to be taught how to read through the specialized lens of a mathematician, scientist, historian, musician/artist, etc. with both accuracy and understanding (Shanahan & Shanahan, 2008). In the middle grades, students encounter more domain

specific vocabulary, multisyllabic words, and complex sentence structures, and for this reason, teachers need a repertoire of strategies to support students' heavier cognitive loads, extended discourse, and implement fix-up procedures (rereading, looking up words, asking for assistance) to improve comprehension (Schoenbach, Greenleaf & Murphy, 2012).

Specific interdisciplinary skills need to be explicitly taught, modeled, and practiced, yet many teachers have not been trained on how to approach literacy instruction specifically related to the discipline in which they teach. According to the International Literacy Association and National Council of Teachers of English (2017), most teacher preparation programs lack the depth and breadth of a clearly established knowledge base in both content, and pedagogical knowledge, necessary for effective teaching, confidence as a teacher, and an understanding of the complex instructional practices required to meet the diverse needs a classroom presents. Teacher preparation programs at all levels (early childhood, elementary, and secondary) should emphasize knowledge development in foundational reading and language progressions, as well as the knowledge of curriculum content and goals, theories of teaching and learning, child and adolescent development, culturally relevant pedagogy, and discipline specific content and pedagogy (International Literacy Association and National Council of Teachers of English, 2017; Darling-Hammond, 2014).

Teachers' perceptions of students' abilities are another key component to students' success in the classroom. Teachers are typically the first to implement intervening strategies based on observations or perceptions of students' abilities

(Deno, 2003; Eckert & Arbolino, 2005; Begeny et al, 2008). Teacher preparation programs often focus on how to identify students with disabilities but lack the training necessary to prepare teachers to authentically communicate the nature of the learning disability with students and co-create an action plan for academic growth with their students (Abernathy & Taylor, 2009).

Datnow, Choi, Park, and St. John (2018) posit that teachers tend to have varying perceptions about students' abilities based on students' gender, race, socioeconomic status, disability category, and other labels used by colleagues or school staff, and these perceptions have important implications for students' academic trajectories and achievement outcomes. When teachers adopt misconceptions, or ignore how disabilities manifest in the classroom, teachers perpetuate their own fixed mindset approach and reinforce a fixed mindset in students who believe they are incapable of learning (Datnow et al., 2018). Many of the general and special education teachers in District A exhibit fixed mindsets about SWDs' ability to learn and will often deflect responsibility for growing SWDs' literacy capacity to specialists.

Additionally, many teachers in District A are not comfortable analyzing data or using the data to inform instructional practices. With the implementation of NWEA MAP Growth, the district has provided some training for analyzing MAP data and the reporting features available to teachers to support targeted instruction. Dissemination of state standardized assessment data is the responsibility of school-based administrative teams and occasionally content supervisors. There are many inconsistencies between the various content area's

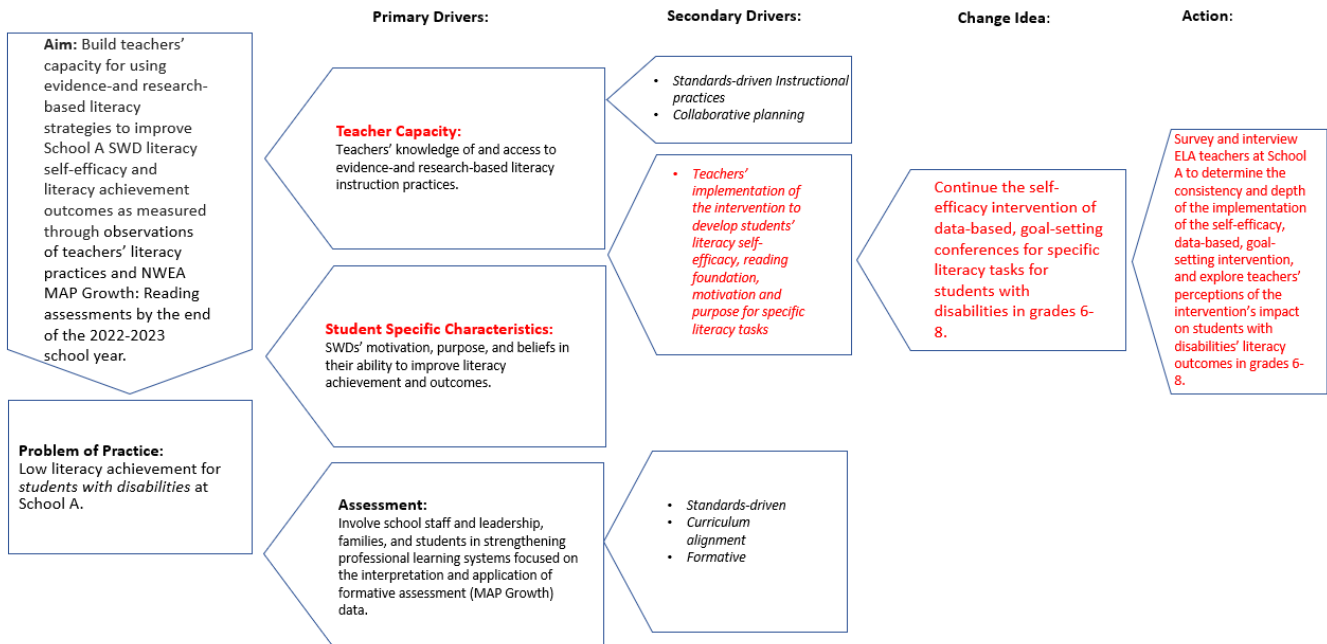
review and application of data to inform instruction, resulting in a lack of data-driven lesson planning and instruction.

Theory of Action Statement

Although there are many factors to consider when addressing the literacy achievement of students with disabilities in the middle grades, this researcher will explore the self-efficacy intervention involving data-based, goal setting conferences for specific literacy tasks for students with disabilities in grades 6-8 at School A. There is extensive evidence that developing students' self-efficacy is directly linked to improved learning outcomes and motivation, yet there is a gap in the research as to which practices yield the best literacy outcomes for SWD in the middle grades. The theory of action is as follows: *if ELA teachers' self-reported data is collected on the efficacy and feasibility of practices associated with the self-efficacy, data-based, goal setting intervention, **and** additional research is conducted on the identified intervention practices, with additional data collected on NWEA MAP Growth: Reading assessments, **then** School A will be able to decide upon plans for future implementation of the self-efficacy, data-based, goal setting intervention, or specific component parts, **resulting in** a more informed, data-driven approach to professional development for ELA teachers at School A regarding specific literacy practices for SWD, monitored through observations of ELA teachers' literacy instruction and NWEA MAP Growth: Reading assessments by the end of the 2022-2023 school year.*

Figure 9

Driver Diagram



Student Self-Efficacy as an Improvement Initiative. Self-efficacy is the belief in one's ability to succeed in achieving an outcome or goal, specific to a task or area of knowledge (Bandura, 1997). Self-efficacy shapes the behaviors and strategies that propel an individual to the desired outcome (Bandura, Barbaranelli, Caprara, & Pastorelli, 2001). High self-efficacy creates confidence in one's ability to exert control over self- motivation, behavior, and environment, which yields students who advocate for their own needs and supports (Bandura, 1997; Klassen, 2002). Research suggests that improving students' self-efficacy can boost achievement, promote emotional health and well-being, and serve as a valid predictor of motivation and learning for all students, including students with disabilities (LaRocca, 2017; Bouffard-Bouchard, 1990; Tabassam & Grainger, 2002). LaRocca (2017) posits that

students with high levels of self-efficacy participate more in class, work harder, persist longer, and have fewer adverse emotional reactions when encountering difficulties than students with lower self-efficacy.

According to self-efficacy research, students whose self-efficacy was raised, regardless of their ability levels, set higher aspirations for themselves, showed greater strategic flexibility in the search for solutions, achieved higher intellectual performances, and were more accurate in evaluating the quality of their performances than were students of equal cognitive ability who were led to believe they lacked the same capabilities (Bouffard-Bouchard, 1990; Bong & Clark, 1999; Tabassam & Grainger, 2002). Bouffard-Bouchard (1990) found that students' self-efficacy beliefs encouraged self-motivation and strategic thinking, and although students with disabilities tend to focus more on lower-order thinking processes (i.e., spelling or grammar) rather than higher order thinking processes (i.e., literary analysis), research suggests that the development of metacognition and positive self-efficacy can improve literacy outcomes for students with disabilities (Klassen, 2002; Tabassam & Grainger, 2002). There is evidence that if students with disabilities have appropriate instruction emphasizing specific skills and strategies, with targeted feedback, they can become more self-determined with a stronger sense of self-efficacy (Shogren, Wehmeyer, Palmer, & Forbes-Pratt, 2015).

Self-determination is a term that has emerged in special education to describe a combination of skills, knowledge, and beliefs, including an understanding of one's own strengths, limitations, capabilities, and effectiveness, that empowers

individuals to engage in goal-directed, self-regulated, autonomous behavior (Field, Martin, Miller, Ward, & Wehmeyer, 1998). While self-efficacy centers on a person's belief that he can accomplish a specific task, self-determination centers on self-motivation and self-regulation (Ross, Perkins, & Bodey, 2016).

Self-determination theory (SDT) and self-efficacy theory (SET) are closely aligned in that they are both based on the belief that humans are "agents of their actions" with multifaceted internal structures that allow them to be fully present in, and responsible for, their decision-making processes and situational outcomes (Sweet, Fortier, Strachan, & Blanchard, 2012; Sugarman & Sokol, 2012).

Although there are similarities between self-determination theory and self-efficacy theory, each theory has its own view on agency. In SET, humans act when they feel that they are capable and will be successful in completing the task or attaining the goal, therefore self-efficacy is driving the change. Even though SDT supports the idea that feeling competent is important, in SDT, theorists believe that autonomy plays a more significant role. SDT theorists believe that if people feel autonomous in their actions, the likelihood of follow-through and sustainability increases, resulting in self-determined motivation as the central element of agency (Sweet, Fortier, Strachan, & Blanchard, 2012). In a meta-analysis conducted by Algozzine, Browder, Karvonen, Test & Wood (2001) of single subject and group subject design studies, evidence was found for the development of self-efficacy to promote elements of self-determined behavior, including self-advocacy, goal setting and attainment, self-awareness, problem-solving skills, and decision-making skills.

Self-efficacy and self-concept are also terms that are often used interchangeably, but there are distinct differences between the two. Self-concept is generally defined as a composite view of oneself (Bong & Skaalvik, 2003). Self-efficacy is the perception that people form of their ability to establish and implement the actions required to accomplish specific learning-related tasks (Chapman & Tunmer, 2003). According to Bong and Skaalvik (2003), self-concept represents an individual's overall perceptions of self, while self-efficacy represents an individual's expectations and convictions of what they can accomplish on specific tasks. Table 11 highlights the key differences between self-concept and self-efficacy.

Table 11*Comparison Between Academic Self-Concept and Academic Self-Efficacy*

Comparison Differences	Academic Self-Concept	Academic Self-Efficacy
<i>Working definition</i>	Knowledge and perceptions about oneself in achievement situations	Convictions for successfully performing given academic tasks at designated levels
<i>Central element</i>	Perceived competence	Perceived confidence
<i>Composition</i>	Cognitive and affective appraisal of self	Cognitive appraisal of self
<i>Nature of competence evaluation</i>	Normative and ipsative	Goal referenced and normative
<i>Judgment specificity</i>	Domain-specific	Domain-specific and context-specific
<i>Dimensionality</i>	Multidimensional	Multidimensional
<i>Structure</i>	Hierarchical	Hierarchical
<i>Time orientation</i>	Past-oriented	Future-oriented
<i>Temporal stability</i>	Stable	Malleable
<i>Predictive outcomes</i>	Motivation, emotion, and performance	Motivation, emotion, cognitive and self-regulatory processes, and performance

Note. Academic Self-Concept and Self-Efficacy: How Different Are They

Really? (Bong, 2003)

When comparing the impact of self-determination, self-concept, and self-efficacy on literacy achievement, there are key findings that highlight the distinction between the theories. Research has shown that increased *self-determination* for SWD has resulted in improved outcomes for secondary and post-secondary students in the areas of employment, financial independence and independent living, and overall life satisfaction (Wehmeyer et al, 2012; Shogren et al, 2015; Shogren et al, 2016) but does not directly correlate to specific literacy

tasks. Using the Self-Description Questionnaire II (SDQ II), Marsh (1985) determined that students' *self-concepts* started out high in elementary school but reached their lowest point in ninth grade before, once again, increasing. Marsh (1985) also noted that verbal achievement was most correlated to verbal self-concept. Increased *self-efficacy*, on the other hand, directly correlates to specific literacy tasks and can improve literacy outcomes for SWD through targeted strategies (LaRocca, 2017; Bandura, 1994; Caprara et al, 2008; Bouffard-Bouchard, 1990, Bandura et al, 1996).

According to Snow (2002), readers bring to the act of reading their cognitive capabilities (attention, memory, critical analytic ability, inferencing, visualization), motivation (a purpose for reading, interest in the content, self-efficacy as a reader), knowledge (vocabulary and topic knowledge, linguistic and discourse knowledge, knowledge of comprehension strategies), and experiences. Guthrie (2008) identified three common motivational profiles of struggling adolescent readers which include: (1) extrinsically motivated readers, who possess some skills but read and comprehend just enough to get a grade or avoid punishment, (2) resistant readers, who are caught in a cycle where they don't engage in school reading activities because they do not see the relevance, and therefore do not build knowledge that can support comprehension and help them make connections to other texts in the future, and (3) students with low self-efficacy, as a result of continued struggles with word reading and higher-order comprehension skills. Developing self-efficacy in SWD in any of the aforementioned areas of reading needs to be addressed through at least one of the

four major routes to self-efficacy including SWDs' past literacy achievements and performances, their level of exposure to vicarious learning opportunities, positive feedback and persuasion from teachers and peers, and experiencing positive emotional connections in the context of literacy tasks (Bandura, 1997).

Personalized Classroom Structures and Practices. The Response to Intervention (RtI) model focuses on instructional needs, data-based decision making, and tiered systems to support all students' academic progress (Shogren, Wehmeyer, & Lane 2016). The concepts of individualized and personalized instruction are often used interchangeably when considering classroom structures and targeted instructional practices to improve student outcomes. Although both take into consideration developmental differences, individualized approaches account for differences in developmental capabilities, whereas personalized approaches address both capability and motivation (Adelman & Taylor, 2012).

When considering the implementation of RtI, student motivation must be considered in the context of what will positively and negatively influence SWDs' motivation to learn. Educators must ascertain the critical components of content, ensure consistent procedures and processes, and personalize learning structures to provide SWD the opportunity for autonomy and choice in the decision-making process. Providing non-threatening opportunities to learn and demonstrate proficiency is also a critical component in motivating SWD in the middle grades (Adelman & Taylor, 2012).

Differentiated Instruction and Universal Design for Learning (UDL).

Universal Design for Learning originated as a universal design movement in the field

of architecture to anticipate needs and provide access to structures for individuals with disabilities. Structures designed through the tenets of universal design accommodate individuals with disabilities, providing access for all users (Hall, Vue, Strangman, & Meyer, 2004). The UDL framework was established on the learning sciences research principles that support the differences in how students are motivated, how they understand information, and how they express knowledge acquisition. UDL supports curriculum development that is effective and inclusive for all students (Rose & Gravel, 2010). Learning environments that are flexible can be adjusted to align with individuals' strengths and learning characteristics, and the curriculum is continuously evolving as the learner grows and progresses (Hall, Vue, Strangman, & Meyer, 2004).

Differentiation is the teacher's responsiveness to the varied abilities and interests among students in the classroom. When a teacher plans for, and flexibly adjusts, lessons to improve the learning experience for students, differentiation is occurring (Tomlinson, 2000). Within differentiation theory, teachers are encouraged to align with the UDL practice of providing multiple means of engagement through choices in instructional tools, adjusting levels of challenge to maintain rigor, and offering choices in context (Hall, Vue, Strangman, & Meyer, 2004).

Cooperative Learning Opportunities. Cooperative learning opportunities have been supported by research as structures for improving learning outcomes for students at all grade levels and varying abilities, as well as for bolstering self-esteem in learners. Research has indicated that adolescents respond positively to learning

opportunities fostering choice, independence, and authority within peer groups. Cooperative learning aligns with the developmental needs of adolescent learners, while promoting pro-social skills, and should be a structure considered by secondary educators (Slavin, 1996).

Collaborative strategic reading (CSR) is a cooperative learning instructional practice that relies on teachers' abilities to facilitate the dialogical process using districts' curriculum to improve struggling learners' ability to comprehend texts through a process of making thinking visible, identifying procedural steps and strategies to enable learning, fostering collaboration and conversation between student pairs and/or student groups, and promoting dialogue between students and the teacher (Vaughn, Klingner, Swanson, Boardman, Roberts, Mohammed, & Stillman-Spisak, 2011). According to a review of research on cooperative learning structures by Slavin (1995, 2011), secondary students in grades 6 through 12 engaging in cooperative learning over a minimum of four-week periods showed a 63% increase in academic achievement versus students in the traditionally taught control groups.

Specific Feedback and Conferring. Specific feedback strategies can support the development of struggling readers' development of self-efficacy. Craven, Marsh, and Debus (1991) provide guidelines for the implementation of feedback strategies for promoting positive student self-efficacy. They suggest that teachers' responses to successful achievement outcomes should refer to: (1) the correct use of a task-specific strategy; (2) the effort and perseverance required for completing the task; and (3) a confirmation to the student that she or he has sufficient ability to successfully manage

such tasks. This type of feedback assists students in developing attributions that emphasize the connection between the role of specific strategies and their purposeful application in causing successful outcomes. When students experience difficulty, teacher feedback should center on: (1) clarification of the inadequate or incorrect use of an appropriate strategy (reteaching the strategy if necessary); (2) the level of effort or perseverance put forth by the student; and (3) affirmation to the student that she or he has enough ability to accomplish the task. The specificity of this type of feedback assists students with disabilities in developing the mindset that failed outcomes are not due to lack of ability, which is usually perceived as an unchangeable factor, but to strategy use and effort, which are areas the student can control.

Involving middle grades students with disabilities in metacognitive conversations about their reading challenges, barriers, and strengths, can help them identify which reading strategies are most beneficial to them when they encounter difficulties (Schoenbach, Greenleaf, & Murphy, 2012). Teachers should encourage adolescent students to set literacy goals, engage in self-reflection and evaluation of literacy tasks, and make decisions about the direction of their learning (Dennis, 2008; Hall, 2006). According to another study by Hall (2007), very little attention has been given to the way teachers and students work together about literacy tasks, texts, and goal setting, yet students who are involved in the instructional decision-making process and metacognition are more engaged and motivated to learn.

D. Past and Current Initiatives to Improve Reading Achievement of Middle Grade Students with Disabilities

National Initiatives to Improve Reading for Students with Disabilities

There are several federal policies and programs that have focused on improving educational outcomes for students with disabilities. These include the 1973 Vocational Rehabilitation Act that was passed to provide equitable opportunities within federal agencies and federally supported institutions for those with disabilities, as well as Public Law 94-142 that was passed in 1975. Public Law 94-142, later renamed The Individuals with Disabilities Education Act (IDEA), prohibits discrimination against students with disabilities in education and grants students the right to a free and appropriate public education (FAPE) that is tailored to their unique needs. The IDEA was part of a tiered approach, in conjunction with the Rehabilitation Act and Americans with Disabilities Act (ADA), to support students with disabilities (National Council on Disability, 2004).

Another important federal law that supports the education of students with disabilities is the Every Student Succeeds Act (ESSA), which is the 2015 reauthorization of the 1965 Elementary and Secondary Education Act (ESEA). Beginning in the 1990s, and continuing with the 2002 ESEA reauthorization of the No Child Left Behind Act (NCLB), states and local districts increased accountability for the achievement of students with disabilities (U.S. Department of Education, 2002). Title 1 of ESSA requires that all students access the same

rigorous content and meet certain benchmarks for achievement, particularly in reading, mathematics, and science (U.S. Department of Education, 2018).

Under NCLB, the Reading First initiative provided \$1.0 billion-per-year funding to ensure schools capitalized on the resources needed to eliminate the reading deficit and help all students read at or above grade level by third grade (U.S. Department of Education, 2008). The Reading First initiative promoted scientifically-based reading instruction in the early grades to ensure that more students received effective reading instruction to reduce the need for remediation in later grades, as well as decrease the number of students diagnosed as needing services under IDEA due to poor reading instruction in the primary grades (NCLB, 2001). Despite these efforts, educators and policy makers have continued to grapple with intervening approaches to improve literacy achievement for struggling learners and students with disabilities.

District A Initiatives to Improve Reading for Students with Disabilities

The school system has implemented a variety of new initiatives in recent years in an attempt to improve literacy achievement for specific subgroups, including students with disabilities. Examples of recent district initiatives include professional development on Differentiation Theory, Universal Design for Learning (UDL), and Learning Focused as instructional frameworks to promote access and rigor for all students. Additionally, District A implemented both a revised Strategic Plan in 2017 and introduced a Comprehensive Literacy Plan (CLP) in 2018 to address district-wide priorities.

The District A Strategic Plan (2017) identified five priority areas including *community engagement, workforce, climate and culture, student outcomes, and equity*, in an effort to provide a more comprehensive and equitable academic experience for all students. The execution of the District A Strategic Plan currently includes equity training for all district staff and students, as well as the identification, and appropriation, of resources based on students' needs. The Strategic Plan highlights the elimination of *all* achievement gaps with a specific focus on specialized groups, including students with disabilities.

District A developed a Comprehensive Literacy Plan (CLP) in 2018, which outlines a strategic approach to improving literacy outcomes for underperforming students in conjunction with the Striving Readers Comprehensive Literacy (SRCL) Grant funds awarded to the district from MSDE. The CLP outlines five critical areas to support literacy practices and processes in school communities including: instructional leadership, strategic professional learning, continuity of standards and evidence-based instruction, comprehensive system of assessments, and tiered instruction and intervention (District A CLP, 2018). The CLP details the district's literacy initiatives with early learning literacy, as well as pre-kindergarten through Grade 12 literacy, with a substantial emphasis on creating a strong literacy foundation from infancy onward, including early intervention and prevention.

In 2019, all District A K-12 schools adopted the NWEA MAP Growth universal screener in accordance with the Multi-Tiered Systems of Support (MTSS) guidelines. The universal screener is administered at the beginning of

the academic school year (BOY), mid-year (MOY), and end of the school year (EOY) to identify students' literacy needs for targeted and differentiated instruction, progress monitor student growth, and appropriately identifying reading interventions for at-risk students (NWEA, 2019).

District A has struggled with consistent implementation of these drivers from building to building throughout the district. Reading interventions are frequently under scrutiny due to adherence to fidelity, inappropriate placement for secondary students, and lack of skill transference to the general education classrooms. Differentiation, UDL, and Learning Focused frameworks have been promoted, and encouraged, through professional development opportunities, but their emphasis ebbs and flows, and implementation and fidelity, once again, depends on the direction from building leadership. The aforementioned drivers have been rolled out by central office for building administrators to implement and enforce, and neither building administrators nor teachers have much voice in the direction of new district initiatives.

Many educators in the district feel that these initiatives have been forced "at" them, not coordinated "with" them, and students with disabilities' literacy scores have not improved. Moving forward, a new set of drivers will be explored to develop self-efficacy in students, with staff and students working together to promote positive change and improved literacy outcomes for students with disabilities. Rather than students with disabilities being passive participants, as has been the case in past attempts to address the low literacy achievement

problem, students will be given voice, purpose, and confidence in the development of targeted literacy skills.

School A Initiatives to Improve Reading for Students with Disabilities in Grades 6-8

School A has complied with the district initiatives to improve student outcomes and close achievement gaps over recent years, with a concentrated effort on implementing the Learning Focused instructional framework as a school-wide professional development approach. The school improvement goal for the Learning Focused framework was to improve teachers' capacity to plan standards-driven lessons, implement evidence-based instructional practices, and support writing across all content areas. This framework, though, was met with resistance as many teachers indicated that it undermined their professional judgement and autonomy for lesson planning within their content area. The Learning Focused framework became a recommended approach to lesson planning but is no longer a requirement.

In 2018, School A entered a collaborative relationship with the Maryland Coalition for Inclusive Education (MCIE) as a demonstration site for inclusive educational practices for students with disabilities. The primary focus for the partnership was to foster inclusion in the general education setting for students with disabilities rather than segregating SWD in self-contained classrooms without the benefit of interacting with general education students in the general education setting. General education teachers work in collaboration with special education teachers, case managers, and inclusive programming specialists to identify and overcome barriers to educating students with disabilities in the

general education setting. Although this intervention was also met with resistance, as many of the general education teachers felt that they were not equipped to differentiate instruction to the degree necessary to meet the needs of students with significant learning needs, the partnership continued, and many teachers have shared that they see the value in continuing this work.

Also in 2018, I was placed at School A as a literacy coach through the Striving Readers Comprehensive Literacy (SRCL) Grant to improve literacy outcomes for specific subgroups of students, including students with disabilities. I was tasked with increasing teachers' capacity for planning standards-and data-driven instruction, implementing evidence- and research-based best literacy practices across all disciplines, and engaging teachers in coaching cycles with student-centered learning goals. Of all the strategies utilized, the practice that seemed to have the greatest impact on SWDs' literacy achievement was data-based student conferences with literacy-specific goal setting.

The intervention was piloted in the fall of 2019 after the administration on the NWEA MAP Growth: Reading beginning-of-the-year (BOY) assessment. The specific components of the intervention included data transparency, student-specific goal setting for literacy skill development, creating an action plan to achieve the goal within a designated time frame, and the identification of the student's purpose for setting the goal. Data transparency involved sharing students' results on MCAP, system-wide assessments, and NWEA MAP Growth, as well as communicating to students what the numbers meant and how the data was used to inform instruction. Based on students' identified strengths and

weaknesses, students selected a deficit skill to target for improvement. With the support of the teacher, students generated a 2-3 step action plan for achieving their literacy goal, and identified why the goal was important to them. The District A ELA Supervisor provided teachers with an intervention overview, basic training, and data and goal setting worksheets to track students' completion of each component, yet teachers were afforded flexibility and autonomy in how the intervention components were implemented.

I met with the ELA teachers and school-based administrators at School A in the fall of 2019 prior to piloting the intervention to share student data, which included the BOY MAP assessment results, the Spring 2019 MCAP/PARCC ELA data, and system-wide writing benchmark data. Using this data, teachers prioritized conferring schedules and, with my support, began meeting with students to engage in data conversations and targeted goal setting based on students' specific literacy goals. The ELA teachers were encouraged to implement a progress monitoring plan to ensure students were on track to meet their literacy goals prior to the mid-year (MOY) NWEA MAP Growth: Reading assessment.

Once students completed their MOY NWEA MAP Growth: Reading assessment, teachers were urged to share students' results in a follow-up conference. Students with disabilities at School A demonstrated an average growth of over 7 points from the beginning of the year MAP administration to the mid-year administration, exceeding the NWEA MAP Growth: Reading projections by more than 3 points. When students were informally interviewed

about their reading growth between administrations, many indicated that knowing their previous scores, setting goals specific to their literacy needs, and receiving teachers' support for reaching those goals, made all the difference to them. Students began believing that they could succeed in reading, and their self-efficacy towards specific literacy tasks was improved.

Due to COVID-19 school closures, students' end-of-the-year (EOY) state and district assessment requirements were waived, and this intervention was not continued in the spring of 2020 as was the original intent. Based on School A's increase in SWDs' reading growth on NWEA MAP, though, the positive development of SWDs' self-efficacy through data-driven conferring and goal setting appears to be an intervention practice worth exploring through further research, as it is the intervention that seems to have yielded the highest literacy achievement outcomes for SWD in grades 6-8 at School A.

E. Proposed Investigation

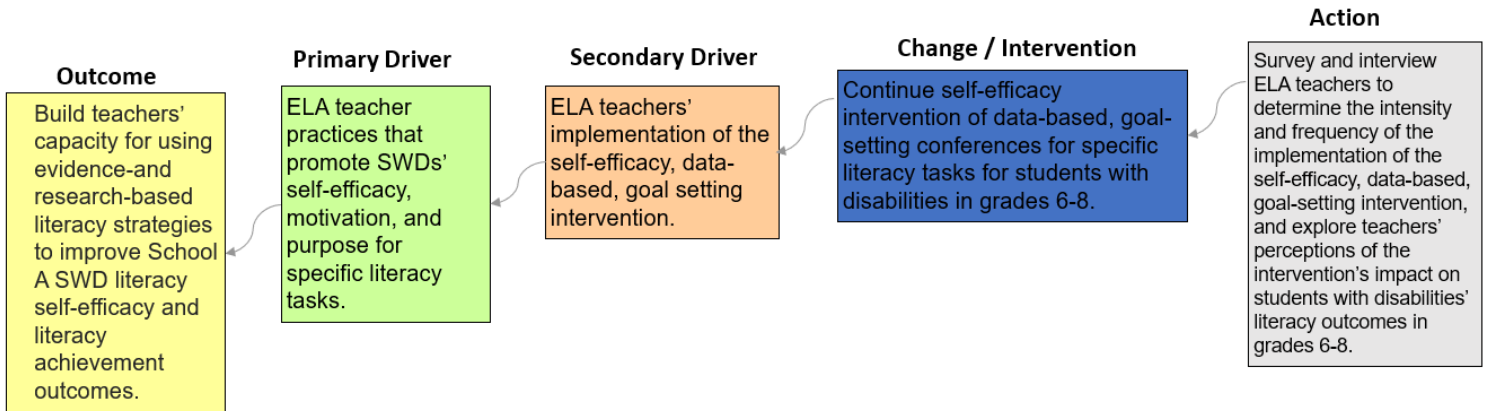
The evidence indicates that prior attempts to address this problem at the national, state, and local levels have been unsuccessful. Personalized classroom structures, differentiated instruction, cooperative learning opportunities, and specific feedback are instructional practices that counter inefficacy and develop students' belief in their abilities to accomplish academic tasks (Bandura, 1994; Klassen 2002; Tabassam & Grainger, 2002; Baker, 2005; Wei, Blackorby, & Schiller, 2011; Vaughn, Klingner, Swanson, Boardman, Roberts, Mohammed, & Stillman-Spisak, 2011; Slavin, 2011). Learning environments that foster access to learning for all students, such as Universal Design and Universal

Design for Learning, promote diverse supports for learning and engagement with the general education curriculum, in addition to embedded opportunities for social and emotional learning (Tomlinson, 2000; Hall, Vue, Strangman, & Meyer, 2004; Rose & Gravel, 2010). The fundamental goal is to cultivate positive academic, social, and behavioral outcomes in schools to prepare students with disabilities to meet the demands of society through the development of self-concept, self-determination, and self-efficacy (Shogren, Wehmeyer, & Lane, 2016).

There is ample evidence within the research on self-efficacy to determine that developing students' self-efficacy is a worthwhile practice, yet there is a gap in the research as to which self-efficacy practices yield the best results with students with disabilities in the area of literacy achievement in the middle grades. There are myriad approaches that support elements of self-efficacy development, and are best instructional practices for all students, but lack the precise cultivation of SWDs' self-efficacy as it relates to their specific literacy needs and desired outcomes.

Figure 10

Theory of Action Chain

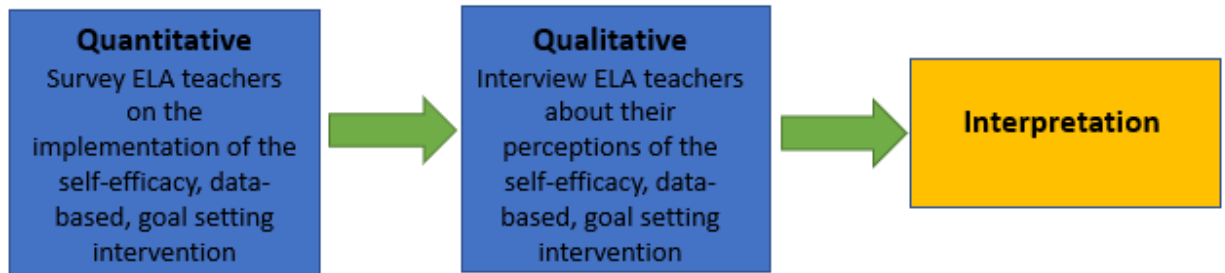


The aim of this proposal is to explore the identified intervention to build teachers' capacity for using self-efficacy-based strategies to improve SWDs' literacy achievement. There is a great sense of urgency in solving this problem in the district if we hope to support SWD's literacy growth, reading proficiency, and academic achievement for success in high school and beyond. As noted earlier, the theory of action for this research states that if more information is obtained about the self-efficacy, data-based, goal setting intervention, then School A can intensify efforts to increase teachers' training in, use of, and fidelity to, practices that the support SWDs' literacy self-efficacy, resulting in improved literacy achievement for SWD in the middle grades at School A. Literacy development is a significant concern for all students, but particularly considering the lack of reading proficiency for students with disabilities in the middle grades at School A as they continue to be identified as the subgroup with the lowest literacy achievement.

The purpose of this study was to understand how the self-efficacy, data-based, goal setting intervention was implemented by ELA teachers at School A in the fall of 2019 to determine *if*, *how*, and *how often* the intervention was implemented and explore teachers' perceptions about the intervention implementation process and potential reasons for the increase in NWEA MAP reading scores. This research was not designed to prove the effectiveness of the intervention, but to understand how the intervention was implemented at School A in District A and explore teachers' perceptions of the intervention process and potential outcomes. The first phase included a quantitative survey for ELA teachers at Schools A, E, and F to determine the frequency and intensity of the intervention implementation within District A, while the subsequent phase included School A ELA teacher interviews as a qualitative exploration of teachers' perceptions of the intervention and potential implications. Themes from this qualitative data were used to generate vital information about the intervention to inform literacy instructional practices in the middle grades at School A, and in District A, moving forward.

Figure 11

Sequential Exploratory Design Study



As noted earlier, the data-based, goal setting intervention was piloted at School A in the fall of 2019. This researcher met with all five ELA teachers at School A, as well as the School A administrative team (Principal, Assistant Principal, and Dean) during the fall of 2019, to support the implementation of the intervention. ELA teachers at School A were tasked with conducting data-informed, goal setting conferences in the fall of 2019 with their students based on state assessment data (MCAP/PARCC) and MAP Growth: Reading from the beginning of year (BOY) administration. Preliminary data from the mid-year MAP Growth: Reading (winter 2020 administration) indicated considerable gains post intervention pilot, with an average overall score increase (over 7 points) for students with disabilities from the BOY administration to the MOY administration. Due to the COVID-19 school closures in the spring of 2020, the intervention was not conducted again during the 2019-2020 school year.

This researcher explored the intervention in greater detail to generate vital information to share with District A and the School A administration and teachers to better inform their literacy instructional practices moving forward.

The ELA teacher survey and interview data helped this researcher determine the frequency, intensity, and fidelity of the intervention implementation and additional variables that contributed to students' literacy achievement outcomes. Future research considerations include a deeper analysis of literacy achievement scores, intervention fidelity and progress monitoring through observations of literacy instruction, and implementation of a self-efficacy measure for SWD.

Academic achievement and performance gaps for students with disabilities directly impact students' academic and post-school success (Biancarosa & Snow, 2006; Blackorby & Sekino, 2010; Lichtenstein & Blackorby, 1995; Winn & Behizadeh, 2011). Developing self-efficacy skills in students with disabilities as they progress throughout their academic careers, and transition to adulthood, is a critical component of their emerging independence (NLTS2, 2005). School A students with disabilities' literacy growth is paramount in securing their successful transition into high school, and beyond, ensuring that they have the necessary foundation for life-long success.

Section 2: Study Design

As identified in the previous section, literacy is a critical life skill. Middle grade students with disabilities, who do not acquire proficient literacy skills, are at a disadvantage heading into high school and the working world (Biancarosa & Snow, 2006; Blackorby & Sekino, 2010; Lichtenstein & Blackorby, 1995; Winn & Behizadeh, 2011). As text complexity increases across content areas in the middle grades, students who struggle to read are at a higher risk for negative academic and social outcomes such as suspension, dropping out, unemployment, and involvement in the justice system (NCLD, 2019). In this section the researcher identified how the purpose supports the Theory of Action, as well how the study design and methods address the research questions.

A. Purpose Statement

The purpose of this study was to understand how the self-efficacy, data-based, goal setting intervention was implemented by ELA teachers at School A in the fall of 2019 to determine *if*, *how*, and *how often* the intervention was implemented (frequency and intensity) and explore teachers' perceptions about the intervention implementation process and potential reasons for the increase in post-intervention NWEA MAP Growth: Reading scores. The research supported analysis of survey and interview data to determine the fidelity of the intervention process and identify trends and variables that emerged as contributing factors to students' literacy outcomes. A document analysis of intervention materials was

conducted to further understand the components of the intervention, training, and district expectations (Stage & Manning, 2003). Throughout the study, the researcher included analytic memos to document the methodological process through personal reflections and considerations post-survey and post-interviews (Phillips & Carr, 2007). By understanding how the self-efficacy, data-based, goal setting intervention pilot was implemented and perceived by ELA teachers in District A, this researcher used the data obtained to generate critical information about the intervention to inform future literacy practices in the middle grades at School A in District A.

B. Aim Statement

The aim of this research is to build teachers' capacity for using evidence- and research-based literacy strategies to improve SWD literacy self-efficacy and literacy achievement outcomes as measured through observations of teachers' literacy practices and NWEA MAP Growth: Reading assessments by the end of the 2022-2023 school year. The two primary drivers targeted to address the aim include *teacher capacity* and *student specific characteristics*. The intention of addressing teacher capacity is to increase teachers' knowledge of, and access to, evidence- and research-based literacy instructional practices, while the intention of addressing student specific characteristics is to increase SWDs' motivation, purpose, and literacy self-efficacy to ultimately improve SWDs' literacy achievement and outcomes. The secondary driver that feeds into both teacher capacity and student specific characteristics involves teachers' use of, and fidelity to, the data-based, goal setting intervention to develop students' literacy

self-efficacy, reading skills foundation, motivation, and purpose for specific literacy tasks.

The change idea for this project is to continue the self-efficacy, data-based, goal setting intervention that was piloted in the fall of 2019 for SWD in grades 6-8 if the research outcomes suggest that this is a practice worth continuing at School A. A review of the NWEA MAP Growth: Reading assessments indicated that SWDs' average reading scores increased post-intervention, yet there were too many unknown variables to deem the intervention as the cause for the rise in scores. This research was not designed to prove the effectiveness of the intervention but to solely understand the intervention as it was delivered at School A, as well as understand how teachers perceived the intervention, implementation process, and potential instructional impacts.

C. Description of Proposed Study

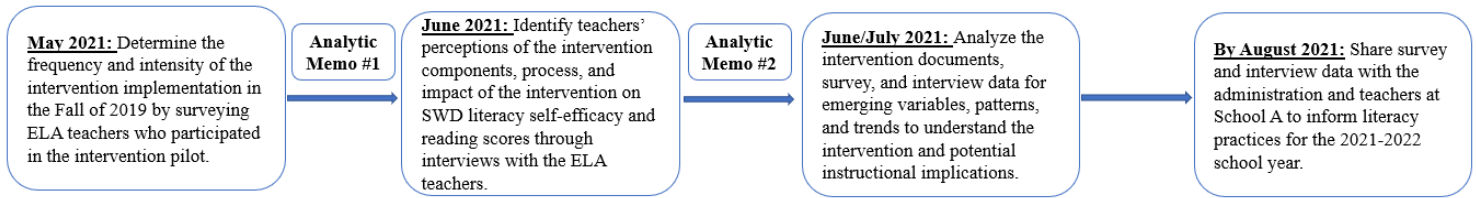
The study consisted of both quantitative and qualitative phases to explore how the intervention was implemented at School A (Tashakkori & Creswell, 2007). By conducting an anonymous, multiple choice, web-based, quantitative survey at three middle schools in District A with similar student populations (Schools A, E, and F), this researcher determined the frequency and intensity of the intervention implementation as reported by the ELA teachers in the fall of 2019. Data was triangulated through ELA teacher survey responses, individual interviews with the ELA teachers at School A, and analysis of intervention documents, to develop a more comprehensive understanding of teachers'

perceptions of the intervention process and potential reasons for the increase in post-intervention NWEA MAP Growth: Reading scores.

The theory of action for this research stated that if ELA teachers' self-reported data is collected on the efficacy and feasibility of practices associated with the self-efficacy, data-based, goal setting intervention, and additional research is conducted on the identified intervention practices, with additional data collected on NWEA MAP Growth: Reading assessments, then School A will be able to decide upon plans for future implementation of the self-efficacy, data-based, goal setting intervention, or specific component parts, resulting in a more informed, data-driven approach to professional development for ELA teachers at School A regarding specific literacy practices for SWD, monitored through observations of ELA teachers' literacy instruction and NWEA MAP Growth: Reading assessments by the end of the 2022-2023 school year. In accordance with the theory of action timeline, by the end of May 2021, the teacher surveys were completed, and data was analyzed to drive the interview protocols based on teachers' self-reported responses. Within the following month, individual interviews were conducted with the ELA teachers at School A to capture their perceptions of the intervention. Post-survey and post-interviews, analytic memos were completed to synthesize what the researcher learned from each research phase. Data from the survey and interviews, as well as the analysis of the intervention documents was studied for emerging variables, patterns, and trends to better understand the intervention and potential instructional implications. Research outcomes and recommendations will be shared with School A stakeholders at the conclusion of the research study in August 2021.

Figure 12

Theory of Action Timeline



D. Design of Proposed Study

The mixed method, sequential exploratory design approach explored the intervention implementation as perceived by the ELA teachers at School A through an examination of teacher surveys, teacher interviews, document analysis, and analytic memos. Themes from this data were used to generate vital information about the intervention to inform literacy instructional practices in the middle grades at School A moving forward.

A mixed methods approach is utilized when both quantitative and qualitative data are needed to answer the research questions (Terrell, 2016; Ivankova, Creswell, & Stick, 2006). In the quantitative strand of this study, the researcher collected baseline data from the survey to determine the frequency and intensity of the intervention implementation. The data from the survey informed the protocols for the interview process. The qualitative strands included individual interviews with four of the five ELA teachers from School A who participated in the intervention pilot in the fall of 2019. The interview questions were crafted to explore teachers' perceptions of the intervention, implementation process, and potential instructional implications.

According to Peshkin (1993), the generative potential of research is limitless and is critical in understanding complex phenomena in the world of education. Therefore, this researcher implemented a triangulation approach by utilizing a document analysis to better understand the intervention training and resource materials provided to the teachers, as well as teacher survey and interview responses from the quantitative and qualitative phases of the study. This methodological triangulation approach drew on multiple qualitative and quantitative methods (survey, interview, and document analysis) to compare, and cross-check, the information obtained through each method to identify emerging themes and codes about the self-efficacy, data-based, goal setting intervention and implementation process (Patton, 2002). According to Patton (2002), triangulation reduces systemic and confirmatory bias by comparing findings between multiple data sources and perspectives.

It should be noted that this study took place during the COVID-19 pandemic, and the learning environments for teachers and students were in a constant state of flux throughout the 2020-2021 school year. Teachers and students were in varying stages of virtual, hybrid, concurrent, and face-to-face teaching and learning which likely impacted the outcomes of this study.

E. Research Questions

The following research questions addressed different aspects of this study:

- How, and to what extent, did the implementation of the intervention and its specific component parts vary between ELA teachers?

- How do the ELA teachers perceive the self-efficacy intervention and its impact on SWD literacy self-efficacy and reading scores?

Methods

There were two phases in this study including a quantitative survey and qualitative interviews, document analysis, and analytic memo. In Phase One, the quantitative phase, an anonymous, multiple choice, web-based survey was provided to ELA teachers at Schools A, E, and F in District A through the Qualtrics platform to determine the frequency and intensity of the intervention pilot as reported by the ELA teachers. The survey responses were used to advise the course of the interview protocols.

In Phase Two, the qualitative phase, individual interviews were conducted with the ELA teachers who piloted the intervention at School A. A document analysis and analytic memos were also included in Phase Two to provide a more comprehensive understanding of the intervention, implementation process, and potential instructional impacts.

Phase One: Survey. According to Creswell (2005), surveys are used to measure perceptions, attitudes, behaviors of a group. Cook & Cook (2008) suggest that surveys are useful in providing information that are difficult to observe directly. In the case of the intervention pilot at Schools A, E, and F, teachers completed the pilot in the fall of 2019 and did not utilize the intervention during the 2020-2021 school year. This researcher was unable to observe the implementation of the intervention in real time because the intervention had not been implemented since the fall of 2019 due to COVID-19 school closures and the transition to virtual learning. The

researcher depended on teachers' self-reported implementation data through the use of an anonymous, multiple choice, web-based survey using the Qualtrics platform. The use of the survey provided a cross-sectional approach to understanding the extent to which the intervention implementation varied between ELA teachers at School A, E, and F (Punch, 2003).

Phase Two: Interviews. Utilizing interviews in qualitative research phases provides researchers with the opportunity to gain insight into the experiences, beliefs, concerns, thinking, and interpretations of others (Patton, 2002; Schostak, 2006). Since the interview is a partial and biased view of specific events as recounted by individual participants, it was critical to analyze teachers' responses thoroughly and consider all variables, patterns, and trends for a more comprehensive understanding of teachers' perceptions of the data-based, goal setting intervention (Schostak, 2006).

Interviews were conducted with four of the five ELA teachers at School A who participated in the intervention pilot in the fall of 2019. The interviews were conducted via Zoom per the research guidelines outlined through the University of Maryland during the COVID-19 pandemic. All interviews were conducted 1:1 with the option of a follow-up interview for clarification purposes, as needed.

This researcher wove together the views of the participants to articulate a more complete picture of the intervention pilot process. The interview protocol was developed in anticipation of the survey outcomes, and revisions were not necessary based on the survey responses.

Phase Two: Analytic Memos. Analytic memos can provide researchers opportunities to capture their thinking and reflect throughout the data analysis process

(Phillips & Carr, 2007). Phillips et al (2007) indicate that analytic memos encourage the researcher to make connections to, or between, data, formulate critical questions of the data, and identify emerging patterns or themes. Gibbs (1988) encourages the use of analytic memos as a tool to increase researchers' awareness of experiences, record the development of ideas and questions, and reflect on the results of methodologies.

An analytic memo was completed after the initial phase involving the quantitative survey. The researcher documented emerging patterns and trends, questions, challenges, and surprises resulting from the survey responses. Finally, the researcher captured reflections about the survey process in general.

A second analytic memo was completed after the individual ELA teacher interviews were conducted. Again, the researcher captured reflections and documented patterns, trends, questions, challenges, and surprises that emerged from the interview process. Analytic memos provided this researcher with an opportunity to engage in a cycle of reflective practice, in alignment with the principles of improvement science, to make connections between the quantitative and qualitative phases of this research, as well as to confront any confirmatory biases about the intervention or its implementation (Gibbs, 1988; Lewis, 2015; Markkanen, Välimäki, Anttila, & Kuuskorpi, 2020).

Phase Two: Document Analysis. Document analysis is typically used to enhance and enrich qualitative research studies (Stage & Manning, 2003). According

to Stage et al (2003), document analysis can triangulate and highlight discrepancies in data, drive questioning, and identify analytical categories.

Intervention training materials, agendas, and the Student Data and Goal Setting Worksheet were analyzed during the qualitative phase to support the understanding of teachers' self-reported implementation and intervention perceptions, discrepancies in the data, and implications moving forward.

Research Setting. School A in District A was selected for this research as the literacy achievement at School A for SWD has been a concern for many years. Although School A has received resources and support through the district, SWD continue to be the lowest performing group of students in the school. It is one of three middle schools (Schools A, E, and F) within the district with consistently low literacy achievement outcomes for all students, particularly for SWD. This researcher was appointed as a literacy coach in grades 6-8 at School A in 2018 through the Striving Readers' Comprehensive Literacy (SRCL) Grant to address the low literacy achievement for specific subgroups of students, including students with disabilities. Therefore, school A is currently within the researcher's sphere of influence.

Sampling and Participants. Purposive sampling was used for this study as participants were identified for their involvement with the self-efficacy, data-based, goal setting intervention pilot in the fall of 2019 (Patton, 2002; Patton, 2015; Palinkas, Horwitz, Green, Wisdom, Duan, & Hoagwood, 2015). The researcher identified the individuals within District A who could provide the information required to answer the research questions. According to Patton (2015) the intent of purposive sampling is to carefully target the selection of participants to align with the

purpose of the study, research questions, and the type of data being collected.

However, due to the limited sampling sizes for both the survey and interview phases, this researcher acknowledges the validity and authenticity of the data does not account for a robust representation of perspectives and experiences as afforded to a study with a larger sampling size (Onwuegbuzie & Johnson, 2006).

In Phase One, the researcher surveyed ELA teachers at Schools A, E, and F who participated in the intervention pilot to develop a deeper understanding of how the intervention was implemented in each of the three middle schools in the southern end of District A (with similar student populations) as self-reported by the ELA teachers. There were 16 ELA teachers between the three middle schools that were invited to participate in the survey based on their knowledge of, and experience with, the intervention and implementation process. The survey addressed the frequency and intensity of the intervention implementation.

In Phase Two, the researcher interviewed three School A ELA teachers for grades 6-8. The former ELA Secondary Supervisor for District A tasked School A's ELA teachers to pilot the intervention. During the intervention pilot, there were five ELA teachers. Four of the ELA teachers remain at School A, and one retired. Two additional ELA teachers were added to the staff for the 2021-2022 school year, but they were not invited to participate in the interview since they were not part of the intervention pilot at School A in the fall of 2019. The ELA teachers at School A who participated in the pilot, including the retired ELA teacher, were contacted via email regarding participation.

As this researcher worked with the ELA teachers at School A for the past three years, and established relationships with the staff, the researcher was cognizant of the potential impact of the relationship on the responses the teachers provided during the interview process. The researcher cultivated the script and protocol for each strand of the study to encourage honest and transparent conversations about the intervention, implementation, and intervention implications. This researcher understood that the relationship with the ELA teachers at School A might be a limiting factor in this study.

Protecting Human Subjects. An expedited IRB was requested for this research due to the minimal risks involving human subjects (ELA teachers in District A) for the anonymous Qualtrics survey and individual teacher interviews.

Human Subject Review and Confidentiality. To protect the ELA teachers at Schools A, E, and F in District A, as well as the University of Maryland, this researcher enacted the following procedures to ensure that no identifiable subject data was used during the course of the research process:

- Survey participants received an email that detailed the survey and its purpose.
- Participants completed a consent form prior to both the survey and interview.
- ELA teacher names were not disclosed to maintain confidentiality.
- Final documents only reported results in aggregate forms.
- Participants were provided access to the results upon request after the completion of the study.

- Data from the survey and interviews was stored on an encrypted flash drive on a password protected computer for three years before being erased.

Instruments and Procedures. There were two phases to the research study. The first phase utilized a quantitative strand (survey) to gather information from the ELA teachers in District A (Schools A, E, and F) as to the intensity and frequency of the intervention implementation. The survey questions were designed by this researcher to answer the first research question: *how, and to what extent, did the implementation of the intervention vary between ELA teachers?*

The second phase included qualitative measures (interviews, analytic memos, and document analysis) to develop a deeper understanding of the intervention process and answer the research question: *how do the ELA teachers perceive the intervention and its impact on SWD literacy self-efficacy and reading scores?*

The study commenced upon approval from the University of Maryland Institutional Review Board and District A's Office of Information Technology. Upon approval from these institutions, an email was sent to the Principals of Schools A, E and F informing them of the study (Appendices A and B). Emails were also sent to the ELA teachers at Schools A, E and F apprising them of the study and requesting their voluntary participation in the survey and subsequent interview, if applicable (Appendices C and D). Reminders were sent to the teachers at Schools A, E, and F after the survey had been open for one week (Appendices E and F).

Phase One: Survey. The survey provided the baseline data for the frequency and intensity of the intervention implementation by the ELA teachers at three middle schools in District A. The survey was administered to the ELA teachers at Schools A, E, and F anonymously through the Qualtrics platform and was available for completion from May 11, 2021, through May 25, 2021.

Once teachers accessed the Qualtrics survey (Appendix G) through the provided link, and consented to participate in the survey, they were prompted to review the opening statement and begin the survey. There were 12 questions for the participants to respond to, and at the completion of the survey, the teachers received a message thanking them for their participation. The Qualtrics survey can be viewed in full in Appendix G.

Phase Two: Interviews. The interviews provided insight into, and greater understanding of, the ELA teachers' perceptions of how the self-efficacy intervention impacted students' literacy achievement and instructional practices for SWD at School A. The interview protocol was finalized after reviewing the survey responses. The signed consent was collected prior to each interview. Each participant was provided a brief overview of the intervention to refresh their memories as the intervention took place approximately 18 months ago, prior to COVID-19 school closures (Appendix H). There were ten interview questions, and the full interview protocol is available for review in Appendix I.

Data Analysis

Data was collected from both the quantitative and qualitative phases of the study. During the first phase, anonymous Qualtrics survey data was analyzed for

the consistency and depth of the intervention implementation at Schools A, E, and F. During the qualitative phase, anecdotal evidence was analyzed from the teacher interviews to determine ELA teachers' perceptions of the intervention process and potential instructional implications. Documents pertaining to the intervention were also analyzed in the qualitative phase to fully understand the intervention pilot process at School A as initiated by District A. Finally, analytic memos were included in the qualitative phase to document this researcher's thinking and emerging questions about the survey and interview data, the connections made between the data, and identification of the emerging trends. This triangulation approach provided a more comprehensive understanding of the intervention pilot at School A.

Analysis of Survey Responses. This researcher used the descriptive statistics available through Qualtrics to analyze the teachers' survey responses and address the research question: *to what extent did the implementation of the intervention vary between ELA teachers?* This researcher analyzed the data for patterns and trends related to the frequency and intensity of the intervention implementation as reported by the ELA teachers during the fall 2019 pilot. Data from the Phase One survey was considered when crafting the protocols for the qualitative teacher interviews (Phase Two).

Analysis of Teacher Interviews. According to Patton (2002), skilled interviewing and analysis is more than just asking questions and reading responses. The process requires an active extraction of themes and codes by engaging in a listening tour of recordings and transcriptions. Multiple opportunities to listen to

recordings, and reread transcriptions, are critical in distilling those major themes and codes (Patton, 2002).

To cultivate a deeper understanding of the self-efficacy, data-based, goal setting intervention, this researcher conducted individual interviews with four of the ELA teachers at School A who piloted the intervention in the fall of 2019. This phase of the study addressed the research questions: *how do the ELA teachers perceive the intervention and its impact on SWD literacy self-efficacy and reading scores?* and *what are the instructional implications for middle grade SWD moving forward in reading?*

Teachers' interview responses were recorded via Zoom. The recordings were uploaded into the transcription software Otter.ai. The artificial intelligence software transcribed the recordings, and identified keywords and common themes, to provide this researcher with insights into the frequency and intensity of the intervention implementation process and potential instructional implications, as self-reported by the ELA teachers.

The data was analyzed for themes and codes that intersected with the survey responses to provide a more comprehensive understanding of the intervention as a complete entity. This researcher utilized a matrix approach to recording the key findings by grouping representative themes that illuminated the understandings of the intervention process. The purpose of the Phase Two qualitative approach was to

reveal variables, patterns, and trends that may inform literacy practices at School A moving forward.

F. Summary

The researcher selected the mixed methods approach outlined in this study to obtain information from ELA teachers at School A in District A about the implementation of the self-efficacy, data-based, goal setting intervention and their perceptions about the intervention's outcomes for SWD in grades 6-8. Data from this study was used to generate critical information about literacy practices for SWD in the middle grades at School A moving forward. This section provided details regarding how the study was conducted. Section 3 will discuss the results and conclusions of this study, the potential for this study to be scaled and replicated in other schools in District A, and recommendations for literacy practices moving forward.

Section 3: Results and Conclusions

Section 1 highlights current practices and past attempts at solving the problem of low literacy achievement for SWD nationally, within the state, and within District A and School A. Section 2 outlines the methods and procedures for Phase One (survey) and Phase Two (interviews) of this research study to explore a self-efficacy, data-based, goal setting literacy intervention piloted in the middle grades at School A in the fall of 2019. In this section, the research study results, key findings, conclusions, and implications for School A and District A are shared.

A. Results

Results and key findings are shared for both phases of the research study including a teacher survey about the implementation of the intervention in the fall of 2019 (Phase One) for English Language Arts (ELA) teachers in grades 6-8 who participated in the self-efficacy, data-based goal setting intervention pilot, as well as ELA teacher interviews (Phase Two) to explore teacher experiences with, and perceptions of, the intervention during the 2019 pilot. Analytic memos (Appendices N and O) were conducted after each phase of the research study to document this researcher's experiences, thinking, and data analysis processes. A document analysis (Appendix P) was also conducted to better understand the resources the teachers had access to and how the intervention pilot was communicated to ELA teachers throughout the intervention implementation window.

Survey Results

The survey invitation was sent to 16 English Language Arts teachers at Schools A, E, and F who had access to the self-efficacy, data-based, goal setting intervention in the fall of 2019. The survey was anonymous, primarily multiple choice and scales (with one open-ended question at the end of the survey), and web-based using the Qualtrics platform. The survey consisted of 12 questions to identify teachers' self-reported intervention experiences. Out of the 16 survey invitations sent, 11 teachers consented to participate. Of those 11 teachers, one respondent completed the consent, but stopped the survey before responding to the first question. Another respondent answered through the third question, and then discontinued the survey. Yet another teacher indicated that after the initial training, the intervention was never implemented. Since the teacher did not implement the intervention, the intervention was concluded for this participant. There were 8 teachers who completed the survey in its entirety, resulting in a participation rate of 50%. Demographic data was not collected for survey participants to preserve confidentiality due to the small number of participants invited to take the survey.

After consenting to participate in the survey, teachers were guided through a series of questions to help this researcher understand how the intervention was implemented and address the research question: *how, and to what extent, did the implementation of the intervention and its specific component parts vary between ELA teachers?*

The first question was multiple choice and asked teachers to identify the frequency in which they implemented the intervention. The choices were: *monthly*,

weekly, daily, and never. Ten teachers responded to this question. Six respondents (60%) noted that the intervention was implemented *monthly*; two respondents (20%) indicated that the intervention was implemented *weekly*; one respondent (10%) indicated that the intervention was implemented *daily*, and one (10%) indicated that the intervention was *never* implemented.

The second question was also multiple choice and asked teachers *how did you implement the self-efficacy, data-based, goal setting intervention?* The choices were: *whole group, small group, 1:1, and not at all.* Nine teachers responded to this question. There were four respondents (44%) who indicated that they administered the intervention with the *whole group*, and another four respondents (44%) indicated *small groups* were utilized. There was only one respondent (11%) who indicated that the intervention was implemented *1:1*.

The third question was also multiple choice and asked *who received the intervention?* The answer choices included: *all students, some students, at-risk students only (including students with disabilities, and no students.* Nine teachers responded to this question. Six teachers (67%) answered *all students* and three (33%) responded *some students*. There were no responses for the option *at-risk students only (including students with disabilities)*, and no responses for *no students*.

Questions four through six were presented in the format of a Likert Scale (ranging from 1-10) with 1 being *never* and 10 being *frequently* for questions four and five. For question six, the Likert Scale descriptions ranged from 1 as *never* to 10 as *extensively*. Results for each question were reported as *Net Promoter Scores* through the Qualtrics descriptive analytics platform. The net promoter score divided

respondents into three categories depending on the selected scale point. *Promoters* were identified as those respondents with scale points at 9 or 10. *Passives* were respondents with scale points at 7 and 8, and *detractors* were respondents with scale points of 0 through 6. Responses for questions four through six were reported with an overall net promoter score which was calculated by subtracting the percentage of *detractors* from the percentage of *promoters*. For example, a 0% would mean that there were equal promoters and detractors, and a negative percentage indicates more detractors than promoters.

Table 12

Survey Results for Questions 4-6

Question 4	<i>To what extent did you monitor students' progress towards their goals between the Fall 2019 and Winter 2020 MAP administrations?</i>	Overall Net Promoter: -37.5%
Question 5	<i>To what extent did you hold follow-up conferences with students prior to the Winter 2020 MAP administration?</i>	Overall Net Promoter: -50%
Question 6	<i>To what extent did you make adjustments to the intervention?</i>	Overall Net Promoter: -37.5%

Question seven returned to a multiple-choice format. This question was designed to follow-up on the components of the intervention that the teachers may have adjusted. The choices included: *data review, goal setting, action plan, timeline, or no components were adjusted*. Teachers were prompted to select all the specific intervention component parts that were adjusted. The *goal setting* component was the

most altered component with five respondents (42%), while the *action steps* were the next highest with three respondents (25%) indicating adjustment. Two teachers (17%) indicated that they adjusted the *data review* component. Adjustments to the *timeline*, or *no components adjusted*, received one response (8%) each.

Question eight was also presented as a Likert Scale ranging from 1-10 with 1 being *not at all* and 10 being *frequently*. Teachers were asked *to what extent did you review students' post-intervention MAP Reading scores with students after the Winter 2020 administration?* Eight teachers responded. Five respondents (63%) identified a scale point in the detractor range, while two (25%) reported a scale point in the passive range. Only one teacher (12%) indicated a scale point in the promoter range, for an overall net promoter score of -50%.

Question nine was a multiple-choice question to determine which students teachers reviewed data with after the mid-year reading assessment. The question asked *which students did you review post-intervention MAP Reading scores with after the Winter 2020 administration?* The answer choices included: *all students*, *some students*, *at-risk students only (including students with disabilities)*, and *no students*. Eight teachers responded to this question. Four respondents (50%) indicated that they reviewed the data with *all students*, while two (25%) respondents indicated that they did not review the data with any students. One respondent (12%) indicated meeting only with *at-risk students (including SWD)*, and one (12%) indicated meeting with *some students*.

Questions ten and eleven were presented in the Likert Scale format (from 1-10) and results were reported as an overall net promoter score. Question ten inquired

how likely would you be to implement this intervention again? The overall net promoter score was 37.5%. Five teachers (63%) responded in the promoter range, one teacher (12%) reported a scale point in the passive range and two teachers (25%) reported scale points in the detractor range.

For question eleven, teachers were directed to consider feasibility of the intervention with the question *in the overall scheme of your responsibilities as an educator, rate the feasibility of including the intervention and its specific components into your instructional schedule.* The overall net promoter score for this question was -25%. Four of the respondents selected a scale point in the detractor range (50%), while two (25%) selected scale points in both the passive and promoter range, respectively.

Question 12 was the final question and was an open-ended opportunity for teachers to share additional thoughts about the intervention. The question asked *is there anything else you would like to add about your experience with the self-efficacy, data-based, goal setting intervention?* Two respondents indicated *no*, but the remaining six respondents provided the following insights:

- *“Valuable information is gathered from these interventions/goal settings/MAP assessments.”*
- *“The Student Snapshots were very helpful.”*
- *“Data conferences were definitely easier in person. I would like to include this intervention next year--either delivered whole group or to targeted students. It did seem to encourage students to do their best on assessments.”*

- *“Enthusiasm was very high at the beginning of the program, but over time seemed to diminish with some students, mostly the ones who professed to hate reading, I believe. I wonder how much peer pressure (as in the perception of reading not being cool) had to do with this?”*
- *“It seemed to motivate students.”*
- *“It is almost impossible to do individually.”*

Key findings from the survey are explored and summarized in the following section.

Summary of Survey Key Findings

The survey provided valuable information to answer the first research question: *how, and to what extent, did the implementation of the intervention and its specific component parts vary between ELA teachers?* The key findings that emerged from the data analysis of the survey are included in Table 13 and summarized below.

Table 13*Key Findings from Survey*

Findings	Survey Question	Evidence
Monthly	Question 1	60% of respondents delivered the intervention monthly
Grouping	Question 2 and 12	44% of respondents indicated whole group; 44% of respondents indicated small group; “I would like to include this intervention next year-either delivered whole group or to targeted students.”
All students	Question 3 and 9	67% of respondents delivered the intervention to all students; 50% of respondents indicated that when post intervention data was shared, it was with <i>all</i> students
Conferring (to include progress monitoring)	Questions 4 and 5	50% detractor for progress monitoring; 63% detractor for conferring prior to MOY assessment
Data	Questions 8, 9, and 12	63% of respondents did not review post intervention MAP Reading scores with students; 50% of respondents indicated that when data was reviewed post intervention it was with <i>all</i> students; “student snapshots [data and goal setting worksheet] were very helpful,” “Valuable information is gathered [...]”
Goal Setting	Question 7	42% of respondents adjusted the goal setting component
Time/Feasibility	Questions 10, 11 and 12	50% of respondents reported in the detractor range for feasibility of implementation; 63% of respondents in the promoter range for the likelihood of implementing the intervention again; “Data conferences were definitely easier in person,” “It is almost impossible to do individually.”
Motivation	Question 12	“It seemed to motivate students,” “Enthusiasm was very high at the beginning, but over time seemed to diminish with some students [...],” “It did seem to encourage students to do their best on assessments.”

Based on the survey responses provided by the ELA teachers at Schools A, E, and F, the most common implementation model for the self-efficacy, data-based, goal setting intervention was monthly delivery within whole or small group settings. Most of the respondents also indicated that the intervention was provided to all students, yet progress monitoring towards students’ goals was not routinely utilized by the

respondents during the intervention implementation window, nor were follow-up conferences held regularly with students prior to taking the mid-year MAP Growth: Reading assessment. Respondents also indicated that the goal setting component was the component most likely to be adjusted when implementing the intervention.

Most respondents indicated that they did not review students' MAP Growth: Reading scores after the winter administration. For those respondents who did conduct follow-up conferences with students to share post-intervention MAP Growth: Reading scores with students, most indicated that they reviewed scores with all students.

Many of the respondents indicated that they would implement the intervention again despite challenges with time constraints and feasibility of implementation. The participants indicated that valuable information was gathered on students from the data review and goal setting components and that the intervention provided some level of motivation for the students.

Interview Results

The interviews were conducted post-survey and were designed to address the research question: *how do the ELA teachers perceive the self-efficacy, data-based, goal setting intervention and its impact on SWD literacy self-efficacy and reading scores?* Four out of the five ELA teachers from School A, who participated in the intervention pilot in the fall of 2019, volunteered to participate in the interview phase of the research study. The ELA teachers at School A who participated in both the intervention pilot and interview phase of this research were White females, each with over ten years of teaching ELA within District A and seven or more years teaching

ELA at School A. The interviews were conducted 1:1 and recorded via Zoom. The recorded interviews were transcribed through the artificial intelligence software Otter.ai. The four participating teachers were identified as *Teacher 1*, *Teacher 2*, *Teacher 3*, and *Teacher 4*.

There were ten interview questions within the interview protocol. The first two questions were designed to put teachers at ease at the start of the interview and encourage reflection on the self-efficacy, data-based, goal setting intervention piloted in the fall of 2019. Question one prompted teachers to share their teaching experiences and backgrounds. Teachers were provided the opportunity to share how long they had been teaching, courses taught, and districts/schools in which they have worked.

Next, teachers were provided an overview of the intervention as a reminder of the intervention and its component parts, as the intervention occurred approximately 18 months prior. Question two prompted teachers to share their experiences with the intervention.

Teacher 1: “The intervention, I thought, was really, initially very, very good. It got the kids really excited about reading.”

Teacher 2: “I think that that [intervention] encouraged them to do their best, especially on the MAP test, because I think it's really hard to ask a student to do something, and to do their best on it, when literally, they don't see how it counts for them. There's no grade attached to it; you're asking them to do it three times in a year, and many of them are not intellectually able to see the big picture yet. I think your honor students, yes. You know, they have that mindset of, well, if I'm going to do

something, I'll do it, I'll do my best, I'll put my best effort into it. Whereas your students who might not be as mature and might not have that confidence, they don't do that. I was floored when I saw some of them rise to the occasion because I'm constantly telling them how smart they are. That was so motivating. The biggest struggle for me is, how do I meet with them individually? And keep the class moving? They might be your not so well-behaved students.”

Teacher 3: “When we started going over it with the kids, we realized that most of the time, the kids don't really know what they got. They don't really know how they scored on tests. And we found that they really liked knowing, even if they weren't great results. I think that for some of them, it was kind of a wakeup call that *oh, somebody else knows I got a zero on this. I didn't actually do it and they know I didn't do it.* I thought that was really powerful. And the next powerful part I think, was the goal setting.”

Teacher 4: “When we went through the intervention, the conferencing with them [students], explaining what the test was, what the scores meant, how they did, I think we saw kind of some light bulbs with the kids like, *oh, so that's what it's for, and that's what it means.* They became energized.”

Question three encouraged teachers to think about the implementation of the intervention with SWD, and specifically about intervention practices that were noteworthy with this population of students.

Teacher 1: “I think the program, with a properly focused child, would help. I think there were kids that other things stood in the way of [...] actually accessing the program.”

Teacher 2: “I think that they enjoyed the 1:1, the smaller talks, and having my undivided attention, because they really crave that. Sometimes I feel like when you're trying to move through material, you're so global, you're so big, that you don't always drill down, so slowing down and taking the time for them to fine tune some of their responses, [...] was really beneficial. And then I also just think, having them build that confidence in themselves and seeing that they grew [...] because I think they are just struggling to get through the day and not seeing for themselves this big picture like [...] *I actually am improving; I actually am learning.*”

Teacher 3: “I had three or four classes that had students with disabilities of some kind. I think that one thing that was really good for them was knowing that we could have a conversation about their progress or their scores, and it was just 1:1. They also knew that everybody else was having those conversations, too, and it wasn't just them. I think that that was good for them.”

Teacher 4: “I thought it was helpful when we pulled some students for 1:1 conferencing, and I think students that fall into this category were probably the ones that would benefit from that the most. Time constraints held us back; we ended up having to do whole group, going over their data and what the scores meant and so on. That worked fine for most everyone, but there was a small group of students that I think really benefited from the 1:1 conferencing, and I think the goal setting piece was very helpful for them.”

For question four, teachers were shown District A and School A MAP Growth: Reading data indicating the rise in reading scores for SWD in grades 6-8 at School A post intervention on the mid-year reading assessment (Figure 1). Teachers

were also provided disaggregated grade level growth data for SWD in grades 6, 7, and 8 at School A (Table 1). After interviewees had an opportunity to review the data, teachers were prompted to share their thoughts regarding the MAP Growth: Reading scores for SWD on the Winter 2020 administration.

Teacher 1: “I think that's pretty fabulous, and I don't know that there were any other changes in the routine [...]. I don't know that there was anything that was intensely done or different from [...] the regular curriculum and curricular approach. So, I would say that must have something to do with it [intervention].”

Teacher 2: “Wow, that's impressive. The eighth grade? I'm shocked by it. [...] I think that, obviously, it [intervention] was definitely worthwhile, and I think that those students responded to it.”

Teacher 3: “We thought it was important that they knew what the scores were, and we were having those conversations. I think that it just really [...] worked for them to care about the test. Because honestly, at the beginning of the year, none of that was talked about, or discussed, or anything, and [...] they really didn't care.”

Teacher 4: “I would attribute it, based on what I saw, to just being transparent about their scores, having them understand, this is how you did. I really think that a lot of the kids [...] had never even really heard how they did, so an assessment means nothing if you don't know your score and do something with it. I think that was probably one of the biggest pieces.”

For question five, teachers were asked about the ways in which they thought the intervention affected students' literacy outcomes on the MAP Growth: Reading assessment.

Teacher 1: “If it causes them to believe that they're better, maybe they're not a whole lot better [...], but they're thinking that way; it's going to pay off.”

Teacher 2: “Sharing the scores with them and taking the time to do that so they know exactly where they are, and then cheerleading them on to do well. I think it was extremely beneficial so that they could track their own progress and set their own goals of what they wanted to accomplish. I just think [...] an overall awareness of where you are must have really resonated with a lot of them [...] and to have somebody take the time to share it with them and discuss how they can improve and what they can do better.”

Teacher 3: “I think that it was positive. I certainly don't think it was negative. I hope that it made them [students] understand that what they're doing is important.”

Teacher 4: “I think that they actually tried. I think we had a lot of kids, and especially those who aren't quite as motivated to do really well in school, [...] it motivated them a little bit.”

Question six centered on students' literacy self-efficacy, which has been defined for this study as students' beliefs in their abilities to accomplish specific literacy tasks (Bandura, 1997). Interviewees were asked to keep that definition in mind as they considered how the intervention affected students' literacy self-efficacy.

Teacher 1: “It [intervention] allowed them to talk to somebody about it, and there was no right or wrong answer, their thoughts were applauded, and their work was validated.”

Teacher 2: “I think having their teachers' undivided attention and knowing that their teacher broke down the information and the data in a way that then they

could understand it, promoted them to then take ownership of it and to challenge themselves [...] to do better.”

Teacher 3: “I think that it definitely made them think about, and care about, the test. I don't know if that translated into their courses in school.”

Teacher 4: “I think where we saw improvement was really the fact that we were able to point out what they [students] did well. I think, just like any teacher does, you try to hit the positive first. The teacher as a cheerleader helped; I do think that it did build some of that efficacy.”

For questions seven and eight, this researcher informed the interviewees that questioning would center on the specific component parts of the intervention. Teachers were reminded that the component parts consisted of *data review*, *goal setting*, generating *action steps*, and identifying a *timeline* with students. For question seven, teachers were prompted to think about the ways in which specific intervention components impacted students' literacy outcomes.

Teacher 1: “I don't know how I could break one step apart from the other. [They] worked in tandem.”

Teacher 2: “I think [...] seeing the data snapshot [data and goal setting worksheet] and seeing the information, and then also their [students] sense of self pride. I like the idea of setting a goal for each student of what they're going to accomplish. I think that that also gives them some type of ownership over what they're doing, and I think it allows them to see the significance of it. I think the challenge becomes making sure that in the classroom, because you have so much to do, that you allow the time to continually revisit it [goal]. You're always keeping that

in mind and not letting it [...] fade away, because it's overwhelming. Sometimes there's so much to do. So, making that a focus, like bringing it up in warmups, and in quick writes as a continual reminder of here's something that we're all working towards, that we all want to be successful. I think you have to keep it [goal] foremost in their mind.”

Teacher 3: “I think that the goal setting is probably the most important just because they're [students] deciding for themselves what they want to do better. But then again, they wouldn't be able to do that [...] accurately if they didn't have the scores. So, I kind of feel like they have to go together.’

Teacher 4: “I think working through the front [data] of that sheet was stronger than the goal setting. I feel like my kids set their goals and then forgot about them. I don't know that they were actually working towards those goals, and having so many kids with different goals, it's almost impossible for the teacher to be on top of that for them.”

Question eight tied together the specific intervention components and students' self-efficacy. Teachers were invited to consider the ways in which specific component parts impacted students' literacy self-efficacy.

Teacher 1: “I don't know that the self-efficacy point or goal was really achieved as well as I would have liked. The [self] advocacy, I would have liked to have seen stronger; that will come, hopefully, with time.”

Teacher 2: “I think the data snapshot, knowing exactly what their score is, and then [...] just having them reflect upon it was important.”

Teacher 3: “I think that when they set a goal, and then they had to think about action steps, that was really difficult for them, they didn't know what that meant. They were just like *I'm going to study more; I'm going to read at home*. So, having to actually put into words and think about, specifically, *what could you do? Or what can you do to make this one little piece better?* I think that breaking that [goal] down, was important and one thing that they could focus on.”

Teacher 4: “I personally did not see the goal setting [...] carried through. I think more of the data transparency and the conferencing, especially with those students who needed that 1:1 conferencing, helped them to believe that they could do better more than the goal setting.”

For the final two questions of the interview, teachers were encouraged to think about how their resources were allocated during the intervention pilot in the fall of 2019, share how those resources were allocated, and provide any additional insight about, or experience with, the intervention pilot that was not covered in the previous questions. Question nine specifically focused on teachers' allocation of resources during the intervention pilot.

Teacher 1: “It was very time intensive. And I think maybe I didn't, in the beginning, spend as much time on the goal setting. I think it worked well with it being small group. If I had tried to roll that out with all my kids, just getting the materials and the paperwork, trying to talk to everybody at some point, I think it would have been undoable.”

Teacher 2: “With my honors students, the first time I met with them individually and talked with them, then we did more of a group goal setting because

they were already there, they saw the significance and the importance of it [...], from their own value system, they want to do well. The other class was way, way more time consuming, meeting with them, and talking with them about what they needed to do. Almost to the point where it was overwhelming because each one of them wasn't working to their full potential [...], but I liked having it all condensed in the snapshot, so that they always had it with them. I definitely saw the benefit of it. So, I thought it [intervention] was extremely helpful and extremely beneficial. I think it gave them confidence that they could do things, and I think that they were proud of it. I do remember several of them, mostly males, who were very insecure with themselves, and had been receiving special education services, see that sense of pride that they can do well.”

Teacher 3: “Transparency of the information was done whole class; everybody had their own document, and they could look at their own scores, but there was no sharing of scores. We would walk around and do small conferences with people if they had questions. And then for the back [data and goal setting worksheet], when they started goal setting, we did that piece by piece [...] looking over their data, and then making their goals and setting their action steps; monitoring, walking around the room, and conferencing with students as needed.”

Teacher 4: “If we were to do any sort of 1:1, and conferring with students about their scores, and setting goals, and so on, we definitely needed help in order to make that happen. I really did find it [intervention] valuable overall, but I do hope that it is realized the amount of time that it takes to do it.”

Question ten asked teachers if there was anything else about the intervention and their experience with the intervention that they wanted to share. Teachers 1, 2, and 3 indicated that there was not. Teacher 4 shared the following:

Teacher 4: “If you're going to have kids set goals, and I think this may have been part of the problem where maybe I didn't see as much of a benefit in it, the kids probably don't always know, *if I'm low on vocabulary, what do I do? What can I do?* I think maybe have some specifics for the teacher and some pieces within our curriculum, some ideas that can be put out there for us [teachers] so that we can help guide students better with goal setting and timelines and such because we run out of time, and the kids are just putting whatever, and then it's not helpful. I think there needs to be a more defined structure for it [goal setting] to be truly beneficial.”

Key findings from the interviews are explored and summarized in the following section.

Summary of Interview Key Findings

The interviews conducted with the ELA teachers at School A, who piloted the self-efficacy, data-based, goal setting intervention in the fall of 2019, provided valuable information to answer the research question *how do the ELA teachers perceive the self-efficacy intervention and its impact on SWD literacy self-efficacy and reading scores?* Themes that emerged during the interviews included *motivation, self-efficacy, time and feasibility, data transparency, goal setting, conferring, and grouping.*

The concept of student motivation emerged early in the interviews with question two, when teachers were prompted to share their experiences with the

intervention. Key words like *excited* and *energized* were used by teachers to describe students' reactions to the intervention. One teacher stated that the intervention "got kids really excited about reading," while another teacher indicated that the students became energized about their learning. The consensus was that students liked knowing their scores on the MAP Growth: Reading assessment and, as a result, were more motivated to work towards their self-identified goals.

Data transparency was reported as a key component of the intervention and a contributing factor to students' increased motivation. Teachers reported that students appreciated seeing their scores and having their scores explained in ways that the students could understand. Knowing how students performed on the literacy assessments (PARCC/MCAP, NWEA MAP Growth: Reading, district writing benchmarks), and understanding the implications of the data, helped students take ownership of their learning.

Students' self-efficacy was also illuminated in the interviews. Teachers indicated that with the transparency of data and individualized goal setting, students were able to take ownership of their scores and the trajectories of their learning progressions. One teacher shared that students' "thoughts were applauded, and their work validated." Although another teacher shared that she felt as though the development of students' self-efficacy was not fully realized in her classroom, the remaining three teachers interviewed disclosed that students' confidence grew through an awareness of their abilities and an actualization of growth-based goal setting.

Another key component of the intervention was goal setting. Three out of the four teachers interviewed stated that the goal setting component was the most critical element of the intervention for improving students' achievement. Teachers' responses included statements such as "I think the goal setting piece was very helpful for them," and "I think that the goal setting is probably the most important just because they're [students] deciding for themselves what they want to do better." One teacher, however, reported that "I feel like my kids set their goals and then forgot about them." The majority of the teachers reported that the goal setting component encouraged students to decide for themselves which literacy skills to work on based on their individual data.

Conferring and grouping emerged as themes and were closely tied to time and feasibility. Although teachers were encouraged to meet with students 1:1 to share data and set goals, all the teachers interviewed reported that conferring with students 1:1 was not feasible within the constraints of a typical middle school day. Teachers indicated that there were some students who benefitted from a 1:1 conference, particularly striving readers and SWD, but that much of the data transparency and goal setting was conducted in whole or small groups.

Time and feasibility of implementation were identified as hindrances with the intervention. Teachers unanimously agreed that the intervention was time intensive. Teachers reported that they struggled with scheduling individual student conferences and monitoring students' goals. A teacher shared, "If we were to do any sort of 1:1, and conferring with students about their scores, and setting goals, and so on, we definitely needed help in order to make that happen." Another teacher indicated that

sharing the data, setting goals with students, and monitoring students' progress towards those goals in each class was overwhelming, while yet another teacher used the term "undoable." The consensus was that the intervention had value, but that the time required to fully implement the intervention was unreasonable.

Analytic Memos

Analytic memos provide avenues for data exploration, contemplation, and communication throughout the research study (Phillips & Carr, 2007; Birk, Chapman, & Francis, 2008; Saldaña, 2011). The first analytic memo was completed after the survey window closed for Phase One of the research study (Appendix N). Through the cultivation of the memo, this researcher was able to explore connections and questions that arose from the analysis of the survey data. The data was considered in conjunction with the research question *how, and to what extent, did the implementation of the intervention and its specific component parts vary between ELA teachers?* The memo highlighted variations noted in the intervention implementation such as whole group administration versus 1:1 conferring and captured emerging hypotheses about time and feasibility of the intervention implementation process.

The second analytic memo was completed post interviews in Phase Two of the research study (Appendix O). The memoing process captured this researcher's concerns about conducting the interviews in the last two weeks of an unprecedented school year as teachers administered end-of-year exams, finalized grades, and prepared their classrooms for summer break. The second analytic memo also provided the opportunity for reflection on the research questions *how and to*

what extent, did the implementation of the intervention and its specific component parts vary between ELA teachers? and how do the ELA teachers perceive the self-efficacy intervention and its impact on SWD literacy self-efficacy and reading scores?

The researcher was able to explore connections between the survey results and interview responses to further cultivate developing themes and hypotheses about preferred delivery models and time and feasibility of intervention implementation.

Document Analysis

Engaging in document analysis provides an opportunity to enrich qualitative research studies and can be used to support triangulation of data (Stage & Manning, 2003). A document analysis was conducted in Phase Two of this research study to better understand how the intervention was communicated to the ELA teachers during the pilot in the fall of 2019 (Appendix P). The document analysis illuminated key themes such as *data transparency, literacy goal setting, data driven decision making, communication, training/resources, and student motivation* through the analysis of the Student Data Snapshot, Goals and Growth Worksheet, Data Snap and Goal Setting PowerPoint for Students, Steps for Reviewing Data Snap and Goals and Growth Worksheet (teacher resource), and various meeting agendas. There were relatively few documents procured for analysis, highlighting the lack of resources, structure, and guidelines provided to the teachers prior to initiating the intervention pilot.

B. Conclusions

The researcher embarked on this research study to understand how the self-efficacy, data-based, goal setting literacy intervention was implemented by ELA teachers in select middle schools in District A in the fall of 2019. The research questions drove inquiry in both the quantitative and qualitative phases of this study. This researcher employed a triangulation approach utilizing data from surveys, interviews, and document analysis to draw conclusions and provide supporting evidence. Conclusions and evidence are presented in this section and are summarized in the Triangulation Matrix available in Appendix Q.

Research Question #1

The first research question inquired *how, and to what extent, did the implementation of the intervention and its specific component parts vary between ELA teachers?*

Conclusion 1. ELA teachers piloting the intervention in the fall of 2019 consistently preferred implementing the intervention *monthly* with *all* students within the *whole* or *small group* setting.

Evidence. Based on the survey responses provided by the ELA teachers at Schools A, E, and F, the most common implementation model for the self-efficacy, data-based, goal setting intervention was monthly delivery within whole or small group settings with all students. Six of the respondents who participated in the survey reported that they implemented the intervention *monthly*, while two respondents indicated that the intervention was implemented *weekly*. Only one respondent indicated that the intervention was implemented on a *daily* basis. When prompted as

to the setting of the intervention, there were four survey respondents who indicated that they administered the intervention with the *whole group*, and another four respondents indicated that the *small group setting* was utilized. There was only one respondent who indicated that the intervention was implemented *1:1* with students. The majority of the survey participants also reported administering the intervention to *all students*, followed by *some students*, and none of the respondents indicated that the intervention was provided only to *at-risk students (including SWD)*. Progress monitoring was not routinely utilized by the respondents during the intervention pilot window, nor were follow-up conferences held regularly with students prior to taking the mid-year MAP Growth: Reading assessment.

The ELA teachers from School A who participated in the interviews reported that there were some students who benefitted from a 1:1 conference, particularly striving readers and SWD, but that much of the data transparency and goal setting was conducted in whole or small groups for the sake of time management.

Conclusion 2. The data review and goal setting components were the intervention parts that were implemented most consistently by teachers.

Evidence. Teachers were provided Student Data Snapshots and Goals and Growth Worksheets for each student, populated with students' individual data, prior to the intervention pilot in the fall of 2019. The front side of this document contained students' scores on MCAP/PARCC, MAP Growth: Reading, and system-wide writing assessments. Sharing this data with students comprised the data review component of the intervention. The backside of the document consisted of the Goals and Growth

Worksheet for the goal setting component. Also included on the Goals and Growth Worksheet were the action steps and timeline components.

Survey respondents indicated that the Student Data Snapshots and Goals and Growth Worksheets provided valuable data to share with students and were helpful in supporting the goal setting process. The survey responses indicated that the *goal setting* component was the most altered component, while the *action steps* were the next highest, followed by the *data review* component. Although the goal setting component was identified as the most modified, it was also the component that the majority of the interviewees indicated was the most critical in promoting students' reading growth.

Three out of the four interviewees indicated that the data review and goal setting components encouraged ownership of learning. Students were encouraged to select literacy goals that were specific and relevant to their individual needs. This also promoted accountability and motivation since students purposefully selected goals that mattered to, and benefited, them. The action steps and timelines seemed to be the components that were underutilized or disregarded. One teacher noted that students were challenged in developing specific action steps to reach their goals. Often students' action steps were too broad or unrelated to their goals. Interviewees suggested that District A should consider providing examples of, or options for, action steps based on goals related to comprehension, fluency, vocabulary, and/or writing to better support teachers and students when engaging with this component.

Research Question #2

The second research question was *how do the ELA teachers perceive the self-efficacy intervention and its impact on SWD literacy self-efficacy and reading scores?*

Conclusion 3. The intervention components of data review and goal setting were perceived by teachers to be beneficial for students but were time intensive for teachers.

Evidence. Participants were provided an opportunity at the conclusion of the survey to share additional experiences, thoughts, or perceptions about the intervention. Five teacher responses centered on the benefits of the intervention, but one teacher indicated that the intervention was “almost impossible to do individually.” Participants indicated that valuable information was gathered on students from the Student Data Snapshot and Goals and Growth Worksheet. Many of the survey respondents indicated that they would implement the intervention again despite challenges with time constraints and feasibility of implementation.

Time and feasibility concerns also emerged during the interview phase. Teachers who were interviewed all agreed that the intervention was time intensive. Teachers reported that they struggled with scheduling individual student conferences and monitoring students’ goals. Interviewees shared that they would need help from a co-teacher or instructional assistant to be able to adequately engage in conferences with students about their scores and set goals in order to maintain classroom management. One teacher indicated that sharing the data, setting goals with students, and monitoring students’ progress towards those goals in each class was overwhelming, while another teacher used the term “undoable.” In summary,

teachers who were interviewed deemed the data review and goal setting components of the intervention valuable but demanding of their time and resources.

The document analysis (Appendix P) highlighted the lack of training, tools, and resources provided to teachers prior to initiating the intervention pilot. The participating ELA teachers in all schools received the Student Data Snapshots and Goals and Growth Worksheets for each student that was populated with students' individual data. Teachers also received a Data Snap and Goal Setting PowerPoint to be used with students to support students' understanding of the data review and goal setting process. Teachers were also provided a checklist outlining the steps for reviewing the intervention components. Minimal training was provided to the teachers during English Language Arts (ELA) deep planning, school improvement team, and ELA core leads meetings as evidenced on the agendas analyzed. During the interview phase, teachers indicated that they would appreciate more training with recommendations and guidelines for structuring the intervention delivery prior to initiating the intervention again.

Conclusion 4. Teachers felt that the intervention increased students' motivation for literacy-based tasks and performance on assessments, particularly for striving readers and SWD.

Evidence. Survey participants noted that the intervention increased enthusiasm and motivation for reading and literacy tasks, particularly at the inception of the intervention and that it encouraged students to do their best on assessments.

During the interview phase, a teacher stated that the intervention "got kids really excited about reading," while another teacher indicated that the students

became energized about their learning. Teachers reported that the data review and goal setting components contributed to students' increased motivation. Teachers noted that students appreciated seeing their scores on the Student Data Snapshot and knowing what those scores meant. Understanding the data helped students take ownership of their learning, while the goal setting component encouraged students to decide for themselves which literacy skills to work on based on their individual data.

At the beginning of the interviews, teachers were provided the growth data for SWD post-intervention on the mid-year MAP Growth: Reading assessment. SWD in grades 6-8 demonstrated average growth ranging from 4.31 points to 12.55 points (Table 1). Teachers noted that the intervention seemed to be the factor that contributed to SWD reading achievement by increasing students' motivation to do well on the assessment. Teachers also coalesced around the idea that the striving readers and SWD benefited the most from the data review and goal setting components of the intervention. Teachers reported that the striving readers and SWD were more motivated by the 1:1 conferences; having their teachers' undivided attention and positive promotion of growth-centered literacy goals was highly beneficial for this population of students.

Limitations. There are several limitations that should be noted for this study. The first limitation noted is that of the COVID-19 school closures. The self-efficacy, data-based, goal setting intervention was piloted in the fall of 2019 between the beginning-of-the-year MAP Growth: Reading assessment and the mid-year administration in the winter of 2020. Shortly after the mid-year reading assessment, schools were closed due to the pandemic. The intervention was not continued in the

spring of 2020 due to the school closures and transition to virtual learning for the remainder of the 2019-2020 school year. This resulted in only one semester of implementation of the intervention rather than the full academic year as originally intended. Virtual instruction continued as the 2020-2021 school year began and transitioned to hybrid instruction in the spring of 2021 when this study was conducted. The intervention was not mandated after fall 2019 due to the variations of instructional delivery models (i.e., virtual, in-person, hybrid, and concurrent).

In addition, the University of Maryland imposed certain restrictions on research during the COVID-19 closures. These restrictions required that all interviews were conducted virtually via Zoom. There were no technology issues encountered, and all participants were able to access, and log in to, the virtual meetings. Norms were established at the onset of the interview, as well, to mitigate this limitation. Nonetheless, it is not possible to determine what limitations in communication (verbal and nonverbal), and participants comfort level, might have resulted from the interview format.

In both the quantitative and qualitative phases of this study, participants were asked to self-report experiences with, and perceptions about, the intervention that occurred approximately 18 months prior, contributing to a phenomenon known as recall bias. Recall bias is defined as an error occurring when study participants do not accurately remember past events or experiences and/or omit details (Spencer, Brassey, & Mahtani, 2017). In addition, interference theory (Farmaki, 2021) suggests another possible limitation to participants' accurate recollections of their experiences with the intervention. Interference theory suggests that participants' memories of

similar events (i.e., pre-and post- COVID-19) intervention implementation) may interfere with each other. In addition, Farmaki notes that memory retrieval in a crisis situation is also affected, making it more challenging for individuals to accurately recall events and experiences. Attempts to minimize these limitations included providing study participants an overview of the intervention prior to both the survey and interviews and crafting survey items and interview questions that were both objective and reflected specific elements of the intervention. During the interview phase, one teacher repeatedly went off topic, but the researcher was able to redirect the teacher and maintain fidelity to the interview protocol.

The limited sample of teachers in both the survey and interview phases raises both sample selection bias and validity concerns. Sample selection bias occurs when research participants' responses may not be representative of the population being analyzed (Nunan, Bankhead, & Aronson, 2017). The study was never intended as a comprehensive evaluation of the intervention, in large part, due to the changes in implementation due to COVID-19. It was exploratory and intended to obtain a sense of participating teachers' perceptions and experiences. The sampling was purposive and included only those ELA teachers in the district who piloted the intervention in the fall of 2019. Therefore, the pool of possible respondents was small by design. Sixteen participants were invited to take the survey, yet only eight completed the survey in its entirety. Despite several email reminders, the response rate of 50% is a limitation. Due to this researchers' sphere of influence at School A, only the five ELA teachers there, who implemented the intervention, were invited to participate in the interviews. Of that number, four agreed to be interviewed. One teacher declined

indicating that she was too busy finishing out the school year. Also noted is a lack of diversity among participants. Demographic information was not obtained for the participants of the survey to maintain confidentiality as the survey was anonymous and the demographic information could have led to teacher identification.

In both phases of this study there were a limited number of participants invited, and an even smaller number of participants who opted in, resulting in a limited number of voices represented in the results. The response rate, as well as questions about the recall, are likely a reflection of both COVID-19 and the timing of the research study. The study was conducted during the last few weeks of an unprecedented school year. Despite four email reminders sent to garner participation in the survey and interviews, low responses must be viewed as a limitation.

Finally, researcher bias is a possible limitation in this study. The researcher worked at School A during the intervention pilot, serving as colleague and resource to the ELA teachers who participated in the intervention pilot. This researcher sought to minimize researcher bias through carefully crafted research questions, survey questions, and interview protocols, as well as purposeful data collection methods and analysis that utilized a triangulation approach to verify key findings across multiple data sources.

C. Implications for District A and School A

In the previous sections, the results and limitations were discussed. However, the implications for the school system and School A go beyond the report of findings and require deeper analysis and consideration. As a middle school literacy coach at School A in District A, I have seen students negatively impacted by low literacy

achievement, particularly striving readers and SWD. Students with disabilities frequently lack self-efficacy and motivation in reading and other literacy skills due to inadequate literacy skills. This results in low literacy achievement on state standardized assessments and district benchmarks in School A and the district. School A was identified by the district as a middle school in need of additional support in 2018. While two other middle schools were also identified as middle schools in need of support (Schools E and F), School A was the primary focus of this study as it encompassed my sphere of influence as a literacy coach in the building.

In the fall of 2019, School A, along with Schools E and F, piloted a self-efficacy, data-based, goal setting intervention as directed by the ELA Supervisor for Secondary Schools. Initial findings suggested growth in the literacy achievement of SWD on the NWEA MAP Growth: Reading assessment post-intervention. This study was designed to understand how ELA teachers in the three middle schools reported implementing the self-efficacy, data-based, goal setting intervention. In addition, the study explored the perceptions of ELA teachers in School A regarding the intervention implementation process and potential reasons for the increase in post-intervention NWEA MAP reading scores.

Implication 1: Need for Evaluation of the Intervention

Results of this exploratory study indicated that ELA teachers report that they did not have the time or resources to implement all components of the self-efficacy intervention. Further, the lack of student progress data makes it impossible to conclude that the intervention was effective or responsible for the 2019 mid-year MAP Growth: Reading assessment gains. To establish effectiveness, a much more

carefully designed evaluation that includes more teachers and classrooms, as well as structured classroom observations and more frequent monitoring of student data, will be required. This needs to be considered before the intervention is “scaled up” in District A.

Implication 2: Listen to Teachers Early in Planning

Despite the limitations noted earlier, this study did yield some interesting and important findings for the system. Among these are the positive perceptions among teachers of at least some aspects of the intervention. Teachers indicated that 1:1 conferring with students was beneficial in reviewing data and setting goals, particularly with striving readers and SWD. Teachers reported students being motivated and “energized.” These were important goals of the intervention, yet the current structures in place prevent teachers from implementing the intervention as intended.

Unfortunately, due to the time constraints, teachers reported not having sufficient time or support to deliver the intervention to individual, or targeted groups, of students. Thus, the majority of teachers reported implementing the intervention mostly within the whole group setting. The lack of time is not something that can be fixed solely by adjusting the intervention. The time constraints are more a system issue that includes how schools and classes are organized, the demands of curriculum and pacing, and schedules for state and district mandated assessments.

In order for the self-efficacy, data-based, goal setting intervention, or any other intervention, to have a chance to demonstrate effectiveness, District A and School A should consider restructuring the classroom environment to allow for

adequate time, flexible grouping, and an appropriate allocation of human resources for teachers. These needs should be addressed for teachers returning to school buildings for in-person instruction in the upcoming school year, as well those teaching in the district's virtual academy.

Implication 3: Identify and Prepare Structures and Supports

District A must carefully consider the types of supports teachers may need to implement an intervention before launching even a pilot program. Teachers need supports in place to facilitate intervention implementation with fidelity. The document analysis revealed that very few resources and tools were provided to the ELA teachers responsible for implementing the intervention, and very little time was devoted to training teachers prior to initiating the intervention. Resources for the data review and goal setting components were the only resources provided to teachers, which may have been why the teachers reported using these components most frequently. Teachers were left on their own to design instructional procedures and/or materials to address the needs of specific students. In particular, they noted that not having a variety of materials to differentiate instruction within reading comprehension and vocabulary acquisition and usage prevented them from fully utilizing all the intervention components. Teachers also noted that if the intervention was to be delivered 1:1, and progress monitoring conferences were to be held regularly, another teacher, or instructional assistant, would be needed in the classroom to facilitate these components.

In summary, the district should consider the findings from this study as a guideline for future pilot program implementation. The district should ensure that the

organizational structures are configured to appropriately support the implementation of the intervention. Then the district can embark on developing clear and precise intervention protocols, training tools, progress monitoring resources, and a set of materials and practices that support differentiated instruction. Only after appropriate structures are in place, and clear guidelines and resources are developed, will teachers be able to focus their time and energy on the delivery of the intervention with fidelity.

Implication 4: Developing Students' Literacy Self-efficacy

Students' literacy self-efficacy was an area of particular interest in this study, as well as in the intervention that was implemented. The piloted intervention was district-designed to improve students' literacy self-efficacy and literacy achievement outcomes. It was based on the work of Bandura (1997) who defines self-efficacy as students' beliefs in their abilities to accomplish specific tasks.

During both the survey and interview phases, teachers reported that the intervention seemed to increase students' enthusiasm and motivation for reading, particularly striving readers and SWD, yet the feedback from the teachers was less concrete regarding the impact of the intervention on the development of students' self-efficacy. Some teachers noted that the intervention may have supported students' self-efficacy, but others indicated uncertainty about the impact of the intervention on self-efficacy with comments like, "I don't know that the self-efficacy point or goal was really achieved as well as I would have liked."

When teachers were able to confer with students 1:1, they indicated that the students responded positively to having their teachers' undivided attention. Striving readers and SWD, in particular, seemed to benefit from the 1:1 interaction with their

teacher while reviewing the data and generating student-specific goals. During the interview, one teacher noted that the individual conferences helped students to understand their data and take ownership of their learning. One-on-one conferring affords teachers the opportunity to co-develop student specific goals with students, as well as provide targeted feedback and/or targeted instruction, which can positively impact students' literacy self-efficacy (Craven, Marsh, & Debus, 1991; Hall, 2006; Dennis, 2008; Schoenbach, Greenleaf, & Murphy, 2012).

As students return to school from the COVID-19 school closures and virtual learning, there is an even greater need to connect with students, foster relationship building, set learning goals, and promote positive self-efficacy. Conferring with students about their individual data, and setting specific literacy goals together, fosters connections and creates opportunities to strengthen bonds between teachers and students at a time when many students feel isolated and disassociated from school.

Moving forward, it will be vital for both District A and School A to have a shared understanding of what literacy self-efficacy is, how literacy self-efficacy impacts students' reading, and a clear identification of evidence-based practices, such as conferring, that encourage the development of students' literacy self-efficacy.

D. Summary

The purpose of this mixed method, sequential exploratory design study was to understand how the self-efficacy, data-based, goal setting intervention was implemented by ELA teachers in the fall of 2019 to determine *if*, *how*, and *how often* the intervention was implemented and explore teachers' perceptions

about the intervention implementation process and potential reasons for the increase in NWEA MAP reading scores. This research was not designed to prove the effectiveness of the intervention, but to understand how the intervention was implemented and explore ELA teachers' perceptions of the intervention process and potential outcomes. As noted in Sections 1 and 2, the theory of action for this research stated that if more information was obtained about the self-efficacy, data-based, goal setting intervention, then School A could intensify efforts to increase teachers' training in, use of, and fidelity to, practices that supported SWDs' literacy self-efficacy, resulting in improved literacy achievement for SWD in the middle grades.

The data collected from this research, while limited, provided valuable information for District A and School A to consider prior to continuing the intervention or other future pilots. Analysis and synthesis of the data collected support the recommendations for District A and School A to reconfigure their organizational structures to allow teachers to implement the intervention with fidelity, as well as promote evidence-based practices that develop students' literacy self-efficacy. These next steps will be critical in moving the district, and School A, closer to building teachers' capacity for using evidence- and research-based literacy strategies, increasing students' literacy self-efficacy, and improving literacy achievement outcomes for SWD moving forward.

Appendices

Appendix A

Email to Principals Informing of Study and Survey (Schools A, E, and F) INSERT DATE

Dear Principal,

I would like to make you aware of my research study. I will be conducting an anonymous survey as part of my research to fulfill the partial requirements for my Doctorate in Education (EdD) under the supervision of my dissertation advisor, Dr. Margaret McLaughlin, at the University of Maryland.

My dissertation “**Literacy for Students with Disabilities (SWD) in the Middle Grades: An Exploration of Self-efficacy, Data-based Goal Setting as a Literacy Intervention**” is a study of the implementation experiences of 6th, 7th, and 8th grade ELA teachers who participated in the 2019 pilot of the data-based, goal setting intervention. Your school was one of the pilot sites.

The purpose of the survey is to obtain information from those ELA teachers to determine if, how, and how often the intervention was implemented. The survey will be anonymous and will consist of 12 questions that should take teachers approximately 15 minutes to complete. I will be contacting the ELA teachers individually via email to ask for their voluntary participation in the survey. The email will contain a link to the survey.

This study has been approved by (NAME), following district guidelines and procedures. Data obtained throughout this study will generate critical information about the intervention to inform future literacy practices for students in the middle grades in District A. If you would like a final copy of the study, I am happy to provide one for you. If you have questions, or would like additional information, please contact me [REDACTED].

Sincerely,
Lisa L. Yankanich, Doctoral Candidate
Doctorate in Education

Appendix B

Email to Principal Informing of Interviews (School A)

INSERT DATE

Dear Principal,

I would like to make you aware of the second phase of my study. After the conclusion of the web-based survey, I will be conducting individual interviews of the 6th, 7th, and 8th grade ELA teachers who implemented the data-based, goal setting intervention piloted in the Fall of 2019. The interviews are part of my research to fulfill the partial requirements for my Doctorate in Education (EdD) under the supervision of my dissertation advisor, Dr. Margaret McLaughlin, at the University of Maryland for my dissertation “**Literacy for Students with Disabilities (SWD) in the Middle Grades: An Exploration of Self-efficacy, Data-based Goal Setting as a Literacy Intervention.**”

The purpose of the interviews is to explore the ELA teachers’ perceptions of the intervention in general, specific components of the intervention, training resources and materials, and possible reasons for the post-intervention increase in SWD reading scores. The interviews will be conducted virtually, or in person, based on teacher preference. The interview should take approximately 45 minutes and will be conducted outside of the contractual school day. Confidentiality will be maintained. Individual teacher and student names will not be disclosed in the written research. This study has been approved by (NAME), following district guidelines and procedures.

Literacy is a critical skill for life. Adolescents need strong literacy skills to succeed in middle and high school. Students who do not acquire these skills find themselves at a serious disadvantage academically, socially, as civil participants, and in the working world. Data obtained throughout this study will generate critical information about the intervention to inform future literacy practices for students in the middle grades in District A. If you would like a final copy of the study, I am happy to provide one for you. If you have questions, or would like additional information, please contact me [REDACTED].

Sincerely,
Lisa L. Yankanich, Doctoral Candidate
Doctorate in Education

Appendix C

Personalized Email to ELA Teachers at School A About Survey and Interview INSERT DATE

Dear (TEACHER NAME),

I am requesting your assistance with participation in a research study to complete my dissertation “**Literacy for Students with Disabilities (SWD) in the Middle Grades: An Exploration of Self-efficacy, Data-based Goal Setting as a Literacy Intervention**” as part of my Doctorate in Education under the supervision of my dissertation advisor, Dr. Margaret McLaughlin, at the University of Maryland. The study centers on the exploration of the data-based, goal setting intervention piloted during the Fall of 2019 and potential instructional implications.

The intention of this research is to understand how the self-efficacy, data-based, goal setting intervention was implemented in the Fall of 2019 and explore your perceptions about the intervention implementation process and potential reasons for the increase in post-intervention NWEA MAP reading scores. The study includes an anonymous survey to determine the consistency and depth of the intervention implementation and individual interviews to explore your perceptions of the intervention and potential implications.

The first phase will be a brief, anonymous, web-based survey. The survey will consist of 12 questions about the intervention implementation and should take less than 15 minutes to complete.

Survey Link:

The survey can be accessed by clicking on the link above and will remain open until (DATE). The consent to participate will be at the beginning of the survey. The survey is anonymous, and confidentiality will be maintained.

The second phase will be individual interviews to explore your perceptions of the intervention in general, specific components of the intervention, training resources and materials, and possible reasons for the post-intervention increase in SWD reading scores. The interviews will be conducted virtually, or in person, based on your preference. The interview should take approximately 45 minutes and will be conducted outside of the contractual school day. You will be compensated post-interview with a \$20.00 Amazon gift card for your participation. Confidentiality will be maintained. No names will be disclosed in the written research. This study has been approved by (NAME), following district guidelines and procedures.

Literacy is a critical skill for life. Adolescents need strong literacy skills to succeed in middle and high school. Students who do not acquire these skills find themselves at a serious disadvantage academically, socially, as civil participants, and in the working world. Data obtained throughout this study will generate critical information about the intervention to inform future professional development and literacy practices at (SCHOOL A).

Please respond to this email if you are willing to participate in the interview, as participation is voluntary. Once I receive your agreement, I will forward you a

consent form to sign, and I will contact you to coordinate a time for the interview. If you have questions, or would like additional information, please contact me [REDACTED]. Thank you very much for your time and consideration.

Sincerely,
Lisa L. Yankanich, Doctoral Candidate
Doctorate in Education

Appendix D

Personalized Email to ELA Teachers at Schools E and F About Survey

INSERT DATE

Dear (TEACHER NAME),

I am requesting your assistance with participation in a research study to complete my dissertation “**Literacy for Students with Disabilities (SWD) in the Middle Grades: An Exploration of Self-efficacy, Data-based Goal Setting as a Literacy Intervention**” as part of my Doctorate in Education under the supervision of my dissertation advisor, Dr. Margaret McLaughlin, at the University of Maryland. The study centers on the exploration of the data-based, goal setting intervention piloted during the Fall of 2019 and potential instructional implications.

The intention of this research is to understand how the self-efficacy, data-based, goal setting intervention was implemented in the Fall of 2019 and explore your perceptions about the intervention implementation process and potential reasons for the increase in post-intervention NWEA MAP reading scores. The study includes a survey to determine the consistency and depth of the intervention implementation. The survey will be brief, anonymous, and web-based. The survey will consist of 12 questions about the intervention implementation and should take less than 15 minutes to complete. If you did not administer the data-based, goal setting intervention in the Fall of 2019, please do not click on the link or partake in the survey.

Survey Link: [REDACTED]

The survey can be accessed by clicking on the link above and will remain open until (DATE). The consent to participate will be at the beginning of the survey. The survey is anonymous, and confidentiality will be maintained. This study has been approved by (NAME), following district guidelines and procedures.

Literacy is a critical skill for life. Adolescents need strong literacy skills to succeed in middle and high school. Students who do not acquire these skills find themselves at a serious disadvantage academically, socially, as civil participants, and in the working world. Data obtained throughout this study will generate critical information about the intervention to inform future professional development and literacy practices in the middle grades.

If you have questions, or would like additional information, please contact me [REDACTED]. Thank you very much for your time and consideration.

Sincerely,

Lisa L. Yankanich, Doctoral Candidate
Doctorate in Education

Appendix E

Reminder Email to ELA Teachers at School A About Survey and Interview INSERT DATE

Dear (TEACHER NAME),

This is a reminder to please complete the survey and consider participation in the interview for the dissertation study “**Literacy for Students with Disabilities (SWD) in the Middle Grades: An Exploration of Self-efficacy, Data-based Goal Setting as a Literacy Intervention.**” Your contribution is greatly valued to understand how the self-efficacy, data-based, goal setting intervention was implemented in the Fall of 2019 and explore your perceptions about the intervention implementation process and potential reasons for the increase in post-intervention NWEA MAP reading scores.

The survey consists of 12 questions about the intervention implementation and should take less than 15 minutes to complete. Please click on the following link to initiate the anonymous survey:

Survey Link: [REDACTED]

Please also consider participating in the individual interviews to explore your perceptions of the intervention in general, specific components of the intervention, training resources and materials, and possible reasons for the post-intervention increase in SWD reading scores. The interviews will be conducted virtually, or in person, based on your preference. The interview should take approximately 45 minutes and will be conducted outside of the contractual school day. You will be compensated post-interview with a \$20.00 Amazon gift card for your participation.

Confidentiality will be maintained throughout the study. Data obtained will generate critical information about the intervention to inform future professional development and literacy practices at (SCHOOL A).

Please respond to this email if you are willing to participate in the interview, as participation is voluntary. Once I receive your agreement, I will forward you a consent form to sign, and I will contact you to coordinate a time for the interview. If you have questions, or would like additional information, please contact me [REDACTED]. Thank you very much for your time and consideration.

Sincerely,
Lisa L. Yankanich, Doctoral Candidate
Doctorate in Education

Appendix F

Reminder Email to ELA Teachers at Schools E and F About Survey

INSERT DATE

Dear (TEACHER NAME),

This is a reminder to please complete the survey for the dissertation study “**Literacy for Students with Disabilities (SWD) in the Middle Grades: An Exploration of Self-efficacy, Data-based Goal Setting as a Literacy Intervention.**” Your contribution is greatly valued to understand how the self-efficacy, data-based, goal setting intervention was implemented in the Fall of 2019 and explore your perceptions about the intervention implementation process and potential reasons for the increase in post-intervention NWEA MAP reading scores.

The survey consists of 12 questions about the intervention implementation and should take less than 15 minutes to complete. If you did not administer the data-based, goal setting intervention in the Fall of 2019, please do not click on the link or partake in the survey.

You may access the survey by clicking on the following link:

Survey Link: [REDACTED]

Confidentiality will be maintained throughout the study. Data obtained will generate critical information about the intervention to inform future professional development and literacy practices in (DISTRICT A).

If you have questions, or would like additional information, please contact me [REDACTED]. Thank you very much for your time and consideration.

Sincerely,
Lisa L. Yankanich, Doctoral Candidate
Doctorate in Education

Appendix G

Qualtrics Intervention Survey



This survey is designed to gather information on the implementation of the self-efficacy, data-based, goal setting intervention piloted during the Fall of 2019 between the beginning of the year (BOY) MAP Growth: Reading administration and the mid-year (MOY) administration. An area of particular interest in this study is students' literacy self-efficacy. For the purposes of this study, literacy self-efficacy is defined as students' beliefs in their abilities to accomplish specific literacy tasks. I understand that we have had an unprecedented year, and I am asking you to recall events from 18 months ago. Time constraints in teaching are always a consideration, along with the demands of curriculum expectations, pacing, and the myriad other factors that comprise a teacher's day. This survey is designed to gather information on your experience with the intervention; there is no right or wrong answer and there is no expected outcome.

The survey is anonymous, and confidentiality will be maintained. The responses will be used to understand your collective experiences with the intervention and to help inform literacy practices in the middle grades in the future.

The survey consists of 12 questions and should take no more than 15 minutes to complete.

Thank you very much for your participation!

Institutional Review Board

1204 Marie Mount Hall • 7614 Regents Drive • College Park, MD 20742 • 301-405-4212 • irb@umd.edu

CONSENT TO PARTICIPATE

Project Title	<i>Literacy for Students with Disabilities in the Middle Grades: An Exploration of Self-efficacy, Data-based, Goal Setting as a Literacy Intervention.</i>
Purpose of the Study	<p><i>I, Lisa L. Yankanich, am conducting this study at the University of Maryland, College Park as part of my dissertation under the direction of Dr. Margaret McLaughlin. This consent form only addresses the survey portion of this study.</i></p> <p><i>I am inviting you to participate in this research project because you are an English Language Arts (ELA) teacher at a middle school that had access to the data-based, goal setting intervention piloted in the Fall of 2019.</i></p> <p><i>The purpose of this research project is to understand how the data-based, goal setting intervention was implemented and to explore your perceptions about the intervention implementation process.</i></p>

<p>Procedures</p>	<p><i>The procedures involve you responding to an anonymous web-based survey through the Qualtrics platform sent via link in an email. The survey may be taken via computer, iPad/tablet or smartphone. If you did not participate in the intervention pilot in the Fall of 2019, please do not partake in the survey. This survey will take approximately 15 minutes or less and consists of 12 items. Below is a sample item from the survey.</i></p>
<p>Potential Risks and Discomforts</p>	<p><i>There are no known risks for you participating in the survey. Your responses to the survey will be anonymous. You will not be able to skip items as there are only 12 items which are all areas centering on your experience with the intervention and its implementation. Each item must be completed prior to submitting the survey.</i></p>
<p>Potential Benefits</p>	<p><i>There are no direct benefits to you as the participant, however, the benefits to the school and district are potentially considerable. The information obtained through the survey will illuminate how the data-based, goal setting intervention practices were implemented, as well as the challenges in implementation. This information can better inform school and district literacy professional development in the middle grades moving forward.</i></p>
<p>Confidentiality</p>	<p><i>Any potential loss of confidentiality will be minimized by storing data on a password protected computer on a cloud site (JMD Box). The survey is anonymous. All data obtained from the survey will only be reported in the aggregate format (with compiled responses only; no individual responses). Only the primary investigator will have access to the data collected. You may request a copy of the study once the primary investigator has deemed it complete.</i></p> <p><i>If a report or article about this research project is written, your identity will be protected to the maximum extent possible. Your information may be shared with representatives of the University of Maryland, College Park or governmental authorities if you or someone else is in danger or if we are required to do so by law.</i></p>

Compensation	<i>You will not receive compensation.</i>
Right to Withdraw and Questions	<p><i>Your participation in this research is completely voluntary. You may choose not to take part in the survey. If you decide to participate in this research, you may stop participating at any time. If you decide to stop participating, close your internet browser. If you decide not to participate in this study, or if you stop participating at any time, you will not be penalized or lose any benefits to which you otherwise qualify. Your decision to participate, or not participate, in this study will not have a negative or positive impact on your employability or relationships with your respective school.</i></p> <p><i>If you decide to stop taking part in the study, if you have questions, concerns, or complaints, or if you need to report an injury related to the research, please contact the investigator:</i></p> <p style="text-align: center;"><i>Lisa L. Yankanich</i> <i>1305 Dares Beach Rd. Prince Frederick, MD 20678</i> <i>yankanichl@calvertnet.k12.md.us</i> <i>443-550-8000</i></p> <p style="text-align: center;"><i>or</i></p> <p style="text-align: center;"><i>Dr. Margaret McLaughlin</i> <i>3119 Benjamin Building, or mjm@umd.edu.</i> <i>301-641-5147</i></p>

<p>Participant Rights</p>	<p><i>If you have questions about your rights as a research participant or wish to report a research-related injury, please contact:</i></p> <p style="text-align: center;"> <i>University of Maryland College Park Institutional Review Board Office 1204 Marie Mount Hall College Park, Maryland, 20742 E-mail: irb@umd.edu Telephone: 301-405-0678</i> </p> <p><i>For more information regarding participant rights, please visit: https://research.umd.edu/irb-research-participants</i></p> <p><i>This research has been reviewed according to the University of Maryland, College Park IRB procedures for research involving human subjects.</i></p>
<p>Statement of Consent</p>	<p><i>By agreeing to participate, you are indicating that you are at least 18 years of age; you have read this consent form or have had it read to you; your questions have been answered to your satisfaction and you voluntarily agree to participate in this research study. You may print/download a copy of this consent form.</i></p>

If you agree to participate, please select "Yes" below to take the survey.

- Yes
 No



Outside of the basic intervention training (including modeling), how often did you implement the data-based, goal setting intervention?

- Daily
- Weekly
- Monthly
- Never



How did you implement self-efficacy, data-based, goal setting intervention?

- Whole group
- Small group
- 1:1
- Not at all



Who received the intervention?

- All students
- At-risk students only (including students with disabilities)
- Some students
- No students



To what extent did you monitor students' progress towards their goals between the Fall 2019 and Winter 2020 MAP administrations?

Not at all										Frequently
0	1	2	3	4	5	6	7	8	9	10
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

To what extent did you hold follow-up conferences with students prior to the Winter 2020 MAP administration?

Not at all										Frequently
0	1	2	3	4	5	6	7	8	9	10
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

To what extent did you make adjustments to the intervention?

Not at all										Extensively
0	1	2	3	4	5	6	7	8	9	10
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Which component did you adjust? (Select all that apply)

- Data review
- Goal setting
- Action steps
- Timeline
- No components were adjusted

To what extent did you review students' post-intervention MAP Reading scores with students after the Winter 2020 Administration?

Not at all										Frequently
0	1	2	3	4	5	6	7	8	9	10
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Which students did you review post-intervention MAP Reading scores with students after the Winter 2020 Administration?

- All students
- At-risk students only (including students with disabilities)
- Some students
- No students

How likely would you be to implement this intervention again?

Not at all										Absolutely
0	1	2	3	4	5	6	7	8	9	10
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Considering the overall scheme of your responsibilities as an educator, rate the feasibility of including the intervention and its specific components into your instructional schedule.

Very Challenging										Very Easy
0	1	2	3	4	5	6	7	8	9	10
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Is there anything else you would like to add about your experience with the self-efficacy, data-based, goal setting intervention?



This survey is designed to gather information on the implementation of the self-efficacy, data-based, goal setting intervention piloted during the Fall of 2019 between the beginning of the year (BOY) MAP Growth: Reading administration and the mid-year (MOY) administration. An area of particular interest in this study is students' literacy self-efficacy. For the purposes of this study, literacy self-efficacy is defined as students' beliefs in their abilities to accomplish specific literacy tasks. I understand that we have had an unprecedented year, and I am asking you to recall events from 18 months ago. Time constraints in teaching are always a consideration, along with the demands of curriculum expectations, pacing, and the myriad other factors that comprise a teacher's day. This survey is designed to gather information on your experience with the intervention; there is no right or wrong answer and there is no expected outcome.

The survey is anonymous, and confidentiality will be maintained. The responses will be used to understand your collective experiences with the intervention and to help inform literacy practices in the middle grades in the future.

The survey consists of 12 questions and should take no more than 15 minutes to complete.

Thank you very much for your participation!

You have completed the survey! Your participation is greatly appreciated and your responses are valued. Thank you very much for your time and consideration!

Appendix H

Intervention Overview for Interview Protocol

The self-efficacy, data-based, goal setting intervention was a district designed intervention piloted in the Fall of 2019 at the secondary level in ELA (grades 6-12) to promote improved literacy outcomes through data transparency and goal setting for students between the beginning of year (BOY) NWEA MAP Growth: Reading assessment and the mid-year (MOY) NWEA MAP Growth: Reading assessment.

The intervention consisted of four component parts including:

- Data transparency: sharing students' state and district reading and writing data with students
- Goal setting: setting specific literacy goals with students
- Action plan: identifying actionable steps for achieving goals with students
- Timeline: identifying an achievable timeframe to accomplish students' goals

Students' data, goal, action plan, and timeline were documented on the *student data and goal setting worksheet* (Data Snap).

Note: *Literacy self-efficacy is defined as a student's belief in his/her ability to accomplish specific literacy tasks.*

Appendix I

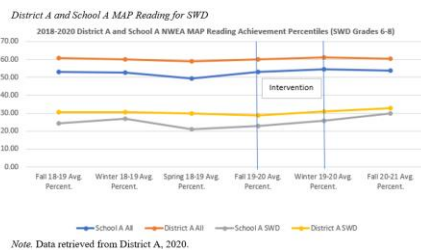
Interview Protocol

Opening Statement: *Thank you so much for your time today. I am so happy that you are willing to share your thoughts and experiences about the data-based goal setting intervention with me. The purpose of this study is to understand your perceptions about the intervention, implementation process, and potential reasons for the increase in post-intervention NWEA MAP Reading scores. An area of particular interest in this study, is students' literacy self-efficacy. For the purposes of this study, literacy self-efficacy is defined as students' beliefs in their abilities to accomplish specific literacy tasks. Themes from this data will be used to generate vital information, and a hypothesis, about the intervention to inform literacy instructional practices to support students in the middle grades at (School A). There is no expected outcome, and this research is not intended to prove that this intervention is effective. I understand that we have had an unprecedented year, and I am asking you to recall events from 18 months ago. Time constraints in teaching are always a consideration, along with the demands of curriculum expectations, pacing, and the myriad other factors that comprise a teacher's day. This interview is designed to gather information on your experience with the intervention; there is no right or wrong answer. Are there any questions you have for me before we get started?*

Questions/Prompts:

- 1. Tell me about your teaching background and experience.*

2. *What was your experience with the data-based, goal setting intervention pilot in the Fall of 2019?*
3. *Now let's reflect on the implementation of this intervention with SWD. Were there practices within this intervention that were noteworthy when working with this population of students?*
4. *What are your thoughts about the increase in MAP Growth: Reading scores for SWD on the Winter 2020 administration?*



2019-2020 NWEA MAP Growth Reading Assessment for SWD at School A

<i>School A Grade Level</i>	<i>SWD NWEA MAP: Reading Growth BOY-MOY (+/- change in overall score)</i>
6	+5.26
7	+4.31
8	+12.55

Note. Data retrieved from NWEA MAP, 2020.

5. *In what ways do you think the intervention affected students' literacy outcomes on MAP Growth: Reading?*
6. *The next question is centered on students' literacy self-efficacy. As I mentioned in the opening, for the purposes of this study, literacy self-efficacy refers to students' beliefs in their abilities to accomplish specific literacy tasks. Keeping that in mind, in what ways do you think the intervention affected students' literacy self-efficacy?*
7. *As we segue into the next few questions, we will talk about the specific component parts of the intervention including data transparency, goal setting, action steps, and timelines. In what ways do you think **specific** intervention components impacted students' literacy outcomes?*

8. Now let's go back to the concept of self-efficacy and think about it in relation to the specific component parts. In what ways do you think **specific** intervention components impacted students' literacy self-efficacy?

9. I'd like you to take a moment to reflect on how the intervention was delivered to students in the Fall of 2019. Tell me about how you allocated your resources regarding the specific intervention components? For example, was more or less time given to certain components such as sharing data, setting goals, creating an action plan, or implementing a timeline?

10. Is there anything else about the intervention and your experience with it that you would like to share?

Closing Statement: Thank you very much for your participation in this study. I greatly appreciate your time and willingness to share your thoughts on the intervention to help inform literacy practices moving forward. After synthesizing the responses, I may contact you again for clarification purposes. To thank you for your time and participation today, you will receive a \$20.00 Amazon gift card which I will email to you directly within the week.

Appendix J

Consent Form for Survey



Institutional Review Board

1204 Marie Mount Hall • 7814 Regents Drive • College Park, MD 20742 • 301-405-4212 • irb@umd.edu

CONSENT TO PARTICIPATE

Project Title	Literacy for Students with Disabilities in the Middle Grades: An Exploration of Self-efficacy, Data-based, Goal Setting as a Literacy Intervention.
Purpose of the Study	<p><i>I, Lisa L. Yankanich, am conducting this study at the University of Maryland, College Park as part of my dissertation under the direction of Dr. Margaret McLaughlin. This consent form only addresses the survey portion of this study.</i></p> <p><i>I am inviting you to participate in this research project because you are an English Language Arts (ELA) teacher at a middle school that had access to the data-based, goal setting intervention piloted in the Fall of 2019.</i></p> <p><i>The purpose of this research project is to understand how the data-based, goal setting intervention was implemented and to explore your perceptions about the intervention implementation process.</i></p>
Procedures	<p><i>The procedures involve you responding to an anonymous web-based survey through the Qualtrics platform sent via link in an email. The survey may be taken via computer, iPad/tablet or smartphone. If you did not participate in the intervention pilot in the Fall of 2019, please do not partake in the survey. This survey will take approximately 15 minutes or less and consists of 12 items. Below is a sample item from the survey.</i></p>

	<p><i>Who received the intervention?</i></p> <hr/> <p><input type="radio"/> All students</p> <p><input type="radio"/> At-risk students only (including students with disabilities)</p> <p><input type="radio"/> Some students</p> <p><input type="radio"/> No students</p>
<p>Potential Risks and Discomforts</p>	<p><i>There are no known risks for you participating in the survey. Your responses to the survey will be anonymous. You will not be able to skip items as there are only 12 items which are all areas centering on your experience with the intervention and its implementation. Each item must be completed prior to submitting the survey.</i></p>
<p>Potential Benefits</p>	<p><i>There are no direct benefits to you as the participant, however, the benefits to the school and district are potentially considerable. The information obtained through the survey will illuminate how the data-based, goal setting intervention practices were implemented, as well as the challenges in implementation. This information can better inform school and district literacy professional development in the middle grades moving forward.</i></p>
<p>Confidentiality</p>	<p><i>Any potential loss of confidentiality will be minimized by storing data on a password protected computer on a cloud site (UMD Box). The survey is anonymous. All data obtained from the survey will only be reported in the aggregate format (with compiled responses only; no individual responses). Only the primary investigator will have access to the data collected. You may request a copy of the study once the primary investigator has deemed it complete.</i></p> <p><i>If a report or article about this research project is written, your identity will be protected to the maximum extent possible. Your information may be shared with representatives of the University of Maryland, College Park or governmental authorities if you or someone else is in danger or if we are required to do so by law.</i></p>
<p>Compensation</p>	<p><i>You will not receive compensation.</i></p>
<p>Right to Withdraw and Questions</p>	<p><i>Your participation in this research is completely voluntary. You may choose not to take part in the survey. If you decide to participate in this research, you may stop participating at any time. If you decide to stop participating, close your internet browser. If you decide not to participate in this study,</i></p>

	<i>If you agree to participate, please select "Yes" below to take the survey.</i>
	Yes No

Appendix K

Consent Form for Interview





Institutional Review Board

1204 Marie Mount Hall • 7814 Regents Drive • College Park, MD 20742 • 301-405-4212 • irb@umd.edu

CONSENT TO PARTICIPATE

Project Title	<i>Literacy for Students with Disabilities in the Middle Grades: An Exploration of Self-efficacy, Data-based, Goal Setting as a Literacy Intervention.</i>
Purpose of the Study	<p><i>I, Lisa L. Yankanich, am conducting this study at the University of Maryland, College Park as part of my dissertation under the direction of Dr. Margaret McLaughlin. This consent form only addresses the interview portion of this study.</i></p> <p><i>I am inviting you to participate in this research project because you are an English Language Arts (ELA) teacher at a middle school that had access to the data-based, goal setting intervention piloted in the Fall of 2019.</i></p> <p><i>The purpose of this research project is to understand how the data-based, goal setting intervention was implemented and to explore your perceptions about the intervention implementation process. The study also includes a web-based survey; however, this portion of the study involves a follow-up that will attempt to better understand personal experiences with, and perceptions of, the intervention.</i></p>
Procedures	<p><i>The procedures involve you participating in an individual interview with me that will last approximately 45 minutes and address 10 questions. A sample question is: What was your experience with the data-based, goal setting intervention pilot in the fall of 2019?</i></p> <p><i>The interview may be conducted via Zoom or in-person depending on your availability and preference, as well as in-person research restrictions mandated by the University of Maryland. Each interview will be digitally recorded either through Zoom (for virtual interviews) or via the Voice Recorder</i></p>

	<p><i>and Audio Editor application (for in-person interviews).</i></p> <p><i>The interviews will be analyzed using standard qualitative procedures which call for creating transcripts and removing individual identities from those transcripts. Any reports of findings will be reported in the aggregate, and, to the extent possible, no information that might identify you individually will be included.</i></p>
Potential Risks and Discomforts	<p><i>There are no known risks for you participating in the interview. Your responses to the interview questions will be treated in full confidentiality as discussed below.</i></p> <p><i>You will be asked to recall your experiences with the intervention in the Fall of 2019. I understand that we have had an unprecedented year, and I am asking you to recall events from 18 months ago. However, there are no expected correct answers. The data-based, goal setting intervention was implemented under the assumption that ELA teachers would implement the key elements of the intervention (data transparency, goal setting, and an action plan and timeline for achieving the goal) in addition to curriculum expectations and pacing. This interview is intended to understand more about the implementation process.</i></p>
Potential Benefits	<p><i>There are no direct benefits to you as the participant, however, the benefits to the school and district are potentially considerable. The information obtained through the interview will illuminate how the data-based, goal setting intervention practices were implemented, as well as the challenges in implementation. This information can better inform school and district literacy professional development in the middle grades moving forward.</i></p>
Confidentiality	<p><i>Any potential loss of confidentiality will be minimized by storing data on a password protected flash drive for 3 years. Only the primary investigator will have access to the data collected. You may request a copy of the study once the primary investigator has deemed it complete.</i></p> <p><i>If a report or article about this research project is written, your identity will be protected to the maximum extent possible. Your information may be shared with representatives of the University of Maryland, College Park or governmental authorities if you or someone else is in danger or if we are required to do so by law.</i></p>
Compensation	<p><i>You will receive a \$20.00 Amazon gift card for your</i></p>

	<i>participation in the full interview.</i>
Right to Withdraw and Questions	<p><i>Your participation in this research is completely voluntary. You may choose not to take part in the interview. If you decide to participate in this research, you may stop participating at any time. If you decide not to participate in this study, or if you stop participating at any time, you will not be penalized or lose any benefits to which you otherwise qualify. Your decision to participate, or not participate, in this study will not have a negative or positive impact on your employability or relationships with your respective school.</i></p> <p><i>If you decide to stop taking part in the study, if you have questions, concerns, or complaints, or if you need to report an injury related to the research, please contact the investigator:</i></p> <p style="text-align: center;"><i>Lisa L. Yankanich</i>  or <i>Dr. Margaret McLaughlin</i> 3119 Benjamin Building, or </p>
Participant Rights	<p><i>If you have questions about your rights as a research participant or wish to report a research-related injury, please contact:</i></p> <p style="text-align: center;">University of Maryland College Park Institutional Review Board Office 1204 Marie Mount Hall College Park, Maryland, 20742 E-mail: irb@umd.edu Telephone: 301-405-0678</p> <p><i>For more information regarding participant rights, please visit:</i> https://research.umd.edu/irb-research-participants</p> <p><i>This research has been reviewed according to the University of Maryland, College Park IRB procedures for research involving human subjects.</i></p>
Statement of Consent	<i>By agreeing to participate, you are indicating that you are at</i>

	<p><i>least 18 years of age; you have read this consent form or have had it read to you; your questions have been answered to your satisfaction and you voluntarily agree to participate in this research study. You may print/download a copy of this consent form for your records.</i></p> <p><i>If you agree to participate, please select “Yes” below and date and sign the consent. Electronic signatures will be accepted. If you choose to sign electronically, please return the signed consent to [REDACTED] prior to your interview.</i></p>
	<p style="text-align: center;">Yes No</p>
Date:	Signature:

Appendix L

University of Maryland IRB Approval



UNIVERSITY OF
MARYLAND

INSTITUTIONAL REVIEW BOARD

1204 Marie Mount Hall
College Park, MD 20742-5125
TEL 301.405.4212
FAX 301.314.1475
irb@umd.edu
www.umresearch.umd.edu/IRB

DATE: May 10, 2021

TO: Lisa Yankanich, EdD
FROM: University of Maryland College Park (UMCP) IRB

PROJECT TITLE: [1741793-1] Literacy for Students with Disabilities in the Middle Grades:
An Exploration of Self-efficacy, Data-based, Goal Setting as a Literacy
Intervention.

REFERENCE #:
SUBMISSION TYPE: New Project

ACTION: APPROVED
APPROVAL DATE: May 10, 2021
EXPIRATION DATE: May 9, 2022
REVIEW TYPE: Expedited Review

REVIEW CATEGORY: Expedited review category # 7. Waiver of Written Consent, 45CFR46.117(c)
(1).

Thank you for your submission of New Project materials for this project. The University of Maryland College Park (UMCP) IRB has APPROVED your submission. This approval is based on an appropriate risk/benefit ratio and a project design wherein the risks have been minimized. All research must be conducted in accordance with this approved submission.

Prior to submission to the IRB Office, this project received scientific review from the departmental IRB Liaison.

This submission has received Expedited Review based on the applicable federal regulations.

This project has been determined to be a MINIMAL RISK project. Based on the risks, this project requires continuing review by this committee on an annual basis. Please use the appropriate forms for this procedure. Your documentation for continuing review must be received with sufficient time for review and continued approval before the expiration date of May 9, 2022.

Please remember that informed consent is a process beginning with a description of the project and insurance of participant understanding followed by a signed consent form. Informed consent must continue throughout the project via a dialogue between the researcher and research participant. Unless a consent waiver or alteration has been approved, Federal regulations require that each participant receives a copy of the consent document.

Please note that any revision to previously approved materials must be approved by this committee prior to initiation. Please use the appropriate revision forms for this procedure.

All UNANTICIPATED PROBLEMS involving risks to subjects or others (UPIRSOs) and SERIOUS and UNEXPECTED adverse events must be reported promptly to this office. Please use the appropriate reporting forms for this procedure. All FDA and sponsor reporting requirements should also be followed.

Appendix M

District A IRB Approval

May 3, 2021

Ms. Lisa L. Yankanich

Dear Ms. Yankanich:

Thank you for submitting a request to do research in the following stipulations:

Your request has been approved with

- All staff participation in the study is voluntary. This is for all interviews/surveys. Please make sure that this information is communicated clearly to all subjects for your study.
- Confidentiality is extremely important. As mentioned in your proposal, all names/identifying information must be confidential throughout and after the study has been complete.
- Once completed, please make sure that you provide me, Jonathan McClellan a summary of your results.
- Any changes to your research design or survey must be communicated to me for review and consideration of approval.

If you have any questions, please feel free to contact me.

Sincerely,



Jonathan McClellan
Director of Information Technology

Appendix N

Analytic Memo 1

I am interested in understanding how the self-efficacy, data-based, goal setting intervention was implemented by English Language Arts (ELA) teachers in the three identified middle schools in District A and illuminating the extent to which the intervention implementation varied between ELA teachers. For the purposes of this study, self-efficacy is defined as students' beliefs in their abilities to accomplish specific literacy tasks. A driving question I have for this phase of my research study is *how and to what extent, did the implementation of the intervention and its specific component parts vary between ELA teachers?* I am curious about how each of the teachers implemented the intervention as a complete program, which students received the intervention, and how teachers utilized the specific component parts of the intervention: data transparency, goal setting, developing an action plan, and generating a timeline.

As I embarked on the Phase One of my research study (survey), I was filled with apprehension as to whether anyone at all would even participate. My survey opened on May 11, 2021, and remained open for 2 weeks, closing on May 25, 2021. I sent out 16 survey invitations to the English Language Arts teachers at Schools A, E, and F in grades 6-8 in the hopes that each teacher would participate. I was thrilled that within the first day of the survey being opened I had 4 respondents. My apprehension was rooted in the concern that the end of the school year was rapidly approaching, and after an unprecedented year of school closures, partial reopening, and hybrid and concurrent instruction that the strain and stress felt by many teachers would trigger an

unwillingness to add anything more to their metaphorical plates, even a brief 12 question survey. Out of the 16 survey invitations sent, I had a total of 11 respondents initiate the survey process prior to the survey closing. One respondent discontinued the survey after completing and agreeing to the embedded consent, and another discontinued after completing the third question. Yet another respondent indicated that after the initial intervention training, he/she did not implement the intervention at all, leaving only 8 respondents who completed the survey in its entirety for a 50% participation rate.

I was not surprised that most of the respondents implemented the intervention either whole group or small group; there was only one respondent who indicated that the intervention was implemented 1:1 with students, and this person also indicated that the intervention was administered to *all* students. I was surprised this was the case as meeting with all students 1:1 is a very time-consuming process. There was a comment by a respondent that “it is almost impossible to do individually.” I thought I would receive more comments like this from the respondents, but there was only one who alluded to the intervention being time-consuming. Then again, the majority of the respondents conducted the intervention in a whole or small group setting. Perhaps if those teachers had engaged in 1:1 goal setting conferences, they would have experienced more time constraints.

I was intrigued by a response to the final question which was an open-ended question asking the participants if there was anything else they would like to share about their experience with the intervention. One respondent wrote, “enthusiasm was very high at the beginning of the program, but over time seemed to diminish with

some students, mostly the ones who professed to hate reading, I believe. I wonder how much peer pressure (as in the perception of reading not being cool) had to do with this?" The response made me wonder about the value of progress monitoring and follow-up conferences with students to keep motivation high for all students receiving the intervention. This teacher indicated that progress monitoring did take place between the BOY and MOY MAP Growth: Reading assessment, but no follow-up conferences were held with students prior to the MOY Reading assessment and scores were not shared with students after they took the MOY reading assessment. I wonder if the lack of motivation for reading and reading achievement came from the students not receiving their MOY scores and literacy follow-up conferences, rather than from peer pressure or an association with reading not being "cool."

The open-ended question at the end of the survey provided the greatest insight as to what the teachers thought of the intervention as a whole. There were 5 responses to the final open-ended question that indicated positive outcomes and associations with the intervention including motivating students, encouraging students to do their best on assessments, benefits (although the benefits were not stated by the respondent) of the student data and goal setting worksheets (Data Snaps), and the value of the information gathered about students from the intervention, goal settings, and MAP assessments.

Appendix O

Analytic Memo 2

The second phase of my research study consisted of interviewing the English Language Arts (ELA) teachers at School A who participated in the self-efficacy, data-based goal setting intervention in the fall of 2019. This phase was designed to answer the research questions *how and to what extent, did the implementation of the intervention and its specific component parts vary between ELA teachers?* and *how do the ELA teachers perceive the self-efficacy intervention and its impact on SWD literacy self-efficacy and reading scores?* As Phase Two of my research study began, I continued to feel apprehensive about who would be willing to participate in the interviews. With only two weeks left in the school year, I was concerned that the ELA teachers who piloted the intervention at School A would be focused on wrapping up an unprecedented school year and unwilling to participate in my research study interview. Another concern I had was that I was contacting a teacher who had retired the previous year, and I wasn't sure I would be able to reach her. Fortunately, the email address I had for her was still functional. She responded to my email quickly and was my first interviewee.

The remaining four teachers were still at School A but were not as quick to respond to my interview requests. I do believe that the timing of my Phase 2 research was not ideal for the teachers who were finishing the year back in the building. Of the five ELA teachers contacted to participate in the interview phase, four teachers volunteered to participate. The fifth teacher declined participation, stating that she had too much to do to conclude the school year.

The interviews took place after the contractual day and were held via Zoom between May 27, 2021, and June 9, 2021. I allotted 45 minutes for each interview, which proved to be sufficient for the questions and prompts addressed. My hope for the interviews was to understand how the teachers perceived the intervention and its impact on students' reading achievement post intervention.

My first interviewee was the retired ELA teacher. She was very willing to participate in the interview, but during the interview, she tended to stray from the questions and discuss aspects of a separate curriculum endeavor. I was able to redirect her focus back to the intervention-centered questions, but this pattern persisted throughout the interview process. My impression was that she was very willing to cooperate in the interview but was having difficulty recalling the specifics of the intervention from 18 months prior when the intervention was piloted. I believe she was trying to be as helpful as she could with her limited recollection.

The remaining interviews were very straightforward and more along the lines of the experience I anticipated when looking ahead to each interview. Some of the concerns I expected to surface were, in fact, addressed by the teachers, including time and feasibility of implementation, as well as the utilization of whole or small group data transparency and goal setting as preferable approaches.

I was surprised to hear one teacher state that she did not think that the goal setting was as effective as the data transparency and conferring. When further prompted, she stated that the 1:1 conferring for the struggling readers helped them to believe that they could do better more so than the goal setting process. She indicated that following up with every student on their goal was impossible. Although other

teachers indicated that 1:1 conferring was not feasible with all students in every class period, and that priority was given to the more struggling readers for 1:1 conferring, goal setting was still identified as one of the most important components of the intervention.

Overall, the teachers indicated that the intervention was beneficial and worthwhile, although time intensive. When conducting the document analysis, I realized how very little guidance was provided to the teachers on how to implement the intervention. This resulted in a wider range of interpretation and implementation than may have been anticipated by the district when introducing the intervention pilot. This was not something I addressed directly in the interview protocol, but it did surface at the end of the interview when I asked teachers if there was anything else they wanted to add about their experience with the intervention. One teacher recommended more guidance and structure on how to deliver the intervention, while another indicated that the intervention could be more streamlined to include only the data transparency and goal setting to save time.

Appendix P

Intervention Document Analysis

Document Analysis Table

Key Themes: data transparency, literacy goal setting, data driven decision making; communication; training/resource, student motivation

Document Selected	Data/Content Presented	Concept Illuminated	Evidence
Student Data Snapshot SY 2018-2019	Individual student reading and writing data (summative and formative)	Data transparency	MCAP ELA achievement level (1-5); MCAP Writing Prose Constructed Responses (PCRs) for narrative, literary analysis, and research simulation tasks; District A System-wide Assessment (SWAs) for narrative, literary analysis, and research simulation tasks; MAP Growth reading overall score and scores in subsections of literature, informational and vocabulary.
Goals and Growth Worksheet	Individual student literacy goal development worksheet	Specific, targeted literacy goal setting; data driven decision making; student motivation	Student selected goal development and purpose; action steps; timeline; progress monitoring/success criteria.
Data Snap and Goal Setting PowerPoint for Students (Teacher Resource)	Guidance for students to understand the data and complete the Goals and Growth worksheet	Intervention resource; data transparency; specific, targeted literacy goal setting; communication; student motivation	Explanation of the data and examples of possible targeted goals; support for generating the goal, action steps, timeline, and success criteria.

Steps for Reviewing Data Snap and Goals and Growth Worksheet (Teacher Resource)	Guidance for teachers on how to review the Data Snapshot with students and how to proceed with the Goals and Growth worksheet	Training material; intervention resource; communication	Step-by-step instructions for ELA teachers to introduce and support students in understanding testing data and using the identified data to set an appropriate, specific, and targeted literacy goal.
School A ELA Deep Plan Agenda (10/24/19)	Agenda items for planning session with ELA teachers	Training communication; data transparency; literacy goal setting; data driven decision making; communication	Agenda established by Secondary ELA Supervisor including data review and the introduction of the Data Snapshots and Goals and Growth worksheet.
School A School Improvement Team Agenda (12/4/2019)	Agenda for school improvement meeting to include an update on the goal setting activity/intervention as means to increase student motivation	Student motivation; data transparency; literacy goal setting; data driven decision making; communication	School improvement planning for student motivation.
District A Core Leads Agenda (1/9/20)	Agenda for ELA Core Leads to develop data communities	Data transparency; data driven instruction; data driven decision making; intervention training communication	MCAP update; Data goals: to build a community, to consistently use diversified data sources to drive instruction/instructional decision making (MCAP, MAP Growth, SWAs), and to build confidence and competence with data and data systems.

Appendix Q

Triangulation Matrix

Key Findings	Key Words (Interview)	Survey Question	Document Selected	Evidence
Motivation	Students, disabilities, data transparency, goal setting, excited, energized	#12	Data Snap and Goal Setting PowerPoint for Students (guidance for students to understand the data and complete the Goals and Growth worksheet)	<p>Surveys: “It seemed to motivate students,” “Enthusiasm was very high at the beginning, but over time seemed to diminish with some students [...]” “It did seem to encourage students to do their best on assessments”</p> <p>Interviews: “It got the kids really excited about reading,” “And we found that they really liked knowing [scores], even if they weren’t great results,” “They [students] became energized,” “it kind of motivated them a little bit.”</p> <p>Document Analysis: Explanation of the data and examples of possible targeted goals; support for generating the goal, action steps, timeline, and success criteria.</p>
Time/Feasibility	Intervention, teacher, components, specific, setting, overwhelming, intensive, constraints, almost impossible	#11 and #12	Data Snap and Goal Setting PowerPoint for Students (Teacher Resource); Steps for Reviewing Data Snap and Goals and Growth Worksheet (Teacher Resource); School A ELA Deep Plan Agenda; School A School Improvement Team Agenda; District A Core Leads Agenda	<p>Survey: 50% of respondents reported in the detractor range for feasibility of implementation; “Data conferences were definitely easier in person,” “It is almost impossible to do individually”</p> <p>Interviews: “The biggest struggle for me is, how do I meet with them individually?” “Time constraints held us back,” “I don’t know that they were actually working towards those goals, and having so many kids with different goals, it’s almost impossible for the teacher to be on top of that for them.” “It was very time intensive,” “I think maybe I didn’t, in the beginning, spend as much time on the goal setting,” “If I had tried to roll that out with all my kids, just getting the materials and the paperwork, trying to talk to everybody at some point, I think it would have been undoable,” “The other class was way, way more time consuming, meeting with them, and talking with them about what they needed to do. Almost to the point where it was overwhelming,” “If we were to do any sort of 1:1, and conferring with students about their scores, and setting goals, and so on, we definitely needed help in order to make that happen,” “I really did find it</p>

				[intervention] valuable overall, but I do hope that it is realized the amount of time that it takes to do it.” Document Analysis: Limited teacher training and resources for providing the intervention.
Data	Growth, recall, sharing, questioning, scores, results, transparency, test, goals	#8, #9, #12	Student Data Snapshot SY 2018-2019 (individual student reading and writing data (summative and formative))	Survey: 63% of respondents did not review post intervention MAP Reading scores with students; 50% of respondents indicated that when data was reviewed post intervention it was with <i>all</i> students; “student snapshots [data and goal setting worksheet] were very helpful,” “Valuable information is gathered [...]” Interviews: “And we found that they really liked knowing [scores], even if they weren’t great results,” “We thought it was important that they knew what the scores were, and we were having those conversations,” “I would attribute it, based on what I saw, to just being transparent about their scores, having them understand, this is how you did,” “Sharing the scores with them and taking the time to do that so they know exactly where they are,” “I think having their teachers’ undivided attention and knowing that their teacher broke down the information and the data in a way that then they could understand it, promoted them to then take ownership of it,” “I think working through the front [data] of that sheet was stronger than the goal setting,” “I think the data snapshot, knowing exactly what their score is, and then [...] just having them reflect upon it was important,” “I personally did not see the goal setting [...] carried through. I think more of the data transparency and the conferencing, especially with those students who needed that 1:1 conferencing, helped them to believe that they could do better more than the goal setting.” Document Analysis: MCAP ELA achievement level (1-5); MCAP Writing Prose Constructed Responses (PCRs) for narrative, literary analysis, and research simulation tasks; District A System-wide Assessment (SWAs) for narrative, literary analysis, and research simulation tasks; MAP Growth reading

				overall score and scores in subsections of literature, informational and vocabulary.
Goal Setting	Reading, literacy, self-efficacy, data, questioning, progress, accomplish, time	#7	Goals and Growth Worksheet (individual student literacy goal development worksheet)	<p>Surveys: 42% of respondents adjusted the goal setting component</p> <p>Interviews: “And the next powerful part I think, was the goal setting,” “I think the goal setting piece was very helpful for them,” “it was extremely beneficial so that they could track their own progress and set their own goals of what they wanted to accomplish,” “I like the idea of setting a goal for each student of what they're going to accomplish,” “I think that the goal setting is probably the most important just because they're [students] deciding for themselves what they want to do better,” “I think working through the front [data] of that sheet was stronger than the goal setting,” “I feel like my kids set their goals and then forgot about them,” “I don't know that they were actually working towards those goals, and having so many kids with different goals, it's almost impossible for the teacher to be on top of that for them.” “I think that when they set a goal, and then they had to think about action steps, that was really difficult for them,” “I personally did not see the goal setting [...] carried through. I think more of the data transparency and the conferencing, especially with those students who needed that 1:1 conferencing, helped them to believe that they could do better more than the goal setting.” “I think maybe I didn't, in the beginning, spend as much time on the goal setting,” “when they started goal setting, we did that piece by piece [...] looking over their data, and then making their goals,”</p> <p>Document Analysis: Student selected goal development and purpose; action steps; timeline; progress monitoring/success criteria.</p>
Conferring	Recall, sharing, questioning, scores, students,	#4 and #5	Student Data Snapshot SY 2018-2019 (individual student reading and writing data	<p>Surveys: 50% detractor for progress monitoring; 63% detractor for conferring prior to MOY assessment</p> <p>Interviews: “I think that they enjoyed the 1:1, the smaller talks, and having my undivided attention, because they really crave</p>

	disabilities, 1:1, conversations, goal setting, time		(summative and formative); Goals and Growth Worksheet (individual student literacy goal development worksheet)	that,” “I think that one thing that was really good for them was knowing that we could have a conversation about their progress or their scores. And it was just 1:1. And they also knew that everybody else was having those conversations, too, and it wasn't just them,” “I thought it was helpful when we did pull some students for 1:1 conferencing,” “there was a small group of students that I think really benefited from the 1:1 conferencing,” “I think having their teachers’ undivided attention and knowing that their teacher broke down the information and the data in a way that then they could understand it, promoted them to then take ownership of it,” “I personally did not see the goal setting [...] carried through. I think more of the data transparency and the conferencing, especially with those students who needed that 1:1 conferencing, helped them to believe that they could do better more than the goal setting.” “We would walk around and do small conferences with people if they had questions.” Document Analysis: Explanation of the data and examples of possible targeted goals; support for generating the goal, action steps, timeline, and success criteria.
Grouping	Setting, data, goals, whole, small, individual	#2 and #12	Student Data Snapshot SY 2018-2019 (individual student reading and writing data (summative and formative); Goals and Growth Worksheet (individual student literacy goal development worksheet)	Surveys: 44% of respondents indicated whole group; 44% of respondents indicated small group; “I would like to include this intervention next year-either delivered whole group or to targeted students.” Interviews: “We ended up having to do whole group going over their data,” “I think it worked well with it being small group,” “the first time I met with them individually and talked with them, then we did more of a group goal setting,” “Transparency of the information was done whole class,” Document Analysis: Potential to group students based on similar data and/or goals
Intervention	Components, literacy, reading.	#10 and #12	Steps for Reviewing Data Snap and Goals and Growth Worksheet	Survey: 63% promoter range for the likelihood of implementing the intervention again
	growth, grades, disability, specific, time, structure		(Teacher Resource); School A ELA Deep Plan Agenda; School A School Improvement Team Agenda; District A Core Leads Agenda	Interviews: “I think that, obviously, it [intervention] was definitely worthwhile,” “It was very time intensive,” “I thought it [intervention] was extremely helpful and extremely beneficial,” “I really did find it [intervention] valuable overall, but I do hope that it is realized the amount of time that it takes to do it,” “I think maybe have some specifics for the teacher,” “I think there needs to be a structure in order for it to be truly beneficial.” Document Analysis: Step-by-step instructions for ELA teachers to introduce and support students in understanding testing data and using the identified data to set an appropriate, specific, and targeted literacy goal. Agendas-communication about the intervention, data, and motivating students

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