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High School Teachers' Perceptions of the Use of Achieve3000 as a Literacy Proficiency Intervention

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Walden University

College of Education and Human Sciences

This is to certify that the doctoral study by

Cameron Gaines

has been found to be complete and satisfactory in all respects,
and that any and all revisions required by
the review committee have been made.

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Walden University
2024

Abstract

High School Teachers' Perceptions of the Use of Achieve3000 as a Literacy Proficiency

Intervention

by

Cameron Gaines

MA, Walden University, 2016

BS, Georgia State University, 2013

Project Study Submitted in Partial Fulfillment

of the Requirements for the Degree of

Doctor of Education

Reading, Literacy, and Assessment

Walden University

August 2024

Abstract

Inconsistent use of a literacy development initiative resulted in no improvement of low literacy scores in April of 2022, as a total of 80.85% of high school students in one learning zone within a Georgia school district scored below literacy proficiency on the Georgia Milestones Assessment System. The purpose of this qualitative study was to examine high school teachers' perceptions of the use of Achieve3000 as a literacy intervention using the conceptual framework of disciplinary literacy. This study's two research questions focused on high school teachers' perceptions of using Achieve3000 as a literacy intervention and their perceptions of support that high school teachers need to use Achieve3000 more effectively. A basic qualitative design approach was used to garner and contextualize teachers' experiences using the intervention. A sample of 10 core content teachers across eight South Learning Zone high school campuses were interviewed. A self-designed interview protocol was used to engage teachers in a one-on-one semi structured interview. Data were analyzed from qualitative interviews using open coding and thematic analysis to identify the common themes: little relevance to instruction, low student engagement, lack of understanding, loss of autonomy, lack of effective training, lack of accessible and ongoing support, and lastly lack of understanding of the usefulness and relevance of Achieve3000. In addressing the decline in literacy proficiency scores, the observed Georgia school district and similar districts may work to promote social change by mitigating the continued decline in literacy and improving the implementation of effective interventions while improving students' success both in and out of the classroom.

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Dedication

To my inspirational students, parents, and wife; your support has been insurmountable. I value and love you all deeply. This great academic journey is dedicated to those who have had such an impact on my life: my mother Chermayne, my wife Akeyla, and my first group of students Dazhae, India, Jessika, Kayla, and Shatyrah. I hope that I have made you all just as proud as you have made me. I leave you all with this message: “We are what we repeatedly do. Excellence then, is not an act, but a habit”.

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Section 1: The Problem

Literacy proficiency is necessary for passing state-mandated assessments and supporting on-time graduation rates and college and career readiness. Literacy is generally described as the ability to read, write, and use numbers; however, due to a changing educational field, experts consider literacy to include identifying, understanding, interpreting, creating, and communicating using varied information formats (United Nations Educational, Scientific, and Cultural Organization, 2023). Students with prolonged struggles in literacy are more likely to have delayed graduation times, suggesting that students with reading difficulties are more likely to struggle with plans to further education (Holopainen & Hakkarainen, 2019). Of those secondary education U.S. students who graduated in 2019, only 25%-38% were proficient readers and writers (Perin & Holschuh, 2019). As a result, many educational institutions developed literacy interventions to mitigate learning loss. From extensive research on effective literacy support, suggested best practices for intervention include implementing weeklong reading cohorts, 25 hours of targeted instruction, and using small groups of no more than 12 students (Dorn et al., 2020).

Furthermore, many online programs that effectively support best practices have been identified, including Achieve3000. Using Achieve3000 as an intervention program to support literacy development has significantly improved students' Lexile scores (Haymon & Wilson, 2020). The observed Georgia school district purchased Achieve3000 during the 2020–2021 academic year to improve literacy proficiency in future Georgia Milestones Assessment System (GMAS) administrations. The problem that I addressed

through this study was that inconsistency in using a literacy development initiative, Achieve3000, resulted in no improvement of low literacy scores in April of 2022, as a total of 80.85% of high school students in one learning zone within a Georgia school district scored below literacy proficiency on the GMAS. The literacy development initiative involves implementing lessons from Achieve3000.

In Section 1, I discuss the local problem, rationale, and evidence of the local problem from peer-reviewed literature. This section also includes a definition of terms, the significance of the study, research questions, and a literature review. Lastly, this section ends with the implications of this study and a summary.

The Local Problem

Achieve3000 is a technology-based literacy intervention program that accelerates learning growth through differentiated content and instruction (Achieve3000, 2024). Focusing on foundational skills through differentiated learning, this intervention mitigates learning deficits and provides progress monitoring. Interventions focusing on code and meaning in the skills of both reading and writing that are delivered through standardized protocols and multiple components help improve literacy (Al Otaiba et al., 2023). Aimed toward intervention, the online program offers target lessons, multiple-choice questions, writing tasks, and interactive activities to improve literacy, vocabulary development, comprehension, and more. Achieve3000 is aligned with Common Core standards and measures texts and lessons by grade and skill-appropriate Lexile levels. Achieve3000, and other literacy development programs, have become new initiatives for educational institutions in recent years. Research suggests that teachers adapting to new

school curricula aimed toward improving instructional practice results in significant academic improvement for students (Brynelson et al., 2019). The more exposure to intervention that teachers offer, the more likely their chances of witnessing students' academic improvement. Gersten et al. (2020) found a strong positive correlation between reading intervention and student outcomes. Intervention should occur as soon as possible to affect future student achievement greatly. Early vocabulary and reading fluency in Grade 3 correspond with later reading comprehension success in high school (Petscher et al., 2019). Furthermore, recent trends in the decline of literacy rates within the United States suggest a need for intervention.

Learning loss has negatively affected literacy proficiency in the United States the most between 2019 and 2022 (National Center for Education Statistics, 2019). As of 2019, with the highest score available at 500, high school seniors' reading averages on the National Assessment of Educational Progress (NAEP) ranged from 249–333, with only 37% of seniors meeting academic preparedness requirements (National Center for Education Statistics, 2019). Zhao (2022) reported that, on average, based on reading data between 2019 and 2020, American students lost between 57–183 days of reading instruction before the start of the 2021 school year. Using the i-Ready reading diagnostic data from 1.6 million K-12 schools nationwide in 2021, Dorn et al. (2021) found that students were nine points behind on reading. Student progress in literacy proficiency has slowed. Data from the national Northwest Evaluation Association Measures of Academic Progress Reading Assessment report for the United States suggests that growth in literacy

was slower in the 2020–2021 school year than in the 2019–2020 school year, with between 3%-6% decline in scores (Lewis et al., 2021).

Students must complete their GMAS in 11th grade to measure their literacy proficiency. In the local setting, as of 2022, one learning zone in the observed Georgia school district has suffered a loss in proficiency, with a decline of 12.83% in literacy proficiency on GMAS between 2019 and 2022 (Georgia Department of Education, 2019, 2022). On the GMAS, scores on Level 1 (beginning learner) are considered failing, and Level 2 (developing learner) are considered meeting requirements to pass, while Level 3 (proficient learner) are passing slightly above average. Level 4 (distinguished learner) are passing significantly above average scores. Georgia Department of Education (2022) advised that students scoring a 1 or 2 need additional support, while a 3 or 4 indicates that a student is prepared for the next academic level. The South Learning Zone, as of 2022, has 42.51% in the Level 1 category, 38.34% in the Level 2 category, 18.57% in the Level 3 category, and 0.58% in the Level 4 category (Georgia Department of Education, 2022). When adding the percentages of Level 1 and Level 2 scores for the 2022 administration of GMAS, 80.85% of students scored below proficiency, with a score of 3 and above being the aim of the observed Georgia school district. Due to COVID-19 restrictions, there was no administration of the GMAS for the academic year 2020–2021. The observed Georgia school district purchased Achieve3000 during the 2020–2021 academic year to improve literacy proficiency in future GMAS administrations. Table 1 depicts each school within the South Learning Zone's performance on literacy proficiency in the 2019 and 2022 administration of the GMAS. As shown in Table 1, the percentage of

students scoring below proficiency increased between the academic year of 2019 and 2022.

Table 1

South-Learning Zone Literacy Proficiency Levels on 2019 and 2022 GMAS

	2019		2022	
	Beginning	Developing	Beginning	Developing
Campus 1	30.19	39.74	37.05	43.98
Campus 2	26.41	38.75	35.03	40.61
Campus 3	25.66	40	25.81	48.39
Campus 4	27.31	37.71	32.44	47.8
Campus 5	62.83	30.89	66.67	26.19
Campus 6	NO DATA	NO DATA	78.57	17.86
Campus 7	30.73	37.87	46.15	38.18
Campus 8	12.02	34.4	18.39	43.71
Total	215.15	259.36	340.11	306.72
Average	30.73571429	37.05142857	42.51375	38.34

Note: Campus 6 did not have enough participants to report data in 2019.

The problem that I addressed through this study was that inconsistency in using the literacy development initiative resulted in no improvement of low literacy scores in April of 2022, as a total of 80.85% of high school students in one learning zone in a Georgia school district scored below literacy proficiency on the GMAS. The literacy development initiative involves implementing lessons from Achieve3000. In the local setting, according to high school administration, the gap in practice that contributes to the problem is that teachers within the observed learning zone do not use the Achieve3000 literacy intervention with fidelity. According to the observed Georgia school district's policy, students are mandated to complete an assignment with Achieve3000 once a month per core subject area to improve the declining literacy proficiency scores evidenced by the 2022 administration of the GMAS. Administration within the learning

zone reports their awareness of the inconsistent uses of the intervention program,

Achieve3000. An assistant principal in the observed learning zone asserted:

The issue with our campus, like many others, is that teachers aren't using the Achieve3000 intervention. We need everyone on board for this to work. Why they aren't using it, I don't know. But we have to comply with the district, regardless of how we feel about it. (Assistant principal, personal communication, December 16, 2022)

Principal A posited that,

We provide Achieve3000 support to our staff on the county level and campus-wide. There is a missing step between the expectation versus our reality. Our campus does the intervention weekly, to make sure everyone hits the target. But not everyone is doing that. So, there's a crack in the dam somewhere and it's on all of us to chip in and get it done. (Principal, personal communication, December 16, 2022)

An English language arts (ELA) teacher from a different campus within the learning zone claimed that,

I don't like using that program. I don't know how to use it, and by the time I figure it out, I've lost time with my kids. I'll just stick to what I know works in the meantime, and the district will have to understand. As long as my scores look the way I need them to, nobody should care. (Teacher, personal communication, January 2, 2023)

These few administrators and teachers provide evidence of a gap in practice.

In alignment with concerns at the local level, research shows that teachers' concerns with using technology-based interventions include a lack of time and a decline in efficacy in training over time (Francom, 2020). These beliefs influence teachers' perceived usefulness, ease of use, and efficacy in instructional practice (Hamutoglu, 2021). Conversely, teachers and administrators believed educational technology was useful for engaging learners, developing autonomous learning, and creating pathways to transferable 21st-century skills (Lawrence et al., 2020). In a recent study, only 24% of surveyed teachers felt they received adequate training to support the instruction of struggling readers (Merga et al., 2020). The hesitancy teachers have with using new district initiatives often does not stem from an act of defiance or lack of interest. Out of 73 high school math teachers in an empirical study, only 19.67% of participants indicated little to no desire to use instructional technology (Trujillo-Torres et al., 2020). Non-ELA teachers who do not have a literature content area share concerns about where literacy instruction would fit into their content (Smith & Robinson, 2020).

Furthermore, many teachers feel unsure of how to handle recurring issues with instructional technology-based programs (Vinnervik, 2022). In understanding teacher perceptions of using Achieve3000 as an intervention, schools in the learning zone of the observed Georgia school district may work to improve usage rates. School climate is important in accounting for literacy scores beyond students' and schools' socioeconomic status (Berkowitz, 2021). Suppose teachers have varied experiences with professional development, causing a lack of cohesive preparation. These varied experiences may

heavily affect their approaches to implementing Achieve3000, with even further implications on student success.

Rationale

The Problem at the Local Level

The problem that I addressed with this study was that the inconsistency in using the literacy development initiative resulted in no improvement of low literacy scores in April of 2022, as 80.85% of high school students in one learning zone in the observed Georgia school district scored below literacy proficiency on the GMAS. The literacy development initiative involves implementing lessons from Achieve3000. In the observed Georgia school district, high school students' college and career readiness and content mastery decreased between 2019 and 2022. Content mastery in the observed Georgia school district during 2019 was 79.6% and in 2022 decreased to 73.3%, while in 2019, college and career readiness was ranked at 80.4% and decreased to 78.5% in 2022 (Georgia Department of Education, 2022). With 11,360 students enrolled in the observed learning zone within the Georgia school district for the 2022 academic year, approximately 9,184 students scored below literacy proficiency on the 2022 administration of GMAS.

Chief Academic Officer Jones suggested that Achieve3000 was purchased to support the literacy development plan “FOCUS” (Chief academic officer, personal communication, March 20, 2020). The intervention plan was projected to significantly improve learning loss within 2-3 years of implementation. However, with a decline in literacy proficiency within the first 2 years of implementation, the observed Georgia

school district determined that usage rates across campuses did not comply with district expectations. This study's results may help improve teacher usage of Achieve3000 as a literacy intervention as the board of education leaders work to mitigate teacher concerns and bolster professional support.

Evidence of the Problem from the Professional Literature

Educational leaders encounter difficulties implementing new initiatives as teachers may refuse or reject using new programs. Although teacher perceptions indicated that online intervention programs were valuable, barriers, such as the demands of staying abreast of instructional practices in a constantly changing environment, worked against implementation (Negrín-Medina et al., 2022). Additionally, teachers shared concerns about a lack of time compared to expectations of compliance with district mandates (Smith & Robinson, 2020). Education tends to promote standardization with routines and procedures dictating teacher actions; when these compliance expectations conflict with teachers' professional judgments, they become dissenting (Forgasz et al., 2023). With the current instructional practice in the United States, school systems have been experiencing declines in literacy development. Schult et al. (2022) observed that 2020 reading competency scores were lower than in the three prior years. According to the NAEP report for 2020, eighth-grade students entering high school had an overall decrease of 3 points on the NAEP Reading Assessment. In response to this decline, educational institutions have developed literacy intervention programs to help improve reading scores.

Definition of Terms

Achieve3000: A computer-based reading program that delivers assignments at different reading levels (<http://www.achieve3000.com/>).

Beginning proficiency level: Does not yet demonstrate proficiency in the knowledge and skills necessary at this grade level/course of learning, as specified in Georgia's content standards. The students need substantial academic support to be prepared for the next grade level or course and to be on track for college and career readiness (Georgia Department of Education, 2023).

Coaching: A successful form of professional development for impact on student outcomes (Lofthouse, 2019).

Common Core State Standards (CCSS): An initiative from 2010 that delineates what students K-12 should know, understand, and do to prepare them for college, career, and lifelong learning after graduation (CCSS, n.d.).

Differentiation: Continuous responsive decision-making process by teachers to improve academic diversity that supports efficient and progressive learning (Bondie et al., 2019).

Developing proficiency level: Partial proficiency in the knowledge and skills necessary at this grade level/course of learning, as specified in Georgia's content standards. The students need additional academic support to ensure success in the next grade level or course and to be on track for college and career readiness (Georgia Department of Education, 2023).

Disciplinary literacy: Specialized strategies, routines, skills, language, or practices inherent in certain content areas that are not generalizable to other domains (Shanahan & Shanahan, 2008).

Distinguished proficiency level: Advanced proficiency in the knowledge and skills necessary at this grade level/course of learning, as specified in Georgia's content standards. The students are well prepared for the next grade level or course and college and career readiness (Georgia Department of Education, 2023).

Georgia Milestones Assessment System (GMAS): A comprehensive summative assessment program that represents a single system of summative assessments that span all three levels of the state's educational system – elementary, middle, and high school (Georgia Department of Education, 2023).

Lexile score: A numerical measure of an individual's reading ability or text complexity (MetaMetrics Inc., 2020)

Literacy interventions: A research-proven strategy to support struggling readers to reach grade-level proficiency in phonemic awareness, phonics, vocabulary, fluency, or comprehension (Fradera, 2021).

Literacy proficiency: Identifying, understanding, interpreting, creating, and communicating using varied information formats (UNESCO, 2023).

Professional Development: Any purposeful and organized formal learning opportunity or training for in-service teachers (Kalinowski et al., 2019).

Proficient: Proficiency in the knowledge and skills necessary at this grade level/course of learning, as specified in Georgia's content standards. The students are

prepared for the next grade level or course and are on track for college and career readiness (Georgia Department of Education, 2023).

Teacher self-efficacy: A teacher's belief in their ability to affect student achievement (Clark, 2016).

Significance of the Study

This study is significant in that following national trends in education, the observed Georgia school district increased their spending to accommodate the needs of their students better, yet the literacy proficiency scores on the GMAS in the observed learning zone within the school district have declined by approximately 12.83% despite implementing and funding new interventions. Table 2 illustrates the increase in per pupil expenditure that the observed Georgia school district allotted between the fiscal years of 2018-2022 to support the implementation of intervention programs and rigorous Common Core State Standards-aligned instruction.

Table 2

Observed Georgia School District Increased Spending to Support Instruction

Fiscal year	Per pupil expenditure
FY18	\$10,841
FY19	\$11,072
FY20	\$11,432
FY21	\$11,529
FY22	\$11,925

Note: Achieve3000 costs \$42 per pupil.

As shown in Table 2, the observed Georgia school district increased spending by approximately 9.52% between 2018 and 2022. Intervention programs have included Achieve3000, i-ready, Edgenuity, and Northwest Evaluation Association Measures of

Academic Progress. Although many intervention programs are optional, district mandates require all core content teachers to use Achieve3000 once a month. Core classes include ELA, history/social studies, science, and math. Despite the new implementation of intervention programs, students have not statistically improved in literacy proficiency, a problem many schools across the country face. This gap in practice affects schools nationwide. In their State of Global Literacy Report, the Institute for Multisensory-Education (2019) explained how in the United States, spending per student has increased by 35% while U.S. teenagers only scored 31st out of the 35 countries in the Organization for Economic Cooperation and Development. Dorn et al. (2020) reported that 24% of U.S. states allocated funding for Internet and devices in schools.

Consequently, U.S. students are still not exceeding college and career readiness requirements. This research could shed light on contributing factors to the literacy decline outside of financial expenditures and varying demographics, focusing solely on the informed instructional practice of educators. The consequences of ignoring teacher perceptions of using literacy development interventions could result in the continued learning loss that America is facing. According to Elleman and Oslund (2019), data from the Program for International Student Assessment and the NAEP showed that 19% of 15-year-old U.S. students scored below a 2 (out of 6). Only 10% of all U.S. students scored a 5 (out of 6) on mandated reading assessments. Elleman and Oslund also reported that only 64% of eighth graders read at or below the basic reading level. This information suggests that, given current instructional practice, U.S. students struggle to excel or meet the basic requirements of literacy proficiency. Educational leaders may benefit from

improving teacher perceptions of new literacy development initiatives. Research shows that when teachers have high self-efficacy, student achievement and motivation grow (Engin, 2020). The implications of this study may work to mitigate the decline in literacy proficiency by improving teacher self-efficacy through data-informed professional development.

In conducting this project study, these findings can help educational leaders mitigate learning loss, increase graduation rates, and improve college and career readiness within the observed Georgia school district and nationwide. This study may create opportunities for educators, administrators, and board members to develop further effective and equitable approaches to literacy improvement in underperforming schools. This research can be used by leadership to consider axiology that may help minimize bias in teacher training and tailor best practices for teachers of diverse students from diverse backgrounds. By exploring core content high school teachers' perceptions, the findings of this study refine teachers' core values of instructional practice that educational leaders may leverage when developing professional development opportunities.

Research Questions

The following two research questions that guided this study

RQ1: What are high school teachers' perceptions of using Achieve3000 as a literacy intervention?

RQ2: What are high school teachers' perceptions about the support or resources needed to use Achieve3000 more effectively as a literacy intervention?

Review of the Literature

I completed searches for a literature review using Google Scholar, ERIC, EBSCO, ProQuest, Walden dissertations, and SAGE. I used the aforementioned search engines to locate recent and relevant peer-reviewed articles published within the last 5 years. I organized the search into four relevant topics: a conceptual framework of disciplinary literacy, challenges to implementation, effects of low literacy skills, and the functionality of Achieve3000.

Conceptual Framework: Disciplinary Literacy

Shanahan and Shanahan (2008) defined disciplinary literacy as specialized strategies, routines, skills, language, or practices inherent in certain content areas that are not generalizable to other domains. Within the disciplinary literacy (DL) framework, there is an emphasis on supporting language and literacy for disciplinary learning by focusing on discipline-specific practices and training students in these practices (Wright & Domke, 2019). In response to a literacy crisis, this approach helps to prepare students to meet college and career readiness requirements by addressing the literacy demands within math, science, social studies, and literature (Faggella-Luby et al., 2012). Demands on literacy development become more complex at the secondary level; thus, this framework can help students navigate the unique language structures in each discipline (Fang & Schleppegrell, 2010). Within the local setting at the observed Georgia school district, all core content areas (math, science, history, and ELA) must use Achieve3000 as a literacy intervention once a month. Therefore, this conceptual framework was best

suiting to better contextualize high school teachers' perceptions of using Achieve3000 as a literacy intervention.

The DL framework best aligns with high school instruction. Basic literacy skills are expected to be mastered within elementary school, intermediate literacy skills are expected to be fully developed within middle school, and the advanced literacy skills that disciplinary literacy enables are expected to be mastered within high school (Faggella-Luby et al., 2012). I learned of high school teachers' perceptions within this study, making the chosen framework most appropriate. Lent (2016) indicated that teaching strategies in “isolation” burdens teachers more; therefore, making literacy a priority in only one content makes approaches to intervention ineffective. Not only do all content areas use reading and comprehension as a skill for more than 50% of instructional time, but when teachers prioritize literacy strategies across content areas, students are more equipped to achieve deeper-level tasks (Brevik, 2019). Different content areas will access different literacy-based skills (Bernstorff et al., 2014). Academic discourse across varied disciplines holds different characteristics, such as specialized vocabulary, different ways of reading, and different tasks and practices (Rabold, 2019). Students may be able to read well at an early age; however, without exposure to DL, they may not be as successful in core content classes. Strong reading skills at an early age are not indicative of guaranteed mastery of advanced literacy skills when engaging with the specialized reading of literature, science, history, and math (Perle et al., 2005). Research shows that students in the postsecondary setting struggle with reading across the disciplines due to text complexity and differentiated activities that differ from their previous reading

experiences (Manarin et al., 2022). Exposure to DL allows students to increase disciplinary mastery and improve college and career readiness. The expansion of information-based technology, internationalization of employment markets, and evolution of workplace demands have increased the necessity of literacy as a precursor for economic and social participation (Carnevale, 1991). Thus, the implications of disciplinary literacy affect students' lives both inside and outside of school and their younger and older lives.

Outcomes of Disciplinary Literacy

Many studies have shown that disciplinary literacy positively affects learning outcomes. In Revelle's (2019) qualitative study involving 24 teachers, students engaged with project-based-learning, a disciplinary literacy strategy, to improve literacy development in their social studies classes. Throughout the 4-week practice, teachers indicated that they noticed a significant improvement in learning outcomes. Lawrence et al. (2019) observed nine middle and high school social studies teachers using a literacy-based project in the social studies content. Teachers reported that this approach increased student collaboration, intensified interest in the subject area, and improved critical thinking. Mertens et al. (2021) used a literacy-based strategy across multiple content areas, reporting improvement in each course. Social studies teachers saw improvement in students' metacognitive awareness in research and identifying bias in historical text. In the math course, students improved on abstract concepts such as visualization and statistics.

Improved literacy proficiency has been found to have strong positive relationships with progressing math skills. Rinne et al. (2020) determined that increased reading fluency helped increase students' subtraction, addition, multiplication, and number line accuracy. Using observation notes and artifacts as data sources, Frambaugh-Kritzer and Buelow (2022) determined that literacy strategies helped improve student mathematics performance. Strategies were focused on teaching students to comprehend complex math-focused texts, appropriately use and understand discipline-specific vocabulary, and improve overall mathematical knowledge. Enderson and Colwell (2021) found that teachers using literacy-based strategies in the math indicated that the approach made the content more relevant to students and increased learner engagement. Fang and Chapman (2020) found that re-reading, close reading, monitoring, and questioning in a math class helped to improve academic performance.

Literacy-based strategies such as concept sorting, Semantic Feature Analysis, and evidence-based writing are proven best practices for supporting science learning (Grysko & Zygouris-Coe, 2020). The varied categories of science, such as ecology, biology, and chemistry, require the acquisition of discipline-specific vocabulary. Understanding the vocabulary and functions of discipline-specific words helped students complete science-related tasks. Paugh and Wendell (2021) conducted an observational study in which students designed and executed planned rocket launches with literacy strategies to improve student capacity for “epistemic practices.” Students created and interpreted information both written and in text format. It was reported that students’ abstract reasoning, discourse, and independent thinking had improved. Clark et al. (2021)

examined how disciplinary literacy affected learning outcomes in a science class over 8 weeks. Data suggested that students produced higher-quality science informational texts using a content-based rubric. By observing two groups of students to evaluate how disciplinary literacy influenced skill mastery in ELA, Reynolds et al. (2022) determined that novice readers (without disciplinary literacy strategies) could only go as far as conceptualization. Those students who were considered advanced with exposure to disciplinary literacy techniques interpreted texts to the point of recursive understanding and metacognitive monitoring during and after reading. Traga Philippakos and MacArthur (2021) worked with 17 ELA teachers to determine the effect of professional development and instructional practice on using disciplinary literacy-based interventions; after engagement with discipline-based strategies, the students' writing quality improved from pretest to posttest. Research showed that disciplinary literacy improves learning outcomes regardless of the discipline.

Disciplinary Literacy Skills Within the Disciplines

Common transferrable skills taught using disciplinary literacy include interpreting a text, making predictions, summarizing, revising, and editing (Saraceno, 2019). In math content areas, students use literacy skills to formulate, identify, and understand mathematical foundations in varied contexts (Retnawati & Wulandari, 2019). Math requires students to transcend from concrete to abstract thinking by translating verbal problems into mathematical expressions and validating solutions (Umbara & Suryadi, 2019). Additionally, Manfreda Kolar and Hodnik (2021) asserted that math students must

analyze, interpret, evaluate, and synthesize information from mathematical text.

Disciplinary literacy in math supports these functions under the CCSS.

The expository and technical skills required of science students focus on students' language skills. Students in this discipline must interpret symbols, analyze diagrams, recognize patterns, infer main ideas, use inductive and deductive reasoning, and understand cause-effect relationships (Stoffelsma & Spooren, 2019). Indeed, literacy within science goes beyond simple reading and writing; students must critique scientific texts and interpret information (Chen, 2019). Science utilizes literacy to help students fortify critical thinking skills and comprehend and track information (Pan et al., 2021). According to CCSS, 17% of the standards within the science discipline address a literacy-based learning outcome (Wright & Domke, 2019). The same study determined that the social studies discipline uses disciplinary literacy to help students gather and evaluate information, assert claims, and use evidence.

Social studies content areas help students build systematic knowledge and vocabulary across multiple domains (Tyner & Kabourek, 2020). Students will need to learn to read for historical context to help make meaning out of presented information (Wrenn & Gallagher, 2021). Consequently, teachers of this discipline will benefit from monitoring students' literacy proficiency. Reading skills help students access various skills within the social studies domain by aiding them in explaining and comprehending historical text (ter Beek et al., 2022). Additionally, with such emphasis on expository texts, students will greatly use many of the same text complexity skills they have used in ELA. Hubbard (2019) determined that within social studies, students need literacy-based

standards to pass state-mandated exams, as assessment questions require complex literacy skills. Students interact with illustrated images and text, requiring them to draw inferences from the source material, a common method in literacy improvement strategies. In social studies, students may also use literacy skills to question issues presented in primary sources (Muetterties & Darolia, 2020).

The misguided belief that literacy has no role or effect outside of ELA goes against best practices. The assumption that only general literacy strategies, as opposed to disciplinary literacy strategies, comprise ELA learning standards should be challenged. DL within ELA allows students to expand foundational understandings across topics, develop argumentative skills, and analyze literature (Reynolds et al., 2022). Students must understand various features in different text genres in the ELA discipline. In ELA classes, students will read multiple texts on a wide range of topics, such as social justice, science, sports, or the lived experiences of others (Reynolds et al., 2022).

Furthermore, features such as using evidence to support claims across argumentative, informational, or narrative writing are far different in other disciplines (Brunskill & Strong, 2021). Schematic understanding of text organization, transforming from comprehension to interpretation, and advanced reasoning are all tenets of disciplinary literacy within ELA (Reynolds et al., 2022). Some specific outcomes of effective disciplinary literacy instruction in the ELA discipline include reading textbooks, mastering conventions of English, and completing research papers (Rabold, 2019).

Review of the Broader Problem

I used the following search engines: EBSCO, Google Scholar, ProQuest, ERIC, and SAGE. Search terms included *literacy, teacher resistance, teacher hesitation, implementation, intervention, Achieve3000, teacher perceptions, impact, literacy best practices, disciplinary literacy, crime and education, assessment, Georgia Milestones, validity, decline in literacy, literacy proficiency, math literacy, science literacy, social studies literacy, English language arts literacy, college and career readiness, and Georgia Milestones scores*. This literature review section is organized into three relevant topics: challenges to implementation, effects of low literacy skills, and the functionality of Achieve3000. In this section, I reviewed the broader problem concerning teachers' inconsistent use of literacy intervention and the implications of said current practice.

Challenges to Intervention Implementation

In the field of education, new initiatives for intervention are carried out by teachers. Teacher resistance to change is influenced by their educational philosophies (Alanoglu et al., 2022). Furthermore, Neri et al. (2019) reported four categories through which teachers assess capacity for resistance: compatibility, complexity, observability, and triability. Compatibility refers to commonalities between resources and teacher values. Complexity refers to how difficult the resource is to understand and use. Observability refers to how much implementation will be seen or noticed by others. Lastly, triability refers to the degree to which a resource can be engaged with experimentation. Byrne and Prendergast (2020) argued that education reform represents a challenge to teachers' thinking and practices, which ultimately leads to concern prior to

implementation taking place. Teachers begin to feel critical of their ability to implement new practices, which impacts their fidelity. Additionally, school climate plays a role in challenges to implementation. Al-Takhayneh et al. (2022) found that factors contributing to school innovation climate, such as independence, confidence, cooperation, creativity, and fairness, directly correlate to teacher resistance. School administrators who do not seek to foster the tenets of a positive innovation climate can render negative attitudes from teachers. Ahmad (2022) posited that administrators who design organizational structures that are not mindful of the competitive pressure that teachers face, will struggle to encourage them to implement new practices.

Teacher Perceptions of Challenges to Implementation

A common problem within the educational setting is encouraging teachers to actively participate and utilize materials from new initiatives with fidelity or accuracy. Akram et al. (2022) synthesized existing literature to delineate themes in teacher perception of integrating technology-based interventions, like that of Achieve3000. Research demonstrated that teachers perceived limitations to implementation to be slow Internet speeds and a lack of infrastructure around expectations of use. Boonmoh et al. (2021) conducted a qualitative study involving 126 teachers' perceptions' of using online resources. Data indicated that teachers could not effectively implement programs due to a lack of classroom resources, mainly computers, Internet access, and projectors. Mensah and Osman (2022) echo the same sentiment, reporting that teachers felt challenged by a lack of laptops and difficulty accessing software across poor Wi-Fi. Within his study, Hamutoglu (2021) reported that 399 teachers' perceptions of internal barriers to

implementation were ease of use, usefulness, and efficacy. Francom (2020) reported results from a 3-year survey that suggest teachers' main concerns with implementing resources were: lack of time and the decline in efficacy of training and support. Merga et al. (2020) reported that only 24% of teacher participants felt that their training on new initiatives had been sufficient. Additional opposition to using new interventions has been encouraging teacher buy-in for programs perceived to be irrelevant to their specific content instruction.

Non-ELA Teachers' Resistance to Literacy Intervention Implementation

Literacy intervention is a research-proven strategy for struggling readers to reach grade-level proficiency in phonemic awareness, phonics, vocabulary, fluency, or comprehension (Fradera, 2021). Among math, science, and history teachers in Smith and Robinson's (2020) study, common themes of resistance to literacy development instruction emerged. While teachers found value in strategies such as close reading, they believed it took time away from the curriculum. Many schools offer professional development on new initiatives; however, implementation still does not occur. Vinnervik (2022) reported that teacher participants felt that professional development had not addressed their concerns, making them feel uncertain about instructional practice. Prendergast et al. (2019) sought to determine math teachers' perceptions of using literature within their content area. Approximately 90% of participating math teachers indicated they had not used literature in their instruction. Survey data indicated that barriers to implementation included: lack of time, lack of belief in effectiveness, lack of pedagogical knowledge, and unclear outcome expectancy.

Furthermore, math teachers indicate conceptual challenges, such as developing literacy as a foundation for resisting new literacy initiatives (Umbara & Suryadi, 2019). Irby et al. (2020) explored science teachers' perceptions of using literacy interventions in their content area. Of the negative responses, teachers explained that they did not want to learn new instructional practices; they believed learning outcomes had been achieved without literacy intervention and that the literacy intervention strategies offered were ineffective. In creating supportive professional development approaches, educational leaders should consider the concerns of all core content teachers. Through redesigning professional development, schools may work to improve implementation processes.

Effects of Low Literacy Skills

The dangers of the long-term effects of low literacy skills include increased dropout rates, decreased employment salary ranges, and involvement in the criminal justice system (Didion et al., 2020). A correlation exists between people ages 15-29 who are not employed with low literacy skills; they are more likely to drop out of high school and be less politically and socially involved (van Vugt et al., 2024). When provided with reading intervention, at-risk students have the largest reduction in crime predictability (Anwar & Derin, 2019). When students are exposed to education intervention, Anders et al. (2023) reported that local criminal behavior had decreased by 20%. Additionally, research shows that poor academic performance is a high indicator of student dropout rates (Holopainen & Hakkarainen, 2019). Out of 1,047 participants who had dropped out of school, over half indicated that they dropped out due to a lack of engagement at school and the school environment (McDermott et al., 2019). Contributing factors to low literacy

include outdated teaching methods and ineffective curriculum., which amplifies a lack of student engagement. Developing literacy through intervention is critical for the success of students both academically and non-academically. Low literacy skills affect parents, communities (crime and employment), and students.

According to Abbas and Hussain (2021), parents perceive the consequences of low literacy skills to be less confident children, less socially responsible children, immoral activity, and increased child pregnancy. For those whose children are at risk, parent perceptions of student success differ further. Many parents reported feeling less confident in their child's future if they received special education (Paccaud et al., 2021). Parents also perceive that students with lower literacy skills have less engagement with extracurricular activities (Zaccoletti et al., 2020). Parental concerns around children with low literacy scores mirror the impacts on local communities.

By surveying inmates at various prisons, Jonathan et al. (2021) found that inmates with low literacy rates and academic gaps were most likely to have committed the following crimes: robbery, burglary, automobile theft, drug trafficking, and shoplifting. Conversely, Vandala (2019) found that by improving the literacy skills of imprisoned persons, inmates had improved self-esteem and felt more equipped with skills to make them law-abiding citizens. In their study, García et al. (2019) found that the cost of criminal activity was reduced through years of exposure to an academic intervention program. Through academic intervention, the local economy can save upwards of \$463,000 annually for crimes committed by men and \$32,790 annually for crimes committed by women (García et al., 2019).

Within the socio-economic context, students must respond to a technologically advanced and fast-changing world. Adults who experience learning loss generally earn 3% lower income than those with higher academic skills (Hanushek & Woessmann, 2020). Diebolt and Hippe (2019) suggested that the Gross Domestic Product per capita value globally increases as literacy rates increase. Presently, literacy rates have declined in America. If the American education system does not provide intensive interventions, newly graduating students may face reduced lifelong earnings of up to \$61,000 (Dorn et al., 2021). Studies show that students who are more academically invested have higher retention rates (matriculation to future grade levels) than those who are not (Burke, 2019). In their study, Wild and Heuling (2020) determined a statistically significant correlation between cognitive skills and dropout rates.

Achieve3000 as a Literacy Intervention

The present study acknowledges the local integration of Achieve3000 as a literacy intervention. Achieve3000 is a literacy-based intervention program that offers engaging, interactive, and online learning for students with deficiency gaps (Achieve3000, 2016). This program improves students' academic success by reinforcing the development of literacy skills. Strong literacy skills are essential for college readiness, as 80% of college-level tasks involve reading (Holschuh, 2019). Focusing on foundational skills through varied online learning, this intervention mitigates learning deficits and monitors progress as students engage with assigned material. Achieve3000 offers personalized standards-based content that supports foundational skills of reading, writing, and understanding (Achieve3000, 2017). The intervention offers full lessons, multiple choice questions,

writing assignments, and texts in both English and Spanish (Achieve3000, n.d.).

Achieve3000 is aligned with CCSS and measures texts and lessons by grade and skill-appropriate Lexile levels while providing tiered instruction for special education students (Achieve3000, n.d.). The supplemental texts within the intervention program best support students with special needs or those identified at risk (Strassman et al., 2019). Teachers may assign articles by class or individually, and run performance reports based on standard, text question pass rates, or whole class overview. The program calculates Lexile scores based on student performance, which guides the complexity of future assigned texts (Achieve3000, 2020). Achieve3000 is useful, particularly for its adaptive nature to student responses, by leveling text to meet student needs (Achieve3000, 2020). Many schools use Achieve3000 as an intervention method to assist in developing literacy proficiency. Due to COVID-19 restricting students to virtual learning, it is estimated that students lost up to 4 months of instruction per virtual year (Achieve3000, 2020). Achieve3000 is designed to reduce the effect of learning loss on student achievement and progress students toward college and career readiness (Achieve3000, n.d.).

Disciplines Within Achieve3000. On the intervention platform, articles address discipline-specific concepts within all core content areas. Social Studies covers the subcategories of U.S. history and world history on Achieve3000. Topics include colonialism, the constitution, enslavement, the Civil War, reconstruction, the Cold War, ancient civilizations, and the Middle Ages (Actively Learn, n.d.). Science content covers the concepts of engineering, life science, physical science, and earth and space science. Topics include animals, biotechnology, cells, acids, motion, atmosphere, earth systems,

natural resources, and chemical reactions (Achieve3000, n.d.). ELA content covers topics through informational and literary text that CCSS skills are associated with, such as poetry or nonfiction. While utilizing Achieve3000, math accesses a different part of the platform titled “Achieve3000Math”. Achieve3000Math is suggested for Grades 3-12, aimed at developing math fluency and growing students’ performance on CCSS standards for math. Within this platform, students engage with one-on-one tutoring sessions, scaffolded lessons, and adaptive multiple-choice questions that assess students’ fluency and conceptual understanding (Achieve3000, n.d.).

Literacy Outcomes of Achieve3000. Research shows that Achieve3000 effectively improves learning outcomes geared toward literacy proficiency. Literacy competency can be measured using Lexile scores and ranges. Lexile scores measure readers’ ability or text complexity in numerical value (Georgia Department of Education, n.d.). The ranges are between 200 (beginning readers) and 1700 (advanced readers). When monitored with fidelity, students’ use of Achieve3000 can improve Lexile reading comprehension over time (Achieve3000, 2019). The Achieve3000 company advises that schools use at least one to two weekly lessons to help double the predicted student growth (Achieve3000, 2021). Haymon and Wilson (2020) found that after completing tasks using Achieve3000, the mean Lexile score of 120 students increased from 1307 to 1492. Davisson (2021) observed the effects of Achieve3000 on the learning outcomes of a remedial and general education class, and data suggested that reading scores were significantly increased. Remedial classes went from an average reading score of 302.275 to 310.422 within the academic year. In contrast, general education classes went from an

average reading score of 334 to 337. According to the *2018-2019 National Lexile Study* (MetaMetrics, 2019), every grade level 2-12 in all U.S. states increased Lexile scores more than expected within the school year when using Achieve3000.

GMAS

The GMAS is designed to provide information on content mastery across math, science, ELA, and social studies beginning in the 3rd grade (Early et al., 2019). The GMAS is administered online, featuring technology-enhanced questions, constructed response opportunities, reported Lexile scores, and estimated norm-referenced performance ranges (Georgia Department of Education, 2022). In 2016, the GMAS was evaluated and received acceptable reliability (ranging from alphas of .85-.93) and validity (Georgia Department of Education, 2016). As school systems move forward, GMAS scores help shape decisions around leadership and instruction. Within the high school setting, scores from the GMAS provide implications on college and career readiness for high school students (Burke, 2021). The decline in literacy proficiency, as indicated by GMAS scores, has prompted school districts to implement intervention in the local setting. Georgia Department of Education (2022) reported that the Board of Education partnered with MetaMetrics to ensure that reported Lexile levels were accurate and relevant to the GMAS questions.

Usage of GMAS. Data from this assessment helps education professionals assess instructional practice and monitor student growth. Intervention and development practices directly influence achievement scores on the GMAS (Hall, 2020). Gutierrez de Blume et al. (2021) found that through measuring GMAS scores, students who were

exposed to literacy development across content areas performed better than those students who did not. Additionally, Poole (2020) found that students engaging in intervention progress monitoring through a system called ACCESS had strong correlational relationships with high achievement on the GMAS. Further research suggests that scores on the GMAS are high indicators of students' academic success (Mays-Truitt, 2019). Price (2022) advises that scores from this assessment also help inform parents, school districts, and the board of education about the quality of schools and help influence schools' College and Career Ready Performance Index.

Conclusion

Students who fall below literacy proficiency may have difficulty excelling in their core content classes, which increases the likelihood of delayed graduation, lower salary rates, and crime involvement. Research further suggests that those students who underperform in literacy measure skills are less likely to be considered college and career-ready. Students who do not perform well academically would be best served by intervention. Teacher resistance to implementing interventions occurs for many reasons. However, a cross-disciplinary intervention that focuses on best practices for literacy development, such as word processing, differentiation, and comprehension, may help to improve literacy proficiency and overall academic success. Achieve3000, used as an intervention, can positively impact students' literacy proficiency. Following best practice approaches, this intervention has significantly increased the lexile levels of students exposed to the program.

An analysis of the literature shows that Achieve3000 is an effective intervention tool for ELA classes and all core content areas. However, within the local setting, teachers have not used the intervention in compliance with district mandates. There are few studies conducted on teacher perceptions of using Achieve3000 as a literacy intervention in all core content areas.

Implications

Two project directions could have aligned with this study based on the preliminary research and a comprehensive literature review. Data suggest that literacy proficiency has not only failed to improve but has declined in the observed school district. With the resources readily available to teachers, there appears to be a disconnect between development and instructional practice. Based on the findings of data from the local level and supporting research around effectively implementing interventions, I could have developed a 3-day professional development plan for high schools in the observed Georgia school district to use. Conversely, based on the needs presented by speaking with administrators and teachers in the observed Georgia school district, I could also have created a helpful resource outlining the functions and troubleshooting tasks for Achieve3000 that will remain accessible to staff as needed. Administrators indicated that the district's expectation to issue the intervention monthly would not be changed and that training on the intervention has been conducted. Teachers indicated that their training was inadequate to use the Achieve3000 platform comfortably. Ultimately, based on the varying needs and causes of delayed implementation, I developed a white paper for high schools in the observed Georgia School District to utilize when crafting professional

development. Developing a tangible resource could help to mitigate teacher resistance and support future professional development in the observed Georgia school district. The results of this study may help increase the usage of Achieve3000 as an intervention and build the capacity for students' literacy proficiency scores to increase. In underperforming schools, it is common that high school students are still working to build foundational literacy skills (Faggella-Luby et al., 2012). The present study, therefore, may work to improve student graduation rates, bolster overall academic performance, and increase students' college and career readiness.

Summary

Section 1 of this study discussed the overall problem of declining literacy contextualized within the local problem: inconsistency in using the literacy development initiative resulted in no improvement of low literacy scores in April of 2022, as 80.85% of high school students in one learning zone in the observed Georgia school district scored below literacy proficiency on the GMAS. The rationale and evidence of the problem from existing literature provided information about the causes of teacher resistance to implementing interventions and the influence of low literacy skills. Section 1 also included a definition of terms, the significance of the study, research questions, a review of the literature, and the implications of this study. The research questions guiding this study were: What are high school teachers' perceptions of using Achieve3000 as a literacy intervention, and what are high school teachers' perceptions about the support or resources needed to use Achieve3000 more effectively as a literacy intervention?

The remaining content for Section 2 includes the basic qualitative design used within this study, criteria for determining and gaining access to the 12 participants, collection and analysis of data, and data analysis results. Section 3 includes an overview and detail of the project designed for this dissertation. In Section 4, I discussed reflections and conclusions.

Section 2: The Methodology

In this section, I provide the research design for this basic qualitative study. Additionally, I discuss the criteria for selecting participants, gaining access to the participants, data collection, data analysis, and evidence of the quality of the data. Section 2 ends with the data analysis results, interpretation of the findings, and the project deliverable.

Qualitative Research Design and Approach

I used a basic qualitative design for this case study to examine high school teachers' perceptions of using Achieve3000 as a literacy intervention. A qualitative study allows researchers to understand how participants in specific settings become aware of, explain, react to, and adapt to their daily occurrences (Miles & Huberman, 1994). A qualitative approach was best suited for this study as data are collected through participants' lived experiences (see Clark & Vealé, 2018).

A basic qualitative approach is best suited to collect the beliefs and experiences of participants using nonnumerical data (Merriam & Tisdell, 2017). The research problem was that inconsistency in using the literacy development initiative has resulted in low literacy scores in April of 2022; 80.85% of high school students in one learning zone in a Georgia school district scored below literacy proficiency on the GMAS. Qualitative findings in this design are often presented as recurring topics or themes (Sandelowski & Barroso, 2002). This basic qualitative research design was used to answer the following research questions:

RQ1: What are high school teachers' perceptions of using Achieve3000 as a literacy intervention?

RQ2: What are high school teachers' perceptions about the support or resources needed to use Achieve3000 more effectively as a literacy intervention?

My experience with using interventions, as well as the existing literature, helped to develop these questions. I created these questions to explore high school teachers' perceptions of using Achieve3000 as a literacy intervention. This approach is best for exploring how individuals make meaning out of their experiences (Kahlke, 2014). The purpose of this study was to explore high school teachers' perceptions of the use of Achieve3000 as a literacy intervention. Using a basic qualitative design specifically does not require researchers to align with one methodology (Kahlke, 2014). The basic qualitative design does not follow philosophic assumptions, which supports my research purpose of exploring teacher perspectives without assumptions about their responses (Caelli et al., 2003).

Other considerations for design approaches to this study were ethnography and phenomenology. However, based on the purpose of this study, using a basic qualitative design was most appropriate. Ethnography seeks to observe first-hand what participants do or say through qualitative research (Hammersley, 2006). Approaches using this research design may call for small-scale comparisons of groups and subgroups (Wutich & Brewis, 2019). Consequently, with only eight campuses in the South Learning Zone and only 10 participants total, this study did not call for comparisons of small groups but for the overall summation of their experiences. Phenomenology centers around

contextualizing a phenomenon through the lived experiences of those who encounter the phenomenon (Neubauer et al., 2019). However, this approach is best supported by the practice of the researcher directly involving themselves in the participants' lives and gathering stories (Given, 2008). The nature of this study took more of an outside look into the generalized perceptions of high school teachers in the local setting. Although interviews were used to collect data, they focused on current instructional practices due to perceived limitations. A basic qualitative design was deemed most appropriate and effective in supporting this study's problem and purpose statements.

Participants

In this subsection, I offer an overview of the criteria for selecting participants, justification for the number of participants, and procedures for gaining access to participants. Additionally, I review the process of establishing a research-participant relationship. Lastly, I discuss the measures taken to protect participants from harm.

Criteria for Selecting Participants

Selecting participants is considered a first step for embarking on qualitative research. I had several criteria for study participation. Participants had to (a) be employed at the observed Georgia school district as a core content teacher; (b) teach within one of the eight high school campuses in the South Learning Zone; (c) have worked 3 full years within the observed learning zone in the observed Georgia school district, after the purchase of Achieve3000 in 2019; (d) have attended at least one professional development training on Achieve3000; and (e) have implemented the intervention at least

three times in their instruction. Purposive sampling ensured that qualifying participants yielded meaningful and relevant data.

Justification for the Number of Participants

In a basic qualitative design, research focuses less on sample size and more on data quality (Lodico et al., 2010). I used purposive sampling, which involves a relatively small participant group. Sampling designs for qualitative research are not random; they should purposefully include individuals capable of providing the most appropriate context for the problem (Johnson et al., 2020). Purposive sampling requires that people be qualified to explain and discuss the research problem from varied points of view (Campbell et al., 2020). For this reason, I used purposive sampling to select 10 participants. I retrieved 10 high school core content teachers' perceptions of using Achieve3000 as a literacy intervention from the eight high school campuses within the local setting. The selection criteria yielded fewer participants based on each school's staff demographics.

Gaining Access to Participants

Once the Walden University Institutional Research Board (IRB) and the Georgia school district granted me permission to collect data, I emailed the approval letters to the principals of the eight high school campuses in the local setting for permission to email their teachers to participate in my study. Then, I used my school email address to contact the mathematics, social studies, ELA, and science departments to invite them to participate in this study. Only high school teachers within the observed learning zone were issued an invitation. The email sent to teachers included an overview of the

problem, study purpose, participation requirements, expected duration, promise of confidentiality, my contact information, and digital consent forms.

Establishing Researcher-Participant Relationship

As a current faculty member within the observed Georgia school district, I have access to personnel within the local setting. Having worked in three campuses within the observed Georgia school district for over 10 years, I have established work relationships with many teachers within my department, district leaders, and principals. I have also provided training to teachers outside of my department on behalf of the district, which has granted me a work-based relationship with many staff members in the observed learning zone. I attended the preplanning meetings across the eight campuses to introduce myself and my study. Additionally, as schools within the observed learning zone continued to host monthly faculty meetings, I attended two campus meetings after preplanning when I still needed participants.

Measures Taken for Protection of Participants' Rights

Participants in a qualitative study share their experiences and beliefs supporting the research. To ensure their trust and safety, researchers should always uphold ethical practices and cause no harm to participants (Ravitch & Carl, 2021). I obtained permission to collect data from the Walden University IRB (Approval #: 09-06-23-0538095) and sent the IRB approval letter to the research board within the observed Georgia school district to obtain permission to conduct the study.

Primarily, ethical practice ensures that participants are safe and that they can trust the researcher not to harm or misrepresent them in any capacity. Ravitch and Carl (2021)

advised that misleading participants about how the information will be used or responding negatively to participants in ways that make them uncomfortable are detrimental to qualitative research and ethical practice. Strategies such as providing confidentiality or anonymity encourage participants to speak more freely as their identity is protected from the general public. Researchers may use pseudonyms in place of names to ease participants' minds; this study involved the use of alphanumeric codes for that purpose.

Additionally, full transparency instills trust between the researcher and the interviewee. Ravitch and Carl (2021) discussed both internal and external transparency, asserting that “Internal-facing transparency means being clear and transparent about all aspects of a study with participants...External-facing transparency means that threats to validity and the presence of bias” (p. 212). Full transparency, both internal and external, is essential to minimize harm. In this study, I employed confidentiality for all participants, offered informed consent, and delineated stipulations to protect participants from harm.

Confidentiality

Protecting the identity of participants can both establish trust and protect them from harm. In this study, I issued alphanumeric codes to all participants as a means of protection (see Merriam & Tisdell, 2017). Each participant was given the letter T with a number representing the order in which they were interviewed. For further protection, the participants did not know what alphanumeric codes were being used in the study to prevent teachers from trying to find one another should they have a working relationship.

Informed Consent

I used a consent form from Walden University's consent form template. The consent form explained the study (including the purpose of the study, an overview of the research problem, and the research questions), criteria for participation, expected procedures and processes (duration, scheduling, and interview format), and participants' rights to confidentiality. I obtained permission to invite staff for participation from the principals of each campus. If either party (principal or teacher) had questions, they were given my work email, personal email, and cell phone number. Additionally, all participants were emailed a printable version of their consent and responses to the demographic questions. Teachers responded with the completed form and the title "I consent" as the subject line. Before conducting interviews, teachers had a consent form on file and gave verbal consent on the recording.

Protection From Harm

The work conducted in this study must not cause any harm to participants, as it damages their trust and violates ethical standards (Ravitch & Carl, 2021). Approaches that mitigate harm or breach ethics include using alphanumeric codes to avoid identifying information, garnering consent before participation, and providing transparency. I employed alphanumeric codes for participants, provided detailed information to teachers, and earned consent from those willing to join the study. Ravitch and Carl (2021) asserted that an IRB would not tolerate harm-causing behaviors such as framing research in explicit language that coerces others, offering misleading information, and reacting negatively to participant responses. I designed interview questions that make no

assumptions or guide participants' thinking, ensuring that my role as a researcher remained neutral and uninfluential. The IRB takes on a key role in ensuring beneficence, meaning researchers take necessary measures to secure the safety and trust of study participants. In addition to securing confidentiality, I took steps to eradicate bias. During this study, I attended faculty meetings among the eight high school campuses so that teachers could meet me face-to-face. Shenton (2004) suggested that researchers develop an early familiarity with participants' cultures before data collection begins. I learned about participants' personalities and communication styles in establishing direct and personal contact. I learned about the participants to understand why and how they communicate information without an assumption or stereotype on my behalf. Rubin and Rubin (2012) advised against stereotyping participants, as it skews researchers' interpretation of data.

Data Collection

Qualitative studies may collect data from interviews (one-on-one or focus groups), observations, document analysis, and other tools (Merriam & Tisdell, 2015). For this study, I elected to use interviews. Qualitative interviews should be less standardized and use broad, open-ended questions that can be analyzed by delineating patterns (Groenland & Dana, 2020). I collected data from 10 core content high school teachers in the local setting over 3 weeks using Microsoft Teams to record. While participants were interviewed, I enabled the transcript feature to capture the conversation and accurately take notes on my laptop. All participants were asked questions from the interview protocol (see Appendix B). I transcribed the data collected and issued teachers an

electronic link to their email where they may request and receive access to their transcribed interview to ensure confidentiality.

Description of Data Collected

Using a self-designed interview protocol, I used one-on-one semi-structured interviews with 10 core content area high school teachers. The protocol was delineated from McNamara's (2009) and Turner's (2010) guidelines for conducting qualitative interviews to include conducting interviews in a private room, explaining the purpose, expressing confidentiality, outlining the format, sharing the duration of the interview, providing contact information, allowing for clarifying questions, and completing notes to assist in recall. The questions used in an interview may come from existing literature or previously collected data from observations or document reviews (Busetto et al., 2020). Within semi-structured interviews, questions are pre-planned with an opportunity for participants to explain and clarify responses in detail (Alsaawi, 2014). In this study, questions were based on research from similar studies.

Justification of Data Chosen

This study follows a basic qualitative design. In doing so, I needed to collect data on participants' lived experiences to help contextualize the problem of the study. The problem was that inconsistency in using a literacy development initiative resulted in no improvement of low literacy scores in April of 2022, as 80.85% of high school students in one learning zone within a Georgia school district scored below literacy proficiency on the GMAS. The two research questions guiding this study asked *What are high school teachers' perceptions of using Achieve3000 as a literacy intervention?*, and *What are*

high school teachers' perceptions about the support or resources needed to use Achieve3000 more effectively as a literacy intervention? Conducting observations would not allow me to gain deeper insight into the causation behind teacher resistance to using Achieve3000 as a literacy intervention nor clarify teacher perceptions. However, interviews allowed for insightful responses through dialogue and open-ended questions (see Marshall & Rossman, 2014; Nachmias & Nachmias, 2008). Qualitative interviews are designed to gain insight into participants' lived experiences through conversation and, thus, are best suited to respond to the research questions sufficiently. Erickson (2011) wrote that "Qualitative inquiry seeks to discover and to describe in narrative reporting what particular people do in their everyday lives and what their actions mean to them" (p. 43). Lodico et al. (2010) suggested that interviewing allows researchers to gather data by probing and clarifying responses. In developing interview questions that target data necessary to support the research questions, this method helps improve validity through saturation. Merriam and Tisdell (2017) affirmed that data saturation is more readily achieved when researchers establish similar inquiry sets. As participants engaged in the interview process, they responded to eight interview questions and possible probes or follow-up questions that directly correlated to the research problem and questions.

Collection Instrument

I developed an interview protocol (see Appendix B) based on McNamara's (2009) and Turner's (2010) guidelines. Participants responded to the questions on this document during the interview. Given that current educational best practice is inclined towards technology-based resources, I elected to use virtually recorded interviews. Virtual

interviews allow researchers to reduce travel costs and mitigate schedule conflict concerns (de Villiers et al., 2022). I conducted all interviews via Microsoft Teams using the microphone so that I could both record and transcribe the audio for analysis.

Sufficiency of Data Collection Instruments

This study's two research questions focused on exploring high school teachers' perceptions of using Achieve3000 as a literacy intervention and their perceptions of support that they need to use Achieve3000 more effectively. The interview protocol focused on sufficiently answering these inquiries with opportunities for follow-up and clarification of responses (see Appendix B). Questions on the interview protocol were derived from existing and recent research on the problem of study.

The first research question in this study was *What are high school teachers' perceptions of using Achieve3000 as a literacy intervention?* Interview Questions 4, 5, 6, and 7 addressed this research question.:

- To what extent do you find Achieve3000 influences your instruction?
- Did the influence of Achieve3000 on your instruction benefit, harm, or have no impact on students? How so?
- How would you describe your capacity to implement Achieve3000? Why so?
- Would you suggest Achieve3000 to members of your content area? Why or why not?

The second research question in this study was *What are high school teachers' perceptions about the support or resources needed to use Achieve3000 more effectively*

as a literacy intervention? Interview Questions 8, 9, 10, 11, and 12 addressed this research question.:

- What supports do you currently need around Achieve3000?
- What supports do you currently have around Achieve3000?
- Describe the effectiveness of the supports offered to you around Achieve3000.
- Has the training you've received on implementing Achieve3000 influenced your implementation methods during instruction? Why or why not?
- What further training is needed that would benefit your implementation of Achieve3000?

Each research question was intentionally supported by four to five interview questions to allow participants to share both specific and general responses in their interviews. If the participant required probing or follow-up questions, they were targeted according to the addressed research question.

Process for Generating, Gathering, and Recording Data

Teachers had a scheduling link to schedule their recorded Microsoft Teams interviews. Interviews lasted approximately 20–30 minutes in length. Following the email invitation and confirmed consent, the schedule link allowed participants to select a date and time that best met their availability. All interviews were conducted during the second semester (February to March) of the 2023–2024 academic school year. Upon completion of the interview, I emailed my correspondence of thanks to all participants. Data were stored on my password-protected work computer using Microsoft OneDrive to maintain access to district resources and personnel.

Systems for Data Tracking Process

Using Microsoft Excel, I generated a spreadsheet with alphanumeric codes for each participant in the first column, the questions being asked in the second column, a notes section in the third column, questions asked for probing or clarification in the fourth column, and a link to the transcription of the interview in the fifth column. I transcribed the data from each interview immediately following the conclusion and exported the transcription into a Microsoft Word document and NVivo Pro Software. NVivo can help researchers analyze unstructured text, video, or audio data from (but not limited to) interviews (Dhakal, 2022). This software helped me to store, organize, and sort interviews for thematic analysis. In the sixth column of my Excel sheet, I included categories and emerging themes from each participant.

Procedures for Gaining Access to Participants

Before conducting the study, I sought approval to research from Walden's IRB. Upon approval, I forwarded my letter from Walden to the research board within the observed Georgia school district for their approval. I then gained consent to interview employees from each of the principals of the eight high school campuses in the local setting, using the IRB letter from Walden University. The consent was documented via a district form sent to the principal's email to include an electronic or wet signature.

After receiving permission from the IRB in Walden University and the observed Georgia school district, and consent from the principals within the eight high school campuses, I emailed teachers based on their departments. Emails were only sent to the ELA, social studies, math, and science content teams using their group email contact.

Within the email, teachers found an invitation to participate in the study. Furthermore, the signed consent form from each principal was attached to the email. The invitation to participate housed an overview of the study (duration, research questions, problem, and purpose statements), schedule (interviews), confidentiality statement, and contact information. Teachers indicated their interest by signing and clicking the “Yes, I consent” or “No, I do not consent” button on the form. All participants will be emailed a signed and completed copy.

Role of Researcher

I am an 11th-grade American Literature teacher within Campus 8 of the observed learning zone in the observed Georgia school district. I have 10 years of working experience in the observed school district where the study was conducted. Participants were teachers on the same level as me. I do not and have not had administrator authority over or with the participants of this study, thus, reducing the risk of implicit bias. Furthermore, I have no responsibilities in the remaining seven high school campuses. My only bias, in my opinion, is my own experience and perceptions of Achieve3000 in my content area. Otherwise, no monetary promise or incentive was given in the invitation to participate in this study.

Data Analysis

This study's two research questions focused on exploring high school teachers' perceptions of using Achieve3000 as a literacy intervention and their perceptions of support that they need to use Achieve3000 more effectively. I collected data from 10 high school core content teachers to understand current instructional practices during the

2023–2024 academic school year. I used Braun and Clarke’s (2006) six-phase thematic analysis to derive codes and themes from interview responses.

The first phase of Braun and Clarke’s (2006) thematic analysis is familiarizing oneself with the data collected. This phase involves repeated data readings while looking for meaning and building understanding. The second phase is generating initial codes. I created basic codes that addressed data according to their semantic or latent content during this process. The third phase is to search for themes. During this phase, I organized my long list of codes into concepts or themes based on how they relate. The fourth phase is reviewing themes. This phase involves refining the previously identified themes, determining if they are valid if some can work combined under one theme, or if large themes need to be broken down separately. I then placed these themes on a concept map. The fifth phase was to define and name the remaining themes. During this phase, I explained the deeper meaning behind each theme and how the data specifically represented that theme. Lastly, the sixth phase is to produce the report. This sixth phase involves comprehensively explaining the data and convincing the reader of the research’s validity. In completing these steps, I immersed myself in data and observed my reflexivity.

Thematic analysis is the inductive and deductive orienting of data based on semantic meaning into common and emergent themes and patterns (Braun & Clarke, 2023). This analysis helps researchers to develop categories for thematic coding. Coding based on emerging themes has four key outcomes: reducing the amount of data into smaller units, allowing fieldwork to be more focused, developing a cognitive map that

organizes schema for a better understanding, and laying the groundwork for cross-case analysis by surfacing common themes (Miles & Huberman, 1994). All themes were categorized according to the research questions using the Microsoft Excel sheet that tracks data. A detailed discussion of emergent themes and descriptions can be found in the Data Analysis Results section.

Evidence of Quality of the Data

Triangulation of data helps to promote reliability, validity, and credibility (Bans-Akutey & Timub, 2021). Credibility is the capacity to which outside researchers can rely on research (Self & Roberts, 2019). Validity means that findings reflect the actual phenomenon of the study. In contrast, reliability means that findings can be tested or analyzed repeatedly and yield the same result (Burkholder et al., 2020). Member checking was conducted to promote the credibility of findings, while purposive sampling ensured validity. By coding responses into categories, I also ensured reliability (see Fink, 2003). Furthermore, the triangulation of these data sources worked together to mitigate internal and external validity threats.

Member Checking

As a means of ensuring the validity of data, I conducted member checks for all participants. Once the data analysis was complete, all participants received a copy of the findings 1 month after interviews were conducted to check for the accuracy of my interpretations. Participants had the opportunity to clarify or restate any information they chose. None of the participants elected to make revisions and accepted the documents as accurate.

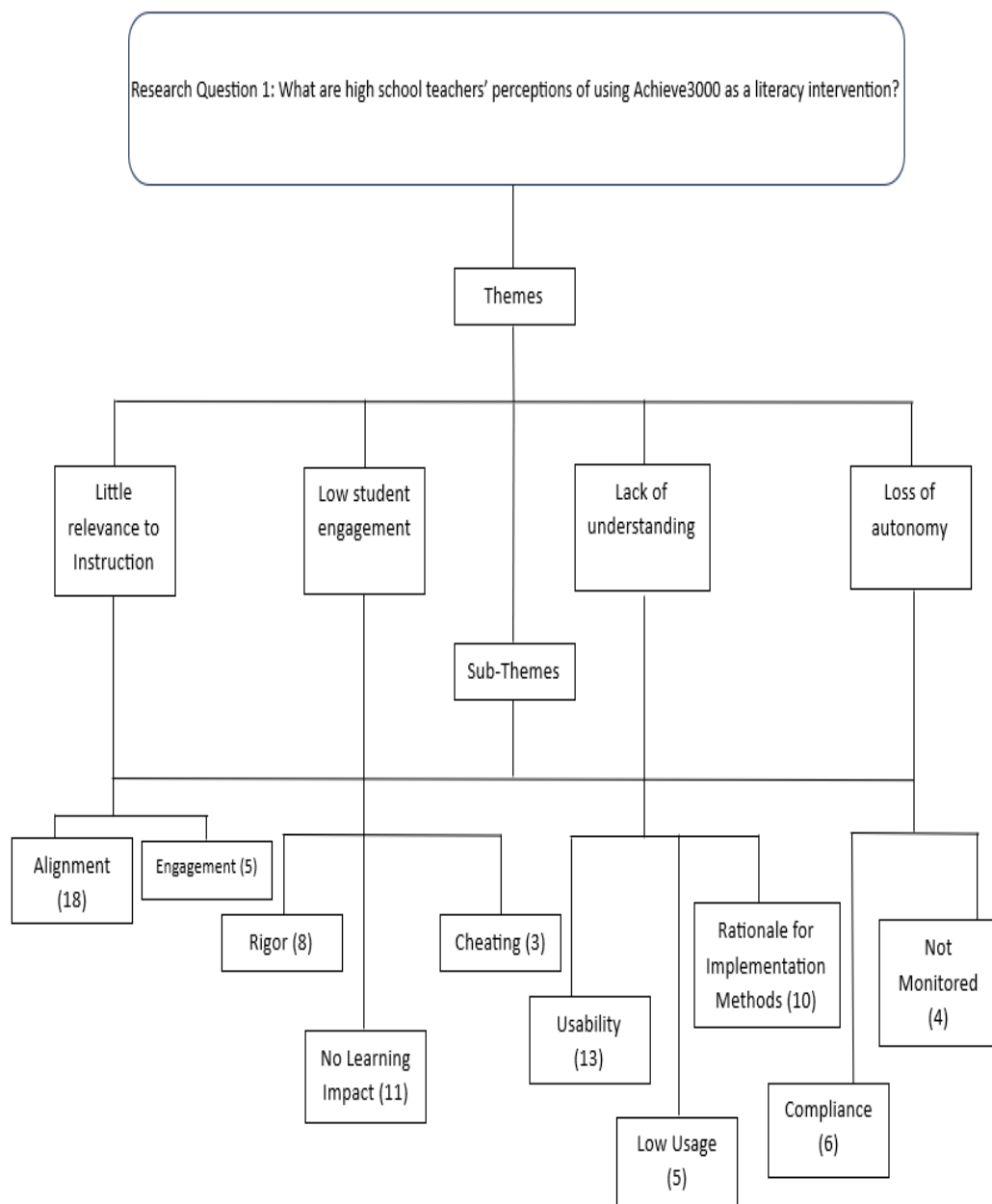
Triangulation of Data

Data triangulation involves seeking data sources at varied points in time, with different people, and in different locations to ensure validity (Ravitch & Carl, 2021). Furthermore, triangulating data helps to improve research accuracy through saturation. Saturation means thorough analysis has occurred so that no new themes or information emerges (Mason, 2010). In this study, triangulation occurred from interviews with teachers from different content backgrounds and campuses.

Data Analysis Results

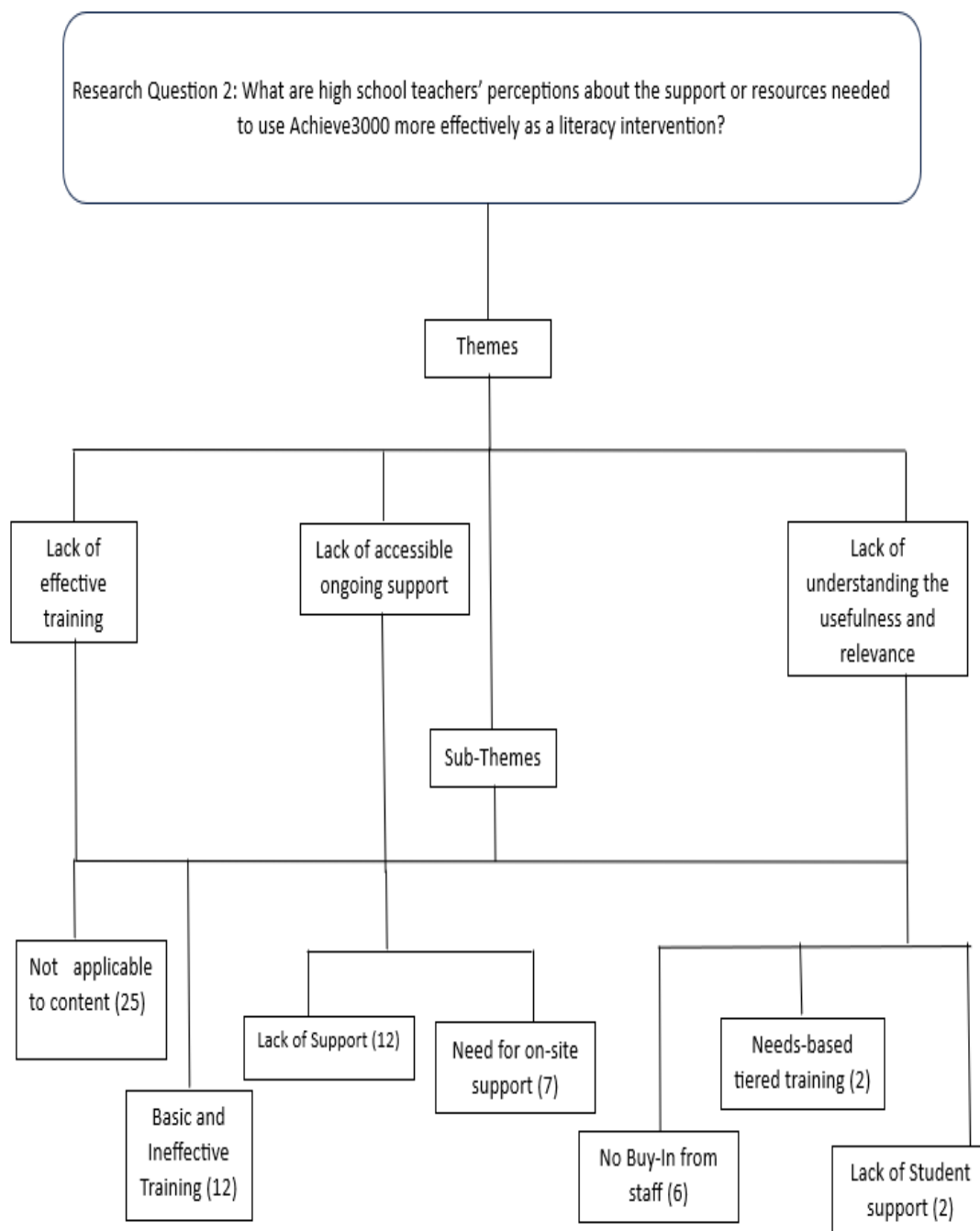
I used Braun and Clarke's (2006) six-phase thematic analysis to derive codes from the data. I began the process by familiarizing myself with the data, listening to the audio, and ensuring the transcriptions matched. Using Microsoft Teams and Microsoft Word, I downloaded the transcription from my recorded interviews, removed any identifying information, and transcribed each interview three times for accuracy. I began Phase 2 of the thematic analysis by importing the transcript into the NVivo software. I took notes on the transcripts to provide background information or rationale for future codes. Using Braun and Clarke's (2006) recommendation of asking questions about the data. I inquired: (a) What makes this statement important? (b) What do I think about these data? When annotating the transcripts, I thought of possible codes to elicit from the data. During Phase 3, I began placing the codes into clusters to develop strong thematic relationships among them (see Figure 1). There were 83 references of codes responding to RQ1 and 66 references of codes responding to RQ2. The number of times codes were referenced can be seen within the parentheses in Figure 1. Within RQ1, four themes

emerged: little relevance to instruction, low student engagement, lack of understanding, and a loss of autonomy. The subthemes that were used to create the theme “little relevance to instruction” were alignment and engagement (in terms of how teachers used the resource), with a total of 23 references. The subthemes that were used to create the theme “low student engagement” were: rigor, cheating, and low learning impact with a total of 22 references. The subthemes that were used to create the theme “lack of understanding” were low usage, usability, and rationale for implementation, with a total of 28 references. The subthemes that were used to create the theme “loss of autonomy” were compliance and lack of monitoring, with a total of 10 references.

Figure 1*RQ1 Subthemes and Themes*

Note. The numbers in parentheses represent the numerical frequency the subthemes were referenced.

Within RQ2, three themes emerged: lack of effective training, lack of accessible and ongoing support, and lack of understanding of the usefulness and relevance. The subthemes that were used to create the theme “lack of effective training” were not being applicable to content, and basic and ineffective training, with a total of 37 references. The subthemes that were used to create the theme “lack of accessible and ongoing support” were lack of support and on-site support, with a total of 26 references. The subthemes that were used to create the theme “lack of understanding of the usefulness and relevance” were buy-in, tiered training, and student training with a total of 10 references (see Figure 2).

Figure 2*RQ2 Subthemes and Themes*

Note. The numbers in parentheses represent the numerical frequency the subthemes were referenced.

Through accessing my notes on each transcript, I was able to establish relationships among heavily referenced codes to generate a common subtheme in Phase 4. Codes were given varied colors to help distinguish them from one another and placed into the thematic category they most aligned. Subthemes with high commonalities were combined into one overarching theme. Following the outlined process of Phase 5, I asked the following questions: (a) Does this theme tell me something useful about my research question? (b) Are there enough data to support this theme? (c) Is this a theme or a code? Responding to these questions helped me to finalize establishing a viable correlation between codes as well as separate and condense themes. This process resulted in a total of 10 subthemes for RQ1 and 7 subthemes for RQ2 (see Figures 1 and 2). Additionally, I checked the themes against the entire data set to ensure relevance and connection to the research problem. Any themes that did not fit or were unrelated were removed. I used my annotated notes to help define each theme in Phase 5 to ensure that each theme was distinct and unique from one another, according to Braun and Clarke (2006). As a result, the aforementioned themes emerged for each research question according to their topic, relationship, and significance (see Figures 1 and 2).

I used the conceptual framework of disciplinary literacy to provide context for these findings. Shanahan and Shanahan (2008) posited that although disciplines share similarities in academic language, each uses unique practices. Approaches to disciplinary literacy that use a generalized implementation undermine the focus of literacy in subject-specific courses (Hinchman & O'Brien, 2019). The interview questions used in this study were based on the tenets of this conceptual framework. Seven themes emerged from this

study: (a) Little relevance to instruction, (b) low student engagement, (c) lack of understanding, (d) loss of autonomy, (e) lack of effective training, (f) lack of accessible ongoing support, and (g) lack of understanding the usefulness and relevance.

Findings Related to RQ1

The first RQ: What are high school teachers' perceptions of using Achieve3000 as a literacy intervention?) allowed teachers to respond based on their unique expertise, regardless of content background. Participants responded to the following questions for RQ1:

- To what extent do you find Achieve3000 influences your instruction?
- Did the influence of Achieve3000 on your instruction benefit, harm, or have no impact on students? How so?
- How would you describe your capacity to implement Achieve3000? Why so?
- Would you suggest Achieve3000 to members of your content area? Why or why not?

These questions focused on how teachers used the literacy intervention within their domain as well as explored the overall impact the intervention had on students, from the teachers' point of view. These questions served to provide background for the second research question. Four themes according to RQ1 emerged from this study: (a) Little relevance to instruction, (b) low student engagement, (c) lack of understanding, and (d) loss of autonomy. Ten subthemes according to RQ1 emerged from this study: (a) Alignment, (b) engagement, (c) rigor, (d) no learning impact, (e) cheating, (f) usability,

(g) low usage, (h) rationale for implementation methods, (i) compliance, and (j) no monitoring.

Theme 1: Little Relevance to Instruction.

Eight out of 10 participants referenced subthemes that worked to develop this overarching theme. Eight participants made references to the subtheme of alignment in their curriculum (18) and four participants made references to the subtheme of how they chose to engage with the platform (5). Of the four participants who discussed how they engaged with the platform, it was reported that Achieve3000 was not used as a tool to drive instruction but delivered to students for the sake of time, supplement, and compliance. Most of the participants indicated that Achieve3000 did not align with the standards they were expected to teach. Additionally, participants reported feeling that this intervention was an addition to what they have already taught; something they can assign for homework or busy work. Achieve3000 was referred to as a “time filler” and only done because it was mandated.

T1 stated, “If we are reading texts about justice and fairness, then usually there are some Achieve3000 articles to supplement the readings and to align with that general theme.” T1 suggested that explicit instruction and other district material were the primary sources of delivering their standards and that Achieve3000 would only be useful only after that had occurred.

T2 claimed that “it does not support the learning demands of the current curriculum that is outlined and implemented at my current school district.” In their

experience, T2 could not align social studies standards with the functionality of Achieve3000.

T3 asserted, “It really doesn't, in my opinion, benefit my instruction. It certainly doesn't drive my instruction. I think it's just better suited for the ELA department, honestly. We don't have the ability to solve equations, they can only read text.” T3 had difficulties conceptualizing how reading the informational text was going to improve students' abilities to solve math equations.

T5 said, “I really don't see very much of an influence. It kind of takes up a lot of time that could be used otherwise. It takes away from our opportunity to conduct experiments and such.” According to this participant, students in science classes needed kinesthetic approaches to learning, and Achieve3000 was not useful to that end.

To summarize, many participants did not employ the intervention as the primary learning source. The largest sentiment contributing to the development of this theme was the idea that participants were expected to deliver specific information regarding their content; however, Achieve3000 did not support what their students needed to succeed.

Theme 2: Low Student Engagement

Eight out of ten participants referenced three subthemes that contributed to the development of this overarching theme. Of these participants, there were a total of 22 references to rigor (8), cheating (3), and no impact on learning (11). Many participants suggested that students were able to randomly select answers just to breeze through the assignment on Achieve3000. Furthermore, cheating was a concern for participants as students were able to locate the answers to questions online.

For these reasons, participants felt as if the intervention had no impact on their students' learning. T7 remarked, "Zero influence on students. They sped through it, and it's easy to cheat." Participant T7 reflected on their experiences of students not valuing the program because they believed it wasn't worth doing. T8 stated, "I think students viewed it as an extra task and, therefore, did not put forth great effort to complete it." Similar to other participants, T8 faced difficulty in trying to get their students to see the value in Achieve3000. T4 reported "And when you have high school students who do not take the diagnostic seriously, you know, then they are getting an easier assignment or easier reading and not really learning anything. They are all much higher in skill than where Achieve starts them. And it's just not helpful in that manner." In their experience, T4 had issues with the lack of rigor associated with the questions offered on Achieve3000.

In summary, participants reported that students were able to cheat by finding answers online and speeding through non-rigorous questions. Students did not seem to value or take the platform seriously causing very low engagement with the intervention. Additionally, teachers referenced incentivizing students to take the platform seriously.

Theme 3: Lack of Understanding

All 10 participants referenced three subthemes that developed this overarching theme. The subthemes of usability (13), low usage (5), and rationales for implementation (10) were referenced a total of twenty-eight times. Participants indicated that Achieve3000 was not their preferred resource, and they did not use it when they did not

have to. Consequently, participants reported that they had not used it often because they did not know how to make it usable for their classrooms.

Participants identified specifically, how the platform did not support their instructional needs. T1 stated, “The use of it in alignment with the day-to-day work of a teacher can sometimes get lost.” T10 shared a similar sentiment when explaining why they would not suggest using Achieve3000 to other members of their content area. T10 explained, “For U.S History, yes, for other topics, no, because it doesn't add value. You will find resources for it. Other standards you will not. It doesn't have everything we need.” T2 said, “I don't feel as though those features were provided in a way that I would need for the usability in my specific classroom. I teach science, and we are hands-on. So, it just hasn't been effective from my experience.” These perceptions were common amongst participants, as most of them reported thinking that Achieve3000 was not suited for use in their instruction, and it had not been made clear to them how it could be.

Participants also cited their challenges in understanding how to interpret the functionality of the platform. T8 said “And so I never got a full like a full grasp of what students were understanding, not understanding, if it was really capturing their reading level.” Similarly, T7 found that “it's kind of hard to, you know, assign to everybody and then also going in and like looking at the graded part, I feel like that's kind of more difficult too. I can't locate their work when it's done.” Participants suggested that issues in troubleshooting resulted in their decreased usage of the intervention.

Lastly, participants suggested that the intervention had little to no influence on their instructional practices or student learning. T5 reported “Well it kind of helped, I

guess a little bit, but I really didn't see too much of an influence. Another reason why I really didn't go back to using it again that much.” This participant acknowledged that Achieve3000 could potentially have some benefits to it, however, made the decision not to prioritize it due to the low level of influence they perceived it to have.

Overall, many participants suggested that the reason they chose not to implement the intervention in their classes was due to its perceived ineffectiveness. The professional development offered to teachers in the observed Georgia school district was not offered based on content background or need. Participants received training with other teachers from different content area backgrounds at one point in the semester and never received additional training.

Theme 4: Loss of Autonomy.

Five participants referenced two subthemes to develop this overarching theme. The subthemes of compliance (6) and no monitoring (4) were referenced a total of ten times. Participants felt as if they had to use the intervention solely because the observed Georgia school district had paid for it and mandated it. When participants felt as if the district was not consistently monitoring their usage, they expressed that this decreased the level of teacher buy-in.

Participants suggested that they only used the intervention to meet district mandates, and not because they valued the resource. T9 informed me “Well, it is mandatory, so I use it weekly, but in most cases two to three times each week.” When asked how often they use Achieve3000, T3 responded “More often than I would like to, and we are required to use it at least once a week, and so I do that for compliance.” T4

contributed, “I don't like that the application is mandatory at all. If I can find better tools for my instruction, I would like the autonomy to do so.” Participants indicated that had they been given the option, Achieve3000 would not be their first tool for literacy intervention.

One participant explained that the cause of the low teacher buy-in was the urgency to be compliant. T6 suggested, “I'll be kind of transparent towards the end of using it, it felt more of like just something we had to do because of the district.” This quote reflected the sentiments of other participants, who felt as if there was no teacher-buy in because the observed Georgia School District did not incentivize them to use the resource. Overall, teachers had not bought into the platform; however, they had not expressed an unwillingness to learn.

Findings Related to RQ2

The second research question (RQ2: What are high school teachers' perceptions about the support or resources needed to use Achieve3000 more effectively as a literacy intervention?) allowed teachers to respond based on their specific needs, regardless of content background. Participants responded to the following questions for RQ2:

- What supports do you currently need around Achieve3000?
- What supports do you currently have around Achieve3000?
- Describe the effectiveness of the supports offered to you around Achieve3000.
- Has the training you've received on implementing Achieve3000 influenced your implementation methods during instruction? Why or why not?

- What further training is needed that would benefit your implementation of Achieve3000?

These questions explored what supports teachers are currently offered as well as provided participants the opportunity to express what content-specific needs they have to improve implementation. Research suggests that when implementing effective professional development for disciplinary literacy, leaders should offer disciplinary-based strategies for instruction, differentiation in what is considered literacy, methods to measure literacy within the discipline, and an outlined model of implementation (Howell et al., 2021). The results of this study offered further context around supports put in place by the observed Georgia School District, explaining the cause for the problem of practice.

Three themes according to RQ2 emerged from this study (e) lack of effective training, (f) lack of accessible ongoing support, and (g) lack of understanding of the usefulness and relevance. Eight subthemes according to RQ2 emerged from this study: (b) basic and ineffective training, (c) lack of support, (d) not applicable to content, (e) need for on-site support, (f) no buy-in from staff, (g) needs-based tiered training, and (h) lack of student support. These subthemes connect and support the overarching themes within smaller clusters that emerged to respond to the research questions posed.

Theme 5: Lack of Effective Training.

Ten participants referenced two subthemes that developed this overarching theme. The subthemes of not applicable to content (25) and basic training (12) were referenced a total of thirty-seven times. Participants reported feeling as if the training they received from the observed Georgia School District was not in-depth enough to fully explain the

use of Achieve3000. Additionally, participants shared the sentiment that the training was not relevant to their content area and would be better suited elsewhere.

Many participants felt as if the training was too rudimentary. T1 said that “the training for it, however, is sometimes basic.” T10 also shared, “Well, it's basically it's not actual support, is just an instruction on how to access the platform, how to access the resources, how to see the scores for the students but to actually align with what we are talking about? No. It's basically about us using it.” T6 also discussed how the support was not useful:

No, because she didn't really tell us how to implement. It was just more of like planning-wise, like, hey, this is an article, you could do on this unit, type thing.

As far as that, using it was always pretty straightforward and basic.

Most of the participants did not find the support they had been offered helpful.

Participants shared their thoughts about how to improve the support given to them. T10 posited,

OK, first of all, we have to have someone who is trained specifically for social studies regarding Achieve3000. They need to explain the different parts that affect us that are needed from our students regarding lexile levels. We need to also figure out which articles are more embedded or suited for each standard.

Regarding the same sentiment, T1 added, “I think to make it more effective, it would just depend on the need that the teacher needed.” T2 reported similar feelings stating,

The current supports that I would specifically need around the achieve3000 would be to have somewhat of an achieve 3000 person or a trained expert in house at my

school. Someone that I could go to to help me to learn about the actually useful features, updates and how to better implement using achieve 3000 in my classroom. I feel as though having an expert in House in the building would provide me with training as necessary versus just one training and then that's it or showing me something I wouldn't need to use.

The participants indicated that support based on their school building would be more accessible than district support staff.

Many participants also felt as if the support offered around Achieve3000 did not illustrate a correlation between their content and the lessons offered on the platform. Responses indicated that participants were not instructed on how to apply the intervention to their lessons. T2 responded, "It has not influenced my implementation methods because again the training from the district has not been effective." T3 also said, "Honestly speaking, it didn't seem like the person presenting it would be able to show me how either." T7 stated,

Maybe there are things I don't know, to maybe make it work better for us, especially like if we have any questions because pretty much it's almost just like, hey, go in there and assign this and be done with it.

Participants suggested that although they were not against using the intervention, they needed further clarity on how to apply Achieve3000 to what they specifically do in their classes.

Theme 6: Lack of Accessible and Ongoing Support.

Eight participants out of 10 referenced two subthemes that developed this overarching theme. The subthemes of lack of support (12), and on-site support (7) were referenced a total of 19 times. Participants indicated that the support offered by the observed Georgia school district was not consistent or accessible. Additionally, participants referenced wanting further support from their district on a more specialized level.

Participants felt as if the availability to training was sparse and not memorable. T1 stated, “To be transparent, I don't think there's any training, and I think that if you were familiar with it at all, that the training wasn't really for you unless you requested to be in it.” T10 said “We get the training during preplanning and the training during post-planning or in the middle of the year. But that is as far as the training that we get.” T8 also said, “I have not received training on Achieve3000. I learned from coworkers.” Aside from the training occurring in low frequency, the training itself had not been helpful to participants. T7 responded, “This is something that I've told admin for the past couple of years that we can't see all of our classes, and nothing is pretty much done about it.” Teachers felt as if the questions they had after training, had gone unanswered because even the administrative staff was unfamiliar with the platform.

For those who had support on-site, two participants felt as if they were helpful. One participant who had on-site support indicated they did not feel comfortable going to them for assistance. Those without support on-site expressed how they would like that support to operate. T2 indicated,

I would like to have somewhat of an Achieve3000 person or a trained expert in-house at my school. Someone that I could go to, to help me to learn about the actually useful features, updates, and how to better implement using Achieve3000 in my classroom.

T5 shared their experience with their on-site support, stating,

Well, we do have a contact teacher who we can always ask questions to. If we need assistance, that person is in place. So, they kind of assisted with the training during the PD [professional development] but they have their own classes. I don't want to bother another teacher every time I need help with this thing.

T6 also shared their experience with on-site support, sharing that,

Earlier when using it our instructional coach at the time did a pretty good job of trying to hold us accountable and she even did a scope and sequence on some of the articles that I knew of earlier on. I don't think the district was telling us what articles to use, but she worked with the Social Studies Department and ELA department to truly scope and sequence articles in a way that would be beneficial for students.

Teachers who sought assistance from experienced staff, had better experiences in problem solving when using Achieve3000.

In summary, participants felt as if the support offered from the observed Georgia school district did not occur frequently enough, to improve their use of the intervention. Furthermore, participants would like to have on-site support to assist them in the interim of waiting for additional district-level training.

Theme 7: Lack of Understanding of the Usefulness and Relevance

Seven participants referenced three subthemes to develop this overarching theme. The three subthemes of buy-in (6), tiered training (2), and student training (2) were referenced a total of ten times. Participants suggested that the observed Georgia school district did not give teachers the rationale behind wanting to use Achieve3000 as a literacy intervention. Participants felt like the sole motive behind using this particular platform, was because the observed Georgia school district spent federal funds, not because it was in the best interest of children. Responses indicated that teachers wanted support not only for themselves but for their children as well. When being given support, they also wanted it to be relevant to their actual needs at the time. The lack of relevance in training caused hesitation for participants when trying to determine how this intervention was relevant to their classes as well as its usefulness in general.

Participants felt as if the training neglected to inform them of context and the deeper uses of the intervention. T10 asserts that “the instruction that was given wasn't about implementation, it was just about the use of the platform because they said so.” Likewise, T5 mentioned “Maybe I’m missing a piece of information that prevents me from seeing the value. I know they want us to use it because they spent money on it.” T7 stated, “But these days it feels like they don’t want to waste their money.” Participants felt as if because the county spent money, they pushed the intervention to become mandatory, as opposed to determining if the tool was indeed useful for students. The belief that money usurped student needs resulted in teacher hesitancy and negative feelings towards Achieve3000; decreasing teacher buy-in.

Generalized approaches to professional development also decreased teacher buy-in. T2 posited that,

the supports that I would request for my district would be to actually level the training based on comfortability, usability, and accessibility. So, when I say that, I mean if I'm at a level one with using Achieve3000 or if I'm at a Level 2, I can kind of just slide in where I fit in versus just going to one generic training where there are different users of different content areas, different backgrounds, a different set of different skills.

Participants indicated that the district-offered training was not useful to them.

Participants wanted students to have the same access to support that they would have. T9 stated, "I know the students would need support not only from me, but you know, just finding out how to do it in any other classes." In order to incentivize students to use the platform more, T6 suggested,

I would say to increase buy-in on the student in prizes or some other form of recognition for doing well and showing growth. A lot of schools would need funding to do that to make the program valuable to students.

Participants expressed the desire to involve students more in the usage of Achieve3000 by incentivizing their progress.

In closing, participants would like the observed Georgia school district to provide training that addresses their specific needs to make it relevant for them. Additionally, participants indicated that the observed Georgia school district should offer training to both staff and students that explains how this intervention is useful to their schools.

Similar to tutorials after school, teachers or support staff have an opportunity to support students in using Achieve3000 in one-on-one sessions after school. The observed Georgia school district has not implemented a structure of support for students, which places the onus on teachers to become proficient in understanding a tool they perceive they have not been effectively trained on.

Discrepant Cases

Discrepant data are found when researchers seek outliers or information that counters emerging themes (Ruona, 2005). Discrepant data should be considered and analyzed for threats to validity (Maxwell, 2004). During the data analysis process, conflicting information surfaced from the 10 interviews. Discrepant data are helpful in the reexamination of information for deeper understanding (Yin, 2016). Any discrepant cases will be further discussed in the findings. Merriam and Tisdell (2017) posited that discrepant data are data that do not merge with the existing themes. In this study, out of 10 interviews, only 1 discrepant case emerged from T9's interview. This case was included in the data set to enhance credibility. This study was focused on exploring high school teachers' perceptions of using Achieve3000 as a literacy intervention; therefore, the results of this study are generalizable to other high school teachers.

The discrepant case only varied according to the themes: Little relevance to instruction and low engagement. T9 was the only one out of 10 to indicate that Achieve3000 was aligned with their content area and that the articles presented on the platform were engaging and exciting for their students. T9's viewpoint was as follows:

I thought it was very helpful for, you know, connecting the dots in science. I tried to look for stories that the students might find interesting outside of, you know, the basic science stuff about molecules and chemicals and stuff. I tried to find things like it was one on there that talked about the greenhouse gases, but it connected with how when cows fart, they released a lot of greenhouse gases. So, the kids thought that was fun, you know, cool to read. Also, it helps build their reading skills and you can really connect the subject of science with sometimes I feel like students' own understanding like science is everywhere.

This discrepant case was critical to note as it provides context for the inconsistent usage of Achieve3000 in the South Learning Zone at FCS Schools. This case did not align with seven other participants who indicated that Achieve3000 does not support nor align with their instructional needs, standards, and learning tasks (see Appendix C).

Summary of Themes

The first theme was “little relevance to instruction,” with participants indicating that the activities embedded in Achieve3000 did not meet the demands of their specific content. Participants indicated that Achieve3000 was not used to drive their instruction as it was best suited as a “time-filler” and did not supply enough material to teach their standards.

The second theme was “low student engagement” with participants reporting that students could randomly select answers to fly through learning tasks as well as cheat by looking for answers to the questions online. Participants did not perceive Achieve3000 to have an impact on student learning.

The third theme was “lack of understanding,” with participants stating that Achieve3000 was not their preferred intervention tool. Participants suggested that they were struggling to conceptualize how to integrate the resource into their instruction and that they perceived the resource to be ineffective.

The fourth theme was “loss of autonomy,” with participants reporting that they only used the platform because the observed Georgia school district had mandated it. Additionally, participants reported that they believe they were told to use this resource because the observed Georgia school district had spent district funding on Achieve3000, and teachers had no voice.

The fifth theme was “lack of effective training,” with participants indicating that the training they have received in the past was ineffective. Participants suggested these trainings were ineffective because they were not relevant to their content needs and would be better suited for other content areas.

The sixth theme was “lack of accessible ongoing support” with participants reporting that the trainings were not consistent with them occurring sporadically if at all throughout the year. Additionally, participants claimed to not have access to support when needed.

The last and seventh theme was “lack of understanding of the usefulness and relevance of Achieve3000,” with participants suggesting that the observed Georgia school district offered no rationale behind the use of Achieve3000. Furthermore, participants reported that they would like support for both them and students to make implementation more effective.

Interpretation of the Findings

Achieve3000, as a platform, provides lessons based on content areas that are aligned with the Georgia Standards of Excellence, which are the standards used by the observed Georgia school district. In relation to the first theme, “little relevance to instruction,” and the seventh theme, “lack of understanding of the usefulness and relevance of Achieve3000,” teachers were missing the knowledge of how to turn these lessons or even isolated texts into support for their ongoing instruction. The observed Georgia school district offered professional development that merely showed teachers how to find texts and assign them to students, which is what caused the gap in learning. To overcome this, educational leaders will need to specify training by content first. The disciplinary literacy framework should guide educational leaders’ thinking. Shanahan and Shanahan (2008) defined disciplinary literacy as specialized strategies, routines, skills, language, or practices inherent in certain content areas that are not generalizable to other domains. In each training for the core subject areas, teachers will need explicit guidance on how to implement either a lesson or isolated text within their current practice. Different content areas will access different literacy-based skills (Bernstorff et al., 2014). It would be ideal if professional development could work with standards that teachers are either currently teaching or will be teaching within the coming week.

The second theme, “low student engagement,” was delineated from the first theme. Teachers suggested that engagement was low because usage and understanding had been low of the platform. When teachers did not understand the connection between the chosen intervention and their curriculum, it did not translate importance or usefulness

to the students. Fauth et al. (2019) found that best practices in professional development, such as supportive environments and the ability to practice, had the strongest correlation to student achievement. Madigan and Kim (2021) determined that when teachers are frustrated and out of focus a negative relationship with student achievement emerges. Within this study, participants suggested that students were able to speed through assigned tasks, and because teachers were frustrated that they did not see the effect on learning, corrective action to mitigate cheating was not precedent.

The observed Georgia school district is combatting the effects of ineffective training. In relation to the third theme, “lack of understanding,” the development of tiered training that targets the needs of each specific content would help to establish a baseline of support. Sánchez-Prieto et al. (2019) found that teachers’ emotional responses to new initiatives had a high statistical correlation to their usage. Educational leaders can work to strengthen the relationship between Achieve3000 support staff and building administrators. When administrators communicate the specific needs of their instructional teams, Achieve3000 may work to design more effective approaches to training which can lead to improved teacher fidelity.

The fourth theme, “loss of autonomy,” emerged from participants feeling as if money and funds spent superseded the needs of students. Ultimately, teachers’ needs were not met by completing district training on Achieve3000. Avidov-Ungar (2023) argued that teachers have varied needs based on their positions in their career. A generalized training offered by the observed Georgia school district disregards teacher needs, fueling a sense of loss of autonomy.

In relation to the fifth theme, “lack of effective training,” when providing professional development, the one-size-fits-all approach proves ineffective (see Cirkony et al., 2024). The observed Georgia school district uses a training schedule to prepare teachers for what training they have to complete by specific dates. Oghly (2023) posited that teachers need frequent opportunities over a duration of time to yield maximum strength in implementation. An opportunity exists to add more frequent training on the district level as well as opportunities to strengthen teacher leaders who are willing to learn.

In relation to the sixth theme, “lack of ongoing and accessible support,” coaching cycles that offer observation, timely feedback, and opportunities for practice have a positive correlation with student achievement (see Sims & Fletcher-Wood, 2021). Either coaches or administrators facilitating a coaching cycle should consider teachers as partners in professional development (Knight et al., 2023). Knight et al. (2023) continued to mention that when teachers are given one training and have no follow-up, they become distrustful of the resource and lose interest in its validity. A proper organization of support could work to combat teachers turning away from using Achieve3000.

The Project Deliverable

Upon analysis of data and findings of this study, the project deliverable of a detailed white paper I determined that an appropriate project genre based on the implementation results of Achieve3000 within the observed school district. Offering a white paper to a district that is struggling to integrate an intervention across multiple schools effectively can help district leaders develop more strategic and effective

approaches to intervention implementation. In this basic qualitative study, I gathered high school core content teachers' perspectives on the use of Achieve3000 as a literacy intervention, focusing on their experiences with using the platform and their perceptions of the support they have been offered. The findings of this study indicated that teachers felt as if they had a lack of understanding on how to integrate Achieve3000 in their daily lessons, battled issues of low student engagement while using the platform, felt a loss of autonomy, and could not conceptualize how Achieve3000 was relevant to their content. In terms of their offered support, teachers indicated that the training was ineffective, not accessible nor ongoing, and did not explain the usefulness or relevance of the program itself.

Summary

Section 2 illustrated a description of the qualitative methodology, research design and approach, participants, data collection, and data analysis procedures. This basic qualitative project study delineated from the local problem that inconsistency in using a literacy development initiative resulted in no improvement of low literacy scores in April of 2022, as 80.85% of high school students in one learning zone within a Georgia school district scored below literacy proficiency on the GMAS. A basic qualitative design was deemed most appropriate as it was best suited to collect the beliefs and experiences of participants using nonnumerical data (see Merriam & Tisdell, 2017). Other approaches, such as ethnography or phenomenology, required the comparison of small samples or the immersion of the researcher into the lives of participants. The two research questions guiding this study sought to explore teachers' experiences with using Achieve3000 as a

literacy intervention and their perceptions of the supports offered to them by the observed Georgia school district.

Once IRB approval was given, 10 core content area high school teachers who met the criteria were invited to interview. I followed Braun and Clarke's (2006) thematic analysis process to develop the seven themes discussed in this study. The seven themes derived from the findings were: (a) little relevance to instruction, (b) low student engagement, (c) lack of understanding, (d) loss of autonomy, (e) lack of effective training, (f) lack of accessible ongoing support, and (g) lack of understanding the usefulness and relevance.

Section 3 introduces the project that I designed based on the results of data analysis. The project goals, rationale, literature review, project description, project evaluation plan, and project implications are discussed. Section 4 discusses reflections and directions for future research, followed by the conclusions of this doctoral project study.

Section 3: The Project

In this section, I describe the project that I designed, in addition to the project goals, resources, supports, potential limitations and solutions, responsibilities, implications, and evaluation. I chose a white paper as a project to address the problem of practice. The problem that was addressed through this study was that inconsistency in using a literacy development initiative resulted in no improvement of low literacy scores in April of 2022, as a total of 80.85% of high school students in one learning zone within a Georgia school district scored below literacy proficiency on the Georgia Milestones Assessment System. The project was designed as a resource for educational leaders within the learning zone of the observed Georgia school district. The intended purpose of this project was to be integrated into implementation and professional development plans as the observed Georgia school district works to mitigate low usage of Achieve3000. This study can be used by zone superintendents, board members, professional development leaders, building administration, and teacher leaders.

Participants reported concerns around (a) little relevance to instruction, (b) low student engagement, (c) lack of understanding, (d) loss of autonomy, (e) lack of effective training, (f) lack of ongoing and accessible support, and (g) lack of understanding the usefulness and relevance. Teachers faced issues with aligning their learning standards to the activities outlined in Achieve3000 while feeling as if their professional knowledge was not considered in the purchase of the program. Additionally, participants reported that the training they had received was minimal, infrequent, and not beneficial to their individual classroom needs, consequently reducing teacher and student buy-in.

Examples of the challenges that participants faced are as follows. T10 asserted that “all we were told was, hey, put in a subject, and the resources will appear, but not all subjects will be found.” T9 further stated, “I think students viewed it as an extra task and, therefore, did not put forth great effort to complete it.” T7 claimed that “I feel like there is like no rigor in it or differentiation between my students.” T3 stated,

I would suggest another platform that caters to our students' needs and will help us better drive our own instruction. In my opinion, Achieve3000 is for content areas that focus on words. We use numbers and symbols to formulate equations. Many challenges that teachers faced were similar in nature, showing that professional development was needed year-round.

In summation, this project was designed based on the obstacles that participants felt prevented them from using the intervention with fidelity. This project is an effort to support educational leaders combating intervention implementation issues in their school district. Evidence that this project should be based on a white paper were the commonalities of teacher perceptions on professional development across multiple schools, low usage reports on Achieve3000, low literacy proficiency scores on GMAS, and evidence suggesting the effectiveness and usefulness of Achieve3000 as a literacy intervention.

Rationale

While the observed Georgia school district offered professional development on Achieve3000, usage of the intervention remained low in some learning zones. The observed learning zone within the observed Georgia school district consequently had low

literacy proficiency scores. Data collected from this study indicated that challenges to implementation stem from a lack of effective professional development and issues using the platform. Educational leaders can use this project to design professional development that addresses teachers' concerns and supports their needs, in an effort to revamp implementation of the intervention.

Review of the Literature

The literature reviewed in this section corresponds to the findings outlining teacher perceptions around supports offered in the observed Georgia school district. The search was only inclusive of peer-reviewed articles published within the last 5 years using ERIC, EBSCO, Google Scholar, and SAGE publication databases. I found 43 articles for this review. The search terms included *professional development, impacts of professional development on student growth, teacher preparation, implementation, effective approaches to professional learning, student achievement and professional development, impacts on student achievement, and educational fidelity*. This literature review touches on the topics relevant to the use of a white paper in developing effective and meaningful professional development.

Effectiveness of a White Paper

A white paper is a report that explains research used to address issues or solve problems (Bardach & Patashnik, 2023). Often, white papers are used in politics or business as a means to make policy decisions informed by research. These white papers help to educate stakeholders about issues they are making policy on. White papers typically follow the eightfold path (Bardach & Patashnik, 2023). Within the eightfold

path, researchers define the problem, assemble evidence, design alternatives, select criteria and project outcomes, address trade-offs, focus, and contextualize the phenomena. Within the process of developing a white paper, researchers review what has occurred and address the decisions that have been made and what are the possible next steps. This process involves a scoping review. Peters et al. (2022) defined a scoping review as an approach to synthesize evidence for researchers and policymakers.

Once the problem has been thoroughly contextualized, researchers include suggestions or solutions in their white paper. Within the solution section, researchers explain the steps for implementing the solution, explain how the solution will resolve the problem, explain the framework used to support implementation, and explain any challenges that may oppose the solution (National University, 2024). As policymakers or educational leaders may have to use multiple approaches to resolve a problem, a white paper is helpful in identifying multiple approaches to the same problem. Educational leaders and professional development designers may use white papers to craft effective training that meets the needs of multiple teachers. A one-size-fits-all approach to professional development does not address the varied learning styles or disciplinary needs that different content area teachers may have. In using a white paper to inform the framework around which professional development is designed, as well as understand the specific needs of teachers, educational leaders may draft numerous profession development exemplars to work to mitigate their implantation issues.

Effective Approaches to Professional Development

Professional development is defined as any purposeful and organized formal learning opportunity or training for in-service teachers (Kalinowski et al., 2019). Research shows that effective professional development can positively influence teacher implementation (Abel et al., 2022). When conducted appropriately, professional development can help build communities (Hartshorne et al., 2020). When providing professional development, the one-size-fits-all approach has been the most detrimental, with the second most damaging being that training is often not delivered in a manner that addresses adult learning needs (Cirkony et al., 2024). Toropova et al. (2021) suggested that a strong correlation exists between teacher job satisfaction and cooperation and professional development (expectations and workload). In their study of teacher perceptions of professional development, Parsons et al. (2019) found that teachers attended professional development because it was mandatory but did not find it useful. The one benefit that teachers found was the ability to access materials during training. If teachers feel supported and understand learning outcomes the likelihood of comfortability using new initiatives increases.

Many studies have been completed to delineate best practices for making professional development relevant and effective, as well as implications of practice. Implementation science is defined as the “study of methods to promote systemic uptake of research findings into routine practice” (Patfield et al., 2023, p. 348). School systems that focus on *how* research-based systems are used, as opposed to the implementation itself, are generally more successful in reaching their goals. Patfield et al. (2023) posited

that systems that build on acceptability, adoption, appropriateness, feasibility, fidelity, penetration, and sustainability will have longevity and success. Acceptability is the extent to which stakeholders view the intervention as reasonable, adoption is the decision to employ the intervention (based on research), appropriateness is the perceived cultural fit the intervention has, feasibility is the extent to which the intervention has capacity for success, fidelity is the degree to which protocol has been outlined and followed, penetration is the process of implementation and how impacted schools are by this process, and lastly, sustainability is the extent to which the intervention can be maintained over time. Additionally, research shows that instructional leadership practices and teacher-administration relationships heavily influence the quality of professional development (Kilag & Sasan, 2023). Instructional leaders who model effective teaching practices, provide feedback, and facilitate collaborative experiences are critical in effective approaches to professional development, while administration that maintains transparent and trusting relationships with staff bolsters teacher buy-in.

In their study, Rahman (2023) considered the implications of effective professional development and offered the GROW model as a system of effective implementation. GROW stands for goals, reality, obstacles/choices, and will/way forward. Rahman suggested that systems focusing on SMART goals will create delineated measurements that staff can understand. Secondly, systems that observe the reality of their circumstances may work to adjust or refine the SMART goals they have outlined. Rahman recommended asking “What is happening now?”, “What is the effect of what is happening now?”, “What steps have we taken towards our goal?”, and “Does

this interfere with any other objectives?” Next, systems should work to consider the obstacles against implementation and develop plans to circumvent them. Rahman also recommended asking “What else could we do?”, “What if this constraint was removed?”, “What are the advantages and disadvantages?”, and lastly, “What needs to stop to achieve this goal?” Lastly, systems should work to establish the will; this process involves outlining what input behaviors should and can occur to see the goal through. Recommended questions include “What can we do?”, “What else will we do?”, “How can we maintain motivation?”, and “When do we review progress?”

Another component of effective professional development is relevance.

Professional learning for teachers can be too general or too specific, too basic or too advanced, or aimed at specific grade levels while neglecting others (Fairman et al., 2023). As a means of ensuring relevance, Fairman et al. (2023) suggested that schools provide professional learning that is job-embedded, focused directly on the intersection of student learning and content, and aligned with curriculum and school improvement. Bergmark (2023) found that teachers felt their instructional practice was influenced by professional development when the training was relevant to their needs.

Duration of Professional Development

Through a synthesis of the literature, Kalinowski et al. (2019) found that duration was a key factor; teachers responded best to professional development when they were aware of how many hours they would spend learning. Explaining to educators the commitment ahead of time, allows them to prepare and have a clear understanding. Professional development that consists of only one session is ill-advised; the suggested

duration of development per initiative is 14 hours (Hanover Research, 2023). Teachers need frequent opportunities for professional learning during targeted intervals of time to maximize professional growth (Oghly, 2023). Some school systems have implemented professional learning either before or after school hours due to scheduling conflicts. To maximize time management and ease of convenience, Yurtseven Avci et al. (2020) suggested adding both virtual and face-to-face options into the time frame of professional development. It is further recommended that professional development only occur during working hours as teachers have negative responses to scheduled development outside of working hours (Tyagi & Misra, 2021).

Professional development that is intensive over longer periods of time is proven to be a more inclusive approach that captures all levels of teachers, as opposed to short-term incidental training (Donath et al., 2023). Research shows that within a professional development cycle, teachers should spend 5 hours on activities (Singh & Fruman, 2020). Teachers indicated that when they were given multiple opportunities to reflect on their practice, their instructional practice improved (Chung, 2023). Within Chung's (2023) study, teachers also reported feeling more highly motivated and less pressured by external demands when they were given more time in their learning communities. In their study, Fernandes et al. (2023) found that teachers reported positive feelings about their professional learning because they were afforded a time frame to practice what they had learned. School systems will need to provide teachers not only with the outline of how long professional learning will occur but also allot appropriate times for coaching,

reflection, and practice. These learning opportunities should occur frequently and at manageable times for teachers.

Adaptability and Differentiation of Professional Development

Teachers responded positively to professional development when content was offered in various formats (Kalinowski et al., 2019). When implementing new initiatives, teachers engage with diverse learners. Thus, professional development that assists teachers in being responsive to the varied needs of students according to interests, learning styles, and motivation is considered best practice (Powell & Bodur, 2019). Research suggests that as curriculum demands change, professional development should immediately and routinely reflect those changes (Porcenas et al., 2023). Overall, a comprehensive professional development focuses on varied topics of assessment, dissemination, context, collaboration, support, and control (Sancar et al., 2021).

Avidov-Ungar (2023) suggested that teachers have varied needs based on their career cycle. Teachers in the “early life” (0-5 years of experience) phase, “middle life” (6-12 years of experience) phase, and “late life” (13 or more years of experience) phase each have varied needs from professional development. Teachers in the early life phase were motivated to pursue professional learning mostly by an increase in salary and improvement of professional practices (Avidov-Ungar, 2023). Conversely, teachers in the late-life phase were motivated to pursue professional learning for a sense of accomplishment. Educational leaders who design professional development should consider the motivation of staff and use these to make training engaging for all through a combination of varied methods.

Kilag et al. (2024) conducted a study in which teachers reported that successful professional development is hands-on, integrates technology, and allows multiple opportunities to receive information. The use of online video lessons and online collaborative coaching has been suggested as elements of best practice (Amador et al., 2023). Educational leaders must find ways to differentiate the ways in which they present information to teachers with varied learning styles and instructional needs. Varied methods of presenting information in professional development include learner-oriented models as well as teacher-agency models. One study that implemented learner-oriented models found it effective to incorporate students as collaborators and travel as a team to witness implementations across varied contexts (Spratt, 2019). Working with students allowed teachers to challenge their assumptions and adapt to becoming responsive to student needs while traveling as a team allowed teachers to observe the implementation in real-time in varied scenarios. Imants and Van der Wal (2020) argued that teacher agency models in professional development focus on presenting the teacher as an actor, depicting dynamic relationships, contextualizing learning on multiple levels, making learning variable, and considering outcomes as part of a continuous cycle. In addition to these models, Leijen et al. (2020) posited that teacher agency models need to include procedures aimed towards articulating the purpose of the action desired backed by rules and principles of practice, procedures for practical reflection (designed to understand oneself), and procedures for critical reflection (designed to understand the inequalities and biases in education).

School systems should work to identify different professional development models that will best equip their teachers with the knowledge and skills necessary to improve professional practice. School systems may work with more than one model at a time, considering the vast needs of staff based on career lifespan and motivations.

The Coaching Cycle

Once professional development occurs, teachers need feedback on their implementation through coaching. Coaching is defined as a successful form of professional development that influences student growth (Lofthouse, 2019). The coaching cycle of support for teachers should be ongoing throughout the entire time of the expected use of new initiatives (Philipsen et al., 2019). Coaching cycles that offer observation, timely feedback, and opportunities for practice have a positive correlation with student achievement (Sims & Fletcher-Wood, 2021). Professional development, when supported by coaching, should be divided into two phases: development and class enactment (Coenders & Verhoef, 2019). In the development phase, teachers are expected to encounter new pedagogies and materials with opportunities to discuss and add to learning. In the enactment phase, teachers are observed implementing initiatives, given feedback, and reflect on learning outcomes. Coaching cycles can occur in cyclical phases of preconference and feedback (Hui et al., 2020). During the preconference portion of coaching, teachers work with leaders to establish goals, outline interactions, gather teacher needs, explain expectations, and provide an overview of the coaching cycle. Kochmanski and Cobb (2023) asserted that two practices will help to define goals for teachers: observing classroom instruction and eliciting teachers' reasoning behind

instructional methods. During the feedback cycle, leaders will observe teachers to collect data on current instructional practices, provide feedback, and redirect to the goals established in the preconference. Coaching should consider teachers as partners in professional development, focusing on the seven partnership principles (Knight et al., (2023). The seven partnership principles in coaching are equality, choice, voice, dialogue, reflection, praxis, and reciprocity. In summation, teachers should have an equal voice, are the final decision makers in their coaching goals, be empowered to share their opinions, contribute to the dialogue around their growth, reflect on their instructional practice, apply learning to real-life scenarios, and expect their coach to give just as much as they do to the process. Teachers will engage with these cycles until they accomplish the outlined goals and progress toward new goals. Reddy et al. (2021) suggested using the classroom strategies coaching model; an approach aimed at improving learning outcomes for both teachers and students. In the classroom strategies coaching model, the steps are as follows: identifying teacher needs, establishing data-based goals, developing implementation plans to achieve those goals, modeling and practicing implementation, providing verbal and visual feedback, evaluating goal attainment, and revising action plans for implementation. Similarly, to this structure, Raley et al. (2023), identified a process called self-determined learning model of instruction for coaching cycles. In this process, coaching occurs in four phases: plan, observe, reflect, and share. Planning occurs prior to summative observation, with coaches and teachers communicating goals and expectations. Observation is done to measure progress in achieving the outlined goals. Reflection involves dialogue between the coach and teacher around strengths and

limitations of practice while establishing new or continuing old goals. Sharing occurs at the end of a cycle when the teacher has achieved the outlined goals and receives their observed areas of growth from the coach. There are numerous approaches to coaching; however, at the focal point of effective professional development is the nuance of teacher involvement, establishing goals, observing practice, providing feedback, and repeating.

Influence of Professional Development on Student Achievement

Research shows that teacher professional development has a statistically significant relationship with student achievement. Some of the key implications of professional development such as implementation fidelity and use of evidence-based strategies prove to have positive effects on student achievement (Glover et al., 2023). Research further shows that the more practice during the coaching cycle teachers are afforded, the more likely teachers are to witness student growth. Fauth et al. (2019) found that best practices in professional development, such as supportive environments and the ability to practice, had the strongest correlation to student achievement. Effective professional development is impactful as it improves overall academic achievement as opposed to impacting one discipline at a time (Gore & Rosser, 2022). Alwaely et al. (2023), found that Type A professional development had the most statistically significant effect on student achievement as opposed to Type B. Type A professional development involved more consistent and comprehensive feedback, while Type B was more punitive and summative with less frequent opportunities for reflection. Conversely, through a synthesis of 14 previously conducted studies, Madigan and Kim (2021) determined that when teachers are frustrated and out of focus, a negative relationship with student

achievement emerges. Hoque et al. (2023) argued that teachers who have high levels of job satisfaction yield student growth because they not only impart knowledge but tend to give extra attention during instruction to ensure the betterment of each child. Implications of negative student achievement were lower reading abilities and lower literacy development. When professional development is not effective or relevant to teacher needs, it can hinder the progress that school leaders set out to gain while depleting teachers' job satisfaction. Consequently, Glover et al. (2023), found a statistically significant relationship between increased opportunities for practice, implementation fidelity, and student achievement in both Math and ELA when predicting student growth. Other considerations, such as modeling and feedback, were considered significant as well. However, the strongest predictor was frequent learning and practice for teachers. Professional development has been proven to help improve students' skills in phonological awareness, phonics, fluency, vocabulary, and comprehension (Didion et al., 2020).

Project Description

The participants in this study reported that Achieve3000 was not best suited for their content needs and did not influence their instruction when used. Although participants have experience using the platform and have received training, their usage of the literacy intervention remained low. Additionally, participants indicated that the support offered by the observed Georgia school district was ineffective, infrequent, and irrelevant to their needs. Professional development that acknowledges the varied uses of literacy in each content area will help participants and teachers alike understand how to

implement the intervention more effectively. Furthermore, professional development that is consistent, specific, and accessible will help to improve the usage of Achieve3000 as a literacy intervention.

In the field of education, Buczko (2022) posited that a white paper seeks to build on existing strengths while extending good practice across the field and reform specific areas or ideas. Creating a white paper that educational leaders will use to develop professional development around the specific needs of their teachers can help to (a) assist teachers in implementing Achieve3000 routinely, (b) increase teacher buy-in, (c) provide research-based decisions around training, and (d) ultimately improve students' literacy proficiency. This white paper can serve as a reference guide as to what teachers want professional development to look and feel like, what topics they need to be covered, areas to troubleshoot prior to training, and where teachers will need support. This project aims to assist teachers in implementing Achieve3000 as a literacy intervention with fidelity, not only for compliance but for the betterment of students' literacy proficiency overall.

The goals of this white paper are to deliver specific and research-based recommendations on professional development as well as improve the usage of Achieve3000 as a literacy intervention district-wide. This project shares the findings of this study and provides a baseline of knowledge to educational leaders. The white paper can be accessed and used by zone superintendents, program specialists, board members, Principals, Assistant Principals, and teacher leaders.

Potential Resources and Existing Supports

The resources needed to plan new professional development for Achieve3000 consist of collaboration between program specialists, building leaders, and teachers. Program specialists work in the observed Georgia school district to develop training presentations that will be disseminated to schools. Teachers who have participated in this study offer a lens into the need for support in professional development. Additionally, building leaders (Principals and Assistant Principals) who work to calendarize training for their staff, will work with teachers to ensure that their expressed needs are being met in a logical sequence and timely manner. Materials needed are the white paper from this study, online presentation tools (PowerPoint, Prezi, or Canva), handouts, and computers.

Potential Limitations and Solutions

Collaboration between stakeholders is paramount to redesigning the professional development for Achieve3000. A possible limitation could be scheduling conflicts between program specialists and building leaders; both groups being on different calendar schedules. A possible solution is for the zone superintendent to provide a master calendar for their program specialists and building leaders to plan with. Once the dates have been outlined for professional development, building leaders could then use the white paper to create agendas for each area of concern that teachers have expressed.

Roles and Responsibilities of Stakeholders

The roles and responsibilities of the zone superintendent, program specialists, principals, assistant principals, and teachers are as follows: (a) zone superintendents and program specialists calendarize training for the school district, (b) program specialists

and building leaders (principals and assistant principals) refine the professional development training calendar, (c) teachers and building leaders review the white paper from this study to determine topics for each training session and determining which group of teachers would need to attend, (d) building leaders work to secure materials needed to present professional development (projectors, laptops, handouts, and internet). The responsibility of this researcher is to provide the white paper to the zone superintendent of the observed learning zone within the observed Georgia school district.

Project Evaluation Plan

Project evaluation is crucial to ascertain the effectiveness of the white paper. I will work closely with zone superintendents and building leaders to assist in the development of professional learning. Summative evaluations will be used to monitor the effectiveness of the white paper when being used to design professional development. Building leaders and program specialists may also monitor the effectiveness of the white paper in their decision-making. Teacher feedback will also be collected after receiving professional development on Achieve3000. The participants will rate responses to questions using a Likert scale of 1-5: 1 being poor, 2 being fair, 3 being good, 4 being very good, and 5 being excellent. Educational leaders who design new professional development using the white paper will respond to six Likert scale-based questions and four open-answer questions (see Appendix A). Teachers who receive professional development because of informed decision-making from the white paper will also respond to seven Likert scale-based statements and three open-answer questions. The participants will rate responses to questions using a Likert scale of 1-5, 1 being strongly

disagree, 2 being somewhat disagree, 3 being neutral, 4 being somewhat agree, and 5 being strongly agree (see Appendix A).

Project Implications

This project study could improve the usage of Achieve3000 as well as increase literacy proficiency in students as a result of redesigned professional learning. Teachers can benefit by having their requests acknowledged such as on-site support, support for students, more frequent training, and having relevant material presented to them. Educational leaders may benefit from this study through increased buy-in from teachers and, ultimately, increased usage of the intervention. Moreover, building leaders would have used their resources effectively and created a sustainable means of support for literacy initiatives. Zone superintendents and program specialists can benefit from designing professional development that works better for their staff. Lastly and perhaps most importantly, students may benefit from additional exposure to Achieve3000 as a literacy intervention.

The findings from this study can be used by zone superintendents, program specialists, principals, assistant principals, teacher leaders, and teachers. Research-based best practices around professional development could work to improve teacher self-efficacy, mitigate teacher aversion to new initiatives, and establish effective means of staff support. These findings may also motivate stakeholders to inquire into other professional development opportunities given to teachers and begin the work to refine those processes. As educators grow professionally, students succeed academically.

This project was designed as a solution to the research questions. Research Question 1 was: What are high school teachers' perceptions of using Achieve3000 as a literacy intervention? Research question 2 was: What are high school teachers' perceptions about the support or resources needed to use Achieve3000 more effectively as a literacy intervention? This project responded to participants' responses to interview questions that supported these research questions. The positive social change resulting from these findings will be an increase in literacy proficiency for the observed learning zone in the observed Georgia school district, improvement of teachers' professional knowledge and practice, and bolstering of efficacy in intervention implementation practices.

Summary

Based on the findings of this study, a white paper was designed to address the problem of practice. A description of the project, rationale, goals, resources and supports, limitations and solutions, responsibilities, implications, and evaluation plan were presented and discussed. Section 4 presents the project's strengths and limitations, recommendations for alternative approaches, scholarship, project development, and evaluation. Section 4 concludes with reflections, leadership and change, implications, applications, and directions for future research.

Section 4: Reflections and Conclusions

Section 4 contains a review of the study and presents the project's strengths, limitations, recommendations, evaluation, reflection, and directions for future research. The findings from the data analysis were the foundation of the development of the white paper, which serves as a resource and planning guide for educational leaders struggling with the implementation of interventions. The findings can potentially increase the usage of interventions such as Achieve3000 by improving the professional development and support that school districts offer to teachers. As a result, student achievement may increase in literacy proficiency and resolve the discrepancy in scores on GMAS.

Project Strengths and Limitations

Teachers within the observed learning zone of the observed Georgia school district had been mandated to use Achieve3000 as a literacy intervention in the math, science, social studies, and ELA subject areas. The purpose of this qualitative study was to examine high school teachers' perceptions of the use of Achieve3000 as a literacy intervention using the conceptual framework of disciplinary literacy. Findings from this study indicated that teachers were unsatisfied with the level of support offered and did not conceptualize the connection between the intervention and their respective content areas, resulting in the development of seven themes. The first theme was little relevance of instruction. The second theme was low student engagement. The third theme was a lack of understanding. The fourth theme was the loss of autonomy. The fifth theme was the lack of effective training. The sixth theme was the lack of accessible and ongoing support. The seventh theme was a lack of understanding the usefulness and relevance.

Benefits

The white paper was designed as a resource for educational leaders to address the concerns that participants and teachers alike indicated. The white paper serves as a resource for planning professional development, which may be used to address the seven themes from this study. Educators attending a professional development session that has been designed as a result of the white paper may experience more positive feelings regarding using Achieve3000 as a literacy intervention. During professional development, teachers should experience ongoing support, receive information that is relevant to their content, and be given opportunities for both practice and exposure. In addition, the white paper may serve as guidance for additional professional development planning using the themes from this data set. Educational leaders can use the white paper to improve overall student achievement by building teachers' capacity to improve instructional practices.

Limitations

Due to the basic qualitative design structure of this study, only 10 participants from eight campuses were needed to reach saturation. The stringent nature of the qualifications that participants had to meet to participate in the study also contributed to the smaller sample size. Participants must have taught within the observed Georgia school district for 3 full years after the acquisition of Achieve3000, must have taught within one of the eight campuses in the South Learning Zone of the observed Georgia school district, must have been employed by the observed Georgia school district during

the time of the study, must have attended at least one training on Achieve3000, and must have implemented the intervention at least three times in their instruction.

This study involved 10 core content teachers within the observed Georgia school district. This small sample size limits the transferability of this project study's results. Future research involving a larger sample size is recommended. Additionally, transferring results to another study with a school district under a different demographic, setting, and content presents limitations. The findings from this project study are most comparable to the observed Georgia school district with declines in literacy proficiency and low state-level assessment scores.

Recommendations for Alternative Approaches

In this project study, I intended to examine high school teachers' perceptions of the use of Achieve3000 as a literacy intervention using the conceptual framework of disciplinary literacy. An additional approach would include designing a professional development model for the observed Georgia school district from this study's findings. This professional development model would serve as an exemplar for the observed Georgia school district to model. The observed Georgia School District will need to find preventative measures for reducing the risk of cheating, as well as develop learning practices for teachers that invite both student excitement and interest. Creating sample lessons using the intervention would help teachers struggling to engage students by providing a framework of reference. Educational leaders would better serve teachers by specializing the training they received, to impart value to the implementation process. Using the reports feature from Achieve3000 shows teachers how to track student growth;

however, teachers would need more structure around how to disaggregate these data and what implications for learning the data may have. Sequencing training to break down concepts for teachers, such as lesson implementation, data protocol, and progress monitoring, prevents teachers from feeling overwhelmed and allows them to practice implementation in a less intimidating manner.

The observed Georgia school district has an opportunity to provide an overview of the benefits of using Achieve3000 in other learning zones within the district. Another learning zone would be ideal to both follow implementation guidelines as well as hear some of the positive effects of the intervention when used with fidelity. Fellow teachers may participate, to make the exchange of information more relevant to teachers within the observed learning zone. The schools in the observed Georgia school district can work together to streamline this process and establish a learning community across the district. Not only does this support buy-in but it creates a community of support for teachers. An additional approach would include exploring teachers' perspectives on which interventions they would recommend ways to improve literacy proficiency on GMAS. Centering teacher voices in decision making could result in the development of a preferred resource bank that is informed by teachers, rather than educational leaders outside of the classroom with limited exposure to students' needs.

Scholarship, Project Development and Evaluation, and Leadership and Change

While orchestrating this study, I gleaned knowledge on the effects of professional development on student achievement, and the driving forces that make professional development effective. Additionally, I gained insight into other content areas on how

their experiences with the intervention Achieve3000 have gone, and how those perceptions lend themselves to low usage. The conceptual framework of disciplinary literacy has helped me professionally, as I further my career and expand into new roles within education. The observed Georgia school district can benefit from the work conducted in this study, and the changes may potentially expand to surrounding school districts as well.

I ascertained knowledge of the process of research, data collection, and data analysis to formulate an informed project. Summative evaluations will be employed by educational leaders and myself. When professional development is designed using the white paper within this study, teachers will provide feedback on their experiences as well. Feedback from stakeholders will facilitate the adjustments to newly designed professional development as needed.

As an educator, I firmly believe and value the work of literacy proficiency. With a background in the observed Georgia school district for approximately 11 years now, I place emphasis on the success of the students enrolled. The demands that educators are expected to meet intensify and change daily, requiring their professional learning and training to be just as rigorous. When the problem of low usage of the intervention presented itself, I was urged to contribute to finding a solution or exploring the causes. The findings of this study will directly influence teachers as program specialists and zone superintendents will receive and can integrate the white paper into their decision-making. As I strive to become an educational leader in my career, understanding what drives both

teacher and student success is paramount. As a researcher, I have learned what practices will make me effective in various educational settings.

Reflection on Importance of the Work

This doctoral journey has been demanding yet purposeful and fulfilling. The work that I have done will positively impact the teachers that I work with and the educational leaders that I work for. Furthermore, the processes of research have helped me to learn more about effective leadership approaches and using data to make informed decisions. As a novice in doctoral work, I faced many obstacles that caused me to reflect on my purpose and desired outcome. Because of the passion I have for this profession, I understood and accepted that giving up or taking a break was not an option; the problem needed immediate attention. I learned how to design research questions and search for answers within the data. The development of themes and subthemes helped me to immerse myself in the data and provide an accurate and informed white paper that will serve hundreds of teachers within the district where I work. It is my desire that other learning zones will implement this white paper to address some of their challenges with intervention or teacher development, for the betterment of the district.

Implications, Applications, and Directions for Future Research

This doctoral experience presented many challenges and trying moments as a novice researcher. I had to revise my study numerous times because of this learning curve; however, I chose to remain undaunted by the fight. The learning loss of COVID-19 has affected students nationally; however, it was particularly difficult to witness my students and students in our learning zone fall so far behind in literacy proficiency.

Although the sample size of this study was small, this study may be replicated in other school systems to explore the problems in educational settings.

Other studies that explore teacher perceptions of interventions currently exist, however, little research exists on teacher perceptions regarding the supports around the interventions they are expected to use. Jara (2022) completed a quantitative study comparing the scores of students exposed to Achieve3000 versus those of students with little to no exposure. This information could also be used by educational leaders in conjunction with the findings of this study to make decisions around professional development and implementation methods.

Recommendations for future research include a mixed-methods design which could apply to this study as well. Researchers could use a survey to gather quantitative data on the usage of Achieve3000 by participants combined with qualitative data from a focus group setting. Conversely, a quantitative version of this study could also be possible. Using survey data, a group of teachers who use Achieve3000 routinely could be compared to a group of teachers who do not use Achieve3000 routinely and a group of teachers who do not use Achieve3000 at all. Each group of teachers would respond to survey questions about their perceptions of Achieve3000 and its influence on student learning in their classes. Future researchers could compare, or contrast themes delineated from survey data from each group of teachers.

Conclusion

The findings from this project study can affect not only high school teachers but may expand to include all grades K-12. Incorporating technology-based interventions

such as Achieve3000, has been challenging for both novice and advanced educators within the observed Georgia school district. On trend with the demanding nature of the profession, Achieve3000 surfaced as a new innovative initiative in response to a problem pervading the learning zone. As the usage of the intervention did not increase, the literacy proficiency scores of students within the observed Georgia school district declined. The results of this study will encourage positive social change as teachers gain exposure to effective professional development that truly influences their instructional practice while earning their buy-in. Students and teachers alike may improve their sense of self-efficacy, as they observe the positive influences of effective professional development. Whether future researchers focus solely on interventions or professional development, the ultimate yield may be the improvement of school systems.

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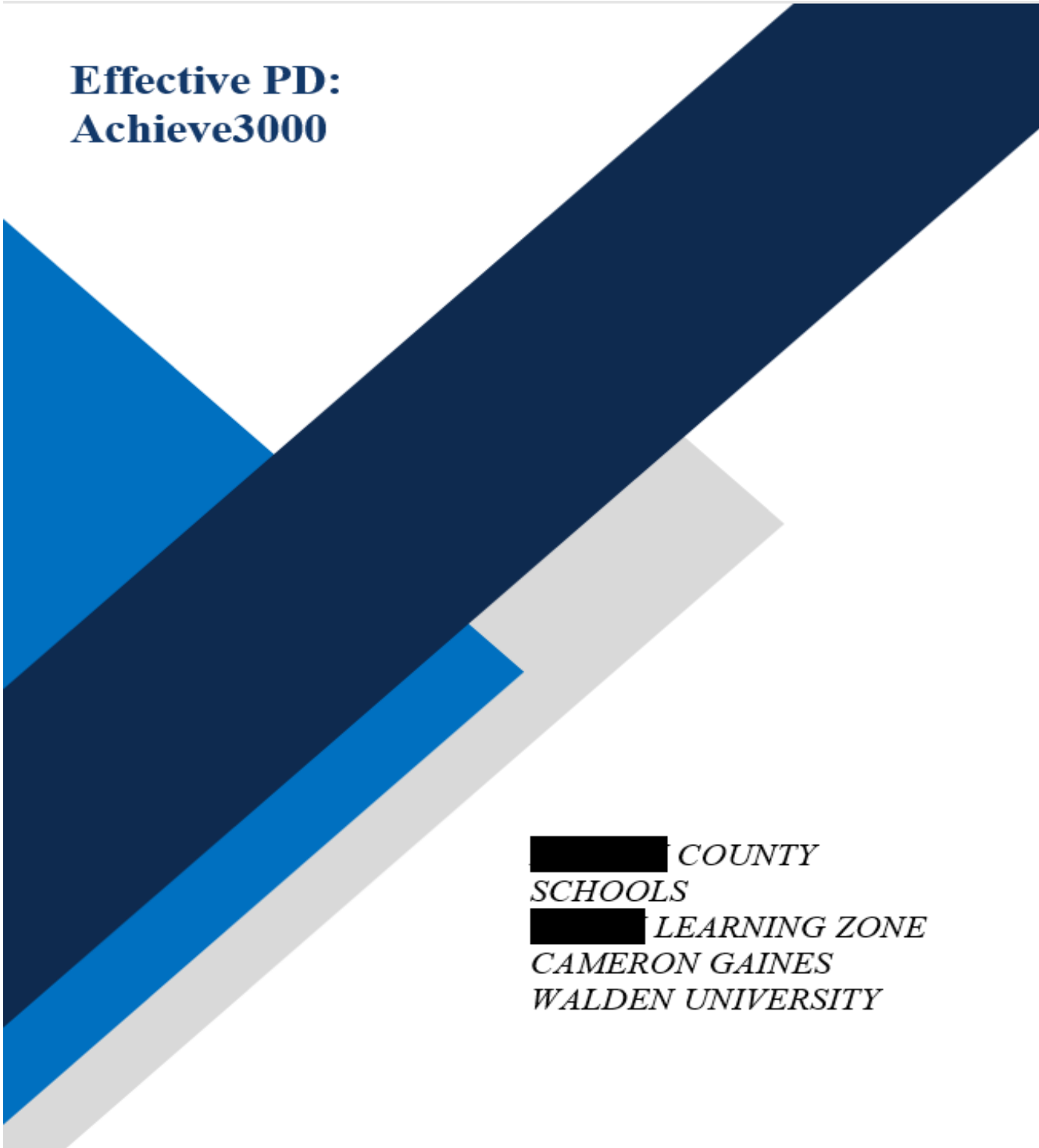
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**Effective PD:
Achieve3000**



████████ COUNTY
SCHOOLS
████████ LEARNING ZONE
CAMERON GAINES
WALDEN UNIVERSITY

Executive Summary:

The problem that was addressed through this study was that inconsistency in using a literacy development initiative resulted in no improvement of low literacy scores in April of 2022, as a total of 80.85% of high school students in one learning zone within a Georgia school district scored below literacy proficiency on the Georgia Milestones Assessment System. The purpose of this qualitative study was to examine high school teachers' perceptions of the use of Achieve3000 as a literacy intervention using the conceptual framework of disciplinary literacy. This study's two research questions focused on high school teachers' perceptions of using Achieve3000 as a literacy intervention and their perceptions of support that high school teachers need to use Achieve3000 more effectively. A basic qualitative design approach garners and contextualizes teachers' experiences using the intervention. A sample of 10 core content teachers across eight South Learning Zone high school campuses were interviewed. A self-designed interview protocol was used to engage teachers in a one-on-one semi-structured interview. Data was analyzed from qualitative interviews using open coding and thematic analysis to identify the common themes: little relevance to instruction, low student engagement, lack of understanding, loss of autonomy, lack of effective training, lack of accessible and ongoing support, and lastly lack of understanding of the usefulness and relevance of Achieve3000. In addressing the decline in literacy proficiency scores, the observed Georgia school district and similar districts may work to promote social change by mitigating the continued decline in literacy and improving the implementation of effective interventions while improving students' success both in and out of the classroom.

RQ1: What are high school teachers' perceptions of using Achieve3000 as a literacy intervention?

RQ2: What are high school teachers' perceptions about the support or resources needed to use Achieve3000 more effectively as a literacy intervention?

Introduction & Background

Achieve3000 is a technology-based literacy intervention program that offers engaging, interactive, and online learning for students with deficiency gaps (Achieve3000, 2016). Focusing on foundational skills through differentiated learning, this intervention mitigates learning deficits and provides progress monitoring. Interventions focusing on word reading, word knowledge, and text-processing strategies help improve literacy (Miciak et al., 2018). Aimed toward intervention, the online program offers target lessons, multiple-choice questions, writing tasks, and interactive activities to improve literacy, vocabulary development, comprehension, and more. Achieve3000 is aligned with Common Core standards and measures texts and lessons by grade and skill-appropriate Lexile levels. Achieve3000, and other literacy development programs, have become new initiatives for educational institutions in recent years. Research suggests teachers adapting to new school curricula aimed toward improving instructional practice results in significant academic improvement for students (Brynelson et al., 2019). The more exposure to intervention teachers offer, the more likely their chances of witnessing students' academic improvement. Gersten et al. (2020) found a strong positive correlation between reading intervention and student outcomes. Intervention should occur as soon as possible to affect future student achievement greatly. Early vocabulary and reading fluency in Grade 3 correspond with later reading comprehension success in high school (Petscher et al., 2019). Furthermore, recent trends in the decline of literacy rates within the U.S. prove a need for intervention.

Learning loss has negatively affected literacy proficiency in the United States the most between 2019 and 2022. As of 2019, with the highest score available at 500, high school seniors' reading averages on the National

Assessment of Educational Progress (NAEP) ranged from 249-333, with only 37% of seniors meeting academic preparedness requirements (Nation's Report Card, 2019). Zhao (2022) reported that, on average, based on reading data between 2019 and 2020, American students lost between 57-183 days of reading instruction before the start of the 2021 school year. Using the i-Ready reading diagnostic data from 1.6 million K-12 schools nationwide in 2021, Dorn et al. (2021) found that students were 9 points behind on reading. Student progress in literacy proficiency has slowed. Data from the national Northwest Evaluation Association Measures of Academic Progress Reading Assessment report for the United States suggests that growth in literacy was slower in the 2020-2021 school year than in the 2019-2020 school year, with between 3%-6% decline in scores (Lewis et al., 2021).

Students must complete their GMAS in 11th grade to measure their literacy proficiency. In the local setting, as of 2022, one learning zone in the observed Georgia school district has suffered a loss in proficiency, with a decline of 12.83% in literacy proficiency on GMAS between 2019 and 2022 (Georgia Department of Education, 2022). On the GMAS, scores on Level 1 (beginning learner) are considered failing, and Level 2 (developing learner) are considered meeting requirements to pass, while Level 3 (proficient learner) are passing slightly above average. Level 4 (distinguished learner) are passing significantly above average scores. Georgia Department of Education (2022) advised that students scoring a 1 or 2 need additional support, while a 3 or 4 indicates that a student is prepared for the next academic level. The South Learning Zone, as of 2022, has 42.51% in the Level 1 category, 38.34% in the Level 2 category, 18.57% in the Level 3 category, and 0.58% in the Level 4 category (Georgia Department of Education, 2022). When adding the percentages of Level 1 and Level 2 scores for the 2022 administration of GMAS, 80.85% of students scored below proficiency, with a score of 3 and above being the

aim of the observed Georgia school district. Due to COVID-19 restrictions, there was no administration of the GMAS for the academic year 2020-2021. The observed Georgia school district purchased Achieve3000 during the 2020-2021 academic year to improve literacy proficiency in future GMAS administrations. Table 1 depicts each school within the South Learning Zone's performance on literacy proficiency in the 2019 and 2022 administration of the GMAS.

Table 1

South-Learning Zone Literacy Proficiency Levels on 2019 and 2022 GMAS

	2019		2022	
	Beginning	Developing	Beginning	Developing
Campus 1	30.19	39.74	37.05	43.98
Campus 2	26.41	38.75	35.03	40.61
Campus 3	25.66	40	25.81	48.39
Campus 4	27.31	37.71	32.44	47.8
Campus 5	62.83	30.89	66.67	26.19
Campus 6	NO DATA	NO DATA	78.57	17.86
Campus 7	30.73	37.87	46.15	38.18
Campus 8	12.02	34.4	18.39	43.71
Total	215.15	259.36	340.11	306.72
Average	30.73571429	37.05142857	42.51375	38.34

Note: Campus 6 did not have enough participants to report data in 2019.

As shown in Table 1, the percentage of students scoring below proficiency increased between the academic year of 2019 and 2022. The problem that was addressed through this study was that inconsistency in using the literacy development initiative resulted in no improvement of low literacy scores in April of 2022, as a total of 80.85% of high school students

in one learning zone in a Georgia school district scored below literacy proficiency on the GMAS. The literacy development initiative involves implementing lessons from Achieve3000. In the local setting, according to high school administration, the gap in practice that contributes to the problem is that teachers within the observed learning zone do not use the Achieve3000 literacy intervention with fidelity. According to the observed Georgia school district's policy, students are mandated to complete an assignment with Achieve3000 once a month per core subject area to improve the declining literacy proficiency scores evidenced by the 2022 administration of the GMAS.

In alignment with concerns at the local level, research shows that teachers' concerns with using technology-based interventions include a lack of time and a decline in efficacy in training over time (Francom, 2020). These beliefs influence teachers' perceived usefulness, ease of use, and efficacy in instructional practice (Hamutoglu, 2021). Conversely, teachers and administrators believed educational technology was useful for engaging learners, developing autonomous learning, and creating pathways to transferable 21st-century skills (Lawrence et al., 2020). In a recent study, only 24% of surveyed teachers felt they received adequate training to support the instruction of struggling readers (Merga et al., 2020). The hesitancy teachers have with utilizing new district initiatives often does not stem from an act of defiance or lack of interest. Out of 73 high school math teachers in an empirical study, only 19.67% of participants indicated little to no desire to use instructional technology (Trujillo-Torres et al., 2020). Non-ELA teachers who do not have a literature content area share concerns about where literacy instruction would fit into their content (Smith & Robinson, 2020).

Furthermore, many teachers feel unsure of how to handle recurring issues with instructional technology-based programs (Vinnervik, 2022). In

understanding teacher perceptions of using Achieve3000 as an intervention, schools in the learning zone of the observed Georgia school district may work to improve usage rates. School climate is important in accounting for literacy scores beyond students' and schools' socioeconomic status (Berkowitz, 2021). Suppose teachers have varied experiences with professional development, causing a lack of cohesive preparation. These varied experiences may heavily affect their approaches to implementing Achieve3000, with even further implications on student success.

Description of the Problem

The problem that was identified with this study was that inconsistency in using the literacy development initiative resulted in no improvement of low literacy scores in April of 2022, as 80.85% of high school students in one learning zone in the observed Georgia school district scored below literacy proficiency on the GMAS. The literacy development initiative involves implementing lessons from Achieve3000. In the observed Georgia school district, high school students' college and career readiness and content mastery decreased between 2019 and 2022. Content mastery in the observed Georgia school district during 2019 was 79.6% and in 2022 decreased to 73.3%, while in 2019, college and career readiness was ranked at 80.4% and decreased to 78.5% in 2022 (Georgia Department of Education, 2022). With 11,360 students enrolled in the observed learning zone within the Georgia school district for the 2022 academic year, approximately 9,184 students scored below literacy proficiency on the 2022 administration of GMAS.

Chief Academic Officer Cliff Jones suggested that Achieve3000 was purchased to support the literacy development plan "FOCUS" (Chief Academic Officer, personal communication, March 20, 2020). The intervention plan was projected to significantly improve learning loss

within two to three years of implementation. However, with a decline in literacy proficiency within the first two years of implementation, the observed Georgia school district determined that usage rates across campuses did not comply with district expectations. This study's results may help improve teacher usage of Achieve3000 as a literacy intervention as the board of education leaders work to mitigate teacher concerns and bolster professional support.

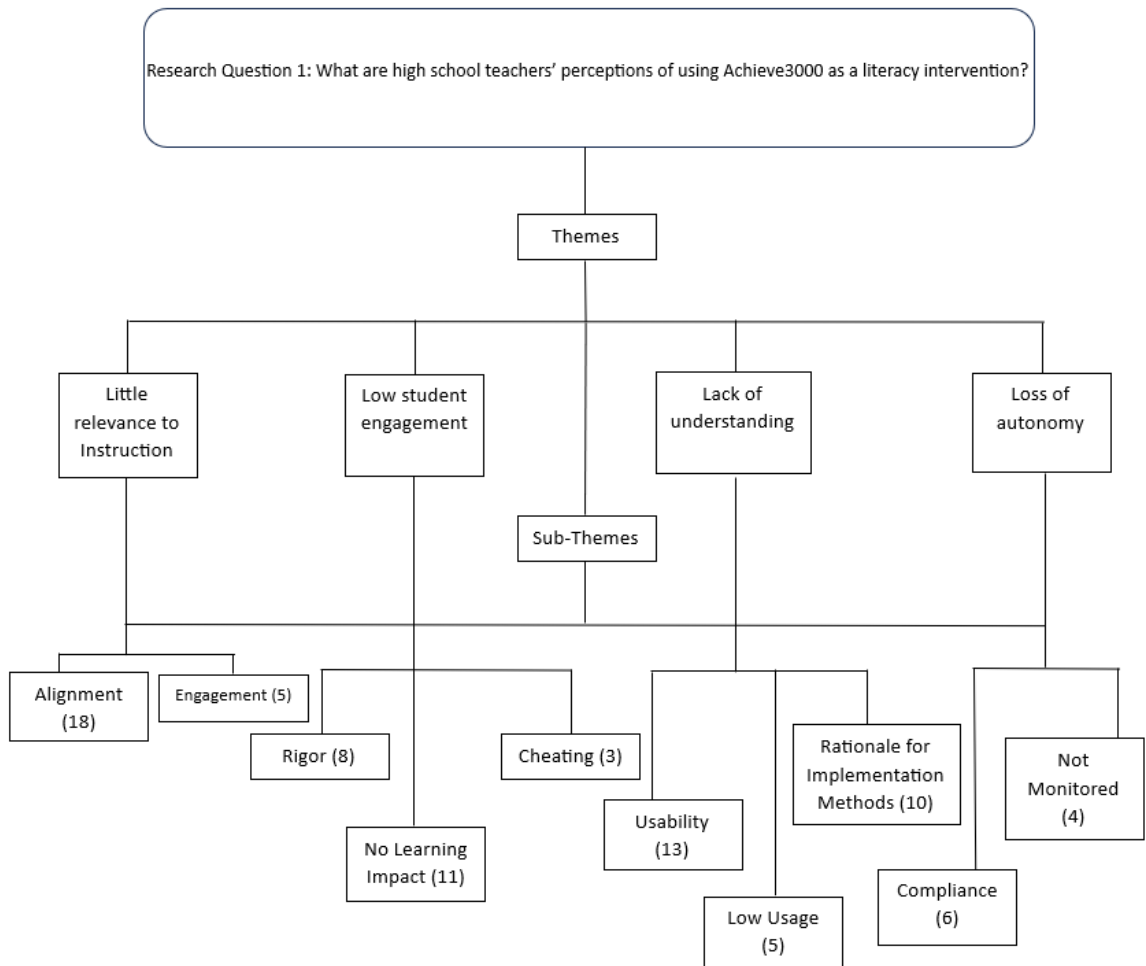
Evidence of the Problem from Literature

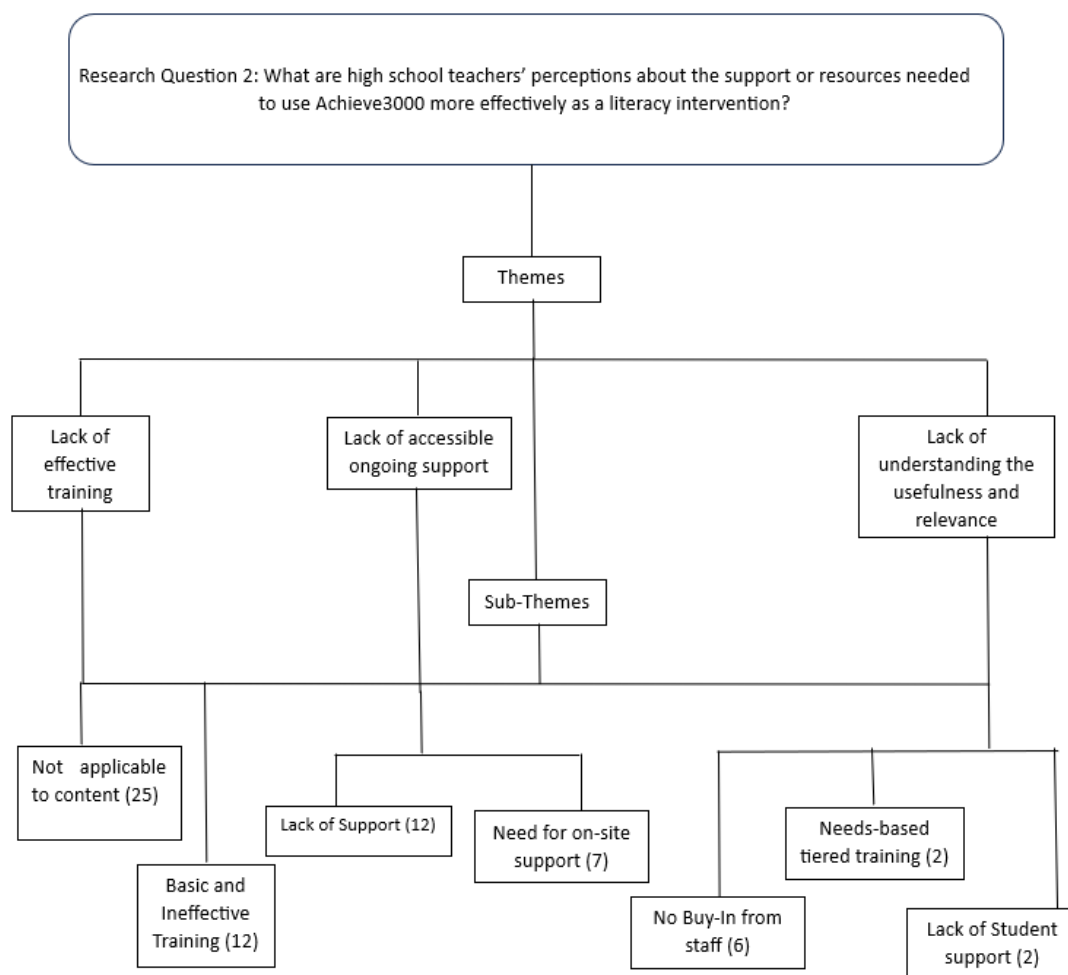
Educational leaders encounter difficulties implementing new initiatives as teachers may refuse or reject using new programs. Although teacher perceptions indicated that online intervention programs were valuable, barriers, such as the demands of staying abreast of instructional practices in a constantly changing environment, worked against implementation (Negrín-Medina et al., 2022). Additionally, teachers shared concerns about a lack of time compared to expectations of compliance with district mandates (Smith & Robinson, 2020). With the current instructional practice in the United States, school systems have been experiencing declines in literacy development. Schult et al. (2022) observed that 2020 reading competency scores were lower than in the three prior years. According to the National Assessment of Educational Progress (NAEP) report for 2020, eighth-grade students entering high school had an overall decrease of 3 points on the NAEP Reading Assessment. In response to this decline, educational institutions have developed literacy intervention programs to help improve reading scores.

Data Analysis Results

Figure 1

RQ Code Themes





Findings

The conceptual framework of disciplinary literacy was used to provide context for these findings. Shanahan and Shanahan (2008) posit that although disciplines share similarities in academic language, each uses unique practices. Approaches to disciplinary literacy that use a generalized implementation undermine the focus of literacy in subject-specific courses (Hinchman and O'Brien, 2019). The interview questions used in this study were based on the tenets of this

conceptual framework. Seven themes emerged from this study: (a) Little relevance to instruction, (b) low student engagement, (c) lack of understanding, (d) loss of autonomy, (e) lack of effective training, (f) lack of accessible ongoing support, and (g) lack of understanding the usefulness and relevance.

RQ1: What are high school teachers' perceptions of using Achieve3000 as a literacy intervention?

The first research question (RQ1: What are high school teachers' perceptions of using Achieve3000 as a literacy intervention?) allowed teachers to respond based on their unique expertise, regardless of content background. The second research question (RQ2: What are high school teachers' perceptions about the support or resources needed to use Achieve3000 more effectively as a literacy intervention?) allowed teachers to respond based on their specific needs, regardless of content background. Participants responded to the following questions for RQ1:

- To what extent do you find Achieve3000 influences your instruction?
- Did the influence of Achieve3000 on your instruction benefit, harm, or have no impact on students? How so?
- How would you describe your capacity to implement Achieve3000? Why so?
- Would you suggest Achieve3000 to members of your content area? Why or why not?

The problem of practice within the observed Georgia School district was the inconsistency in the use of the literacy intervention. There was a total of 10

teachers interviewed from the backgrounds of Science, English Language Arts, Math, and Social Studies collectively. These questions focused on how teachers used the literacy intervention within their domain as well as explored the overall impact the intervention had on students, from the teachers' point of view. These questions served to provide background for the second research question. Four themes according to RQ1 emerged from this study: (a) Little relevance to instruction, (b) low student engagement, (c) lack of understanding, and (d) loss of autonomy. Ten subthemes according to RQ1 emerged from this study: (a) Alignment, (b) engagement, (c) rigor, (d) no learning impact, (e) cheating, (f) usability, (g) low usage, (h) rationale for implementation methods, (i) compliance, and (j) no monitoring.

RQ2: What are high school teachers' perceptions about the support or resources needed to use Achieve3000 more effectively as a literacy intervention?

The second research question (RQ2: What are high school teachers' perceptions about the support or resources needed to use Achieve3000 more effectively as a literacy intervention?) allowed teachers to respond based on their specific needs, regardless of content background. Participants responded to the following questions for RQ2:

- What supports do you currently need around Achieve3000?
- What supports do you currently have around Achieve3000?

- Describe the effectiveness of the supports offered to you around Achieve3000.
- Has the training you've received on implementing Achieve3000 influenced your implementation methods during instruction? Why or why not?
- What further training is needed that would benefit your implementation of Achieve3000?

These questions explored what supports teachers are currently offered as well as provided participants the opportunity to express what content-specific needs they have to improve implementation. Research suggests that when implementing effective professional development for disciplinary literacy, leaders should offer disciplinary-based strategies for instruction, differentiation in what is considered literacy, methods to measure literacy within the discipline, and an outlined model of implementation (Howell et al., 2021). The results of this study offered further context around supports put in place by the observed Georgia School District, explaining the cause for the problem of practice.

Three themes according to RQ2 emerged from this study (e) lack of effective training, (f) lack of accessible ongoing support, and (g) lack of understanding of the usefulness and relevance. Eight subthemes according to RQ2 emerged from this study: (b) basic and ineffective training, (c) lack of support, (d) not applicable to content, (e) need for on-site support, (f) no buy-in from staff, (g) needs-based tiered training, and (h) lack of student support. These subthemes

connect and support the overarching themes within smaller clusters that emerged to respond to the research questions posed.

Summary of Themes

The first theme was “Little relevance to instruction” with participants indicating that the activities embedded in Achieve3000 did not meet the demands of their specific content. Participants indicated that Achieve3000 was not used to drive their instruction as it was best suited as a “time-filler” and did not supply enough material to teach their standards.

The second theme was “Low student engagement” with participants reporting that students could randomly select answers to fly through learning tasks as well as cheat by looking for answers to the questions online. Participants did not perceive Achieve3000 to have an impact on student learning.

The third theme was “Lack of understanding” with participants stating that Achieve3000 was not their preferred intervention tool. Participants suggested that they were struggling to conceptualize how to integrate the resource into their instruction and that they perceived the resource to be ineffective.

The fourth theme was “Loss of autonomy” with participants reporting that they only used the platform because the observed Georgia school district had mandated it. Additionally, participants reported that they believe they were told to use this resource because the observed Georgia school district had spent district funding on Achieve3000, and they (teachers) had no voice.

The fifth theme was “Lack of effective training” with participants indicating that the training they have received in the past was ineffective. Participants suggested these trainings were ineffective because they were not relevant to their content needs and would be better suited for other content areas.

The sixth theme was “Lack of accessible ongoing support” with participants reporting that the trainings were not consistent with them occurring sporadically if at all throughout the year. Additionally, participants claimed to not have access to support when needed.

The last and seventh theme was “Lack of understanding of the usefulness and relevance of Achieve3000,” with participants suggesting that the observed Georgia school district offered no rationale behind the use of Achieve3000. Furthermore, participants reported that they would like support for both them and students to make implementation more effective.

Implications

Two project directions could have aligned with this study based on the preliminary research and a comprehensive literature review. Data suggest that literacy proficiency has not only failed to improve but has declined in the observed school district. With the resources readily available to teachers, there appears to be a disconnect between development and instructional practice. Based on the findings of data from the local level and supporting research around effectively implementing interventions, I could have developed a 3-day professional development plan for high schools in the observed Georgia school district to use. Conversely, based on the needs presented by

speaking with administrators and teachers in the observed Georgia school district, I could also have created a helpful resource outlining the functions and troubleshooting tasks for Achieve3000 that will remain accessible to staff as needed. Administrators indicated that the district's expectation to issue the intervention monthly would not be changed and that training on the intervention has been conducted. Teachers indicated that their training was inadequate to use the Achieve3000 platform comfortably. Ultimately, based on the varying needs and causes of delayed implementation, I developed a white paper for high schools in the observed Georgia School District to utilize when crafting professional development. Developing a tangible resource could help to mitigate teacher resistance and support future professional development in the observed Georgia school district. The results of this study may help increase the usage of Achieve3000 as an intervention and build the capacity for students' literacy proficiency scores to increase. In underperforming schools, it is common that high school students are still working to build foundational literacy skills (Faggella-Luby et al., 2012). The present study, therefore, may work to improve student graduation rates, bolster overall academic performance, and increase students' college and career readiness.

Potential Resources and Existing Supports

The resources needed to plan new professional development for Achieve3000 consist of collaboration between program specialists, building leaders, and teachers. Program specialists work in the observed Georgia school district to develop training presentations that will be disseminated to schools. Teachers who have participated in this study offer a lens into the need for support in professional development. Additionally, building leaders

(Principals and Assistant Principals) who work to calendarize training for their staff, will work with teachers to ensure that their expressed needs are being met in a logical sequence and timely manner. Materials needed are the white paper from this study, online presentation tools (PowerPoint, Prezi, or Canva), handouts, and computers.

Criteria for Effective PD

- Goal Oriented
- Relevant to Teachers
- Adaptable and Differentiated
- Ongoing and Accessible
- Appropriately Timed

Review of the Literature

Rahman (2023) suggests that systems focusing on SMART goals will create delineated measurements that staff can understand. Secondly, systems that observe the reality of their circumstances may work to adjust or refine the SMART goals they've outlined. It is recommended to ask: what is happening now, what is the effect of what is happening now, what steps have we taken towards our goal, and does this interfere with any other objectives?

Professional learning for teachers can be too general or too specific, too basic or too advanced, or aimed at specific grade levels while neglecting others (Fairman et al., 2023). As a means of ensuring relevance, Fairman et al. (2023) suggest that schools provide professional learning that is job-embedded, focused directly on the intersection of student learning and content, and aligned with curriculum and school improvement. Bergmark (2023) found that teachers felt their instructional practice was influenced by professional development when the training was relevant to their needs.

Review of the Literature Continued...

Avidox-Ungar (2023) suggests that teachers have varied needs based on their career cycle. Teachers in the “early life” (0-5 years of experience) phase, “middle life” (6-12 years of experience) phase, and “late life” (13 or more years of experience) phase each have varied needs from professional development. Teachers in the early life phase were motivated to pursue professional learning mostly by an increase in salary and improvement of professional practices. Conversely, teachers in the late-life phase were motivated to pursue professional learning for a sense of accomplishment. Educational leaders who design professional development should consider the motivation of staff and use these to make training engaging for all through a combination of varied methods.

Educational leaders must find ways to differentiate the ways in which they present information to teachers with varied learning styles and instructional needs. Varied methods of presenting information in PD include learner-oriented models as well as teacher-agency models. One study that implemented learner-oriented models found it effective to incorporate students as collaborators and travel as a team to witness implementations across varied contexts (Spratt, 2019). Working with students allowed teachers to challenge their assumptions and adapt to becoming responsive to student needs while traveling as a team allowed teachers to observe the implementation in real-time in varied scenarios. Inmants and Van der Wal (2020), argue that teacher agency models in professional development focus on presenting the teacher as an actor, depicting dynamic relationships, contextualizing learning on multiple levels, making learning variable, and considering outcomes as part of a continuous cycle. In addition to these, Leijen et al. (2020), posit that teacher agency models need to include procedures aimed towards articulating the purpose of the action desired backed by rules and principles of practice, procedures for practical reflection (designed to understand oneself), and procedures for critical reflection (designed to understand the inequalities and biases in education).

School systems should work to identify different professional development models that will best equip their teachers with the knowledge and skills necessary to improve professional practice. School systems may work with more than one model at a time, considering the vast needs of staff based on career life-span and motivations.

Once professional development occurs, teachers need feedback on their implementation through coaching. Coaching is defined as a successful form of

professional development that impacts student growth (Lofthouse, 2019). The coaching cycle of support for teachers should be ongoing throughout the entire time of the expected use of new initiatives (Philipsen et al., 2019). Coaching cycles that offer observation, timely feedback, and opportunities for practice have a positive correlation with student achievement (Sims and Fletcher-Wood, 2021). PD when supported by coaching should be divided into two phases: development, and class enactment (Coenders and Verhoef, 2019). In the development phase, teachers are expected to come into contact with new pedagogies and materials with opportunities to discuss and add to learning. In the enactment phase, teachers are observed implementing initiatives, given feedback, and reflect on learning outcomes. Coaching cycles can occur in cyclical phases of pre-conference and feedback (Hui et al., 2020). During the pre-conference portion of coaching, teachers work with leaders to establish goals, outline interactions, gather teacher needs, explain expectations, and provide an overview of the coaching cycle. Kochmanski and Cobb (2023) assert that two practices will help to define goals for teachers: observing classroom instruction and eliciting teachers' reasoning behind instructional methods. During the feedback cycle, leaders will observe teachers to collect data on current instructional practices, provide feedback, and redirect to the goals established in the pre-conference. Coaching should consider teachers as partners in professional development, focusing on the seven partnership principles (Knight et al., 2023). The seven partnership principles in coaching are equality, choice, voice, dialogue, reflection, praxis, and reciprocity. In summation, teachers should have an equal voice, are the final decision makers in their coaching goals, are empowered to share their opinions, contribute to dialogue around their growth, reflect on their instructional practice, apply learning to real-life scenarios, and expect their coach to give just as much as they do to the process.

Professional development that is intensive over longer periods of time is proven to be a more inclusive approach that captures all levels of teachers, as opposed to short-term incidental training (Donath et al., 2023). Research shows that within a professional development cycle, teachers should spend 5 hours on activities (Singh and Fruman, 2020). Teachers indicated that when they were given multiple opportunities to reflect on their practice, their instructional practice improved (Chung, 2023). Within Chung's (2023) study teachers also reported feeling more highly motivated and less pressured by external demands when they were given more time in their learning communities. In

their study, Fernandes et al. (2023), found that teachers reported positive feelings about their professional learning because they were afforded a time frame to practice what they had learned. School systems will need to provide teachers not only with the outline of how long professional learning will occur, but allot appropriate times for coaching, reflection, and practice. These learning opportunities should occur frequently and at manageable times for teachers.

Outcomes

Research shows that teacher professional development has a statistically significant relationship with student achievement. Some of the key implications of professional development such as implementation fidelity and use of evidence-based strategies prove to have positive effects on student achievement (Glover et al., 2023). Research further shows that the more practice during the coaching cycle teachers are afforded, the more likely teachers are to witness student growth. Fauth et al. (2019) found that best practices in professional development, such as supportive environments and the ability to practice, had the strongest correlation to student achievement. Effective professional development is impactful as it improves overall academic achievement as opposed to impacting one discipline at a time (Gore & Rosser, 2022). Alwaely et al. (2023) found that Type A professional development had the most statistically significant impact on student achievement as opposed to Type B. Type A professional development involves more consistent and comprehensive feedback, while Type B is more punitive and summative with less frequent opportunities for reflection. Conversely, through a synthesis of 14 previously conducted studies, Madigan and Kim (2021), determined that when teachers are frustrated and out of focus a negative relationship with student achievement emerges. Hoque et al. (2023) argued that teachers who have high levels of job satisfaction yield student growth

because they not only impart knowledge but tend to give extra attention during instruction to ensure the betterment of each child. Implications of negative student achievement were lower reading abilities and lower literacy development. When professional development is not effective or relevant to teacher needs, it can hinder the progress that school leaders set out to gain while depleting teachers' job satisfaction. Consequently, Glover et al. (2023), found a statistically significant relationship between increased opportunities for practice, implementation fidelity, and student achievement in both Math and ELA when predicting student growth. Other considerations, such as modeling and feedback, were considered significant as well. However, the strongest predictor was frequent learning and practice for teachers. Professional development has been proven to help improve students' skills in phonological awareness, phonics, fluency, vocabulary, and comprehension (Didion et al., 2020).

Recommendations

The observed Georgia school district offered professional development that showed teachers how to find texts and assign them to students, which is what caused the gap in learning. To overcome this, educational leaders will need to specify training by content first. In each training for the core subject areas, teachers will need explicit guidance on how to implement either a lesson or isolated text within their current practice. It would be ideal if professional

development could work with standards that teachers are either currently teaching or will be teaching within the coming week.

The observed Georgia School District will need to find preventative measures for reducing the risk of cheating, as well as develop learning practices for teachers that invite both student excitement and interest. Creating sample lessons using the intervention would help teachers struggling to engage students by providing a framework of reference. Additionally, teachers referenced incentivizing students to take the platform seriously. The observed Georgia school district could provide rewards to students using their behavioral management system currently in place, called Positive Behavioral Interventions and Supports (PBIS). Students receive points from this system and are allowed to use these points to purchase snacks, sports tickets, or entertainment items.

Using the reports feature from Achieve3000 shows teachers how to track student growth, however, teachers would need more structure around how to disaggregate this data and what implications for learning the data may have. Sequencing training to break down concepts for teachers such as lesson implementation, data protocol, and progress monitoring prevents teachers from feeling overwhelmed and allows them to practice implementation in a less intimidating manner.

The observed Georgia school district has an opportunity to provide an overview of the benefits of using Achieve3000 in other learning zones within the district. Another learning zone would be ideal to both follow implementation

guidelines as well as hear some of the positive impacts of the intervention when used with fidelity. Fellow teachers may participate, to make the exchange of information more relevant to teachers within the observed learning zone. The schools in the observed Georgia school district can work together to streamline this process and establish a learning community across the district. Not only does this support buy-in but creates a community of support for teachers.

The observed Georgia school district is combatting the effects of ineffective training. The development of tiered training that targets the needs of each specific content would help to establish a baseline of support. Educational leaders can work to strengthen the relationship between Achieve3000 support staff and building administrators. When administrators communicate the specific needs of their instructional teams, Achieve3000 may work to design more effective approaches to training.

The observed Georgia school district uses a training schedule to prepare teachers for what training they have to complete by specific dates. An opportunity exists to add more frequent training on the district level as well as opportunities to strengthen teacher leaders who are willing to learn. Achieve3000 is mandated within the county and has received a budget allowance. Building leaders can leverage some of their funding to provide intensive training to willing teacher leaders, which would then be of service to struggling and apprehensive teachers.

Similar to tutorials after school, teachers or support staff have an opportunity to support students in using Achieve3000 in one-on-one sessions after school. The observed Georgia school district has not implemented a structure of support for students, which places the onus on teachers to become proficient in understanding a tool they perceive they have not been effectively trained on.

Educational Leader Evaluation

Educational leaders who design new professional development using the white paper will rate responses to questions using a Likert scale of 1-5: 1 being poor, 2 being fair, 3 being good, 4 being very good, and 5 being excellent. These evaluations will be reviewed by district leaders (Director of the program specialist department and upwards) to determine the usefulness of the white paper for the observed Georgia school district. Results from this evaluation may be used to determine if the white paper will be a continued source of professional learning development approaches. Educational leaders who design new professional development using the white paper will respond to nine questions:

- How would you rate the clarity of this white paper? (Rate 1-5)
- How comprehensive was the coverage of key topics related to professional development design? (Rate 1-5)
- How would you rate the quality of the research and evidence presented in this white paper? (Rate 1-5)

- How effective was the white paper in providing strategies for designing professional development? (Rate 1-5)
- To what extent did the white paper influence your approach to professional development design? (Rate 1-5)
- Have you implemented any specific strategies from the white paper in your professional development programs? If yes, how successful were these strategies in practice?
- What aspects of the white paper did you find most useful? (Please explain)
- What aspects of the white paper could be improved? (Please explain)
- Would you recommend this white paper to other educational leaders?

Teacher Evaluation

The teacher participants who receive professional development that was designed using the white paper will rate responses to questions using a Likert scale of 1-5, 1 being strongly disagree, 2 being somewhat disagree, 3 being neutral, 4 being somewhat agree, and 5 being strongly agree. The results of this evaluation will be used by program specialists to modify the professional development they have designed as needed. Teachers who receive professional development because of informed decision-making from the white paper will respond to 10 questions.:

- This was a quality professional development session. (Rate 1-5)

- The presentation of Achieve3000's features and functionalities was clear and understandable. (Rate 1-5)
- The presenters were effective in delivering the content. (Rate 1-5)
- The training materials (e.g., slides, handouts) were helpful. (Rate 1-5)
- The professional development session includes practical examples and demonstrations. (Rate 1-5)
- You are confident in your ability to use Achieve3000 in your instruction after this training. (Rate 1-5)
- You would recommend this professional development session to your colleagues. (Rate 1-5)
- What specific strategies or techniques from the training have you found most useful in your practice? (Please explain)
- What aspects of the professional development session did you find most valuable? (Please explain)
- Do you have any suggestions for additional topics or areas related to Achieve3000 that future training sessions should cover?

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Appendix B: Interview Protocol

Teacher #:

Date:

Time:

Content taught:

Years of experience:

Pre-Interview Script: Before conducting the interview, I will introduce myself, explain my role in the research, and thank the participant for their cooperation. I will review the purpose of this study, and the duration of the interview, restate promises of confidentiality, and confirm consent.

I will say: My name is Cameron Gaines, a doctoral candidate attending Walden University and a current staff member of the observed Georgia school district. I am conducting this qualitative interview with high school core content teachers, as the primary and sole researcher in this study. The purpose of this study is to explore high school teachers' perceptions of the use of Achieve3000 as a literacy intervention. To protect you from harm and uphold confidentiality, I will use an alphanumeric code as opposed to your actual name. Additionally, I have structured interview questions in a manner that excludes interviewer bias to avoid influencing your responses or beliefs. All information gathered from this interview will be stored on my password-protected computer and delivered to you upon completion of the interview for your approval and final consent.

I will then inform them of the duration and structure of the interview.

I will say: This virtual Microsoft Teams interview will last approximately 25-30 minutes, with the ability to extend or reduce time as needed. I will ask you a question, which will also be on display via my computer screen and pause for your response. While interviewing you will see the words being transcribed in real-time on screen. Should you have any questions or need clarity on questions asked of you, please do so before responding. You may self-correct, further explain, or retract statements at any moment during the interview. After the interview is complete, you will be emailed a transcript of our interaction for your final approval and consent. At this time, do you have any questions? Do I have your consent to begin the interview?

Interview Questions:

Background Questions

1. How long have you been teaching in the observed Georgia school district?
2. What content areas have you taught, and which do you currently teach?
3. How often do you use Achieve3000 to support instruction?

Research Question-Based Interview Questions

4. To what extent do you find Achieve3000 influences your instruction?
5. Did the influence of Achieve3000 on your instruction benefit, harm, or have no impact on students? How so?
6. How would you describe your capacity to implement Achieve3000? Why so?
7. Would you suggest Achieve3000 to members of your content area? Why or why not?

8. What supports do you currently need around Achieve3000?
9. What supports do you currently have around Achieve3000?
10. Describe the effectiveness of the supports offered to you around Achieve3000.
11. Has the training you've received on implementing Achieve3000 influenced your implementation methods during instruction? Why or why not?
12. What further training is needed that would benefit your implementation of Achieve3000?

I will thank the participant for their time, explain the next steps, and affirm confidentiality.

I will say: Thank you for taking the time to speak with me today, I greatly appreciate it. As a reminder your responses will be stored on my password-protected computer, a transcript of this interview will be emailed to you, and a pseudonym will identify this interview as opposed to your name. The email of this interview's transcript will be sent within the next 10 minutes; upon your review, please email back with the response of either "yes" or "no" to inform consent. My contact information will be included in the email should you have any questions or concerns.

Appendix C: Discrepant Case

	T1	T2	T3	T4	T5
Cluster 1: Little relevance to Instruction	<p>I think that the training or the use of it in alignment with the day-to-day work of a teacher can sometimes get lost.</p> <p>I think it will be helpful if there were PD aligned to incorporating it not just by the title of an article, but by maybe actual lesson plans incorporating achieve into our weekly lesson plans, like a way to incorporate it beyond just read this article and answer the questions type of thing.</p> <p>I think, though, that sometimes the questions associated with the text are not rigorous enough in that I've noticed that some students are able to almost skip the reading and just answer the questions type of thing.</p>	<p>I don't find that Achieve 3000 influences my instruction, often because it does not support the learning demands of the current curriculum that is outlined and implemented at my current school district.</p> <p>I don't feel as though those features were provided in a way that I would need for the usability in my specific classroom. I teach science, and we are hands-on. So, it just hasn't been effective from my experience.</p>	<p>It really doesn't, in my opinion, benefit my instruction. It certainly doesn't drive my instruction. I think it's just better suited for the ELA department, honestly. We don't have the ability to solve equations, they can only read text.</p> <p>My issue runs into the fact that Achieve 3000 focuses on the vocabulary, and its vocabulary that I do not use in my class and that my students don't need to learn in my class in order to do well in Algebra One. That's the disconnect I have with achieve3000.</p> <p>In my opinion, achieve 3000 is for content areas that focus on words. We use numbers and symbols to formulate equations. Our standards don't even align to the questions they ask on there.</p>	<p>And when you have high school students who do not take the diagnostic seriously, you know, then they are getting an easier assignment or easier reading and not really learning anything. They are all much higher in skill than where Achieve starts them. And it's just not helpful in that manner.</p>	<p>Well, it kind of helped, I guess a little bit, but I really didn't see too much of an influence so another reason why I really didn't go back to using it again that much.</p> <p>So I did explore and see the articles that were offered and I could see it benefiting, you know, the ELA class of course, because they do focus more on literacy and reading on that platform I noticed.</p> <p>And, you know, leveling texts for students, which is important in all classes I would assume. But I see that really being beneficial more in ELA versus science.</p> <p>So when I did use it, I like the articles that were given, but I just didn't see a regular use for it at the moment. The articles are interesting, but students aren't tested on interest.</p>
Cluster 2: Low student engagement	<p>I've noticed that some students are able to almost skip the reading and just answer the questions type of thing</p>	<p>The only thing we can do is read random articles and answer four questions on there.</p>	<p>The achieve 3000 was pitched to us, you know, as a way to help with student enrichment. But again, we're having trouble finding ways to include that in our student enrichment.</p>	<p>I may try to find a standard based activity or pair one of the readings with the content, but other than that it has very little influence on how I really plan out my lessons.</p> <p>I am going to say it did benefit my lower achieving students, but my higher achieving students would zip through it honestly just guess because of the structure of the questions, you know, they're not really that rigorous.</p> <p>I just personally don't care for the platform so much. It seems easy and like a time filling activity</p>	<p>Hmm, I really don't see very much of an influence. It kind of takes up a lot of time that could be used otherwise. It takes away from our opportunity to conduct experiments and such.</p>

	T6	T7	T8	T9	T10
Cluster 1: Little relevance to Instruction	<p>I wouldn't say it influences my instruction as much as it supplements it.</p> <p>Typically, we chose articles that aligned to whatever essential question or whatever the theme of the unit was every now and then.</p> <p>When looking at the data, we may have identified some misconceptions with a specific standard, but oftentimes those results correlated with whichever unit assessments we were providing and not so much achieve.</p>	<p>I did give the reading and comprehension part about it, but that's all there really is from what I've seen, there is no part for me to kind of like gauge the students on like written responses with achieve 3000.</p> <p>And then also like I said, the differentiation between like the levels. If I can't give feedback, what are they doing it for?</p>	<p>It did not ultimately influence my instruction, however, it was a nice component to have towards the end of the instruction. I gave it for homework too.</p> <p>It's cool to look at the students like lexile levels, but I think the only difficulty is just like blending it with the instruction that's mandated by the state.</p> <p>So how do we merge instructional time to where</p>	<p>I thought it was very helpful for, you know, connecting the dots in science.</p> <p>I tried to look for stories that the students might find interesting outside of, you know, the basic science stuff about molecules and chemicals and stuff.</p> <p>I tried to find things like it was one on there that talked about the greenhouse gases, but it connected with how when cows fart, they released a lot of greenhouse gases.</p>	<p>Uh, sometimes it is just a reinforcement of the standard, but other times it's just, uh, a glossary of the subject, not what the actual what the standard is about.</p> <p>For U.S. History.</p> <p>Yes, for other topics, no, because it doesn't add value.</p> <p>The article will cover the topic in a broad sense but it isn't taught with a</p>
	<p>One of the drawbacks of Achieve was that it lines students with their MAP test data.</p> <p>So if students didn't necessarily take that test seriously, it would not place them on an appropriate level. The Achieve 3000 program wasn't super beneficial</p>		<p>students focus can still be on the lesson that's required and achieve 3000 in a way that's best for EOC classes.</p>	<p>Also, it helps build their reading skills and you can really connect the subject of science with sometimes I feel like students own understanding, like science is everywhere.</p>	<p>standard.</p> <p>Umm, it's basically a filler for the classes for the OK.</p>
Cluster 2: Low student engagement	<p>I don't think it offered a lot of impact because I don't know if students fully registered the correlation all the time and we didn't necessarily have the class time to fully dive deep and expound on the ways that it connected to the unit.</p> <p>So, I would say to increase buy in on the student in prizes or some other form of recognition for doing well and showing growth. A lot of schools would need funding to do that to make the program valuable to students.</p>	<p>I feel that it doesn't influence my instruction whatsoever because the students do not take it seriously and for, I guess the simple fact that they don't get a grade for it. They don't pretty much take it seriously.</p>	<p>At the time for instruction, I don't think it had an impact on students. It was more like a checklist of they did it or didn't.</p> <p>I think students viewed it as an extra task and therefore did not put forth great effort to complete it. And so I never got a full like a full grasp of what students were understanding, not understanding, if it was really capturing their reading level, they didn't take the task seriously.</p>	<p>So, the kids thought that was fun, you know, cool to read.</p> <p>So, they found it interesting, and it helped them connect the dots, and I could use what they read in achieved 3000 uh to tie in with my lesson and to refer back to when I needed them to regurgitate something that they already learned.</p>	<p>Umm. It has some influence.</p>

Note. The discrepant case is highlighted in yellow.