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Effective Reading Practices for Inclusive Classrooms

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Effective Reading Practices for Inclusive Classrooms

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Master of Arts in Education – Differentiated Instruction

ED 590: Research & Complete Capstone, Cohort 090

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DEDICATION

To my wife: There is no way I could have done this without your constant, consistent, and unyielding love, and support. This achievement belongs to you as much as it does to me.

Thank you!

To my father: Thank you for pushing and supporting me to take on this endeavor. I never would have considered a post graduate opportunity without your guidance.

To my cohort colleagues: You have made this learning experience truly enriching and more than I could have ever hoped for. I cherished our weekly chats, discussions, and feedback. Your ideas and thoughtful approaches to new challenges has helped me grow into a better educator.

Thank you and we did it!

Table of Contents

| | |
|---|----|
| Abstract..... | 5 |
| Chapter One: Introduction..... | 6 |
| Importance of the Topic..... | 7 |
| Scope of Research..... | 8 |
| Research Question..... | 9 |
| Definition of Terms..... | 9 |
| Summary..... | 10 |
| Chapter Two: Literature Review..... | 11 |
| Structured Reading Instruction..... | 13 |
| Explicitly Taught Reading Comprehension Strategies..... | 18 |
| Student Autonomy..... | 24 |
| Discussion and Collaboration..... | 29 |
| Review of the Proposed Problem..... | 36 |
| Review of the Importance of the Topic..... | 36 |
| Summary of Findings..... | 37 |
| Conclusion..... | 37 |
| Chapter Three: Discussion and Application..... | 38 |
| Insights Gained from the Research..... | 38 |
| Application..... | 40 |
| Future Studies..... | 44 |
| Conclusion..... | 45 |
| References..... | 47 |

Appendix.....50

 Article Tracking Matrix.....50

Abstract

This paper examined research on what are best practices for teaching reading comprehension to students in an inclusive classroom. This topic is explored through research findings from multiple quantitative and qualitative studies which examined the effectiveness of structured reading instruction, explicitly taught reading strategies, student autonomy, and discussion and collaboration as best practices for improving reading comprehension skills. While research showed a variety of effective practices and strategies to increase reading comprehension among all students, the research also suggested the need for content area teachers to receive on-going professional development to consistently implement evidence-based practices throughout the course of the school year. Further research is needed to determine best practices for providing professional development, the impact of teacher efficacy on implementation of evidence-based reading instruction and strategies, and the effectiveness of long-term reading instruction in general education classrooms.

Keywords: differentiated instruction, inclusion, metacognition, reading comprehension, reciprocal teaching, TRAP

Effective Reading Practices for Inclusive Classrooms

Chapter One: Introduction

Diverse students with a wide range of abilities and needs exist in a typical modern-day classroom. According to the Minnesota Department of Education (MDE), in 2021 52.5% of the student population were proficient in reading comprehension (Minnesota Department of Education, 2022). This trend dating back to 2017 shows a decrease in reading comprehension. For educators to curb this trend and to effectively meet the needs of all students, they need to implement effective reading practices to help develop reading comprehension skills for all students. Research suggests students benefit most when they can interact and collaborate with peers rather than being pulled out to receive specialized services (Alasim, 2019). Specialized services vary from student to student based on learning and emotional needs. Examples of these services and classes include speech, music, and occupational therapy. Intervention programs focusing on math and reading skills also hold important roles in many students' education. As more students with varying learning needs stay in the general education classroom, there is an emphasis on establishing inclusive classrooms for all students to have the opportunity to collaborate with peers.

With a full spectrum of abilities present in the typical inclusive classroom, teachers need to differentiate more than ever to effectively meet the needs of all students, especially around reading comprehension. The following literature review and implications for educators suggested the most effective reading practices consisted of structured reading instruction, explicitly taught reading strategies, student autonomy, and peer discussion and collaboration. Across multiple qualitative, quantitative, and mixed-method studies showed educators saw the most growth in

reading comprehension when students applied summarizing, questioning, predicting, and clarifying as strategies to use when trying to understand an assigned text.

Importance of the Topic

An inclusive classroom is a learning environment where all students, no matter ability, are valued members of the learning community (McLeskey, 2018). There are a variety of ways teachers can successfully support inclusive classrooms, and one common method is through differentiated instruction. Differentiated instruction is commonly defined as adapting or modifying part of a lesson to make it more accessible or appropriate according to the students' readiness and current ability (Tomlinson, 2017). Teachers are often tasked with differentiating instruction to ensure accessibility and appropriate rigor for reading comprehension. One-way educators accomplished this was by implementing effective reading instruction and strategies (Shelton et al., 2019).

As discussed by Tomlinson (2017) and McLeskey (2018), classrooms are becoming increasingly diverse. Educators face the challenges of fostering growth for students who have a variety of abilities and skills. The heterogenous classroom is more the norm: students whose ability match their peers, students who exceeds the norm, students who struggle, and students who receive specialized services such as English-language learners (ELL) (Tomlinson, 2017). In every classroom there is some level of reading to learn to engage and synthesize content. There is no "one size fits all" reading strategy or method effective for all students to understand complex texts.

To help educators to overcome these challenges, a comprehensive list of evidence-based practices is needed for educators to effectively differentiate their lesson to meet the reading needs of all students. Based on the following literature review, there are a variety of instructional

practices and strategies teachers can implement to meet the reading needs of all students. The following research showed the growth students obtained when they received direct reading instruction, were given explicitly taught reading strategies to choose from, and were provided structured time to discuss and collaborate with peers. Most notably, students showed the most growth when they were able to question, predict, clarify, and summarize a text with peers. Educators can use these and much more to appropriately differentiate instruction to effectively foster growth with all students.

Scope of Research

This research study examines quantitative, qualitative, and mixed-methods studies to better understand which reading comprehension strategies are most effective for general education teachers to implement to foster reading comprehension among all students. The following literature review and implications for educators will discuss four evidence-based themes. The first theme will show structured reading instructional methods to improve comprehension skills. This information is helpful by informing educators on effective practices for differentiating lessons to help make reading more accessible for all students. The second theme will highlight the effectiveness of explicitly teaching reading strategies for students to apply throughout the reading process. This will support teachers as they make decisions on which strategies to teach to support reading comprehension for all students. The third theme examines the effectiveness of student autonomy about which reading strategies to apply and when throughout the reading process. This information will shed light on the benefits of student metacognition by supporting student awareness of their reading struggles and how to overcome them. The final theme will analyze the effectiveness of discussion and collaboration among peers

to understand challenging texts together. This information will be able to inform and function as a resource for educators to effectively differentiate reading instruction for all students.

Research Question

In light of what is known about differentiated instruction, what effective reading practices help develop reading comprehension skills for all students in an inclusive classroom? By implementing effective reading practices, educators can successfully differentiate instruction to aid students with the development of comprehension skills they can apply across curriculums. They will also be able to answer the following question: in light of what is known about differentiated instruction, how shall professional educators effectively teach every student?

Definition of Terms

Differentiated Instruction is a method educators use to methodically adapt or modify a part of their lesson to make it more accessible and appropriate for each learner. Educators often differentiate by altering the content, process, and/or product based on student readiness (Tomlinson, 2017).

Inclusion in a classroom is the learning environment consisting of students with every ability and learning challenge. These can range from students with ID, ELL, students needing special education services, gifted and talented, etc. (McLeskey, 2018).

Metacognition is the process of thinking about thinking, meaning learners are thinking about strategies help them better think, process, or solve a particular problem. For this research question, metacognition refers to the student ability to think about a text, think about where they are struggling, and then choose the most appropriate reading strategy to help them better comprehend the assigned text (Babayigit, 2019).

Reading Comprehension is purposeful thinking during structured interactions between the learner and text. It is an active skill learners apply to problem-solve and make connections when reading and discussing text (Ness, 2007).

Reciprocal Teaching is an instructional method for educators to scaffold four reading strategies (predicting, clarifying, summarizing, and questioning) throughout the reading process from beginning to end (Pilten, 2016).

TRAP is a paraphrasing strategy which scaffolds the reading process into four steps. Students first think about what they are going to read, then read a paragraph, stop to identify the main idea and supporting details, then paraphrase the text at the end (Chandler & Hagaman, 2020).

Summary

With a wide range of reading ability often present in inclusive classrooms, it is imperative educators are aware of reading practices they can implement to effectively differentiate instruction for all students. Educators face the daunting task of providing accessible and rigorous education to all students, no matter the learning differences or challenges. Educators need access and knowledge to tools and effective reading practices they can apply to their planning and teaching to ensure equitable opportunities for each student.

The following research suggested reading comprehension strategies were effective when educators provided structured reading instruction. It also proved good readers use a variety of explicitly taught reading strategies, have autonomy to implement the strategy best fitting their need, and the ability to discuss and collaborate after reading in a meaningful way. These four themes were supported by quantitative and qualitative research and the following review will

show insight into effective reading practices. Implications for teachers to differentiate reading instruction to better support the inclusive classroom will also be provided.

Chapter Two: Literature Review

The below literature examines effective reading practices and the implications for an inclusive classroom. The results of the research conducted show four common themes for effective reading practices. Reading instruction was most effective when teachers provided structured reading instruction, students were explicitly taught a variety of reading strategies, students had autonomy to implement strategies best fitting their need, and students benefited most from small group discussion and collaboration connected to a text. These four themes were supported by quantitative and qualitative research and the following review will show insight into effective reading practices. A review of the proposed problem, the importance of topic, and a summary of findings will also be provided.

The first recurring theme for effective reading practices was structured instruction such as reciprocal teaching and modified multi-component cognitive strategy instruction (MMCSI). This theme was directly supported by Pilten (2016), Bilgi & Ozmen (2018), Chandler & Hagaman (2020), and Goodwin et al. (2020). Researchers Boardman et al. (2018), Burns et al. (2011), Burke et al. (2016), McElhone (2015), Ness (2007), Izquierdo Castillo & Jimenez Bonilla (2014), Coakley-Fields (2018), Lindholm & Tengberg (2019), and Thomas (2015) also concluded structured reading instruction as an effective practice to increase reading comprehension among participants. However, it was Pilten's (2016) and Bilgi & Ozmen (2018) mixed method and experimental designs showing the strongest generalizations. The following research suggested students showed significant growth in reading comprehension when the teacher provided a reading structure.

The second recurring theme for effective reading practices was explicitly teaching reading comprehension strategies to apply throughout the reading process. Researchers Pilten (2016), Bilgi & Ozmen (2018), Burke et al. (2016), McElhone (2015), Ness (2007), Izquierdo Castillo & Jimenez Bonilla (2014), Chandler & Hagaman (2020), and Thomas' (2015) all suggested the first step to developing reading comprehension skills started with explicitly taught strategies. The results showed students demonstrated significant development with reading comprehension skills because they were taught specific strategies within structured reading instructional methods. Bippert (2019), Lindholm & Tengberg (2019), Burns et al. (2011), and Hua et al. (2020) all conducted research specifically aimed to increase understanding on the effects of explicitly taught strategies and the active use of them throughout the reading process.

The third recurring theme for effective reading practices was student autonomy and voice when implementing and facilitating reading strategies, collaboration, and technology incorporation as research conducted by Babayigit (2019), Ness (2007), Izquierdo Castillo & Jimenez Bonilla (2014), and Thomas (2015). Bippert (2019) as well as Boardman et al. (2018) and Coakley-Fields (2018) showed comparable results of an increase in reading comprehension skills when students had autonomy to implement strategies based on need. The following research had similar findings and implications for educators to effectively motivate and further develop reading comprehension skills in all students.

The final recurring theme for effective reading practices for all students were text discussions and peer collaborations. Research conducted by Boardman et al. (2018), Burke et al. (2016), McElhone (2015) and Coakley-Fields (2018) showed reading comprehension growth when structured discussions and peer collaboration were implemented in a classroom or small group setting. Bippert (2019) and Thomas (2015) shared similar findings where students' reading

comprehension further developed and improved when they collaborated and worked together to understand complex texts.

Structured Reading Instruction

Several researchers have examined various instructional methods yielding data-based increases in reading comprehension. Pilten (2016) observed reciprocal teaching to be an effective instructional method as the researcher compared to a control group who did not receive this strategy. MMCSI is another effective instructional method for improving reading comprehension, supporting comprehension, and applying taught skills when proper (Bilgi & Ozmen, 2018). All middle school students showed improvement in summarizing when they received reading instruction through the self-regulated strategy development (SRSD) (Chandler & Hagaman, 2020). Goodwin et al. (2020) took a deep dive into morphology centering reading instruction on key words and text structure which showed significant growth among students with limited vocabulary and language skills.

Pilten (2016) conducted a mixed research study involving both quantitative and qualitative aspects on the evaluation of effectiveness of reciprocal teaching strategies. The researcher used a pretest-posttest control group using an experimental design and presented findings using a descriptive case-study. A reading comprehension evaluation scale was developed by the researcher to be used for the pre and post-test. The researcher also used teacher and student interviews for collecting qualitative data. The experiment and case-study were conducted over an eleven-week period during the 2014-2015 school year at a primary school in the Konya providence. There were 54 fourth graders (31 female, 23 male) who participated, 26 formed the experiment group and 28 formed the control group. The researcher had one teacher participant in each group.

Pilten's (2016) results showed expository text comprehension skills of the experiment group whose teacher implemented the reciprocal teaching strategy developed more than the control group students. Using this method, the experiment group showed a statistically significant level of reading comprehension compared to the control group. Related results can be found in research conducted by Bilgi & Ozmen (2018), Boardman et al. (2018), Lindholm & Tengberg (2019), Chandler & Hagaman (2020), Coakley-Fields (2018), and Thomas (2015). Pilten's (2016) research likewise suggested the effectiveness of structured reading instruction and implied educators should use a structured approach to developing reading comprehension skills with students.

Limitations of this mixed-method study only explored the effects of reciprocal teaching strategy on one fourth grade class and only focused on expository texts, but the effectiveness on texts from other genres should be explored. Repeating this study over a longer period, implementing different techniques such as computer-assisted learning, story-sharing, graphic organizers, or audio texts would all enhance the findings from this study (Pilten, 2016). Expanding on this study for future research by considering the limitations would help enhance the generalizations made for reciprocal teaching and the effectiveness as a reading practice on reading comprehension for all students.

Similarly, Bilgi & Ozmen (2018) conducted a quantitative research study on the effectiveness of MMCSI using a multiple probe experimental design. The students were evaluated by using a reading comprehension assessment and summary writing. The researcher's experiment lasted six months and involved 11 total sessions of direct instruction using MMCSI. There was a total of three student participants from three different secondary schools in Turkey. The participants were a fifth grader and two seventh graders (one female, two male) with

borderline deficiency in intelligence and mild intellectual disabilities (ID). The goal of this experiment was to take a close examination of individuals with mild ID. Students needing specialized services are being placed in general education classrooms and struggle to understand text comprehension due to the multi-step reading process with few research studies taking aim to better understand the reading needs of students with (ID) (Bilgi & Ozmen, 2018).

The results from this experiment showed MMCSI was effective in improving students' comprehension of descriptive texts. Effective implementation of MMCSI showed students were able to develop and support comprehension skills for future use. Students were then able to apply those skills to different reading topics and texts structures (Bilgi & Ozmen, 2018). Research conducted by Pilten (2016), Goodwin et al. (2020), Boardman et al. (2018), Chandler & Hagaman (2020), and Thomas (2015) showed equivalent results for students who received structured reading instruction to effectively develop reading comprehension skills.

A major limitation from this experiment was the sample size. It would be noteworthy to replicate this experiment with a larger sample size including students without ID. Another limitation was instruction was given one-on-one generalizing for small groups or whole classes difficult. It is also noted the texts were chosen specifically for the students and future studies should use texts more typical of a general education setting (Bilgi & Ozmen, 2018). Taking these limitations into account would help bolster the results from this experiment and improve generalizing the use of scaffolded reading instruction like MMCSI as an effective reading practice for all students.

Chandler & Hagaman (2020) investigated the effects of SRSD paired with the paraphrasing strategy TRAP on reading comprehension of seven struggling middle school readers in the Midwest. Students were a mix of sixth and seventh graders divided into three

groups, and instruction was given by two pre-service educators in the spring semester during a one hour reading intervention period. The researchers applied a multiple baseline design with various probes. Data was analyzed via visual inspection focusing on stability, level, and trends. With the increase in emphasis on inclusive classrooms, SRSD is a promising model for educators to implement to effectively differentiate instruction for struggling students.

Chandler & Hagaman's (2020) findings suggested SRSD when paired with the paraphrasing strategy TRAP showed improvement for struggling readers. All participants in this experiment showed growth in summarizing. SRSD promoted metacognition among all students and aided them in appropriately applying reading strategies. Likewise, findings from Bilgi & Ozmen (2018), Boardman et al. (2018), Pilten (2016), and Goodwin et al. (2020) all showed similar improvements when implementing direct instructional models aimed at improving reading comprehension skills.

Limitations of this quantitative study existed due to the numbers of strategies used, making it difficult to know the root cause of improvement in reading comprehension for students. It is also noteworthy other classroom settings and teachers were not assessed and therefore it is challenging to determine if students were able to apply these strategies to other contents and text structures. Accounting for these limitations in future studies would improve implications for educators to implement SRSD as an effective reading practice and applying TRAP as a reading strategy to effectively improve reading comprehension skills in an inclusive classroom.

Goodwin et al. (2020) conducted a quantitative study to better understand the role morphological knowledge plays in reading comprehension for middle school students. The researchers assessed 1,140 fifth through eighth graders from an urban school district in southeast

United States. The Monster P.I. assessment was gamified through a computer-adaptive program to collect data on morphological language. The researchers examined the data through multiple regression analyses focusing on 184 students who showed limited reading vocabulary knowledge based on the MAP reading assessment. The purpose of this study was to explore the role and potential applications of morphological skills in reading comprehension by comparing reading vocabulary between typical and struggling readers.

Results from this experiment indicated the four morphological skills identified by the assessment support and improve reading comprehension. The four skills identified were morphological awareness, syntax, semantics, and phonological knowledge (Goodwin et al., 2020). Students with limited vocabulary showed they were better equipped at understanding reading passages when they received structured instruction on morphological knowledge and given opportunities to apply these skills in the gamified assessment used for the study. These results aligned with Babayigit (2019) and Bilgi & Ozmen (2018) whose results showed students rely on their cognitive skills to understand complex texts and benefited from structured instruction on text structures. Burns et al. (2011) and Hua et al. (2020) had similar findings in relation to instruction focused on vocabulary and keywords.

Limitations to note from this study include not considering control factors like current morphological awareness, current reading comprehension skills, or current ability level when students were first assessed. Another limitation was only comparing data between participants showing efficient reading comprehension and those identified as struggling. The researchers did not consider other student populations or other reading measures to better understand why the 184 students were struggling in reading comprehension. Taking into consideration the

aforementioned limitations for future research would strengthen the generalizations to effectively differentiate instruction to improve reading comprehension for all students.

The research above supported the first recurring theme of structured reading instruction as an effective reading practice. Examples of effective instructional methods detailed in the research above included reciprocal teaching and MMCSI. Research below will detail other effective instructional methods such as close reading and collaborative strategic reading (CSR) aligned with the research above. Research discussed below by Boardman et al. (2018), Burns et al. (2011), Burke et al. (2016), McElhone (2015), Ness (2007), Izquierdo Castillo & Jimenez Bonilla (2014), Coakley-Fields (2018), Lindholm & Tengberg (2019), and Thomas (2015) also showed results supporting structured reading instruction as an effective practice to increase reading comprehension among participants. Research along with others will detail the effectiveness of structured reading instruction as well as explicitly taught reading comprehension strategies, student autonomy, and discussion and collaboration.

Explicitly Taught Reading Comprehension Strategies

The following researchers analyzed data about the effectiveness of explicitly taught reading comprehension strategies. Bippert's (2019) research results showed educators must first provide students with reading strategies to use, specifically comprehension and dialogic strategies. Reading strategies were most effective when students were metacognitive of which strategy best suited their need (Lindholm & Tengberg, 2019). Previewing and pre-teaching key terms were shown to improve reading comprehension prior to students reading an assigned passage (Burns et al., 2011). Further vocabulary instruction prior to reading also helped a student when comprehending a challenging text (Hua et al., 2020).

Bippert (2019) conducted a qualitative case-study on the perceptions of technology, curriculum, and reading strategies in a middle school intervention program. The researcher implemented a purposive sample to select participants and primarily used field notes, recordings, conversational and semi-structured interviews for pre and post data. The researcher observed a middle school intervention classroom for 13 weeks at a public school in Texas. There were four total seventh graders observed along with two co-teachers and two administrators from the same building. The students were chosen due to being placed in a tier II reading intervention class based on the previous school years' reading assessment scores as decided by the State of Texas Assessment and Academic Readiness (STAAR) and their Lexile levels evaluated by Achieve 3000, the school districts reading assessment. The researcher wanted to find the contradictions among perceptions between student, teacher, and administrator surrounding the use of technology and curriculum like Achieve 3000 and its direct effect on developing reading comprehension skills.

The results showed students benefitted most when they were able to choose strategies explicitly taught to them by the reading intervention teachers. As part of the curriculum, the intervention teachers of this case-study explicitly taught a range of strategies to aid students in actively making sense of complex texts. Results showed a higher percentage of motivation and effectiveness because students were able to choose from the range of strategies taught to them before trying a challenging text. This related to research conducted by Babayigit (2019), Izquierdo Castillo & Jiménez Bonilla (2014), Ness (2007), and Thomas (2015) as results showed the effectiveness of student autonomy for choosing strategies to help increase reading comprehension.

Results also suggested students benefited from opportunities for social engagement and collaboration using dialogic strategies such as think-alouds and text-based discussions. Students benefited from being able to work in pairs or groups to discuss the text and build conclusions together. This was similar to findings from Boardman et al. (2018), Burke et al. (2016), Coakley-Fields (2018), McElhone (2015), and Thomas (2015). In summary, Bippert's (2019) findings suggested students showed increased reading comprehension when participants were explicitly taught reading strategies used throughout the reading process.

Notable limitations from this case-study were observations conducted at one middle school, implementation in fidelity of the technology-based reading curriculum, and student access to technology. The small sample size from one middle school intervention classroom makes it difficult to relate to all middle schoolers. For these findings to be more applicable for all students, this case study should be replicated with a much larger sampling size of participants across multiple schools. Another limitation is the fidelity the reading intervention program Achieve 3000 was implemented, noting at times the reading intervention teachers differentiated instruction to better meet the current needs of all students. Lastly, a limitation from this case-study is the access to technology and reading curriculums for all students (Bippert, 2019).

Lindholm & Tengberg (2019) had related results to Bippert (2019) when conducting quantitative research on the reading development of foreign-language learners in Swedish middle schools and the relation to reading strategy use. The researchers conducted a longitudinal study with a cross-sectional design over the course of two years. Reading comprehension was assessed three times and reading strategy use was evaluated using the Metacognitive Awareness of Reading Strategies Inventory (MARSI) scale. Sixty-two middle school students in grades fifth and sixth participated and were selected based on having an immigrant background as defined as

both parents being foreign-born, and/or speaking at least one other language other than Swedish. The purpose of this quantitative study was to better understand the critical components to students' reading comprehension and how to best support reading development. Inclusive classrooms and diversity among student populations with an immigrant background are increasing and thus the increased need for effective differentiated practices (Lindholm & Tengberg, 2019).

The results from this quantitative study showed a statistically significant increase in reading comprehension in L2 students over the two-year period (Lindholm & Tengberg, 2019). Students in their second year of instruction showed statistical growth over students who were just starting the program. Similar findings from Babayigit (2019), Izquierdo Castillo & Jiménez Bonilla (2014), Ness (2007), Bilgi & Ozmen (2018), Bippert (2019), Chandler & Hagaman (2020), and Thomas (2015) showed student autonomy of explicitly taught strategies was positively correlated to increased reading comprehension and the efficient use of strategy instruction (Lindholm & Tengberg, 2019).

Notable limitations were students had difficulties completing the reading assessment used to evaluate reading comprehension development despite being allotted an extra thirty minutes. These time constraints raised issues about validity of the data collected. Another limitation was the repeated use of the same reading assessment, potentially causing a practice effect could have altered the data collected. Lastly, the sample size would need to be expanded on for future studies to help improve generalizing the results and implications on effective reading practices for all students (Lindholm & Tengberg, 2019).

Burns et al. (2011) conducted a quantitative study comparing the effectiveness of two evidence-based interventions on 19 struggling middle schoolers in Minnesota. The researchers

implemented and observed the effectiveness of a text previewing comprehension strategy and a keyword pre-teaching strategy. The instruction and application of these two strategies were seen during small group intervention and lasted two weeks. The researchers used a between-subjects independent variable, intervention conditions were counterbalanced between small groups, and written responses were compared between the control and variable groups. Burns et al. (2011) conducted research because reading intervention is becoming more prevalent in middle and high schools with few studies about the effectiveness on reading comprehension skills.

Findings showed previewing strategies and pre-teaching keywords had a significant impact on student reading comprehension. Students in the experimental group showed a better understanding of the selected reading passages after being able to apply predictive reading skills and knowing keywords from the text. Likewise, results from Babayigit (2019), Bippert (2019), Lindholm & Tengberg (2019) and Hua et al. (2020) showed a significant increase in reading comprehension for middle school students who were taught explicit strategies to apply before and after reading. Specifically, Hua et al. (2020) and Goodwin et al. (2020) research showed significant growth when instruction focused on vocabulary and discourse language.

Limitations from this quantitative study were researchers preselected keywords rather than students finding words they were unsure of. There was only one baseline passage selected for all students and the experimental group were given shorter passages to comprehend. It is possible some students had more background knowledge on the passages than others potentially effecting the data results. In general, there are other potential limitations to be considered for future research designs to improve previewing the text and pre-teaching vocabulary as an effective reading practice for all students.

Hua et al. (2020) conducted a quantitative experimental design and an alternating randomized treatment design to compare the effects of two reading interventions used on six seventh graders enrolled at an Iowa middle school. These students were all eligible for special education services and participated as part of the reading intervention class. The experiment lasted six weeks, totaling 22 sessions and instruction was provided by the reading intervention teacher. Data was analyzed by visual observations and using three types of randomization tests. The aim of the study was to investigate the joint effects of vocabulary instruction, paraphrasing strategies, and their effect on reading comprehension for struggling readers (Hua et al., 2020).

Results for one student were similar to Bippert (2019), Burns et al. (2011), Chandler & Hagaman (2020), and Goodwin et al. (2020) all supported reading comprehension improvement for middle school students where explicitly taught strategies like paraphrasing and vocabulary were focused on (Hua et al., 2020). However, results were not replicated across the other five participants. A limitation of this study was both vocabulary and reading comprehension assessments were created by the researcher. It is also noteworthy the small sample size from the rural Midwest makes it challenging to generalize results as an effective reading practice in an inclusive classroom. Further research should take into consideration the limitations to strengthen the generalizations for explicitly taught reading strategies to improve reading comprehension for all students.

The second recurring theme for effective reading practices was explicitly teaching varying reading comprehension strategies to apply throughout the reading process. This theme had research supported by Bippert (2019), Lindholm & Tengberg (2019), Burns et al. (2011), and Hua et al. (2020). Commonalities discussed above showed the use of predicting, clarifying, questioning, and summarizing as effective strategies along with previewing and vocabulary

instruction. Researchers Pilten (2016), Bilgi & Ozmen (2018), Burke et al. (2016), McElhone (2015), Ness (2007), Izquierdo Castillo & Jimenez Bonilla (2014), Chandler & Hagaman (2020), and Thomas' (2015) all suggested the first step to developing reading comprehension skills starts with explicitly taught strategies. Many researchers discussed in this review agreed participants demonstrated significant development in reading comprehension skills because participants were taught specific strategies to apply when needed. The following theme on student autonomy expands on the second theme by pairing explicitly taught strategies with student metacognition.

Student Autonomy

Student autonomy has shown to be an integral piece for student reading comprehension growth. Research below showed student autonomy increased engagement, motivation, and comprehension. Babayigit (2019) observed sixth grade students often using pre-reading and post-reading metacognitive strategies to comprehend texts. Data collected by Ness (2007) found questioning, text structure, and summarization as favored explicit strategies taught by secondary content-area teachers for student use. Student autonomy also had a direct impact on student development in decision-making and reading awareness (Izquierdo Castillo & Jimenez Bonilla, 2014). Furthermore, when students were allowed choices in text and collaborative groups, research showed enhanced reading comprehension (Thomas, 2015).

Babayigit (2019) conducted a quantitative study using a descriptive survey to examine the metacognitive reading strategies used by sixth graders during the 2018-2019 school year. A metacognitive reading questionnaire was used to determine the strategies used by participants and a metacognitive reading strategies scale was applied in the classroom environment. A multi-stage cluster sampling was applied to determine the participants who consisted of 388 students in the city of Yozgat, Turkey. The purpose of this survey was to better understand the use of

metacognitive reading strategies as metacognition is thought to be connected to learning factors such as recall, understanding, and problem-solving (Babayigit, 2019).

The results from this descriptive survey showed sixth graders used metacognitive reading strategies throughout the reading process. Students paid close attention to parts of the text they considered important and worked to comprehend and evaluate the text after reading. Students implemented most strategies after reading. Like findings from Bippert (2019), Ness (2007), Izquierdo Castillo & Jimenez Bonilla (2014), Boardman et al. (2018), Coakley-Fields (2018), and Thomas (2015) all showed students applied the most comprehension skills such as dialogic strategies after reading. Students used strategies of underlining important information and visualizing the most. While note taking and making real-world connections to the text the least (Babayigit, 2019).

Limitations from this quantitative study were omitting sixth-grade classroom teachers, which reading strategies were taught, and to what degree reading instruction was given. Within the study, the past and current learning experience of sixth graders was discounted because the aim was to understand what students do naturally to understand challenging texts. Other variables not considered were text-levels, specialized services provided to students, and what reading instruction had been given throughout the year. Taking these limitations into account for future studies would help generalize these results as effective reading practices for all students.

In a qualitative study conducted by Ness (2007), the researcher observed and interviewed eight secondary teachers' instructional practices with the hopes of increasing the inclusion of reading comprehension strategies in secondary content-area classrooms. This included four science and four social studies teachers, split evenly between middle and high school. All teachers were interviewed in open-ended sessions with analysis taking place over five distinct

phases. The teachers were observed for a total of 2400 minutes, each teacher seen during 30-minute segments for a total of five hours. The author cited over six million middle and high school students are struggling with reading comprehension in the U.S., showing the rising need for direct reading instruction to occur in content-area classrooms.

The researcher's analysis and results showed only 3% of instructional time was used to deliver direct reading instruction to middle and high school students. Of the time used for direct reading instruction, strategies explicitly taught were asking and answering questions, summarizing, text structure, graphic organizers, predicting and clarifying. Teachers observed also utilized multiple strategy instruction allowing for student autonomy when reading to use the best reading strategy for them.

These strategies have shown to be effective, and evidence based with similar findings from Babayigit (2019), Izquierdo Castillo & Jimenez Bonilla (2014), Bippert (2019) and Thomas (2015) whose research yielded an increase in reading comprehension among students when given autonomy on reading strategies. Overall, the strategies and practices implemented by the participating secondary teachers aligned with evidence-based practices supported by research conducted by Bilgi & Ozmen (2018), Chandler & Hagaman (2020), Goodwin et al. (2020), Pilten (2016), Bippert (2019), Burns et al. (2011), Hua et al. (2020), and Lindholm & Tengberg (2019). Limitations to consider when evaluating the strength of this study include the small sample size, the lack of variety in content area teachers, and little data collection on student growth or the effectiveness of the instructional time given in the participating teachers classroom.

Authors Izquierdo Castillo & Jimenez Bonilla (2014) conducted a qualitative action study using a pedagogical intervention on building up student autonomy through reading strategies.

The researchers identified three strategies to explicitly teach and allow students to choose from skimming, scanning, and making predictions. The authors used a grounded theory approach, implementing a checklist and varying formative assessments to collect data. Three female and three male ninth grade students volunteered as participants from a rural public school in Colombia. The students came from a low socioeconomic and agricultural background, with an elementary education and difficulties in reading and writing. The purpose of this study was to evaluate the effectiveness of evidence-based reading strategies coupled with student autonomy on increasing reading comprehension among struggling readers in high school.

Results showed participants developed autonomous features such as decision-making, increased motivation, and reading comprehension. After applying explicitly taught reading strategies of skimming, scanning, and predicting, students showed improved reading comprehension aligned with Bippert (2019), Burns et al. (2011), Hua et al. (2020), and Lindholm & Tengberg (2019) whose research supported the effectiveness of explicitly taught reading strategies to improve reading comprehension among middle and high school students. Izquierdo Castillo & Jimenez Bonilla (2014) research results most notably aligned with Babayigit (2019), Ness (2007), and Thomas (2015) whose research supported the effectiveness of student autonomy and metacognition to increase critical thinking skills, reading awareness, and reading comprehension. Limitations to consider strengthening and applying these results for all students include but not limited to expanding the number of participants, widening the age group, reading level, and seeing students in other settings such as an urban school.

Thomas (2015) conducted a qualitative pre-post quasi-experimental and intrinsic case study on enhancing nonfiction reading comprehension through online book discussions. Pre and post surveys, interviews, and student samples were collected and analyzed for data collection.

The researcher relied on a structured reading instructional method known as close reading, similar to reciprocal teaching mentioned above by breaking down specific reading strategies to use before, during, and after reading. 63 seventh grade students from Bayside Middle School participated, 19 graduate-level students worked as facilitators in the online discussions, and the social studies teacher whose classroom was used for observations. This study stems from the Common Core State Standards (CCSS) passed in 2010, placed an emphasis on informational texts and the role in developing students' content knowledge (Thomas, 2015).

The results from this quasi-experiment case study showed allowing students text choice in implementing the close reading instructional method and taking part in online book discussions increased student motivation and understanding of nonfiction texts (Thomas, 2015). Coakley-Fields (2018), Boardman et al. (2018), Izquierdo Castillo & Jiménez Bonilla (2014) Bippert (2019), and Babayigit (2019) all shared similar results on student choice and the increase in motivation when working in collaborative groups. Thomas' (2015) findings also showed scaffolded assistance when given through close reading instruction from the graduate-level online facilitators aided in enhancing understanding and retention of the text. This aligned with findings from Pilten (2016) and Bilgi & Ozmen (2018), Ness (2007), and Izquierdo Castillo & Jimenez Bonilla (2014) whose research showed a positive impact on reading comprehension when instruction is purposely scaffolded and structured to meet the needs of students. Finally, the results showed scaffolded instruction, online discussions, and student autonomy were effective reading practices to help develop student reading comprehension skills and better understand nonfiction texts (Thomas, 2015).

Limitations from this study were sample size, location, graduate help, and school funding per pupil (Thomas, 2015). To better use the implications from this study, it would be worthwhile

to expand on the number of participants and extend the experiment to multiple middle schools. Throughout this study, 19 graduate-level students acted as facilitators as part of the online discussion. The graduates were trained in higher-level thinking and questioning. As a result, the graduates were able to give one-one-one help to students which is unlikely to occur in a larger sampling or implementation by another researcher. It should be noted students attending Bayside Middle School received an extra \$1400 per pupil in state funding compared to peers in other public schools. This funding helped ensure access to technology and other services might otherwise not be available for future studies. Taking these limitations into consideration for future studies would improve student autonomy as an effective reading practice for all students.

Research discussed above supported the third theme for effective reading practices which was student autonomy. Research above supported student awareness on reading challenges and knowing when to apply explicitly taught reading strategies to overcome those challenges. Fellow researchers Bippert (2019) as well as Boardman et al. (2018) and Coakley-Fields (2018) showed comparable results of an increase in reading comprehension skills when students had autonomy to implement strategies based on their need. Student autonomy also led to an increase in motivation and participation in class. The final theme on discussion and collaboration has similar impacts on student motivation and participation as well as increasing reading comprehension skills among all students.

Discussion and Collaboration

Similar to the effectiveness of dialogic strategies shown by Bippert (2019) and Thomas (2015), the following researchers showed the effectiveness of peer collaboration and structured discussion centered on a text. Collaborative practices when used intentionally provided more

opportunities for discussion in a variety of ways when compared to groups who did not receive strategy-based collaborative instruction (Boardman et al., 2018). Results from Burke et al. (2016) showed an increase in reading comprehension within social studies content-area classrooms when structured reading instruction was provided, students were provided the opportunity to engage in the content together, and teacher planning was supported. These results aligned well with inquiry-based student-centered discussions as observed by McElhone (2015). Student centered discussions were shown to improve inclusivity among students as they were provided the opportunities to work together to become more capable readers and valued partners in reading comprehension (Coakley-Fields, 2018).

Boardman et al. (2018) conducted a two year-long quantitative study on strategy instruction on teacher and student interactions during text-based discussions using a multi-strategy reading model called Collaborative Strategic Reading (CSR). CSR is like other instructional models such as reciprocal teaching, MMCSI, and close reading by applying before, during, and after reading strategies as research suggested from Pilten (2016), Bilgi & Ozmen (2018), and Thomas (2015). The researchers used an experimental design as part of a larger randomized control trial study, implementing a within-teacher design and random assignment at the classroom level for student participants. Discourse analysis was used to measure the effectiveness of CSR and text-discussions compared to typical reading instruction. One hundred and eighty-four seventh and eighth graders participated across five different public middle schools with five English-language arts teachers. Each teacher was seen on four separate occasions. Text-based discussions have long been part of reading instruction, though structured methods have recently developed with few studies being done examining the effectiveness of these structured reading discussions (Boardman et al., 2018).

Results from this experimental study showed CSR had a positive effect on reading comprehension by having a greater focus on text-based discussions and collaboration for students compared to peers who received typical reading instruction. CSR compared to typical reading instruction had a greater focus on text-based collaboration and provided structure for teacher-student discussions. Outcomes from using CSR included an increase in dialogic strategies such as turn-and-talks, teacher-student interactions, student-student collaboration, and an increase in reading strategy use (Boardman et al., 2018). These results were comparable to what was found by Burke et al. (2016), McElhone (2015), and Coakley-Fields (2018), Bippert (2019), and Thomas (2015) whose research suggested text-based discussions are an effective reading practice by helping students develop reading comprehension skills when given the opportunity to discuss with peers.

Limitations for this experimental study were unable to discern the effectiveness of reading strategy use and text collaboration, the challenges educators faced attempting to implement and develop small-group discussions, and the small number of classrooms used for observations. Though CSR proved to be an effective instructional method for increasing reading comprehension, it is impossible to discern if the text-based discussions or the reading strategies used were more effective in further developing reading comprehension for the middle school students. It is worth noting educators faced challenges and complexities in implementing small group discussions and there were endless variables which shifted from classroom to classroom. Though this sampling size was from different classrooms across five public middle schools, expanding this experiment to other content-area classrooms would enhance the generalizations made by the research. Taking these limitations into account for further research studies would

make a stronger case for discussion and collaboration as effective reading practices for all students.

Burke et al. (2016) conducted a qualitative study on teaching reading comprehension to students with autism spectrum disorders (ASD) in social studies classrooms and the beliefs of their effectiveness from middle school teachers. Ten middle school social studies teachers participated in the study with varying years of experience, most participants identifying as female and with over five years of teaching. The researchers collected data over the course of three weeks, conducting two interviews per educator, and implementing a purposive sampling and constant comparison analysis. The researcher chose this study after identifying the rise of middle school students diagnosed with ASD, showing an increase by 64% over the course of five years. The research question addressed the need for middle school social studies to effectively provide specialized services to students with ASD and understand how teachers were differentiating instruction for reading comprehension among all students.

Results from this qualitative study were like Bippert (2019), Boardman et al. (2018), Coakley-Fields (2018), Thomas (2015), and McElhone (2015) because the middle school social studies teachers interviewed implemented instructional strategies to actively engage all students in the learning process. This included a variety of peer-to-peer interaction and collaboration. Burke et al. (2016) also implemented structured reading practices and explicitly taught strategies aligned with the aforementioned studies supported by Bilgi & Ozmen (2018), Chandler & Hagaman (2020), Goodwin et al. (2020), Bippert (2019), Burns et al. (2011), Hua et al. (2020), Lindholm & Tengberg (2019), and Pilten (2016) for being effective for all students. Specifically, Burke et al. (2016) cited most teachers taught vocabulary development and main idea identification. The researchers also covered summarization, self-monitoring, and text-structure,

using pre-reading, during reading, and post-reading strategies to increase reading comprehension.

Limitations for this qualitative study include but not limited to a mostly homogenous group of female educators. All participants taught in Chicago suburban middle schools. The data collected was solely based on educators' self-reflection and no student observation. These limitations must be considered for further research to help strengthen the effectiveness of collaboration as a reading strategy for all students.

McElhone (2015) conducted a semester-long observation and inquiry-based professional development with a 5th grade elementary teacher on using stems and supported inquiry to help the teacher further develop dialogic reading instruction. The 5th grade teacher was a white female with nine years of teaching experience who was pursuing a doctoral degree from the same institution as the researcher, but in a different department. The teacher's 5th grade class consisted of 32 students nearly split between male and female, and students varied in reading ability ranging from first grade to above grade level. The researcher used discourse analysis of class discussions and qualitative analysis of teacher and student interviews. This study included one to two teacher observations each week. Seven students were chosen to be interviewed using a semi-structured protocol. The researcher and teacher collaborated throughout the semester for 2.5-3.5 inquiry based professional development hours to focus on dialogic reading strategies. This study was conducted as other research suggested and scholars agreed, dialogic strategies and discourse lead to an increase in reading comprehension. These strategies help students develop critical thinking skills, understand textual interpretations, and collaborate with peers in a meaningful way.

McElhone's (2015) research suggested providing structure for students to discuss and collaborate text as an effective reading strategy. Researchers Bippert (2019), Coakley-Fields (2018), and Boardman et al. (2018) similarly conducted research on the effectiveness of dialogic reading strategies and concluded the same improvement in reading comprehension. Students shared during small group discussion what helped guide and deepen their understanding of the text which were the provided stems for conversation. The case study also involved the use of structured reading instruction and explicitly taught strategies as effective practices for increasing reading comprehension among middle school students aligned with results from studies conducted by Bilgi & Ozmen (2018), Burke et al. (2016), Chandler & Hagaman (2020), Goodwin et al. (2020), Pilten (2016), Bippert (2019), Burns et al. (2011), Hua et al. (2020), and Lindholm & Tengberg (2019). Limitations to consider helping strengthen further research on peer discussion and collaboration include the small sample size of one educator and their classroom, and analysis is based on teacher and student reflection.

Coakley-Fields (2018) conducted a small ethnographic case-study for a year examining the effect of peer-relationships on further understanding and comprehending texts in a reader's/writer's workshop model. This qualitative study was based in sociocultural theory (learning occurs through social interactions) and used a purposive sample to focus on two fourth-grade students, one labeled as an average reader and the other being a struggling reader. A third student was also seen, along with the classroom teacher as they interacted with the other two students. The researcher saw the same classroom two-to-three times a week for about four hours per visit for the entirety of the school year. The researcher used notes from observations, interviews, and transcripts of conversations using D/discourse analysis (Coakley-Fields, 2018). The researcher wanted to further understand what factors contributed to an inclusive classroom

and the impact they have on implementing peer text-based discussions using the reader's workshop model.

The results from this ethnographic study showed struggling readers can be effectively included in discussions and collaboration involving text when peers are viewed as capable readers and valued members of the classroom (Coakley-Fields, 2018). This can be achieved when the teacher successfully supports an inclusive classroom by taking time to build a community (McLeskey, 2018). The two students observed were able to effectively develop reading comprehension skills together because the teacher had created opportunities for them to collaborate on understanding complex texts. These findings related to research by Bippert (2019), Boardman et al. (2018), Burke et al. (2016), McElhone (2015), and Thomas (2015) who all concluded the effectiveness of text-based discussion and collaboration.

One limitation from this study was the small sample size and grade-level making it difficult to generalize for all students. Another limitation was the amount of teacher professional development given on literacy strategies and inclusive classrooms. The researcher had provided coaching to the teacher observed prior to the study being conducted.

The final recurring theme of text-based discussions and peer collaborations was supported by the research above as an effective reading practice for all students. The above research showed reading comprehension growth when structured discussions and peer collaboration were implemented in a classroom or small group setting (Boardman et al., 2018; Burke et al., 2016; McElhone, 2015; Coakley-Fields, 2018). Research conducted by Bippert (2019) and Thomas (2015) as discussed in earlier themes shared similar findings where students' reading comprehension further developed and improved when participants collaborated and worked together to understand complex texts. Taking into consideration these results and

limitations, structured reading instruction, explicitly taught reading strategies, student autonomy, and discussion and collaboration are effective reading practices for all students.

Review of the Proposed Problem

According to MDE (2022), the trend of the last five years shows a decrease of reading comprehension among all age groups. With classrooms becoming more inclusive, leading to a spectrum of abilities, and learning challenges, educators face a daunting task of effectively differentiating instruction for all students. To fully address this alarming trend and meet the needs of all students, educators need to implement effective reading practices to help develop reading comprehension skills for all students. In light of what is known about differentiated instruction, what effective reading practices help develop reading comprehension skills for all students in an inclusive classroom? Educators must be informed and have access to a variety of instructional methods and reading strategies to help foster reading comprehension growth for all students.

Review of the Importance of the Topic

Due to the *Individuals with Disabilities Education Act* (2004), there has been an increase in students needing specialized services placed in a general education classroom. While it used to be common for special education students and ELL students to receive instruction in a different classroom setting, it is no longer the case. As mentioned above, educators often have a variety of students in class ranging from gifted to struggling to needing added supports for a learning disability (Tomlinson, 2017). Reading skills and comprehension are imperative for students to have access to new materials and content no matter which class there are in. Thus, it is important for educators to be aware of effective instructional methods and strategies they can implement to appropriately differentiate instruction for all students in an inclusive classroom.

Summary of Findings

The above research showed four clear themes to effectively differentiate reading instruction to support reading comprehension for all students. These four themes examined a variety of methods and strategies whom teachers and students implemented to effectively understand complex texts. As discussed by Tomlinson (2017), educators should apply scaffolds to allow new content, processes, or products to be accessible and rigorous for all students. In light of what is known about differentiated instruction, educators can apply this information to appropriately modify portions of their lesson to be more accessible for all students.

Many researchers suggested structured reading instruction to improve reading comprehension. Educators can implement a variety of instructional methods like reciprocal teaching, MMCSI, close reading, and CSR. An overwhelming number of studies supported explicitly teaching reading strategies for students to apply at the beginning, during, or after reading. Strategies such as predicting, questioning, clarifying, and summarizing were common across multiple studies. Researchers also indicated students showed growth in reading comprehension when participants were meta-cognizant of their reading struggles and chose explicitly taught strategies to best fit their need. Finally, many researchers agreed students learned best when participants were able to collaborate and discuss challenging texts. While research clearly showed effective methods and strategies to boost reading comprehension, further research is needed to better understand which methods and strategies are most effective to address specific reading challenges such as vocabulary, visualization, and retell.

Conclusion

In conclusion, the research examined above has shown a variety of instructional methods and strategies which are effective for increasing reading comprehension among all students.

Structured instructional strategies such as reciprocal teaching, MMCSI, close reading, and CSR are all effective methods for teaching reading comprehension skills. Overwhelmingly the above research supports explicitly teaching strategies for students to choose from and apply throughout the reading process. When students are aware of why they are struggling to read, they are better able to apply the right strategies to help them overcome any challenges they may have in reading comprehension. Students learn best when provided structured opportunities to discuss and collaborate to understand complex texts. The above research supports these methods and strategies as effective for all students, including those identified needing specialized supports like ID, ELL, and performing below grade level.

The following chapter will discuss insights gained from the reviewed research and potential applications for educators in the classroom. Research is lacking in specific areas that would strengthen generalizations made in this section. The third chapter will suggest future studies to strengthen the effectiveness of reading comprehension strategies, and how to best provide purposeful professional development to train teachers to implement reading instruction with complete efficacy.

Chapter Three: Discussion and Application

Insights Gained from the Research

The above research has provided specific examples of instructional methods and strategies for educators to apply to effectively teach reading comprehension skills. The following chapter will examine potential applications to address student reading needs in the classroom. Explore recommendations for future studies to strengthen and expand on the evidence analyzed within this paper. Lastly, conclude the importance and effectiveness of reading instruction for all students.

The above research provided insights for effective reading practices in the inclusive classroom for the further development of reading comprehension skills for all students. The literature implied structured reading instruction as an effective reading practice because the research showed significant gains in reading comprehension for participants who received instruction (Pilten, 2016). The research concluded students benefited from scaffolded assistance and a step-by-step process to reading and understanding complex texts (Bilgi & Ozmen, 2018). Possible instructional methods as reviewed are reciprocal teaching, MMCSI, close reading, and CSR (Pilten, 2016; Bilgi & Ozmen, 2018; Thomas, 2015; Boardman et al., 2018).

The literature also implied educators should explicitly teach a variety of reading comprehension strategies to effectively help students develop comprehension skills in an inclusive classroom (Lindholm & Tengberg, 2019). Based on research, it is clear students are better equipped to understand complex texts when they can apply the right strategies based on their learning needs (Bippert, 2019). Examples of strategies educators can model are predicting, clarifying, summarizing, and questioning (Burke et al., 2016; Ness, 2007; Pilten, 2016).

Another insight from the literature for an effective reading practice for all students is to allow student choice and voice when trying to understand challenging texts (Babayigit, 2019). Research showed this as an effective reading practice in inclusive classrooms because students were allowed to choose the strategy most right for them, it increased motivation, and gave students the opportunity to take responsibility for their learning (Thomas, 2015). Educators should plan for student autonomy by allowing student choice around texts, strategy-use, and a variety of applications to show understanding of the text (Thomas, 2015; Bippert, 2019; Burns et al., 2011; Hua et al., 2020; Lindholm & Tengberg, 2019; Babayigit, 2019; Ness, 2007; Izquierdo Castillo & Jiménez Bonilla, 2014).

The last insight by the literature for an effective reading practice in the inclusive classroom is implementing text-based discussions and collaboration because students showed growth in reading comprehension when given the opportunity to collaborate with peers (Coakley-Fields, 2018). Research showed discussions and collaboration enhanced comprehension skills and deepened understanding of the text compared to peers who were not given this opportunity on a regular basis (Boardman et al., 2018). Suggested methods for teachers to differentiate instruction to support collaboration in the inclusive classroom are incorporating Socratic seminars, turn and talks, pair-shares, and incorporating online discussion forums (McElhone, 2015; Coakley-Fields, 2018; Boardman et al., 2018; Thomas, 2015).

MDE reporting only about half of the student population in Minnesota showing proficiency in reading comprehension is alarming. Especially when taking into consideration this is a trend dating back to 2017. Reading comprehension is important for all students as they rely on these skills to access new content and materials. The insights gained from the above research indicated evidence-based practices and strategies for educators to use in their pedagogy and curriculum to address the rising need for reading instruction in all core-content classrooms. Furthermore, the literature has shown structured reading instruction, explicitly taught reading strategies, student autonomy, and discussion and collaboration are effective reading practices for all students in the inclusive classroom. How do educators begin to implement direct reading instruction and provide reading strategies to help students in accessing and learning new material?

Application

To effectively address the decrease in reading comprehension trend is for school districts to provide purposeful professional development to educators. Every year, educators are offered

professional development on a wide variety of topics such as co-teaching, but rarely provide training and tools to effectively differentiate instruction for all students. With less students being proficient in reading comprehension, this means there are less students who can access the curriculum and materials. Within every classroom there is some level of reading to learn to engage and synthesize content. Purposeful professional development on effective instructional models, evidence-based reading strategies, and methods for fostering discussion and collaboration must be provided to all educators to ensure they have the necessary training and tools to effectively differentiate instruction to meet the needs of all students.

School districts can provide purposeful training on reading comprehension instructional methods and strategies by staying grounded in student data and evidence-based practices. This can be accomplished by first providing and analyzing student reading proficiency data to understand where their student population is currently at. Then schools should provide training on evidence-based practices such as reciprocal teaching, MMCSI, close reading, and CSR (Piltan, 2016; Bilgi & Ozmen, 2018; Thomas, 2015; Boardman et al., 2018). Once educators have learned what these strategies are, they should be provided time to plan and implement a strategy which best fits the need for their classroom. In between professional development opportunities, educators should be provided time to observe colleagues and to reflect with one another. Follow up professional development opportunities should incorporate time to further reflect and improve planning to continue to differentiate instruction and provide direct reading instruction with efficacy.

Professional development for educators should also provide tools and evidence-based strategies to use in the classroom which help all students. The research discussed above supports the effectiveness of explicitly taught strategies for students to apply when they struggle to

comprehend a text. Strategies proven to be effective include predicting, questioning, clarifying, and summarizing as these strategies are used in reciprocal teaching (Burke et al., 2016; Ness, 2007; Pilten, 2016). Evidence from the above research also showed the effectiveness of applying reading strategies throughout the reading process from beginning to end (Pilten, 2016; Chandler & Hagaman, 2020). Educators who incorporate reading to access new content and material also need to provide explicitly taught reading strategies to support students who struggle with reading comprehension. A core piece of effective differentiation is to provide supportive strategies and modifications like those listed above for all students to have equitable access to new learning experiences.

Along with providing tools and evidence-based strategies, educators need to support student metacognition through modeling and self-reflection. Evidence from research conducted by Babayigit (2019) and Thomas (2015) support the idea students can improve their reading comprehension when they are thinking about the reading process, aware of why they are struggling, and equipped with appropriate strategies to apply when they recognize they are struggling. Research supports teacher modeling through reciprocal teaching as an effective instructional strategy to increase reading awareness among all students. Educators read and think aloud as the class follows along, applying strategies as they go and marking the text. As students become more familiar with strategies taught, they begin to transition to small group and individual reading. Leaving students who need more help to work more closely with the educator, and the educator then provides more individual differentiation as needed. Throughout this gradual release model and specific inclusion of predicting, questioning, clarifying, and summarizing strategies, educators can effectively improve reading comprehension for all students in the inclusive classroom.

Finally, the research discussed above supports discussions and collaboration as an important means for fostering reading comprehension among all students. Research conducted by McElhone (2015), Coakley-Fields (2018), Boardman et al. (2018), & Thomas (2015) suggested methods for teachers to differentiate instruction to support collaboration in the inclusive classroom were Socratic seminars, turn and talks, pair-shares, and incorporating online discussion forums. More specifically, Boardman et al. (2018) showed the positive effects CSR has on developing reading comprehension through structured discussion. When educators prepare students for discussion, provide writing and speaking prompts, and prepare questions ahead of the lesson, students show they can successfully discuss an assigned text more thoroughly. When students collaborate and discuss texts together, they effectively develop comprehension skills to better understand complex texts.

Purposeful professional development on effective instructional models, evidence-based reading strategies, and methods for fostering discussion and collaboration must also be further researched to strengthen the generalizations made in this paper. The research above did not discuss effective means to designing and implementing effective practices around providing professional development. What are the best methods to train staff to provide comprehensive reading instruction? How do school districts implement best practices for reading instruction with real efficacy? Among the myriad of trainings offered each school year, what can districts do to choose trainings most relevant for their staff? Many of the case studies discussed above took place over a shortened period. What effect does yearlong implementation of reading instruction and strategies have on student reading comprehension? While the research above discussed multiple instructional methods and strategies which are effective at addressing the decrease in reading proficiency, there are topics needing further research.

Future Studies

As mentioned above, there are multiple effective instructional methods and strategies for educators to implement to differentiate for the varying needs of all students. These methods and strategies are evidence-based and have shown to be effective with all students. However, research is lacking in specific areas that would strengthen generalizations made in the earlier section. Research analyzed in chapter two is missing supporting evidence on effective professional development designs, teacher efficacy, and long-term effects from yearlong reading instruction in all general education classrooms.

First, future studies should be conducted to better understand effective practices for providing professional development to educators. General education classroom teachers are experts in their fields but often lacking training in specific areas such as reading instruction. Therefore, new research needs to be conducted to better understand how to utilize professional development opportunities to effectively provide training to assist teachers in their continuing education. What makes training successful? What do school districts need to provide to best support teacher implementation? Answering these questions along with others would lead to a better understanding of what is needed to prepare teachers with the necessary tools and training to successfully differentiate instruction for all students.

Second, future studies should explore the impact of teacher efficacy on reading instruction and other strategy implementation. In this educators' experience, professional development and training often change from year to year. They rarely provide hands-on, concrete tools to apply in a classroom. Goals are constantly shifting, changing, and transitioning without pausing for reflection or to see if what was implemented was effective. As a result, teachers struggle to consistently implement evidence-based strategies that are effective for

differentiating instruction. New research is needed to better understand the impact that teacher efficacy has on student growth and how to support stronger efficacy among educators. What do teachers need to have confidence and comfort in implementing new instructional methods and strategies? How can educators be held accountable without feeling targeted or reprimanded? What reflective practices can be systematic to encourage further teacher development? Answers from these questions would help design more purposeful professional development and lead to higher efficacy for differentiating instruction to meet the needs of all students.

Lastly, the research reviewed in chapter two analyzed the effectiveness of multiple instructional methods and strategies for developing reading comprehension skills. Many of the studies reviewed only lasted for a brief period, ranging from a few weeks to a few months. However, research conducted for at least a year by Babayigit (2019), Boardman et al. (2018), Coakley-Fields (2018), and Lindholm & Tengberg (2019) all showed long-term positive effects on reading comprehension skills. For this reason, new research is needed to better understand the effectiveness of providing direct reading instruction over the course of the school year. What impact does year-long reading instruction have compared to shorter periods of time? What can educators do to support lifelong academic skills to be applied across curriculums and in future years? Understanding how to foster lifelong learners and instill a growth mindset can help lead students to a life of success and opportunities as they are better prepared to overcome struggles and solve problems.

Conclusion

In summary, there are evidence-based instructional methods and strategies for improving reading comprehension skills among all students in an inclusive classroom. This is imperative as MDE reported in 2021 the decline in reading proficiency among students in Minnesota, a trend

dating back to 2017. Dating back to 2007, middle and high school classrooms were beginning to see an increase in struggling readers which directly affected their achievement and understanding of new content (Ness, 2007). Struggling readers is not a new problem, but one that is often overlooked. It is increasingly difficult for general education classroom teachers to effectively instruct all students with the wide range of abilities, skills, and needed specialized services. With a growing number of students being placed in the general education setting that require specialized services such as autism (ASD) and mild intellectual disabilities (ID), teachers are woefully underprepared and unsupported in effectively differentiating instruction for all students (Burke et al., 2016; Bilgi & Ozmen, 2018).

Simply stated, “We cannot assume that teachers in training will develop skills in best practices without deliberate, scaffolded, and guided instruction.” (Thomas, 2015, p. 85). Providing educators with best practices, purposeful professional development, and guided reflection will improve differentiated instruction and grant the necessary learning experiences all students need to achieve. As discussed in this paper, there are instructional methods, strategies, and best practices for improving reading comprehension skills that all students benefit from. Now is the time to provide all educators the necessary training to effectively differentiate instruction for all students, implement best practices for reading instruction, and address the alarming decrease in student reading proficiency.

References

- Alasim, K. N. (2019). Reading development of students who are deaf and hard of hearing in inclusive education classrooms. *Education Sciences, 9*(3).
<https://doi.org/10.3390/educsci9030201>
- Babayigit, Ö. (2019). Examination the metacognitive reading strategies of secondary school sixth grade students. *International Journal of Progressive Education, 15*(3), 1–12.
- Bilgi, A. D., & Özmen, E. R. (2018). The effectiveness of modified multi-component cognitive strategy instruction in expository text comprehension of students with mild intellectual disabilities. *Educational Sciences: Theory and Practice, 18*(1), 61–84.
<https://doi.org/10.12738/estp.2018.1.0021>
- Bippert, K. (2019). Perceptions of technology, curriculum, and reading strategies in one middle school intervention program. *RMLE Online: Research in Middle Level Education, 42*(3). <http://dx.doi.org/10.1080/19404476.2019.1565600>
- Boardman, A. G., Boelé, A. L., & Klingner, J. K. (2018). Strategy instruction shifts teacher and student interactions during text-based discussions. *Reading Research Quarterly, 53*(2), 175–195. <http://dx.doi.org/10.1002/rrq.191>
- Burke, L., Hsieh, W.-Y., Lopez-Reyna, N., & Servilio, K. (2016). Teaching reading comprehension to students with autism spectrum disorders in social studies classrooms: Middle school teacher perceptions. *Journal of the American Academy of Special Education Professionals, 60*–78.
- Burns, M. K., Hodgson, J., Parker, D. C., & Fremont, K. (2011). Comparison of the effectiveness and efficiency of text previewing and preteaching keywords as small-group reading comprehension strategies with middle-school students. *Literacy*

Research and Instruction, 50(3), 241–252.

- Chandler, B., & Hagaman, J. (2020). Pre-service teacher implementation of strategy instruction: Effects on the comprehension of middle school students. *Journal of Special Education Apprenticeship*, 9(1).
- Coakley-Fields, M. R. (2018). Markers of an “Inclusive” reading classroom: Peers facilitating inclusion at the margins of a fourth grade reading workshop. *Reading Horizons*, 57(1), 15–31.
- Goodwin, A. P., Petscher, Y., & Tock, J. (2020). Morphological supports: Investigating differences in how morphological knowledge supports reading comprehension for middle school students with limited reading vocabulary. *Language, Speech, and Hearing Services in Schools*, 51(3), 589–602. https://doi.org/10.1044/2020_LSHSS-19-00031
- Hua, Y., Hinzman, M., Yuan, C., & Balint Langel, K. (2020). Comparing the effects of two reading interventions using a randomized alternating treatment design. *Exceptional Children*, 86(4), 355–373. <http://dx.doi.org/10.1177/0014402919881357>
- Individuals with Disabilities Education Act, 20 U.S.C. § 1400 (2004).
<http://uscode.house.gov/view.xhtml?path=/prelim@title20/chapter33&edition=prelim>
- Izquierdo Castillo, A., & Jiménez Bonilla, S. (2014). Building up autonomy through reading strategies (Formación en autonomía a través de estrategias de lectura). *PROFILE: Issues in Teachers' Professional Development*, 16(2), 67–85.
- Lindholm, A., & Tengberg, M. (2019). The reading development of Swedish L2 middle school students and its relation to reading strategy use. *Reading Psychology*, 40(8), 782–813. <http://dx.doi.org/10.1080/02702711.2019.1674432>

- McElhone, D. (2015). Using stems and supported inquiry to help an elementary teacher move toward dialogic reading instruction. *Journal of Classroom Interaction, 50*(2), 156–171.
- McLeskey, J. (2018). *Inclusion: Effective practices for all students* (3rd Edition). Pearson.
- Minnesota Department of Education. (2022). *Test achievement levels, test results and participation: How are students performing on standards?*
https://rc.education.mn.gov/#assessmentsParticipation/orgId--1062500000__groupType--district__test--allAccount__subject--R__accountabilityFlg--FOC_NONE__year--trend__grade--all__p--23
- Ness, M. (2007). Increasing the inclusion of reading comprehension strategies in secondary content-area classrooms. *Language and Literacy Spectrum, 17*, 3–13.
- Pilten, G. (2016). The evaluation of effectiveness of reciprocal teaching strategies on comprehension of expository texts. *Journal of Education and Training Studies, 4*(10), 232–247. <https://doi.org/10.11114/jets.v4i10.1791>
- Thomas, A. F. (2015). Enhancing nonfiction reading comprehension through online book discussions. *Reading Horizons, 54*(2), 66–90.
- Tomlinson, C. A. (2017). *How to Differentiate Instruction in Academically Diverse Classrooms* (3rd Edition). Association for Supervision & Curriculum Development.

Appendix

Article Tracking Matrix

| Articles: | Method: | Structured Reading Instruction | Explicitly Taught Strategies | Student Autonomy | Discussion & Collaboration | Outlier |
|--|--------------|--------------------------------|------------------------------|------------------|----------------------------|---------|
| Babayigit, 2019 | Quantitative | | X | <u>X</u> | | |
| Bilgi & Özmen, 2018 | Quantitative | <u>X</u> | X | | | |
| Bippert, 2019 | Qualitative | | <u>X</u> | X | X | |
| Boardman et al., 2018 | Quantitative | X | | X | <u>X</u> | |
| Burke et al., 2016 | Qualitative | X | X | | <u>X</u> | |
| Burns et al., 2011 | Quantitative | X | <u>X</u> | | | |
| Chandler & Hagaman, 2020 | Quantitative | <u>X</u> | X | | | |
| Coakley-Fields, 2018 | Qualitative | X | | X | <u>X</u> | |
| Goodwin et al., 2020 | Quantitative | <u>X</u> | | | | |
| Hua et al., 2020 | Quantitative | | <u>X</u> | | | |
| Izquierdo Castillo & Jiménez Bonilla, 2014 | Qualitative | X | X | <u>X</u> | | |
| Lindholm & Tengberg, 2019 | Quantitative | X | <u>X</u> | | | |
| McElhone, 2015 | Qualitative | X | X | | <u>X</u> | |
| Ness, 2007 | Qualitative | X | X | <u>X</u> | | |
| Pilten, 2016 | Mixed | <u>X</u> | | | | |
| Thomas, 2015 | Qualitative | X | X | <u>X</u> | X | |

**Sources marked X indicates primary study used to support theme.*