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Better for Gifted Students? Comparing the SEM-R Program for Gifted and Typically Gifted Students

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Better for Gifted Students?

Comparing the SEM-R Program for Gifted and Typically Developing Students

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ABSTRACT

The purpose of this study was to determine if the Schoolwide Enrichment Model in Reading will raise comprehension and retelling in typically developing and gifted and talented students. The research questions ask whether the program will increase comprehension (question 1) and if the program was more effective for the gifted students versus the general classroom population (question 2). The Schoolwide Enrichment Model in Reading was implemented through a 4-week study with pre- and post- assessments to measure the changes in comprehension and retelling. The results showed that the Schoolwide Enrichment Model in Reading was effective in raising comprehension and retelling in all students, but measured no difference between gifted and typically developing students.

CHAPTER ONE

Introduction and Purpose

"I would like you to read a story to me. Please try your best. If you do not know a word, I will read the word for you. Keep reading until I say stop. Be ready to tell me all about the story when you finish. Put your finger under the first word. Ready, begin". (Good III & Kaminski, 2011). These are the directions used to prompt students to take the Acadience Oral Reading Fluency Assessment. As the student begins reading, I start a one-minute timer and begin tracking their reading, marking any errors or skipped words. After sixty seconds, the timer sounds. "You may stop." The student made no errors, indicating 100% accuracy of reading. I place a bracket around the last word read and remove the passage from the student's view. "Now tell me as much as you can about the story you just read. Ready, begin". I set another one-minute timer and listen as the student provides a retell of the passage. After a moment of silence, the student looks at me with a puzzled look and says "Well, umm… the girl got celery from the fridge. That's all I can remember". Typically, I would count the number of words used in the student's retell and record them in the booklet assessment booklet. For this student, I recorded 7 for the retell score, for the 7 words that he used in his retell. Lastly, I circle the retell quality score that the student received based on the scale provided in the assessment book. For this student the "1" was circled because they provided a retell with less than 3 details. However, all I hear is silence as the student struggles to retell the passage they just read. The process is repeated two times, for a total of three passages, read and retold in one sitting. Later in the day I score the passages, looking for total words correct (number of

words read – errors = total words correct) for total words correct and copy all the data onto the front cover of the book. This is a glimpse into the process of completing an Acadience Oral Reading Fluency Assessment (ORF) with a single student. Each student engages with this assessment three times a year, in the fall, winter, and spring to track their growth and monitor their acquisition of early literacy skills.

You may think the example above is a recall from a struggling reader due to the low recall of information from the text, however, this is a recall of a student in my classroom that has been identified as cognitively gifted. While one would expect the retell to be much more detailed due to the students' higher performance skills in various areas of academics, it surprised me that he had so little recall of the information he just read in the short passage. This assessment revealed to me that this specific student needed strategic instruction in comprehension and retelling.

The Acadience Oral Reading Fluency Assessments (ORF) provides insight into a student's phonics and word attack skills, their accuracy and fluency in reading, and their ability to comprehend a text. While the assessment is not in depth, it provides teachers a quick screener for students and can be used to quickly determine whether students are at benchmark (on track based on norms) for reading. Using the scores determined in the assessment, the teacher would then determine additional diagnostic assessments that could target the area of need for an individual student.

Using the ORF assessment, I looked into my students' data with the intent to determine trends among students. I was instructed in the program training that the assessment would clearly distinguish my advanced readers from my average or lower readers, but I wanted to see how the data supported my classroom observations. In the

first weeks of school, I saw how my cognitively gifted students could read texts accurately and with haste, but struggle to comprehend or retell the text in great detail. Using the Acadience Oral Reading Flunency assessment, measuring students' oral reading fluency and retelling abilities through a one-minute timed passage reading followed by a passage retell, I saw that 39% of my students were measuring below benchmark levels for retelling. Of the 4 cognitively gifted students, 2 provided minimal retelling of the text and did not meet the benchmark score. With such high decoding skills present, I knew that these students needed more than the typical small group reading lessons typically provided in second grade, as they often focus on decoding and phonics skills. They need to be exposed to higher-level thinking questions, creative thinking, and the opportunity to share their inquiries with others.

Significance

I teach second grade in a suburban school district outside of Columbus, Ohio. I currently have 4 students that have been identified as cognitively gifted (a student that is performing at a remarkably high level in comparison to peers of same age, or experience, typically two years above the norm). My school's current process is to place the gifted students in clusters (small groups of students) to have "gifted cluster classrooms". I have one cluster in my classroom with 4 students and my teammate has the second cluster. There are currently three second grade classes at my school. This means that one of the second-grade classes does not have a gifted cluster.

The idea of studying gifted students came to light when I was given the opportunity to have the gifted cluster in my classroom. Before beginning my research, I did not have a lot of background knowledge on the instruction of gifted and talented

students. As a professional, responsible for the education of all students in my classroom, I felt that it was my responsibility to understand best practices for teaching gifted and talented students. In conjunction with my Capstone, I will be participating in 15 hours of professional development provided by the district in the area of gifted and talented education. This is required, per the state of Ohio, for all teachers that house a gifted cluster.

After determining the focus of my Capstone, I then completed research to determine the curriculum that I would use to foster development in comprehension and retelling. While there are only few curricula that specifically serve gifted and talented students, I determined the Schoolwide Enrichment Model (Renzulli, 2019) to be the best for my students as it would also focus on their individual interests and boost involvement in their reading. I believe that students would better engage with the text when they possess a higher interest level. With more engagement, comes higher levels of comprehension.

Some of the requirements of a teacher housing a gifted cluster include the offering of extensions and differentiation to meet the needs of all my students (see Chapter 2, Gifted Servicing and Enrichment). The Schoolwide Enrichment Model (SEM) will offer extension and differentiation through its detailed model (see Chapter 2, Schoolwide Enrichment Model in Reading). While the SEM focuses on gifted and talented students, I would like to implement with my entire class to determine if it is effective for raising comprehension and retelling in only the gifted and talented students or if it is effective for the entire class.

CHAPTER TWO

Through this literature review you will learn the meaning of a gifted and talented student through the lens of two prominent researchers, as well as the state of Ohio. You will see the process of identifying a gifted student and then the serving requirements of gifted and talented students. The literature review will then explain the framework of the Schoolwide Enrichment Model and the Schoolwide Enrichment Model in Reading; the program implemented in the research study. Lastly, you will learn about the importance of comprehension and retelling on a student's development as a reader.

What is Gifted?

The National Association for Gifted Children [NAGC] (2019) describes gifted as "students with gifts and talents [that] perform - or have the capability to perform - at higher levels compared to others of the same age, experience, and environment in one or more domains". Francoys Gagné and Joseph Renzulli are two prominent researchers within the realm of gifted education. Gagne (1985) defines gifted as "the possession and use of untrained and spontaneously expressed natural abilities (called aptitudes or gifts) in at least one ability domain to a degree that places a child among the top 10% of his or her age peers". Renzulli (2011) states that "gifted behavior occurs when there is an interaction among three basic clusters of human traits: above-average general and/or specific abilities, high levels of task commitment (motivation), and high levels of creativity". Often referred to as a noun, Joe Renzulli uses the term gifted as an adjective meaning *to be given* (Renzulli, 2012).

Many decades of research have been completed to determine the connections between identified gifted and talented students and the services that they receive in school. Treffinger's (1988) work in gifted education focused on advocating for differentiated instruction for students identified as gifted and talented. Carolyn Callahan (1996) and Dona Matthews (1997) agree that the identification of gifted and talented students must match the program implementation and delivery to best serve the students' needs. The focus of this literature review is to show the importance of identifying, servicing, and teaching gifted and talented students to meet their individual needs. It also aims to provide background information and an overview of the curriculum that will be used in the research project.

Enrichment Triad Model

The major theoretical framework that has guided the development and processes of the Schoolwide Enrichment Model is the Enrichment Triad Model developed by Joe Renzulli (2016). Created in 1977, the Enrichment Triad Model set forth to encourage creative productivity in students through the application of real-world inquiry. The triad model is based around three types of enrichment: type 1, general exploratory activities, type 2, group training activities, and type 3, individual and small group investigation of real-world inquiry. Types 1 and 2 are applicable to all students. Type 3 is the most advanced type, targeted for advanced learners.

In *Reflections on Gifted Education*, Renzulli (2016) describes the 3 types of enrichment in detail. Type 1 enrichment, general exploratory activities, exposes students to new topics or new areas of interest through various forms. Books, DVDs, podcasts, presentations from visitors, and general classroom curriculum are some examples of

methods that students are offered for general exploration. Type 2 enrichment, group training activities, inform and educate students on the way to think skillfully and complexly, using problem solving skills to dive into self-selected areas of interest for advanced study. Methods of exploration could involve cognitive training, critical thinking, listening, communicating, writing, analyzing, research skills, problem solving, or methods training. Type 3, individual and small group investigation of real problems, is most applicable to advanced students. Type 3 enrichment provides opportunities, experiences and methods of presentation for students to apply learned skills to their self-selected area of interest. This enrichment type is an independent, interest-based study with guidance from the teacher, in a small group setting. The goal is to increase students' self-efficacy to encourage them to produce educational learning that is past their normal range in classroom instruction. These 3 types of enrichment will be revisited later, in the Schoolwide Enrichment Model section of the literature review, to explain their purpose and importance in servicing students identified as gifted and talented.

Ohio's Definition of Gifted

Ohio's definition of giftedness is consistent with that of Gagne (1985) and Renzulli (2011) as well as the National Association for Gifted Children (2019). Ohio Administrative Code 3301-51-15, *Operating Standards for Identifying and Serving Students Who are Gifted [Operating Standards]* (2018) defines gifted as a student that is performing at a remarkably high level in comparison to peers of same age, or experience, typically two years above the norm. There are multiple types of giftedness defined by Ohio's Department of Education (2018); superior cognitive ability, specific cognitive ability, and creative thinking ability. A student can be identified as having superior

cognitive ability if they score two standard deviations above the mean on an approved standardized intelligence test or performed at or above the 95th percentile level on an approved standardized achievement test administered by a licensed psychologist. To be identified as exhibiting specific cognitive ability, the student must score at or above the 95th percentile on an approved standardized test in a specific academic field. A student can be identified as gifted in more than one academic field. Lastly, a student can be identified as exhibiting creative thinking ability if the student scored one standard deviation above the mean on an approved individual or intelligence test, while also; 1) attaining a sufficient score on an approved individual or group test of creative ability as determined by the Department of Education or 2) displaying sufficient performance in an approved checklist by a trained individual as set by the Department of Education (Operating Standards, 2018).

Gifted Servicing and Enrichment

Gifted Identification

The NAGC (2022) states that the identification of gifted and talented students can take place through various policies and procedures. Intelligence and achievement tests or referrals from teachers, administrators and parents are the main forms of identification of gifted and talented students. Ohio's identification procedures are consistent with that of NAGC's policies and procedures.

Assessments are the primary form of identification for gifted and talented students. Appropriate instruments of assessment in the identification of gifted and talented students are determined by the Ohio Department of Education. The school districts are provided an approved list of assessments and checklists from which the

district may select (Ohio Department of Education, 2022). All assessments for identification must be administered by trained personnel. Assessments are required to be validated for their purpose and appropriateness for the students' age, gender, race, ethnicity, or social class. They must be appropriate for minority groups as well as disadvantaged students. Assessments are required to be administered in the student's native language and with any accommodation from a student's Individualized Education Plan (IEP) and/or 504 plan (Operating Standards, 2018).

Districts are mandated by the Department of Education to administer grade level testing to all students at least twice during a students' kindergarten through sixth grade educational career, with the intent of identifying students who may be gifted. The first test must be completed between the span of kindergarten through second grade, to measure superior cognitive ability, creative thinking ability and specific academic ability in math, language arts, science and social studies. The testing of all grade level students (whole grade level testing) must be administered once in grade three through six to test for superior cognitive ability, creative thinking ability, and specific academic ability in only math and language arts (Ohio Department of Education, 2018). Some assessments approved by the Department of Education for use in identifying gifted and talented students include the Cognitive Abilities Test (CogAT) (Lohman, 2012), iReady (Curriculum Associates, 2017) , MAP Growth (NWEA, 2019), STAR Reading (Renaissance Learning, 2022), TerraNova Achievement Test (Data Recognition Coorperation, 2022), The Iowa Assessments (Iowa Testing Programs, 2012), and various Woodcock-Johnson assessments (Shrank et al., 2014) .

In the Ohio Department of Education's (DOE) (2018) publication, *Implementing the Operating Standards for Identifying and Serving Students Who are Gifted,* the DOE states that districts must offer referral-based testing at least two times a year. Referrals can be requested by parents, teachers or administration. For an initial referral of a student, the testing must be completed within 90 days. Districts may use the mandated whole group testing option for identification of a student for superior cognitive ability, creative thinking ability, or specific academic ability in any subject area. If the referral happens outside of the mandated whole grade level testing, the intervention specialist administering the assessment may select an appropriate time for testing within the 90-day window.

After a student has been identified, the district is required to provide an Identification Plan to the Department of Education stating the assessments administered, a timeline for the assessments, the schedule of assessments and the results of the assessments (Operating Standards, 2018). The school district is also required to provide a yearly report to the Department of Education with statistics from the school year. These include but are not limited to number of students screened and assessed, number of students identified for gifted services and the number of students receiving services (Operating Standards, 2018). The districts are also required to participate in an audit, if requested.

Enrichment in the Classroom

Acceleration and differentiation are two forms of enrichment for gifted and talented. Acceleration includes taking the grade level curriculum and working through the standards at a faster pace (Keleman, 2020). This is beneficial to advanced students

because they may not need as long of instruction time to understand and apply the concept. Differentiation maintains the same learning goal for every student in the classroom, but the instruction is provided in a way that meets individual student needs. Some students require extension activities for differentiation, some require modifications. Differentiated instruction is more beneficial for gifted students because they are still participating in the learning but at a level that is better suited for their specific needs. For example, a math story problem would be given to all students in the classroom. The context of the problem is the same for all students however the complexity of the numbers would be different based on the student's needs.

Cluster Groupings

After identifying students that qualify as gifted, services are provided in various ways. One way of servicing gifted and talented students is through cluster groupings. Hoover and Sayler (1993) state that a cluster is a small group of 5 to 8 students, that are assigned to one classroom as a pod, instead of being separated into multiple grade level classrooms. With cluster grouping, students receive their instruction from their trained classroom teacher instead of receiving pullout services from a gifted intervention specialist. Hoover and Sayler argue that cluster grouping is an advantage for gifted and talented students because they have the opportunity to interact with classmates of similar ability through their cluster placement (1993).

In a 4-year comparative investigation of the effects of various grouping types on 2nd through 5th grade gifted and talented students in a rural school district, Gentry and Owen (1999) found that cluster groupings benefited gifted and high-ability learners, due to teachers being able to meet individual student needs through specialized instruction for

groups of students. They also state that a benefit of cluster groupings is that the gifted students are provided the opportunity to work with other gifted students at their level. Winebrenner and Devlin (1998) stated that gifted clusters are beneficial for the servicing of gifted and talented students because the teacher can plan extension activities for the group of gifted students rather than just planning an activity for one student in their class. The process of cluster grouping is a better use of teachers' planning time. Personally, I have seen this in my own classroom with my gifted cluster. My planning time is used more effectively when I can plan a lesson for 4 students rather than just one student. Lastly, cluster grouping is effective because gifted students can be encouraged to develop with the help and challenge of students with their same ability. Students would be encouraged to work together, to challenge each other and to build off of peer interactions and experiences (Winebrenner & Devlin, 1998).

In a study evaluating the effects of cluster groupings on the achievement of students in a K-6 dual-language charter school, Matthews et al. (2013) determined that there were no negative effects on the academic success of classrooms with gifted clusters compared to classroom without a gifted cluster. Similar growth rates were shown in reading for both students identified as gifted and those not identified as gifted.

One opposing viewpoint identified by Hoover and Sayler (1993) is that the classrooms that do not have a cluster lack gifted students that can inspire, motivate or engage the average or low ability students. I have seen this in my own school, where there are three second grade classes and two have cluster groupings. The third second grade classroom has the majority of lower achieving students or students that have not been identified as gifted, at least not yet. There are still some students achieving at very

high levels but have not been identified as gifted. This has unintentionally developed a class that requires more pre-teaching to prepare students to be ready to learn the second-grade curriculum. This process has also created a classroom with numerous behavior issues due to the imbalance of academics and social skills. In my judgement, the positives outweigh the negatives in the idea of cluster groupings because teachers can meet the academic needs of students in a more effective manner.

Ohio's Demand on Gifted Clusters

The servicing requirements of gifted and talented students are directed by the State of Ohio (Operating Standards, 2018). The instruction and servicing of gifted and talented students must include differentiated instruction that is based within the standard grade level curriculum but includes more complex, expedited delivery and increased depth. The services are required to be consistent with the area for which the student was identified as gifted. For example, if a student was identified as gifted in math, they would receive gifted services for only math.

The servicing of gifted and talented students is required to take place during the typical school day in one of the following ways: a full-time classroom with a gifted intervention specialist teacher, a single subject classroom with a gifted intervention specialist, a co-taught cluster grouping with a gifted intervention specialist, a resource room with pullout gifted services, or a cluster grouping in a general education classroom with a teacher trained in gifted education. Various other options are available for secondary education. Some include honors courses and advanced placement. The state of Ohio lists *qualified teachers* as intervention specialists with a gifted endorsement or

licensure or a general education teacher who has been specifically trained in gifted education (Operating Standards, 2018).

Written Education Plans

In Ohio, each gifted student has a Written Education Plan (WEP) that is a legally binding document created for their specific needs. A WEP is the main tool for communication among stakeholders (parents, teachers, administrators) for the goals and procedures gifted and talented students will receive (Hahn, 2015). A WEP includes SMART (Specific, Measurable, Attainable, Realistic, Timely) goals; both an academic goal and a social emotional goal (Hahn, 2015). The goals within the WEP must be specific and measurable and must include methods that will be used for measurement and evaluation of student progress. The teacher and the parents will collaborate to develop the WEP. Parents must be informed periodically of their child's progress in meeting the goals set forth in their WEP. Each year, the WEP is reviewed for possible revisions to the goals and procedures for serving gifted and talented students (Operating Standards, 2018). Teachers are required to document student progress towards goals set forth in the student's Written Education Plan. This holds the teacher accountable for ensuring that students have received the services that were stated in their WEP.

Schoolwide Enrichment Model

One model used for the instruction of gifted and talented students is the Schoolwide Enrichment Model (SEM) developed by Joe Renzulli and Sally Reis (University of Connecticut, 2019a). Joe Renzulli stated in an overview video that the theme of SEM is that schools should be places that foster talented development in all students no matter their identification (University of Connecticut, 2019a). The purpose of

SEM is to create high interest in student learning to foster more engagement. Susan McLester (2012) states that Renzulli and Reis's "SEM approach to reform is unique in that is reverses an entrenched perspective in education; the notion that schools are a place to make up deficiencies rather than develop talent" (p. 70). Through SEM, students are developing their talent and continuing to grow rather than being held back by the curriculum and pace of traditional learners.

Structure of the Schoolwide Enrichment Model

The Schoolwide Enrichment Model bases its enrichment instruction in enrichment cluster groupings. These groups of students share a common interest in a topic of their choice. They work collectively to gain understanding of their topic and to apply their understanding to a final presentation. Type I enrichment is based on exploring topics and ideas through the normal classroom curriculum. All classroom students participate in Type I enrichment. The purpose of this enrichment is to make the curriculum more enjoyable for all students (University of Connecticut, 2019a) and to provide them surface level explanation and information about numerous topics. Type II enrichment is the cluster groupings of students that share a common interest. All classroom students are placed into a cluster group. The purpose is for students to collectively pursue research on an interest in a creative way (University of Connecticut, 2019a) through book reports, field trips, interviews, small group investigative activities, etc. Lastly, Type III enrichment requires the student to take an active role as a firsthand inquirer. Some examples would be a science fair project, a mentorship program, or other activities that put students in the position to actively engage in the real-world situation for research and learning (Gibson & Efinger, 2001).

How does the Schoolwide Enrichment Model apply to all students?

While SEM may have been created with the gifted and talented in mind, it is applicable to all students, no matter their ability. Sally Reis stated in a written interview with Dr. Suzanna Henshon (2018), "we have learned that if we restrict identification to the top 3%-5% of students, we will fail to identify highly creative students, students who have learning styles that differ from traditional instructional methods, students with learning challenges, and students who live in poverty or are from different cultural backgrounds" (p.216). The Schoolwide Enrichment Model can provide enrichment for all students, no matter their identification status, by focusing on their interests to further develop their knowledge on a topic.

Schoolwide Enrichment Model in Reading

The Schoolwide Enrichment Model in Reading (SEM-R) is an extension of the Schoolwide Enrichment Model. In SEM-R, the focus is to provide reading acceleration and enrichment for students to increase their comprehension and grow their engagement and interest in reading. This is done through student self-selected texts, with high-level thinking strategies directed by a teacher in a small group setting. Furthermore, SEM-R also provides differentiated content, at the students' level, to challenge readers to self-regulate and process the content at a higher level (Henshon, 2018). The SEM-R follows the three components of the standard SEM. Phase 1 is exposure to high-interest, quality literature through book hooks (described below) or read-alouds in the general curriculum that spark interest in a topic or specific type of literature. Phase 2 focuses on scaffolding student abilities to increase independence in challenging reading material. Phase 3 is the

transition from teacher-directed instruction to student led exploration (University of Connecticut, 2015a).

SEM-R Phase 1

In Phase 1 of the SEM-R (Renzulli,2019) the focus is to use book hooks to capture the readers' attention and to make them eager to learn more. "The goal of these book hooks is to entice students to read the book in much the same way as movie trailers entice people to watch the movie" (University of Connecticut, 2015b). The book hooks, provided by the classroom teacher, stimulate discussion about the topic, providing new ideas and higher levels of thinking among the students. Leaving the students hungry for more, is the goal of Phase 1.

SEM-R Phase 2

Phase 2 begins the process of student self-selected text and inquiry. In Phase 2, students select an interest-based text that is slightly above their reading level. Small group instruction is provided by the teacher during the students' reading time. The focus is learning and practicing self-regulation strategies that can be applied to their independent reading and research. The allotted independent reading time is minimal in the beginning but gradually becomes longer as students progress in their reading. During this phase, students engage in reading conferences with their teacher to work on fluency, comprehension and advanced strategy practice that can be applied to their reading (Henshon, 2018; University of Connecticut, 2015c). The reading conferences provide explanations and examples to develop students' higher-level thinking skills.

SEM-R Phase 3

In Phase 3 students move from teacher led instruction to self-learning and choice activities. Activities could include book reports, creating a movie trailer, character trait activities, script writing for a play or movie, center creation, digital displays, etc. (Henshon, 2018). Access to public or school libraries is beneficial in this phase to provide expanded literature on their selected topic. In Phase 3, students continue to explore on their own but are also encouraged to brainstorm with peers completing similar projects (University of Connecticut, 2015d).

Comprehension

Why is comprehension important to this research? The goal in this research is to determine if the SEM-R can increase student comprehension and retelling of a text through the high levels of text exposure and scaffolding provided in the SEM-R. In order to understand the importance of comprehension in reading and to understand the importance of comprehension within the realm of the SEM-R program, we must first understand why comprehension is a key component to student reading and understanding of a text.

In the realm of primary education, there are numerous instructional practices that have been scientifically researched and determined to be essential for the development of reading comprehension among students. Nell Duke, Alessandra Ward and David Pearson (2021) shared that effective comprehension instruction must include 1) effective general classroom instruction, including differentiated instruction, relationship building, culturally relevant pedagogy, and cycles of instruction with appropriate assessment measures, 2) motivating literacy, 3) language development, 4) knowledge building and activating academic content and cultural knowledge, 5) engagement with text, 6) teaching

about texts, and 7) teaching about comprehending. While these instructional practices may be taught simultaneously, all must be present to impact reading comprehension development.

With gifted students, their fluency is typically very high, but sometimes they lack the ability to fully comprehend the text due to their increased speed or lack of attention to the reading. I have seen this in the students in my second-grade classroom. The Institute of Education Sciences publishes educational Practice Guides to aid in the instruction of various educational goals. In the Practice Guide *Improving Reading Comprehension in Kindergarten Through 3rd Grade,* Shanahan et al. (2010) states that strong reading comprehension skills are essential to academic success so that students can apply the skills to learn independently, enjoy their reading, and experience literature to a deeper level. Shanahan et al. (2010) also states that comprehension also gives the reader the chance to take in all of the various topics and types of literature available. The Practice Guide offers five recommendations for improving comprehension in young readers; 1) teach reading comprehension strategies to young readers, 2) teach young readers to recognize and use the structure of the text to expand their knowledge and remember the content, 3) provide high-quality discussions about the text and its meaning, 4) make careful text selection, and 5) provide engaging opportunities for students to interact with the text to develop interest (Shanahan, 2010). Each recommendation provides suggestions for implementation within the classroom. The practice guide ties into the methods and practices of SEM-R in that the instruction of comprehension will help students better use strategies in their reading to comprehend the text.

Comprehension in SEM-R

There are multiple connections between the recommendations suggested in the IES Practice Guide and the procedures for the Schoolwide Enrichment Model in Reading. Starting with IES Recommendation 3 and 4, we see the suggestions of high-quality texts, book hooks, read-alouds and reading conferences. SEM-R attends to high quality discussions and book hooks in Phase 1, exposure to text. IES Recommendation 3 also suggests the use of higher-level thinking questions and discussions. These are present in the reading conferences completed in Phase 2 of SEM-R. Lastly, in IES Recommendation 5 it is suggested that readers are given choice in what to read and then offered peer collaboration for common topic interests. This type of instruction is present in Phase 2 of the SEM-R when students are encouraged to select a topic of study based on their interest. During this phase, the teacher holds short reading conferences with students to engage in the higher-level thinking about their topic. When determining SEM-R's effect on reading comprehension, it shows a high level of similarities to the suggestions for improving comprehension stated by the Institute of Education Sciences.

Research Questions

When looking to improve comprehension in students identified as gifted and talented, the Schoolwide Enrichment Model was selected as the educational tool to be implemented within the study. The focus of this research is to determine if the Schoolwide Enrichment Model in Reading can improve student reading comprehension because of the high value put on student input and engagement. I want to see the students who read with high accuracy learn to enjoy their reading and comprehend rather than just complete the assignment. With high interest in the text, group and peer conferences and

engagement, and the presentation of their learning, I believe that the Schoolwide Enrichment Model in Reading will provide a solid framework for working with my gifted and talented students to raise their reading comprehension.

Question 1

Treffinger's (1988) work in gifted education focused on advocating for differentiated instruction for students identified as gifted and talented. The differentiated instruction for all students, gifted and not gifted, is addressed in SEM-R. The process offers reading acceleration and enrichment for students to increase their comprehension and grow their engagement and interest in reading. Shanahan et at. (2010) states that strong reading comprehension skills are essential to academic success so that students can build strong comprehension skills to learn independently, enjoy their reading, and experience literature to a deeper level. Comprehension is essential to success is reading. What can be done to help students build this comprehension? My research sets out to answer: Is the Schoolwide Enrichment Model in Reading effective in increasing student comprehension and retelling of a text?

Question 2

Matthews et al. (2013) determined that there were no negative effects on the academic success of classrooms with gifted clusters compared to classroom without a gifted cluster. One of the creators of the SEM, Sally Reis, encourages schools and teachers to use the Schoolwide Enrichment Model in Reading to provide enrichment for all students, no matter their identification status, by focusing on their interests to further develop their knowledge on a topic. Joe Renzulli stated in an overview video that the theme of SEM is that schools should be places that foster talented development in all

students no matter their identification (University of Connecticut, 2019a). My research sets out to answer: Is the Schoolwide Enrichment Model in Reading more effective for students identified as gifted or students in the general education population?

CHAPTER THREE

Research Design and Methods

The purpose of this study is to determine if the implementation of the Schoolwide Enrichment Model in Reading can improve students' comprehension and retelling of a passage. The study is also measuring if the Schoolwide Enrichment Model is effective only for the cognitively gifted students or if it is effective for all students in a classroom. For this study "comprehension" refers to a student's ability to understand and retain a text they read. "Retelling" refers to a student's ability to tell the main ideas and details of a passage they have read. In this section, I will describe the research design and method of the case study.

Method

The research method is action research. Action research refers to research that is completed in an environment that the researcher is already immersed in as an active participant. Craig Mertler, in his publication *Introduction to Educational Research* states that the purpose of action research is to "address local-level problems with the anticipation of finding immediate solutions" (Mertler, 2016, p. 14-15). The researcher is an educational professional addressing a problem that is of great importance to their educational practice. Action research was selected for the study because of the need for intervention and instruction within my gifted and talented students. Through observation and assessments, it was evident that I needed to focus on increasing reading comprehension and retelling strategies in my gifted and talented students.

Setting

The setting for this action research study is a self-contained second grade classroom located in a large suburban school district in Ohio. The population of the elementary school is roughly 400 students. The student population of the district is roughly 16,000 students. This study focuses on one second grade class of 24 students ranging in ages from 7 to 8. The group of students consisted of 14 boys and 10 girls. The class consists of various cultural backgrounds and home languages including, 2 Spanish speaking families, 17 English speaking families, 1 Arabic speaking family, 1 Persian(Farsi dialect) speaking family, 1 Marathi speaking family and 1 Japanese speaking family. All students speak English fluently in addition to their home languages. Of the 24 students, 4 students have been identified as cognitively gifted, 1 student receives academic instruction in a specialized learning classroom at his current level, 3 students receive English Language services, and 2 students receive pull-out reading support by a reading intervention teacher.

The elementary school is located within a working middle class community. Situated on the edge of the school district, the elementary school pulls students from two cities. Statistical examples are provided to show the status of the community compared to the average for the state of Ohio. All information was gathered from the United States Census Bureau. The median statistic will be listed for the state of Ohio as well as the two median statistics for the cities that the elementary school houses. The statistics were compiled from the years 2015-2019. As of April 1, 2020, the population of the two cities were 37,00 and 49,000. (US Census Bureau, 2022). The median household income for Ohio is $57,000 (US Census Bureau, 2022). Median household income for the location of the research study is $97,000 and $138,000 (US Census Bureau,2022). In the state of

Ohio, 28.3% of individuals over the age of 25 have completed a bachelor's degree or higher. For the cities being studied, 54.7% and 74.6% of individuals over the age of 25 have completed a bachelor's degree or higher (US Census Bureau, 2022). Median home value for owner occupied housing units in the state of Ohio is $217,500. The median home value for owner occupied housing units of the two cities is $377,500 and $254,700. In conclusion, the data shows that the neighborhood and cities surrounding the school are composed of higher middle class, with larger household incomes, higher home values, and residents maintaining higher levels of postsecondary education.

Participants

The participants in the research are the 23 students that receive their core reading instruction in my classroom. With the research question measuring the effectiveness of the Schoolwide Enrichment Model in Reading on two levels, for gifted students and for the general population, I will use data from all students in my classroom, but also focus on the data from 4 students who are cognitively gifted. The students who are cognitively gifted have been assessed previously through the district and the information has been provided stating their giftedness and the requirements for meeting their Written Education Plan (See Literature Review for specific assessment procedures). I will not be using the data from my student that receives his instruction in the specialized learning classroom due him not being present in the room when the research was taking place. Of the 4 gifted students, 3 are male and 1 is female. At the time of the study, 2 students were age 8 and 2 students were age 7. Of the 4 gifted students 2 speak a home language other than English but are fluent in English. Two of the students are of Middle Eastern decent, one is LatinX, and one is White.

Data Collection

Two methods of data collection were used for the study: The Acadience Reading K-6 Benchmark Assessment and the STAR Reading Test. Both forms of data are used as universal screeners (a brief assessment given to all students to identify those that fall below the benchmark scores) for the district.

The Acadience Reading Benchmark Assessment is a universal screener for grades kindergarten through six that measures the acquisition of early literacy skills. The six areas of measurement are phonemic awareness, alphabetic principle/basic phonics, advanced phonics/word attack, accurate and fluent reading of a grade level text, reading comprehension and vocabulary/language skills. The second-grade assessment focuses on alphabetic principle/basic phonics, advanced phonics/word attack, accurate and fluent reading of a grade level text, and reading comprehension through the Nonsense Word Fluency assessment and the Oral Reading Fluency assessment. Each assessment provides the proctor with a benchmark score that is used to determine if a student is on track in the specified area.

In the Nonsense Word Fluency assessment, the student is provided with a list of CVC (consonant, vowel, consonant), and VC (vowel, consonant) nonsense words to read. The proctor records words that are read correctly. The total words read correctly is recorded as the student's score. The goal of this piece of the assessment is to measure a student's ability to decode an unknown word.

The Oral Reading Fluency assessment presents the student with a one page reading passage. They are given one minute to read as much of the passage as they can and then one minute to provide a retell of what they read. The proctor tracks words read

correctly and marks errors in the reading. Then the student is prompted to retell the text. The number of words used in the student's retelling are recorded as the student's score.

The STAR Reading test is a computerized assessment that provides an overview of a student's reading progress. Through various types of questions, the assessment provides overall achievement of a student and student's mastery of grade level standards. This assessment is used as a universal screener as well as a progress monitoring tool. The assessment provides the proctor with a score that is used to determine if a student is on track, to be monitored, or to receive immediate intervention.

Pre-Assessment Data

Table 1: Score Calculations for Acadience Assessments
The Acadience Oral Reading Fluency Assessment was administered to all students. The table below provides insight into how each score is calculated.

Words Correct- the median number of words correct per minute from the three passages read. Scores are determined by errors subtracted from the total words read
Accuracy- median number of errors per minute from the three passages read
Retell- median number of words used in the retell from the three passages read
Retell Quality- median quality of the retell from the three passages read
Composite Score- combination of multiple scores from words correct, accuracy and retell to provide the best overall measure of students' early literacy skills

Table 2: Fall Pre-Assessment Data
This table shows the pre-assessment data on all students completed before the Schoolwide Enrichment Model in Reading.
*At the time of the pre-assessment, the class consisted of 23 students. One student joined our class in the middle of the research study. His data is not included in the study.

Acadience Fall (Pre-Assessment) *	Number of Students Above Benchmark	Number of Students at Benchmark	Number of Students Somewhat Below Benchmark	Number of Students Well Below Benchmark
Words Correct	13 (57%)	7 (30%)	1 (4%)	2 (9%)
Accuracy	13 (57%)	7 (30%)	2 (9%)	1 (4%)
Retell	10 (43.4%)	4 (17.3%)	7 (30.3%)	2 (9%)
Retell Quality	11 (48%) *combine to be above benchmark and at benchmark		9 (39%)	3 (13%)
Composite	13 (57%)	7 (30%)	2 (9%)	1 (4%)

Table 3: Winter Post-Assessment Data
This table shows the post-assessment data on all students completed after the Schoolwide Enrichment Model in Reading.
*Note- composite score for winter assessment does not include nonsense word

Acadience Winter (Pre-Assessment) *	Number of Students Above Benchmark	Number of Students at Benchmark	Number of Students Somewhat Below Benchmark	Number of Students Well Below Benchmark
Words Correct	14 (61%)	5 (22%)	1 (4%)	3 (13%)
Accuracy	10 (43%)	8 (35%)	2 (9%)	3 (13%)
Retell	11 (48%)	9 (39%)	3 (13%)	0
Retell Quality	14 (61%) *combine to be above benchmark and at benchmark		9 (39%)	0
Composite	10 (43%)	9 (39%)	1 (4%)	3 (13%)

Instruction

The program implemented for the research was the Schoolwide Enrichment Model in Reading. The instruction process took place over a period of 4 weeks in a

student interest-based reading research project. For the purpose of student interest, I called the whole project “Genius Hour”. I explained to the students that we will use our dedicated reading workshop to become geniuses on our selected topics. The entire research project consisted of each student completing the following: topic selection, research question development, research, final project creation, and sharing of topic.

Topic Selection

Students were given a survey titled “If I Ran the School Survey” by Sally Reis and Del Siegle (2002). The survey provided students with 5 categories of general topics: science, technology/audiovisual, social studies, arts, and language arts. Through a selection process, students narrowed down their choice to a final research topic.

Research Question Development

The students were asked to select three questions they had about their topic. They then focused their research on finding the answers to the three questions.

Student Research

Students used books and online resources to answer their three research questions. They recorded their information in a planning booklet and included the source for where they located their information.

Final Project Creation

Students were offered the opportunity to select their method of presentation. The selections varied from creating a Google Jamboard, a Google SlideShow, recording a Clips video, writing a book or creating a poster.

For the final project the presentation had to include their research questions, the information to answer their questions, 2 fun facts about their topic, and 5 images that supported their topic.

Sharing Their Topic

Students shared their completed projects with the two second grade classes in the school.

Data Analysis

My data analysis attempts to answer two questions: was there an students' increase in comprehension (question 1) and was the program effective in raising comprehension and retelling in gifted students versus students in the general education population (question 2). For question 1, a paired t-test is used for ratio data. This was selected because one group is being measured twice through a pre-test and post-test (Mertler, 2016). A Wilcoxson signed-rank test is used for ordinal data (Statistical Test Selector, 2022). For question 2, an independent samples t-test is used for ratio data. This was selected because two groups (gifted and not gifted) are being compared on the same dependent variable, the test score (Mertler, 2016). A Mann-Whitney U-test is used for ordinal data (Statistical Test Selector, 2022).

CHAPTER FOUR

Findings

Research Question 1:

Is the Schoolwide Enrichment Model effective in increasing student comprehension and retelling of text?

The statistical analyses indicate that the Schoolwide Enrichment Model was effective in raising comprehension and retelling scores from fall to winter as measured by three assessments; the Oral Reading Fluency Words Correct, Retell score and the Acadience Composite Score. The statistical analyses indicate no change in Retell Quality and STAR scales scores.

Table 4: Comparison of Means/Medians for Comprehension and Retelling
A paired t-test is used for ratio data. A Wilcoxson signed-rank test is used for ordinal data.
* = statistically significant at the .05 level when a Bonferroni correction is applied.
Cohen's d is used to estimate effect size.
ORFWC= Oral Reading Fluency Words Correct
Retell= Number of words used in a student's retell of the text
Retell Quality= Quality score for retell (see Table 1)
Composite= Follows a formula provided described in Table 1

Variable	Test	Mean/Median Fall	Mean/Median Winter	t	z	p	d
ORFWC	Paired t-test	Mn=78.4 ± 6.7	Mn=93.2 ± 6.6	6.149		.000*	1.28
Retell	Paired t-test	Mn=22.3 ± 3.0	Mn=34.5 ± 3.8	3.108		.005*	.65
RetellQ	Wilcoxson	Mdn=1	Mdn=2		1.476	.140	
Composite	Wilcoxson	Mdn=195	Mdn=251		2.95	.003*	.34
STARSS	Wilcoxson	Mdn=939	Mdn=957		2.373	.018	

Research Question 2:

Is the Schoolwide Enrichment Model more effective for students identified as gifted or students in the general education population?

The statistical analyses indicate that the Schoolwide Enrichment Model is equally effective for all students. That is, the SEM is not more effective for gifted and talented compared to typical students. The improvement in the difference of Retell Quality from fall to winter shows that there is a significant difference, but the effect size is essentially zero.

Table 5: Comparison of Means/Medians for Gifted and Typically Developing Students
An independent samples t-test is used for ratio data. A Mann-Whitney U-test is used for ordinal data.
* = statistically significant at the .05 level when a Bonferroni correction is applied.
Equal variances are assumed for DiffORFWC and DiffRetell by Levene's Test for Equality of Variances.
DiffORFWC= winter Oral Reading Fluency Words Correct (ORFWC) - fall ORFWC
DiffRetell= winter Retell score – fall Retell score
DiffRetellQ= winter Retell Quality (RetellQ) – fall Retell Quality
DiffComposite= winter Composite score – fall Composite score
DiffSTARSS= winter STAR Scaled Score – fall STAR Scaled Score

Variable	Test	Mean/Median Gifted	Mean/Median Typical	t	z	p	Effect size
DiffORFWC	Ind. t-test	Mn=13.3 ± 8.0	Mn=15.2 ± 2.5	.294		.772	
DiffRetell	Ind. t-test	Mn= -1.75 ± 14.7	Mn=15.2 ± 3.5	1.699		.104	
DiffRetellQ	Mann-Whitney	Mdn= -1	Mdn= 1		2.56	.010*	.01
DiffComposite	Mann-Whitney	Mdn= 52	Mdn= 54		.162	.871	
DiffSTARSS	Mann-Whitney	Mdn= 21	Mdn= 23		.081	.935	

CHAPTER FIVE

The purpose of this study was to investigate whether the Schoolwide Enrichment Model in Reading had an increase on students' comprehension and retelling. The research questions that guided my investigations were: Is the Schoolwide Enrichment Model in Reading effective in increasing student comprehension and retelling of a text (question 1)? and Is the Schoolwide Enrichment Model in Reading more effective for students identified as gifted or students in the general education population (question 2)?

In this section, I discuss how the results regarding comprehension and retelling, when implementing the Schoolwide Enrichment Model in Reading, were related to research found in the literature review. In addition, I discuss possible limitations of the study and next steps for classroom practice.

Observations from the Results

Through the process of this research study there were numerous observations and connections to the research completed in the literature review. Much of the suggestions and statements in the literature review were confirmed in my research study.

Matthews et al. (2013) determined that there were no negative effects on the academic success of classrooms with gifted clusters compared to classroom without a gifted cluster. Similar growth rates were shown in reading for both students identified as gifted and those not identified as gifted. The data collected from my research confirms the statement made from Matthews et al.. I agree that there were no negative effects of the cluster groupings present in the research study, and there is data to support that similar growth rates were shown in students identified as gifted and those not identified as gifted. The enrichment program was equally successful in improving comprehension

in any student in the study. Furthermore, I think the consistent growth in all students is due to all students needing targeted instruction in comprehension and retelling in second grade. By second grade, students have *learned to read* through skills taught in kindergarten and first grade. When they reach second grade, they move into the phase of *reading to learn*. Comprehension is one of the key factors in ensuring a student is gaining meaning and understanding from their reading. Lastly, I believe the program was effective for the students that were not identified as gifted because they still required targeted instruction in comprehension completed in the small group setting.

Treffinger's (1988) work in gifted education focused on advocating for differentiated instruction for students identified as gifted and talented. Carolyn Callahan (1996) and Dona Matthews (1997) agree that the identification of gifted and talented students must match the program implementation and delivery to best serve the students' needs. Through the SEM-R, the students were provided with instruction at their level and in small groups of common interest. This type of instructional model was effective in meeting the needs of all students through the differentiated instruction that was provided in a small group setting. As confirmed in the data, the small group differentiated instruction offered students the opportunity to work at their own pace, engage with texts at their level, and response to their research in ways that best fit their learning styles.

Looking at research question 2: Is the Schoolwide Enrichment Model in Reading more effective for students identified as gifted or students in the general education population? I was not surprised that the data showed that SEM-R was equally effective for all students. With the cognitively gifted students already measuring above the benchmark levels, there is less room for growth due to their already high levels. With the

general education classroom measuring below or at benchmark levels, the general classroom population has more room to grow. This results in the opportunity for larger measures of growth than that of the gifted students.

Nell Duke, Alessandra Ward and David Pearson (2021) shared that effective comprehension instruction must include motivating literacy, engagement with text, teaching about texts, and teaching about comprehending. Furthermore, the IES Practice Guide (Shanahan, 2010) recommends that careful selection of the text, high quality discussion about the text, and engaging opportunities to interact with the text to develop interest all aid in the development of comprehension and retelling skills. The SEM-R program provided these types of instruction for comprehension. Based on the data, the increase of scores from the fall to the winter provides evidence that the SEM-R program is effective in increasing student comprehension in reading. I believe the SEM-R program is effective in improving students' comprehension based on the student selected topics and texts. With more interest in the subject and the text, students are more motivated to read and comprehend. I also believe the increase in comprehension lends itself to the selection of research questions about their topic. The students have a specific purpose, to answer their research questions, while reading the books and articles about their topic. With high interest in their topic and the need to present their findings on their research, I believe that the students were given internal and external motivation to comprehend the texts and explain their reading.

After completing this study, I presume many would then ask if there truly is a need for differentiated instruction among all students. As seen in the data, there is equal growth among the gifted and talented and the general education population. I lend this to

the specific, targeted instruction in comprehension at each individual students' level. This ensures that all students can receive appropriate leveled instruction within their needs and at an appropriate pace. Without the differentiation in small group instruction, I do not believe one would see the same measures of improvement in student comprehension and retelling.

Limitations and Potential Changes

While the study provided answers to the two research questions, I believe a larger population of students could provide stronger data to support the findings. I would be interested in completing the same study with all three of the second-grade classes within my school. I would use the same measurement tools, run the same statistical tests and then compare the results to the original data. Additionally, I wondered if an increase in the number of cognitively gifted students (ex: using 7 students) in the study would produce the same results for question 2. Would there be an increase in the statistical significance for question 2? Would there be a completely different outcome to question 2 with a larger population of gifted students?

Some other potential changes could be suggested. Would the outcome be different if 6 weeks were spent on the study versus the 4 weeks that were spent on the study? Would the results change if the study was completed again with the same group of students using a new topic? Would the data gathered on students be different if another assessment was administered? Would a more detailed assessment of student comprehension change the outcome of the study?

Next Steps

After completing this study, I believe that the Schoolwide Enrichment Model in Reading is an effective program to increase student comprehension and retelling. I would suggest the use of SEM-R and cluster groupings to colleagues with or without gifted clusters simply because it increased students' comprehension and retelling in a short amount of time. Through the small group instruction provided in cluster groupings I can effectively provide targeted instruction to students with common needs in a timely manner. I would like to continue the use of SEM-R in my classroom in the future after seeing the results it produced in my current classroom.

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