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Reading Interventions for High School Students with Reading Difficulties

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SPED 6960: Creative Project

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November 17, 2023

Reading Interventions for High School Students with Reading Difficulties

Becoming literate is important to the future of the students in classrooms, because it can lead to better life outcomes, such as graduation from high school and better job opportunities. Currently in our nation, two-thirds of students with disabilities in 8th grade read below basic levels and there is no significant improvement by the time the students reach 12th grade according to results on the National Assessment of Education Progress (NAEP; U.S. Department of Education, 2022). According to NAEP, Utah is performing higher than many other states however this does not include students with disabilities. Students and their families deserve more. Many of these students will struggle to graduate from high school and more importantly many of them will not be able to read and write at a functional level. Many of these students will not be able to read above a 5th grade level; in other words, they will not become functionally literate. According to Loe and Feldman (2007), students with limited proficiency who were followed into their adolescence failed more grades, achieved lower ratings on all school subjects on their report cards, had lower class rankings, and performed more poorly on standardized academic achievement tests than their typical reading peers. School histories of these same struggling students indicate persistent problems in social participation, including more years to complete high school, lower rates of college attendance, and lower rates of college graduation in comparison to their peers (Loe et.al. 2007). Many of these students' lives will be significantly different because of their reading deficits. This will affect their ability to secure family supporting jobs, to read contracts for mortgages and car purchases, as well as their overall quality of life.

To become a skillful reader, students need different types of skills, including language comprehension skills and word recognition skills. Scarborough (2001) visualized the

interconnectedness between strands or subskills in a rope. There are two major strands: word recognition and language comprehension; each strand is definable, measurable and somewhat independent. The word recognition strand includes phonological awareness, decoding and sight word recognition; instruction focused on word recognition is often referred to as code-focused instruction. The language comprehension strand includes background knowledge, vocabulary, language structures, verbal reasoning, and literacy knowledge and instruction focused on these elements is referred to as meaning-focused instruction. According to Moats and Tolman (2019) the end point of reading development, a skilled reader appears to scan the print effortlessly, extracting meaning and sifting through print, making connections between new ideas in the text and existing knowledge, and interpreting according to his or her purposes. At the stage of consolidated and fluent reading, it may seem that proficient readers are reading by sight or recognizing words as wholes. Laboratory studies verify, however, that when a good reader knows a word well, the brain recognizes the sounds, syllables, morphemes, and grammatical structure of the word (Adlof & Perfetti, 2014).

Researchers have examined the relationships among the strands to show how they influence one another at various points in reading development (Moats 2019). Earlier, word recognition skills or reading comprehension abilities are more predictive, but as students advance through the grade levels, their language comprehension skills become more important (Lonigan et al., 2018). However, if students miss just one strand of the rope, the rope will not be strong enough to continue to build and carry all the skills needed (Scarborough, 2001). As students move from lower grades to higher grades in school the expectation to move from reading monosyllabic words to multisyllabic words can prove difficult for struggling students. The older students get, the more expectations for reading are placed on them; this adversely affects students

who are unable to keep up with reading that is required of them in their school classes (Bhattacharya, 2020).

Many students are struggling with reading in classrooms across the country. Teachers need support and guidance in order to help increase the reading levels of students. Educators need to be able to access curriculum that will be able to help students in secondary classroom specifically grades 9-12. Teachers can make a difference, when given the correct tools and strategies to make a difference in classrooms and ultimately impact the lives of students.

Review of the Literature

Search Strategy

In researching teachers' ability to identify low readers in high school and to help them be able to graduate with a functional reading level, I conducted a search of literature to identify relevant studies. I searched ERIC, Education Source and APA PsychInfo. Using search terms "*reading difficulties in Secondary Schools*". The search yielded 309 possible articles, 39 were related to teaching strategies for high school students. I chose four articles that were interesting to me and works well with my overall topic. The four articles I found fit into two categories: word reading interventions and reading comprehension interventions.

Word Reading Interventions. Word reading or word recognition is the ability to recognize words or the ability to decode words. Two papers discussed effective word reading interventions for older students. Bhattacharya (2020) talked about teaching multi-syllabic words using either a syllabic or a morphemic approach to students in the secondary school setting that read at the third, fourth, and fifth grade level. Mullaney and colleagues (2014) reported results of an investigation of the effects of the Rewards Program for two high-school students.

Bhattacharya (2020). Bhattacharya (2020) discusses strategies to teach multisyllabic versus morphemic word reading to students in secondary settings. The purpose of this article is to share information to practicing teachers about two word-reading approaches: multisyllabic and morphemic analyses. Both strategies can be used to teach struggling readers to read long words.

The author encourages explicit instruction in syllabic and morphemic analyses, because deliberately teaching syllable and morpheme-based instruction over time strengthens struggling readers' recognition of letter-sound patterns such as individual syllables and morphemes in words and contribute toward the reading of complex words. The teaching strategies advised by the author include: using a finger to trace or underline each syllable in the word, saying each syllable unit aloud, counting the sounds connected with the spellings of the syllable unit, spending time teaching syllable division rules, and breaking the words into fewer meaningful parts such as prefix, base word, and suffix.

There are many specific intervention elements that the author has put forth to ensure implementing the strategy will be successful. The student should be able to identify syllables in words by recognizing that every syllable contains a vowel sound. The student should practice and learn the long sound, short sound and schwa pronunciations of single letter vowels. When applying the intervention elements, the student will begin to use flexible syllable segmentation. While using these interventions the instructor will need to correct erroneous sounds in the words and continuously repeat practice in breaking and blending words into syllables.

When teaching older students, the instruction should be explicit including sustained practice in reading multisyllabic words is highly recommended for improving word identification skills. Keeping in mind that as readers transition from lower to higher grades they are exposed to

more complex words, requiring them to be able to break the words up and elicit meanings in order to read target words.

Mullaney et al. (2014). Mullaney et al. (2014) discuss the effects of direct instruction using the Reward's program strategies to teach the separation of complex words to secondary students with disabilities. The purpose of this article is to evaluate the effects of the direct instructions Reward's program on reading complex words of two fifteen-year-old boys in a reading resource room.

The authors follow the Reward program. This program specifically teaches how to read long words by splitting the words up into smaller word parts. Each participant is given a workbook to work through. The program teaches a syllable technique to the participants that breaks the words into smaller word parts and teaches the meanings of the word parts for the student to learn what the whole word means. The program uses a lot of praise to encourage the student in success. Included in the program is spelling and vocabulary that is within each lesson.

The specific intervention includes: 20 lessons in the program with the eight final lessons focusing on decoding strategies. The program is systematic and intentional with instruction. The instructor should consider that the participants need to read at a 3rd grade level to participate and the group size should be at least 2 or more.

The participants were 15-year-old males in Special Education. The first participant was a 9th grader with a specific learning disability, who struggled in reading, writing, and math. He was able to read at a 2nd grade level and his writing was 3rd grade level. He did enjoy school and needed to reach his target skills. The second participant was also in the 9th grade. He was in Special Education with an Other Health Impairment and Autism Spectrum Disorder. He struggled with a reading level at the 4th grade and writing at the 5th grade level. He was a hard

worker; however, he was very quiet and did not interact with peers. He was chosen for the program because he needed to improve his reading skills.

According to the results of the study, the students improved significantly. Participant one was able to complete the program. Participant 2 was unable to complete the program because the semester ended prior to completion. Overall, the students stated that they did not enjoy it but did note that they felt more comfortable towards the end of the intervention. The authors were able to see drastic results from the participants.

Reading Comprehension Interventions. Reading comprehension is the ability to read words and process words to understand meaning of the text. Reading comprehension is important because it takes all the smaller skills that have been learned and puts it all together. This helps the reader know what message the author is trying to convey to the audience. The next two articles focused on reading interventions. Poch and Lembke (2018) describe comprehension strategies include routines, procedures and actions taken to help the students make sense of what they are reading. Swanson and colleagues (2017) focus on interventions targeting background knowledge and vocabulary by telling the students the purpose of the activity and clearly explaining and modeling.

Poch and Lembke (2018). Poch and Lembke (2018) discuss the promoting of content knowledge for secondary students with disabilities through comprehension strategies. The purpose of the article is to provide a research-based recommendation in adolescent literacy to practicing teachers.

The strategies the authors discuss are when students with learning disabilities struggle to make progress and need to have explicit instruction and modeling, more scaffolding is needed such as reteaching vocabulary or targeting a smaller chunk of the content. To do this the authors

promote two strategies in the classroom to help the students have more success including using double entry journals and anticipation guides.

When using the double entry journal strategy, teachers help students identify up to five direct quotes from a short text the student is currently reading. The text (that the teacher wants the student to be exposed to) should be read by the student either in a group or individually. The teacher should use the model-lead-test (I do, we do, you do) by modelling the first response and then have the student complete the remaining statements individually. After student are done, the responses are discussed in a group.

The anticipation guides follow a similar format. The teacher identifies a short selection of two pages or less and creates no more than five thematic statements that capture the main idea of the text. The statements are intended to activate the students' background knowledge and challenge the students' beliefs. The instructor explains the strategy and the preview statements and uses the model-lead-test strategy.

Both strategies discussed activate the students' prior knowledge to help scaffold comprehension and include routines using the sequenced steps. The teacher should engage the students in activities to promote discussions. Additionally, teachers should consider the importance of reflection on their implementation of the strategy and if more supports might be needed. Teachers should be careful about limiting exposure to text for students with disabilities. These strategies can be used in different content curriculum. It is important to understand the necessity for more suggested strategies to help teachers be able help more students. Overall students with disabilities can benefit from explicit instruction using comprehension strategies.

Swanson et al. (2017). Swanson et al. (2017) discuss the importance of enhancing adolescent comprehension of text by building vocabulary knowledge. The purpose of this article is to inform practicing teachers how valuable vocabulary is to reading comprehension because it has the ability to predict reading comprehension across all grade levels. Vocabulary also has a correlation with background knowledge suggesting students with stronger vocabularies have greater background knowledge.

Through this article, the authors explain strategies for teacher-directed, explicit vocabulary instruction, text-based vocabulary instruction, and morphology-based vocabulary instruction. The specific teaching strategies include: (a) Using clear statements about the purpose and rationale for learning new vocabulary, (b) using clear explanations and (c) modeling of instructional activities. The instructor should use guided practice with feedback until the students achieve independent mastery. The students should all have active participation and draw upon knowledge of familiar words to aid them in deriving the meaning of unfamiliar but related words.

The specific intervention elements include relating new vocabulary to other words and concepts and providing students with several opportunities to practice using the new vocabulary within context. It is important that vocabulary exercises are meaningful and require higher-level thinking and processing. This will ensure that the student will use oral language during explicit vocabulary instruction effectively. Specifically for struggling readers and students with disabilities, teachers should provide additional support during text reading to encourage higher quality inferences and greater gains in vocabulary knowledge. Authors also state that it is vital that students read more in order to increase word identification, spelling ability, vocabulary and

reading comprehension. When practicing these strategies teachers should consider the co-teaching model and keep in mind that all students benefit from explicit instruction of vocabulary.

Summary

Learning to read can be a difficult task: there are many parts that come together to help solidify the overall process for reading. Scarborough has compared reading to a rope and using that visual, an understanding of how daunting the process can be become especially for students that have disabilities. Fortunately, research has shown there are specific instructional techniques teachers can use to successfully teach reading to struggling students.

Specifically, to teaching word recognition skills to older students, both Mullaney et al. (2014) and Bhattacharya (2020) discuss chunking the words by making smaller pieces and learning about each part of the word. This is reflected in the word recognition portion of the reading rope, which is one of the essential parts of reading. The authors strongly suggest teachers teach these skills explicitly to start building the foundations of reading. The strategies presented help the students learn to break the words up. These processes give students confidence to keep trying.

While all the articles touch on the necessity of background knowledge, the articles by Poch and Lembke (2018) and Swanson et al. (2017) offer strategies to increase reading comprehension. While the word recognition is the base of Scarborough's reading rope, language comprehension strengthens the rope, reiterating that all pieces are vital to have strong reading comprehension ability. The language comprehension portion of the rope includes background knowledge and vocabulary knowledge. Poch and Lembke give teachers ideas of how to use guides and journals to help strengthen the background knowledge of the students and Swanson et al. gives strategies for increasing vocabulary knowledge.

A common theme across all four articles was that teaching struggling students can be done with explicit instruction. Explicit instruction includes scaffolding instruction by first modeling the specific skill and then assisting the students through the learning process, guiding them, and supporting them as they perform skills independently. Secondly, the articles all discussed the value of feedback. Feedback needs to be given immediately and precisely. It is important and valuable to give the feedback in a way that the students understand the error and the correction. Finally, the students should receive positive affirmations throughout the instruction increasing the students' confidence (Mullaney et al., 2014).

Scarborough's rope is invaluable to teaching, word recognition as well as language comprehension, they make up individual strands that can form the strong bond of reading, with the ultimate goal of reading comprehension. Students need all the skills from the word recognition portion and the skills from the language comprehension in order to become literate. However, students lacking in word recognition skills may not be ready for comprehension activities. It is important to know which skills students need to work on.

The Current Project

Many students in classrooms struggle with reading from early grades through high school. Are there strategies available for teachers, to be able to support and help increase the reading levels of students? Is it possible to help students at the secondary level; more specifically students that are between the 9th and 12th grades? Are teachers able to make a difference, are there strategies that can be implemented into classrooms to make a small difference in the lives of the students? With the right strategies and supports in place students will be more successful and have better outcomes, for life, after graduation.

In this project, I conducted a literacy assessment report and an intervention report. It is important to determine interventions that would be the most beneficial for my students and their current abilities I chose an array of assessments for word strategies and reading comprehension. I want to become more fluent in my delivery of the assessments and the interventions, in order to keep it more interesting and correctly paced for student engagement.

Literacy Assessment Report¹

Background Information

SG is a 17th year old student in 11th grade. She has been receiving services for Special Education in the school district since 2018. When given the Kaufman test for Educational Achievement assessments for math concepts and applications she scored a standard score of 72, indicating she is low, for the reading composite she scored 66 standard score indicating that she is very low and in the 1 percentile for her age. This information from the KTEA testing indicates that both scores from reading and math are two standard deviations from the mean and SG would benefit from explicit instruction. When looking exclusively at reading comprehension her standard score was 69 and her letter and word recognition standard score was 66. The reading comprehension is the age equivalent of 10 years 2 months, whereas the letter and word recognition is 8 years 10 months, SG's overall performance in reading assessments has been low often testing in the 3rd-4th grade range, this is shown in her KTEA testing as well as in some of her classroom assessments. She has been primarily tested by computer-based programs. However, when working with SG one on one, she seems to have more sight recognition of familiar words and struggles with decoding.

Behavioral Observations

I conducted all assessments in May of 2023, at the end of SG's junior year in high school. SG participated in the assessments when asked to do so. SG seemed to grow bored with the assessments on the computer. SG's attention and effort were better in the short assessments. I believe the current assessments that were given in a one-to-one setting are accurate. I do not believe the computer-based assessments are completely accurate. The student was in a classroom

¹ Note that the description of the assessments come from a pre-made template and were not written by the student-author.

setting with 27 other students. Some students completed the assessment prior to SG and this seemed to have been distracting for SG. SG looked like she wanted to finish the assessment and just clicked through answers without thinking about the questions being asked of her. This could be because SG did not understand the importance of the assessment being given to her and that data was being collected about her knowledge in craft, structure, main ideas, and key details.

Previous Assessment Data: Dreambox Reading Plus

Reading Plus is a computer-based program that assesses fluency, comprehension, vocabulary, stamina, and motivation. The focus of reading plus is the components of reading instead of a reading age. Reading Plus is a guided, silent reading supplementary intervention. All students in our high school complete the Reading Plus assessments in their ELA classrooms, as part of the schools reading improvement plan. The students take the beginning of year assessment, middle of year assessment, and end of year assessment.

Comprehension and Vocabulary

During the initial assessment, SG did not demonstrate the ability to read and comprehend text at the 1st-grade level. SG demonstrated knowledge of academic vocabulary words at the 1st-grade level (Grade level equivalent: 1.8). SG's overall reading proficiency, based on comprehension level, vocabulary level, and reading rate, was below 1st-grade level.

Silent Reading Fluency and Stamina

Because SG did not demonstrate the ability to comprehend 1st-grade-level text, it was not possible to establish a valid comprehension-based silent reading rate (fluency measure) for SG on Reading Plus.

Motivation

One section of the assessment asks students about their motivation to read. SG's self-

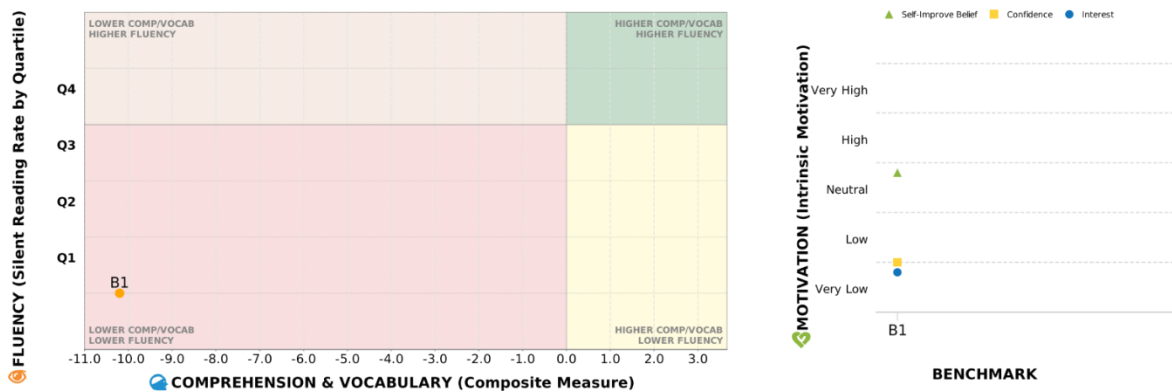
improvement belief related to becoming a better reader was in the neutral range. SG' s self-reported confidence as a reader was in the low range. SG also reported very low interest in reading.

Figure 1

Reading plus Scores for SG

TT 11th LA Glathar/Emery P4

Term: 2022 - 2023 Term



Assessment Procedures and Results

Based on classroom observations and previous assessment scores from Reading Plus, I wanted to know SG’s abilities due to the discrepancies between some of her scores. I chose each of these assessments to provide a clearer picture of what SG’s reading level actually is and what her strengths and weaknesses are.

Test of Word Reading Efficiency

The Test of Word Reading Efficiency (TOWRE) assesses a student’s ability to automatically recognize and decode words. This is a norm-referenced test, or a test that indicates a child’s performance as compared with other students in the same age range. The Phonemic Decoding Efficiency subtest consists of a list of nonsense words, which assesses the student’s ability to quickly decode unknown words. Students have 45 seconds to read as many of the

nonsense words as they can.

SG's scaled score on the Phonemic Decoding Efficiency subtest was 58, placing her below the first percentile. SG's score indicates she is in the profound difficulty range as compared with her age-level peers. SG's ability to decode nonsense words is minimal. During the assessment she tried to make sense of the nonsense words by pronouncing them as real words. An analysis of the words she read correctly and those she read incorrectly suggests SG has trouble with the short vowel sounds.

Dynamic Indicators of Basic Early Literacy Skills

The *Dynamic Indicators of Basic Early Literacy Skills* (DIBELS) (now Acadience) is a set of individually administered assessments of early literacy skills. These assessments are administered via one-minute timings and determine fluency in several different areas of early literacy, which include letter naming fluency, phoneme segmentation fluency, nonsense word fluency, and oral reading fluency. Because SG is a senior in high school, I administered the Oral Reading Fluency and Maze assessments only.

Oral Reading Fluency (ORF). The DIBELS *Oral Reading Fluency (ORF)* measure is a standardized, individually administered test of accuracy and fluency with connected text. Student performance is measured by having students read a passage aloud for one minute. Words omitted, substituted, and hesitations of more than three seconds are scored as errors. Words self-corrected within three seconds are scored as accurate. The number of correct words per minute from the passage is the oral reading fluency rate. The median score of three passages administered is used to determine the student's mastery level. Because previous assessments indicated SG reads at a fourth-grade level, I administered ORF at that grade level. SG read 96 words correct per minute on the first passage, 103 on the second, and 107 on the third passage.

SG's median ORF score was 103, which is considered at grade level for the passages (i.e., fourth grade); however, the score indicates she needs intensive support considering she is in twelfth grade. To determine at which grade level SG reads at a level needing intensive support, I administered one ORF passage each at both fifth and sixth grade. On the fifth-grade passage SG read 78 words correct per minute and on the sixth-grade passage she read 68 words correct per minute. Both scores indicate a need for intensive support. SG experienced difficulty with decoding and felt pressured by the timed aspect of the test. SG was able to process the content of the passages and could answer comprehension questions at the end of the passages.

Core Maze. A maze reading assessment is a task that measures how well students understand text they read silently. The maze task differs from traditional comprehension in that it is based completely on the text. After the first sentence, every seventh word in the passage is replaced with the correct word and two distracters. Students choose the word from among the three choices that fits best with the rest of the passage. Capable readers understand the syntax of what they read and the meanings of the words as they are used in the text. Some students with reading difficulties can't comprehend what they read well enough to choose words based on semantic and syntactic accuracy. A maze reading assessment can identify these students and measure changes in their reading behaviors as the result of instruction. Students are given 3 minutes to take this assessment. The Maze assessment is given to all 9th grade students in our school via computer on the Canvas Learning Management System. All students in SG's resource class were given the same grade level (i.e., ninth grade). This was one of the first assessments given to SG for this report, at the same time it was also given to the resource class with students from each grade level beginning at ninth grade through twelfth grade.

SG scored nine words correct out of a possible 53 words. This indicates a need for

intensive intervention and extensive reading difficulties.

San Diego Quick Assessment of Reading Ability

This test measures the recognition of words out of context. Generally, proficient readers are equally accurate both in and out of context, while struggling readers tend to overly rely on context and recognize words in context more easily than those out of context. The test consists of 13 graded lists from pre-primer to eleventh grade level. The words within each list are of about equal difficulty while each list becomes increasingly more difficult. Students read lists until they reach frustration level (three or more errors). Students complete the grade level list for their frustration level even if they have more than three errors.

When reading lists of words out of context, SG is able to read 5th grade words at an independent level. She is able to read 5th grade words at an instructional level, or the level at which she can read when provided with instructional support. SG reached frustration level at 6th grade level.

Interpretation of Assessment Results

The scores on the various reading assessments revealed two main patterns in SG's reading behavior. First, it seems SG does not give her best effort during computer-based assessments. This is particularly apparent in the Reading Plus assessment where she scored below the first-grade level. During the Maze assessment, SG also scored particularly low with only 9 words correct within the 3 minutes. From behavioral observations, it seems that SG gets distracted easily while doing the computer-based assessments and clicks through quickly to get it done without understanding the importance of these tests for her future. During the one-on-one assessments, SG was engaged in the assessment process and these indicate she currently reads between at an upper elementary level (between fourth and sixth grade).

The second pattern apparent from her assessments is that SG has low decoding skills and seems to read words from memory. This is shown in her inability to read nonsense words, where she scored below the first percentile, but her ability to read words in isolation and context between the fourth and sixth grade level. In all assessments, she was unable to use strategies to read unknown multi-syllabic words.

Recommendations

To ensure that SG continues to make progress, it is important that she received ongoing support. Below, you will find two sets of recommendations that are based on SG's specific needs. One set is for SG's family to implement at home and the other set is for her teacher(s) to implement at school. With the ongoing assistance, encouragement, and practice described, SG will continue to improve in reading.

Recommendations For Home

- SG should practice reading at home daily.
- SG should find anything that she enjoys reading to practice (although texts written to friends through smart phone or other messaging services could be a problem because they may have words that are misspelled or shortened).
- SG should read aloud to make sure that words are pronounced correctly.
- SG could read aloud and record self and listen to it.
- Reread stories or passages.
- Summarize the story read to a family member.

Recommendations For School

- Offer reading materials at a level that the student can read; for now, anything at a fourth

or fifth grade level seems appropriate. SG has requested to borrow books from some of her teachers that have a classroom library.

- Provide audio along with the printed text for harder texts.
- Read aloud to the student.
- Work on basic decoding skills and multi-syllabic word attack.
- Use vocabulary activities to help the student understand the text better.
- Use guided notes for the student to participate in the reading.
- Use reading groups that pair up the student with another student reading at a different level.
- Have SG summarize or answer questions about the text she just read.
- Some of these suggestions are costly. However, there are online articles and resources that can be utilized at a lower cost.

Reflection

This literacy assessment report taught me a lot about the reading level of my student but also, more about the importance of using different types of assessments. I noticed that using computer assessments can be a useful tool when assessing reading comprehension, however it was also clear that students do not always try their best. Some factors to take into consideration when using this type of assessment is that students can grow bored with the assessment or not find the readings enjoyable. This will cause them to guess and to quickly get through the assessment. This will result in an underestimation of their reading level, rendering the assessment invalid. Timed assessments, such as 1 minute or less, are quick but also do not give a full picture of the student's abilities. An essential part of the assessment process is conducting the assessments with fidelity to ensure that the results are accurate and can be useful in driving

instruction. A combination of both computer-based assessments and timed individual assessments might be the best option to get an accurate picture of the reading capabilities of a student. When students reach the secondary level of education, especially high school, it is important to include them in the assessment process. Communicate with the students so that they know that assessments given are important indicators of their abilities and could potentially lead to where the student is placed for classes and what type of classes that will be needed for their success. To illustrate, SG struggled with the computer-based assessment scoring at a 1st grade level. This gave me the impression that she reads very low for an 11th grader. But when I personally conducted the shorter assessments, she performed at a higher level between 4th and 5th grade. This example underscores the importance of using multiple tests that examine different parts of reading. When a student has weaker decoding skills, this affects the student's automaticity, the effort for decoding becomes laborious and the student is unable to think about what they are reading. Scarborough (2001) shows us that the weaker skill affects the overall strength of the rope.

I have three main take aways from this project that I will carry on in my teaching career. First, computer-based assessments are a great tool. However, in order to use them more successfully, a teacher needs to know the student and their needs. Maybe the assessments should be broken into smaller time fragments that the student can handle better. Another important thing a teacher should recognize is the student's mental state. Will the student be able to handle this type of assessment on a particular day or should that student take it at another time. Second, I have also learned that when assessing reading it is important to use a battery of assessments not just one and done. Each assessment can provide different information about students' skills. Finally, giving assessments to the student personally allows for the teacher to see and hear

students' responses_which gives another level of understanding for the teacher. In the future I will pay better attention to my students. I will watch for cues from them to know when and which skills to assess. I will also communicate the importance of the assessments to help them prepare to take them. While the preparation and timing may not always be perfect, it will be in the best interest of the student to work with them as much as possible, in order to receive the best outcomes.

Intervention Report

Setting

The intervention took place in a high school resource classroom. While I teach approximately 47 students across 5 classes, I chose to focus this intervention on my 9th period, Directed Studies Reading. The class is right after lunch and is 70 minutes long with the exception of Fridays. On Friday's classes are 55 minutes, because of early release. The students have 10 classes within an AB (purple and white) schedule. The students have Directed Studies Reading 9th period on white days.

The class consists of 8 students, with 4 Seniors, 2 Juniors, and 2 Sophomores. The students are a mix of 3 classifications for Special Education, 1 other health impairment (OHI), 2 autism, and 6 specific learning disability (SLD). The majority of the class reads at the same level of 6th grade instructional, a couple higher and a couple lower. Throughout the year, students were moved into the class or moved out of the class. Student BM was added to the class; his reading level is below first grade. However, I included him in the program because he was the only outlier and I did not want him to feel excluded. I accommodated his testing by reading the assessments out loud to him, only because these assessments are used as term grades. Although this may have not mattered, the student chose not to attend frequently. For this report I will focus on the progress of students that were scheduled for the class for most of the term.

The Intervention

The Rewards program was created by education authors and literacy experts as a series of lessons for a short-term reading and writing intervention. The program is research-based and aimed at struggling readers in grades four through twelve. The version of Rewards I used in this intervention report helps students who struggle with reading multisyllabic words and

understanding curriculum content. The program uses direct and explicit instruction to teach students a method to decode multisyllabic words. Part of this method teaches students the meanings of prefixes and suffixes, which enables students to infer the meaning of a word in a given context. Besides this method for breaking apart words, Rewards also addresses word and passage level fluency. Furthermore, Rewards includes attention to vocabulary words. Students practice reading and learning the definitions of specific words prior to reading a passage to help prepare them for reading and comprehending the passages.

The Rewards program consists of five units. Each unit consists of four lessons, after two lessons there is a review including ten matching problems which are prefixes and suffixes and definitions of multisyllabic words. A typical sequence in a unit is: lesson 1, lesson 2, review, lesson 3, lesson 4, review, check-up.

Procedures

I implemented the Rewards program at the start of the 2023-2024 school year. Before implementation, I assessed the students in my class to ensure they were reading at a fourth-grade level. The assessments consisted of two Rewards assessments: a fluency passage and multisyllabic word fluency (63 words, 242-word parts) and the San Diego Quick assessment, which all students at our school complete each year. I will discuss the results below. Some of the students wanted to do their best and took longer on the multisyllabic word fluency. After the assessments were conducted, I started implementing the Rewards program. Table 1 shows the progression through the Rewards program. We completed the first two units of the program within the first eight weeks of school. A typical lesson takes between 50 to 60 minutes. The beginning of school is a hard time for students adjusting to being in class all day versus free time. Therefore, I split the lessons into 20–25-minute segments to help with student engagement.

As time progressed, the students wanted to complete the lessons quicker and wanted the full lessons each day. The checkups and assessments took the full lesson time as they included decoding multisyllabic words, academic vocabulary, meanings of prefixes and suffixes, and spelling. To ensure I implemented Rewards as it was intended, I planned to complete an implementation fidelity checklist at the end of each day through a google form.

Table 1

Implementation schedule of the Rewards program for the first eight weeks of school.

Week	Mon	Tue	Wed	Thu	Fri
Aug 14-17				First day of school	
Aug 21-25	Started Testing		Testing took a long time because of the amount of tests.		Some students took longer because they were trying their best. Others did not know the words.
Aug 28-Sep 1		Lessons can take up to 50 minutes per lesson. Lesson 1		I did 20 to 25 minutes per class. Lesson 1	
Sep 4-8	Labor Day		Lesson 2		Lesson 2
Sep 11-15		Lesson 2 review/Lesson 3		Lesson 3	
Sep 18-22	Lesson 4		Lesson 4		Lesson 4 Review/Check up
Sep 25-29		Lesson 5 Student wanted to do the lessons quicker		Lesson 6 Their stamina is better and can tolerate	

				the full lessons.	
Oct 2-6	Lesson 6 Review/Lesson 7		Lesson 8		Lesson 8 review/checkup
Oct 9-13		San Diego Quick			

Students’ Progress Through the Program

Students completed the reviews and checkups for units 1 and 2. The checkups consist of 20 words in the decoding multisyllabic words, they are listed in four rows of five words. The instructions are to practice all the words in each line. The teacher asks students to read one line only. The academic vocabulary has 10 multiple choice questions. The student is asked to circle the letter next to the words that best express the vocabulary word’s meaning. In the next part of the assessment, students are asked to fill in the blanks for the meanings of prefixes and suffixes. The teacher then will dictate the word for the students to spell. Finally, in the forming word families the student is given three base words and five prefixes and suffixes. Using the word parts to make five words that they have heard before. They are allowed to use the parts more than once. Bonus points are given for completing the forming word families section.

The checkup in the Rewards program is valued at 100 points possible. I reduced the points possible on checkup to be a value of 33 points possible because it was used for a classroom grade. The 33 points includes a 5 extra points section. On the first checkup, the complete group scored an average of 27.8 points (SD 3.3). The scores for the second checkup were a little higher, with an average of 28.7 (SD 2.8). These scores indicate students’ scores became more similar to each other in the second unit, and slightly higher. Because of the small sample and the fact that there is no control group, we cannot be sure the intervention is the cause

of the changes. The complete group was included in the overall scores because the outlier (BM) had the test read to him, which is not the way the rest of the group received the test.

Pre And Posttest Data

The San Diego Quick Assessment (SDQA) was given as pretest in the first week of school, after summer break. Most of the students I have not taught for a couple years and did not know reading levels for them. SG I suspected would be around 3rd grade level. SG performed higher than that at a 6th grade level. EB I would have place at around 6th grade but EB is 10th grade. EB processes information slower, with time given is able to work at a higher level. KR 's frustration level was 4th grade. KR was one of the students with a lower SDQA. When looking at the group together, 67% scored below the average of 6.3.

Although not much time was given for improvement after 8 lessons with the Rewards program, the students were able to increase their SDQA score. KR was lower than most of the class and was able to go up to 4th grade instructional reading level. KR participated in the lessons although is distracted easily. KR might do better with individual one to one reading support. BM is low with no improvement for lack of coming to class and he did not take the post SDQA. BM needs one to one intervention. See Table 2.

After administering the posttest, there were small changes in the sample group, only 7 of the original nine participants took the post SDQA. As a whole, the group scored lower, but it seems that BM and HB were were major factors in this decrease. Without BM and HB, the group increased by about over one full grade level (see Table 2). After administering the post SDQA three of the seven students were over the average of 7.5 grade level. Additionally, there were some students that made exceptional progress. For example, KR increased an entire grade level which is really good for only completing two units of intervention. I believe that with more time

and completing more lessons KR will continue to improve. SG also improved a grade level. EB and KH may have had some words they weren't able to read correctly but overall were at the top of the reading levels.

Besides the overall slight increases on the SDQA, students also increased their multisyllabic word reading. Tables 3-8 present the multisyllabic words each student missed at pretest and how they did at posttest. In general, all students read at least one multisyllabic word more correct at posttest. This is an indication that the Rewards program increased their skills in multisyllabic word reading. Specifically, AG initially missed two sixth grade words (necessity and relativity) and two 7th grade words (sundry and enumerate) and then was able to correctly read those words after two units of intervention. CS improved two words, commercial and acrid, after the intervention.

One of the students who started lower than ideal (3rd grade instructional) made lots of progress. KR improved three words but increased her instructional level (exclaimed, served, and certainly).

BM cannot decode, he has excellent memory and I read to him the checkup. His scores were above 100% when given the bonus points. If he had to take the checkup without someone reading it to him, he would not be able to complete it. For example, part 1 is decoding multisyllabic words. There are four lines of word, I asked him to read one line of five words. The words consisted of; unfortunate, billion, reproduce, abnormal, and powerlessness. BM struggled with all the words but was able to get three words with help of breaking the words into smaller chunks. Ultimately, he could not decode unfortunate and reproduce. BM completed the bonus section earning some extra credit by having me read to him the word parts. He then circled the

base words and then was able to complete the section by adding prefixes and suffixes to the base word.

Table 2

Assessment scores for the class receiving the Rewards intervention

	Pre- San Diego Quick	Post- San Diego Quick
Average for complete group	6.3	5.8
Average for group minus BM and HB	7.1	7.5
Standard deviation for complete group	3.1	4.0
SD for group minus BM and HB	2.7	2.6

Note: The San Diego Quick scores are represented by average instructional reading level; i.e., the grade level where students can read the word list of ten words with two or fewer errors.

Table 3

Words missed per grade level out of 10 words read on the SDQA for SE

Word Missed	Grade level	Pre SDQA	Post SDQA
dominion	7	-	-
impetuous	7	+	-
enumerate	7	-	+
condescend	7	-	+

Note: - = did not read the word correctly; + = read the word correctly.

Table 4

Words missed per grade level out of 10 words read on the SDQA for KR

Word Missed	Grade level	Pre SDQA	Post SDQA
exclaimed	3	-	+
several	3	-	-
served	4	-	+
wrecked	4	-	-
certainly	4	-	+

Note: - = did not read the word correctly; + = read the word correctly.

Table 5

Words missed per grade level out of 10 words read on the SDQA for EB

Word Missed	Grade level	Pre SDQA	Post SDQA
nausea	10	-	+
barometer	10	-	+
superannuate	11	-	+

Note: - = did not read the word correctly; + = read the word correctly.

Table 6

Words missed per grade level out of 10 words read on the SDQA for CS

Word Missed	Grade level	Pre SDQA	Post SDQA
commercial	6	-	+
necessity	6	+	-
dominion	7	-	-
capacious	8	-	-
intrigue	8	-	-
delusion	8	-	-
acrid	8	-	+

Note: - = did not read the word correctly; + = read the word correctly.

Table 7

Words missed per grade level out of 10 words read on the SDQA for SG

Word Missed	Grade level	Pre SDQA	Post SDQA
scanty	5	-	-
abolish	6	-	-
apparatus	6	-	+
necessity	6	-	-
relativity	6	-	-

Note: - = did not read the word correctly; + = read the word correctly.

Table 8

Words missed per grade level out of 10 words read on the SDQA for KH

Word Missed	Grade level	Pre SDQA	Post SDQA SDQA
acrid	8	-	+
conscientious	9	-	-
gratuitous	10	-	-

prevaricate	11	-	+
superannuate	11	-	+

Note: - = did not read the word correctly; + = read the word correctly.

Table 9

Words missed per grade level out of 10 words read on the SDQA for AG

Word Missed	Grade level	Pre SDQA	Post SDQA
apparatus	6	-	-
necessity	6	-	+
relativity	6	-	+
dominion	7	-	-
sundry	7	-	+
enumerate	7	-	+

Note: - = did not read the word correctly; + = read the word correctly.

Table 10

Words missed per grade level out of 10 words read on the SDQA for BM

Word Missed	Grade level	Pre SDQA	Post SDQA
road	1	-	
live	1	-	
bigger	1	-	
always	1	-	
spring	1	-	

Note: - = did not read the word correctly; + = read the word correctly.

Implementation Fidelity

To ensure I implemented the Rewards program with fidelity I developed an *Overall Fidelity Checklist* (see Appendix A) and a daily fidelity checklist (see Appendix B).

Rewards Overall Fidelity Checklist

The first fidelity item is screening to ensure all students are reading at an appropriate grade level. I gave all the students the assessments suggested by the Rewards program. This

included the San Diego Quick Assessment, a fluency passage provided by the program, Multisyllabic Word Reading Fluency Pretest/Posttest. Another teacher in my department wanted to get a baseline for her students as well, so we worked together during our preparation periods to assist each other in assessing all the students we teach. This proved to be a very arduous task, because there were a lot of students to test. Working together allowed me to be able to get my assessments completed in a timely manner, in order to begin the intervention program. During the assessment periods, students were moved in and out of the classes as well as switching class periods. Of the eight students in my 9th period Direct Studies Reading class, seven read at least at a fourth-grade level. One student, BM was placed in the class later and did not read at the expected level for Rewards. However, as mentioned above, I decided to include him as not to make him feel an outsider.

The second fidelity element states to form small instructional groups (i.e., between 2 and 12 students). My Directed Studies Reading class has a total of 8 students. I have decided to instruct the class as a whole.

The third element includes collecting pre- and posttest data to see benefits of the Rewards program. I have collected the data from using the San Diego quick and a fluency passage provided by the Rewards program.

The fourth fidelity element is about being prepared to teach the lessons, specifically for the first unit of four lessons. I gathered the materials needed for the first 4 lessons before starting the program. I had all my lessons ready for the students, in order to move as soon as the students were ready to begin the next lesson. Being prepared also includes preparing vocabulary instruction. I decided to teach the students the vocabulary using examples. The other option included using illustrations and visuals. The students in my class are primarily older students:

four Seniors, two Juniors, and two Sophomores. I wanted to respect their maturity. A third element of being prepared included reviewing the materials before teaching. Before implementing the program, I had the reviews ready for the first unit. When I prepared the lesson materials for unit 2, I included the review sheets.

The fifth fidelity element includes teaching the lesson following five essential principles: (a) provide systematic instruction, (b) elicit frequent responses, (c) provide immediate corrective feedback, (d) maintain a brisk pace, (e) provide practice. Throughout implementation, I followed the lesson manual, following the scripts and using the student friendly definitions for vocabulary. I encouraged choral, partner and written responses by following the scripting used in the lessons. I listened as the responses were given, and when incorrect, I said the word correctly and then had the students repeat it again. I maintained a brisk pace. I watched the students for clues that they were not engaged, for example when students were looking at their phones or were frequently losing their place in the lesson. Sometimes I stopped the lesson for the day because I could not get them back on track, this was very frustrating because I wanted to continue but the students were not engaged. I decided to reward students with a pizza party when the program will be completed to help them stay engaged. I tried to use my daily checklist to help me follow the lessons using the principles (see below).

The sixth overall fidelity element states to use progress monitoring assessments. I conducted the checkup assessments for the first two units. When I prepared for unit 2, I made sure to have all materials necessary to teach, including the assessment. The final fidelity element talks about sustainability of the program by providing other teachers with tips. I have not yet completed teaching the Rewards program; however, teachers can remind the students to break the words into sections and read each section individually, then read the whole word. Another

benefit would be to discuss the meanings of prefixes and suffixes to encourage the student to remember meanings and help them to learn more word meanings.

Daily Fidelity Checklist

When I started this intervention, I was determined to follow the Rewards program with fidelity. I wanted to see what results could be attained if followed with fidelity. I created an overall fidelity sheet and a daily data sheet to help me with this goal. Unfortunately, my daily fidelity sheet was on Google Forms. I struggled with sending it to myself every other day. My other duties as a teacher took my attention. I did the daily fidelity checklist for lessons 1, 2, and 8. They were taken the first three sessions and close to one of the last. It would have been better to have them printed out on paper on my desk, or another option I could have done would have been to create a QR code and taped it next to my desk so I could have completed it on my phone, right after completing the class. I did find that creating the document helped me to memorize the important fidelity measures and I did find that the fidelity questions ran through my mind. When delivering the intervention, I would ask myself: Did I follow the fidelity checklist? When reading the scripts for the program it helped me work towards the fidelity expectation. I only filled out the forms on four occasions out of the 12 lesson periods. Below I present bar graphs with counts of my daily implementation based on those four occasions. Overall, I was consistent with always or almost always completing the checklist questions. By writing the checklist, it helped me to know what was important to me when completing each lesson. Even though I did not complete the checklist every day I did think about the checklist when delivering the instruction.

Reflection

Getting started with the intervention took longer than I originally thought it would. Doing the assessments to determine reading levels took 2 class periods. During a typical class period, I

started the class with a bell ringer that took 10 minutes. I then moved onto a Rewards lesson, which I usually taught approximately 20 minutes. We finished class by reading a short story and doing writing, projects, or other comprehension activities. As the weeks moved by in the intervention the students began to request completing full lessons in the Rewards program during one class period. While the students have expressed not liking the lessons, they want to get them completed. My own interpretation of this is that the students may not like the lessons, they do like knowing what is going to be happening in class and the predictability of what the lesson is going to be. They want the stability of the lessons daily.

My students would have made more progress with time. If I could have provided the intervention daily, I could have finished the lessons I had intended (Units 1-3; Lessons 1-12). If the students had access to the program daily, they would have less time to forget what we are working on. Being able to implement a program with the dosage as intended (every day for about 50 minutes) would help students make more progress, but this was not possible due to the AB schedule my school uses.

Overall, I find that Rewards is a valuable program. By using the program daily, I see the way that different strands of Scarborough's rope are utilized throughout the program (2001). In the first 12 lessons of Rewards the students are practicing the word recognition pieces such as decoding, phonological awareness, and sight recognition which is increasing the automatic word recognition. Then from lesson 13 on the students are practicing background knowledge, vocabulary and verbal reasoning thus strengthening the strategic strand of the rope. The students benefit from learning the meanings of prefixes and suffixes. I did not finish teaching the complete program for this report but have seen some small improvements in the amount of time I was able to teach the program. I will also continue with the program with my class and finish the

program. I know that communicating with students about the value of this type of program will help them to buy in and participate knowing it is beneficial. I found the assessments that were provided at the beginning of the intervention are helpful to getting information about the student and providing guidance to help them progress. I have learned that fidelity to programs such as Rewards and others are imperative for their success with students.

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Appendix A

Rewards Daily Fidelity Checklist

Components-	Implementation (5 scale) 5- always 4-almost always 3-so so 2-almost never 1-never	Comments (very optional)
Instructional materials are organized and ready, including overhead or whiteboard materials and student books		
Interventionist follows the steps and wording in the lessons (can be paraphrased) as indicated in the manual		
Interventionist uses the student engagement strategies for oral or written student responding as indicated in the manual.		
Interventionist appropriately models skills and strategies when indicated and with ease.		
Interventionist provides students with signals for choral responses.		
Interventionist varies student response opportunities, sometimes asking for individual responses and sometimes partner responses.		
Interventionist maintains good pacing throughout the lesson.		
Students are engaged in the lesson and respond orally or in writing when appropriate.		
Interventionist is encouraging and assists when needed. Providing error correction/feedback immediately.		

Appendix B

Rewards Overall Fidelity Checklist

1. Screen- Using a universal screener or pretest that allows for grade level determination needed to be able to successfully complete Rewards. The student should be at least a 4th grade level in order to be able to work on the programs. This could be the San Diego Quick Assessment.

I gave all the students the assessments suggested by the Rewards program. This included the San Diego Quick Assessment, a fluency passage provided by the program, Multisyllabic Word Reading Fluency Pretest/Posttest. This proved to be a very arduous task, because there were too many students to test. Another teacher in my department wanted to get a baseline for her students as well, so we worked together during our preparation periods to assist each other in assessing all the students we teach. This allowed me to be able to get my assessments.

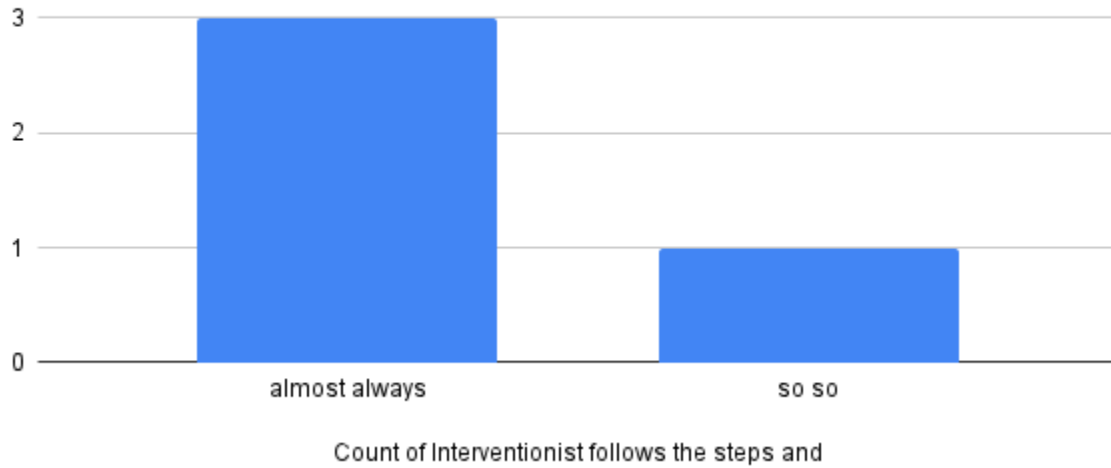
2. Form Instructional Groups- Smaller instructional groups are beneficial for tier 2 and tier 3 instruction. Students will be able to get more out of the instruction in a group of students 2-12. Groups larger than 12 will affect the benefits the students receive.
3. Collect Pre Program Data- Collecting data prior to the instruction allows the instructor to see the benefits of the program. Using one minute assessments in fluency and passage reading will give data pre/post program.
4. Be prepared- The lessons have to be taught sequentially.
 - a. Gather all necessary materials needed for the first 4 lessons.
 - b. Decide on the vocabulary instruction that will be used for the lessons to gain the benefits best for the students.

- c. Follow the directions of the lessons. Review the student manual and teacher manuals to understand the lessons to be taught. Have the prefix and suffix review sheets for the students.
5. Teach the lessons- There are 5 principles that are necessary to follow.
 - i. a. Provide systematic instruction using the method I do, we do, you do.
Use the strategy in the book for vocabulary understanding by using student friendly definitions and visual representations.
 - ii. B. Elicit frequent responses include choral, partner, and written responses.
 - iii. C. Monitor responses and provide feedback quickly, using the teacher guide to follow the correct method.
 - iv. D. Maintain a brisk pace while giving students response time but not too slow to be boring.
 - v. E. Provide practice in order to promote accuracy, automaticity, and retention.
6. Assessments used to assess the progression of the students to ensure improvements are being made.
7. Sustain program gains by providing teachers with tips that would benefit the students after reading passages.

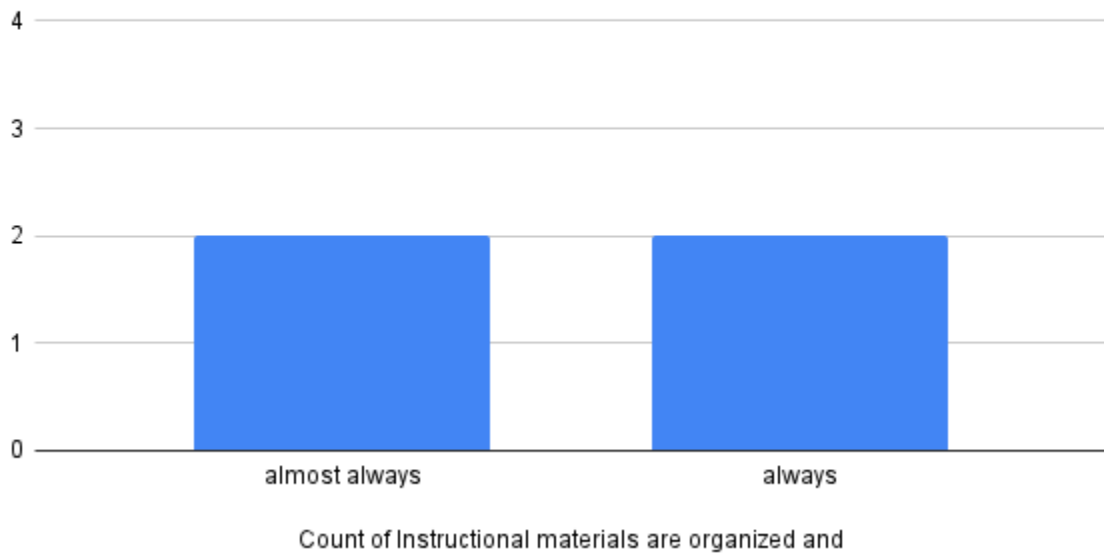
Appendix C

Daily Fidelity Checklist Bar Graphs

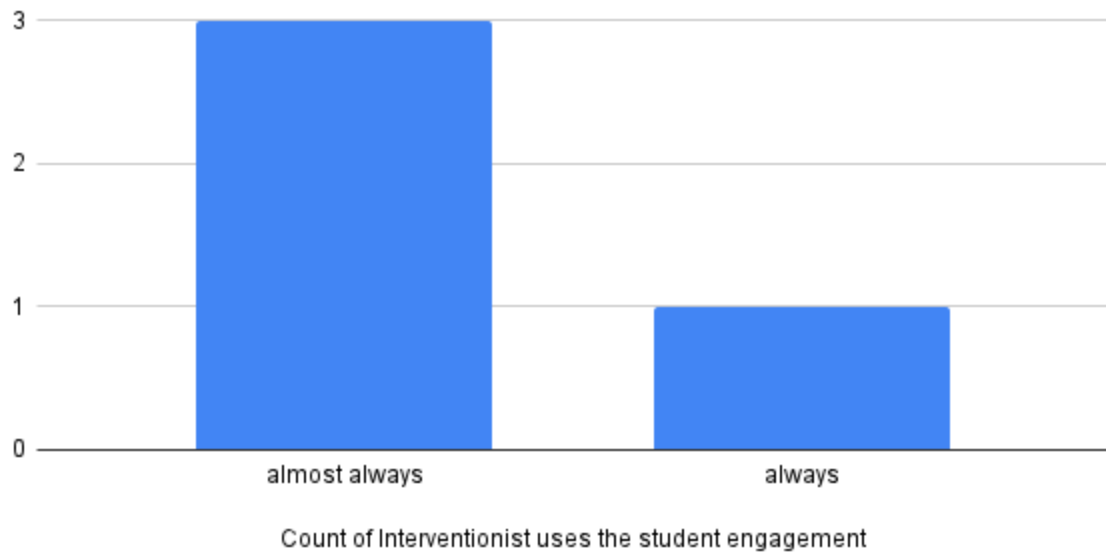
Count of Interventionist follows the steps and wording in the lessons (can be paraphrased)



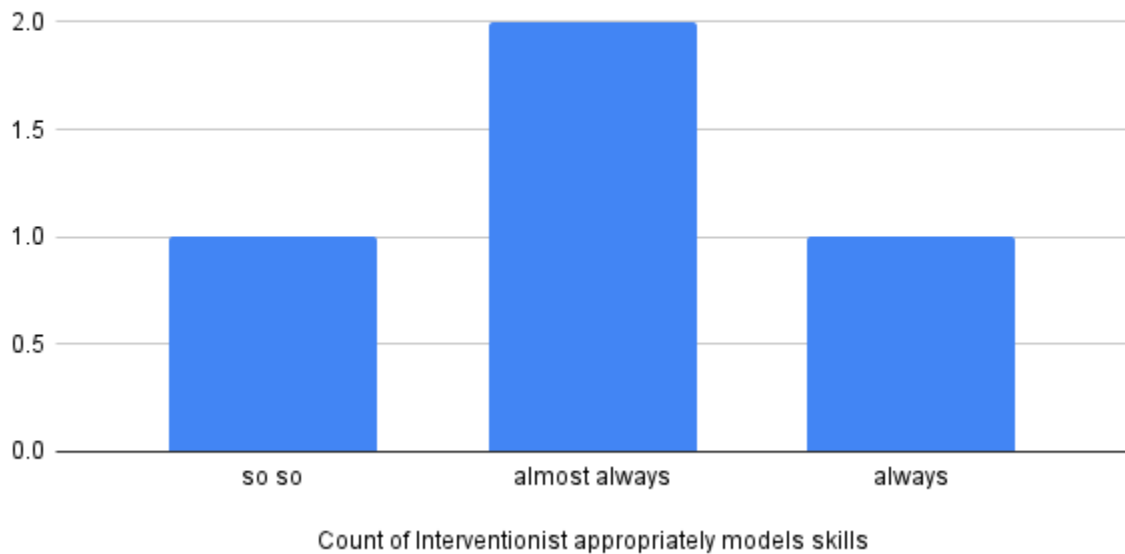
Count of Instructional materials are organized and ready, including overhead or whiteboard



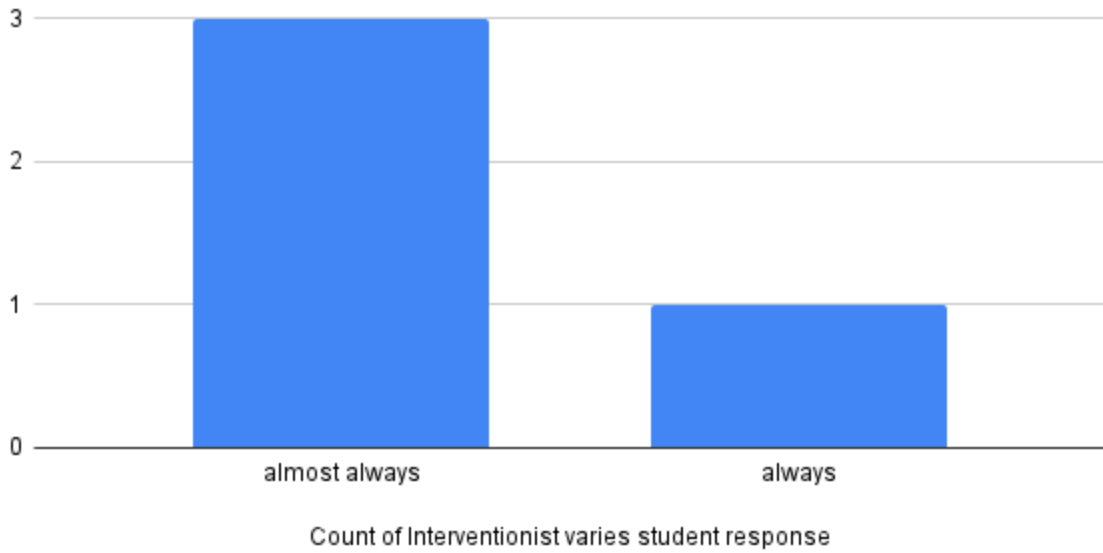
Count of Interventionist uses the student engagement strategies for oral or written student



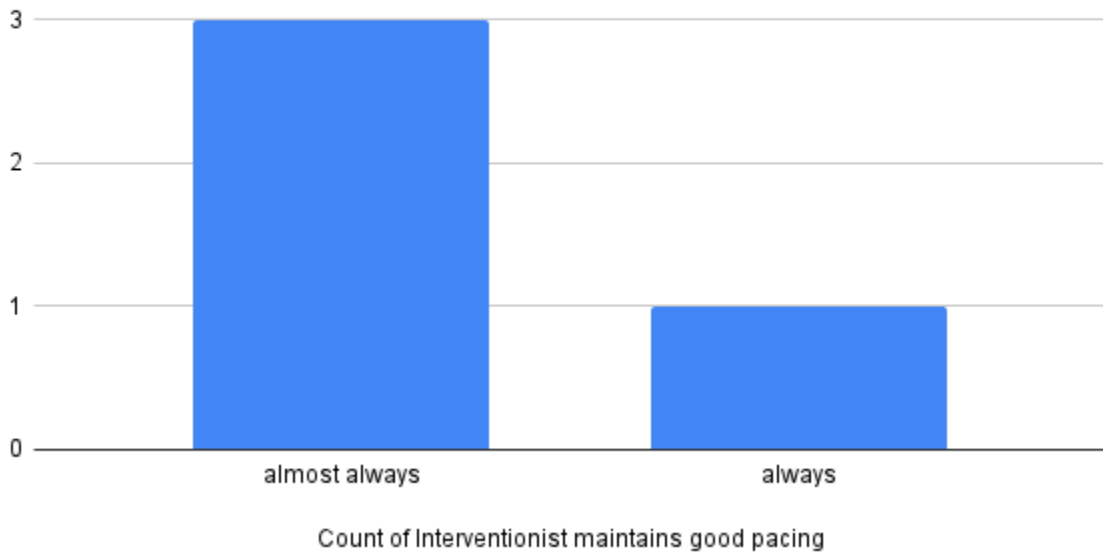
Count of Interventionist appropriately models skills and strategies when indicated and with ease.



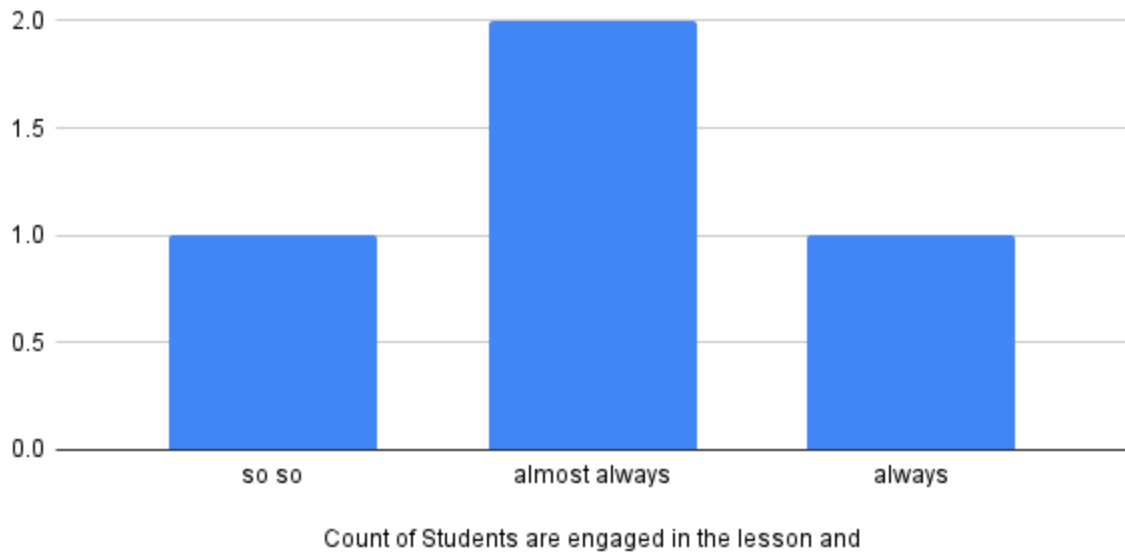
Count of Interventionist varies student response opportunities, sometimes asking for



Count of Interventionist maintains good pacing throughout the lesson



Count of Students are engaged in the lesson and respond orally or in writing when



Count of Interventionist is encouraging and assists when needed. Providing error

