

## **Let's R.E.A.D.: A Small-Group Literacy Intervention for Struggling Readers**

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### **How to Be an Effective Reader**

The goal of reading is the ability to understand the message that the writer is trying to communicate. In primary school, students are still learning to read. In later grades, we will expect these same students to become effective enough to use reading as a skill to learn new material in a variety of academic disciplines. This requires strong reading comprehension skills, however, reading comprehension is constructed through the mastery of prerequisite literacy skills. Research has shown that comprehension of text is based on the understanding of all literacy processes including phonemic awareness, phonological processing, sight word vocabulary and reading fluency (National Reading Panel (NRP), 2000).

Healthy reading skill development starts very early with emergent literacy skills such as phonemic awareness, like letter name-sound identification and correspondence. Reading also requires a strong background in sight word vocabulary, as these are words that cannot be phonetically put together so they must be automatically recognized by memory. A working knowledge of both phonemic awareness and sight word vocabulary allows the reader to read through sentences more fluently because they do not have to stop as frequently to decode or guess at words in a passage. The ability to read accurately and automatically refers to the reader's fluency. As reading becomes less effortful, it requires less brain power to decode the words in the passage and the reader can then devote these cognitive resources to interpreting the meaning of the passage. All in all, instruction on essential literacy skills such as sight words, phonemic awareness and fluency will have a direct impact on increasing the student's reading comprehension and achieving the goal of effective reading – understanding what is read.

Research in the field suggests that struggling readers experience past failures with reading and develop low self-efficacy for reading over time (Scruton & McNamara, 2014). Their past experiences influence their future actions such that since they were not good at it in the past, they believe they will experience similar failures in the future, increasing their avoidance of reading tasks. This perceived inevitable failure results in ineffective or nonexistent goal setting behaviours for future reading tasks and a reluctance to engage with reading entirely (Scruton & McNamara, 2014). These disparities in willingness to engage create gaps in achievement that are difficult to overcome because their typically developing peers are not discouraged from reading. This is known as the Matthew Effect, where that poor readers fall further behind as typical readers continue to advance. Successful interventions that target literacy skills and motivation can be useful tools to put students back onto a healthy reading trajectory.

### **Let's R.E.A.D.**

Let's R.E.A.D. is a small-group literacy intervention program to assist students 7-9 years old with their reading. It takes place twice a week for an hour over the course of eight weeks at various sites across the Niagara Region. At the beginning of the program, informal needs-based assessments are administered so that the program staff gain an understanding of the areas of

strength and need regarding their participants' literacy skills. The assessments include an evaluation of the child's abilities in the areas of sight words and vocabulary, phonemic awareness, phonological principles and reading fluency. The assessment results are then analyzed to tailor an individualized literacy program to advance from the participants' areas of need via direct instruction and engaging hands-on activities. At the end of program, the same assessments are re-administered to determine the progress made by participants.

Over the course of the hour, each session is systematically broken up into four fifteen-minute blocks to maintain attention and dedicate similar instruction time to each vital literacy component. In the first three blocks, children rotate through three small-group stations dedicated to hands-on games and activities that address sight words, phonics and fluency. The last 15-minute block of programming is reserved for the group instructor to lead a whole-group activity such as reading a novel to the students to model fluent reading, and moreover, to spark a genuine interest in literature. This time can also be used to reinforce specific skills that students had been mastering or to share progress toward their reading goals. Throughout the program, the children spend approximately 10-15 minutes per week with the one-on-one instructor to scaffold their greatest area of literacy need.

Let's R.E.A.D. relies on the critical elements of reading instruction outlined by the National Reading Panel (2000) including phonics, sight words and fluency that are common in many reading interventions. However, Let's R.E.A.D. is unique as it also focuses on building self-regulation skills using goal-setting and success graphing throughout the program. Scruton and McNamara (2014) argue for the use of motivational tactics such as realistic goal setting, monitoring and feedback to enhance traditional literacy interventions and foster the intrinsic motivation necessary to continue reading long after the program is complete. In Let's R.E.A.D. participants work with their one-on-one instructor to set realistic reading fluency goals based on the results of the initial, informal literacy assessment. In each of the following sessions, the pair work together on skills related to attaining their goals and track their progress using fluency graphs where they can monitor their progress and determine their next steps. The internal feedback that the participants get from monitoring their graphs and watching them soar towards their goals, often surpassing them, allows the vulnerable reader to reinterpret their engagement with reading-related tasks and visualize that they can be successful readers (Scruton & McNamara, 2014). Overall, the Let's R.E.A.D. intervention aims to increase literacy skill proficiency through direct instruction, engaging activities and self-regulation.

### **The Research Project**

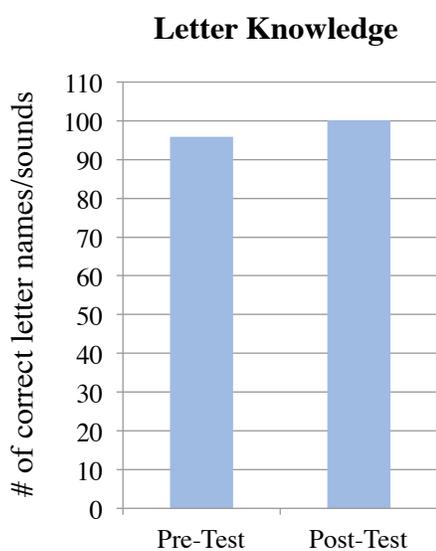
Let's R.E.A.D. is attempting to fill a void in the Niagara Region by providing services for children with, or at-risk of developing, reading disabilities. Currently, emergent research endeavours are aimed at finding successful intervention programs that effectively alleviate symptoms of reading disabilities. This research project aimed to measure and assess whether Let's R.E.A.D. is successfully providing a valuable service. A total of 67 children participated in the Let's R.E.A.D. program over the 2016 program season. The following data summarizes participants' progress from the beginning to the end of the program in each of the four targeted literacy skills.

## (1) Letter Knowledge

Letter knowledge comprises of skills relating to identifying and pairing graphemes (the letter symbol) with the appropriate phoneme (the sound). Letter knowledge, or letter name-sound correspondence, is known to be one of the strongest and earliest predictors of how well children will learn to read (NRP, 2000). The reading process is a hierarchy of skills that all build upon one another and at its very foundation is the ability to recognize letter names and sounds accurately.

### *How is it targeted in Let's R.E.A.D.?*

Participants review letter names and sounds within the first few sessions of the program at the phonics station. Typically, letter knowledge is progressing well by the age of seven, even in struggling readers. However, the program explicitly reviews letter names and sounds to correct any issues with letter-sound correspondence as it is a necessary skill used to decode unfamiliar words and learn more advanced phonetic principles. Let's R.E.A.D. has children engage in hands-on games requiring students to identify letters in words and their respective sounds. For example, students may use playdough to mold the letters that make the sound specified by the station volunteer.



### **Results**

In the Letter-Sound Correspondence assessment children are shown all twenty-six lowercase and uppercase letters of the alphabet and asked to give the appropriate letter name and sound. Students are scored on letter name and sound individually. The maximum score is 104. Participants significantly improved in their letter knowledge during Let's R.E.A.D. Scores increased from a pre-test mean score of 94 of 96/104 to a post test score of 100/104. At the pre-test, participants already knew 92% of their letter names and sounds. Therefore, participants had a solid foundation of letter knowledge prior to beginning the program and there was less room for improvement compared to the other targeted literacy skills.

$$t(41) = 7.26, p < .001$$

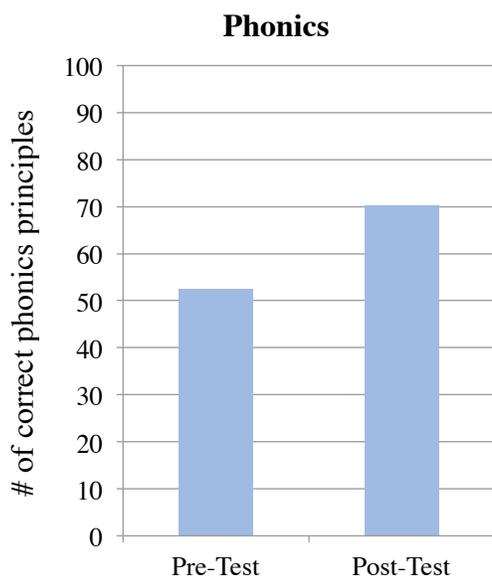
## (2) Phonological Awareness

Phonological awareness is the reader's ability to understand the sound structure of words, including their capabilities to blend and segment words. For example, understanding that the letter sounds /c/, /a/, /t/ blend together to form the word 'cat'. It also includes their ability to understand vowel rules and blends such that when 'ea' are found together in the word "team" it makes the long /E/ sound. The National Reading Panel (NRP, 2000) argues that phonological awareness is a very reliable predictor of later reading ability, thus it is an important focus of

instruction in Let's R.E.A.D. Phonological awareness skills provide children with the tools to decode unfamiliar words by sounding them out.

### *How is it targeted in Let's R.E.A.D.?*

Let's R.E.A.D. teaches children fundamental phonics concepts that build up from letter knowledge such as digraphs, blends, word families, vowel sounds, prefixes and suffixes. Children are explicitly taught rules associated with each concept and children participate in small group games to practice applying these concepts to their reading. For example, children engage in activities with a variety of manipulatives that allow them to create words (e.g. Lego blocks, puzzle pieces, etc.) to help them understand the different sounds associated with words.



### *Results*

Participants were assessed on an unofficial list of phonics skills, including digraphs, blends, vowel teams, final 'e', diphthongs, prefixes, suffixes, etc. Scores were calculated based on **70** the number of correctly identified items in each category to provide a cumulative maximum score out of 149.

**53** Participants significantly improved in their phonological awareness during Let's R.E.A.D. Scores increased from a pre-test mean score of 53/149 to a post test score of 70/149.

$$t() = , p < 0.001$$

$$t(13) = 23.80, p < .001$$

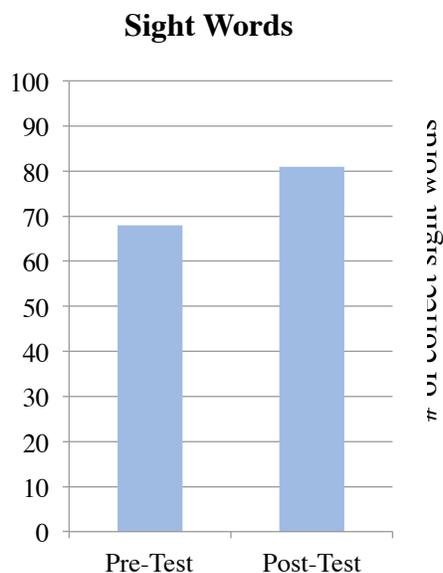
### **(3) Sight Word Vocabulary**

Sight words are words that cannot be phonetically broken up and thus they must be learned by sight and memory through repeat exposure. For example, students are not able to blend together the /t/, /h/ and /e/ sounds to arrive at the word the so they must memorize this word to read it automatically in a sentence. Research has shown that a strong background in sight word vocabulary allows readers to process sentences more automatically, leaving more cognitive resources to dedicate to comprehension.

### *How is it targeted in Let's R.E.A.D.?*

In Let's R.E.A.D., they rely on the Dolch sight word list that outlines the 220 most frequently used words in English that cannot be read by sounding out. This means these words need to be internalized into memory from repeat exposure. There are 11 lists, each containing 20 words, in order of most frequent usage. Children practice identifying and reading these words during each session through games and activities at the sight word station. Typically, children work on 3-5 new words each session and practice these words until mastery. For example, children rehearse

sight words by playing games like Go Fish, Bingo and Swat!. These games encourage children to identify and rehearse sight words through active games that keep children motivated to learn.



### **Results**

To assess sight word vocabulary, children were shown lists of sight words from the Dolch list. The child is asked to identify any words that they know from the lists. The ceiling for this assessment was five consecutive incorrect responses. The maximum score is 220. Participants significantly improved in their sight word identification during Let's R.E.A.D. Scores increased from a pre-test mean score of 68/220 to a post test score of 81/220. On average, participants mastered 13 new words from participating in Let's R.E.A.D.

$$t(65) = 6.10, p < .001$$

## **(4) Reading Fluency**

Fluency is the ability to read aloud with speed, proper expression and accuracy. This is often the most difficult skills for students to master because it involves mastery of the other literacy components. For instance, when students master more sight words and phonics principles they can read words more accurately and more automatically making their reading sound more proficient.

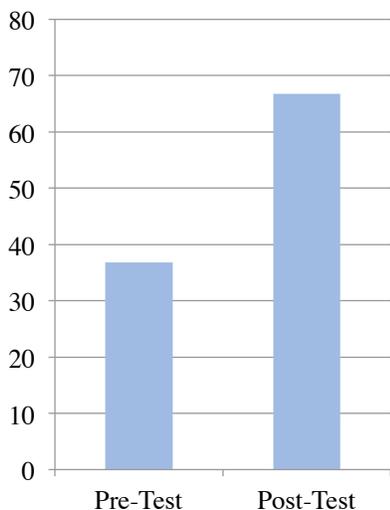
Bigozzi, Tarachi, Vagnoli, Valente and Pinto (2017) found that fluent reading is a predictor for general academic outcomes from middle school to high school. Implicitly, teachers shift from learning to read in primary school to using reading to learn in middle school. This shift is detrimental for vulnerable readers because their school failure begins to expand into all subjects instead of just literacy. For example, teachers instruct students to independently read their science textbook and answer comprehension questions or present their math assessment questions in word problems. Therefore, closing the achievement gap between children with reading disabilities and their peers requires strengthening their reading fluency; not only for them to catch up in literacy but also so they do not fall behind in other subjects that will begin to use reading comprehension as a method of instruction.

### ***How is it targeted in Let's R.E.A.D.?***

In Let's R.E.A.D., students are given a graded reading passage that is just difficult enough to challenge them, without frustrating them. Over the course of the eight-week program, the one-

on-one instructor engages in a repeated reading strategy to improve the student's reading rate and associated words correct per minute (WPM) score. This means that the instructor works on skills necessary to become a fluent reader, such as rehearsing the challenging words in the passage, understanding how to interpret punctuation and where to take pause for breaths. The instructor and children work collaboratively to calculate and graph their increasing fluency score at each session. The participants work their way through the same passage until it has been read fluently from beginning to end.

### Reading Fluency



### Results

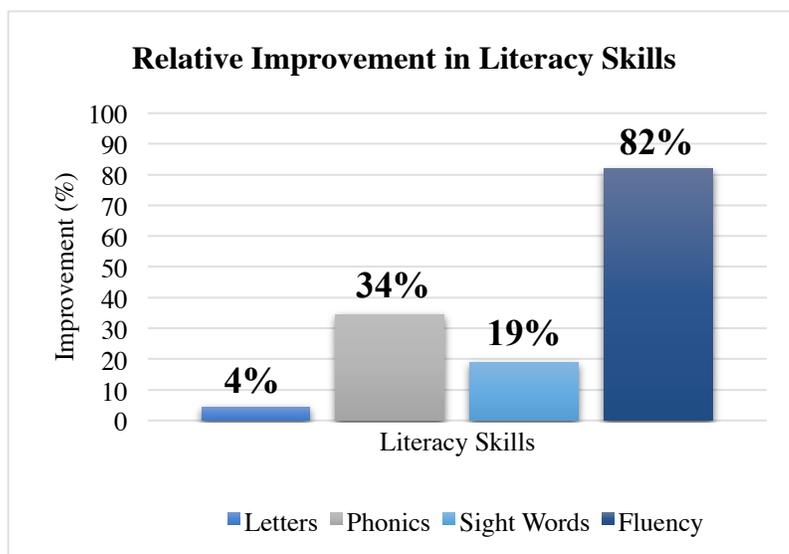
Fluency was the most improved literacy skill following participation in Let's R.E.A.D. To calculate a fluency rate, students read a passage that is at their reading level aloud. The score was computed by the standard words correct per minute calculation, where the number of correct words are divided by the number of words in the passage and multiplied by 60. Participants significantly improved in their fluency skills during Let's R.E.A.D. Scores increased from a pre-test mean score of 37 WPM to a post-test score of 67 WPM. According to research benchmarks, fluency rates under 50WPM are below Grade 1 level and require immediate remediation. However, an average

post-test fluency rate of 67  $t(65) = 9.47, p < .001$  benchmark of 70 WPM that is at (Hasbrouck & Tindal, 2006).

WPM is approaching the Grade 2 instructional level

### Conclusion

After participating in Let's R.E.A.D., participants made substantial gains in all assessed literacy skills, suggesting that Let's R.E.A.D. is a successful intervention program. Specifically, participants showed a 4% improvement on their already proficient letter knowledge. They also increased their sight word vocabulary by 19% and their knowledge of phonological awareness by 34%. Most significantly, participants improved their fluency scores by 82% from



beginning to end of the intervention! Successful interventions not only improve reading outcomes but also demonstrate paralleled functional changes in the brain (Lovio, Halttunen, Lyytinen, Näätänen, & Kujala, 2012). Effective interventions seem to provide chances for children to “re-wire” faulty connections in their brain to improve their phonological processing skills can become effective readers. After the program, participants could begin to envision themselves as good readers because they see their reading skills advance over the course of the intervention. Thus, effective literacy programs, like Let’s R.E.A.D., can serve to reverse the Matthew Effect by putting these participants back on a healthy reading trajectory, motivating them to continue reading and ultimately serving to close the gap between vulnerable readers and their peers.

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