

Program Background

Reading Rocks is a literacy intervention program that was offered by the Learning Disabilities Association of Wellington Region in the Winter of 2017. Developed by the Research Institute for Learning Differences, Reading Rocks provides support to children in the community who are struggling with reading. This program targets the three foundational literacy skills of phonics, sight word vocabulary, and fluency, as recommended by the National Reading Panel. Reading Rocks provides individualized, systematic, and intensive sessions that are short and frequent.

The LDA-Wellington, through the support of a seed grant from the Ontario Trillium Foundation, developed and implemented Reading Rocks in three program sites throughout the Wellington region. Two program sites were located in Guelph and one site in Arthur. A total of 30 children participated in the program. Children were referred to the Reading Rocks Wellington program through caregivers in consultation with their school educators. LDA-Wellington offered the program twice a week for 8 weeks for a total of 16 program sessions. In the program, children were paired with a trained literacy tutor to receive one-on-one support, and through hands-on, interactive literacy activities, the pair collaboratively work towards the child's personal goals and improves his/her literacy skills.

In line with the mandate of both the LDA-Wellington and the Ontario Trillium Foundation, pre- and post-program data was collected from children participating in Reading Rocks. Measuring the efficacy of the program was critical to ensuring that LDA-Wellington was offering empirically supported programming. The following report outlines the results of the Reading Rocks Wellington program.

Letter recognition

Letter recognition refers to the ability to identify all the names of the alphabet letters. Letter recognition has been shown consistently to be an important predictor of reading success. After participating in the Reading Rocks Wellington program, children demonstrated a statistically significant increase in letter name recognition, from a pre-program mean score of 46.23 in Session 1 of the program to a post-program score of 51.04 by Session 16 [t(26) = -5.14, p < .001]. This finding indicates that participating in the Reading Rocks Wellington program resulted in significant improvements in letter-name recognition.



Letter sounds

Letter-sound association is closely associated with letter-name recognition, as this refers to the ability to associate the alphabetical letters with corresponding sounds. Participants of the Reading Rocks Wellington program demonstrated a statistically significant increase in their letter-sound understanding, from a pre-program mean score of 44.89 in Session 1 to a postprogram score of 51.37 by Session 16 [t(26) = -4.36, p <.001]. This finding indicates that participating in the Reading Rocks Wellington program resulted in significant improvements in participants' letter-sound association.



Phonics

Phonics is an essential prerequisite reading skill and involves the ability to hear, identify, and manipulate phonemes and apply these to print. The National Reading Panel has suggested that phonics is critical to healthy reading development. Following this recommendation, phonics was a primary focus on the Reading Rocks Wellington program. In the program, participants demonstrated a statistically significant increase in their phonics skills, from a pre-program mean score of 51.75 in Session 1 to a post-program score of 89.22 by Session 16 [t(26) = -8.95, p <.001]. This finding indicates that participating in the Reading Rocks Wellington program



Sight words

Sight words are commonly used words that can be automatically recognized by readers without employing decoding strategies. Mastery of sight word recognition is an effective tool for readers, as it reduces the amount of time and effort a reader exerts during the reading process. In the Reading Rocks Wellington program, participants demonstrated a statistically significant increase in their sight word vocabulary, from a pre-program score of 104.95 in Session 1 to a post-program score of 190.54 by Session 16 [t(26) = -5.27, p <.001]. Participation in the Reading Rocks Wellington program resulted in significant improvements in participants' sight word vocabulary.



Reading Fluency

Reading fluency refers to the ability to read independently with speed, accuracy, and proper expression. Reading fluency is a complex reading skill that employs each of the foundational skills such as letter sound understanding, sight words, and phonics. Reading fluency develops gradually over time with practice. In the Reading Rocks Wellington program, participants demonstrated a statistically significant increase in their reading fluency, from a preprogram mean score of 44.76 in Session 1 to a post-program score of 77.46 by Session 16 [t(26) = -6.24, p <.001]. Therefore, participating in the Reading Rocks Wellington program resulted in significant improvements in reading fluency



Individual Analyses

The following data represents a sample of the individual participant achievement gains associated with participating in the Reading Rocks Wellington program.

Participant: Steven

* The name of the child has been changed for confidentiality purposes.



Results

From Session 1 to Session 16, Steven demonstrated statistically significant improvements in all five components of reading assessed in the program: letter-name recognition, letter-sound understanding, sight word vocabulary, phonics, and fluency. In particular, Steven demonstrated significant improvements all of the foundational literacy skills.

Conclusion

Overall, as a result of participating in Reading Rocks Wellington, children experienced significant gains in all areas of reading. The specific skills, on which the program focused, were based on the latest research around developing healthy reading. Over the course of 8 weeks, participating children successfully improved in letter sound understanding, phonics, sight word recognition, and reading fluency. These skills will be important building blocks in developing strong readers.

The LDA-Wellington team was encouraged by the results of the offering of the Reading Rocks program and is looking forward to growing the program throughout the Wellington region. As the program continues to develop, the LDA-Wellington team looks forward to increasing their service and programming to children and youth with reading difficulties within the community.