Empower Reading 2017-18

Empower Reading TM is an evidence-based reading intervention program, which was developed by the Learning Disabilities Research Program at the Hospital for Sick Children. This program is based on 25 years of research in Canada and the United States.

The TCDSB has continued to offer Empower as an intervention for students in grades 2-5 who have demonstrated significant difficulties in decoding and spelling.

Since 2013-14, TCDSB has also offered both a decoding and spelling program for students in grades 6-8, as well as a program focused on comprehension and vocabulary for students in grades 2-5.

In 2017-18, 374 students participated in the Gr. 2-5 Decoding/Spelling (DS) program, 118 students in the Gr. 2-5 Comprehension/Vocabulary (CV) program, and 12 students participated in the Gr. 6-8 Decoding/Spelling (DS) program. Currently (2018-2019) TCDSB has 59 active locations/schools providing Empower with many locations offering multiple programs.

It should be noted that participation in the Grade 2-5 DS program was much higher for grade 2 and 3 students (grade 2, n=145; grade 3, n=146) than grade 4 and 5 students (grade 4, n=49; grade 5, n=34)

Student performance has been measured in all programs through assessments of literacy that are appropriate to the specific decoding or comprehension intervention.

This report summarizes research results indicating positive outcomes for students in all three interventions and reports from teacher interviews on the efficacy of Empower.

1. Results for students in Gr. 2-5 Decoding/Spelling indicate that:

- Students in all grade levels improved on the Letter-Sound test whereby they answered almost all of the items correctly in June.
- Students in all grades also improved on the Sound Combinations tests, whereby they answered over 75% of the items correctly in June.
- Grade two students made the largest gains.

- All decoding and word recognition measures were provided by SickKids: students answered at least 90% of the items correctly on the "KeyWords" test (words which are emphasized in Empower) and student mean scores ranged from 67% to 76% in June on the "Challenge Words" test (which requires students to generalize their decoding skills to new words).
- Phonemic awareness improves over the school year for Empower students in all grades. The Blending and Segmenting Assessment (TCDSB phonemic awareness measures), with students answering up to 92% of items correctly on the Blending items and 85% of the Segmenting items by June.
- The Running Record (TCDSB measure). On average students were well below grade level at the beginning of the program and improvement was observed by June. (For example, in the fall 96% of grade 2 students and 94% of grade 3 students had instructional Running Record results which were one or two years below grade level. However, by Spring 50% of both grade 2 and 3 students were reading at grade level).
- Students improve on all measures focused on letter-sound recognition, word recognition and phonemic awareness which are all skills emphasized in Empower decoding and spelling.
- While Running Record results indicate similar improvement in decoding, there are many students who are still behind grade level and may need further support after they complete Empower
- Results presented here are consistent with those presented in other years, suggesting that Empower decoding/spelling is consistent in improving students' reading skills.
- Results from transfer students in Hub schools are similar to those from other Empower students in the same schools.
- 2. Results for students in Gr. 6-8 Decoding/Spelling and Gr. 2-5 Comprehension/Vocabulary indicate that:
 - **Gr. 6-8 Decoding/Spelling:** It should be noted that there was a small sample size as only 12 students participated in Gr. 6-8 Decoding and Spelling.

- These results on their own are not adequate to demonstrate effectiveness of Empower. However, they do replicate earlier work based on a larger, more representative sample.
- Results from the SickKids Blending and Segmenting, and Running Record tests indicate improvement over the course of the intervention.
- **Gr. 2-5 Comprehension/Vocabulary**: Students improved on the Running Record scores, in both decoding and comprehension. The Quick Comprehension Analysis (QCA) also suggests that students improve in accurate and fluent reading as well as comprehension.
- In addition, comprehension teachers completed an exit survey at the end of instruction suggesting that students improved on all the comprehension strategies taught in Empower.

3. Motivation to Read:

- Teachers indicate that students who receive Empower become more motivated to participate in class and enjoy reading more.
- In order to document these changes, 54 students in selected Gr. 2-5 Decoding and Comprehension classes were administered interviews and surveys on their motivation to read. The Motivation to Read protocol was administered near the beginning of Empower (October, 2017) and then again towards the end of Empower intervention (May, 2018)
- The majority of students had a good understanding of the value of reading, regardless of the program and thought that Empower helped them in various aspects of literacy.
- Students generally thought that reading was valuable to get better grades and do well in school, as well as to perform adult tasks and get better jobs.
- The majority of decoding students knew the names of the decoding strategies and also thought that Empower helped them in vocabulary, writing and interest in reading.

• Comprehension students generally thought that Empower helped them with improved vocabulary, writing, and interest but generally not to the same extent as decoding students.

4. Longer term (3 to 4-year Post-Intervention)

Student performance on Canadian Achievement Test (CAT) and EQAO was analyzed:

- Students who take CAT tests after completing Empower have better results than those who take it beforehand.
- CAT results show after Empower more students received average or high stanine scores on the grade 5 than on the grade 2 test.
- Students who participated in Empower before taking Grade 3 EQAO had better scores than those who had Empower afterwards.
- While most students improve on the Board and Provincial measures, there is a proportion of students who will need further Special Education intervention. Empower teachers suggest that these students are often identified as having a Language Impairment or Learning Disability.
- Most students need continued reinforcement after Empower.