What Works Clearinghouse

ies INSTITUTE OF EDUCATION SCIENCES

Read, Write & Type!™

Program description

Read, Write & Type!™ Learning System is a software program with supporting materials designed to teach beginning reading skills by emphasizing writing as a way to learn to read. The program was developed for six- to nine-year-old students who are just beginning to read and for students who are struggling readers and writers. The main goal of *Read, Write & Type!™* is to help students develop an awareness of the 40 English phonemes and the ability to associate each phoneme with a letter or a combination of letters and a finger stroke on the keyboard. Other goals of the program include identifying phonemes in words and fluency in sounding out, typing, and reading regularly spelled words.

Research

One study of *Read, Write & Type!™* met the What Works Clearinghouse (WWC) evidence standards. The study included 150 students from first grade in five elementary schools.[1]

The WWC considers the extent of evidence for *Read, Write & Type!™* to be small for alphabetics and comprehension. No studies that met WWC standards with or without reservations addressed fluency or general reading achievement.

Effectiveness

Based on the one study, *Read, Write & Type!™* was found to have potentially positive effects on alphabetics and no discernible effects on comprehension. Findings on fluency and general reading achievement were not reported in the study.

	Alphabetics	*Fluency*	*Comprehension*	*General reading achievement*
Rating of effectiveness	Potentially positive effects	na	No discernible effects	na
Improvement index[2]	Average: +8 percentile points Range: –10 to +29 percentile points	na	Average: +3 percentile points Range: –2 to +15 percentile points	na

na = not applicable

1. The evidence presented in this report is based on available research. Findings and conclusions may change as new research becomes available.
2. These numbers show the average and range of improvement indices for all findings across the study.

Additional program information

Developer and contact

Developed by Dr. Jeannine Herron and Dr. Leslie Grimm, *Read, Write & Type!*™ is distributed by Talking Fingers, Inc. Address: One St. Vincent Drive, San Rafael, California 94903. Email: contact@talkingfingers.com. Web: www.talkingfingers.com. Telephone: (800) 674-9126.

Scope of use

Read, Write & Type!™ was developed in 1994. Information is not available on the number or demographics of students, schools, or districts using the software.

Teaching

Game-like computer activities with animated characters lead students sequentially through each lesson of *Read, Write & Type!*™. Each of the program's 40 lessons explicitly teach one of the 40 phonemes. Lessons in the activity book correspond to the software and include activities on identifying beginning, middle, and ending sounds, thinking about sounds in words, rhyming, spelling words, and dictating. The lessons begin by having students say and write individual sounds and the letters that represent those sounds, and then progress to having students write words, sentences, and stories. After attaining a certain level, students do the *Power Fountain* activity to practice speed and accuracy in writing and typing. *The E-mail Tower,* a simulated e-mail program, is another optional activity for students to practice their newly acquired skills by writing short messages.

The software program can be used at school or home, where teachers or parents can print out individual or group reports of student progress.

Cost

The program can be purchased for in-school use for $89.00 for two discs/licenses. A site license costs $699.00 for 25 discs and classroom materials. The software can be purchased for in-home use for $79.00.

Research

One study reviewed by the WWC investigated the effects of *Read, Write & Type!*™. The study (Torgesen, Wagner, Rashotte, & Herron 2003) was a randomized controlled trial that met WWC evidence standards.

Met evidence standards

Torgesen, Wagner, Rashotte, & Herron (2003) included 150 low-achieving first grade students in five elementary schools. At two of the schools, students were randomly assigned either to the *Read, Write & Type!*™ condition or to the *Auditory Discrimination in Depth*® condition. At three schools, students were randomly assigned to *Read, Write and Type (RWT), Auditory Discrimination in Depth*® *(ADD),* or a regular instruction comparison group. The beginning reading review presents data relevant to comparisons of RWT with ADD and of RWT with regular instruction.[3] The beginning reading review presents findings from all comparisons.[4]

Extent of evidence

The WWC categorizes the extent of evidence in each domain as small or moderate to large (see the What Works Clearinghouse Extent of Evidence Categorization Scheme). The extent of evidence takes into account the number of studies and the total sample size across the studies that met WWC evidence standards with or without reservations.[5]

The WWC considers the extent of evidence for *Read, Write & Type!*™ to be small for alphabetics and comprehension. No studies that met WWC standards with or without reservations addressed fluency or general reading achievement.

3. Description of the assignment procedure was based on personal communication with the first study author on September 7, 2006.
4. The WWC review of beginning reading includes all comparisons that meet evidence standards because all schools provide some type of reading instruction and there is no typical comparison condition.
5. The Extent of Evidence categorization was developed to tell readers how much evidence was used to determine the intervention rating, focusing on the number and size of studies. Additional factors associated with a related concept, external validity, such as students' demographics and the types of settings in which studies took place, are not taken into account for the categorization.

Effectiveness

Findings

The WWC review of interventions for beginning reading addresses student outcomes in four domains: alphabetics, fluency, comprehension, and general reading achievement.[6] The Torgesen et al. (2003) study addressed outcomes in the alphabetics and comprehension domains. The findings below present the authors' and the WWC-calculated estimates of the size and statistical significance of the effects of *Read, Write & Type!*™ on students' performance.

Alphabetics. The Torgesen et al. (2003) study findings for alphabetics are based on the performance of *Read, Write & Type!*™ students and comparison students on three measures of phonological awareness and two measures of phonics.

- When the *Read, Write & Type!*™ group was compared with the *Auditory Discrimination in Depth*® group, the study authors found that there were no statistically significant differences between the groups on any of the three phonological awareness measures (phoneme blending, phoneme elision, and phoneme segmenting subtests of the Comprehensive Test of Phonological Processes) or the two phonics measures (word attack and word identification subtests of the Woodcock Reading Mastery Test).
- When the *Read, Write & Type!*™ group was compared with the regular classroom instruction/support group, the authors reported, and the WWC confirmed, statistically significant positive effects of *Read, Write & Type!*™ on one of the phonological awareness measures (phoneme segmenting) and on one of the phonics measures (word attack). The authors did not find statistically significant effects of the program on the second phonics measure (word identification) or on the other two phonological awareness measures (phoneme blending and elision).

In the alphabetics domain, one study with a strong design met WWC evidence standards. It showed statistically significant positive effects for one comparison group and no effects for the other, so the intervention was categorized as having potentially positive effects on alphabetics.

Comprehension. The Torgesen et al. (2003) study examined comprehension using the passage comprehension subtest of the Woodcock Reading Mastery Test and an estimated verbal IQ measure (based on the vocabulary subtest of the Stanford Binet Intelligence test).

- When the *Read, Write & Type!*™ group was compared with the *Auditory Discrimination in Depth*® group, the authors reported no statistically significant difference between the groups on the comprehension measures.
- When the *Read, Write & Type!*™ group was compared with the regular classroom instruction/support group, the authors reported no statistically significant difference between the groups on the comprehension measures.

In the comprehension domain, one study with a strong design met WWC evidence standards. Neither of the two comparisons showed statistically significant effects. The average effect size across the two comparisons was also not statistically significant and was not large enough to be considered substantively important according to WWC criteria. Therefore, the intervention was categorized as having no discernible effects on comprehension.

Rating of effectiveness

The WWC rates the effectiveness of an intervention in a given outcome domain as: positive, potentially positive, mixed, no discernible effects, potentially negative, or negative. The rating of effectiveness takes into account four factors: the quality of the research design, the statistical significance of the findings,[7] the size of the difference between participants in the intervention and the comparison conditions, and the consistency in findings across studies (see the WWC Intervention Rating Scheme).

6. For definitions of the domains, see the Beginning Reading Protocol.
7. The level of statistical significance was reported by the study authors or, where necessary, calculated by the WWC to correct for clustering within classrooms or schools and for multiple comparisons. For an explanation, see the WWC Tutorial on Mismatch. See Technical Details of WWC-Conducted Computations for the formulas the WWC used to calculate the statistical significance. In the case of *Read, Write & Type!*™, corrections for multiple comparisons were needed.

The WWC found *Read, Write & Type!™* to have potentially positive effects for the alphabetics domain and no discernible effects for the comprehension domain

Improvement index

The WWC computes an improvement index for each individual finding. In addition, within each outcome domain, the WWC computes an average improvement index for each study and an average improvement index across studies (see Technical Details of WWC-Conducted Computations). The improvement index represents the difference between the percentile rank of the average student in the intervention condition versus the percentile rank of the average student in the comparison condition. Unlike the rating of effectiveness, the improvement index is based entirely on the size of the effect, regardless of the statistical significance of the effect, the study design, or the analyses. The improvement index can take on values between –50 and +50, with positive numbers denoting results favorable to the intervention group.

The average improvement index for alphabetics is +8 percentile points in one study across two comparisons, with a range of –10 to +29 percentile points across findings.

The average improvement index for comprehension is +3 percentile points in one study across two comparisons, with a range of –2 to +15 percentile points across findings.

Summary

The WWC reviewed one study on *Read, Write & Type!™,* which met WWC evidence standards. Based on the study's results, the WWC found the program to have potentially positive effects in the alphabetics domain and no discernible effects in the comprehension domain. The evidence presented in this report may change as new research emerges.

Reference

Met WWC evidence standards

Torgesen, J., Wagner, R., Rashotte, C., & Herron, J. (2003). *Summary of outcomes from first grade study with Read, Write and Type and Auditory Discrimination in Depth Instruction and software with at-risk children* (FCRR Tech. Rep. No. 2). Retrieved from Florida Center for Reading Research Web site: http://www.fcrr.org/TechnicalReports/RWTfullrept.pdf

For more information about specific studies and WWC calculations, please see the WWC *Read, Write & Type!™* Technical Appendices.