What Works Clearinghouse

ies INSTITUTE OF EDUCATION SCIENCES

Beginning Reading June 11, 2007

Start Making a Reader Today® (SMART®)

Program description

Start Making a Reader Today® (SMART®) is a volunteer tutoring program widely implemented in Oregon for students in grades K-2 who are at risk of reading failure. The program is designed to be a low-cost, easy-to-implement intervention. Volunteer tutors go into schools where at least 40% of students are eligible for free or reduced-price lunch and read one-on-one with students twice a week for half an hour. Typically, one volunteer works with two children on four types of activities: reading to the child, reading with the child, re-reading with the child, and asking the child questions about what has been read. The program also gives each student two new books a month to encourage families to read together.

Research

One study of *SMART®* met the What Works Clearinghouse (WWC) evidence standards. The one study included more than 125 students in first grade in six schools across four school districts in Oregon.[1] The WWC considers the extent of evidence for *SMART®* to be small for alphabetics, fluency, and comprehension. No studies that met WWC evidence standards with or without reservations addressed general reading achievement.

Effectiveness

Start Making a Reader Today® was found to have potentially positive effects on alphabetics, fluency, and comprehension.

	Alphabetics	*Fluency*	*Comprehension*	*General reading achievement*
Rating of effectiveness	Potentially positive effects	Potentially positive effects	Potentially positive effects	na
Improvement index[2]	+16 percentile points	Average: +17 percentile points Range: +16 to +18 percentile points	Average: +14 percentile points Range: +11 to +16 percentile points	na

na = not applicable

1. The evidence presented in this report is based on available research.
2. These numbers show the average and range of improvement indices for all findings in the study. The range is provided only if more than one outcome was measured within a domain.

Additional program information

Developer and contact

Developed by the Oregon Children's Foundation, *Start Making a Reader Today*® is self-distributed. Address: 219 NW 12th Ave, Suite 203, Portland, OR 97209. Email: smart@getsmartoregon.org. Web: www.getsmartoregon.org. Telephone: (503) 937-4800 or (877) 598-4633.

Scope of use

Since its start in 1992, the program reports serving 100,000 children in the state of Oregon through more than 2.3 million volunteer hours. It has also given students more than 1.4 million books. The goal for the 2006–07 school year is to serve 12,000 students in 280 schools in 32 of Oregon's 36 counties.

Teaching

SMART® accepts applications from schools where at least 40% of students are eligible for free or reduced-price lunch. The *SMART*® organization hires a part-time school coordinator for each participating school who works under the direction of a regional manager. The coordinator recruits and trains volunteers, is present at the school during all program hours, schedules reading sessions, and serves as primary contact for school personnel. In rural areas, *SMART*® offers the *SMART*® *Kit* as an alternative delivery model. The kit assists a school and its surrounding community to implement the program themselves without a regional manager. It includes instructions for setting up the program, organizing classrooms, recruiting volunteers, scheduling the intervention into classrooms, and coordinating the overall program.

Once the program is in place, the *SMART*® organization assists the school with materials, books, volunteer training, and technical assistance. *SMART*® staff facilitate the creation of local Leadership Councils, made up of school and community members, which assist in local fundraising and serve as local advocates for *SMART*®. In *SMART*® Kit communities, this group is known as a Leadership Committee and takes on primary responsibility for program operation.

Volunteers, who range from high school students to senior citizens, undergo a 1–2 hour long training that provides an introduction to the program and to reading strategies instruction. Volunteers are trained by the *SMART*® coordinator where the program is housed. They draw on the handbook that outlines the four *SMART*® reading strategies: reading to students, reading with students, re-reading, and asking comprehension questions. Using these strategies, volunteers tutor students one-on-one for 30 minutes twice a week throughout the school year.

Cost

The *SMART*® program is funded through a wide range of statewide and local activities involving businesses, foundations, and individuals. There is no cost to a school participating through the standard delivery model. Local fundraising pays the salary of program coordinators, though some program coordinators volunteer and thus do not incur this cost.

For communities using the *SMART*® *Kit* delivery model, local groups raise money to cover the cost of *SMART*® licensing and for the salary of a school coordinator. Overall program cost runs approximately $300 a year per child. This cost is largely covered through donations to the *SMART*® parent organization.

Research

One study (Baker, Gersten, & Keating, 2000) reviewed by the WWC investigated the effects of *SMART*®. This study was a randomized controlled trial that met WWC evidence standards.

Baker, Gersten, & Keating (2000) randomly assigned low-performing first-grade students in 24 classrooms from six Title I schools to the intervention or the comparison group within each classroom and assessed reading outcomes at the end of first and second grades. Students in the intervention group received the *SMART*® program as a supplement to the regular reading curriculum during first and second grades. Students in the comparison group did not receive the *SMART*® program, but received the same classroom instruction as students in the intervention group.

Research *(continued)*

The study also included an average-achieving comparison but the WWC did not include this portion of the study in its review.

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.[3]

The WWC considers the extent of evidence for *SMART*® to be small for alphabetics, fluency, and comprehension. No studies that met WWC evidence standards with or without reservations addressed general reading achievement.

Effectiveness

Findings

The WWC review of interventions for beginning reading addresses student outcomes in four domains: alphabetics, fluency, comprehension, and general reading achievement.[4] The Baker, Gersten, & Keating (2000) study reported outcomes in the first three domains. The findings below report outcomes assessed at the end of second grade.[5]

Alphabetics. The Baker, Gersten, & Keating (2000) study reported a statistically significant positive effect of *SMART*® on the Woodcock Reading Mastery Tests–Revised (WRMT-R) word identification subtest. This result was confirmed by the WWC.

Fluency. The Baker, Gersten, & Keating (2000) study reported, and the WWC confirmed, statistically significant positive effects of *SMART*® on the Oral Reading Fluency test, first- and second-grade passages (both administered to students at the end of second grade).

Comprehension. The Baker, Gersten, & Keating (2000) study reported a statistically significant positive effect of *SMART*® on the word comprehension subtest of the WRMT-R, and no statistically significant effect on the passage comprehension subtest of the WRMT-R. The WWC did not find that either of these effects was statistically significant. The average effect size across the two outcomes, however, was large enough to be considered substantively important according to WWC criteria (that is, an effect size of at least 0.25).

Rating of effectiveness

The WWC rates the effects of an intervention in a given outcome domain as: positive, potentially positive, mixed, no discernible effects, potentially negative, or negative effects. The rating of effectiveness takes into account four factors: the quality of the research design, the statistical significance of the findings,[6] 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).

3. 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 sizes 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.
4. For definitions of the domains, see the Beginning Reading Protocol.
5. Outcomes assessed at the end of second grade are shown in Appendix A3 and outcomes assessed at the end of first grade are shown in Appendix A4.
6. 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 the Technical Details of WWC-Conducted Computations for the formulas the WWC used to calculate the statistical significance. In the case of the *Start Making a Reader Today*®, a correction for multiple comparisons was needed for some domains.

The WWC found *Start Making a Reader Today®* to have potentially positive effects for behavior

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.

In the one study of *SMART®,* the improvement index for the single outcome in alphabetics is +16 percentile points; the average improvement index for fluency is +17 percentile points, with a range of +16 to +18 percentile points across findings. The average improvement index for comprehension is +14 percentile points, with a range of +11 to +16 percentile points across findings.

Summary

The WWC reviewed one study on *SMART®* and this study met WWC evidence standards. Based on this study, the WWC found potentially positive effects for alphabetics, fluency, and comprehension. The evidence presented in this report may change as new research emerges.

References

Met WWC evidence standards

Baker, S., Gersten, R., & Keating, T. (2000). When less may be more: A two-year longitudinal evaluation of a volunteer tutoring program requiring minimal training. *Reading Research Quarterly, 35*(4), 494–519.

For more information about specific studies and WWC calculations, please see the WWC *Start Making a Reader Today®* Technical Appendices.