What Works Clearinghouse

INSTITUTE OF EDUCATION SCIENCES

Read Well®

Program Description[2]

Read Well® is a reading curriculum for kindergarten and first-grade students whose goal is to increase students' literacy abilities. The program provides instruction in phonemic awareness, phonics, vocabulary, comprehension, and fluency. Students are given opportunities to discuss the vocabulary concepts that are presented in each story. The program is based on the tenets of scaffolded instruction, in which teachers begin by presenting models and gradually decreasing their support by providing guided practice before students are asked to complete the skill or strategy independently. For example, the student and teacher read new text aloud with the teacher reading the difficult or irregular words. As student skills (and motivation) increase, the amount of teacher-read text decreases and the student is given greater independence. The program combines daily whole class activities with small group lessons.

Research[3]

One study of *Read Well*® that falls within the scope of the English Language Learners review protocol meets the What Works Clearinghouse (WWC) evidence standards. This study, which included 34 first-grade English language learner students from one school in rural Colorado, examined program impacts on students' reading and English language development.[4]

Based on this one study, the WWC considers the extent of evidence for *Read Well*® on English language learners to be small for both reading achievement and English language development. No studies that meet WWC evidence standards with or without reservations examined the effectiveness of *Read Well*® on English language learners in mathematics achievement.

1. This report has been updated to include reviews of four studies that were not included in the earlier review of *Read Well*®. Of these studies, two are not within the scope of the protocol, one is within the scope of the protocol but does not meet evidence standards, and one meets standards. One study that meets standards with reservations in the earlier review (Denton, Parker, & Hasbrouck, 2004) no longer meets evidence standards because the intervention and comparison groups are not shown to be equivalent at baseline. (The protocol for the English Language Learners topic area was revised to specify that groups must be equivalent on the pretest for a quasi-experimental design.) A complete list and disposition of all studies reviewed is provided in the references.
2. The descriptive information for this program was obtained from a publicly available source: the program's website (http://store.cambiumlearning.com/resource.aspx?page=ProgramOverview&site=sw&parentId=019005451, downloaded May 2009). The WWC requests developers to review the program description sections for accuracy from their perspective. Further verification of the accuracy of the descriptive information for this program is beyond the scope of this review. The literature search reflects documents publicly available by February 2009.
3. The studies in this report were reviewed using WWC Evidence Standards, Version 2.0 (see the WWC Procedures and Standards Handbook, Chapter III), as described in protocol Version 2.0.
4. The evidence presented in this report is based on available research. Findings and conclusions may change as new research becomes available.

Effectiveness

Read Well® was found to have no discernible effects on reading achievement and potentially positive effects on English language development for elementary school English language learners.

	Reading achievement	*English language development*	*Mathematics achievement*
Rating of effectiveness	No discernible effects	Potentially positive effects	na
Improvement index[5]	Average: –1 percentile points	Average: +21 percentile points	na
	Range: –2 to –1 percentile points		na

na = not applicable

Additional program information

Developer and contact

Developed by Sopris West Educational Services, *Read Well*® is distributed by Cambium Learning, Inc. Address: Sopris West, 4185 Salazar Way, Frederick, CO 80504. Email: customerservice@sopriswest.com. Web: http://store.cambiumlearning.com. Telephone: (303) 651-2829 or (800) 547-6747.

Scope of use

Read Well® has been implemented in various regions of the country with kindergarten, first-grade, and second-grade regular education students and English language learners.

Teaching

The *Read Well*® program involves explicit, systematic instruction in English language decoding, sustained practice of skills in decodable text, and frequent opportunities to discuss vocabulary and concepts presented in text. Reading and writing skills include story maps, story retells, and guided reports. A key feature of *Read Well*® is the use of scaffolded instruction, in which teachers begin by presenting models and gradually decreasing their support by providing guided practice before students are asked to complete the skill or strategy independently. For example, the student and teacher read new text aloud with the teacher reading the difficult or irregular words. As student skills (and motivation) increase, the amount of teacher-read text decreases and the student is given greater independence.

The *Read Well*® instructor package includes all teacher materials and one set of student materials necessary for implementing the program in a classroom. A professional development program is available for teachers interested in using the curriculum.

Cost[6]

Read Well® can be purchased in whole class, small group, or student packages that are targeted to kindergarten, first-grade, or second-grade students. The whole class instructor package for kindergarten students costs $1,253.95. It includes both whole class and small group instructional components. The cost for a stand-alone small group instructor package is $511.95. The student package costs $1,880.95 for 24 students and $428.49 for six students.

The instructor package for first-grade students costs $1,044.95. The student package costs $1,985.95 for 24 students and $574.95 for six students.

The instructor package for second-grade students costs $1,097.49. The student package costs $1,985.49 for 24 students and $574.95 for six students.

Materials in the instructor and student packages are also available for individual purchase at prices ranging from $19.95 to $396.95.

5. These numbers show the average and range of student-level improvement indices for all findings across the study.
6. The cost of *Read Well*® was received from the developer, Cambium Learning, Inc. in May 2009.

Research

Five studies reviewed by the WWC investigated the effects of *Read Well*® on English language learners. One study (Frasco, 2008) is a randomized controlled trial that meets WWC evidence standards.[7] The study included 34 English language learner students in first grade. The intervention group included 17 students assigned to receive *Read Well*® as their core reading program. The control group included 17 students assigned to receive *Macmillan/McGraw-Hill 2003* as their core reading program.

The remaining four studies do not meet either WWC evidence standards or eligibility screens.

Extent of evidence

The WWC categorizes the extent of evidence in each domain as small or medium to large (see the WWC Procedures and Standards Handbook, Appendix G). The extent of evidence takes into account the number of studies and the total sample size across the studies that meet WWC evidence standards with or without reservations.[8]

The WWC considers the extent of evidence for *Read Well*® to be small for both reading achievement and English language development for English language learners. No studies that meet WWC evidence standards with or without reservations examined the effectiveness of *Read Well*® in mathematics achievement for English language learners.

Effectiveness

Findings

The WWC review of interventions for English language learners addresses student outcomes in three domains: reading achievement, English language development, and mathematics achievement. The studies included in this report cover only two domains: reading achievement and English language development. The findings that follow present WWC-calculated estimates of the size and the statistical significance of the effects of *Read Well*® on English language learners.[9]

Reading achievement. Frasco (2008) reported a not statistically significant difference in reading gains, as measured by the Dynamic Indicators of Basic Literacy Skills (DIBELS) Nonsense Word Fluency subtest, and a not statistically significant difference in fluency and comprehension gains, as measured by the Gray's Oral Reading Test–Fourth Edition (GORT-4).[10] The average effect size across these outcomes was not large enough to be considered substantively important according to WWC criteria.

English language development. Frasco (2008) reported a positive and statistically significant difference in vocabulary gains as measured by the Peabody Picture Vocabulary Test–Third Edition (PPVT-III). However, WWC calculates significance based on posttest standard deviations (as opposed to the study, which

7. In addition to the results discussed below, Frasco (2008) also reports results on the Comprehensive Test of Phonological Processing (CTOPP) that are excluded from this report since the test measures phonemic awareness, which is not part of any English Language Learners domain.
8. 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 the students' demographics and the types of settings in which studies took place—are not taken into account for the categorization. Information about how the extent of evidence rating was determined for *Read Well*® is in Appendix A5.
9. The level of statistical significance was reported by the study authors or, when 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. For the formulas the WWC used to calculate the statistical significance, see WWC Procedures and Standards Handbook, Appendix C for clustering and WWC Procedures and Standards Handbook, Appendix D for multiple comparisons. For the *Read Well*® studies summarized here, no corrections for clustering or multiple comparisons were needed. However, the WWC calculates statistical significance based on posttest standard deviations and not on pretest to posttest gains; this adjustment was applied to the Frasco (2008) study.
10. The study also includes results on the Comprehensive Test of Phonological Processing. The English Language Learners area does not consider phonological awareness measures as part of the reading achievement or English language development domains. Therefore, these results are not included in this review.

Effectiveness *(continued)*

used standard deviations of pretest to posttest gains); after this adjustment, the WWC found that the difference in vocabulary gains was not statistically significant. The effect size is large enough to be considered substantively important according to WWC criteria.

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. The rating of effectiveness takes into account four factors: the quality of the research design, the statistical significance of the findings, the size of the difference between participants in the intervention and the comparison conditions, and the consistency in findings across studies (see the WWC Procedures and Standards Handbook, Appendix E).

The WWC found *Read Well*® to have no discernible effects for reading achievement and potentially positive effects for English language development for English language learners

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 WWC Procedures and Standards Handbook, Appendix F). The improvement index represents the difference between the percentile rank of the average student in the intervention condition and the percentile rank of the average student in the comparison condition. Unlike the rating of effectiveness, the improvement index is entirely based on the size of the effect, regardless of the statistical significance of the effect, the study design, or the analysis. The improvement index can take on values between –50 and +50, with positive numbers denoting favorable results for the intervention group.

The average improvement index for reading achievement is –1.46 percentile points across the study, with a range of –2.30 to –0.61 percentile points across findings. The average improvement index for English language development is +21.06 percentile points across the study.

Summary

The WWC reviewed five studies on *Read Well*® for English language learners. One of these five studies meets WWC evidence standards; the remaining four studies do not meet either WWC evidence standards or eligibility screens. Based on the one study, the WWC found no discernible effects in the reading achievement domain and potentially positive effects in the English language development domain for English language learners. The conclusions presented in this report may change as new research emerges.

References

Meets WWC evidence standards

Frasco, R. D. (2008). Effectiveness of *Reading First* for English language learners: Comparison of two programs (Doctoral dissertation, Walden University, 2008). *Dissertation Abstracts International, 69*(03A), 141–879.

Studies that fall outside the English Language Learners review protocol or do not meet WWC evidence standards

Denton, C. A., Anthony, J. L., Parker, R., & Hasbrouck, J. E. (2004). Effects of two tutoring programs on the English reading development of Spanish-English bilingual students. *The Elementary School Journal, 104*(4), 289–305. The study does not meet WWC evidence standards because it uses a quasi-experimental design in which the analytic intervention and comparison groups are not shown to be equivalent.

Additional source:

Denton, C. A. (2000). The efficacy of two English interventions in a bilingual education program (Doctoral dissertation, Texas A&M University, 2000). *Dissertation Abstracts International, 61*(11), 4325A. (UMI No. 9994233)

References *(continued)*

Kamps, D., Abbott, M., Greenwood, C., Arreaga-Mayer, C., Wills, H., Longstaff, J., et al. (2007). Use of evidence-based, small-group reading instruction for English language learners in elementary grades: Secondary-tier intervention. *Learning Disability Quarterly, 30*(3), 153–168. This study does not meet WWC evidence standards because the measures of effectiveness cannot be attributed solely to the intervention—the intervention was combined with another intervention.

Santoro, L. E., Jitendra, A. K., Starosta, K., & Sacks, G. (2006). Reading well with *Read Well*: Enhancing the reading performance of English language learners. *Remedial & Special Education, 27*(2), 105–115. The study is ineligible for review because it does not use a comparison group.

Sopris West Educational Services. (2007). Read Well: *Results with the* Read Well *curriculum, kindergarten and first grade, Huntsville, Alabama*. Frederick, CO: Author. The study is ineligible for review because it does not examine an intervention implemented in a way that falls within the scope of the review.

Appendix

Appendix A1 Study characteristics: Frasco, 2008

Characteristic	Description
Study citation	Frasco, R. D. (2008). Effectiveness of *Reading First* for English language learners: Comparison of two programs (Doctorial dissertation, Walden University, 2008). *Dissertation Abstracts International, 69*(03A), 141–879.
Participants	The study was based on 36 first-grade English language learner students. Seventeen of these students were randomly assigned to the *Read Well*® intervention group and 19 were assigned to the *Macmillan/McGraw-Hill* control group. Two students attrited from the control group, resulting in 17 intervention group students and 17 control group students for a total of 34 students in the analysis sample. Overall attrition was 5.6% and differential attrition was 10.5%.
Setting	The study took place in a rural elementary school in eastern Colorado. English language learners constituted 61% of the school population. Eighty-two percent of the study body qualified for free and reduced-price lunch during the 2007–08 academic school year.
Intervention	For approximately three months, students received a minimum of 90 minutes of daily instruction in *Read Well*® *1*, which was utilized as their core reading program. The pacing depended on the level of mastery for each individual participant, allowing students to accelerate or slow down according to their grasp of the material.
Comparison	Students in the control group were taught reading using *Macmillan/McGraw-Hill 2003* core reading program and also received 90 minutes of daily instruction. The pacing of the program is based on completing a story weekly, with intervention provided for students after giving the unit test during Week 6 of each unit. This study encompassed two skills-based units, or 12 weeks of instruction. Teachers used lesson maps and templates that included recommendations for where to replace or add activities for struggling readers such as English language learner students.
Primary outcomes and measurement	Study measures in the reading achievement domain included the Dynamic Indicators of Basic Early Literacy Skills (DIBELS) Nonsense Word Fluency Subtest and Gray's Oral Reading Test–Fourth Edition (GORT-4). Study measures in the English language development domain included the Peabody Picture Vocabulary Test–Third Edition (PPVT-III). The study also reports results on the Comprehensive Test of Phonological Processing (CTOPP) that are excluded from this report, since the test measures phonemic awareness, which is not part of any English Language Learners domain. For a more detailed description of these outcome measures, see Appendices A2.1–A2.2.
Staff/teacher training	Three teachers and four instructional aides were involved in the study. Teachers and instructional aides received professional development to implement the program.

Appendix A2.1 Outcome measures for the reading achievement domain

Outcome measure	Description
Dynamic Indicators of Basic Early Literacy Skills (DIBELS) Nonsense Word Fluency Subtest	The DIBELS assessment is a screening tool used by teachers to test students one-on-one to determine early literacy skills. The Nonsense Word Fluency subtest is a one-minute probe that assesses the alphabetic principle. Students are given a list with consonant-vowel-consonant (CVC) and vowel-consonant (VC) nonsense words. Students are asked to orally produce each individual sound or read the whole nonsense word (as cited in Frasco, 2008).
Gray's Oral Reading Test–Fourth Edition (GORT-4)	GORT-4 consists of norm-referenced tests of oral reading rate, accuracy, fluency, and comprehension. In general, the entry point for grades 1 and 2 is Story 1. Each story has five comprehension questions to answer following the oral reading of the given passage (as cited in Frasco, 2008).

Appendix A2.2 Outcome measures for the English language development domain

Outcome measure	Description
Peabody Picture Vocabulary Test–Third Edition (PPVT-III)	The PPVT-III assesses receptive vocabulary. Students are shown pictures by the examiner. The examiner gives the student a vocabulary term, and the students identify the term by pointing to the picture or providing an oral response (as cited in Frasco, 2008).

Appendix A3.1 Summary of study findings included in the rating for the reading achievement domain[1]

Outcome measure	Study sample	Sample size (students)	Author's findings from the study: Mean outcome (standard deviation)[2] — *Read Well*® group[3]	Author's findings from the study: Mean outcome (standard deviation)[2] — Comparison group	WWC calculations: Mean difference[4] (*Read Well*® –comparison)	WWC calculations: Effect size[5]	WWC calculations: Statistical significance[6] (at $\alpha = 0.05$)	WWC calculations: Improvement index[7]
Frasco, 2008[8]								
DIBELS: Nonsense Word Fluency Subtest	Grade 1	34	72.00 (17.34)	73.35 (27.27)	–1.35	–0.06	ns	–2.30
Gray's Oral Reading Test–Fourth Edition	Grade 1	34	12.00 (3.39)	12.06 (4.18)	–0.06	–0.02	ns	–0.61
Domain average for reading achievement[9]						**–0.04**	**na**	**–1.46**

ns = not statistically significant

na = not applicable

DIBELS = Dynamic Indicators of Basic Early Literacy Skills

1. This appendix reports findings considered for the effectiveness rating and the average improvement indices for the reading achievement domain.
2. The standard deviation across all students in each group shows how dispersed the participants' outcomes are: a smaller standard deviation on a given measure would indicate that participants had more similar outcomes. The standard deviations shown here differ from those shown in Frasco (2008), because the WWC uses posttest standard deviations, while the study reported standard deviations of pretest to posttest gains.
3. The mean of the intervention group reported here was calculated as the comparison group posttest mean plus the difference in pretest to posttest gains reported by the author.
4. Positive differences and effect sizes favor the intervention group; negative differences and effect sizes favor the comparison group. The mean difference reflects the difference between groups in pretest to posttest gain scores calculated by the author.
5. For an explanation of the effect size calculation, see WWC Procedures and Standards Handbook, Appendix B. Effect sizes calculated based on data from Frasco (2008) use a difference-in-differences approach; that is, the numerator of the effect size is equal to the difference between the pretest-posttest mean difference for the intervention group and the pretest-posttest mean difference for the comparison group. The denominator reflects the pooled posttest standard deviation for the intervention and comparison groups.
6. Statistical significance is the probability that the difference between groups is a result of chance rather than a real difference between the groups. The statistical significance reported here is not consistent with the author's reported significance, since the WWC uses posttest standard deviations to provide the same metric across studies (as opposed to the study, which used standard deviations of pretest to posttest gains).
7. The improvement index represents the difference between the percentile rank of the average student in the intervention condition and that of the average student in the comparison condition. The improvement index can take on values between –50 and +50, with positive numbers denoting favorable results for the intervention group.
8. The level of statistical significance was reported by the study authors or, when necessary, calculated by the WWC to correct for clustering within classrooms or schools and for multiple comparisons. For the formulas the WWC used to calculate the statistical significance, see WWC Procedures and Standards Handbook, Appendix C for clustering and WWC Procedures and Standards Handbook, Appendix D for multiple comparisons. In the case of Frasco (2008), no corrections for clustering or multiple comparisons were needed.
9. The WWC-computed average effect sizes for each study and for the domain across studies are simple averages rounded to two decimal places. The average improvement indices are calculated from the average effect sizes.

Appendix A3.2 Summary of study findings included in the rating for the English language development domain[1]

Outcome measure	Study sample	Sample size (students)	Author's findings from the study: Mean outcome (standard deviation)[2] — *Read Well*® group[3]	Author's findings from the study: Mean outcome (standard deviation)[2] — Comparison group	WWC calculations: Mean difference[4] (*Read Well*® –comparison)	WWC calculations: Effect size[5]	WWC calculations: Statistical significance[6] (at $\alpha = 0.05$)	WWC calculations: Improvement index[7]
Frasco, 2008[8]								
PPVT-III	Grade 1	34	89.12 (17.65)	81.41 (7.52)	7.71	0.56	ns	21.06

ns = not statistically significant

PPVT-III = Peabody Picture Vocabulary Test–Third Edition

1. This appendix reports findings considered for the effectiveness rating and the average improvement indices for the English language development domain.
2. The standard deviation across all students in each group shows how dispersed the participants' outcomes are: a smaller standard deviation on a given measure would indicate that participants had more similar outcomes. The standard deviations shown here differ from those shown in Frasco (2008) because the WWC uses posttest standard deviations, while the study reported standard deviations of pretest to posttest gains.
3. The mean of the intervention group reported here was calculated as the comparison group posttest mean plus the difference in pretest to posttest gains reported by the author.
4. Positive differences and effect sizes favor the intervention group; negative differences and effect sizes favor the comparison group. The mean difference reflects the difference between groups in pretest to posttest gain scores calculated by the author.
5. For an explanation of the effect size calculation, see WWC Procedures and Standards Handbook, Appendix B. Effect sizes calculated based on data from Frasco (2008) use a difference-in-differences approach; that is, the numerator of the effect size is equal to the difference between the pretest-posttest mean difference for the intervention group and the pretest-posttest mean difference for the comparison group. The denominator reflects the pooled posttest standard deviation for the intervention and comparison groups.
6. Statistical significance is the probability that the difference between groups is a result of chance rather than a real difference between the groups. The statistical significance reported here is not consistent with the author's reported significance, since the WWC uses posttest standard deviations to provide the same metric across studies (as opposed to the study, which used standard deviations of pretest to posttest gains).
7. The improvement index represents the difference between the percentile rank of the average student in the intervention condition and that of the average student in the comparison condition. The improvement index can take on values between –50 and +50, with positive numbers denoting favorable results for the intervention group.
8. The level of statistical significance was reported by the study authors or, when necessary, calculated by the WWC to correct for clustering within classrooms or schools and for multiple comparisons. For the formulas the WWC used to calculate the statistical significance, see WWC Procedures and Standards Handbook, Appendix C for clustering and WWC Procedures and Standards Handbook, Appendix D for multiple comparisons.

Appendix A4.1 *Read Well*® rating for the reading achievement domain

The WWC rates an intervention's effects for a given outcome domain as positive, potentially positive, mixed, no discernible effects, potentially negative, or negative.[1]

For the outcome domain of reading achievement, the WWC rated *Read Well*® as having no discernible effects for English language learners.

Rating received

No discernible effects: No affirmative evidence of effects.

- Criterion 1: No studies showing a statistically significant or substantively important effect, either *positive* or *negative*.

  Met. The WWC analysis found no positive or negative statistically significant or substantively important effect.

Other ratings considered

Positive effects: Strong evidence of a positive effect with no overriding contrary evidence.

- Criterion 1: Two or more studies showing statistically significant *positive* effects, at least one of which met WWC evidence standards for a *strong* design.

  Not met. *Read Well*® has only one study that met WWC evidence standards and no studies showing statistically significant positive effects.

AND

- Criterion 2: No studies showing statistically significant or substantively important *negative* effects.

  Met. *Read Well*® has no studies showing statistically significant or substantively important negative effects.

Potentially positive effects: Evidence of a positive effect with no overriding contrary evidence.

- Criterion 1: At least one study showing a statistically significant or substantively important *positive* effect.

  Not met. *Read Well*® does not have a study showing a statistically significant or substantively important positive effect.

AND

- Criterion 2: No studies showing a statistically significant or substantively important *negative* effect and fewer or the same number of studies showing *indeterminate* effects than showing statistically significant or substantively important *positive* effects.

  Not met. *Read Well*® does not have any studies showing a statistically significant or substantively important negative effect, but there is only one study showing indeterminate effects and none showing statistically significant or substantively important positive effects.

Mixed effects: Evidence of inconsistent effects as demonstrated through either of the following criteria.

- Criterion 1: At least one study showing a statistically significant or substantively important *positive* effect, and at least one study showing a statistically significant or substantively important *negative* effect, but no more such studies than the number showing a statistically significant or substantively important *positive* effect.

  Not met. *Read Well*® has only one study showing indeterminate effects.

OR

- Criterion 2: At least one study showing a statistically significant or substantively important effect, and more studies showing an *indeterminate* effect than showing a statistically significant or substantively important effect.

  Not met. *Read Well*® has only one study showing indeterminate effects.

(continued)

Appendix A4.1 *Read Well*® rating for the reading achievement domain *(continued)*

Potentially negative effects: Evidence of a negative effect with no overriding contrary evidence.

- Criterion 1: One study showing a statistically significant or substantively important *negative* effect and no studies showing a statistically significant or substantively important *positive* effect.

  Not met. No studies showing statistically significant or substantively important negative effects in this domain.

OR

- Criterion 2: Two or more studies showing statistically significant or substantively important *negative* effects, at least one study showing a statistically significant or substantively important *positive* effect, and more studies showing statistically significant or substantively important *negative* effects than showing statistically significant or substantively important *positive* effects.

  Not met. No studies showing statistically significant or substantively important negative effects in this domain.

Negative effects: Strong evidence of a negative effect with no overriding contrary evidence.

- Criterion 1: Two or more studies showing statistically significant *negative* effects, at least one of which met WWC evidence standards for a *strong* design.

  Not met. No studies showing statistically significant or substantively important negative effects in this domain.

AND

- Criterion 2: No studies showing statistically significant or substantively important *positive* effects.

  Met. No studies showing statistically significant or substantively important positive effects in this domain.

1. For rating purposes, the WWC considers the statistical significance of individual outcomes and the domain-level effect. The WWC also considers the size of the domain-level effect for ratings of potentially positive or potentially negative effects. For a complete description, see the WWC Procedures and Standards Handbook, Appendix E.

Appendix A4.2 *Read Well*® rating for the English language development domain

The WWC rates an intervention's effects for a given outcome domain as positive, potentially positive, mixed, no discernible effects, potentially negative, or negative.[1]

For the outcome domain of English language development, the WWC rated *Read Well*® as having potentially positive effects for English language learners. It did not meet the criteria for positive effects as it had only one study with a statistically significant and substantively important positive effect. The remaining ratings (mixed effects, no discernible effects, potentially negative effects, and negative effects) were not considered, as *Read Well*® was assigned the highest applicable rating.

Rating received

Potentially positive effects: Evidence of a positive effect with no overriding contrary evidence.

- Criterion 1: At least one study showing a statistically significant or substantively important *positive* effect.

  Met. One study reviewed by the WWC reported a substantively important positive effect in English language development.

AND

- Criterion 2: No studies showing a statistically significant or substantively important *negative* effect and fewer or the same number of studies showing *indeterminate* effects than showing statistically significant or substantively important *positive* effects.

  Met. The WWC analysis found no indeterminate, statistically significant negative, or substantively important negative effects in this domain.

Other ratings considered

Positive effects: Strong evidence of a positive effect with no overriding contrary evidence.

- Criterion 1: Two or more studies showing statistically significant *positive* effects, at least one of which met WWC evidence standards for a *strong* design.

  Not met. *Read Well*® has only one study that met WWC evidence standards and showed a substantively important positive effect.

AND

- Criterion 2: No studies showing statistically significant or substantively important *negative* effects.

  Met. The WWC analysis found no statistically or substantively important negative effects in this domain.

1. For rating purposes, the WWC considers the statistical significance of individual outcomes and the domain-level effect. The WWC also considers the size of the domain-level effect for ratings of potentially positive or potentially negative effects. For a complete description, see the WWC Procedures and Standards Handbook, Appendix E.

Appendix A5 Extent of evidence by domain

Outcome domain	Number of studies	Sample size		Extent of evidence[1]
		Schools	Students	
Reading achievement	1	1	34	Small
English language development	1	1	34	Small
Mathematics achievement	na	na	na	na

na = not applicable/not studied

1. A rating of "medium to large" requires at least two studies and two schools across studies in one domain and a total sample size across studies of at least 350 students or 14 classrooms. Otherwise, the rating is "small." For more details on the extent of evidence categorization, see the WWC Procedures and Standards Handbook, Appendix G.