IES | Institute of Education Sciences

World of Words

Intervention Brief | *Preparing Young Children for School*

A Publication of the National Center for Education Evaluation at IES

Children who know fewer words in preschool typically continue to have lower levels of vocabulary knowledge in higher grades than their peers who know more words. In fact, this difference continues to be pronounced and even widens as these children reach higher grade levels.[1] Interventions that support vocabulary development and reading comprehension in early childhood have the potential to improve student language development, narrowing this gap.[2] *World of Words* is a supplementary curriculum used to help young children in prekindergarten develop vocabulary knowledge,[3] concept knowledge, and content knowledge in science. The curriculum includes intentional conversations and shared book readings of texts focused on science topics.

> **Goal:** *World of Words* aims to accelerate the development of children's vocabulary knowledge, concept knowledge, and content knowledge in science through topic-centered conversations and shared book readings.

The What Works Clearinghouse (WWC) reviews existing research on educational interventions to identify evidence-based programs and practices. This WWC intervention report summarizes the available evidence on the effects of *World of Words* on student outcomes.

Did *World of Words* improve student outcomes?

Four studies of the *World of Words* program conducted in Head Start and state-funded preschool sites meet WWC standards. Findings from these studies are summarized in Table 1. The table includes a row for the outcome domain–a group of related outcome measures–studied in the research. The *World of Words* studies included language outcome measures that fit within the language domain.[4] The effects of the program on other outcomes are unknown.
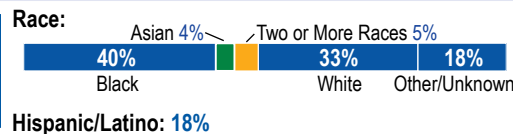
The WWC effectiveness rating indicates whether the *World of Words* program resulted in improved outcomes for children assigned to receive the program compared with children who were not. The table also indicates whether the evidence reviewed satisfies the Department of Education's requirements for strong, moderate, or promising tiers of evidence at the time this report was written. More information about these ratings and requirements is provided on the next page. Findings and conclusions could change as new research becomes available.

Table 1. Summary of findings on *World of Words* program from four studies that meet WWC standards

Outcome domain	Effectiveness rating	Sample Size	Evidence tier	Summary
Language	Positive effects	992	TIER 1 STRONG	The research provides strong evidence that *World of Words* improved student language. This assessment is based on four studies that meet WWC standards.

CHARACTERISTICS OF THE STUDY SETTING AND PARTICIPANTS

Settings: Head Start and state-funded preschool sites in the United States.

Race:
Asian 4% — Two or More Races 5%
| 40% | | 33% | 18% |
Black — White — Other/Unknown

Hispanic/Latino: 18%

Female: 52%

Families with incomes below the federal poverty guidelines: 94%

How was *World of Words* implemented?

This section provides details of how Head Start and state-funded preschool sites implemented *World of Words* in the four studies that contribute to this intervention report. This information can help educators identify the requirements for implementing *World of Words* and determine whether implementing this program would be feasible in their districts, schools, or early childhood education centers.

World of Words aims to accelerate the development of children's vocabulary knowledge, concept knowledge, and content knowledge in science through topic-centered conversations and shared book readings. Teachers implementing *World of Words* in their classrooms received initial training, ongoing coaching, and sets of materials provided by the developer. Then, teachers implemented the 12- to 15-minute *World of Words* sessions during whole-group circle time. The sessions were implemented over 12 to 24 weeks, depending on the number of science topics covered. Teachers using *World of Words* covered between 4 and 8 science topics. For each topic, sessions took place 3–5 days a week across 2–3 weeks. Table 2 describes the components and implementation of *World of Words* in more detail.

Comparison condition: In the four studies that contribute to this intervention report, children in the comparison group were taught by teachers who did not implement *World of Words*. Instead, teachers in the comparison condition selected their own texts and engaged in their typical reading strategies consistent with their core curriculum or another supplemental curriculum.

WWC standards assess the quality of the research, not the quality of the implementation. Studies that meet WWC standards vary in quality of implementation. However, a study must describe the relevant components of the intervention and how each was implemented with adequate detail to be included in an intervention report.

Table 2. Implementation of components of *World of Words*

Component	Description of the component	How it was implemented
"Talk together" (Initial conversation)	The initial conversation is intended to build young children's background knowledge on a particular science topic.	Teachers began by introducing the science topic and vocabulary words, using video clips or picture cards with clear photographic examples of the words. The teachers provided explicit definitions of vocabulary words related to the science topic. During the conversation, teachers connected the words to the science topic and previously learned concepts.
"Read together" (Shared book reading)	The shared book reading is intended to engage young children in listening to a reading of a book about the science topic.	Each set of books on a science topic consists of three types of text that include the vocabulary words and concepts on which the lesson focuses. *Predictable* texts include rhyming structure and repetition to help children recall the words they are learning; *narrative* texts are storybooks that include characters, their traits and mental states, and temporal connections; *informational* texts are written with the purpose of providing scientific information about the topic. During the shared book reading, teachers read the texts provided in an engaging manner, using statements or questions that encourage conversation and are specific to the type of text being read. For example, following the reading of a predictable text, the teachers asked questions that encouraged the children to use the words they are learning. For the narrative text, the teachers stopped to highlight a word, link a word to a concept in the book, or give more information about a word. For informational books, the teachers read a few pages at a time, stopping at various points to connect the content to other books that have been read.
"Reflect together" (Reflection conversation)	The reflection conversation is intended to help young children connect what they learned across topics.	Teachers asked children open-ended questions to encourage them to think about the text and apply their new vocabulary knowledge. Teachers used the question prompts provided by the developer or developed their own. Teachers encouraged children to provide a rationale for their answers using the words they had learned. Teachers referred the children back to the picture cards when they needed support in remembering the new words or their meanings. The teachers also asked challenging questions to provide the children with opportunities to think about words in new contexts.

Note: The descriptive information for this intervention comes from the program website, https://www.worldofwordswow.com/, the four studies that meet WWC standards, and from correspondence with the developer. The WWC requests that developers review the program description sections for accuracy from their perspective. The WWC provided the developer with the program description in December 2022, and the WWC incorporated feedback from the developer.

What resources are needed to implement *World of Words*?

This section provides educators with an overview of the resources needed to implement *World of Words*. Table 3 describes the major resources needed for implementation and approximate costs.

Table 3. Resources needed to implement *World of Words*

Resource	Description
Initial training	According to the developer, teachers need a minimum of a half-day of professional development prior to implementing *World of Words*. The developer offers a range of professional development options, from one-on-one web-based sessions to large on-site training. As of December 2022, this training was provided by the developer at no cost.
Ongoing coaching	According to the developer, teachers need ongoing coaching (e.g., biweekly). The developer offers coaching options, ranging from one-on-one web-based sessions to onsite observations and demonstrations. As of December 2022, coaching was provided by the developer at no cost.
Facilities	*World of Words* is typically implemented in children's classrooms during regular instruction time. Internet access and separate meeting spaces may be required for web-based consultations or on-site training.
Whole-class instructional time and teacher planning time	Teachers implementing *World of Words* dedicate approximately 12–15 minutes each day to intervention activities, plus additional planning time that may be needed to refer to *World of Words* lesson-planning tools.
Materials and equipment	The developer provides six sets of materials for implementing the program. Each set focuses on a science topic and includes five texts (including predictable, informational, and narrative texts), a scripted teacher's guide, 15 picture cards, and a topic poster. Classrooms implementing *World of Words* may also need media-equipped devices for playing audio and video portions of *World of Words* lessons. As of December 2021, the program was available for $450.00 ($75.00 per text set).
Additional resources	Additional resources include assessments, home connections, extension activities, and lesson strategy notes.

For More Information:

About *World of Words*
    Address: 239 Greene Street, New York, NY 10003
    Email: info@ReadWithWOW.com
    Web: https://www.worldofwordswow.com/
    Phone: (917) 275-7113

To request more information about *World of Words* costs and components
    Web: https://www.worldofwordswow.com/contact/

---

[1] Fernald, A., Marchman, V. A., & Weisleder, A. (2013). SES differences in language processing skill and vocabulary are evident at 18 months. *Developmental Science*, *16*(2), 234-248. https://doi.org/10.1111/desc.12019; Scarborough, H. S., Neuman, S., & Dickinson, D. (2009). Connecting early language and literacy to later reading (dis)abilities: Evidence, theory, and practice. In F. Fletcher-Campbell, J. Soler, & G. Reid (Eds.). *Approaching difficulties in literacy development: Assessment, pedagogy and programmes* (pp. 23-38). Sage Publishing; Storch, S. A., & Whitehurst, G. J. (2002). Oral language and code-related precursors to reading: Evidence from a longitudinal structural model. *Developmental Psychology*, *38*(6), 934-947. https://doi.org/10.1037/0012-1649.38.6.934

[2] Marulis, L. M., & Neuman, S. B. (2010). The effects of vocabulary intervention on young children's word learning: A meta-analysis. *Review of Educational Research*, *80*(3), 300-335. https://doi.org/10.3102/00346543103770

[3] The *World of Words* program is designed for use in prekindergarten through grade 2. However, this intervention report provides evidence of its effectiveness only in prekindergarten.

[4] The language domain includes measures that assess receptive and expressive language, vocabulary knowledge, grammar, morphology, and listening comprehension.