SERP built Word Generation by bridging research, practice and design.

In 2004, SERP's first field site partnership began with a question posed by Boston Public Schools Superintendent Tom Payzant. He noted that when students get to high school, many are unable to comprehend their textbooks. Payzant asked, "What could be done in middle school to build reading comprehension of content-area texts before they encounter high school textbooks?"



A SERP/Harvard research team reviewed district data and programs, visited schools, and interviewed teachers and administrators. The biggest challenge identified by teachers, and confirmed by assessment data, was vocabulary. Even though textbooks are careful to define words like photosynthesis, democracy, and alliteration, many "all-purpose" academic vocabulary words, such as system, analyze, and distinguish, were not being taught.

In 2005, a team of researchers, practitioners, and designers recruited by SERP went to work on a teaching strategy for academic vocabulary consistent with research knowledge (multiple exposures to words in different contexts, authentic opportunities to use words in discussion and writing). An added challenge was the strategy had to fit comfortably into the current routines of the classroom. This balancing act yielded a program that required only about 15 minutes per day. Unusual, however, was that different content-area teachers shared the teaching throughout the week. The

language arts teacher opened and closed the unit, but the math, science, and social studies teachers each had a 15-minute portion to cover as well.













factor

Development of the Word Generation program was led by renowned language and literacy expert Catherine Snow and was executed with a SERP team that included curriculum writers and design staff with deep knowledge of the classroom and with experience as teachers. Very soon after initial prototypes went into schools, the team used feedback from teachers to revise the design significantly. For example, ten weekly academic focus words were reduced to five, and math activities were refocused to target review rather than the introduction of new concepts.





In 2009, the units were made available to teachers as free downloads on SERP's Word Generation website. The materials have been updated over the years and maintained as a free resource. While many teachers use WordGen successfully without additional support, professional development sessions and actual WordGen classroom lessons were video-recorded and posted online for teachers seeking guidance. In response to teacher interest, SERP developed additional resources in response to teacher requests, including supports for English learners, vocabulary cards to post in classrooms, and discussion and debate resources.



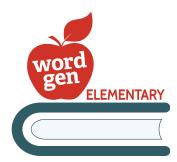
A Harvard team then won a grant to conduct a randomized trial of the Word Generation program in three cities beginning in the 2009-2010 academic year. While this study was under way, the U.S. Department of Education, Institute of Education Sciences (IES) announced its one-hundred million dollar Reading for Understanding (RFU) Initiative. This major funding would be awarded to five organizations, each conducting basic research, development, and evaluation to

address literacy within a specific grade span. SERP was tapped for grades four through eight, and this new work would include expanding WordGen to serve younger students and to develop middle grades curricula that focus on science and social studies content.

The products of SERP's five-year RFU effort include WordGen Elementary (Grades 4-5, 26 units), Science Generation (Grades 6-8, 18 units), and Social Studies Generation (Grades 6-8, 18 units). As with the original program, the new programs relied upon early feedback from a small number of partner teachers and more extensive feedback at the end of each implementation year.











Over the years, use of Word Generation has grown appreciably. The number of visitors annually to the Word Generation website has risen from 4,800 (2009) to 158,000 (2017). To date, 31,000 people have completed the optional registration form, and they include people from school districts in every state in the U.S. and from 59 countries. Some registrants are individual teachers, while others are literacy directors for entire schools or school systems.

In 2017, the U.S. Department of Education selected WordGen Elementary for an independent, national study. SERP seized this opportunity to design a new strategy for ongoing instructional improvement that is affordable and sustainable. Sample agendas for teacher team meetings are provided, as are activities to prompt teachers' deeper dives into program practices. By way of video, researchers guide teachers through the purpose and importance of key program features and affordances. This provides outside expertise that is both high-level and affordable. Over the course of a school year, teachers look ahead to identify opportunities to use research-based practices and later reflect on how these practices were helpful or challenging in their classroom context. While many teachers use Word Generation without support, research evidence strongly suggests that collaboration among teacher teams is a powerful strategy for improving the quality of instruction if those teams have sufficient expertise available to them. This novel design for professional learning makes that expertise accessible.

As SERP's first product, Word Generation blazed a trail for the many SERP initiatives that came on its heels, and the lessons from each partnership initiative are carried from one effort to the next. No two SERP projects have followed an identical path, but the growing number of SERP projects and products bear the imprint of a strategy first developed with Word Generation: a) to design for and with teachers; b) to provide schools with tools that fit comfortably into current routines while reshaping practice over time; and c) to solve problems in one place in a way that can be used effectively and sustainably anywhere.