The research behind Amplify Science

Grades K–8

Amplify Science is based on the latest research on best practices for teaching and learning science—and it works.

Amplify Science has a significant positive impact on student learning.

WestEd's **gold-standard study** at grade 7 found Amplify Science had a statistically significant positive impact on student learning compared to comparison, or "business as usual" programs.*

Teachers also reported that the curriculum supported them in engaging students in scientific discourse. While the study was done at grade 7, the same instructional approach is used across all grades and domains of Amplify Science.

*Materials used by the comparison group included a redesigned NGSS curriculum, an open-source, project-based curriculum; an adopted textbook; and district-created resources.

Using Amplify Science curriculum materials would move an average student's percentile rank* up by

14%

Source: West Ed

Amplify Science

It works because our approach to instruction is grounded in research.

Amplify Science was built to embody the ambitious vision for science education articulated in the Framework for K–12 Science Education (National Research Council, 2012) and incorporates the latest research on student learning, including but not limited to:

Emphasis on coherence.

Curricular coherence is a major predictor of student performance. Amplify Science units are designed around an anchoring phenomenon that drives student learning throughout the unit. A carefully designed learning progression structures student progress toward a complex causal explanation of that phenomenon.

Real world phenomena and authentic student roles.

Each Amplify Science unit introduces students to a realistic problem that they must solve by taking on the role of a scientist or engineer to explain a surprising or mysterious phenomenon.

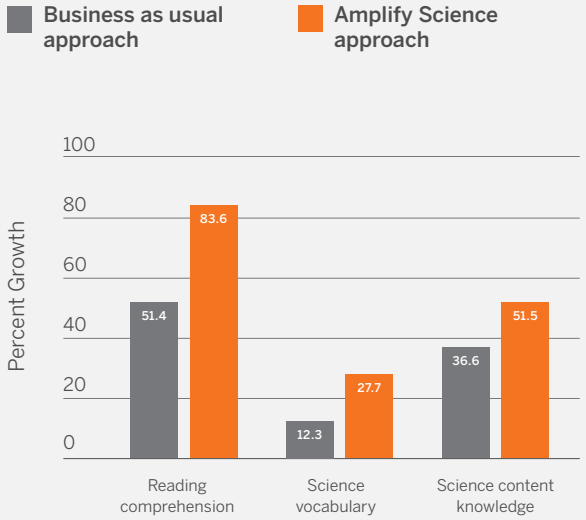
The proven efficacy of our Do, Talk, Read, Write, Visualize approach.

Our core instructional approach is based on the multimodal Do, Talk, Read, Write model initially developed for the UC Berkeley's Lawrence Hall of Science's Seeds of Science/ Roots of Reading® program for grades 2–5. This approach to instruction is highly congruent with research about effective science knowledge and literacy development. The approach was carefully studied and has **gold standard evidence** to show its efficacy.

Adding regular instruction to support visualization aligns with the current NGSS emphasis on helping students create mental models of scientific phenomena. The Do, Talk, Read, Write, Visualize modalities align with the science practices described in the NRC Framework for K–12 Science Education, and embodied in the NGSS.

The strong research base grounded in decades of proven experience in science curriculum development, combined with unparalleled efficacy research provide high-quality evidence that Amplify Science has a significant positive impact on student learning.

Students achieve more in science and literacy with Do, Talk, Read, Write, Visualize



Efficacy research shown based on the Do, Talk, Read, Write approach as tested in the Seeds of Science/Roots of Reading program. Source: The National Center for Research on Evaluation, Standards, and Student Testing (CRESST)

Learn more about the research behind Amplify Science by scanning the code or visit amplify.com/science-research-OR.

Amplify.

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