

KNOWLEDGE-BUILDING REPORT AND EFFICACY STUDY

Building Content Knowledge to Boost Comprehension in the Primary Grades

An independent study of knowledge-building in Kindergarten classrooms revealed the significant positive impact of using content-rich Amplify CKLA with systematic knowledge-building to simultaneously develop language skills and content knowledge in the primary grades.



Study background

Florida State University researchers Sonia Cabell, Ph.D., and Hyejin Hwang, Ph.D., were interested in the connection between integrated literacy/knowledge-building approaches and supporting student comprehension. From their initial review, which spanned dozens of studies, they noted a lack of research performed in K–2 settings. There was, however, evidence for the advantage of content-rich ELA programs in supporting student comprehension.

As part of their research, they conducted an evaluation of the content-rich Amplify CKLA program in Kindergarten classrooms. They chose Amplify CKLA for its wide usage and the alignment of its instructional approach with the key practices of knowledge-building to improve linguistic comprehension, per the Simple View of Reading.

They conducted two trials with over 1,200 Kindergarten students, the findings of which indicated statistically significant positive effects on vocabulary, science knowledge, and social studies knowledge scores in students using Amplify CKLA.

Setting and participants

The study was conducted across two trials, each in a large urban U.S. school district. The first trial consisted of 23 schools, the second of 24. Each school was randomly assigned as either part of the treatment group (implementing the program) or part of the control group (business as usual).

A total of 65 teachers and 1,281 students participated in the study. Each student was individually tested prior to implementing CKLA: First on knowledge in one semester, then again in the spring on language and knowledge using standardized assessments.

Assessment measures

Proximal and standardized assessments were run on each student before and after the study's completion. Proximal measures were created by researchers and examined whether students learned the words and knowledge that they were taught in the curriculum. Standardized measures gauged students' general learning in the areas of receptive vocabulary, expressive vocabulary, linguistic comprehension, and content knowledge in science and social studies.

Conclusion

The results of this work indicate that early content-rich instruction (such as that offered by CKLA) involving students interacting with complex, systematically organized texts can lead to enhanced acquisition of vocabulary and content knowledge.

FINDINGS

Amplify CKLA significantly improved vocabulary and knowledge scores.

- 📖 The treatment group [CKLA students] outperformed the control on proximal vocabulary assessments**, with a statistically significant effect size of 0.55.
- 📖 The treatment group [CKLA students] outperformed the control on proximal social studies knowledge and science knowledge assessments**, with statistically significant effect sizes of 0.97 and 0.26, respectively. Differences in the magnitude of effects between the proximal science and social studies knowledge outcomes likely reflect the topics being assessed.
- 📖 Statistically significant effects were also found for standardized measures of generalized vocabulary** (effect size 0.09).

“The results of this work indicate that early content-rich ELA instruction, involving students interacting with complex, systematically organized texts, can lead to enhanced learning in vocabulary and content knowledge”

Excerpt from Cabell & Hwang, 2020, *Building Content Knowledge to Boost Comprehension in the Primary Grades*



Tier 1 ESSA Evidence

The Every Student Succeeds Act (ESSA) established four tiers of recognized evidence that demonstrate a statistically significant effect on improving student outcomes. Tier 1, the most rigorous tier of evidence, requires strong evidence from at least one well-designed and well-implemented experimental study.

The Cabell and Hwang research on the effects of the Amplify CKLA Knowledge instruction in Kindergarten meets the qualifications for ESSA Tier 1. This level of achievement is a result of the statistically significant greater post-test outcomes displayed by students who received Amplify CKLA Knowledge instruction compared to the students in the business as usual control group.



[Access the full report](#)

Amplify Core Knowledge Language Arts (CKLA) brings the Core Knowledge approach to life.

Embodying the content-specific, coherent, and cumulative Core Knowledge approach, Amplify CKLA integrates rich knowledge-building and foundational skills instruction. While other programs may claim to build knowledge, Amplify CKLA is unique in its breadth and depth of topics spanning history, science, literature, and the arts. Used by over three million students nationwide, Amplify CKLA's comprehensive and engaging literacy curriculum is proven to boost outcomes and close achievement gaps.

To learn more about Amplify CKLA, go to amplify.com/ckla.

Amplify.