



An Independent Study* of the Play & Learn Science App Showed:

Children's understanding of science content and practices improved

- There was a statistically significant improvement in children's scores on an assessment of science content and practices.
- Nearly all parents reported that their child learned something new from the games and hands-on activities.
- Almost all parents reported the games and activities had a positive impact on their child's STEM skills and interests.

Children's use of science vocabulary words increased

- There was a statistically significant improvement in children's use of science-related vocabulary words, as measured by two assessments.
- Parents reported increases in their child's use of science vocabulary words, like *float*, *thermometer* and *object*.

Parents' engagement with science increased

Not only did parents report that their child did or talked about science activities more often, parents also engaged in science- and engineering-related activities with their child more often.

This is important as prior research has shown many parents say they lack the knowledge and confidence to support young children's science learning.

Science literacy has become essential for navigating our increasingly science- and technology-oriented world and for pursuing training and careers across the workforce. Current research indicates that informal science experiences may be more influential than school in sparking young children's motivation to do and learn science. Families are powerful mediators of their children's science activities, interests, and learning. To support family science exploration, the CPB-PBS Ready To Learn Initiative developed the **PBS KIDS Play & Learn Science** app, which provides in-app and direct hands-on science explorations for children ages 3 to 6 and their parents. The app introduces basic science concepts and practices involving weather, solids and liquids, forces and motion, and light and shadow.

* Education Development Center and SRI International conducted an independent study of families' use of the app and related supports over four weeks.



Photo: EDC, Burt Granofsky

Study Facts

32

CHILDREN
ages 3 to 5,
living in two
communities in the
South and Northeast

4

WEEKS
using the app to
explore science
concepts, practices,
and vocabulary

3

MEASURES
two child assessments
of vocabulary and
performance of hands-
on tasks;
one parent survey

Full Report

www.pbslearningmedia.org/rtl/research



The Corporation for Public Broadcasting and PBS are partners in a Ready To Learn Initiative, supported by the U.S. Department of Education. The Initiative brings educational television and digital media resources to children ages 2-8, promoting early learning and school readiness, with an emphasis on supporting children from low-income, underserved communities.



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