PROGRAM PARTICIPANTS INCLUDED:

**TEACHERS**

66 working with
~3000 STUDENTS*

**LIAISONS (EARLY-CAREER SCIENTISTS)**

43 working with
400+ MENTOR SCIENTISTS

*Schools in the study were very similar to the overall US population with respect to student composition.

THANK YOU FOR YOUR PARTICIPATION!

The Digging Deeper Research Study was a success because of the participation of districts from across the country. We appreciate the time and effort of participating teachers and students, and the scientists who supported them.

STUDY GOALS:

Digging Deeper was a research study designed to investigate the effectiveness of a partnership program involving high school students, teachers, and scientist mentors for improving students’ science learning.

KEY FEATURES:

- **Fully randomized control design**
  This research design is the gold standard for intervention research in education.

- **One week of in-person collaborative professional learning**
  Teachers and early-career scientists participated in a workshop to prepare them to co-mentor student teams through plant science investigations.

- **Teachers taught the PlantingScience Power of Sunlight module to students**
  Students took part in guided and open investigations to explore photosynthesis and cellular respiration.

- **Students communicated with mentor scientists online**
  During the Power of Sunlight module, student teams collaborated with their scientist mentor using the PlantingScience platform.
The What Works Clearinghouse Improvement Index indicates that students who participated in the PlantingScience Power of Sunlight program would be expected to outperform students who did not receive the intervention by 11 percentage points on average.

**FULL RESULTS OF THE STUDY**

**IN THE JOURNAL OF RESEARCH IN SCIENCE TEACHING**


**WHAT'S NEXT?**

Due to the success of Digging Deeper, the National Science Foundation has funded a continuation of the research. The new project will focus on repeating the study, as replication studies are much needed but rarely done in education research. The new research will also include comparing the effectiveness of professional learning delivered in-person with an equivalent online collaborative teacher-scientist professional learning. The next round of research will take place 2023-2024.

**GET INVOLVED!**

The Power of Sunlight module, and other PlantingScience modules are available for free for any teacher. All modules provide the opportunity for students to interact online with scientist mentors. Visit [https://plantingscience.org](https://plantingscience.org) to learn more.