



Growing Our Own Einsteins

A Shell-sponsored program for elementary and middle school teachers in Texas is helping develop the scientists and engineers needed to ensure our nation's future competitiveness.

- Environment & Society
- Action Network
- Supporting Education**
- Energize Your Future
- Shell Eco-marathon Americas®
- Respecting the Environment
- Shell in the Community
- Request a Grant
- Innovation
- Products & Services
- About Shell

Activities are designed to improve students' scientific thinking, their mathematical and technological literacy, and interest to pursue science and engineering-related careers.

"The United States is lacking the engineers and scientists we need to remain competitive. The problem stems from the fact that we don't do a good job at the elementary and middle-school level in helping our students become excited about STEM subjects and giving them the skills to pursue science-related careers," explains Dr. Kamil Jbeily, executive director of the Texas Regional Collaboratives at the University of Texas at Austin.



00:00 03:27

Dr. Jbeily suggests one of the reasons students are not learning science early on is because of an inadequate background in the subject matter by elementary and middle school teachers, who are expected to be experts in all subjects, not just one.

"Studies show that teacher quality, more than any other factor, is a key determinant of student success," Dr. Jbeily says.

The TRC's answer to the problem? Equip kindergarten through 8th-grade teachers with skills to provide high-quality science instruction, effectively communicate a positive attitude about STEM subjects and help inspire students to pursue STEM-related careers.

Through TRC professional development and mentoring, 17,000 elementary and middle school teachers have received hands-on instruction from university-level science professors and then have taken their learnings back to public schools to share with other teachers. The multiplier effect means that 30,000 teachers have improved the learning experiences of more than two million students in the State of Texas.

Test scores show the approach is working. The TRC says students of teachers who participate in their professional development and mentoring programs score higher than those who don't on standardized tests.

"I'm learning strategies to better reach kids and to better deliver the material in a way they can understand," says Toni Longino, a middle school teacher in the Clear Creek Independent School District near Houston.

"The collaborative has definitely made me a better teacher," agrees Sandra Wigginton, a fifth-grade teacher and science lab instructor in the Houston Independent School District.

"The program has helped me not only gain knowledge in different fields, such as physical science and natural science, but also I'm able to use classroom materials that otherwise would be too expensive for my school or me to purchase," says Wigginton, "When students handle materials, touch them, it's another way of learning and they can see the real-world application."



Through the Texas Regional Collaboratives for Excellence in Science & Mathematics Teaching, more than 17,000 science teachers are learning hands-on, engaging ways to teach young students and foster a love for learning of science, technology, engineering and math (STEM) subjects.

For Shell, the investment in teachers is an investment in its future workforce. "It takes collaborative efforts and commitment of industry and academia to educate and train the workforce of the future. For that reason, Shell is pleased to support Texas Regional Collaboratives programs that enhance teacher skills and student understanding of math and science. These two disciplines are critical to addressing the energy and environmental challenges of the future," says Marvin Odum, president, Shell Oil Company

SHARE AND FOLLOW US!



RELATED LINKS

Texas Regional Collaboratives

To provide Texas science and mathematics teachers with support systems of scientifically researched, sustained, and high intensity professional development and mentoring to assist them in the implementation of the Texas Essential Knowledge and Skills (TEKS).

For More Information, visit the website - opens in new window

Search



About Our Website

- Contact Us
- Help
- Accessibility
- Sitemap
- Terms and Conditions
- Privacy Policy
- Shell Global Helpline

Main Areas

- Environment & Society
- Innovation
- Products & Services
- About Shell

Environment & Society

- Action Network
- Supporting Education
- Energize Your Future
- Shell Eco-marathon Americas®
- Respecting the Environment
- Shell in the Community
- Request a Grant

Tools

- Job Search
- Station Locator - opens in new window