ED-NASA Partnership Fact Sheet

The U.S. Department of Education’s (ED’s) 21st Century Community Learning Centers (21st CCLC) program has collaborated with NASA since 2013 to bring exciting content and experiences in science, technology, engineering and math (STEM) education to students in some of the nation’s highest-need communities. The programs, which take place during out-of-school time, currently benefit economically disadvantaged and underserved students at approximately 80 21st CCLC sites nationwide. Through the 21st CCLC collaboration with NASA, student teams are tackling real-world engineering design challenges and interacting directly with NASA scientists and engineers.

About ED’s 21st CCLC Program

ED’s 21st CCLC program supports the creation of community learning centers that provide academic enrichment opportunities during non-school hours for children, particularly those who attend high-poverty and low-performing schools. These 21st CCLCs help students meet state and local standards in core academic subjects, such as reading and math, and offer enrichment activities that complement and reinforce schools’ regular academic programs. The 21st CCLC program was created as part of the 1994 reauthorization of the Elementary and Secondary Education Act (ESEA). ESEA was signed into law in 1965 by President Lyndon Baines Johnson, who believed “full educational opportunity” should be “our first national goal.”

Benefits of the ED-NASA Partnership

Considerable evidence suggests that out-of-school time provides a critical pathway for engaging and interesting all students in the STEM fields. It is a particularly effective strategy for engaging underserved and economically disadvantaged students. The ED-NASA collaboration is an important initiative because

- The number of unfilled STEM jobs continues to grow, and females and minorities — especially Native Americans — are the most under-represented groups in the STEM fields. Approximately 14 percent of bachelor’s degrees granted to all American students are in STEM fields, but less than 1 percent of STEM bachelor’s degrees are granted to students of color.
- Income inequality continues to grow, and high-skill STEM jobs are among the highest paying. Numerous studies indicate that the demand for STEM jobs will outpace the supply globally in the next 20 years. The informal learning and hands-on activities that students experience during out-of-school time are key elements for interesting students in the STEM fields.
- The 21st CCLC program, serving over 1.5 million students in all 50 states, provides an unparalleled avenue for reaching students in high-need schools, who often have little or no opportunity to engage with STEM content and experiences or with STEM professionals.
The ED-NASA collaboration provides students with the opportunity to solve challenges currently being addressed by NASA scientists and engineers. Throughout the program, 21st CCLC staff and students interact directly with NASA scientists and engineers, learning firsthand about engineering design and practices.

In 2013, 20 21st CCLC sites across three states participated in the NASA challenges, which offered three engineering design challenges. In 2015, almost 80 21st CCLC sites across 10 states are participating, with the option of choosing from six engineering challenges.

For more information on the 21st CCLC program and the interagency collaboration, visit http://www2.ed.gov/programs/21stcclc/index.html.