FloridaLearns STEM Scholars STEM Brief September 2013

Participating School Districts



Panhandle Area Educational Consortium

Patrick L. McDaniel, Executive Director Calhoun Franklin Gadsden Gulf Holmes Jackson Jefferson Liberty Madison Taylor Wakulla Walton



Heartland Educational Consortium Tom Conner, Executive Director DeSoto Glades Hardee Hendry Highlands Okeechobee



North East Florida Educational Consortium James Surrency, Ph.D., Executive Director Columbia Flagler Gilchrist Lafayette Levy P.K. Yonge Putnam Union





FloridaLearns STEM Scholars Project Provides Rich Opportunities for Participants

The *FloridaLearns STEM Scholars* Project is funded through the Florida Department of Education's Race to the Top award and involves a partnership among Florida's three educational consortia, which provide critical educational support services to Florida's small and rural school districts. The consortia are Panhandle Area Educational Consortium (PAEC) in northwest Florida, Heartland Educational Consortium (HEC) in south central Florida, and North East Florida Educational Consortium (NEFEC) in the northeast part of the state.

The Project is focused on serving gifted and talented students in grades 9 - 12 who reside in the small and rural school districts served by PAEC, HEC, and NEFEC. It affords rich opportunities for the participants, including collaborative problem-solving experiences, leadership development, and information and experiences which ensure that the students and their families are well informed about STEM higher education and career options in Florida.

Scholar/Parent Nights

During the first two years of the *FloridaLearns STEM Scholars* Project, 105 Scholar/Parent Nights were held in regional locations with 2,236 attending. These meetings were designed to provide program information and increase awareness about STEM careers, scholarship opportunities, course requirements, and other key topics.

Regional Forums

Sixty Regional Forums have been offered through the Project thus far, with 3,149 students participating in a wide variety of collaborative problem-solving experiences. Students who began the project in year one have had access to six of these events, which were held at regional colleges and universities throughout the geographic area of each of the consortia. During each Forum, students were given opportunities to explore, imagine, and grow intellectually in a challenging and affirming environment with students of similar abilities and interests. They also completed activities planned to develop their leadership skills and their ability to work collaboratively in teams, and were introduced to campuses and staff of regional colleges and universities that are within driving distance of their homes.

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Summer Challenges

Fourteen Summer Challenges, involving 397 STEM Scholars, have been held across the consortia. With the help of college and university faculty, mentor teachers, and STEM professionals, these four-day summer experiences were focused on relevant content and authentic problem solving. STEM Scholars worked in collaborative teams with students from other districts as they explored topics such as nanotechnology, engineering, ecology, marine habitats, underwater robotics, alternative energy sources, physics and photonics in cyber security, and inorganic chemistry. Through these Challenge events, STEM Scholars were given the opportunity to increase their knowledge and experience in Science, Technology, Engineering and Mathematics, and were exposed to emerging technologies and areas of science, while also developing leadership and collaborative skills as they worked with their peers on creative and innovative solutions to complex problems.

STEM Talent Developers

An important component of the *FloridaLearns STEM Scholars* Project is the collaboration with STEM-related higher education faculty, businesses and industry, military, and workforce development systems to provide information, support, and resources to participants, parents, and community members. Currently 103 STEM Talent Developers have been identified throughout the consortia.

Summer Field Site/Workplace Experiences

Twenty-eight Field Site/Workplace Experience opportunities have been made possible through partnerships with leaders in STEM industries who serve as STEM Talent Developers. During the summer of 2013, 69 students and 24 adults participated in a variety of experiences, including job shadowing, workplace tours, career coaching, and internships. They conducted field and worksite tasks alongside scientists, engineers, and other STEM professionals, receiving first-hand knowledge and experience with STEM career opportunities in their communities through real world interactions with STEM-related employers.

University of Florida Immersion

This summer 87 rising juniors and seniors in the *FloridaLearns STEM Scholars* Project were selected through an application process to attend a week long Immersion into STEM experience at the University of Florida. During this week STEM Scholars participated in hands-on STEM activities, high interest STEM-related field trips, visits to STEM-related research labs, in-depth content instruction, and interaction with university faculty. This residential experience provided students a glimpse into what life on the campus of a major university is like.

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Individualized Guidance Counseling

During the first two years of the *FloridaLearns STEM Scholars* Project, a total of 5,824 individualized counselor visits have been provided. STEM Project counselors ensured that individual learning needs and strengths were addressed when courses were scheduled and encouraged each student to take appropriate rigorous academic STEM courses to ensure the student was intellectually challenged. They offered information about career awareness and readiness, and provided scholarship information to students. They were also available to support the social and emotional needs of these gifted and talented students.

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