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CORRIDOR CONNECTIONS

The Official Newsletter of SCILS
STEM Collective for Innovative Louisiana Stakeholders

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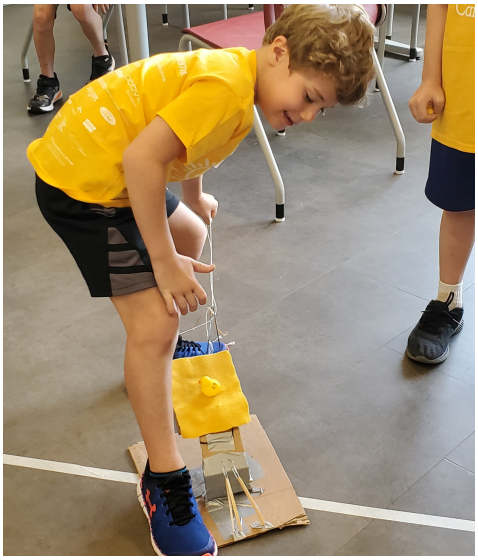
University of Louisiana at Monroe



Lincoln Parish STEM Center

Morehouse Parish Schools

Look Out

SCILS EMBRACES YEAR 2

by Cathi Cox-Boniol

After kick-starting the Region 8 LaSTEM Hub with an exciting summer of projects hosted by partners on different satellite sites along the I-20 corridor, the SCILS team now turns its focus to growth through a more diverse menu of program options in year two. With enhanced funding from the Board of Regents, SCILS not only plans to ramp up the efforts of its partner sites, the wheels are already turning on new events and connections.

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LOOKING FOR BUSINESS AND TECHNOLOGY CAREER EXPO CONNECTIONS?

SCILS is partnering with LA GEAR UP and Louisiana Delta Community College to provide a series of virtual Career Expo opportunities. For more information, please contact Julie Salter, 318-345-9151, jsalter@ladelta.edu

SUMMER 2021 YIELDS EXCITING SCILS PROJECTS

Based on Reports Submitted by SCILS Satellite Sites

With SCILS seed funding, seven satellite sites within the SCILS network developed and executed projects customized for their campus and stakeholders. The results provide evidence of an impactful summer experience for young people and adults alike along the I-20 Corridor.

Within the original satellite partners, Bossier Parish Community College offered CTEC 101 Scholarships to support student exploration in cyber technology while Caddo Parish School District sent students and teachers to Louisiana Tech University to participate in the Cyber-Discovery Camps.

Centenary College developed a Medical Scholars Program as Grambling State University hosted cyber-security training for high school teachers. Louisiana Delta Community College developed a robust forensic science program and Morehouse Parish School District facilitated a robotics program within its STEM Summer Enrichment initiative.

Finally, while the University of Louisiana at Monroe developed a data-base of all STEM Programs available through its campus efforts while hosting Kids U for middle grades students, new SCILS partner the Lincoln Parish School District hosted 8 different STEM Camps through programming within its STEM Center.

Year two will now build upon the outstanding foundation laid by this first round of projects and programs. Hats off to the SCILS outstanding partners for such an impressive launch!

SCILS
STEM Collective for Innovative Louisiana Stakeholders

BY THE NUMBERS:

Through SCILS support and the efforts of partners within the network, the following data represents impact through summer 2021 programming:

199 individuals impacted:

107 females
92 males
105 Caucasian
92 African American
2 other

60 volunteers
568 volunteer hours

Did you know?

According to the Louisiana Workforce Commission, there are 156 openings for Computer User Support Specialists (8/24/2021). Achieving the ITF+ on-ramp credential allows students to enter the path leading to higher levels in the CompTIA Industry-based Credential series that high-wage, high-demand employment opportunities.

LA REGENTS STEM
Science • Technology • Engineering • Math

SCILS is supported through funding to the Science and Technology Education Center (SciTEC) in the College of Education at Louisiana Tech University through the LaSTEM initiative of the Louisiana Board of Regents.

The STEM Labor Force of Today

Scientists, Engineers and Skilled Workers

For this cycle, the report integrates two major components of the STEM workforce: workers with a bachelor's degree or higher and workers without a bachelor's degree, also referred to as the skilled technical workforce (STW). The inclusion of the STW recognizes the importance of these workers in adapting and maintaining new processes and technologies that are integral to the U.S. S&E enterprise and the increasing use of these skills across a broad range of occupations. As such, the STEM workforce described in this report includes occupations that have historically been known to require STEM skills and expertise (e.g., life sciences, physical sciences, engineering, mathematics and computer sciences, social sciences, and health care) as well as occupations that are not typically considered STEM fields but that do, in fact, require STEM skills (e.g., installation, maintenance and repair, construction trades, and production occupations). This major shift in the broad understanding of the STEM workforce more than doubles the number of workers classified as part of the STEM workforce by including 16 million workers with at least a bachelor's degree and 20 million without a bachelor's degree.

Major Takeaways:

- **By including workers of all educational backgrounds and the wide variety of occupations that require significant science, technology, engineering, and mathematics (STEM) knowledge and expertise, the STEM workforce represented 23% of the total U.S. workforce in 2019.**
- **A little over half of STEM workers do not have a bachelor's degree and work primarily in health care (19%), construction trades (20%), installation, maintenance, and repair (21%), and production occupations (14%).**
- **Unemployment was lower among the STEM labor force (2%) compared to the non-STEM labor force (4%) in 2019, and this pattern persisted even during the COVID-19 pandemic.**
- **In 2019, STEM workers had higher median earnings ($55,000) than non-STEM workers ($33,000).**
- **Women are about 34% of STEM workers, representing 44% of those with a bachelor's degree or higher and 26% of those without a bachelor's degree.**
- **Although Blacks or African Americans, Hispanics or Latinos, and American Indians or Alaska Natives represent 30% of the employed U.S. population, they are 23% of the STEM workforce due to underrepresentation of these groups among STEM workers with a bachelor's degree or higher.**
- **Foreign-born workers accounted for 19% of the STEM workforce and 45% of a subset of STEM workers (i.e., mathematical and computer scientists, physical scientists, life scientists, social scientists, and engineers) with doctoral degrees in 2019.**

The U.S. STEM workforce is large and diverse in occupations, education level, and nationality. Although STEM workers generally have better labor market outcomes compared to non-STEM workers, these benefits are unevenly distributed across region, sex, race, or ethnicity. While participation by historically underrepresented groups has grown, these groups continue to be less well represented, which may impede the innovative capacity of the U.S. S&E enterprise. Broadening participation in STEM and ensuring equitable distribution of benefits from STEM fosters the development of a robust STEM workforce, which is critical for improving the nation's living standards, providing economic growth, and maintaining global competitiveness.

For more information or to read the entire report, visit the following bit.ly link:

https://bit.ly/3kdGmkv

Access "The Skilled Technical Workforce: Crafting America's Science and Engineering Enterprise" using the following bit.ly link:

https://bit.ly/3hEcITX

Watch for Satellite Spotlights Beginning in October 2021!

SCILS EMBRACES YEAR 2 (CONT)

Plans for the 2021-2022 year include 1) increasing the number of satellite education partners along the I-20 corridor, 2) increase the number of industry partners within the SCILS network, 3) collaborate and expand the Workforce Wednesday initiative in partnership with Louisiana Delta Community College while including a culminating workforce conference, and 4) launch a community engagement-type event that serves university students while promoting problem solving and retention as well as career and workforce development.

The number of satellite partners has already increased from seven in year one to thirteen in year two. SCILS will continue to leverage resources throughout the region to support the ongoing STEM efforts at each satellite while working to foster stronger connections within the network.

Local Chambers of Commerce throughout the region as well as Workforce and Economic Development teams will assist SCILS in not only fostering stronger relationships with more industry partners but also actively engaging these partners in workforce development initiatives. Planning is underway to develop mechanisms that allow students in middle and high school to interact with business and industry representatives while learning more about workforce pathways and training opportunities. University and community mentors will also be utilized to energize student exploration into area workforce opportunities.

While Louisiana Delta Community College previously initiated the Workforce Wednesday program, SCILS is partnering with the Delta team to expand the effort to include more students along the I-20 corridor. Initial planning includes a systematic schedule of virtual experiences that students can access throughout the year with interactive components included. As students complete their “passport” of activities, they will qualify to attend a culminating mini-conference that will include additional interaction with key workforce partners and other opportunities.

Following the model of the local “Civic Engagement Institute,” SCILS will develop and host a similar event that will engage university students in a STEM-driven experience focused on problem-solving around the Grand Challenges of Engineering. Diverse student groups will collaborate around solutions to the problems while connecting to workforce and career opportunities that can assist in achieving their goals. Community and workforce mentors will be available as well as opportunities for research for this competitive cohort of “SciTEC SCILS Scholars.”

The work done around each goal will serve to further strengthen the foundation SCILS is built upon while promoting collaboration around the possibility of elevating the opportunity for a higher quality of life along the I-20 corridor.

Are you interested in providing leadership to technology and engineering education coordinators and administrators, assisting in curriculum development, promoting model programs, and providing teacher in-service opportunities? The International Technology and Engineering Educators Association's Council for Supervision and Leadership (ITEEA-CSL) is a professional organization operating under ITEEA. The CSL represents leaders in Technology and Engineering education. This includes state and local school system administrators, school department chairs, professional association officers and any professional who wishes to gain a better understanding of how educational leadership is shaping a new generation of learners.

For more information visit: **https://bit.ly/3tLibwU** or access the latest newsletter at **https://bit.ly/2Z5eyGT**