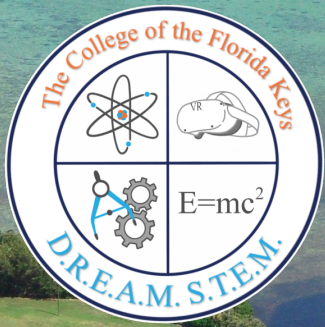




DREAM STEM

NEWSLETTER

WHO WE ARE

The National Science Foundation granted an award to the College of the Florida Keys to create a program entitled “Developing Reliable Educational Avenues to Manifest (DREAM) Science, Technology, Engineering, and Mathematics (STEM) Careers”. The project aims to develop unique and exciting STEM career pathways that will remove barriers to entrance, reduce anxiety, and reward success as students transition from STEM academia to the STEM workforce.



Figure 1. Dr. Patrick Rice during outreach event at Horace O'Bryant Middle School in Key West, FL.

DREAM STEM Outreach Results (2023-2025)

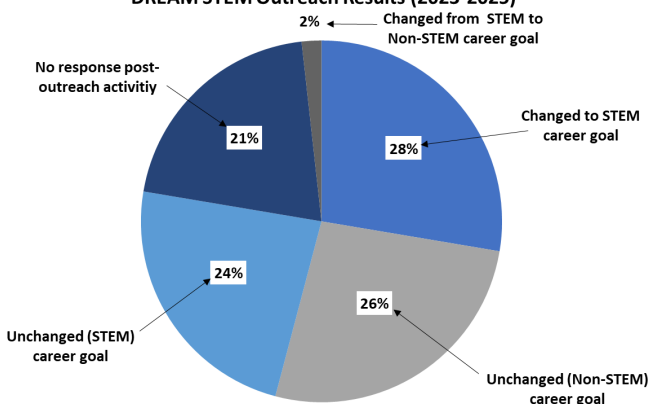


Figure 2. Results from the CFK 2024 Summer Camps STEM Forum. Special Note - 18% changed their career goal to STEM

STEM AMBASSADOR OUTREACH

The DREAM STEM program offers: (1) scholarship opportunities for STEM oriented college students, and (2) support for dual enrollment high school students. Scholarship recipients are called STEM Ambassadors. During outreach efforts at local 3rd grade through high school, the STEM Ambassadors act as mentors and share their stories of how they overcame challenges while pursuing their STEM academic careers. Over the past few years (2023-25), the CFK STEM Team has surveyed 324 3rd grade through High School students (Figure 1). Results suggest that an average of 28% chaged their career goals from Non-STEM to STEM after the outreach activites (Figure 2).

MORE OUTREACH EVENTS



Figure 3. Student utilizing a Virtual Reality Headset for the first time at the Children's Day event (Oct. 2024).

CHILDRENS DAY

The DREAM STEM Team set up a recruiting booth at Children's Day Festival in Key West FL during October 2024. The team provided Virtual Reality (VR) demonstrations of marine science VR training applications like Coral Restoration Virtual Reality (CRVR) as well as other STEM related VR applications. The VR applications were developed as part of the DREAM STEM project and shared with for participants of all ages. Children were informed of the STEM opportunities at CFK and STEM Ambassadors shared stories about there pathway to a STEM career.

COMMUNITY DAY

The College of the Florida Keys annual Community Day features student clubs, local companies, and live performances by local organizations. STEM Ambassadors had the opportunity to connect with community members and promote the program through the use of virtual reality headsets (Figure 4). Community members had the choice to experience a virtual scuba dive with sharks or observe the Earth from a spacewalk. Overall, the interactive experience sparked interest in the younger audience to consider pursuing a STEM career.



Figure 4. STEM Ambassadors at CFK DREAM STEM Recruiting booth at CFK's Community Day (Nov. 2024).



Figure 5. STEM Ambassadors with the winning 8th grade project from the 2025 Sigsbee STEM Fair.

SIGSBEE ELEMENTARY STEM FAIR

For the second year in a row, CFK STEM Ambassadors participated as judges for the Sigsbee Charter Elementary School 2025 STEM Fair in Key West Florida in January 2025 (Figure 5). STEM Ambassador's worked with other professionals from STEM fields as judges and evaluated science and engineering projects from the 6th, 7th, and 8th grade classes.



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