



Embedding Career Exploration and Preparation Within Academic Programming to Enhance Retention in STEM



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Abstract

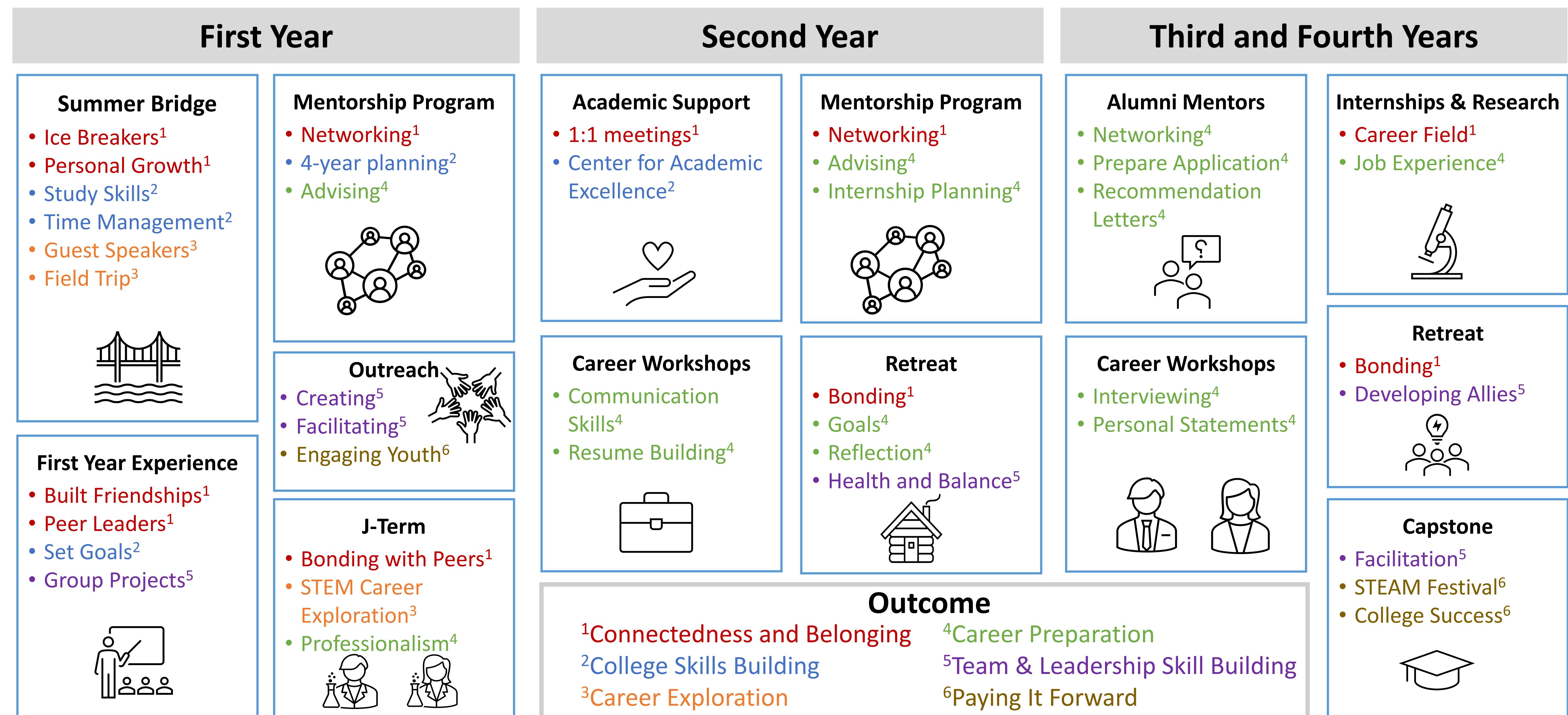
Through an NSF S-STEM grant and institutional support, the STEM CAREERS (Career and Research Exploration to Enhance Retention in STEM) Program was created in 2018. This program provided scholarships and programming for high achieving lower-income students from rural and diverse backgrounds for N = 33 students over four years.

A summer bridge, common first-year experience course, and interim trip on career exploration created a learning community for the cohort in their first year. Career exploration and networking opportunities introduced students to unimagined careers. Career preparation experiences were built into the remaining 3 years of the program as well as multi-layered mentoring. Mixed methods data collection included pre-post STEM career surveys, annual focus groups, and personal reflections. Some preliminary results include enhanced sense of belonging and strong support network, high placement into prestigious summer research programs and internships, and early admittance into dental school and graduate school.

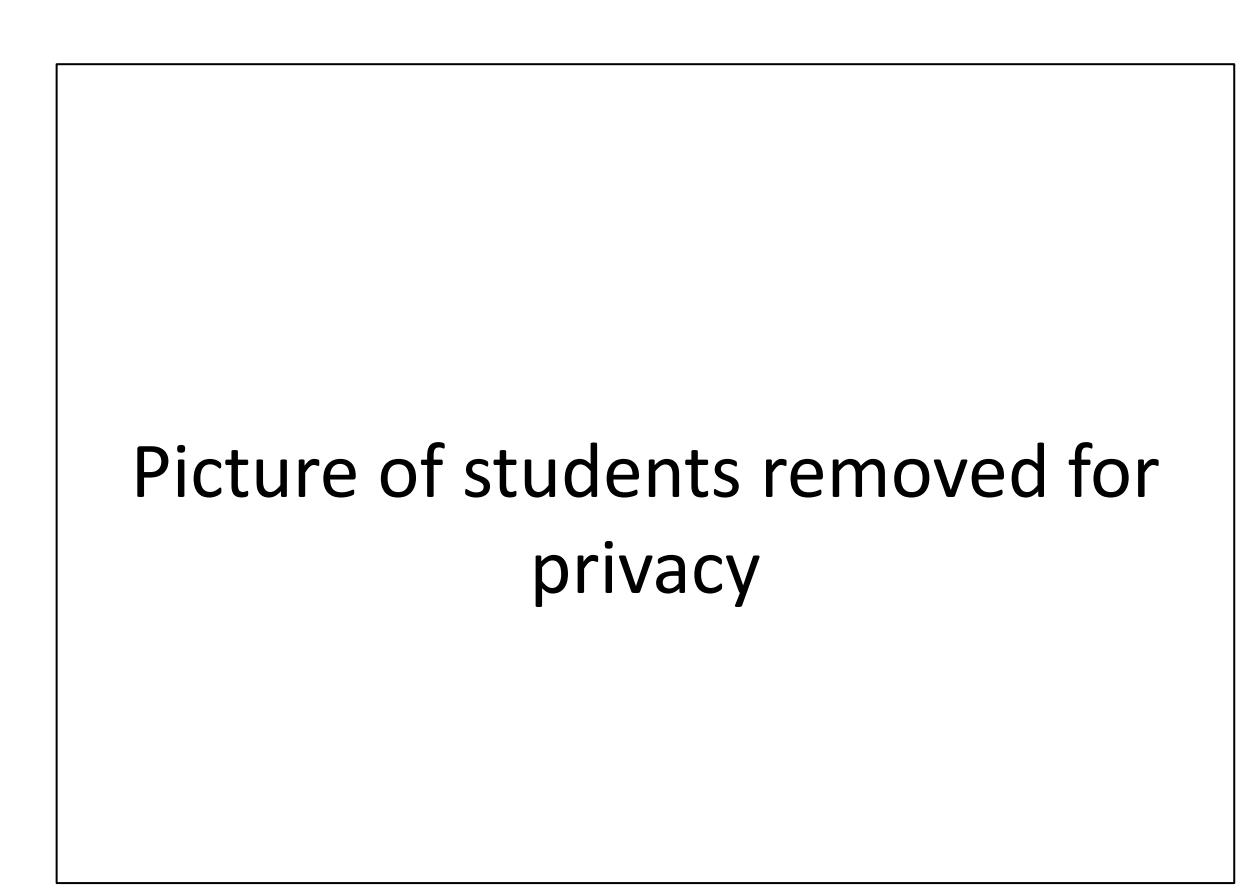
Introduction

- Enrollment of ethnic minorities at BVU has steadily increased, but incoming ACT scores and High School GPA have decreased.
- Program aimed at increasing retention in STEM fields for lower-income students with a focus on students from rural communities, first generation, and diverse backgrounds.
- Fifteen students began program in 2018 and eighteen students in 2019 with programming aimed at combating student challenges to increase the STEM pipeline by utilizing a learning community, tutoring, mentoring, success programs, and a robust career development plan aimed at career exploration and readiness.

Program Outline and Outcomes

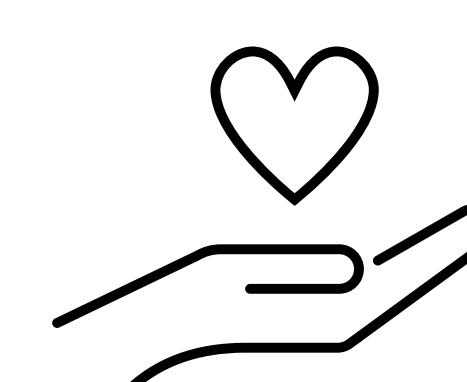


Significant Outcomes

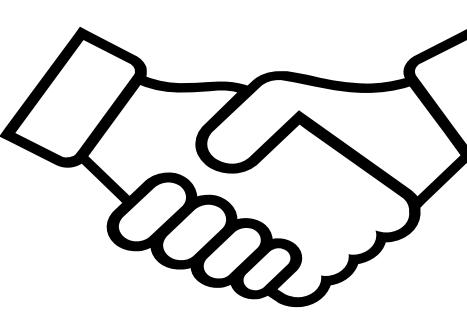


Picture of students removed for privacy

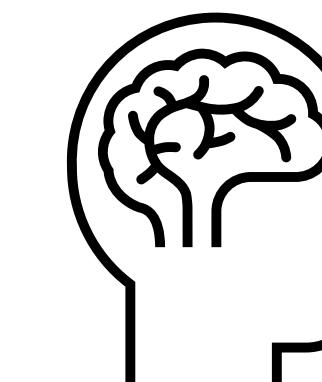
Science-Sample Career Exploration Trip
Osprey Wilds, January 2020



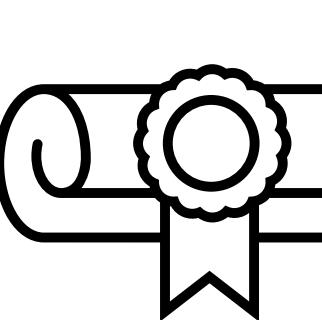
Social-Emotional Support



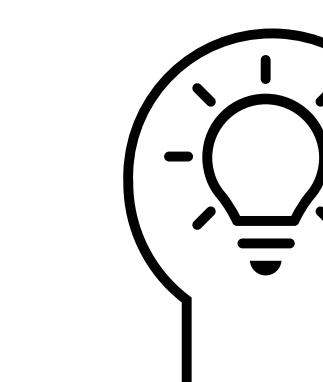
100% Internship Placement Before SR Year



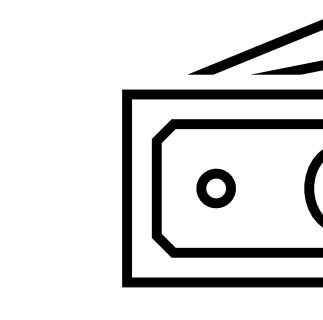
Skill Building for Academic Success



100% Placement After Graduation



New Model for First Year Experience



Scholarships Providing Financial Stability

Future Ideas & Goals

- Analyze institutional graduation rates and job placement.
- Develop and embed career exploration and development into majors.

Acknowledgements

This project is supported by the National Science Foundation Grant # 1643543. Additional financial support from Buena Vista University and the Stine Foundation made this program possible. Additional programming assistance was provided by the Co-PIs and the offices of the Center for Academic Excellence and Career and Leadership Development. Data collection, analysis, and program evaluation was conducted by Duhita Mahatmya, Saba Ali, Allison Mitchell, and Gabriel Yanez.