

Title: Rolling Bones mobile healthcare training program launched in high schools to educate and drive interest in science and healthcare fields

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CURRICULAR INNOVATIONS

Problem/Needs Assessment:

The healthcare workforce shortage continues to worsen with a projected 20,000 deficit of primary care physicians by 2025. Across the nation, a growing demand for healthcare professionals to combat this shortage has created a number of career opportunities that emphasize the importance of Science, Technology, Engineering, and Math (STEM) training.

Program Objectives:

As a STEM/healthcare pipeline initiative, the Center for Experiential and Applied Learning (CEAL) piloted the “Rolling Bones” program in surrounding communities. The program focused on driving healthcare and health science career interest and discussing healthy lifestyle choices.

Description of Program:

During the program, high school students gained hands-on experience examining human hearts, lungs, and brains, while discussing the danger associated with unhealthy behaviors (smoking, vaping, and diet). Various STEM/healthcare careers were described giving students a broader appreciation of future opportunities.

Evaluation/Assessment:

In November/December, 2019, CEAL traveled to 13 high schools, including five Title I, across Forsyth, Guilford, and Stokes counties. Students completed post-event surveys (n=367) that requested demographic information, post-event likelihood to use tobacco/vape, intent to live a heart-healthy lifestyle, interest in careers in healthcare or health science, and feedback on the

experience. Differences across gender and ethnicity were evaluated using appropriate statistical tests.

Conclusions and Lessons Learned:

On a scale of 1 (unlikely) to 4 (likely), students were: unlikely to use tobacco/vape after viewing a smoker's lung (avg=1.2); likely to take steps toward living a heart-healthy lifestyle (avg=3.6); and likely to pursue a STEM/healthcare career (avg=3.1). There was no statistical difference among ethnic groups for any survey question. There was no statistical difference between genders related to use of tobacco/vaping or steps toward a living heart-healthy lifestyle. Females had a statistically higher likelihood of pursuing a career in healthcare (female = 3.32 ± 0.99 ; male = 2.38 ± 1.04 ; $p < 0.05$) or STEM (health science, medical science, or medical research; female = 3.33 ± 0.88 ; male = 2.52 ± 0.99 ; $p < 0.05$) respectively, compared to their male counterparts. Follow-up surveys were recently distributed to determine the information students retained and how they are applying that information. CEAL is awaiting those responses.

References:

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