The Engineering Success Alliance: Increasing Persistence and Success in Engineering Through Academic Support and Community

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The Engineering Success Alliance (ESA) program provides students from under-resourced high schools the skills they need to be successful in the College of Engineering. Incoming students from groups that are historically under-represented in engineering are invited to join the program after they have been admitted to Bucknell. The program seeks to identify and support students who can most benefit from the three main goals of the program: building academic self-efficacy, building a sense of belonging in the engineering community, and balancing academics, social life, and self. Students who accept the invitation participate in ESA take part in a summer pre-orientation program called *Backstage Bucknell* as well as an ongoing program led by the ESA program director. As a result, students enter the College of Engineering as a supportive cohort and are provided with additional academic and professional support. Academic support through ESA is designed to foster academic success and empowerment and reflects research demonstrating the power of positive, community-related activities and instruction. In the upper-class years, ESA's academic programming yields increasingly to professional development and engineering experiences facilitated by ESA. Throughout the student's Bucknell years, individual coaching, modeling, and mentorships both within the college and through ESA's Alumni Advisory Committee help the students find that sense of belonging and balance that lead to persistence and higher levels of success.

ESA began in the fall of 2010 supporting 14 students in the first cohort. Since then ESA has had 104 participants. The retention of ESA participants in engineering after the 2nd semester is 73% and 50% of these participants have a cumulative GPA higher than 3.0. Of the two cohorts of students who have graduated, the majority have gone on to graduate school in engineering or careers in engineering. ESA’s development into a robust student success program will be detailed as well as ideas for future program improvements.