

Multiple Support Mechanisms for Adult and Veteran Students that Increase Academic Success in Engineering and Technology Education

Continuing education after years of technician experience can pose multiple challenges to the adult student population, such incumbent workforce technicians and veterans. Veterans, through their active service, frequently receive training in highly skilled technical areas but may lack a theoretical background in underlying engineering principles. While STEM education is important for the maintenance of national competitiveness, it is especially critical that the nation's veterans, who possess technical STEM training gained in the military, are enabled to pursue higher education in order to increase the quantity and quality of talent available in the STEM workforce. Program that will be presented in this paper emphasizes the importance of recruiting students to engineering and engineering technology disciplines, mentoring and supporting students through degree completion, and partnering with employers to facilitate student academic success and career placement in the STEM workforce. Enabling multiple mechanisms which support and provide guidance are especially important at universities with large veteran populations such as Old Dominion University, Norfolk, Virginia. Advancing the field's understanding of interventions that affect these outcomes for adult students and student veterans is important for the improvement of future support programs as well as to guide implementation across different institutions. The program presented in this paper is funded by the National Science Foundation.