Many college students in West Virginia hail from rural communities and are the first in their families to pursue an undergraduate degree. Research indicates that first-generation college students can face particular barriers to their postsecondary persistence, as can rural students. However, data on the persistence of first-generation college students who are also from rural places is scant. To better understand—and help remove—the barriers confronting such young people interested in STEM (Science, Technology, Engineering and Mathematics), the FIRST TWO Project (https://first2network.org/) brings together community college and university faculty, administrators, national laboratory professionals, and rural education experts. The FIRST TWO pilot program integrates early STEM experiences via internships, a support network for rural first-generation STEM students, and STEM skills development through a discovery-based "principles of research and development" college seminar for first-year students. A "Hometown Ambassadors" program component prepares students to return to their home communities to engage younger students’ interest in STEM, and teachers’ and school board members’ support for STEM education. Our goal is for project courses and support mechanisms to be fully transferrable to other institutions of higher education in the state so that, ultimately, more rural first-generation students participate in the wider STEM enterprise.

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