

The West Virginia P-20 model is an early college program that can be incorporated within schools to provide college classes and STEM integration into existing coursework structures. The West Virginia P-20 program takes students through a curriculum that promotes research-based STEM integration and career training starting in the third grade and continuing through 12th grade with a final capstone project in their senior year of high school. The overall goal of this program is to work with under-served youth in predominantly rural areas to help them prepare for, attend, and ultimately graduate from two-year and four-year programs while developing work-force ready students in the fields of agriculture, forestry, and natural resources. This program is preparing students for the real world by creating a connection between hands-on experiential learning with a curriculum leading them to career opportunities both within and out of the classroom (Perdue, & McKibben, 2017). Students will work with higher education institutions to complete an associate degree while still in high school, but this problem-based learning will start early on with 4-H based research projects beginning in the third grade. The model incorporates in-school 4-H, dual credit with credentialed teachers providing courses that translate into college credit, industry certification along with on-the-job training where the school will sponsor business opportunities to work with students, and research with Extension and university faculty.