

KY-WV LSAMP Midlevel Alliance Outcomes Report

The Kentucky-West Virginia Midlevel Louis Stokes Alliance for Minority Participation program (KY-WV LSAMP) was a nine-institution alliance led by the University of Kentucky. Alliance members include: Bluegrass Community and Technical College (BCTC), Centre College, Kentucky State University (KSU), Marshall University, University of Kentucky (UK), University of Louisville (UofL), West Virginia State University (WVSU), West Virginia University (WVU), and Western Kentucky University (WKU). KY-WV LSAMP is now a Pathways and Research Alliance of ten institutions. With approval for a third phase of funding, Jefferson Community and Technical College was added to the alliance. Alliance goals are to create, enhance, and expand programs designed to broaden participation and increase the quality and quantity of students from underrepresented populations who receive degrees in science, technology, engineering, and mathematics (STEM) disciplines. This report is a compilation of summative accomplishments for the five-year funding period as a Midlevel Alliance.

During this period of funding, the alliance projected a goal to award at least 1,000 URM STEM bachelor degrees and enroll an average of 2,000 URM students in STEM majors at alliance institutions. These goals were met with a total of 1,552 bachelor degrees awarded to URM STEM students and an average of 2,394 URM students enrolled in STEM majors each year. In addition, there have been increases in the number of program participants, the number of participants conducting research, the number of presentations made by participants, and the number of graduating participants who pursue graduate degrees.

Each institution has developed programs consistent with LSAMP goals. Institutions have also, with the help of LSAMP, built sustainable partnerships within campus programs as well as with external (outreach) programs and organizations. Program activities and partnership resources focus on outreach and recruiting, peer mentoring, undergraduate research experiences, research presentation opportunities, summer bridge and transitional programs for entering students, curriculum reforms in “gatekeeper” courses, international experiences, and workshops on professional development and STEM career options.

The **intellectual merit** of the program is the increased knowledge base related to teaching and learning practices for STEM disciplines, practices for improved recruiting and retention, and the development of improved curriculum materials and practices for STEM disciplines. As Scholars pursue their degrees and participate in program activities, they develop the skills needed to succeed not only in their degree programs, but also in the professional community of their chosen field. They learn the skills necessary to be the leaders and experts. Scholars give and receive mentoring on multiple levels from middle school and high school students to world-renowned researchers. In addition to increasing their knowledge and research skills, this multi-level mentoring also helps the Scholars to build excellent professional networks for current and future research, presentation, educational and professional opportunities. Often, the connections made through the LSAMP program guide Scholars to the next opportunity.

The **broader impact** is the increase in URM STEM BS degree production. This will broaden math, science, and engineering participation of underrepresented students from the two Established Program to Stimulate Competitive Research (EPSCoR) states and surrounding regions. Because of the skills developed and the connections made through LSAMP, Scholars are uniquely qualified for graduate programs, government and industry. Once they have received their BS degrees, many participants continue into graduate programs. This will increase the diversification of the STEM workforce and broaden the participation of underrepresented students who seek and earn graduate degrees.

The increase in skilled a workforce has the potential to significantly improve the competitive position of the two states and eventually to improve faculty diversity in STEM fields. In turn, participants will play key roles in educating their respective communities about STEM fields and encouraging younger students

to pursue STEM disciplines. The multi-level mentoring gives Scholars a venue for serving as role models for future generations.

The mission statement and logo adopted in 2016 continue to be used. The logo is easily recognized and is expected to be used by program staff and Scholars throughout the alliance on presentations, including, but not limited to posters and papers. The logo is helping to unify the alliance into a group working together for a common purpose.

There have been many successes as well as some continued challenges and trials. Progress continues to be made to increase the quantity of students from underrepresented populations who receive degrees in science, technology, engineering, and mathematics disciplines. There also continues to be significant progress in the skill set and professionalism of the participants as they progress in their careers. www.uky.edu/KYWV-LSAMP