



AASA LEARNING 2025 Lighthouse System Vignette: Beaver Area School District, Pennsylvania

The Beaver Area School District (BASD) is located in southwestern Pennsylvania, 25 miles west of Pittsburgh. The district is composed of two elementary schools and a middle/high school campus with a total population of 2,060 students. Beaver Valley was selected as a Lighthouse District because of its sustained emphasis upon preparing future-ready learners, including a comprehensive STEM program, a 1:1 ratio of student to Ipad distribution in all K-12 classrooms, a sustained focus on career exploration, and a major emphasis on personalized learning. The principles of equity, diversity, and inclusion extend to a district-wide focus on social-emotional learning and student voice as an essential part of the learning process.

The district's STEM program, for example, is a K-12 priority focus with STEM-related concepts integrated within already established coursework. Similarly, the systemic emphasis upon technology-driven teaching and learning has resulted in an Individualized Professional Development Plan (IPDP) that allows teachers to explore areas of growth and acceleration at their own pace based on their individual readiness levels. As a result of this future-ready professional development, 49 teachers and administrators have mastered technology skills that have earned them an industry-recognized Apple Educator Certification.

At the high school level, the district offers both extensive Advanced Placement coursework as well as a dual enrollment programs involving Carlow University and the Community College of Beaver County. Students attend academies that focus on future-ready careers, including Aviation, Health Services, STEM, Criminal Justice, Construction, and Education. Graduation requirements also emphasize that all students earn one credit for career exploration, including ninth- and tenth-grade students earning half a credit by creating a portfolio using Naviance software. This process prepares them for the mandatory semester-long Career Exploration course. Counselors regularly meet with students to discuss their progress towards narrowing down their post-secondary educational and career options.

A unique component of future-ready preparation in BASD is its authentic personalized learning program, known as the Student Technology Assistance Program (STAP). Initiated in 2011, it has become one of the first student-run Information Technology departments in the district's K-12 educational system. STAP deploys Ipads, manages applications and IP addresses, and facilitates the implementation of switches and routers—with students as a major part of this delivery system. Also, students run professional development for instructional staff, updating them on new trends in technology and the use of tools involving the Maker Lab and Artificial Intelligence. The program has been featured at a recent Apple Education Conference as well as in an article by AASA, entitled "What Else Can Learners Do?"

Additional future-ready initiatives all involve the voices and feedback of key stakeholder groups, including students, instructors, administrators, families, and community groups. These initiatives include new partnerships at the high school level with higher education to bolster dual credit options from four different colleges and universities. Similarly, counselors and building administrators work collaboratively to ensure that students engage in work-related learning experiences to meet graduation requirements beginning as early as the ninth grade. This process has expanded to include community and local businesses to establish a work-based learning database with contact information for students interested in career-focused opportunities.

Specific future-read achievements include a hands-on learning experience for females interested in careers in aviation. In partnership with five other school districts, Beaver Area School District is participating in a “Fly Like a Girl Drone Academy,” offering 24 hours of instruction from an industry partner to prepare participants to take the FAA UAV Pilot License 107 Certification. Similarly, the district has adopted a K-12 robotics program, with funding secured to implement Vex Robotics in the 23-24 academic year.

The district-wide focus on preparing student to become future-ready includes a range of ceremonies, celebrations, and professional development focus areas. The 2023-24 academic year, for example, began with an opening day in-service theme entitled “Honoring Traditions and Innovating for the Future.” Recent professional development programs have included staff visits to Carnegie Mellon University’s Entertainment Technology Center for Transformational Play, including a second-day invitation to become an Apple Distinguished School District.

Finally, parent and family engagement are critical to the success of the district’s future-ready focus. Beaver Area has communicated extensively with families in a variety of settings and media to tell its story about growing the school system and the critical importance of partnerships as part of that process. According to district leaders: “...we work together to redesign our programming and experiences that ensure all students feel welcomed, that we value the whole learner, and that all students engage in student-centered future-driven learning.”