

Growing STEM Pathways and Partnerships at Pullman High School

Bob Maxwell, Superintendent and Juston Pollestad, Pullman High School Principal

Science, technology, engineering and mathematics (STEM) education prepares today’s students to become innovators and inventors of tomorrow by emphasizing hands-on learning with real-world applications. STEM-based education teaches students valuable skills that make them more employable to meet current and future labor demands. Pullman Public Schools continues to engage in partnerships to enhance STEM education courses embedded within our Career Technical Education program.

Schweitzer Engineering Laboratories (SEL) has been a long-term partner with Pullman Public Schools. About 15yrs ago SEL partnered with Pullman High School to provide an electronics teacher. The electronics program provided many students with a strong electronics foundation and introduction to several related career pathways. However, when the teacher retired, the program ended as well. Recently, Pullman High School administration has been looking to reestablish this important connection with SEL. During the past year, Juston Pollestad, PHS principal and John Casselman (k-12 Education Outreach for SEL) have been working together to build the foundation for a STEM course(s) and pathway that will drive higher quality, relevance, and authenticity in learning opportunities by aligning school and industry resources and needs. Jill Bickelhaupt, Career and Technical Education (CTE) Director at Pullman High School will oversee the framework for the STEM course(s) in engineering and manufacturing program.

Vision

Provide a STEM course(s) and pathway that provides a high quality, relevant, and authentic learning opportunities by aligning school industry resources and needs to all students regardless of societal or economic barriers. Students participating in the program will be better equipped to explore and pursue careers in STEM fields that interest them, especially those related to manufacturing and engineering.

Purpose

Increase educational opportunities for students in STEM fields, help students develop a proactive problem-solving mindset and a deeper sense of curiosity in academics, particularly among students who tend to have fewer educational opportunities and personal support structures in place.

Additionally:

- Offer students and educators more insight into careers and career pathways
- Create clear and efficient feedback loops between the school district and SEL
- Ensure relevant, authentic, and challenging content in classrooms

Partnership Elements

Financial Contribution from Schweitzer Engineering Laboratories

To help ensure the success of the program, SEL will contribute \$100,000.00 toward the program in the first year of the partnership with the intention of supporting the program as it develops; this will be assessed at the end of each school year.

The financial gift will be used to support the program holistically and may be used in the following ways:

- Hire and maintain a teacher for the STEM pathway, and/or
- Purchase equipment and materials, and/or
- Purchase curriculum, and/or
- Subsidize professional development for the STEM pathway teacher

Continued financial support would be contingent on Pullman Public Schools demonstrating progress on three goals within the program

1. Student achievement in the STEM pathway across all demographics
2. Graduation rates and post-high school program admission/employability
3. Enrollment, particularly among students who face more barriers to educational opportunities

The proposed initial program offerings for the 2022-2023 school year includes multiple sections of Engineering Essentials, Computer Aided Drafting and Advanced Placement Computer Science. Registration is still being finalized.

This incredible partnership with Schweitzer Engineering Laboratories (SEL) and Pullman High School will enhance the Career Technical Education STEM offerings and pathways and provide students with 21st century skills that are needed by current and future occupational fields.

We want to extend our gratitude to Schweitzer Engineering for this amazing opportunity and partnership.

The Pullman School District Board of Directors and the Pullman School District shall provide equal educational opportunity and treatment for all students in all aspects of the academic and activities programs without regard to race, religion, creed, color, national origin, age, honorably-discharged veteran or military status, sex, sexual orientation (including gender expression or identity), marital status, the presence of any sensory, mental or physical disability, participation in the Boy Scouts of America or the use of a trained dog guide or service animal by a person with a disability. The district will provide equal access to school facilities to the Boy Scouts of America and all other designated youth groups listed in Title 36 of the United States Code as a patriotic society. District programs will be free from sexual harassment.

The following employees have been designated to handle questions and complaints of alleged discrimination: Civil Rights Coordinator and Title IX Coordinator, Assistant Superintendent, (509) 332-3144, and Section 504 Coordinator, Director of Special Services, (509) 332-3144. 240 SE Dexter Street, Pullman, WA 99163. Applicants with disabilities may request reasonable accommodations in the application process by contacting the Personnel Coordinator at (509) 332-3584.

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