PLUM BOROUGH Plum SCHOOL DISTRICT

JOB DESCRIPTION

POSITION:	Technology Education PK-12
DEPARTMENT:	Instruction
REPORTS TO:	Building Principal
SUPERVISES:	N/A
FLSA STATUS:	Exempt
WORK SCHEDULE:	Per the district calendar, 192 days annually
COMPENSATION PLAN:	PBEA Collective Bargaining Agreement

General Description:

The PK-12 Technology Education Teacher is a hands-on, future-minded educator who brings learning to life by connecting students to the tools, systems, and ideas shaping their world. This role emphasizes design-based, project-driven experiences that invite students to explore how technology works and why it matters. Through active engagement with real-world challenges, students dive into core engineering practices and see firsthand how technology intersects with society, the environment, and ethical decision-making. Educators in this position build dynamic, inclusive classrooms where students sketch, prototype, build, and reflect, blending science, math, the arts, and human-centered thinking. The PK-12 Technology Education Teacher stimulates growth, fosters creative confidence, cultivates curiosity, and instills a problem-solving mindset that prepares students to lead, adapt, and thrive in a world where innovation never stops.

Education and Experience:

- Minimum Education: Bachelor's degree in Technology Education, Engineering Education, Industrial Arts. Master's degree in Curriculum & Instruction, Educational Technology, or STEM preferred.
- Minimum Experience: Demonstrated successful teaching experience in STEM, engineering, or technical education. Preferred experience in:
  - Designing and facilitating project-based learning
  - Using the ITEEA STEL as an instructional framework
  - Integrating emerging technologies (e.g., robotics, CAD, AR/VR, digital fabrication)

Licensing Requirements:

- Valid Pennsylvania certificate in Technology Education PK-12 per CSPG 65 guidelines. Additional certifications, such as in STEM disciplines (e.g., Physics 7-12, Mathematics 7-12), Career & Technical Education areas (e.g., Manufacturing, Construction Technology, Engineering Technology), or Cooperative Education, are highly preferred.

Key Responsibilities:

- Design and deliver technology and engineering instruction aligned with STEL core disciplinary standards, including:
    - Nature & Characteristics of Technology
    - Core Concepts of Technology
    - Integration of Technology & Society
    - Design Thinking in Engineering
    - Problem-Solving and Innovation
    - Impact of Technology on the Natural World
- Facilitate student learning through inquiry-based, problem-solving experiences that include:
    - Engineering design cycles
    - CAD and 3D modeling
    - Robotics and automation
    - Energy and power systems
    - Digital communication and data systems
- Maintain a safe and inclusive lab or shop environment by using appropriate tools and materials.
- Use formative and summative assessments to measure STEL-based learning targets and adjust instruction accordingly.
- Promote interdisciplinary connections between technology, science, mathematics, and the humanities.
- Integrate current industry practices and technological tools to increase career readiness.
- Model and teach better practices in digital citizenship, ethical technology use, and sustainability.

Core Knowledge:

- Mastery of technical systems, materials processing, and the engineering design process.
- Familiarity with STEL performance expectations and practices, including student reasoning and design articulation.
- Understanding of how technology shapes and is shaped by society, ethics, and the environment.

Essential Skills:

- Strong communication skills, including facilitation of discourse on real-world technological challenges.
- Classroom and lab management that fosters collaboration, creativity, and autonomy
- Classroom and lab management skills to promote collaboration, safety, and innovation.
- Proficiency in a range of instructional technologies and engineering tools to support design, fabrication, and problem-solving in a technology-rich learning environment.
- Capability to scaffold learning for diverse learners, including students with IEPs and ELs.

Critical Abilities:

- Develop and assess measurable outcomes aligned with STEL and Pennsylvania Academic Standards.
- Facilitate authentic, student-centered design projects and real-world problem-solving. Adapt instruction based on performance data and student feedback to ensure effective learning outcomes.

- Commitment to continuous professional development and high instructional standards.

Temperament Requirements:
- Enthusiasm and responsiveness to diverse learners.
- Collaborative, professional, and growth-oriented.
- Commitment to equity and accessibility in technological literacy, and encouraging students to pursue career-aligned pathways
- Willingness to lead innovation and continuous improvement

Physical/Environmental Requirements:
- Ability to work in a classroom setting, including standing for extended periods.
- Participation in school-based and off-campus professional activities.
- Occasional travel for conferences, workshops, and student events.

Disclaimer: the information in this job description is provided to comply with the Americans with Disabilities Act (ADA). This list is not exhaustive of the duties performed in this position. Individuals currently holding this position may be assigned additional responsibilities.

Required Clearances:
- Act 114 (Federal Criminal History Background Check)
- Act 34 (PA State Criminal History Clearance)
- Act 151 (PA Child Abuse History Clearance)
- Act 126 (Mandated Reporter Training)
- Act 168 (Sexual Misconduct/Abuse Disclosure)
- Act 24 (Arrest & Conviction Statement)
- Current School Personnel Health Record
- Tuberculosis Test Result

Clearances and the School Personnel Health Record must be current within 1 year from the hire date, accompanied by a Tuberculosis Test Result within 3 months of the hire date.

Travel Requirements:
- A moderate amount of travel is required for this position.
- Must have reliable transportation

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Employee signature Date