



Position Description

Teacher – Computer Science

Salary Level: As per Collective Bargaining Agreement

Contract/Benefits: As per Collective Bargaining Agreement

Reports To: Building Principal

Qualifications:

1. A Bachelors degree.
2. Hold a valid and active Pennsylvania Instructional Certificate in specified curriculum.
3. Criminal history and child abuse clearances (Acts 34, 151 and FBI).
4. Experience developing AI-related projects or curriculum.
5. Familiarity with specific AI education platforms or resources.
6. Experience working in a project-based learning or competency-based education environment.
7. Experience with data analysis and using data to inform instructional decisions.
8. Experience with coding competitions or extracurricular computer science activities.
9. Such additional or alternatives to the above qualifications as the board or superintendents may determine appropriate and acceptable. The requirements listed below are representative of the knowledge, skill, and/or ability required.

To perform this job successfully, an individual must be able to perform each essential duty satisfactorily. Reasonable accommodations may be made to enable individuals with disabilities to perform the essential functions.

Essential Duties and Responsibilities

- **Curriculum Development and Implementation (AI-Focused):**
 - Design, develop, and implement engaging and rigorous high school computer science curricula that integrate AI concepts, principles, and applications.
 - Develop project-based learning experiences that allow students to apply computer science skills to solve real-world problems, particularly those related to AI.
 - Collaborate with other faculty to integrate AI concepts across different subject areas.
 - Continuously update curriculum to reflect advancements in AI and computer science.
 - Align curriculum with relevant national and state standards.
- **Personalized Learning and Instruction:**
 - Utilize data-driven insights and AI-powered tools (where applicable) to understand individual student needs, learning styles, and progress.
 - Differentiate instruction and provide personalized support to ensure all students achieve mastery of competencies.
 - Foster student ownership of their learning and encourage self-reflection.

- **Project-Based Learning Facilitation:**
 - Guide and mentor students through the entire project lifecycle, from ideation and planning to execution and presentation.
 - Facilitate collaboration, teamwork, and problem-solving within project groups.
 - Provide timely and constructive feedback on student projects, focusing on both process and outcomes.
 - Assess student learning through project-based rubrics and competency-based assessments.
- **Competency-Based Education:**
 - Clearly define learning competencies and success criteria for computer science topics.
 - Develop and utilize varied assessment methods that directly measure student mastery of identified competencies.
 - Provide students with clear pathways to demonstrate their learning and progress through the curriculum.
 - Track and report student progress based on competency attainment.
- **Technology Integration (AI Emphasis):**
 - Effectively integrate various software, hardware, and AI tools into instruction.
 - Guide students in the ethical and responsible use of AI technologies.
 - Stay current with emerging AI trends and educational technologies.

Planning and Preparation

Through their knowledge of content and pedagogy skills in planning and preparation, teachers make plans and set goals based on the content to be learned, their knowledge of student and their instructional context

1. Demonstrates in-depth and thorough knowledge of state and ASD Standards, content, pedagogy.
2. Assesses student needs to direct and guide instruction.
3. Writes clear and appropriate instructional goals that reflect Allentown School District standards and high expectations for students.
4. Exhibits an in-depth and thorough awareness of resources, materials and technology available through the school, district and professional organizations.
5. Prepares an appropriate instructional design in which plans for various elements are aligned with the instructional goals and have a recognizable sequence and required adaptations for individual student needs.
6. Designs and implements assessments appropriate for student learning completely aligned to the instructional goals and adapted as needed for student needs.
7. Collaborates with all stakeholders (colleagues, parents, students, and school community) to design instruction to promote best practices.

Classroom Environment

Teachers establish and maintain a purposeful and equitable environment for learning, in which students feel safe, valued and respected by instituting routines and by setting clear expectations for student behavior.

1. Establishes high and clear expectations for student achievement with value placed on the quality of student work.
2. Places significant attention to equitable learning opportunities for students.
3. Demonstrates appropriate and highly respectful interactions between teacher and students and among students.
4. Implements highly effective classroom routines and procedures resulting in little or no loss of instructional time.
5. Maintains clear standards of conduct and effective management of student behavior.
6. Provides safe and skillful organization of physical space, to the extent it is under the control of the teacher that provides accessibility to learning and to the use of resources.
7. Demonstrates knowledge and appreciation of the culture and language of all students.

Instruction

Through their knowledge of content and their pedagogy and skill in delivering instruction, teachers engage students in learning by using a variety of instructional strategies.

1. Demonstrates clear and appropriate communication of procedures and high-quality explanations of content.
2. Employs highly effective questioning and discussion strategies that encourage student participation.
3. Creates a high level of student engagement in learning and pacing of instruction.
4. Provides equitable, accurate and constructive feedback to students on their learning.
5. Utilizes informed and appropriate use of informal and formal assessments to meet learning goals and to monitor student learning.
6. Displays a high degree of flexibility and responsiveness in meeting the learning needs of students.
7. Demonstrates a clear knowledge of research-based instructional techniques and methods and presents them with fidelity to meet the needs of all learners.

Professional Responsibilities

Professionalism refers to those aspects of teaching that occur in and beyond the classroom/building

1. Demonstrates full adherence to school and district policies, procedures and regulations and Pennsylvania's Code of Professional Practice and Conduct for Educators.
2. Maintains accurate and complete records in compliance with school and district requirements.
3. Communicates with families regarding student needs and improvement in compliance with school and district requirements.
4. Participates in school and district initiatives and events.
5. Interacts with colleagues and supervisors in a supportive and cooperative manner.
6. Engages in professional development events and opportunities, applies new learning and shares experiences with colleagues.

7. Enriches and improves the quality of teaching and learning through self-reflection and collegial discussions.
8. Performs such other tasks and assumes such other responsibilities as may be assigned or delegated by the building principal or other designated administrator.

Competencies

To perform the job successfully, an individual should demonstrate the following competencies:

Interpersonal Skills

Manages difficult or emotional situations judiciously; Responds to parent and supervisory requests for service and assistance; Solicits parent feedback to improve effectiveness; Meets commitments made to students, parents, supervisor and the community; Maintains confidentiality; demonstrates objective approaches to communicating with students, parents, supervisor and community; Exhibits objectivity and openness to the views of others; Speaks clearly and persuasively in positive or negative situations; Listens and solicits clarification; Responds appropriately to questions; Writes clearly and effectively; Edits work for spelling and grammar; Varies writing style to meet needs of the audience; Presents numerical data effectively; Works well with others.

Leadership Skills

Develops workable lesson plans; Makes self accessible to principals and colleagues; Looks for ways to improve and promote quality; Demonstrates accuracy and thoroughness; Adheres to safety and security procedures; Identifies and resolves problems in a timely manner.

Organizational Skills

Works with accuracy when monitoring all cost-related tasks; Shows respect and sensitivity for cultural differences; Follows policies and procedures; Completes administrative tasks and reports correctly and on time; Supports district's goals and values.

Personal Competencies

Exhibits sound and accurate judgment; Treats people with respect; Works ethically and with integrity; Respects confidentiality; Demonstrates persistence and overcomes obstacles; Prioritizes and plans work activities; Uses time efficiently; Approaches others in a tactful manner; Reacts well under pressure; Demonstrates accuracy and thoroughness; Follows instructions, responds to supervisory direction; Takes responsibility for own actions.

Physical Demands

The physical demands described here are representative of those that must be met by a teacher to successfully perform the essential duties of this job. Reasonable accommodations may be made to enable individuals with disabilities to perform the essential duties.

While performing the duties of this job, the teacher is regularly required to talk or hear. The teacher is frequently required to walk, climb stairs, and bend. The teacher is required to use hands to fingers or handle documents, telephone, etc. The teacher is occasionally required to stand; sit, and reach with hands and arms. Specific vision abilities required by this job include close vision, distance vision, and ability to adjust focus.

Evaluation

The person filling this position will be evaluated according to the teacher evaluation procedure adopted by the Allentown School District.

Reviewed and read by: _____ Date: _____
Individual serving in this position