



Industrial Tech Assistant

BASIC FUNCTION

Under immediate supervision, support the academic instruction of elementary, middle and high school students by providing training and oversight in the safe use of a variety of industrial equipment and technologies; prepare and assemble materials and equipment used in demonstrations and classroom assignments; operate, maintain, and repair equipment and tools in a safe manner; receive, issue, and store equipment, materials and supplies; perform related duties as assigned.

REPRESENTATIVE DUTIES

1. Set up and monitor the use of industrial technology, makerspace and similar classrooms, workshops, labs, facilities, equipment, and tools used in assigned program.
2. Issue, receive, and maintain tools, equipment, materials, and repair parts used by students and instructors; perform routine repairs to assigned technologies, equipment and tools.
3. Maintain inventory records of equipment and instructional supplies; store equipment and tools and keep storage and working areas orderly and clean; prepare requisitions for supplies and materials as assigned.
4. Assist teachers, students, and staff to learn skills associated with construction technologies, tools, and related activities; work with, assist and train students individually and in groups in the proper use and safe operations of a variety of state-of-the-art technologies, construction equipment and tools.
5. Inspect interior and exterior work areas to determine if there are any safety hazards; look for broken and/or damaged equipment, slip-and-fall hazards and other potential hazards; work with professional educators, students and others to ensure that they are following safety policies and practices; ensure students wear appropriate safety gear and operate equipment in a safe manner.
6. Assist in and prepare, present, and discuss instructional materials, lesson plans, teaching aids and activities as they relate to the use of designated technologies, equipment and tools, following prepared lesson plans.
7. Demonstrate a commitment to the Portland Public Schools Equity Initiative by developing a thorough knowledge and application of the district Racial Educational Equity Policy. Participate in staff development, in-services and trainings related to diversity, equity and inclusion in the workplace and in K-12 education; model appropriate behaviors; develop, recommend and implement improvements to district practices and student achievement with awareness and understanding of their impact in a racially and culturally diverse community.
8. Administer first aid or necessary physical assistance to ill or distressed students in accordance with established District policy.
9. Perform related duties as assigned.

DISTINGUISHING CHARACTERISTICS OF THE CLASS

The Industrial Technology Assistant works closely with Elementary, Middle and/or High School students to support educational approaches to providing grade level curriculum in science, art, math, writing, and social studies through hands-on exploration by providing training and monitoring in the safe use of technologies, equipment and tools used in the trades. These lessons emphasize hands-on experiential learning to support student learning objectives. Employees in this classification demonstrate technical expertise with a vast array of computer technologies, general construction, metal, woodworking, power and hand-tools, as well as exhibiting the communication skills necessary to guide and motivate students.

EMPLOYMENT STANDARDS

Knowledge of:

- General shop safety laws, rules and regulations, including the different types and use of safety gear used in the trades.
- Learning patterns of children and adolescents.
- Proper procedure and use of power tools, hand tools, computers, woodworking, metalworking, textile, fabrication, laser and similar technologies and equipment, such as bench top drill press, circular saw, jigsaw, band saw, MIG welder, sewing machine and other equipment.
- Preventive maintenance techniques for assigned tools and technologies.
- Basic first aid.
- Basic shop recordkeeping inventory and parts ordering techniques.
- Interpersonal skills using tact, patience and courtesy.

Ability to:

- Support student instruction through the use of standard educational strategies.
- Create, maintain and monitor a clean, safe and appropriate work space environment for student learning.
- Develop technical and operational expertise for 3D Printers, Laser Cutters, CNC Routers, Vernier sensors and similar equipment.
- Operate and support student mastery of the safe use of power tools, hand tools, computers, woodworking, metalworking, textile, fabrication, laser and similar technologies and equipment, such as bench top drill press, circular saw, jigsaw, band saw, MIG welder, sewing machine and other equipment.
- Operate a variety of computer technologies, operating systems and software, including maintaining mobile lab of laptop computers and computers to run machinery
- Learn and support a variety of educational support strategies related to career technology education, the Maker Space initiative and other district programs, including modeling, designing and engineering principles.
- Communicate clear performance and behavior expectations to students, parents and school administration, as appropriate.
- Give first aid to injured, ill or distressed students in accordance with District policy.
- Understand and execute oral and written instructions.

- Keep records, order materials, track and monitor gardening supplies and related tools.
- Identify hazards and implement safety precautions associated with the work.
- Advocate, model and implement Portland Public School's Equity Initiative and board policies.
- Establish and maintain cooperative and effective working relationships with others.
- Build collaborative relationships with content teachers with the goal of integrative learning experiences for students.

Education and Training:

Consistent with the No Child Left Behind Act of 2002 and other related legislation, candidates for this classification must meet the following standards: the equivalent of graduation from high school and one of the following: Completion of at least two years of study (60 semester units or 72 quarter units) at an institution of higher education Or attainment of an Associate of Arts degree or higher degree. Coursework in the building trades, computer technology, architectural design or similar field is desirable.

Experience

1. One year of experience performing general maintenance in the construction, reconstruction or building improvement industry and six months of experience working with children in a structured environment is required.
2. Any other combination of education and experience that would likely provide the required knowledge and abilities may be considered.

Special Requirements

As work assignments necessitate, employees in this classification will be required to wear District provided protective gear required by local, state and/or Federal law, District policies and/or procedures.

WORKING CONDITIONS

The conditions herein are representative of those that must be met by an employee to successfully perform the essential functions of this job. Persons with certain disabilities may be capable of performing the essential duties of this class with or without reasonable accommodation, depending on the nature of the disability.

Work Environment: Classroom, lab, indoor and outdoor learning area/center with variable weather conditions such as heat, wind, chill and/or cold.

Hazards: Hazardous materials, chemicals, paints, sharp objects and equipment used in general maintenance trades

Physical Demands: Primary functions require sufficient physical ability and mobility to engage in physical labor; dexterity of hands and fingers to operate a computer keyboard, office equipment, building and maintenance equipment and tools such as, but not limited to, power tools, hand tools, computers, woodworking, metalworking, textile, fabrication, laser and similar technologies and equipment, such as bench top drill press, circular saw, jigsaw, band saw, MIG welder, sewing machine, 3D Printers, Laser Cutters, CNC Routers, Vernier

sensors, and other tools and technologies; standing for extended periods of time; kneeling, bending at the waist and knees, reaching overhead, above the shoulders and horizontally to retrieve and store equipment, files and supplies; push, pull, stoop, bend, kneel, squat, crawl, sit, twist, turn, climb and balance to carry and move tools and equipment, supplies and materials weighing up to 75 pounds; hearing and speaking to exchange information in person or on the telephone; vision to read and write printed material and computer screens to and prepare and assure the accuracy of documents.

FLSA: Non-Exempt
Bargaining Unit: Portland Federation of School Professionals
Salary Grade: See PFSP Salary Schedule
Work Year(s): 202, 210

Approval Date:

Portland Public Schools recognizes the diversity and worth of all individuals and groups and their roles in society. The District is committed to equal opportunity and nondiscrimination in all its educational and employment activities. The District prohibits discrimination based on race; national or ethnic origin; color; sex; religion; age; sexual orientation; gender expression or identity; pregnancy; marital status; familial status; economic status or source of income; mental or physical disability or perceived disability; or military service (Board of Education Policy 1.80.020-P).

Human Resources partners with district leadership to recruit, develop, and support a culturally diverse workforce dedicated to the highest standards of equity and achievement that creates an environment of empowerment and success for our students, employees, and the communities we serve.