

SANTA CLARA UNIFIED SCHOOL DISTRICT

CLASS TITLE: DESIGN LAB TECHNICIAN

BASIC FUNCTION:

Under the direction of an assigned supervisor, provide instructional assistance to individuals or groups of students in a maker space or design lab learning environment; operate, adjust and maintain a variety of hi-tech equipment related to maker space and design labs; respond to questions, train and assist students and staff as needed with programs and equipment.

REPRESENTATIVE DUTIES:

Provide instructional assistance and training to individuals or groups of students using maker space or design lab computer equipment and software; answer questions; load, restore, and restart programs as needed; assist students in utilizing computer equipment and instructional materials for projects. *E*

Confer with and assist instructional personnel in planning and choosing appropriate software and hardware tools to compliment lesson plans; order or recommend purchase of software and supplies as needed; preview and evaluate programs for purchase. Learn and apply positive behavior techniques; receive training as provided to meet specialized needs. Prepare instructional materials as directed by teacher(s) and create or modify materials to assist the instructional program. *E*

Demonstrate and instruct students in the appropriate use of maker space or design lab hi-tech equipment; monitor individuals and groups of students in computer practice activities and correct student work as assigned. This includes developing an organizational and safety plan to ensure ease of use and safety for all. *E*

Participate in training and professional development to increase capacity of Makers tools and student engagement.

Operate, adjust and perform minor maintenance on a variety of lab equipment and peripheral equipment; report and arrange for repairs according to established guidelines. *E*

Load programs and prepare software and instructional materials as appropriate for subject and grade level; and assure proper operation of lab equipment. *E*

Observe and control behavior of students according to approved procedures; report progress regarding student behavior; maintain student records related to use of maker space or design lab equipment and peripheral equipment. *E*

Organize and monitor a scheduling system for design thinking classes. Maintain work areas in a clean and orderly condition; store, maintain, distribute and account for inventory of hardware, software and related materials. *E*

Perform a variety of clerical duties including preparing and maintaining records of classrooms, computer lab activities, schedules, assignments, use, student records and software programs and inventory catalog. *E*

Operate a variety of hi-tech lab and peripheral equipment, including microcomputers, laser printers, terminals, and machines. *E*

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Assist volunteers with orientation of classroom and computer lab operations and programs.

Perform related duties as assigned.

KNOWLEDGE AND ABILITIES:

KNOWLEDGE OF:

Design and/or engineering practices in relation to Science, Technology, Engineering, and Math.

Hands-on experiential learning.

Modern technological equipment, including robotics, electronics, video creating, 3-D design/printing, and other tools to assist in design processes.

Operation, adjustment and minor maintenance of computers and peripheral equipment.

Computers and computer use in an instructional environment.

Child guidance principles and practices.

Requirements of maintaining work areas in a safe, clean and orderly condition.

Correct English usage, grammar, spelling, punctuation and vocabulary.

Interpersonal skills using tact, patience and courtesy.

Basic record-keeping techniques.

Basic instructional techniques.

Modern office practices, procedures and equipment.

ABILITY TO:

Learn on the job.

Reflect on successes and failure to improve practice. The ability to debug.

Provide instructional assistance to students in a variety of subject areas and activities focused on design and prototyping.

Demonstrate a patient, understanding and receptive attitude toward students, including those with special needs and/or disruptive behaviors.

Operate and demonstrate the use of computers and peripheral equipment.

Select programs and related materials appropriate for subject and grade level according to established guidelines.

Understand and follow oral and written directions.

Work independently with little direction.

Learn the procedures, functions and limitations of assigned duties.

Communicate effectively with children and adults.

Establish and maintain effective working relationships with others.

Observe and control student behavior according to approved policies and procedures.

Diagnose and repair minor computer problems.

Perform a variety of clerical duties including maintaining records.

Type at an acceptable rate of speed.

EDUCATION AND EXPERIENCE:

Any combination equivalent to: graduation from high school and one year experience working with school-age children in an organized setting and some experience in maker space or design lab operation.

WORKING CONDITIONS:

ENVIRONMENT:

Maker Space or design lab, classroom and library environment.

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PHYSICAL ABILITIES:

Dexterity of hands and fingers to operate a computer terminal and peripheral equipment, sitting or standing for extended periods of time, bending at the waist to assist students, kneeling or crouching, hearing and speaking to exchange information, and seeing to monitor student activities.

HAZARDS:

Operating laser cutting equipment and other hi-tech maker space or design lab equipment.