

JOB TITLE: TECHNICAL SUPPORT SPECIALIST

PAY GRADE: CL 24

LAST REVISED: JULY 2014

Class specifications are intended to present a descriptive list of the range of duties performed by employees in the class. Specifications are <u>not</u> intended to reflect all duties performed within the job. Additional or different duties from the ones set forth below may be required to address changing business needs/practices.

### **SUMMARY DESCRIPTION**

Under direction, plans, designs, installs, configures, troubleshoots, and services networked computer hardware and software, networked control devices, audio/video and multimedia, video multiplexers, television studios, and related equipment and software used in administrative and instructional lab environments; participates in installations and configuration, and assists with maintenance of hardware and software,; provides technical support and training to in the use of computer hardware and software, multimedia routers, television studios and audio/video equipment; and performs a variety of tasks relative to assigned area of responsibility.

**REPRESENTATIVE DUTIES** - The following duties are typical for this job classification. Incumbents may not perform all of the listed duties and/or may be required to perform additional or different duties from those set forth below to address business needs and changing business practices.

- Research, design and install multimedia presentation equipment and software to accomplish system
  integration to meet district instructional needs including Smart Classrooms. Monitor smart classroom
  systems through the use of server software to trouble shoot problems. Determines locations for smart
  classroom, cable, conduit routing and equipment. Install, test and maintain all network componets including
  hardware and software for smart classroom systems.
- 2. Provides technical assistance to faculty, staff, and students on using computers and software programs including remote access and on the proper use of peripheral electronic equipment use to enhance presentations and viewing.
- 3. Configures, tests and maintains control software for Smart Classroom Operation and Maintenance. Designs and programs proprietary software suites for network-controlled classroom equipment. This includes configuring button layout, button functions, building in delay timing for the correct function of devices, implementing rules and monitors in the software to monitor bulb life, theft of equipment and system usage policies; configuring email address, email server, gateways and assigning IP address to networked control equipment.
- 4. Maintains the smart classroom databases, installing smart classrooms of each system set-up and version.
- 5. Troubleshoots hardware and electronic errors, isolating problems from symptoms and repairs multimedia presentation equipment with electronic, optical, mechanical faults. Calibrate projectors for correct color.; reviews purchase requests and recommends standards for equipment and components.
- Troubleshoots software errors, isolating problems from symptoms, determines alternatives and develops and implements solutions. Installs all wiring associated with Smart Classrooms including but not limited to CAT-5e, CAT-6, HDMI, VGA, serial, unbalanced and balanced audio, speaker, composite and component video pursuant to industry accepted practices and standards including but not limited to: NTSC, HDCP, Dante, ANSI/EIA/TIA, NEC, UL, IEEE and FCC
- 7. Participates in the planning and design of Smart Classroom data facilities and equipment for LAN/WAN



network requirements. Interfaces with Network Support Specialists and System Administrators on configuring switches needed to communicate with multiple VLANS for electronic control equipment, PC and projectors. Participates in the design and configure hardware layouts for new or existing facilities in accordance with industry standards. Facilitates and coordinates the installation and movement of district class rooms, labs, related equipment. .

- 8. Participates in troubleshooting to resolve network hardware and operations problems, including connectivity, internet access, email, and file servers.
- 9. Participates in updating security software on networks and workstations, tests existing operating systems and personal computers for potential viruses and security problems.
- 10. Implements protocols and procedural controls for operation of the network systems.
- 11. Installs and configures workstations to laboratory networks; may install laboratory networks; connects workstations to servers and participates with others to connect with College-wide networks; sets up student accounts onto local networks.
- 12. Installs, configures, and maintains specialized software that supports a variety of technical courses offered by the College; tests software to ensure compatibility with the current operating environment and to equipment capability; configures software to communicate with peripherals such as printers, modems, scanners, and screens.
- 13. Receives and resolves user help desk calls; documents calls, forwarding work order requests to the appropriate technology staff. Monitor the work order tracking software for new work orders assigned to departments. Update and close work orders as they are completed in work order tracking software.
- 14. Provides basic troubleshooting of user problems with common desktop software, accessing databases, network and networked equipment, and email.
- 15. Sets up and runs audio equipment and mixing board for convocation, recording board of trustees meetings, and other district events. Interface with district employees to determine best multimedia equipment for their events and then setup and instruct employees on the correct use of the multimedia equipment.
- 16. Schedules audio/visual equipment for use in classrooms, meetings, and events; checks equipment out and in; advises staff and students on check-out procedures; assures that audio/visual and sound system equipment functions properly.
- 17. Maintain the smart classroom databases as we install smart classrooms of each system set-up and version. Create and write user manuals as requested by District employees for the different versions of smart classrooms
- 18. Assists and advises customers of the appropriate equipment to facilitate their needs; writes bid specifications for audio/visual and multimedia system acquisitions and makes purchase recommendations; recommends standards for equipment and reviews purchase requests. Serves as a technical liaison to external vendors and specialists engaged by the District to support smart classrooms equipment and software.
- 19. Sets up and picks up media equipment at a variety of locations; transports equipment and sets up and operates public address systems and multimedia presentations.
- 20. Instructs staff in the use of multimedia presentation systems, television production router, studio equipment, and computer controls for meeting rooms and labs.
- 21. Installs, diagnoses, repairs, and maintains various broadcast and production television studios, video multiplexers, microwave, broadband, and audio/visual and multimedia equipment used to support classrooms, labs, presentations, and conferences; Makes configuration changes including hardware, wiring and programming of router for production needs



- 22. Designs, installs, maintains and repairs multimedia classroom equipment: routers, projectors, networked equipment control devices.
- 23. Confers with contractors and outside service providers involved with Audio visual/multimedia projects to ensure compliance with District specifications; reviews blueprints and schematics and evaluates adequacy of specified material and supplies.
- 24. Designs software and equipment in compliance with ADA regulations and standards.
- 25. May assist in monitoring local and wide area network usage and performance; confers with networking specialists regarding problems.
- 26. May train and provide work direction to assigned student workers and temporary help as assigned.
- 27. Performs related duties as required.

**QUALIFICATIONS** - The following generally describes the knowledge and ability required to enter the job and/or be learned within a short period of time in order to successfully perform the assigned duties.

#### Knowledge of:

Personal computer operations, including the relationship and usage of various input and output components, business and education support software, and terminology.

Computer, video, and multimedia equipment diagnostics and repair.

Operating systems.

Protocols and procedures for setting up new equipment, troubleshooting and performing routine maintenance.

Local area networks for personal computers.

Protocols such as TCP/IP, Serial, Ethernet, and Access Lists.

Electronic and electrical theory and practices.

Communication skills to provide individual instruction and technical assistance on the use of PC-based software for business, education, internet, utility, and connectivity.

Writing skill to document technical procedures.

#### Ability to:

Install, configure, and troubleshoot networked computer workstations, systems, and programs used in both instruction and administrative areas.

Set up, configure, and tune video and multimedia equipment used for classroom, public meetings, and conferencing.

Install and configure personal computer components such as cards and drives.

Connect interface cables and connections between computers.

Prioritize and organize work to meet deadlines and timetables.

Read, interpret and apply technical information including equipment blueprints and schematics.

Give one-on-one training in the use of personal computers and business and instructional software.

Communicate clearly and concisely, both orally and in writing.

Establish and maintain effective working relationships with those contacted in the course of work.

<u>Education and Experience Guidelines:</u> Any combination of education and experience that would likely provide the required knowledge and abilities is qualifying. A typical way to obtain the knowledge and abilities would be:



#### **Education/Training:**

Two years of college with major course work in computer science or a related technical field.

#### **Experience:**

Two years of experience working with audio visual equipment and in the setup of networked personal computer workstations and computer technical support.

#### **License or Certificate:**

Possession of a valid California driver's license.

PHYSICAL DEMANDS AND WORKING ENVIRONMENT - The conditions herein are representative of those that must be met by an employee to successfully perform the essential functions of this job. Reasonable accommodations may be made to enable individuals with disabilities to perform the essential job functions.

**Environment:** Work is performed in both indoor and outdoor environments; travel from site to site; exposure to noise, dust, fumes, noxious odors, and all types of weather and temperature conditions; exposure to electrical energy.

<u>Physical</u>: Primary functions require sufficient physical ability and mobility to work in an indoor and outdoor environment; to stand or sit for prolonged periods of time; to occasionally stoop, bend, kneel, crouch, reach, and twist; to lift, carry, push, and/or pull light to moderate amounts of weight; to operate office and audiovisual equipment requiring repetitive hand movement and fine coordination including use of a computer keyboard; and to verbally communicate to exchange information.

Vision: See in the normal visual range with or without correction.

**Hearing**: Hear in the normal audio range with or without correction.