

## JOB ANALYSIS - COMPUTER TECHNICIAN

JOB ANALYST: Nancy Kennedy, MS,CRC	DATE OF ON SITE ANALYSIS: June 16, 2014
PHONE #: (800) 477-0626 X 4435	DATE REVISED: N/A
CONDUCTED FOR: Chico Unified School District	INFO PROVIDED BY: Computer Technician Staff and Jason Gregg, Director of Information Services

### General Description:

Under the direction of the Director-Information Technology and supervisor assigned, the Computer Technician performs a variety of duties involving the installation, maintenance and troubleshooting of computer equipment, related ancillary equipment and materials, and documentation. The Computer Technician provides assistance to students and staff in the use and operation of computer equipment, and performs required record keeping and clerical activities as required or assigned.

### Essential Job Functions:

1. Perform maintenance and minor repairs on computer equipment, ancillary equipment and printers; troubleshoot system errors; and performs upgrades and installation of software; and backups of files and software.
2. Receive and respond to Help Desk Operations requests for assistance at Chico Unified School District locations; prioritize work based on urgency with coordination of other staff, and complete all necessary documentation and clerical functions as required.
3. Participate in the support of the Chico Unified School District computer technology program; facilitate the purchase, installation, and maintenance of computer and related equipment/software; participate and/or assist with ordering and maintaining supplies and equipment.
4. Advise, tutor, and instruct staff and students in the use and operation of computer equipment and software.
5. Maintain inventory of materials and equipment; remove, store, and discard equipment and materials according to standard procedures; receive, assemble and test new equipment.
6. Maintain current knowledge of technologies, products, vendors, and costs; test and evaluate software and hardware; stay abreast of trends, products and applications.
7. Attend and participate in staff meetings, and in-service activities as assigned; attend workshops, conferences and classes to increase professional knowledge.
8. Serve on site and district computer technology committees; serve as liaison to the educational community.
9. Operate a variety of office machines including, computers, printers, copiers, calculators, fax machines and computers.
10. Understand and adhere to district policies and procedures related to scope of responsibility.

### **Marginal Job Functions:**

Perform related duties and responsibilities as assigned.

### **Required Knowledge, Skill and Ability:**

**Knowledge of:** Operational characteristics of computer apparatus, equipment, peripherals, and materials; wide variety of current computer applications and software; basic mechanical and electronic function, maintenance and repair techniques of computers and peripherals; methods and procedures for documentation and record keeping; uses and functions of testing equipment; current trends in educational computer technology; safe work practices; district protocols, policies and procedures related to scope of responsibility; district locations; best practices and methods for advising or instructing end users on uses and functionality of computer related equipment.

**Skill/Ability to:** Operate a variety of technical computer equipment and related peripheral equipment; perform troubleshooting of hardware and software and diagnose problems; perform repairs or changes to equipment and software; research methods and techniques to stay abreast of operational needs of existing or new equipment/software; read, interpret and apply technical information from publications, manuals or other documents; prepare and maintain accurate and complete records; demonstrate proper methods and professional demeanor when working or demonstrating/instructing in computer labs, or classrooms, and when on any district campus or facility effectively and accurately operate a variety of office equipment; type or operate a keyboard or input devices at a level proficient for successful job performance; work closely and collaboratively with Information Technology staff, and others with whom contact is made; communicate effectively complex ideas and technical concepts using appropriate language and methods according to intended audience/end user (including coworkers, other district staff and educators, students, etc.); establish, maintain and foster positive and harmonious working relationships with those contacted in the course of work; work effectively and interact with sensitivity with staff and students from diverse backgrounds; demonstrate understanding and a patient and receptive attitude toward children, staff, teachers, and members of the community; prepare and present technical information or operational methods for use by student in the classroom, and/or computer lab; possess and maintain a valid driver's license and drive to and from campuses or district facility locations adhering to safety practices and applicable traffic laws; work on a public school campus and around minor children.

The Computer Technician works an 8 hour work day.

**Physical Demands (Per U.S. Department of Labor Definition) \*Times listed are approximate and illustrate an 8 hour work day:**

Rating	Rarely <= 1%	Infrequently 2-5%	Occasionally 6-33%	Frequently 34-66%	Constantly 67% +
	*8 hr work day <= 8 min.	* 8 hr work day 9-30 min.	*8 hr work day 30 min. - 2 1/2 hrs	* 8 hr. work day 2 1/2 hrs.-5 1/4 hrs.	*8 hr. work day 5 1/4 hrs. or more
Sedentary			0 – 10 lbs.		
Light			11 – 20 lbs.	0 – 10 lbs.	
Medium			21 – 50 lbs.	11 – 25 lbs.	1 – 10 lbs.
Heavy			51 – 100 lbs.	26 – 50 lbs.	11 – 20 lbs.
Very Heavy			100 + lbs.	50 + lbs.	20 + lbs.

**STANDING:** *Remaining on one's feet in an upright position at a workstation without moving about.*

**Infrequently to Occasionally.** Standing in place to maintain a position involves working directly on computer equipment at a counter, or when speaking with others in various settings. When diagnosing or troubleshooting equipment, the Computer Technician place devices on a work bench. Standing is intermittent with stepping/walking. When presenting materials, or discussing with teachers, staff or students, the Computer Technician will stand as necessary for various duration. Duration of standing is often short intervals, but may be 5 to 10 minutes at any one time. Surfaces are generally level interior flooring, cement sidewalks, asphalt, or other exterior surfaces.

**WALKING:** *Moving about on foot.*

**Occasionally.** Walking distances vary among campuses where the Computer Technician may be required to work. The Computer Technician is based at a centralized location, but then responds to any area of the district to attend to a Help Desk request, or to perform inventory of equipment, or provide other assistance. The Computer Technician will walk to/from parking lot to the area of the campus where work is to be performed. Generally, this distance is several hundred feet, but may be repeated numerous times during the course of the work day. Some larger campuses will require walking distance of several hundred yards. Surfaces are generally level interior flooring, cement sidewalks, asphalt, or other exterior surfaces.

**SITTING:** *Remaining in the normal seated position.*

**Frequently.** Sitting is required for variable time frames when performing installation, repair or maintenance tasks on computer workstations, and ancillary equipment or software. In addition, the Computer Technician will drive to/from various district locations routinely throughout the work day. Duration of sitting will vary from 5 to 15 minutes, or up to 1 hour on occasions. Work is performed where equipment is located, as well as in the department office. Sitting will occur on an adjustable task chair, meeting room chairs (various types), or other available seating or surfaces when performing regular job functions.

**LIFTING:** *Raising or lowering an object from one level to another (including upward pulling).*

	Never	Rarely	Infrequently	Occasional	Frequently	Constantly	Height
Under 10 lbs.				X			Floor to Overhead
10 – 20 lbs.			X				Floor to Mid-torso
21 – 35 lbs.			X				Floor to Mid-torso
36 – 50 lbs.		X					Floor to Mid-torso
51 – 75 lbs.	X						
76 – 100 lbs.	X						

Typical items lifted (not comprehensive):

- 0 – 10 lbs.: Miscellaneous hand tools, manuals, keyboard/mouse, or other peripheral equipment, cords, clip board or documents, office supplies, etc.
- 11 – 20 lbs.: Heavier equipment, CPU or large LCD monitor, etc.
- 21 – 35 lbs.: Larger CPUs in some areas (being phased out), etc.
- 36 - 50 lbs.: Older model CRTs, etc.

**CARRYING:** *Transporting an object usually holding it in the hands, arms or shoulders.*

	Never	Rarely	Infrequently	Occasionally	Frequently	Constantly	Distance
Under 10 lbs.					<b>X</b>		<b>Any Distance Walked</b>
10 – 20 lbs.		<b>X*</b>					<b>5 to 10 feet</b>
21 – 35 lbs.		<b>X*</b>					<b>5 to 10 feet</b>
36 – 50 lbs.		<b>X*</b>					<b>5 to 10 feet</b>
51 – 75 lbs.	<b>X</b>						
76 – 100 lbs.	<b>X</b>						

See Lifting Section for typical items carried. Carrying in excess of 10 lbs. is generally not required as carts are available at all locations. In case where cart is not immediate accessible, the Computer Technician may elect to carry items, such as ancillary equipment (LCD monitor, etc.), or a CPU. Distances are based on need, but generally items will not be carried than 5 to 10 feet (to a cart), or storage location.

**PUSHING:** *To exert force on or against an object in order to move it away.*

**Infrequently to Occasionally.** Pushing to apply nominal force (less than 10 lbs.) to slide chairs, binders, box of supplies, open/close cabinets or room doors, to access or relocate computer equipment occurs routinely but as a brief action to access or organize supplies or materials. When a rolled cart is utilized applying force of 10 to 25 pounds will be necessary using hands/arms/upper body to move a cart loaded with equipment down corridors or over pavement. This does not occur on a regular basis, but will occur when changing out equipment.

**PULLING:** *To draw towards oneself, in a particular direction or into a particular position.*

**Infrequently to Occasionally.** Pulling to apply nominal force (less than 10 lbs.) to slide chairs, binders, box of supplies, open/close cabinets or doors, to access or relocate computer equipment occurs routinely but as a brief action to access or organize supplies or materials. When a rolled cart is utilized applying force of 10 to 25 pounds may be necessary to maneuver the cart around corners or through doorways. Hands/arms/upper body will be used to pull. This does not occur on a regular basis, but will occur when changing out equipment.

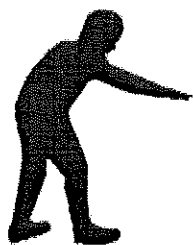
**CLIMBING:** *Ascending or descending ladders, stairs, scaffolding, ramps, poles and the like using hand and feet.*

**Rarely.** Climbing occurs as necessary to access upper story class rooms at two campus locations. Elevator access is available if requested. It will also occur to traverse ADA ramps (e.g. temporary building classrooms/Kindergarten) where they exist on campuses. In addition, the Computer Technician will clean or change light bulbs in overhead/stationary projectors in classrooms, as a maintenance task. Access is via a ladder, and the Computer Technician will ascend/descend to complete this task.

**BALANCING:** *Maintaining body equilibrium to prevent falling when walking, standing, crouching or running on narrow, slippery or erratically moving surfaces.*

**Very Rarely, by strict definition.** Balancing is required when cleaning or changing bulbs on overhead projectors where an overhead reach while standing on a ladder rung is required (See Climbing). Otherwise, balancing is generally not required. An overall good sense of balance is necessary when operating a vehicle, or walking on variable surfaces, but surfaces are generally not narrow, slippery, nor erratically moving.

**STOOPING/BENDING:** *Bending body downward and forward by bending spine at the waist, requiring full use of the lower extremities and back muscles.*



**20 Degrees- Infrequently.** Bending up to 20 degrees occurs routinely to access equipment when standing, or if reaching across a desk to access when seated, and when unplugging/plugging in cords, etc.



**45 Degrees- Rarely.** Bending to 45 degrees occurs generally as a down/up fluid movement to access supplies or items in lower drawers or shelves, or to access behind a CPU located at floor level, or a lower printer drawer, etc.



**90 Degrees - Rarely.** Bending fully to 90 degrees occurs when accessing a cord or to access behind computer equipment. Full bending can be avoided with kneeling or squatting at the discretion of the Computer Technician.

**TWISTING/TURNING:** *Rotating the torso. This includes turning of upper and lower back, and hips.*

**Infrequently, 0 to 45 degrees.** Twisting the upper torso to left or right to approximately 30-45 degrees when moving computer equipment (peripherals or CPUs) from a desk top location, shelf, or if on the floor to transfer to a cart or other location. Some twisting will occur when seated at a workstation using a non-swivel chair to access adjacent equipment, or materials. Lower body rotation is generally not required.

**KNEELING:** *Bending legs at knees to come to rest on knee or knees.*

**Rarely.** Kneeling will occur as necessary to access lower stationary objects, such as a cord, or equipment on the floor. Kneeling will not necessarily be a daily or routine occurrence, but when necessary kneeling may be for prolonged periods of several minutes.

**CROUCHING/SQUATTING:** *Bending body downward and forward by bending legs and spine.*

**Rarely.** Crouching to lower the body from a standing position will primarily lifting/moving older heavier equipment. This commonly occurs when changing out equipment is necessary due to equipment failure/replacement, or if an equipment upgrade occurs during off-peak time (school breaks/summer). Squatting will occur when full bending, or kneeling is not appropriate or necessary, and at the discretion of the Computer Technician. Squatting is generally for a short duration, but may be for up to 1-2 minutes or more when necessary.

**CRAWLING:** *Moving about on hands and knees or hands and feet.*

**Rarely.** Crawling may be required to access under tables or desks to access equipment or cords. Movement may only be 1-2 feet distance, but the Computer Technician will rest or move on hands and feet.

#### **NECK POSITIONS:**

**Extension: 0 - 70 degrees: Rarely.** Glancing upward 0 to 45 degrees will occur very intermittently during the work day to look up from seated or standing position scan immediate or distant areas. Depending in height of individual and height of ladder/location of projector in a classroom, the Computer Technician will extend the neck to view overhead - often directly overhead to clean or replace a bulb. This event occurs only as needed, and not routinely.

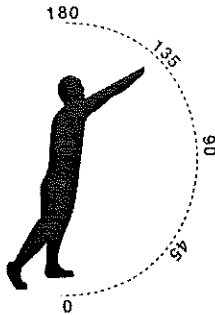
**Flexion: 0 - 80 degrees: Occasionally to Frequently.** Most tasks involve looking downward 0 to 50 degrees, and will be intermittent, as well as for a prolonged periods. Accessing and working on equipment will require looking downward to a desk or counter surface. This includes work performed at a desk to review records, or to write on logs, or other required documents, or assisting a seated individual from a standing position. Viewing immediate lower areas when walking or driving may require glancing downward for safety or to operate personal vehicle. The Computer Technician will keep logs while on sites, and will read manuals and other materials at other times. Work performed reading information or data using a monitor will generally not require neck flexion.

**Left/Right Lateral Rotation: 0 - 45+ degrees: Infrequently.** Looking left or right up to full range will occur as a brief glance when performing routine work functions. This may include scanning students in a computer lab, viewing general surroundings when walking or driving.

**Left/Right Lateral Flexion: 0 - 45 degrees: Not Required to perform any specific job function.** Based on the stance of the Computer Technician lateral flexion will occur as a discretionary movement, but is generally not required.

**REACHING:** *Extended hand(s) and arm (s) in any direction.*

**Forward:** Forward reaching occurs routinely throughout the school day to the frequencies and degrees indicated below:



**135 to 180 Degrees: Rarely.** Reaching overhead to access overhead projector, if necessary to clean or change bulb.

**90 to 135 Degrees: Rarely.** Accessing supplies/items on shelf/file cabinet or in storage area.

**45 to 90 Degrees: Frequently.** Varies with needs of situation to access supplies, records, logs, telephone, equipment, cords, drive vehicle, etc., and will occur briefly or for period of less than one hour.

**Below 45 Degrees: Rarely.** Accessing supplies or equipment at a lower level. May be more frequent if Computer Technician prefers to stand when working on desk top level equipment.

**Abduction (side reaching 0 - 180):** Not required to perform any specific or identified essential function.

**Horizontal Abduction/Adduction (away from or across body):** Occasionally to Frequently as a unilateral right or left movement, and Infrequently as a bilateral movement. Reaching away or across body occurs when accessing or handling supplies, equipment, and routinely when organizing various materials. The Computer Technician will move items to a side in order to access other equipment, etc.

**HANDLING:** *Seizing, holding, grasping, turning, or otherwise working with hand or hands. Fingers are involved only to the extent that they are an extension of the hand, such as to turn a switch.*

**Frequently.** Whole hand actions involve both the dominant and non-dominant hand and unilateral and bilateral functions approximately 50% of the work day. The Computer Technician handles equipment, documents, manuals, and other items routinely throughout the work day. Holding, firm grasping, turning items with hands, or manipulating with hands, is a necessary and daily occurrence when performing routine job functions. Manual dexterity is required to efficiently and effectively repair or maintain equipment, and maneuver devices. The Computer Technician uses hand for three-point pinch, tip pinch, hook grasp, spherical grasp, and firm/power grasp. Wrist mobility involves deviation, extension and flexion. The whole hand will be used in a prone or supine position.

**FINGERING:** *Picking, pinching, touching, feeling or otherwise working primarily with fingers rather than with the whole hand or arm as in handling, and key-stroking.*

**Frequently.** Finger actions occur to input data using a keyboard, or operate a mouse click/scroll. Fine finger manipulation will be required to loosen components or wire/cords. Fingering actions occur with handling functions routinely, as most job functions involve use of an input device for maintenance, repair, or troubleshooting, and required documentation. Fingering actions occur approximately 50% of the work day.

**TALKING:** *Expressing or exchanging ideas by means of the spoken word.*

Speaking clearly and effectively in a calm manner is a critical component for communications with students, teachers, staff and co-workers, or others with whom contact is made. The Computer Technician must be able to communicate in-person, as well as using a telephone or other device. The ability to speak with understanding and in clear age-appropriate language is required for work among students and others to explain technical information, or basic usage techniques of a computer or other equipment/software; and, to coordinate activities with others.

**HEARING:** *Perceiving the nature of sounds by ear.*

Normal, near normal, or corrected to-hearing is required to discern speech and sounds common to the school environment. This involves hearing bells, intercom announcements, and the various speech of students and others with whom contact is made in order to respond or communicate effectively.

**SEEING:**

Normal, near normal or corrected to-vision is required to function effectively as a Computer Technician. Ability for near acuity ( $\geq 20$  inches), far acuity ( $\geq 20$  feet), depth perception, field of vision, accommodation (adjusting focus) and color identification is important for identification of parts and components, features in software programs, location of equipment, supplies and materials, and to make correct determinations when troubleshooting problems, or drive a vehicle.

**ENVIRONMENTAL CONDITION - EXPOSURE TO: (Checked items apply)**

- ☒ Weather - 99 % inside (or covered corridors)    1 % outside (approximation)
- ☐ Extreme Cold
- ☐ Extreme Heat
- ☐ Wet and/or Humid
- ☒ Noise intensity level - Low to Moderate
- ☐ Vibration
- ☒ Atmospheric Conditions - Ambient, generally not present
- ☐ Electrical Shock
- ☒ Work in High Exposed Places - Rarely, work performed from a ladder
- ☐ Radiation (i.e. X-ray)
- ☐ Explosives
- ☐ Toxic or Caustic Chemicals
- ☐ Proximity to Moving Mechanical Parts
- ☒ Other Environmental Conditions - Exposure to air and borne pathogens typical of school setting.

## PSYCHOLOGICAL FACTORS:

1. ABILITY TO COMPREHEND AND FOLLOW INSTRUCTIONS: *The ability to maintain attention and concentration for necessary periods. The ability to understand written and oral instructions, and the ability to do work requiring set limits, tolerances, or standards.*

100% of job tasks involve the ability to maintain attention and concentration for periods of time, such as to troubleshoot technical problems, or install software/hardware, and to read and comprehend manuals, and other materials. In addition, the Computer Technician must possess the ability to read and comprehend, and respond accordingly to a trouble report or Help Desk request (ticket), and take appropriate actions. This requires the ability to read and understand written and oral instructions/information. The Computer Technician will receive requests, and are assigned work orders at the beginning of each work day. It is the role and function of the Computer Technician to go to district locations to address each issue according to standard procedures, and protocols which are based on knowledge of the technical issue, department and/or district policies. Work must be performed according to specifications, or technical protocols, and within all district policies.

2. ABILITY TO PERFORM SIMPLE AND REPETITIVE TASKS: *The ability to ask simple questions or request assistance; the ability to perform activities of a routine nature; and the ability to remember locations and work procedures. The ability to obtain information and answer questions regarding company procedures, or standards for immediate staff is required.*

80 % of job functions involve simple and repetitive tasks or procedures. The Computer Technician will perform routine equipment adjustments, install devices, reset basic configurations, or access protocols. The Computer Technician must know and remember where district properties are located, and remember and follow access requirements if applicable. The Computer Technician will ask simple and direct questions of end-users others where applicable, and obtain information relevant to problems or issues, and may be required to explain basic procedures and policies related to technical equipment and uses. The Computer Technician will also communicate through the work day with other computer technology staff to coordinate availability, or priorities. At the beginning and end of each work day, computer technology staff will meet to discuss daily activities - what must be done, or what was left unfinished, etc. Information is received and shared to enhance the effectiveness of the team, and to coordinate efficient use of time and skills.

3. THE ABILITY TO MAINTAIN A WORK PACE APPROPRIATE TO A GIVEN WORKLOAD: *The ability to perform activities within a schedule, maintain regular attendance and be punctual; and the ability to complete a normal workday and/or work week and perform a consistent pace.*

100% of job functions require the ability of the Computer Technician follow a schedule, perform tasks with efficiency and thoroughness. Regular attendance, and punctuality when traveling between sites is required as assignments are distributed based on priority of issue and expected time to complete. The Computer Technician must possess the ability to work at a pace in order to complete work assignments, in order to not negatively impact the instructional needs of the school, or administrative functions of a department.

4. **ABILITY TO PERFORM COMPLEX AND VARIED TASKS:** *The ability to synthesize, coordinate, and analyze data; and the ability to perform jobs requiring precise attainment of set limits, tolerances and standards.*

20 % of job functions involve complex or varied tasks, and primarily involve assessment of complex technical issues, and troubleshooting uncommon or difficult issues. This also involves the ability to read and comprehend new or complex technical issues and installing or testing new systems. Also, configuring the functionality of new systems with existing equipment/software will require the ability perform complex/varied tasks. The Computer Technician has the ability to consult with colleagues and lead personnel regarding issues, but is responsible to complete tasks within his/her expertise and the scope of the assignment.

5. **ABILITY TO RELATE TO OTHER PEOPLE BEYOND GIVING AND RECEIVING**

**INSTRUCTIONS:** *The ability to get along with coworkers or peers; the ability to perform work activities requiring negotiation with, explaining, or persuading; and the ability to respond appropriately to evaluation or criticism.*

Up to 100% of job functions involve the ability to relate to the needs of the current problem, and the impact remedies will have on anticipated users. The Computer Technician works within classrooms, as well as designated computer labs on various campuses. Work is also performed on equipment used by various staff members, teachers, etc. The support of the end user is primary function of the position, and as such the Computer Technician, but have the ability to understand, explain, and respond appropriately in any situation. This will include understanding and properly and professionally respond to expressed frustrations or negative criticism aimed at technical problems, or necessary changes.

6. **ABILITY TO INFLUENCE PEOPLE:** *The ability to convince or direct other; the ability to understand the meaning of words and to use them appropriately and effectively; and the ability to interact appropriately with people.*

Up to 100% of job duties involve the ability to influence people, and is variable based on the school site, grade levels served, and on-going or special activities/circumstances. This ability varies significantly between the elementary and upper level school sites, and the role and function of end-users. The Computer Technician must possess the ability to provide verbal or written instruction, or physical demonstration of techniques/functions of equipment or software that is appropriate to the recipient. In all cases, the Computer Technician must conduct themselves with courtesy, and use words or expressions that are appropriate.

7. **ABILITY TO MAKE GENERALIZATIONS, EVALUATIONS, OR DECISIONS WITHOUT**

**IMMEDIATE SUPERVISION:** *The ability to recognize potential hazards and follow appropriate precautions; the ability to understand and remember detailed instructions; the ability to make independent decisions or judgments based on appropriate information; and the ability to set realistic goals or make plans independent of others.*

75 to 85% of the Computer Technician's duties involve making general assessments as to the nature and extent of the technical issue, and decisions as to best methods to handle and address. In most cases, the Computer Technician has obtained or been provided with methods and instruction regarding the nature and extent of the assignment. This will often involve understanding and remembering detailed instructions, or protocols to follow to make the necessary repair, maintenance function, or installation. The Computer Technician has the ability to communicate with other Technicians or department personnel regarding complex or issues that will require more extensive time, or expertise. However, the Computer Technician at the work site is expected to be able to make appropriate decisions without immediate supervision.

8. **ABILITY TO ACCEPT AND CARRY OUT RESPONSIBILITY FOR DIRECTION, CONTROL, AND PLANNING:** *The ability to set realistic goals or make plans independently of others; the ability to negotiate with, instruct or supervise people; and the ability to respond appropriately to changes in the work conditions.*

5% of job functions involve responding to changes in the daily schedule, and responding to unscheduled events, or prioritizing more than one Help Desk ticket at one site. The Computer Technician does not supervise or directly make plans or goals for other employees. However, during the course of the work day, jobs may be completed ahead of schedule, or new events may occur that will require a change of focus, or a change of location. The Computer Technician is expected to respond appropriately and work as a team member to ensure that priorities are addressed efficiently and effectively.