

# DACUM RESEARCH CHART FOR SCHOOL COMPUTER TECHNICIAN

## DACUM Panel Members

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### Todd Finnell

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## *Purpose:*

*Install, maintain, configure and repair computers and related hardware/software.*

## Produced by:



**Dates: March 7-8, 2002**

DACUM is an acronym for developing a curriculum. It is a two-day occupational analysis that provides a picture of what the worker does in terms of duties, tasks, knowledge, skills, and traits, and in the tools the worker uses.

TechSETS is one of four Statewide Education Technology Services (SETS) to provide support and/or resources for California schools as authorized by AB1761. These services are those that "are more efficiently and effectively provided on a statewide basis." A contract has been awarded by the California Department of Education to the San Diego County Office of Education, who has been working closely with the Imperial County Office of Education to develop TechSETS.

For more information on TechSETS, visit [www.techsets.org](http://www.techsets.org).

For additional information on the other SETS programs, visit the California Department of Education's informational site at [www.cde.ca.gov/sets](http://www.cde.ca.gov/sets).

<b>A</b>	<b>Set-Up Computer Equipment</b>	A-1 Evaluate Equipment Location	A-2 Place Computer Equipment	A-3 Verify Accuracy and/or Condition of Components	A-4 Connect Computer Equipment	A-5 Install Operating System	A-6 Verify Device Drivers
<b>B</b>	<b>Maintain Computer Hardware</b>	B-1 Maintain Current Diagnostic Software	B-2 Maintain Computer Toolkit	B-3 Maintain Parts Inventory	B-4 Evaluate Service Requests	B-5 Prioritize Service Requests	B-6 Diagnose Hardware Problem
<b>C</b>	<b>Maintain Computer Software</b>	C-1 Install Software Upgrades	C-2 Install Software Patches and Fixes	C-3 Install New Software	C-4 Reinstall Existing Software	C-5 Remove Existing Software	C-6 Resolve Software Conflicts
<b>D</b>	<b>Perform Preventative Maintenance</b>	D-1 Run Operating System Utilities (e.g. Defrag, Disk First Aid)	D-2 Run Diagnostic Software Utilities (e.g. Norton, Disk Warrior)	D-3 Perform System/Data Backups	D-4 Verify Latest Virus Definition Files	D-5 Clean Internal Components	D-6 Clean External Components (e.g. Keyboard, Mouse)
<b>E</b>	<b>Provide User Support</b>	E-1 Perform End-User Training	E-2 Recommend Technology Purchases	E-3 Setup Presentation Equipment	E-4 Assist in Use of Applications	E-5 Respond to User Questions	E-6 Advise User on Ergonomic Issues
<b>F</b>	<b>Maintain Technology Documentation</b>	F-1 Record IP Address Assignments	F-2 Track Software Licenses	F-3 Maintain Equipment Inventory	F-4 Document Service Requests	F-5 Collect Workstation Documentation / Media	F-6 Perform Product Registration
<b>G</b>	<b>Perform Administrative Tasks</b>	G-1 Report Technology Policy Violations	G-2 Maintain User Accounts (Add / Remove)	G-3 Participate in Meetings	G-4 Assign Tasks to Volunteers (e.g. Students, Interns)	G-5 Interface with Vendors / Consultants	G-6 Evaluate Equipment for Disposition
<b>H</b>	<b>Maintain Professional Development</b>	H-1 Participate in Technology Training	H-2 Participate in Electronic Discussions	H-3 Research Web-Based Information	H-4 Read Professional Publications	H-5 Evaluate New Technologies	H-6 Participate in Professional Organizations

A-7 Install Device Drivers	A-8 Install Application Software	A-9 Install Network and/or Client Software	A-10 Configure Printers	A-11 Configure Peripherals (e.g. scanner, PDA)	A-12 Configure Network Connection	A-13 Configure Anti-virus and/or Security	A-14 Verify Equipment Operation
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B-7 Determine Optimum Resolution	B-8 Determine Necessary Tools	B-9 Acquire Replacement Components	B-10 Install Replacement Components	B-11 Configure Replacement Components	B-12 Verify Hardware Resolution
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C-7 Evaluate Software Compatibility	C-8 Verify Software License(s)	C-9 Perform System/Data Restoration	C-10 Perform Antivirus Operation
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D-7 Schedule Printer Maintenance
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E-7 Determine Printer Settings
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F-7 Monitor Warranty Status
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G-7 Report Safety Hazards	G-8 Interface with Other Technology Departments
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H-7 Obtain Professional Certifications	H-8 Participate in Technology Conferences
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## ***General Knowledge and Skills***

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Communication Skills  
Interpersonal Skills  
Knowledge of Various Operating Systems  
Basic Computer Repair Skills  
Analytical Skills  
Knowledge of Computer Terminology  
Knowledge of Common Desktop Applications  
Problem-Solving Skills  
Basic Networking Principles  
Internet Skills  
Time Management  
Basic Mechanical Ability  
Keyboarding Skills  
Ability to Communicate at Different Levels of Expertise

## ***Worker Behaviors***

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Multi-tasking  
Problem Solver  
Resourceful  
Patient  
Self-motivated  
Polite  
Flexible  
Observant  
Responsible  
Sense of humor  
Good listener  
Goal oriented

## ***Tools, Equipment, Supplies and Materials***

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Basic Computer Tools  
Crimping Tools  
Cable Tester  
Terminators  
Cables  
Computer/Laptop  
Cell phone/Radio  
Patch cords  
Anti-Static Band  
Labeler  
Cable Toner  
Support Contact Directory  
Diagnostic Software  
Reference Books  
CD Burner  
Canned Air/Duster  
Anti-Static Bags

## ***Future Trends and Concerns***

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Greater need for specialized training  
Need for competitive pay/benefits  
Overlapping responsibilities with other technical positions  
Increasing responsibilities  
Division of responsibilities due to organizational structure (Instruction/ Technical)