



1. Overview

Desktop computers are an indispensable work tool of every office at Butte County Office of Education. Faculty, staff, and administrators use their workstations in every aspect of their duties. Therefore, it is essential that those computers support current technological needs and be able to run the essential applications that define BCOE's business environment. This plan will help guide upgrades and purchasing of new equipment and the retirement of obsolete tools. The Windows platform of computers is the standard for BCOE.

2. Current Hardware Standards

Dell Optiplex 7040 (Desktop)

Processor	Intel® Core™ i7 670
Memory	8GB DDR3, Dual Channel SDRAM (2-4GB modules)
Video	Integrated Video, Intel® HD Graphics 2500
Optical Drive	DVDRW
Monitor	None
Operating System	Microsoft® Windows® 7 Enterprise
Warranty	3 Year Warranty – On-Site
Keyboard/Mouse	Standard USB Keyboard/Mouse
Hard drive	250GB Solid State Drive (SSD) SATA
Network Adapter	Gigabit LAN
Speakers	None

Dell Wyse 5030 Zero Client (VDI)

Processor	Teradici 2321
Memory	512MB
Video	Not applicable
Optical Drive	None
Monitor	None
Operating System	Teradici
Warranty	1 Year
Keyboard/Mouse	Standard USB Keyboard/Mouse
Hard drive	None
Network Adapter	Gigabit LAN
Speakers	None

Dell Latitude E5570 (Laptop)

Processor	Intel® Core™ i5 (3 rd Gen) 4310U/2
Memory	4GB, DDR3 SDRAM 1600MHz
Video	Intel HD Graphics
Optical Drive	None
Screen	15.6" HD (1366x768) Anti-Glare LED-backlit
Operating System	Microsoft® Windows® 7 Enterprise
Warranty	3 Year ProSupport with 3 Year NBD Limited Onsite Service

Keyboard	Keyboard, touchpad
Camera	Integrated webcam
Sound	Speakers, microphone
Hard drive	500GB 7200 RPM Serial ATA-300 Hard Drive

Dell Latitude E7280 (Laptop)

Processor	Intel® Core™ i7 (3 rd Gen)
Memory	8GB, DDR3 SDRAM 1600MHz
Video	Intel HD Graphics
Optical Drive	None
Screen	12.5" HD (1366x768) Anti-Glare LED-backlit
Operating System	Microsoft® Windows® 7 Enterprise
Warranty	3 Year Pro Support with 3 Year NBD Limited Onsite Service
Keyboard	Keyboard, touchpad
Camera	Integrated webcam
Sound	Speakers, microphone
Hard drive	250GB Solid State Drive (SSD) SATA

HP Chromebook 11 G5

Processor	Celeron 3205U
Memory	2GB
Optical Drive	None
Screen	11.6" HD (1366x768)
Operating System	Chrome
Warranty	1 limited warranty
Keyboard	Keyboard, touchpad
Sound	Speakers, microphone
Hard drive	16GB Solid State Drive (SSD) SATA

Apple Ipad Air (Tablet)

Processor	A8X Chip
Screen	9.7" HD (2048x1536)
Warranty	2 or 3 year warranty
Hard drive	16GB – 126GB Solid State Drive (SSD) SATA

3. Software Standards – Latest approved versions

- Microsoft Windows 10
- Microsoft Office 2016 Professional o Word, Excel, PowerPoint, Outlook, Publisher
- Adobe Acrobat Reader DC
- Adobe Professional X
- Adobe Flash
- Bit Defender Anti-virus

Approved / Supported Software – latest approved versions

- Adobe Acrobat Professional
- Student Information System (Eagle Aeries)

- BusinessPlus
- Google Chrome
- Turbo Meeting
- Google Apps for Education (GAFE)
- CAASSP Browser

Approved / Not Supported Software – latest approved versions

- Ablebits
- Adobe Photoshop
- Attachmate Reflection
- Boardmaker
- FileMaker Pro
- Microsoft Frontpage
- Microsoft Visio
- Skype
- Techsmith Camtasia
- Techsmith Snag-it
- Makerbot 3D printing software
- Autodesk software products
- SACS Financial software
- Gotomeeting
- Dragon Naturally Speaking 12

Unapproved Software –

“180SearchAssistant” and other programs such as “Yahoo and Google toolbar,” “Weather apps”, and “Cool web search” include tracking (spyware) software. While running, the computer is turned into a virtual “internet server.” It tracks and sends information about the user to various companies. This reduces the performance of the computer and the network. Spyware is the number one cause of pop-up ads and spam mail.

Some of these programs place a key in the registry of your computer; this is the set of instructions, which runs when you start your computer. This may cause the computer to run slow.

4. Hardware and Software – End of Service Policy

Google Chromebook - <https://support.google.com/chrome/a/answer/6220366?hl=en>

Microsoft Windows - <http://windows.microsoft.com/en-us/windows/lifecycle>

Microsoft Office - <http://www.allyncs.com/docs/lifecyclesupport.html>

5. Replacements and Upgrades -

The decision about whether to approve replacement or upgrades of desktop computers rests with the department head that has budget authority over funds that would be used to purchase the new computer(s) or upgrade(s.) However, the recommendations listed for minimal hardware configurations should be a strong consideration for the use of departmental funds, particularly if users in the department use standard BCOE software.

Departments should develop plans for regular upgrades or replacements of desktop computers. It is more efficient and less disruptive of daily operations if necessary changes to the hardware and software environment

can be anticipated by both computer support personnel and users of computers. At a minimum, departments should conduct an annual needs analysis of their equipment after new guidelines are issued.

Software –

When new computers are purchased, it is the responsibility of the user to purchase (through ITS) the latest approved version of all software. Older versions and non-approved software will **not** be transferred to new machines.

Database Creation –

Personal or departmental created databases can cause “islands of information”; these “islands” may cause extra work for a department when the data is already available by other means. Acceptable uses of a database such as MS Excel require no preauthorization or review and can be extremely helpful in keeping flat file information. If a user or department feels it is necessary to create a database in MS Access, or other database, the user must request a work order from ITS in order to have the database structure and its uses reviewed by an ITS specialist. *Databases created in unsupported software or outside the BCOE guidelines may not be supported.* The need to review this information should reduce the “islands of information” issues as well as some of the following concerns: redundancy, application support, mission critical data, information not being stored in secure place, small databases by one person have grown to larger audiences, training, and version discrepancies.

The use of unsupported software such as File Maker Pro shall only be used in cases where it is a mandated requirement of an authorizing agency such as the State of California.

Timeline of Projected Support Operating Systems

System	FY 2017-2018	FY 2018-2019	FY 2019-2020	FY 2020-2021
Windows 7	X	X	X	-
Windows 10	X	X	X	X
Apple IOS 8	X	-	-	-
Apple IOS 9	X	X	X	-

Operating Systems prior to Windows 7 will not be supported.

Timeline of Projected Support for Hardware

Hardware	FY 2017-2018	FY 2018-2019	FY 2019-2020	FY 2020-2021
Core 2 DUO	X	-	-	-
Core i5	X	X	X	-
Core i7	X	X	X	X
2 GB RAM	X	X	-	-
4 GB RAM	X	X	X	X

Peripherals –

All peripheral equipment should be evaluated annually by the department and ITS representative to assure the compatibility and functionality of all peripherals. Printers for BCOE have been standardized on HP products. Ricoh Copiers are the exception to this standard.

User Responsibilities –

It is important to ensure users make effective use of all technology systems and that ITS efficiently contains the costs associated with providing desktop support. Knowing how to use technology appropriately should be regarded as part of the professional responsibilities of all administration and staff. User responsibilities include:

- Using only standard hardware and software.
- Acquiring training in the use of their system (as necessary to do their jobs) by attending training classes, reading instructions, manuals and accessing online help.
- Performing routine backups of important data and files, to the file server or other secure location. ○ Using their systems responsibly and ethically as outlined in the Butte County Office of Education policies and procedures.
- Following all security procedures and keeping all passwords confidential.

Donated hardware and software –

Technicians are only able to adequately familiarize themselves with a limited range of hardware. Nonstandard equipment increases the likelihood of conflicts that can render a system inoperable and increase costs for the organization.

The Information Technology department does not support donated computers, peripherals or software unless identical to hardware and software on the BCOE standards list and after the review for donated items has been approved by both the site manager and an ITS manager.

Upon receipt of a *Request for Review of Donated Equipment (BSF104)*, the Information Technology department will advise site whether the offered hardware or software will meet the guidelines.

Software –

BCOE makes every effort to make ensure staffs have the most current software necessary to perform their job functions. When software manufacturers update a version, they tend to terminate support for earlier versions of a product, making support for users difficult. The use of non-standard and outdated software can increase organizational costs for support and disrupt user production. **Timeline of Projected Support for Standard Software**

Software	FY 2017-2018	FY 2018-2019	FY 2019-2020	FY 2020-2021
Office 2010	-	-	-	-
Office 2013	X	X	X	-
Office 2016	X	X	X	X

Purchasing of Technology Equipment –

In accordance with Superintendents Policies all purchasing of technology equipment including, computers, printers, projectors, tablets, peripheral devices, cables, converters and software shall be purchased through the BCOE Information Technology Services Department. Connecting personal equipment to BCOE computers is prohibited.

Student Computer Specifications –

Student computers are to comply with the system specifications outline in the Smarter Balanced framework (<http://www.smarterbalanced.org/smarter-balanced-assessments/technology/>). The Smarter Balanced system requirements ensure that computers are capable of being used for online testing. These system requirements apply to desktops, laptop, and tablet devices. Computing systems that do not meet these requirements should be reviewed and replaced as needed.

Work order submission process for new purchase



