

4.3 SOFTWARE

The district's software policies and standards required to improve efficiency of I.T. technical support to staff and students, enable timely and exceptional customer service and maximize the "uptime" of schools' computers.

(a) Standard Operating Systems

Beginning in 2007-2008, the standard operating systems for all new computers is MAC OS 10.4 and Windows XP. The I.T. department desires as many users as possible to utilize the same operating system (Mac or PC) thus eliminating the need for maintenance of multiple images. The fewer images means an increased level of standardization which translates to improved service to staff and students educators from the IT department. Older versions of MAC OS and Windows Operating Systems will systematically be phased out of Information and Technology's support responsibilities. Refer to the Operating Systems Schedule for Planned Non-Support below:

Operating System Schedule for Planned Non-Support

Operating System	April 2007
MAC	OS 7, 8 and 9
Windows	Win '95 & '98

The I.T. site server infrastructure required to provide staff and students exceptional support will only support Mac OS 10.x and Windows 2000 and higher.

At this time, and given the choice from Microsoft and Apple Inc., the district is not going to implement Window's Vista or Apple Leopard until the systems have proven themselves in the field.

Operating System updates, patches and application installations will be supported by IT. District wide software updates are an essential periodic process to maintain a stable and standardized instructional network.

(b) Schools' Master Images

Information and Technology will customize individual schools' software packages into one digital package referred to as an "image". This package contains all the school's software applications, preferences and settings required for all computers on campus. If any campus computer "crashes" rather than reload each software application disk by disk, IT will "remotely" command the school's server to reload their image on the dysfunctional computer station restoring the computer to normal.

Under normal conditions, schools' images will be updated once each year and will take literally minutes to perform. The process of determining what will be included on a school's image is a site-based decision. All schools are responsible for application licenses and IT personnel will verify that schools have the proper licenses before installing or upgrading site images. The school

should provide a photocopy for all licenses of those applications requiring installation on the school's master image. Any improper software usage and licensing issues will be the schools' responsibility and individuals may be held accountable in the event of piracy. Using IT to verify licenses protects the district, schools and individuals and is beneficial effort for us all.

The planning for software updates on behalf of the schools will be a necessary site function. IT recommends that the site tech coordinator assume the role of providing leadership for software updates. Site tech coordinators must have open technology meetings to discuss the contents and requirements for the site's image. These image decisions may have financial implications due to licensing. The school must purchase all software licenses in advance of IT prescheduled updating of the school's image.

Although Information and Technology will re-image computers once per year, each school's site tech coordinator may image his/her school's computers as desired. IT will provide support to site tech coordinators for the process of imaging computers. It is highly recommended that all site imaging be scheduled in advance, involve stakeholders and not be a frequent event.

(c) Remote Management - Network Control

Remote Management is a technical support feature that will be the cornerstone to ABC's new instructional network. Remote management paves the way to outstanding instructional support for our educators.

Remote management will allow schools' trained Site Tech Coordinators and I.T. staff to help students and teachers remotely. The STC will log onto a teacher's computer from a remote location and solve many problems that previously required the physical presence of the site tech coordinator. Problems will begin to be solved within minutes as opposed to hours and days.

Schools' STC's will be the first point of contact for all instructional support problems. Therefore, all STC's will be fully trained to acquire proficiency with remote management technology. The I.T. department will provide the training, leadership and secondary support when a school site can't solve a problem.

Remote management technology will be installed at all schools as the link between IT and the instructional users at the schools and be the basic vehicle for technology assistance. Therefore, Therefore, as part of the district's refresh cycle, the first phase of refresh implementation will be the purchase and installation of a standardized site server of which remote management technology is a major component.

Remote management Infrastructure is comprised of the following basic hardware and software tools (Refer to Infrastructure Section 4.1 (c) for more server details):

1. A Robust Instructional Server (Apple X-Serve, Quad Core dual Processors)
2. Apple Remote Desktop (Macs) and Altiris (PC's)

Currently, the norm for instructional computers across the district is non-standardization and an inability to allow for remote management from support technicians on and off the school premises. The new instructional network will link every instructional computer to an “instructional server” located at each school campus. This server will maintain student and teacher accounts, save instructional data within digital lockers and provide the opportunity for teachers to receive remote assistance from support experts from within the school and from IT.

(d) Security

All new instructional computers will be accessible over the network using different levels of security or “door ways” into the machine. Each computer will have doorways that authorized personnel may enter for different purposes. There will be “student” access that allows students to complete work and save to their folder or teacher’s folder. Accounts for teachers will allow them to modify their lesson plans and technology logistics required of their students. A school’s super-user account will be given to the site tech coordinator authorized to change global parameters that may impact the entire school. Finally, there are support technicians accounts with the widest access for the purpose of repair, maintenance and troubleshooting. The concept of multi-leveled access/authorization in every computer ensures that IT support personnel can instantaneous access a teacher’s computer from anywhere in the district to resolve technical problems