To understand computer standardization, it’s best to first take a look at today’s landscape. According to the latest 2003 Campus Computing Project survey, less than one-half of all responding institutions recommend that their students purchase a particular brand of hardware (43.1%). These figures increase for faculty (77.1%) and administrators (80.2%). Compared to hardware, software recommendations are slightly higher for students (67.4%) and faculty (85.1%) and decrease slightly for administrators (73.9%). The study goes on to explain that roughly 60% of all campuses report having a financial plan for “acquiring and retiring” aging equipment and software. This figure is up only 8% over the last three years but up significantly from the 22% reported in 1994.

These numbers indicate a slowly growing trend toward standardization. What they don’t explain are the reasons for this trend. It is commonly recognized that standardizing on one computer/software platform saves money and eases the support requirements. That may very well be true but there is a lot more to it than its cost-effectiveness. The following Questions & Answers details what computer and software standardization can mean to a campus and some of the factors campuses may wish to consider in implementing such efforts.

**Q: What does standardization mean?**

**A:** Standardization is achieved when a common base configuration is adopted for the institution, faculty, staff and students. Chosen from a specific vendor the base hardware platform and software suite can be tailored to fit specific needs by building on the common base. Standardization does not require every faculty, staff, administrator and student to have the exact same equipment.

**Q: What are the benefits of computer/software standardization?**

**A:** The most notable one is that standardization is cost-effective for the campus. It decreases support costs in that the campus support team doesn’t require continual training on multiple platforms. This not only means reduced training costs, but satisfied users who are assured that help staff are trained on the software and hardware the user has. It helps in managing inventory more efficiently; enables the development of a long-term replacement/upgrading policy; and, allows the campus to negotiate with the vendor for the best prices given purchase volume. Standardizing also fosters stronger campus-vendor relationships resulting in improved service, receipt of advanced product announcements, and customized benefits.

**Q: Does standardization affect teaching and learning?**

**A:** Yes. For students having a common platform and suite of applications means they can move from course to course using the same tools, not having to spend time learning multiple applications or converting files to meet complete course assignments. For faculty standardization means all the classrooms have the same set of teaching tools, and students can access, download, and use course resources without compatibility concerns or excuses.
Q: Does standardization help address the digital divide for teaching units and students?
A: Standardization appears to facilitate a sense of ‘computer equality’ across campus. Having a standard platform and application suite enables colleges to develop purchase and replacement plans. So the informal hand-me-down policy where some teaching units passed their old system to other units is no longer necessary. In addition, the lower prices make it easier for all students to purchase systems. Standardization led many institutions to create purchase programs where personal systems are provided for every student, including the cost in tuition or enabling it to be covered in financial aid packages.

Q: What is the downside of standardization?
A: Some argue that there may be a cost associated with it. That is, if campuses negotiate a three year refresher policy, it has been argued that this could be more costly than replacing the technology every five years. The counter argument is that by keeping the technology for an extra two years, maintenance costs will be higher than upgrading in the long run.

Q: How do campuses deal with ‘special needs’, i.e., faculty and/or departments that want/need to use a platform other than the standardized one?
A: Some campuses offer different levels of support to meet special needs. For example, campuses may have four levels of support, the highest offering turnkey support for the standardized platform and the lowest offering minimal support for the least used equipment on campus. In these cases a campus can set up centralized support for the common pieces that is supplemented by specialized IT support for individual departments or shared across units that have similar specialized hardware or software.

Q: How does a campus implement a standardization program so that it achieves the most amount of support from faculty, staff, administrators, and students?
A: Some campuses develop roll-out plans providing complete information about benefits, implications of the transitions, timelines, etc. The plan is publicized via emails, websites, campus newspapers, flyers, and other means of campus communications. The key is that the tone of the communication be positive and embracing, highlighting the benefits to everyone on campus. Information is also provided on faculty and staff training that runs parallel to the adoption of the new machines. The goal is to give all campus members enough advanced notice to prepare for the transition.

Q: What are the key issues to consider in selecting a vendor?
A: Campuses suggest there are three major criteria: cost of equipment, customer support, and vendor relationship. Customer support has two aspects: the support the vendor gives to the campus and the support the vendor gives to individual campus customers who choose to buy directly from the vendor. Included in customer support is web support customized for the campus to allow individual campus customers to buy direct from the vendor. In this case, the campus support office still maintains inventory control through systems designed jointly with the vendor. Experience indicates that it is important to have a single point of contact for the vendor and the campus to coordinate the efforts of both.

Sources used for this summary in addition to personal interviews include:
Case Western Reserve University, Microcomputer Computer Ownership Program (March, 2000). http://www.cwru.edu/president/facsen/frames/meetings/minutes/Minutes99-00/Jan00400.htm
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