
Appendix B: Statewide TCO Technical Support Guideline Comparison

Overview:

The California Community College Chancellor's Office (CCCCO) has developed a Statewide Technology Plan commonly referred to as Technology II. A key section of the CCCCCO Technology II Plan addresses the fact that "When educational institutions acquire computer hardware and software, they generally do so without factoring in the costs to support the equipment and infrastructure. As a result, there is often a lack of support to maintain, repair and improve performance of the equipment, as well as a lack of staff for training faculty, staff, and students. This creates delays and inefficient use."¹

The concept of determining the full cost of ownership (one-time and on-going costs, support, training, and replacement) is called Total Cost of Ownership (TCO).

Gartner Group and the Telecommunications and Technology Advisory Committee (TTAC) worked to determine the appropriate TCO model for the community college environment. The purpose of this model is to serve as a guide for developing a baseline minimum requirement for Information Technology TCO. TTAC will review this model annually to determine adjustments to it as appropriate.

As an example of TCO, the cost estimate for a PC is \$3,506 per PC. This cost is comprised of the following model²:

| TCO Components | Cost | Percent of TCO Cost |
|----------------------------|----------------|----------------------------|
| Hardware and software | \$1,794 | 51% |
| Systems management support | 762 | 22% |
| End user support | 417 | 12% |
| Development support | 148 | 4% |
| Communications support | 60 | 2% |
| Training | 325 | 9% |
| Total | \$3,506 | 100% |

Therefore, as a college purchases a computer (i.e., \$1,794), they should also budget for and allocate an additional \$1,712 to support that computer over its expected useful life of 3 years. For more information on the TCO model, please refer to the CCC Technology II Plan.

The TCO initiative model is categorized into four "Computing" areas: Student, Faculty, Administrative and Classified Staff, and Support Baselines (staffing). These areas identify the recommended minimum computing hardware, software, and support levels that Community Colleges should be providing.

¹CCCCO Tech. II Plan; Cost to Implement the Technology II Strategic Plan, pp. 21.

²CCCCO Tech. II Plan; Cost to Implement the Technology II Strategic Plan, pp. 23.

Because technical support is such a critical area to this campus, the TCO section of the Technology Plan will focus on the number of technical staff required to provide adequate support to the Gavilan campus community. In order for Gavilan's Philosophy and Vision Statements, as well as its Educational Goals to be successful, technical support issues must be addressed.

The chart on the following page summarizes the technical support staff guidelines, and compares this guideline with current Gavilan College technical support levels.

Statewide TCO Minimum Technical Support Baseline Initiatives

The following Chart summarized the statewide-recommended minimum baseline staffing requirements under which a Community College should be operating. The intent of this chart is to show the comparison of the minimum recommended levels of support staffing with current levels of Gavilan Community College. The chart can be summarized to reflect that compared to the statewide minimum operating baseline recommendations, Gavilan College has a technical support staffing shortfall of approximately 20 technical support positions.

*FTE(S or F) = Full-Time Equivalent; S = Staff, F = Faculty

| TCO Support Staff | State Guidelines | Gavilan (State Recommended) | Gavilan Actual as of 2/14 | Gavilan Deficit |
|--|-------------------------------|------------------------------------|----------------------------------|------------------------|
| Computer Technician | 1 Tech/ 125 computers | 8 | 4 | -4 |
| Computer lab Monitor | 1 Lab Monitor/75 Computers | 10 | 0 | -10 |
| Network Engineer/ Technician | 1 Network Eng./ 500 Computers | 2 | 1 (contract labor) | -1 |
| Webmaster/ Administrator/ Designer | 1/4000 FTES | 1.5 | 1 | -0.5 |
| Instructional Designer/ Technology Sp. | 1/100 FTEF | 1.3 | 0 | -1.3 |
| Multi-media Technician | 1/300 FTEF | 0.5 | .75 | +0.25 |
| Multi-media Production Sp. | 1/200 FTEF | 0.5 | .75 | +0.25 |

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|-------------------------------------|---------------------------|------------------------------------|--|------------------------|
| Technical Training Sp. | 1/300 FTE (fac and staff) | 1 | 0 | -1 |
| Instructional Application Developer | 1/ 200 FTEF | 1 | 1 | 0 |
| Communications Tech. | 1/1000 FTE | 1 | 0 | -1 |
| Help Desk Technician | 1/1000 FTES | 1.2 | 0 | -1.2 |
| Technical Manager | 1/ 500 pc's | 2 | 1.5 | -0.5 |
| Administrative Systems Support | 1/2000 FTES | .5 | .5 | 0 |
| | | | | |
| Total w/ Approved Hires | | 30.5 | 10.5 MIS=9.0 including contract | -20.0 |

The TCO Support Staff Positions Definitions:

Computer Technician: Installs, configures, repairs, and maintains computer hardware and software including servers and assistive technologies. Maintains network connectivity and provides customer support.

Computer Lab/Classroom Technical Assistant: Provides simple technology maintenance and assists faculty and students during and out of class with technology issues.

Network Engineer/Technician: Designs, installs, configures, repairs, and maintains campus backbone(s), networks, and WANs.

Webmaster/Web Administrator/ Web Designer: Designs and maintains the district's/college's Web infrastructure and Web site.

Instructional Designer/Technology Specialist: Assists faculty with integrating technology into curriculum.

Multi-Media Technician: Installs, configures, repairs and maintains multi-media equipment (satellite downlink, broadcast equipment, microwave, head-end delivery, etc.)

Multi-media production Specialist: Supports faculty with multi-media production, delivery, and operations.

Technical Training Specialist: Trains staff and faculty. Runs a technology-training center.

Instructional Application Developer/ Administrator: Designs, installs, configures, repairs and maintains software applications to support instruction (e.g., systems analyst, programmer, systems administrator roles) to include support for email, library systems, course management software, list serves, and news-feeds.

Communications Technician: Installs, configures, repairs and maintains communications systems and wiring.

Helpdesk Technician: Provides a central point of contact to receive reports of technical problems from students, faculty, and staff. Documents all requests and notifies appropriate service area. Provides technical answers to questions.

Technical Manager: Manages technical personnel and sub-functions.

Director or higher-level manager who supports instructional systems: Manages overall instructional technology function. Acts as liaison with academic administration.