

CRC Recommendation: 2002-2003
Final Report
CTC Consensus – Nov. 27, 2001

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A. Introduction

For the first time in seven years, technology capital development at Glendale Community College is not enhanced by funds from the 1994 bond issue. Further, it is unclear when a new bond issue will be presented for voter approval, and it is also unclear how such a bond issue would deal with computer capital funding.

Those uncertainties affected the CRC as it considered the requests – for implementation in FY 2002-3 -- to begin, maintain, expand, and imagine educational technology use on the GCC campus. All requests, of course, have as their goal providing the best learning possibilities for students. Clearly, our ideas for using technology outstrip the funds available to us.

While the CRC always tries to treat requests individually, we were especially mindful this year of recognizing the intersecting nature of all the requests and how each decision affects the existing technology at GCC. These intersections are extremely difficult to see in the abstract, and often bring negative outcomes. The CRC employs discussion, experience, and a good dose of luck in an attempt to avoid potentially costly and wasteful consequences.

Even then it's not always possible to anticipate. While it's not likely that any individual decision can be disastrous, the educational, functional, and financial implications of poorly coordinated planning are, nonetheless, significant.

So, in attempting to prioritize requests, or even whether to recommend funding in some cases, the committee is always considering the long-range effects of its decisions. CRC members inevitably find themselves philosophically and sympathetically aligned with proposals that can't be integrated easily or at all. That is why the committee meets many times during a two-month period: a simple prioritization based on apparent merit, or students served, or innovation, or thoughtfulness is not possible. The use of wireless laptops is a good example of apparent innovation and thoughtfulness, but the CRC doesn't believe there is enough experience in the pilot program to determine long-range implications.

In the end, this year, the recommendations attempt to balance requests with the financial uncertainties and the need to protect both the existing technology resources and the requirements of future years. Last year the CRC emphasized protecting the existing technology. The collective thinking this year is that the technology is in place and as protected as is possible. Even so, some requests this year, namely for laptop computers, are considered too risky under our current uncertain financial conditions. We need more experience, better understanding of the cost, and resolution of some standardization issues.

The recommendation, then, starts with the Quad Plan. This four-year replacement plan for computer classrooms, labs, and pods is the critical piece in providing technology continuity at GCC. Second, continued support for faculty and staff computing, through the Desktop Project, is vital to the college. Third, the CRC believes a set-aside for future years reflects responsible fiscal planning. Fourth, the committee continues to support permanent presentation systems in classrooms as an effective instructional strategy. Finally, we have prioritized other special requests, identified requests not recommended for funding, and singled out one problematic area of concern that has arisen.

The philosophical and practical rationale that provides the deliberative compass for the committee, and we hope an operational compass for the college users, is explained in detail below. However, as in past years, we believe there are things we can do that do not require capital that will have significant impact on our ability to enhance technology use. We should promote:

- Strategies for integrating more technology into the educational process
- Sharing to stretch our resources
- Standardization that provides compatibility across all locations
- Support that mitigates technical obstacles

In fact, because of the college-wide implications of these continuing concerns and the importance of the implications, the CRC recommends (in **E. Critical considerations**) that the Computer Technology Committee establish a task force to not only validate the

assumptions which drive CRC recommendations, but also to suggest action for implementing them.

Requesters, department heads, and interested individuals should be able to find the recommendations regarding individual requests within this report, in follow-up recommendations from the College Technology Committee (CTC), and in the final report of the Budget Development Committee (BDC). Remember, the results are to be implemented in FY 2002-3 although the goal is to complete moves and installations prior to the start of that academic year.

B. Summary of Recommendations

(Check Appendices for specific information)

Top Priority – Quad Plan (includes 8 standard presentation systems)	\$625,000
2 nd Priority – Desktop Project (includes one-time infusion of \$25,000 to compensate for increased faculty/staff numbers and lower funding in 1999-2000, and to rebuild the supply of refurbished machines)	\$225,000
3 rd Priority – Savings for LW/OBM (Life WithOut Bond Money)	\$100,000
4 th Priority – 3 standard, 5 non-standard presentation systems	\$65,000
5 th Priority – Special Projects and Initiatives Prioritized	\$28,650
Total CRC Funding Recommended	\$1,043,650

C. The Quad Plan

The CRC strongly recommends the Budget Development Committee place the highest priority on funding student computers in accordance with the Quad Plan. Student computing remains first and foremost in GCC's efforts to support teaching and learning with technology.

The Quad Plan was started this fiscal year (2001-2) to replace the 5-Year Plan. The plan, which encompasses labs and lab-like areas that were previously part of the 5-Year Plan, uses a pair of two-tier structures. Labs and other areas identified in Tier One in each pair receive new computers in alternate years. After two years of Tier One service, the computers are moved to Tier Two service for another two years when the process is completed. Early indications are that the plan thus far has simplified the technology upgrade process, while the 2 plus 2, or four-year life expectation is more reasonable than five years for providing stable classroom performance.

Tier One		Tier Two	
Computers purchased for Group A	Existing machines continue to be used	Group A computers transitioned to Tier Two locations	Existing machines continue to be used
Existing machines continue to be used	Computers purchased for Group B	Existing machines continue to be used	Group B computers transitioned to Tier Two locations
Year 1	Year 2	Year 3	Year 4

Several changes will be made to the Quad Plan for FY 2002-3, the year for which this report plans. Some changes are housekeeping; others are far more substantial. All need to be identified. Here are the changes:

- Two pods of computers (25) have been added, the equivalent of a lab classroom, as Tier One machines; this addresses a potential shortfall in the pit areas of HT-1 and HT-2. These can be added with no additional capital funds.
- Those 25 additional computers will be used to create a Tier Two lab for Business.
- Ten computers from HT1-144 will be diverted from movement to pod locations in Tier Two. Instead, they will be moved to NU-110 creating a Tier Two lab. This existing lab was inadvertently omitted from the original Quad Plan.
- In Tier Two, 9 of 37 computers scheduled for Foreign Language/Communications will be diverted to pod use. This reflects actual use by FL/Comm.
- Seventy-five Tier Two computers, scheduled for decommissioning, are being dominoed to Technology for extended use. This, at least in part, meets a Technology request for the equivalent of three Tier Two labs.
- In the 2003-4 tiers of the Quad Plan, 10 computers from HT1-144 will be diverted from movement to pod locations in Tier Two. Instead, they will be moved to Math Solutions creating a Tier Two lab.
- Also in the 2003-4 tiers of the Quad Plan, T2-105A, which had been identified as a Technology/Business lab, is changed to a Technology lab.

D. Desktop Project

The CRC strongly recommends the BDC place a high priority on maintaining adequate funding for the desktop project.

Since July 1996, GCC has deployed new hardware, managed upgrades to software applications, and provided technology training for board-approved college employees through the Desktop Project. This ongoing initiative has provided a planning framework and a management strategy for the college's administrative computing resources, including a means for making effective use of refurbished computers, still serviceable hardware that can be used for various purposes by college employees not eligible for the Desktop Project itself.

During the past four years, GCC has come to appreciate the many and varied benefits of strategic planning for technology. The college has endeavored to set a recognizable course with general goals, clear policies, and continuously improved procedures. The result of this commitment is that board-approved employees have been able to participate in the Desktop Project on their own schedule to address the computing demands of their jobs and to meet their own learning needs. The college has made valiant attempts to accommodate the influx of new faculty each August as well as those employees hired at various times throughout the year; we continue to be sensitive to the pacing of the academic calendar and the needs of department managers. That the Desktop Project has been successful in the past does not mean that we feel that there is adequate money available for the project to continue these activities without occasional funding adjustments. This year's request includes a one-time infusion of \$25,000 to compensate for increased faculty/staff hiring over the last several years and the reduced funding in 1999-2000 year. This infusion will allow us to offer a modest expansion to the DTP by offering at least one additional session throughout the year, which also will result in an increased availability of refurbished machines. It is now apparent that reduced funding in the past also has had a negative impact on the number of refurbished machines available.

The continued success of the DTP and its aligned activities depend upon funding that allows the integration of 145 new desktop computers into the college supply next year, enough to get back on schedule with the goal of replacing about 25 percent of our administrative workstations annually. This level of funding allows some employees to get new workstations every 24-36 months, other employees to get new workstations every 3-4 years, others to stretch the usefulness of their workstations by adding storage or memory over time, and still others to benefit from useable workstations made available through the refurbished process. Meeting the various needs of our employees in creative ways depends upon the regular and full funding of this project each year.

E. Critical considerations (not involving capital funding)

While the charge to the CRC is to recommend capital technology purchases, the CRC continues to believe that budgeting recommendations can have much greater impact if they are aligned with and supported by other activities.

1. Strategies

The CRC believes the college's technology facilities (servers, accounts, classrooms, and labs) can be used by a wider variety of disciplines, departments, faculty and students. Last year, we made some recommendations that resulted in the following activities:

- We created a brochure specifically for faculty outlining the features of the Instructional Palette;
- TED provided training sessions for using the online course rosters, for publishing a syllabus on the web, and with the LMC, for using the projection systems;

- Instructional Computing, in conjunction with the Chemistry department, provided training for Instructional Assistants in a software package used by Chemistry students;
- We revised the support pages on Gecko – The Student Server.
- We advertised the Student Help Desk in the HTC's;
- Some departments provided orientations for full and part-time faculty.

These efforts produced only modest changes. Through Universal Access, more than 12,000 students have used their palette accounts this semester; 300 faculty use the online course rosters, we have seen a modest increase in requests for course folders, especially for those that span specific sections, and there have been a few requests for class-specific email distribution lists. In addition there is light use of the Student Help Desk, mostly at the beginning of the semester. But obviously there is more we can do to use the capabilities we currently have. The CRC recommends that the CTC create an ad hoc task force to

- a. Validate the assumptions of the CRC
 - That technology should be part of all instruction at GCC;
 - That faculty use technology differently in different classes;
 - That “sharing” is a more cost-effective strategy than increasing the number of classrooms and presentation systems;
 - That “sharing” is possible;
 - That “standardization” is a good educational and management strategy.
- b. Take a leadership role in promoting the use of technology across the campus; and
- c. Set goals and measure accomplishments related to increasing technology use.

2. Sharing

The CRC continues to believe that sharing is an important way to meet the demand for limited or restricted computer resources. Several departments have made strides in this regard, but sharing resources across departments is more difficult. In addition, we still do not have an easy way to provide information about available facilities after the semester has begun. To follow through on the CRC recommendation last year, we expect to be able to pilot a web-based classroom scheduling tool during spring semester. We need to be able to identify barriers to “sharing,” develop strategies for breaking down those barriers, and reward sharing when it occurs.

3. Standardization

Over the past several years, the college has attempted to maximize both its capital and operational spending through standardization of hardware, software, and processes. This has garnered significant support across the college and has resulted in measurable increases in technology use and in computing reliability. As we anticipate a possible

Windows operating system upgrade for the Instructional Palette, we may find “standardization” both more difficult to achieve and more important for our success. The CRC has grappled with many requests for non-standard presentation systems, and the LMC has struggled to address long-term requests for Robo-carts. We need to identify barriers to standardization and devise ways to extend the flexibility and usability of standard installations.

4. Support

The CRC continues to strongly recommend that the Budget Development Committee place a high priority on expanding the technology support staff to meet the growing needs of the college. To this end, we recommend placing a high priority on the requested technical support positions. In addition, we recognize that there are additional strategies for improving technology support, including but not limited to shared responsibility among all employees for the timely and accurate reporting of problems to the Help Desk; peer support activities within units and departments, including designation of single points of contact; voluntary participation in “change points” like the Desktop Sessions which align learning activities with hardware upgrades; and self-help through increased participation in formal training sessions, informal training activities, and consultation of online documentation.

F. Appendices

F. 1 Quad Plan Specifics

(the shaded area is covered in this report)

Tier I - New				Tier II				Extended Use	
FY 2003-4				FY 2003-4					
HT2-152	01	English	25	HT2-150	97	English	25		
HT2-156	01	Business	25	B-109	99	Business	25		
HT1-144	01	Graphics	10	Math Sol.		Mathematics	10		
L-138	01	Library	25	CL	99	CL	25		
LS-147	01	Life Sciences	36	Various	97	Electra/HPER/Other (9)	36		
T2-105A	01	Technology	25	HT2-153	98	English	25		
T1-132	01	Technology	25	HT2-155	98	English	25		
HT2-158	01	Mathematics	29	HT2-159	99	Mathematics	29		
HT1-143	01	Testing	25	HT2-151	98	English	25		
Pods (7)			90	Pods (7)			90		
<i>Student Services</i>			12	<i>Student Services</i>			12	<i>Student Services</i>	
			327				327		
Tier I - New				Tier II					
FY 2002-3				FY 2002-3					
HT1-139	00	Business	25	HT1-141	98	Business	25	Available	Tech
HT1-142	00	Business	25	B-106	98	Business	25	Available	Tech
I03	00	GCC North	25	I04		GCC North	25	None	
MA-100	00	Mathematics	37	CL-41		For. Lang./Comm.	28	None	
						Pod	9		
MU-105	00	Music (Mac)	25	L-100		Electra (Mac)	25		
HT1-140	00	Technology	25	CL	99	CL	25	Available	Tech.
HT2-157	00	Business	25	T1-127	99	Technology	25	Available	Tech
Pods (9)	00		115	Pods (7)			90		
				Business		Business	25		
Various	00	Science-4 year	25	Various	97	Sciences-4 year	25		
HT1-144		Graphics	10	NU-110		Nursing	10	Available	Tech
<i>Student Services</i>			12	<i>Student Services</i>			12	<i>Student Services</i>	
			349				349		
Boldface = Mac or some Mac machines									

F. 2. Presentation Systems

The Quad Plan allocation contains funding for presentation systems. Some of that allocation will be necessary as a kind of self insurance to replace projectors, remote control devices and other system resources as they become technologically antiquated, non-repairable, broken, lost, or otherwise make a unit unusable. One such unit will be replaced in a Business lab as part of the Quad Plan. Additionally, beyond that replacement, seven standard presentation systems will be installed, which should leave a reserve of up to \$15,000 as a set aside for self-insurance.

Presentation system requests are placed in two categories – standard and non-standard. Non-standard requests always bring special support issues and often require different equipment; requests for non-standard systems are generally discouraged by the CRC.

Standard Presentation Systems

- are permanently installed in rooms that can and will be easily shared,
- use standard Palette software, and
- use the current desktop computer and projection equipment.

New standard units approved by the CRC include the desktop computer and monitor, projector, VCR, locking cabinet and installation.

Non-Standard Presentation Systems lack one or more of the standard requisites.

Stan. Systems Recommended	Location	No.	Funding
Business	Business – location unknown	1	Quad Plan
GCCN	GCCN	2	Quad Plan
English	LA-108	1	Quad Plan
Psychology	TBD	1	Quad Plan
Social Science	TBD	1	Quad Plan
Interior Design (Macs)	T2-102	1	Quad Plan
Business	B-216	1	Quad Plan
Nursing	NU-111	1	4 th Priority - \$8,500
Graphics Technology	FA-127	1	4 th Priority - \$8,500
Agriculture	AG-104	1	4 th Priority - \$8,500
Non-Stan. Systems Recommended			
Graphics Technology	HT1-144	1	4 th Priority - \$8,500
Fashion & Sewing	T1-149	1	4 th Priority - \$8,500
Fire Science	Robot-cart	1	4 th Priority - \$7,500
HPER	Robo-cart	1	4 th Priority - \$7,500
LMC	Robo-cart	1	4 th Priority - \$7,500

F. 3. Special Projects and Initiatives (requests prioritized)

GCIS Group/Innovation Center	Replenish “loaner farm” – laptops, digital cameras		\$10,000
Art & Photography	G4 Mac (dual proc., 800 MHz for digital photo lab)	3	\$11,500
Performing Arts	PCI Card, expansion chassis	1	\$3,300
Business & various	Microsoft MSDN Academic Alliance Fee	3	\$2,550
Applied Science/Chemistry	ParScore, ParTest software	2	\$1,300

F. 4. Requests set aside for resolution through current funds, projected funds, innovation and creative planning

Admissions & Records	Workgroup printers	2	
Automotive	Computers – extended use (see Engineering request)	25	
Biology	Personal Response System (1 lecture pack, 2 add. Receivers) will be purchased by Innovation Center with college-wide users in mind and multiple locations equipped for use.		
Business	Hard drives for HT1-141 and 142 – Innovation Center		
Business	Oracle Server – Innovation Center	1	
Business Services	Laserjet 4000N printer	1	
Career Services	Desktop Project computer	1	
Center for Learning	Laserjet 4100N printer	1	
Child & Family Studies	Desktop Project computer	2	
Counseling	Laserjet printer	1	

Counseling	Desktop Project computer	2
Eng. & Tech.	2 nd tier computers for B-102 – added to Quad Plan	25
Eng. & Tech.	Computers – extended use (see Auto. request)	50
Food & Nutrition	PCI (USB) Video capture board/CD writer – supplies item	
Graphics Technology	Computers for HT1-144 –in Quad Plan	10
Graphics Technology	Desktop Project Computer	1
LMC	G4 Mac w/22-inch Apple Cinema Display – Desktop Project Computer	1
Mathematics	Pentium III 450 or higher computer system and Networkable Laser Printer for The Math Solution Help Desk – refurb computer	
Mathematics	7 computers for Math Solutions –Quad Plan	10
Multicultural Affairs	Desktop Project Computer	3
Nursing	Berner Critical Care software – Academic Comp.	
Procurement	Color Inkjet printer – supplies item	1
Psychology	Canon Color Bubble Jet Printer – supplies item	1
Training & Emp. Dev.	Update computers for training & shared room- HT2-149	25

F. 5. Requests not recommended for funding

Art & Photography	G4 Mac (dual processor, 800 MHz for ceramics)	1	\$2,500
Automotive	Windows computers	5	\$11,788
Chemistry	Laptop computers	13	\$30,000
Drafting/CAD	Graphics compatible laptop computer	1	\$2,000
Food & Nutrition	Laptop computers	9	\$21,000
Video Production	Avid work stations	3	\$30,000

F. 6. Request not prioritized – requires special consideration

Social Science	Elmo EV-400 Data Projector for MA-142
\$1,999	

This request for a data projector cannot be considered because it is really part of a larger concern – the overall presentation system in MA-142. An existing presentation system was dismantled during remodeling of the lecture hall. We recognize that predicting technology costs for rooms that undergo remodeling is difficult, and sometimes there are unanticipated costs. However, we believe to make this room functional will require spending nearly \$25,000, **three times** the cost of standard presentation systems. Furthermore, this room is currently scheduled only 9 hours a week, 5 of them during the day, and only one evening a week. Its potential for sharing is thus not reflected in its scheduling. Given the higher costs connected with the presentation system requested for this room and the limited hours scheduled, the CRC believes a broader discussion should occur before a decision is made.