

Goucher College Technology-Enhanced Learning Spaces Plan 2006-2007

This plan for the College's technology-enhanced learning spaces consists of the following areas:

1. Existing Classroom Technology
2. Current Opportunities and Challenges
3. Strategic Vision
4. Recommendations

1. Existing Classroom Technology

There is currently a wide range of technologies available in the learning spaces at Goucher.¹ Based on the results of a faculty survey administered in 2003, the Information Technology (IT) division developed a plan for enhancing the technology environment of learning spaces campus-wide. Early in 2004, formerly "mobile" technology equipment was permanently installed in classrooms. In the summer of 2005, using one-time funding, 17 new classrooms were equipped with computers, AV equipment, and projectors. Beginning in the fall of 2005, 95% of usable learning spaces had computer technology available for student and faculty use. During FY 2005-2006, improvements continued to be made to learning spaces across campus. By the start of classes in fall 2006, there was only one routinely scheduled space for classes that did not have technology equipment. There are now 55 general classrooms equipped with at least a minimal level of technology. In addition to that group of 55, there are many learning spaces devoted to specific disciplines. These rooms have been configured and equipped to meet very specific teaching requirements through the collaboration of IT and academic departments. There are additional spaces on campus which are designated as meeting spaces but which hold considerable appeal to instructors who experiment with innovative teaching methods. Access to technology resources in meeting spaces has also been enhanced.

2. Current Opportunities and Challenges

Student and faculty response to enhanced technology in classrooms has been positive and enthusiastic. Because equipment is accessible, easy to use, and in working order, faculty have begun to enhance their courses with a wide variety of multimedia instructional materials, such as websites to primary resources, videos, previously unobtainable graphics, and music. In addition, they have begun to assign multimedia projects that allow students to integrate and present learning in new ways. Students are encouraged to participate in the assimilation of information during class time. During the fall 2006 semester alone, there have been in-class activities to support digital storytelling, oral presentations, research, digital imaging, and poster presentations. A growing number of faculty are beginning to use technology as a tool to support active learning in the classroom. The Center for Teaching, Learning, and

¹ See Appendix A for classroom listings

Goucher College Technology-Enhanced Learning Spaces Plan 2006-2007

Technology (CTLT), which supports both technology equipment and the teaching that takes place in classrooms, has found it necessary to initiate several new programs to support faculty and students.

The CTLT has addressed classroom needs in several ways:

1. Faculty orientations to classroom technology take place at the start of every semester.
2. Directions for technology usage are posted in every classroom.
3. Telephones are available either in or adjacent to classrooms for emergency calls to the IT HelpDesk.
4. CTLT and HelpDesk staff are available to handle emergency calls to classrooms during the day.
5. There is a team of students that handles AV service calls in the evenings.
6. CTLT staff work with faculty in and outside of class times to acclimate students to available technologies.
7. Classroom technology equipment is checked and repaired on a weekly basis, as room usage allows.
8. CTLT staff communicate “good classroom hygiene” to faculty on a recurring basis.
9. CTLT staff communicate with faculty when classroom usage is impaired or updated.

While these measures have been helpful in nurturing the teaching and learning environment of the college, they do not deal with infrastructure issues. At this time, there is no budget specifically earmarked for the repair and maintenance of equipment in the classrooms. This is an especially critical flaw because more and more teaching and learning is dependent on reliable equipment. Some ordinary expenses that can be incurred include the repair or replacement of projector lamps and outdated equipment, simple break/fix of equipment, and programming changes for the more complex classrooms that have been designed with integrated components. In addition, as technology changes and advances, new equipment has to be available to meet the needs of users. The most effective support model for these spaces is a well designed and thoughtful roadmap that plans for routine maintenance and upgrade. Already, since classes began in August 2006, equipment repair and replacement costs have exceeded \$16,000 for work that has been reactive, rather than proactive (One-time costs=\$9,689. Maintenance costs=\$7,684.). Operating in a reactive way has created situations which have negatively impacted students and faculty in classrooms. This is a scenario that is unacceptable.

In addition to maintenance expenses, there is a need for additional “hands” to help during class periods and to service AV equipment during the limited time that classrooms are not in use. Learning spaces are now being utilized from 8:30 a.m. until 11 p.m. during the week. Statistics show that during the 5 to 11 p.m. period, Monday-Thursday, there are a minimum of 30 classrooms in use at any given time. Help Desk records show that there have been 84 reported issues in classrooms since classes began in August. That number does not take into account the calls to the library service desk or to individuals that are responded to immediately. As with equipment funding, the current staffing model and budget does not allow for proactive care and feeding of these rooms. More frequently than not, equipment is not reported as malfunctioning until an instructor is in the middle of a class period. This is also an unacceptable scenario. Currently, technology exists in the standard classroom projector that allows for effective monitoring of projector lamps and inputs.

Goucher College Technology-Enhanced Learning Spaces Plan 2006-2007

Unfortunately, current staffing levels have not allowed for the set up and monitoring of this feature. Even more advanced technologies exist for monitoring classrooms, but the cost is prohibitive at this time.

Scheduling of learning spaces has also become very difficult and will only get worse as more classes are added and as faculty integrate additional technological resources into their teaching. Frequently, instructors request specific rooms or resources for courses but fail to mention other aspects of the course which negatively impact the room that is ultimately selected. There is a need for collaboration between the Registrar's Office, Events and Conference Services, faculty, and the CTLT to design or select a tool to assist in classroom selection. Standardization of technology will make an impact on this process, but there are also non-technical considerations that have to be part of the selection process.

3. Strategic Vision

As the College grows in enrollment and depth of programs, there will be increased demand on technology resources in and out of the classroom. Within the classroom, communication technologies – textual, graphical, audio, and video – will be used to support learning activities that bring together students who are within and outside of the campus borders. The use of personal computers within the classroom as a part of the learning process will increase as networking capabilities increase. Media will become more readily available in digital format only. Students will more actively pursue information as the continuum progresses from a teaching to a learner-centered environment.

It is the goal of the IT division to support such activities at Goucher. IT professionals will continue to partner with faculty and students to provide the highest level of support possible. To that end, IT will be involved in the design, governance, and maintenance of the learning spaces on campus, providing recommendations for new technologies and for solutions that will facilitate the removal of obsolete equipment.

Goucher College Technology-Enhanced Learning Spaces Plan 2006-2007

4. Recommendations

1. Standardize technology equipment in all learning spaces

Classroom Technology Standard
Networked Multimedia projector – whenever feasible to be installed in the classroom ceiling
Networked Computer with a flat panel screen
Multistandard VCR and Region free DVD player
Wireless keyboard, mouse, presentation clicker
Connection for additional faculty / visitor laptop
Overhead projector or document camera

2. Request funding that will be used solely for the purpose of maintaining, repairing, and upgrading learning spaces

Proposed Annual Maintenance and Replacement Budget	Annual Costs
Maintenance costs (based on average of previous two years)	\$6,000
Classroom replacements (average of 15 rooms per year)	\$60,000
Total Annual Cost	\$66,000

Fiscal Year	One-Time Costs
FY08	\$12,600
FY09	\$0
FY10	\$0
FY11	\$0
Special Projects	\$35,000

Goucher College Technology-Enhanced Learning Spaces Plan 2006-2007

3. Provide financial support for a classroom team that will be available during all hours when classes are in session. This team will consist of both professional staff and students. It is recommended that a position be created for a 20 hours/week AV technician and that student funding be made available to provide an additional 40 hours/week of support.

Proposed Annual Classroom Staffing Support Budget	Annual Costs
Professional staff: 20 hours/week (50 weeks X \$15/hour)	\$15,000
Student classroom support staff (40 weeks X \$8/hour)	\$12,800
Total Annual Cost	\$27,800

4. Implement a replacement plan that provides upgrades of all learning spaces on a four year cycle

Classroom	Room Type	Capacity	College Standard Classroom Configuration	Meeting Capabilities (phone, cable, wireless) * Phone installed	Replacement Year (FY) **AV equipment only	Projected Cost for Replacement/Upgrade
Heubeck Lounge	Non-Classroom space used for classes	40	No	Phone Cable Wireless	08	\$11,600.00 One-time Cost
HS 131	Classroom	30	Yes		08	\$4,000.00
HS 134	Classroom	40	Yes		08	\$4,000.00
HS 223	Classroom	20	Yes		08	\$4,000.00
HS G59	Classroom	47	Yes		08	\$4,000.00
Mary Fisher Library	Non-Classroom space used for classes	15	No	Phone Cable	08	\$6,000.00 One-time Cost
Psychology Annex	Music Classroom	20	Yes		08	\$4,000.00
VM 201	Computer Classroom	20	Yes		08	\$4,000.00
VM 208	Classroom	28	Yes		08	\$4,000.00
VM 210	Classroom	28	Yes		08	\$4,000.00
VM 213	Classroom	34	Yes		08	\$4,000.00
VM B10	Lecture Hall	58	Yes	Phone Cable Wireless	08	\$11,000.00 One-time Cost

Goucher College Technology-Enhanced Learning Spaces Plan 2006-2007

Classroom	Room Type	Capacity	College Standard Classroom Configuration	Meeting Capabilities (phone, cable, wireless) * Phone installed	Replacement Year (FY) **AV equipment only	Projected Cost for Replacement/Upgrade
VM G08	Lecture Hall	43	Yes		08	\$4,000.00
VM G11	Classroom	40	Yes		08	\$4,000.00
Annual Total FY08					08	\$72,600.00
Active Learning Zone	Computer Classroom	20	Yes	Phone* Cable Wireless	09	\$4,000.00
Dance Studio 111	Studio	N/A	Yes		09	\$4,000.00
Heubeck A	Non-Classroom space used for classes	125	Yes	Phone Cable Wireless	09	\$4,000.00
HS 133	Computer Classroom	14	Yes		09	\$4,000.00
HS 135	Seminar Room	15	Yes		09	\$4,000.00
HS 137	Classroom	40	Yes		09	\$4,000.00
HS 149	Computer Classroom	19	Yes		09	\$4,000.00
HS 153	Classroom	30	Yes		09	\$4,000.00
Kratz Center	Non-Classroom space	20	No		09	\$4,000.00
Merrick	Classroom space	228	Yes		09	\$4,000.00
Soper Room	Non-Classroom space	26	No	Phone Cable Wireless	09	\$4,000.00
Thormann 200	Classroom	20	Yes		09	\$4,000.00
Thormann 201	Classroom	20	Yes		09	\$4,000.00
Thormann 203	Classroom	20	Yes		09	\$4,000.00
Thormann 204	Classroom	20	Yes		09	\$4,000.00
Annual Total FY09					09	\$60,000.00
Dance Office	Shared/Mobile unit	N/A	Yes		10	\$4,000.00
HS B26	Physics Lab	N/A	Yes		10	\$4,000.00

Goucher College Technology-Enhanced Learning Spaces Plan 2006-2007

Classroom	Room Type	Capacity	College Standard Classroom Configuration	Meeting Capabilities (phone, cable, wireless) * Phone installed	Replacement Year (FY) **AV equipment only	Projected Cost for Replacement/Upgrade
HS B27	Physics Lab	N/A	Yes		10	\$4,000.00
HS G39	Seminar Room	14	Yes		10	\$4,000.00
HS G41	Classroom	26	Yes		10	\$4,000.00
KA 115	Computer Music Lab	N/A	Yes		10	\$4,000.00
Library Classroom	Computer Classroom	18	Yes		10	\$4,000.00
Psychology Annex	Psychology Classroom	39	Yes		10	\$4,000.00
Soper Room	Non-Classroom space	26	No	Phone Cable Wireless	10	\$4,000.00
VM 111	Seminar Room	25	Yes		10	\$4,000.00
VM 112	Classroom	25	Yes		10	\$4,000.00
VM 113	Seminar Room	20	Yes		10	\$4,000.00
VM B12	Classroom	30	Yes		10	\$4,000.00
VM G01	Seminar Room	18	Yes		10	\$4,000.00
VM G02	Seminar Room	20	Yes		10	\$4,000.00
Annual Total FY10					10	\$60,000.00
Buchner Hall	Non-Classroom space	25	Yes	Phone* Wireless	11	\$4,000.00
Digital Arts Classroom	Computer Classroom	11	Yes		11	\$4,000.00
Kelley Lecture Hall	Lecture Hall	144	Yes		11	\$4,000.00
MA 105	Seminar Room	12	Yes		11	\$4,000.00
MA 106	Computer Classroom	20	Yes		11	\$4,000.00
MA 121	Green Room	N/A	Yes		11	\$4,000.00
MA 203	Design Studio	N/A	Yes		11	\$4,000.00
SRC 209	Classroom	25	Yes		11	\$4,000.00
T- Classroom	Classroom	20	Yes		11	\$4,000.00

Goucher College Technology-Enhanced Learning Spaces Plan 2006-2007

Classroom	Room Type	Capacity	College Standard Classroom Configuration	Meeting Capabilities (phone, cable, wireless) * Phone installed	Replacement Year (FY) **AV equipment only	Projected Cost for Replacement/Upgrade
Thormann 202	Computer Classroom	30	Yes		11	\$4,000.00
VM 111	Seminar Room	18	Yes		11	\$4,000.00
VM 202	Seminar Room	22	Yes		11	\$4,000.00
VM B11	Seminar Room	12	Yes		11	\$4,000.00
VM B20	Comm. Lab	N/A	Yes		11	\$4,000.00
VM G05	Classroom	16	Yes		11	\$4,000.00
Annual Total FY10					11	\$60,000.00
Admissions Conference Room	Conference Room	12	No	Phone* Wireless	Special Funding	\$2,000.00
Chapel Undercroft	Non-Classroom space	26	No		Special Funding	\$2,000.00
Community Living Conference Room	Conference Room	15	No	Phone Cable	Special Funding	\$2,000.00
Dorsey 105	Conference Room	12	No	Phone* Wireless Cable	Special Funding	\$2,000.00
Geen Community Center	Non-Classroom space	25	No	Phone Cable Wireless	Special Funding	\$2,000.00
Health Center Conference Room	Conference Room	12	No	Phone	Special Funding	\$2,000.00
President's Conference Room	Conference Room	18	No	Phone* Wireless	Special Funding	\$11,000.00 One-time Cost
Scheeler Board Room	Conference Room	15	No	Phone* Wireless	Special Funding	\$2,000.00
SRC 211	Classroom	25	No		Special Funding	\$6,000.00
Student Activities	Conference Room	15	No	Phone Cable	Special Funding	\$2,000.00

Goucher College Technology-Enhanced Learning Spaces Plan 2006-2007

Classroom	Room Type	Capacity	College Standard Classroom Configuration	Meeting Capabilities (phone, cable, wireless) * Phone installed	Replacement Year (FY) **AV equipment only	Projected Cost for Replacement/Upgrade
Van Meter Faculty Lounge	Non-Classroom Space	25	No	Phone Cable Wireless	Special Funding	\$2,000.00
Total Special Projects					Special Funding	\$35,000.00

5. Develop a project plan to address the obsolescence of VCRs and the impact on teaching materials that are currently only available in VHS format

At this point in time, the use of videotapes in teaching is supported in the learning spaces on campus. This includes the use of videotape formats that are not native to the US. These tapes require the use of multistandard VCRs which are becoming difficult to acquire and increasingly expensive to purchase. In addition, videotapes themselves are aging and becoming unreliable. As they weaken, they tend to break in classroom machines, at which time damage is done to the VCR.

There are currently thirty-seven courses listed in the Goucher Academic Catalog that refer to “film” or “cinema” as a critical component in their description. In addition, there are a number of instructors who use video as an enhancement to their teaching. The use of videotapes, rather than DVDs in these courses, will soon become a significant problem in classroom maintenance. It is time to address the use of videotape by exploring technologies that can preserve or replace them. The CTLT will facilitate a collaborative effort including college librarians, faculty, and college counsel which will work toward the replacement or digitization of video materials used in teaching endeavors. This collaboration will result in all-digital materials, removing the need for multistandard VCRs in all learning spaces. When complete, this project will result in cost savings for the college.

6. Collaborate more closely with IT, Events and Conference Services, faculty, and the Registrar’s Office to develop more streamlined methods of scheduling and selecting appropriate learning spaces for classes

There are currently several groups on campus tasked with maintaining and scheduling classrooms. Because each group uses different tracking methods for their work, there have been communication lapses between the groups. This has resulted in units working with outdated or incorrect information, which has resulted in inappropriate assignment of learning spaces. The CTLT proposes a collaborative effort that will examine technical solutions that will allow for

Goucher College Technology-Enhanced Learning Spaces Plan 2006-2007

accurate and quick updates to the status of rooms on campus. When implemented, such a solution will result in more satisfied instructors and will save on the labor currently required for updating the campus Scheduler.

7. Develop an advisory group consisting of faculty, students, and appropriate resource personnel to provide oversight of learning space development and maintenance

In order to provide learning spaces that are responsive to the changing needs of instructors, the CTLT will bring together a group of faculty, students, and resource personnel on an annual basis to review technology standards and classroom configurations. This group will make decisions concerning information gathering from the community and will determine communication methods back to their constituencies. Recommendations from this group will drive classroom design in new and refurbished spaces.

Goucher College Technology-Enhanced Learning Spaces Plan 2006-2007

Appendix A – Learning Spaces Available: Fall 2006

Classroom	Room Type	Capacity	College Standard Classroom Configuration	Meeting Capabilities (phone, cable, wireless) *phone installed
Active Learning Zone	Computer Classroom	20	Yes	Phone* Cable Wireless
Admissions Conference Room	Conference Room	12	No	Phone* Wireless
Buchner Hall	Non-Classroom space	25	Yes	Phone* Wireless
Chapel Undercroft	Non-Classroom space	26	No	
Community Living Conference Room	Conference Room	15	No	Phone Cable
Dance Office	Shared/Mobile unit	N/A	Yes	
Dance Studio 101	Studio	N/A	Yes	
Digital Arts Classroom	Computer Classroom	10	Yes	
Dorsey 105	Conference Room	12	No	Phone* Wireless Cable
Geen Community Center	Non-Classroom space	25	No	Phone Cable Wireless
Health Center Conference Room	Conference Room	12	No	Phone
Heubeck A	Non-Classroom space	125	Yes	Phone Cable Wireless
Heubeck Lounge	Non-Classroom space	40	No	Phone Cable Wireless
HS 131	Classroom	30	Yes	
HS 133	Computer Classroom	14	Yes	
HS 134	Classroom	40	Yes	
HS 135	Seminar Room	15	Yes	
HS 137	Classroom	40	Yes	
HS 149	Computer Classroom	19	Yes	

Goucher College Technology-Enhanced Learning Spaces Plan 2006-2007

Classroom	Room Type	Capacity	College Standard Classroom Configuration	Meeting Capabilities (phone, cable, wireless) *phone installed
HS 153	Classroom	30	Yes	
HS 223	Classroom	20	Yes	
HS B26	Physics Lab	N/A	Yes	
HS B27	Physics Lab	N/A	Yes	
HS G39	Seminar Room	14	Yes	
HS G41	Classroom	26	Yes	
HS G59	Classroom	47	Yes	
KA 115	Computer Music Lab	N/A	Yes	
Kelley Lecture Hall	Lecture Hall	144	Yes	
Kratz Center	Non-Classroom space	20	No	
Library Classroom	Computer Classroom	18	Yes	
MA 105	Seminar Room	12	Yes	
MA 106	Computer Classroom	20	Yes	
MA 121	Green Room	N/A	Yes	
MA 203	Design Studio	N/A	Yes	
Mary Fisher Library	Non-Classroom space	15	No	Phone Cable
Merrick	Classroom space	228	Yes	
President's Conference Room	Conference Room	18	No	Phone* Wireless
Psychology Annex	Music Classroom	20	Yes	
Psychology Annex	Psychology Classroom	39	Yes	
Scheeler Board Room	Conference Room	15	No	Phone* Wireless
Soper Room	Non-Classroom space	26	No	Phone Cable Wireless
SRC 209	Classroom	25	Yes	
SRC 211	Classroom	25	No	
Student Activities Conference Room	Conference Room	15	No	Phone Cable
T- Classroom	Classroom	20	Yes	
Thormann 200	Classroom	20	Yes	
Thormann 201	Classroom	20	Yes	

Goucher College Technology-Enhanced Learning Spaces Plan 2006-2007

Classroom	Room Type	Capacity	College Standard Classroom Configuration	Meeting Capabilities (phone, cable, wireless) *phone installed
Thormann 202	Computer Classroom	30	Yes	
Thormann 203	Classroom	20	Yes	
Thormann 204	Classroom	20	Yes	
Van Meter Faculty Lounge	Non-Classroom Space	25	No	Phone Cable Wireless
VM 101	Seminar Room	25	Yes	
VM 102	Classroom	25	Yes	
VM 103	Seminar Room	20	Yes	
VM 111	Seminar Room	18	Yes	
VM 201	Computer Classroom	20	Yes	
VM 202	Seminar Room	22	Yes	
VM 207	Goldsmith Education Classroom	28	Yes	
VM 209	Classroom	28	Yes	
VM 213	Classroom	34	Yes	
VM B10	Lecture Hall	58	Yes	Phone Cable Wireless
VM B11	Seminar Room	12	Yes	
VM B12	Classroom	30	Yes	
VM B20	Comm. Lab	N/A	Yes	
VM G01	Seminar Room	18	Yes	
VM G02	Seminar Room	20	Yes	
VM G05	Classroom	16	Yes	
VM G07	Lecture Hall	43	Yes	
VM G11	Classroom	40	Yes	