

MONTGOMERY COLLEGE

Office of Information Technology FY10 Annual Report



The mission of the Office of Information Technology (OIT) is to support student success at Montgomery College through the provisioning of a wide variety of information technology and services for instruction, student services and administrative and business functions. The unit provides leadership in planning for technology and information services and supports the selection, acquisition, implementation and effective use of technology and information resources. Each year the OIT annual report provides a retrospective look at work accomplished during the past fiscal year.

Fiscal year 2010 was a year of change and transition. The College faced significant economic challenges as a result of the continuing economic downturn at the national, state and local levels. Additionally, numerous leadership roles at the executive level of the College changed including the Vice President of Instructional and Information Technology/ Chief Information Officer (CIO). A national search was conducted during the Fall semester 2009 resulting in my appointment in March 2010.

The College began to experience the impact of the economic downturn at the beginning of FY10. Anticipating a continuing worsening economy, the College began proactively seeking cost savings and reductions from all units within the College. The OIT unit worked diligently to identify areas for cost savings. The outcome of this effort resulted in a \$2,845,845 reduction of OIT spending and the return of 15 staff positions to the College administration. These are significant reductions to the OIT budget that support the core mission of the College. These reductions will require diligence on the part of OIT and College leadership to assure priorities and services are not negatively impacted.

The theme of this year's report, *A Significant Year of Transition*, acknowledges the challenges and changes during FY10. This report recognizes the dedicated staff and their efforts in supporting the critical role Montgomery College plays in our community as well as the rich technology environment and services the unit strives to provide for the College community. As we look ahead, we welcome opportunities to demonstrate that student success is our primary focus. We have not only a role, but a responsibility to assure our students and employees have the technology resources and services required to make Montgomery College a community college all others seek to emulate.



Dr. Michael Russell
Vice President of Instructional and Information Technology/
Chief Information Officer (CIO)

Mike Russell

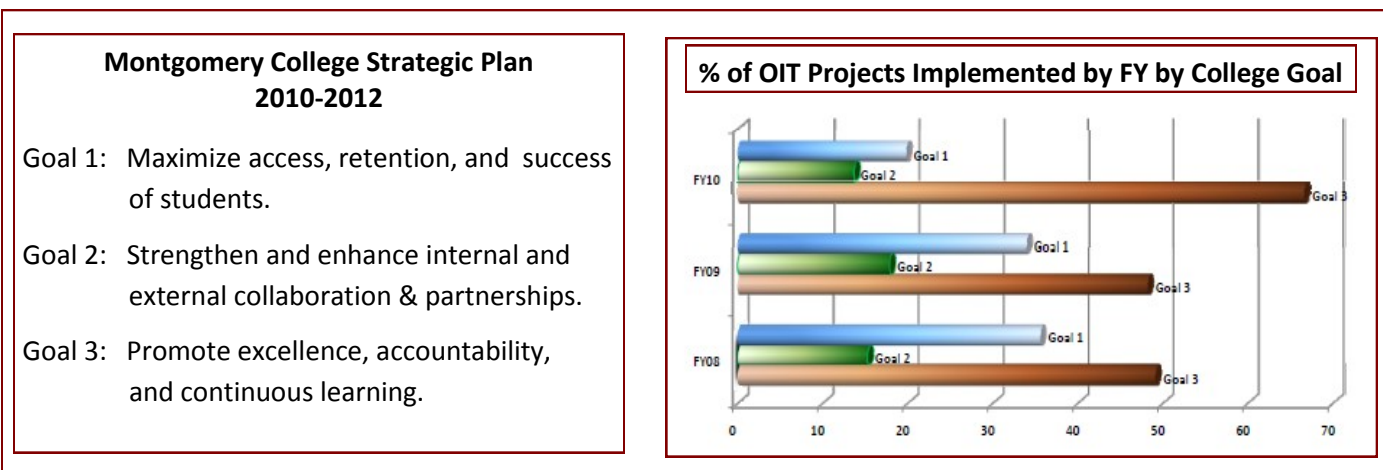


Maintaining Our Strategic Focus

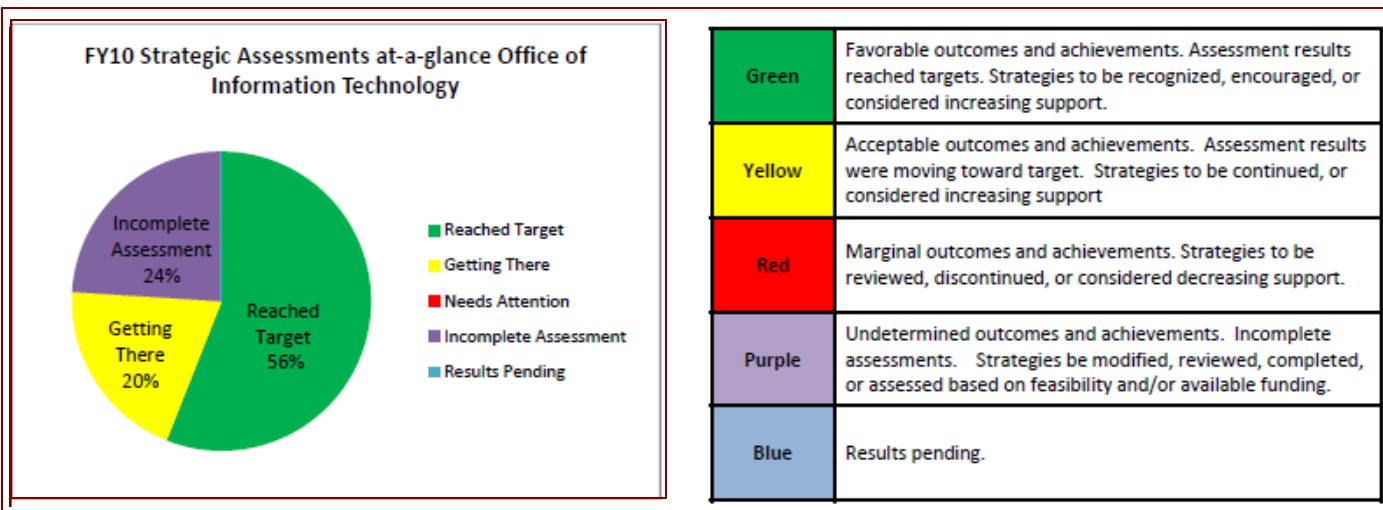
In times of change and challenge it is essential for an organization to maintain focus on the strategic goals of the unit. The Office of Information Technology has identified three strategic goals:

- Goal 1: The College will use information technology resources, where appropriate, to facilitate student success.
- Goal 2: The College will use information technology resources and practices to effectively and efficiently operate the College.
- Goal 3: The College will use information technology resources for development, growth and community initiatives.

Achievement of each goal is a combination of project-related work and on-going activities. The graphic below identifies the goals of the College’s Strategic Plan and how OIT’s project-related work aligned with Collegewide goals in FY08, FY09, and FY10.



Annually, every administrative unit is required to develop and implement specific action plans to demonstrate achievement toward each Collegewide goal. OIT reached identified targets on 56% of its specified action plans. Twenty percent of the action plans were evaluated as making progress. These action plans related to OIT’s multi-year projects and the success made with meeting project timelines. The remaining 24% of the action plans were incomplete. This 24% indicates the challenges the economic downturn posed for the unit as the College reassessed project timelines based on reduced funding. The impact of these changes was felt across the College community as OIT projects planned for FY10 had to be delayed due to reduced funding and changing priorities.



Sustaining Focus on Technology Service and Support

OIT staff are assigned to the Montgomery College campuses and satellite sites to provide technology services and support to the College community. Clients include students, employees, County and local government agencies, strategic business partners, and the residents of Montgomery County. Five OIT work teams interact routinely with these clients. The work teams are **Instructional Technology (InTech)**, **Computer Support Group (CSG)**, **IT Client Services**, **Instructional Television and Media Production Services (ITV)**, and the **College Libraries**. It is important to note that the Libraries unit was transitioned out of OIT to the Senior Vice President for Academic and Student Services area's organization structure at the end of the Spring 2010 semester. Some of the achievements of the Libraries workgroup prior to this organizational change will be highlighted as part of this report.

The **InTech** teams support the classrooms, labs, learning centers, programs and special events at the College locations. InTech collaborates with faculty, staff and administrators to plan and implement technology based projects, technology installations and support services.

In FY10, InTech's support provided for installation of 32 Smart Instructor Workstations (SIWS). The SIWS is a multimedia station that provides technologies to support various pedagogical styles and needs. More and more faculty are creating text, video charts and graphics and using the material in the classroom. There are currently 272 SIWSs installed in classrooms, labs and learning centers. The Germantown campus has an SIWS installed in every classroom that can accommodate the equipment footprint. SIWSs are programmed into all new construction and renovated facilities.

InTech staff provided technology support for building projects such as the new Science Center, the Science East and Science West renovation and the technology planning and implementation for the renovation of the Commons Building. The Commons Building renovation included a flexible space design that promotes

flexibility in the teaching environment and supports alternative delivery methods for instruction and administrative functions.

The **Computer Support Group (CSG)** supports administrative computing. Responsibilities include resolving software problems, enterprise system interface issues and equipment failures; responding to email account change and distribution list change requests; connecting and configuring printers, and assisting with file transfers. In FY10, the CSG managed a total of 7,151 support tickets with a success rate of 99.4%!

Cyclical renewal of technology assists the academic areas' ability to provide students with relevant technology skills to meet their goals, whether the goal is to enter the job market or prepare for transfer to a four-year institution. Traditionally these renewal activities occur during semester breaks in order to minimize disruption to OIT customers:

FY10 Winter Break replacements

- ◆ 298 academic workstations and 68 instructional laptop computers were replaced with state of the market technology

FY10 Spring Break replacements

- ◆ 111 workstations were installed in the Rockville Reading, Writing and Language Lab

FY10 Summer Break replacements

- ◆ 480 new academic workstations and 178 instructional laptops were installed



Computer Support staff (left to right) Len Leiber, Franco DiBari, and Joe Cooley replace workstations during a semester break.

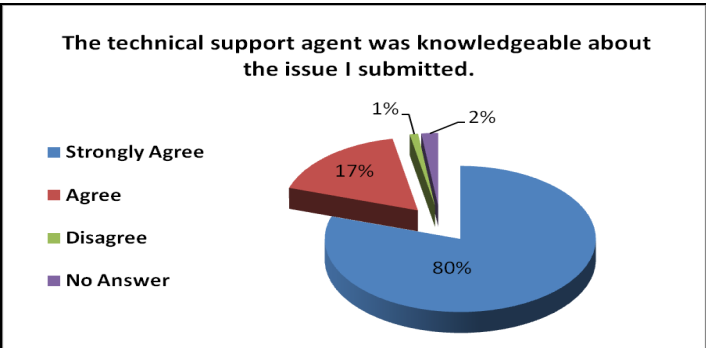
Due to FY10’s economic challenges, the technology replacement program was limited to instructional workstations and installation of new workstations for new or renovated facilities. Replacements of administrative desktops will be reviewed during FY11 based upon the availability of funding.

The **IT Client Services** workgroup is responsible for the IT Help Desk, Hardware Break/Fix Repair, and Voice Services. They support Montgomery College computing by promptly identifying and resolving problems and manage the full spectrum of voice communications services at the College.

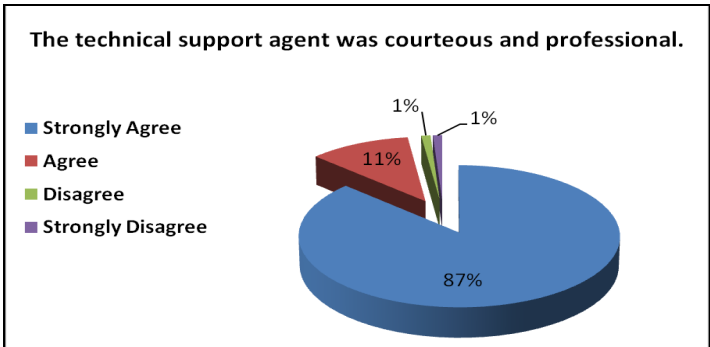
Significant accomplishments in FY10 included:

- ✓ **IT Help Desk:** Help Desk personnel achieved a first call resolution rate of 65% on the 52,131 calls it received as the central point of contact for technology problem resolution for the College’s students, faculty and staff.
- ✓ **Automatic Call Distribution (ACD) System:** Routing incoming calls is the task of the ACD system. This system manages incoming phone calls from callers who require assistance at the earliest opportunity from Montgomery College’s public facing units. IT Client Services successfully upgraded the ACD reporting system and trained College personnel at the Response Center, WD&CE Customer Support, Assessment Center, Financial Aid, IT Help Desk and Performing Arts Center in the upgrade’s functionalities.
- ✓ **Enhanced Montgomery College’s Call Accounting System** to include detailed alarm information when a 911 call is completed. The enhancement provides extension, building and room information in an email that is automatically sent out to Campus Security when the 911 call is completed.

In FY10, IT Client Services implemented customer surveys as a mechanism to support OIT’s pursuit of continuous service improvement. OIT clients were surveyed on the effectiveness of the OIT support services they received.

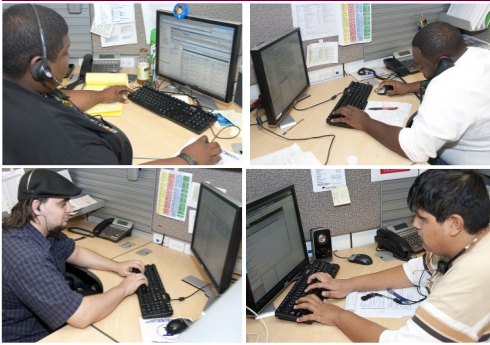


Ninety seven percent (97%) of the respondents felt the OIT staff are knowledgeable in dealing with the issues they are presented. Pictured: Amir Ekrami, Computer Support Specialist, assists Manuri Perera, a Financial Records Assistant with Workforce Development & Continuing Education, with the SIWS in room 402 GBTC.



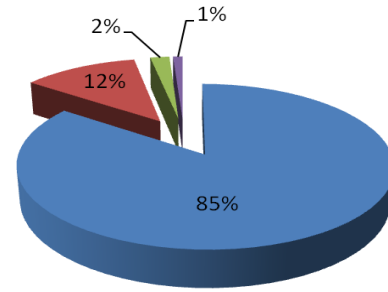
Ninety eight percent (98%) of the respondents agreed that OIT staff are courteous and professional. Pictured: Tom Jacob, Computer Support Specialist, works with Indira Chowbay, Office Assistant/OITB Front Desk, to familiarize her with Microsoft 2007 Outlook Calendar features.

ITHelpdesk@montgomerycollege.edu



How would you rate your overall support experience?

■ Highly Satisfied
 ■ Satisfied
 ■ Dissatisfied
 ■ Highly dissatisfied



Ninety seven percent (97%) of the respondents were satisfied with their overall support from OIT. Pictured: (top left to right, bottom left to right) Lead Help Desk Analyst Donovan Jenkins and Help Desk Analysts Mutiu Oladimeji, Mike Smith and Azeem Khan respond to requests for technology information and support from the College community.

The **Instructional Television and Media Production Services Unit (ITV)** is the educational video and digital media component of OIT. ITV provides high quality video production services and instructional and informational programming. These services extend the reach of the College's training and enrichment activities beyond the College campuses and into the homes and businesses of the Montgomery County community.

FY10 accomplishments included:

- ✓ Nearly 6,500 hours of hands-on training for students in conjunction with MC's Television curriculum.
- ✓ Over 145 hours of original instructional programming produced.
- ✓ Creation of content for television, news-ticker, website, podcast and social media outlets.
- ✓ Channel management and operation of the College's cable channel, MCTV Channel 10: programming, studio and field production, outreach, engineering, media dissemination, repair, satellite operations, IPTV and iTV-interactive TV planning.
- ✓ Professional television, radio and video production services to the Office of Institutional Advancement to market the College, academic programs, recruitment, WDCE and the Foundation and Alumni Association.

Special initiatives in FY10 included:

- ✓ Creation of Spanish language programming for MCTV 10, and Spanish language marketing to promote College programs and resources.
- ✓ Implementation of new technology to enable MCTV 10's live broadcasts of events at all campuses. Previously ITV could only air live broadcasts from the Rockville campus.
- ✓ Completion of two of four phases to convert ITV's Mobile Production Vehicle (MPV) from analog to digital technology. Once all phases are complete, the MPV will provide Montgomery College students with opportunities to learn live and recorded electronic field production techniques in a "hands on" professional environment, and enable ITV to produce and cablecast even more live performing arts and sporting events as they happen.

In FY10, ITV was recognized for the quality of its originally produced programs. In addition to receiving - for the second consecutive year - an award from the **Alliance for Community Media for Overall Excellence in Education Access**, ITV was awarded an **EMMY** for its "The Computer Gaming and Simulation Program at Montgomery College", three **TELLY Awards** for excellence in non-broadcast video, and seven **COMMUNICATOR Awards** for creative excellence by communication professionals.



The **Libraries** play an essential role in supporting the College's academic mission. They offer a variety of face-to-face and virtual services, along with physical and electronic format resources, to support research, teaching and diverse learning styles on a 24/7 anytime, anywhere access model. Use of Web 2.0 tools combined with a federated search engine, open source article linking and virtual reference have enabled the Libraries to create an environment which empowers College and community customers to independently use library resources and services, and to seek guidance when needed.



Montgomery College Libraries

Germantown • Rockville • Takoma Park/Silver Spring



The Libraries model, with a combination of virtual and in-house services and a balanced collection of materials in different formats, is extremely popular with students and heavily used.

Improved access for patrons was the FY10 focus of the Libraries' activities and the impetus for update of the Libraries' resource inventory. Additionally in FY10, the Rockville Library initiated a Faculty Outreach pilot to enhance faculty awareness of Libraries' services and resources. The pilot program was so successful that the Takoma Park/Silver Spring and Germantown campuses adopted the program and a new, integrated College-wide service was born!

Focus on Robust, Reliable and Secure Technology and Core Services

Most of the technology and services provided by OIT are highly visible to the users. What is not visible, but just as critical, is the skill and effort required to provide

the technology infrastructure and complex enterprise applications and solutions that support students and College employees. These responsibilities include providing a secure, service oriented, cost effective infrastructure that will embrace and support new technologies. The infrastructure must support technology solutions whether single user or enterprise-level solutions, and assure a reliable, secure and robust infrastructure. The scope of these technologies requires that they meet the College's current and future needs in a sustainable and efficient manner. This requires the dedication and work of multiple teams across the OIT organization.

The **Network** workgroups monitor the day-to-day operations for both the academic and administrative network systems including data, video and voice network communications support systems. The staff support the data center; manage the application infrastructure, including servers and storage; manage the administrative email system; manage print sharing functionality; provide backup and restoration services for all major applications, and; ensure that the College's information and technology resources are protected from harm and interruption. The **Applications** workgroups are responsible for the implementation, maintenance and support of enterprise, web and specialized applications. These applications support academic and administrative functions, as well as integration between these applications.

Significant accomplishments in FY10 included:

- ✓ Enhanced Internet access that provides up to five times the bandwidth at the College's current sites at a cost less than the previous current Internet access solution.
- ✓ Migration of applications to the new data center. This work included Banner and Exchange, as well as over 100 other servers. The new data center allows OIT to upgrade to industry-standard functionality.
- ✓ Email system upgrade. In addition to the system's migration to the data center, the email solution was upgraded to Exchange 2007. The migration and upgrade allowed OIT to increase user mailbox sizes from 50MB to 250MB and provide for faster recovery.

✓ New Data Center. The new state of the art data facility uses virtualization to consolidate servers thereby significantly reducing costs and support. This new environment will result in less down time for applications, better performance and a better experience for users.

✓ Periodic Vulnerability Scanning. OIT implemented quarterly vulnerability scans of all systems in the new data center. The scans are used to proactively identify and mitigate risks (such as viruses, worms) to systems supported by Montgomery College.

✓ Firewall Upgrades. New firewalls enhance security for existing applications and support disaster recovery.

✓ Implementation of the SolarWinds monitoring tool. This tool provides network traffic monitoring College-wide along with history and trend analysis of network usage and traffic.

Fiscal Challenges Increase Focus on Planning and Business Services

Important components involved in the provisioning of technology and technology services include collaborative strategic and tactical planning, well defined account management processes and adherence to established policies and procedures. This work requires the collaborative efforts of all work groups within OIT as well as with groups external to OIT. These efforts are assigned to the IT Policy, Planning & Cybersecurity (PPC) work-group that is responsible for coordinating the development of IT plans, the development of IT standards and policies, and the management of the budget and business processes within OIT.

FY10 posed challenges to OIT planning and budget at an unprecedented level. OIT management worked diligently in reducing expenditures in numerous areas, resulting in a budget reduction of \$2,845,845. Contractor positions were reduced by over 40% and 15 vacant staff positions were eliminated from the OIT staffing plan.

Other significant accomplishments in FY10 included:

✓ Completed the IT Metrics Proof of Concept pilot, a data analysis project piloted to improve OIT processes and better measure how OIT supports the College's goals and objectives.

✓ Performed an audit of MC's compliance with the Payment Card Industry Data Security Standard. Failure to meet these requirements could impact the College's ability to accept credit cards for payments.

✓ Participated in the College's Print Management Subcommittee.

✓ Developed new IT Standards to guide the deployment and use of technology .

✓ Coordinated technology infrastructure planning for new and renovated facilities at the College.

✓ Performed the statutorily required update of MC's Records Retention Schedule to the State of Maryland.

✓ Updated the IT hardware and software acquisition website to provide the College community with a more user friendly approach for acquiring hardware and software.

✓ Developed a database to track OIT contracts and software acquisitions.

✓ Standardized the contractor termination processes to ensure that OIT abides by contractual obligations lawfully and in a consistent manner.

Focus on FY11

The past year has been one of challenge, change and transition. In spite of the challenges posed by the changing budget realities and leadership transitions, the staff maintained focus on the strategic goals and direction of the unit. They executed their duties and responsibilities in the best interest of the unit and the College.

The economic challenges will continue in FY11. We will continue to experience "new normals" in every aspect of our business. We must assure that our business strategies are aligned with the mission and the priorities of the College. In order to assure this alignment during the coming year, the focus of the unit will be on five key areas:

- Partnerships
- Infrastructure
- Funding
- IT Governance
- Technology in Support of Teaching and Learning

Partnerships are of increasing importance to all organizations. The Office of Information Technology is actively engaged in numerous partnerships within the County and with other institutions of higher education. We will increase our effort in establishing new and enhancing existing partnerships. These partnerships provide opportunity to creatively leverage our collective resources. Examples of partnerships in which OIT is currently engaged are:

- *Information Technology Planning and Coordinating Committee (ITPCC)*. The ITPCC brings the College together with other County agencies to engage in technology opportunities for sharing services.
- *Montgomery County Cross-Agency Resource Sharing Committee (CARS)*. CARS is a joint effort of all Montgomery County agencies to examine opportunities to leverage resources across agencies to gain maximum financial benefit and enhance services.
- *University of Maryland Academic Telecommunications System (UMATS)*. Montgomery College is a member of the group of colleges and universities that interconnect with the University System of Maryland statewide UMATS network and work together in a variety of resource share agreements to provision cost-effective services for the community.
- *WatchLocalTV.org Network (previously known as the PEG Network)*. This group is the rebranded name of the partnership between the public, education and government (PEG) cable channels operating in Montgomery County. This group works together to provide County residents with access to education, government, public affairs and arts programming.

As we plan for the future, it is essential that we have the technology to support our faculty and students. The technology landscape must be supported by a robust and reliable network. The work of the OIT unit must be guided by a strong governance model that assures IT investments are aligned with institutional priorities. The continuing fall-out from the declining economy requires that we be diligent in our efforts to leverage our existing resources and to continue to identify cost savings. However, we must strive to preserve funding for those areas that support our core mission of teaching and learning. FY11 will be one of continued challenges, change and transition.