

President's Report to the Board

It was nearly 137 years ago to the day when Alexander Graham Bell wrote in his journal about a successful experiment with the technology that many of us consider an indispensible lifeline today: the telephone.¹

If only Bell could see us today! The rapid pace of progress, specifically when it comes to technological innovation, is astounding. Phones that once required wires tethered to a wall now travel with us wherever we go, glued to our hands, or tucked away in a nearby pocket. Computers that long ago occupied entire rooms now sit comfortably on our laps. Televisions that, in their earliest days, showed a fuzzy black-and-white picture now allow viewers to watch live events in three dimensions.

As an educational institution, we are not, and cannot be, isolated from the changing technological landscape around us. We cannot actualize our mission without incorporating technology into every aspect of our College. Quite simply, every area of our College requires some sort of information technology and, if we are not integrating technology, then we must, to be relevant to the needs of our students and our community. In this month's report, I hope to provide you with a framework about the ways we are working to innovate inside and outside our classrooms, as well as to maintain infrastructure and security requirements.

Office of Information Technology

Our Office of Information Technology (OIT) has its hands in every department and every building of our College. Its staff offers support services for all the hardware in the College environment. OIT staff maintain, and sometimes create, computer applications and technologies, including College websites. They provide the design, implementation, support, and maintenance required to ensure a robust and reliable technology infrastructure. They assist in the development of privacy and security practices related to information security and records management. They are many things to many people.

This past year, OIT concluded two important initiatives, a unit-wide climate and situational self-assessment and completion of the unit's reorganization. These two initiatives

¹ http://www.loc.gov/exhibits/treasures/trr002.html

required vision, teamwork, and engagement. Motivated by their vision statement, "to be a nationally recognized service organization that inspires collaboration and leverages every resource in support of the educational mission of Montgomery College," the outcome of these two initiatives is a unit that has strategically aligned its services and support model to the vision of Montgomery College 2020. OIT's realigned organizational structure is focused on providing integrated support and services that are aligned to both unit and collegewide goals. Ensuring a common student/employee technology experience in support of the One College service and support model is a priority for OIT.

Innovation

Empowering 21st-century students requires us to think more like them, and incorporate the technology with which they interact and from which they learn on a daily basis. The use of technology in our classrooms is no longer a supplement to instruction; it should be a fundamental part of how we teach. Looking at the educational environment today, it is clear that we must embrace changing technological advances if we are to remain relevant.

During my remarks to faculty and staff at the College's Spring Opening meeting in January, I touched on the burgeoning world of massive open online courses, also known as "MOOCs," and how they are changing the way students receive education. For example, edX provides access to free classes at the country's top institutions for anyone, anywhere, and Coursera is changing the way educators charge, or don't charge, students by asking interested employers to pay for transcripts. These services are providing universal, free, and accessible education—the very founding principles of community colleges.

While prestigious four-year universities have stepped into the MOOC waters, I am not aware of any community college in our state yet offering them. Our community and our students clearly are interested in exploring online educational opportunities. In the past decade, our distance enrollment has jumped 191 percent; in the past two years, nearly 20 percent! There is no doubt in my mind that this type of technological access is here to stay, and that Montgomery College should be at the forefront in this field, rather than following the lead of our educational peers.

I am thrilled that our College already is experimenting in this area. The College's Distance Education & Learning Technologies (DELT) staff is currently working with faculty members to create a MOOC this fall designed to help students with poor writing skills prepare for college-level course work. The goal is for a student to take this course prior to placement tests and, hopefully, place directly into college-level English, rather than into developmental courses.

As we pilot this MOOC, we plan to offer it for free, to any student, anywhere. Just this past summer, we received exemption from state oversight in 35 states, meaning we can offer courses to students in those states. Our College has all the components to make this a successful project: eager faculty members with academic expertise, a tested technological platform (Blackboard), and, of course, determined students craving access to higher education. Depending on the success of this initial program, I hope we will experiment with different funding mechanisms that enable further expansion of our MOOC presence.



Our College not only is experimenting with online courses, but also with flipping our ideas of what is the best way to reach students through the use of technology. As you heard a few months ago during a conference session meeting about technology, members of our faculty are experimenting with "flipped" course structures, where lectures are posted in an online environment and class time is devoted to working with students on the application of that information. Preliminary impressions are that the students are better engaged in the learning process, and are working in groups and seeking out help to apply the lessons.

These are big ideas, but there are smaller ones too that are commanding the attention of our students. For example, there is a tremendous focus on mobile applications in many of our classrooms, helping student engagement and interactivity. One chemistry professor is utilizing an application that provides students with tutorials to review the concepts discussed in class. Other faculty members are using their iPads to wirelessly project visual aids onto the classroom screen and then passing around iPads for students to work on problems with their classmates looking on. This is not your mother's chalk board.

Many professors quite literally are encouraging students to learn using their own technology, by setting up virtual polling software for students to text in answers from their own phones. The College is using a web-based program for this type of text communication between professor and student, where the faculty can send texts without the disclosure of personal phone numbers. And then there are faculty members who use the College's course management system to offer students access to additional materials, as well as to interact with one another.

These are some of the ways the College is embracing technological innovation in the classroom, but the opportunities are endless. Currently, access to online opportunities through our Blackboard system are somewhat limited by requiring students to log in from an actual computer. Our students are asking for more. Our faculty is asking for more. They both want virtual classrooms available in the palms of their hands, wherever they happen to be. This mobile application is a critical component to where we need to go, and I am grateful for our information technology experts who are working to help make this happen.

Speaking of virtualization, building and sustaining a robust virtual technology environment are priorities for the College. Creating a virtual location from which members of our College can access software, rather than require downloads onto individual computers, can have a significant impact on the efficiency and availability of resources and technology applications. We have learned a tremendous amount from a virtualization pilot at the College during the spring 2012 semester. While it made clear the strong faculty interest in virtualized technology, it exposed a number of challenges and provided important lessons. Moving to that future requires a thorough understanding of the technical requirements, budget implications, and end-user needs, including understanding the necessary ongoing support. OIT is initiating the work necessary to evaluate these requirements, including hosting faculty focus groups, and the College already has deployed a successful small virtual desktop environment at our Workforce Development & Continuing Education location in Gaithersburg. The feasibility of scaling this model collegewide is under review.



DELT is working hard to empower our faculty to teach in virtual environments and to incorporate technology into their teaching plans. While the tools are different, the principles of engagement remain and I have no doubt that our exceptional College faculty will excel in this new technological frontier. We must encourage all employees in our community to brainstorm and partner with our technology experts in DELT and OIT; a strategic discussion of technology requirements, completed early in the process, can encourage a visit to unchartered territory and, hopefully, lead to greater student success.

Our employees need a place to innovate, not a physical place, but rather an opportunity to experiment—a teaching sandbox where they can experiment first and incorporate into their classes later. We have phenomenal employees who are excited and innovative, and we must encourage them to push their boundaries. While I am proud of our Innovation Fund Grants and the experimentation that such funding has inspired, I am determined to create a culture of innovation at our College, where our employees and students wake up inspired and incentivized to try, to play, to innovate. If we don't, someone else will do it and we will be playing catch up. We must define the change, rather than react to what others define for us.

Infrastructure

We know that our students and employees are arriving at our campuses with more personal computing devices than ever before. Managing, storing, and securing data, while simultaneously ensuring appropriate access to data, is a major responsibility for OIT. While technology has perhaps never been easier to access, the ability to manage technology services, while supporting end-user requirements, remains a significant information technology task for all higher education institutions.

Providing for the design, implementation, support, and maintenance required to ensure a robust and reliable technology infrastructure is the foundation of our network infrastructure modernization efforts. We have signed an MOU with Montgomery County that establishes a cooperative relationship regarding the construction and use of the county's fiber communications network to help in this regard. Last year, the College made strides towards installing technology to provide wireless coverage in 100 percent of all College buildings. While implementation of the technology is complete, the IT infrastructure and engineering services team continues to monitor usage, signal strength, and connectivity. Keeping up with the many and different types of devices in use by members of our College community, including users who are connecting to our WiFi with more than one device, means we must continuously monitor the WiFi network to keep up with the demand, and make adjustments when and where necessary. We will continue to improve and enhance the WiFi network in order to ensure that all our users experience seamless connectivity. We also are exploring extending wireless coverage outside of College buildings.

Part of our infrastructure modernization and upgrade effort includes completing the migration and cutover of all College network devices to newly installed Juniper switches. In the coming months, the IT infrastructure and engineering services team will systematically move the College's network devices (PCs, printers, etc.) to the new network equipment. The result of this project will increase the reliability of our network and will provide a significantly enhanced set of features including better security management, increased reliability, and faster connections



both within our network and with external resources. The new switches will also allow us to take advantage of new technologies, such as Voice over Internet Protocol (VoIP), on a collegewide basis and will provide a robust, scalable platform that will support our data infrastructure needs well into the future. This project is an example of a major OIT initiative that has required significant time, expertise, and resources, but once complete will provide a critical service to our end-users.

Security

As reported daily in the news, there are constant concerns about controlling who has access to our personally identifiable information, and maintaining and enhancing information security are priorities for the College. To support continuing efforts to keep electronic information secure, OIT is pursuing several initiatives, including collegewide identity and access management, encryption technology on all College laptops, and enforcement of standard stronger passwords. These efforts are part of longer term technology initiatives initiated by the OIT to help the College manage access to computer technology resources.

Identifying and controlling sensitive College information stored on mobile devices is the first step in reducing improper access to information. The College recently completed a laptop encryption pilot with the Office of Human Resources, Development, and Engagement (HRDE). The pilot involved delivering laptops to HRDE with encrypted hard drives, thus securing the data in the event the devices were lost, stolen, or otherwise compromised. I am happy to report that the results of the pilot were excellent. Recommendations from the pilot include enhanced collegewide standards regarding the type of information that is stored, processed, and subsequently available on College mobile resources. Moving forward, OIT will include encryption technology on all College laptops, whether newly assigned or as part of the routine replacement cycle.

The ultimate result of our security-related projects will be a much improved process for managing access to MC user accounts and enhanced security of our electronic resources. Longer term, OIT is working on an initiative that will provide for a common set of login credentials to use when accessing centrally managed technology applications. This will mean having the same login credentials for multiple applications/systems.

Conclusion

Integrating technology into the classroom, partnering with our academic colleagues to enable teaching and learning, and maintaining an innovative, agile, and secure technology infrastructure are just a few of the technology opportunities and challenges that will shape our future. Adapting to a changing technological reality will require focused vision, coordinated leadership, and inspired participants. Above all, it will require courage. It will require us all to embrace change, challenges and, even, disappointment. But who knows what opportunities we will be creating? To end where I began with the words of Alexander Graham Bell: "When one door closes another door opens; but we so often look so long and so regretfully upon the closed door, that we do not see the ones which open for us."



Monthly Discussion Questions²

- 1. **Institutional needs.** What kind of change, if any, does our institution need?
- 2. Context and competition. Do we understand our institution's competitive position?
- 3. **Consequences of no change.** What are the consequences if we do not engage in a change process?
- 4. **Leadership capacity.** As a board and as individual board members, are we able and willing to work with our president to bring about positive change?
- 5. **Change process and players.** Based on this discussion, what is the right role for the board to play at this time?

² Adopted from MacTaggart, Terrence J., *Leading Change: How Boards and Presidents Build Exceptional Academic Institutions*, AGB Press, 2011 (pp. 21–22).



6















Celebrating College Faculty, Staff, and Administrators

Art Exhibitions/Performances

KenYatta Rogers, professor of theatre, performed last month in the Bethesda Round House Theatre's production of David Mamet's Pulitzer prize-winning play, *Glengarry Glen Ross*.

Michaele Harrington, part-time professor of art, exhibited her paintings in the Atrium and the Decker Gallery of the Takoma Park Community Center last month. Her work was part of a four-person exhibition, *Reminiscences*.

The exhibition of Dr. Percy North, professor of art, entitled <u>Max Weber: Bringing Paris to New York</u>, is currently open for visitors at the Baltimore Museum of Art (BMA). In addition to her essay for the exhibition catalog, Dr. North is contributing an article on the exhibition in the BMA's *Prints and Drawings* newsletter. She also is giving several public lectures and training docents in conjunction with the exhibition.

Maggie Gourlay, part-time professor of art, is exhibiting a sculpture installation at the <u>Arlington Arts Center</u> in Arlington, Virginia. The installation is part of an exhibition, *Interwoven*, which runs through the end of March.

Beverly Ryan, part-time professor of art, participated in a recent solo exhibition of her paintings at the <u>Greater Reston Arts Center (GRACE)</u> in Reston, Virginia. Her paintings and mixed-media works were described as addressing "the recent financial crisis in America and the post-industrial landscape."

Conference Presentations/Special Speaking Engagements

Professor Jackie Middleton has been selected as the keynote speaker for the Mid-Atlantic Courtroom Administrators Conference to be held in Atlantic City, New Jersey, this September. She was a workshop presenter last year, and this led to her selection as the keynote presenter this year. Her topic will be "Leading for the Future," and she will give a workshop at the same conference on "Civility in the Workplace." She also will present at the Virginia conference in June.

Several members of the College community presented at the 23rd Annual Conference of the Association of Faculties for Advancement of Community College Teaching (AFACCT) in January at Frederick Community College. Steve Prince, assistant professor of art; Kelly Rudin, assistant professor of history; and Beverly Spencer, part-time professor of speech; discussed the ways that an Oxfam Hunger Banquet ties into the curriculum. Nancy Nyland, Germantown librarian, reviewed the logistics of putting on the event on one campus, and Patricia Ruppert, part-time professor of world languages and philosophy, rounded out the presentation with a three-campus perspective.

Virginia Streamer, part-time English professor, will present "Pythagoras was a Vegetarian," in early March at the College English Association-Middle Atlantic Group, which will be held at the Rockville Campus.

Dr. Judy Ackerman, vice president and provost of the Rockville Campus, served on a National Science Foundation (NSF) Committee of Visitors (COV) Panel for the NSF STEP Program.

Publications

Dr. David A. Hall, professor of networking, has recently finished <u>The Encyclopedia of Japanese Martial Arts</u>, a text that explains Japanese martial arts culture including modern and classical combative systems, weaponry, armor, military history, and religious and military practices.

Professor Jill Kronstadt published a feature article in the online magazine *Bloom*, entitled "Ego and Eros: Kate Chopin, Reinventing the Female Protagonist."

English Professor Elizabeth Huergo will soon release her debut novel, *The Death of Fidel Perez*, which reflects on the spark that started the Cuban revolution and the resulting broken promises.

Special Accomplishments

What do students in Canada, New Zealand, Qatar, Turkey, Sweden, and over 100 other countries have in common with Montgomery College's math students? They watch Professor of Mathematics Bill Witte's video math instruction. Between February 6, 2012, and February 4, 2013, his videos were viewed over 106,000 times by people around the globe. He has received positive feedback and requests for more videos.

Bryant Davis, professor of English, has passed a five-year milestone volunteering to teach literacy courses in an English for Speakers of Other Languages program, where he introduces his students to the United States.

Special Assignments

Dr. Eun-Woo Chang, dean of science, engineering, and mathematics, served on a proposal review panel at the National Science Foundation in January.

Dr. Debra Bright, acting associate dean of student services for the Rockville Campus, has been selected to serve on the <u>National Conference for College Women Student Leaders</u> (NCCWSL) 2013 planning committee. The NCCWSL conference will be held from May 30 through June 2 at the University of Maryland. Dr. Bright is the co-chair for the "Day on Capitol Hill" preconference activity, which involves a panel discussion with a variety of female leaders on the Hill and a tour of the Capitol Building.

Susan Kryszak, retail operations manager for the Rockville Campus, has been elected chair of National Association of College Stores and presented at their annual meeting last month.

Major Grant Awards and Gifts

Can entrepreneurs be created? Fifteen Montgomery College students comprise the first cohort of scholars in the College's Hillman Entrepreneurship Program, and, together with Gul Branco,

director of the program, they are answering the question as part of a weekly seminar. The program is funded through a \$600,000, three-year gift from the David H. and Susan D. Hillman Family Foundation, which provides scholarships for two-thirds of their Montgomery College tuition as well as funds for books. Hillman scholars also have the opportunity to participate in special mentoring, internships, and opportunities to network with local entrepreneurs.

A second \$600,000 five-year award from the National Science Foundation is making it possible for 22 S-STEM scholars to gain a more in-depth understanding of computational biology. This spring semester, these On-RAMP to STEM students will meet in a weekly seminar to explore the interface of biology and mathematics. These scholars, all of whom qualified based on grade point average and financial need, are receiving scholarship awards that permit them to attend Montgomery College full time. Internships, mentoring, and networking opportunities are hallmarks of this program. Dr. Scot Magnotta, professor of biology, is the project director on the grant.

Interesting News to Note

The Renaissance Scholars program is offering two brand new dyads – International Relations combined with General Psychology, and Two-Dimensional Design combined with Introduction to Sociocultural Anthropology. A dyad is a set of co-taught paired courses that serve as the centerpiece of the honors program. The Renaissance Scholars program applied for and received a grant through the United States Institute of Peace Peacebuilding Support Initiative. As a result, the Renaissance Scholars is engaged in a book discussion of Vaddey Ratner's book, *In the Shadow of the Banyan*, and the College will welcome Ratner for a special author discussion.

The first cohort of PALS (Program for Active Learning in STEM) faculty met in January. The initiative, supported by the College's National Science Foundation STEP grant, is designed to create a cohort of faculty who discuss and develop activities—at least one per month—for use in the classroom. Participants this year include Dr. Meg Birney, associate professor of biology; Dr. Jojo Dong, assistant professor of mathematics; Monica Mallini, associate professor of electrical engineering; Dr. Rick Pires, associate professor of chemistry; Jenny Polm, instructor of mathematics; Dr. Alessandra Sagasti, associate professor of biology; and Dr. Barry Spieler, professor of mathematics. Mentors for this first cohort are Susan Bontems, associate professor of chemistry; John Hamman, associate professor of mathematics; and Dr. Kris Lui, assistant professor of physics.

Dr. Desalegne Mengesha, vice president for academic, research, and community services at the University of Gondar in Ethiopia, visited the College in late January to continue efforts established previously by the College's Ethiopian delegation team. Dr. Mengesha attended the President's Executive Council meeting, where he met senior college administrators. He toured all three campuses and met with some of the College's Ethiopian students. He also then met with the College's Ethiopian delegation team to discuss partnership opportunities between Montgomery College and his institution.

The 2013 One Maryland One Book has just been announced: *King Peggy* is the true story of a Silver Spring administrative aide who receives a call in the middle of the night that she is the next in line to become king of a town in a country she left years before. The First Year Experience Program at the Takoma Park/Silver Spring Campus is working with faculty to relate the book's themes—education, the sciences, relationships, cultural straddling, family dynamics, and politics—to students' lives.

Summer Dinner Theatre has announced the shows for the 2013 season: *The Pajama Game* and *The Wiz*. Tickets will be on sale at the Rockville Campus starting May 1. Currently, the College's Auxiliary Services is preparing for the season by partnering with the Speech, Dance, and Theatre Department to update the audition, technician, and internship applications that are posted online at www.montgomerycollege.edu/sdt. Auditions begin May 10.

MC Books and More stores are completing their first full year offering price comparison software in response to affordability and accessibility guidelines to assure students the best deals on textbooks. Students can check the College's online booklist on MyMC to see the best or competitive price for their textbook, which includes the College's price and the comparative price of other vendors. If the external online vendors are more cost effective, the software will allow students to order that book from elsewhere. Those purchases, however, will result in revenue for the College.

Speakers and Events

January Events

In late January, the Science, Engineering, and Mathematics (SEM) Department offered a lecture/workshop series. Dr. Ed Palaszynski, director of the College's Information Technology Institute, and Ram Subhedi, professor of mathematics, delivered presentations on "iPads: Exploring New Frontiers in Education." Leah Allen, assistant professor of biology, Maria Aronne, professor of mathematics, Dr. Nawal Benmouna, professor of physics, Dr. Eugene Li, professor of physics, and Dr. Virginia Miller, associate professor of chemistry delivered presentations on "Engaging Students in an Active-Learning Environment."

Virginia Wangerin, RN, MSN, spoke to the College's nursing faculty and staff on complete curricular analysis and mapping concepts through the curriculum for nursing. She focused on current changes in healthcare that are evidence-based using national initiatives such as Quality and Safety Education for Nurses (QSEN) and the National League for Nursing (NLN). The workshop evaluated the theory and clinical components of each course during each semester and identified active teaching strategies and outcome measures.

During Professional Week in January, the Takoma Park/Silver Spring Campus administrative team, the Office of Equity and Diversity, and the Cultural Arts Center sponsored a multicultural event by Speakeasy DC. "1st Generation: American-born Children of Immigrant Parents Tell True Stories about Growing up as Part of Two Cultures." Several storytellers incorporated their own or their parents' experiences as newcomers to America.

Ray Gonzales, professor of reading and coordinator of the Rockville Campus American English Language Program, served as the keynote presenter at the spring Workforce Development & Continuing Education pre-academic English as a second language faculty development workshop. Professor Gonzales provided an overview of the lexical approach to language teaching, illustrating how this innovative approach can be applied to English for academic purposes.

February Events

Renowned teacher and coach Jerry Gaines, the <u>first African American to attend Virginia Tech on a sport scholarship</u>, appeared at the Theatre Arts Arena to share stories from his book, *40 Stories High: The Story of a Teacher*. The book chronicles his experiences as a teacher, and features vignettes about students whose lives intersected with his. This event was offered as a part of African American History Month.

Also in honor of African American History Month, the <u>Boys to Men Mentoring Program</u> sponsored the 2013 Black Facts competition. Participating students responded to a daily e-mailed question from Black Facts. At the end of the month, a tally was run to see who had the most correct answers; prizes were awarded to the top participants.

The Rockville Art Department hosted an artist panel discussion in conjunction with the exhibition <u>Commitment and Similar Acts of Betrayal: A Contemporary Drawing Exhibit</u> in the Sarah Silberman Gallery. Open to students and the community, the panel explored the artist's role in addressing controversial and provocative subject matter in contemporary art.

In honor of Black History Month, Global Connections, a collegewide social and academic program, presented a special talk, "<u>From Our Past to Our Present: Black History Is American History</u>." The event examined the journey of blacks in America, from the past to the present, leading into their current and future prospects and progress.

The Cultural Arts Center welcomed <u>Ensemble Espanol</u> to the main stage as part of its guest artist series. An additional performance was designed especially for children and their families as part of the College's Around the World Passport Series of multicultural offerings that enrich the appreciation of global culture among children.

Staff at the College planetarium at the Takoma Park/Silver Spring Campus hosted an evening event called "<u>African Skies</u>" that detailed the use of song to share navigational beacons to freedom. More than 40,000 slaves escaped to freedom with the help of the Underground Railroad by using information in the song, "Follow the Drinking Gourd," to determine the direction north.