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PRESIDENT'S REPORT TO THE BOARD

May 2012

J.K. Rowling faced 12 rejection letters before the wizardry of Harry Potter made it to the light of day. Michael Jordan missed 9,000 shots in his basketball career, nearly 30 of which would have won the game. Abraham Lincoln lost at least six elections before becoming our country's president. The common denominator? These world-changers took risks, despite reoccurring disappointment.

I believe that to truly innovate, you must challenge yourself, break out of your comfort zone, and maybe even suffer a few setbacks along the way. To support this journey, our College began awarding Innovation Fund grants one year ago. In the year since, our faculty and staff have embraced innovation and continue to push boundaries.

I know you have heard all about our new developmental math initiative, and how we already are seeking significant achievements in that area. But, math is only one department piloting new ways to reach our students.

The English discipline is in the midst of a yearlong accelerated college English pilot, launched this past semester. English faculty members from across the College are designing collegewide curricula for 14 designated freshman English sections. In this course redesign, students who test just below college level in English and who test college ready in reading can prepare a writing sample to qualify for one of these redesigned sections, which will include both developmental and college-level students. All of the students will receive weekly direct, in-class tutoring support. The goal of the course redesign is to accelerate the progress of developmental students through the English composition sequence, increasing their retention, success, and completion.

But our redesign of courses extends much further. Our biology departments on all three campuses have formed a task force to ensure that our course content and pedagogy are up to the moment and align with the recommendations of the National Academies of Science and the National Science Foundation. In today's world, biology has become highly interdisciplinary, encompassing mathematics, physics, chemistry, and engineering. As such, our faculty are looking at how we can best prepare students for the emerging life sciences industry.

These are but two examples where our faculty and staff are taking the lead to create innovative and national models of academic excellence. For this month's report, I asked campuses to reflect on some of their successes, and challenges, in their effort to be innovative, as well as what ideas we can expect to see down the road.

Board Discussion Questions:

1. In what new ways would you like to see our College embrace innovation?

2. What are some of the ways that you, personally, have refused to let a setback halt your efforts to change course and innovate?

Innovative Curriculum

- Chemistry faculty used a Lumina Grant to redesign the introductory chemistry classrooms to enable teaching with the Student-Centered Active Learning Environment with Upside-down Pedagogies (SCALE-UP) approach. This innovative initiative emphasizes highly interactive, collaborative, guided-inquiry instruction. The departments throughout the College plan to expand this approach to organic chemistry courses.

- This past fall, the College implemented the Montgomery College Accelerated Program (MCAP) in Business, and the students have performed very well in their first semester. They appreciate the cohort model and the opportunity to work continuously with the same group of students. Professor Jackie Middleton, chair of the Germantown Business Department and the instructor of the cornerstone Introduction to Business course, said the following: "I have heard students say that the MCAP program is changing their lives."

- Workforce Development & Continuing Education (WD&CE) is developing online courses to reach seniors who, due to physical or time restraints, cannot otherwise take Lifelong Learning Institute courses. WD&CE is exploring a session for prospective students on "How to Take an Online Class" to allay possible fears of those unfamiliar with the process.

- WD&CE developed a content-embedded course at a high reading and writing level to meet an additional need for pre-academic ESL students. WD&CE now offers a course titled Reading and Writing 4 for Health Care, as well as the regular Reading and Writing 4 course and English for Health Care, which is a more general course.

Innovative Support

- The Calculus Project provides supplemental instruction for students taking Precalculus (MA 180) and Calculus (MA 181). Students in these classes attend instructional sessions outside their regular classroom time to do problem-solving activities and to get additional assistance on class work or homework problems. Students taught the sessions in the fall, and professors teach the spring sessions. Beatrice Lauman, supervisor of the Math, Accounting, Physics, and Engineering Learning Center used foundation funds to pilot this early intervention project, designed to provide preemptive support.

- The College's biology departments developed new undergraduate research experiences with College faculty, for which students can earn course credit for the work. In years past, such experiences were only available through collaborations with faculty at four-year universities.

- Faculty in the Department of Health Enhancement, Exercise Science, and Physical Education received a grant from the Holy Cross Hospital Fund of the Montgomery College Foundation to increase awareness and knowledge about careers in aging studies,

which is a field of growing importance. This Careers in Gerontology and Geriatrics project will recruit students from across all three campuses to create a public service announcement campaign with student actors.

- Dr. Kris Lui used an Innovation Fund grant to convert an entire section of physics to the studio format, allowing students to work together in groups of three to take data, analyze results, and build physical laws and intuition. She measured gains in conceptual understanding using a standardized exam developed by the global physics education research community. Dr. Lui reports: “Not only are students able to solve similar types of problems as were tested before the studio format was implemented, their conceptual understanding has increased. Further, students express a great enjoyment about coming to class, and often are surprised how quickly the time passes...” Dr. Lui notes that the students in this trial seem to have retained material.

- On the Germantown Campus, linking a study skills class with a biology class is having a measurable impact on students’ success. This pairing resulted from a partnership between a faculty member and a counselor. The College is experimenting with other counseling interventions, such as Early Alert, in an effort to catch students before an academic slip descends into an academic slide.

- New facilities and renovated spaces have sparked creative ideas for the use of space. For instance, veterans now have a place to gather on our Germantown and Takoma Park/Silver Spring campuses. In Germantown, art students transformed an old darkroom into a place for independent projects. Also, when the new child care center opens, students will inherit much-needed space to gather, and art will gain a naturally lit studio space. The Takoma Park/Silver Spring Campus is trying to repurpose vacated space to increase the biology labs offered each semester.

- Faculty collegewide are experimenting with shared space. For instance, English classes that need access to computers some of the time alternate between shared traditional and computer classrooms. A computer classroom is shared creatively and collaboratively by the staff in the library and writing center, as well as faculty and students in select academic courses.

Innovative Collaboration and Partnerships

- Dr. Christina Devlin used an Innovation Fund grant to expand the mission of Writing in the Disciplines to include reading, studying, and thinking skills to support student retention. The program created participant-driven faculty study groups, often called “teaching circles” comprised of seven participants representing each campus and several disciplines. As the program develops, participants in the first teaching circle will lead circles of their own centered around other methods to infuse writing, reading, and critical thinking into courses. All participants have changed some aspect of a course to develop student understanding of reading and study skills, and they rewrote assignments and redesigned classroom activities to facilitate active learning.

- The Rockville Department of Music, the College's Arts Institute, and Workforce Development & Continuing Education developed an innovative partnership with Montgomery County Public Schools (MCPS) to provide credit-bearing performance opportunities for MCPS music faculty to participate in Montgomery College ensembles.

- Workforce Development & Continuing Education partnered with a local biotechnology company to create a clinical trial project management course, an adaptation of standard project management to meet the needs of the biotech industry. A similar partnership with a number of public and private organizations resulted in the Chief Science Officer course.

Innovative Technology

- The health sciences (HS) programs use technology in new and innovative ways to improve learning. Originally piloted by the nursing program through a grant, iPads are now used by three additional clinical HS programs: diagnostic medical sonography, surgical technology, and radiologic technology. They use the iPads to access the online textbook resource material, download the ebook versions of textbooks, and operate a program that allows faculty to create concept maps and e-mail them to the students.

- Another innovative use of technology in health sciences is the use of simulation patients to provide all 380 nursing students with the opportunity to practice responding to critical health situations without risking real patient safety. The simulations are videotaped so that students and faculty can review student responses. All clinical nursing courses incorporate simulations, and more faculty are incorporating them into didactic class work.

- The College uses Elluminate to support synchronous online instruction for our students.

- Our campuses provide students with access to a virtual computer lab to ensure that students have access to required software.

- Last fall, two Germantown and two Rockville sections of statistics participated in a study to compare student learning in a traditional format with student learning in a blended course that combined interactive online instruction with weekly face-to-face class meetings.

- Mathematics Professor Bill Witte provides videos for his developmental math course on YouTube, with closed captioning. Students enrolled in the course receive their instruction by watching videos, accessing PowerPoint presentations, or by reading the electronic textbook. Students will be given the option of up to 15 alternative presentations of material that they are mastering.

- Workforce Development & Continuing Education is piloting a workplace preparation software package that provides self-paced instruction on workplace skill basics as a supplemental resource for contextualized ESL courses.

- The College is decreasing costs, boosting functionality, and improving efficiency by moving away from standalone physical servers to virtualized servers at the edge of the network. The bonus of virtualization is added capacity, which helps lower the cost of hardware. One example is Cashiering PC for credit card processing. The actual desktop image is located in the virtual cluster, while the operations team accesses it through a low-cost thin client.

- The College is developing and delivering courses in the mobile web applications field, including the development of an online version—a web applications course delivered as a web application.

Student Stories

- Student Danielle Kurtz is part of a pilot led by five science, engineering, and mathematics faculty members, who are using café-style classrooms to more actively engage students in those disciplines. She writes:

  > "*New ideas can teach students new ways to learn, and help motivate us to become more involved. This is really important because many students find that they have trouble learning in a traditional classroom setting. The café-style classroom causes both teachers and students to open up... It creates a more relaxed environment than a traditional classroom, where students can become more comfortable and familiar with each other as well as with their professor. Group work has become more efficient (and fun!), and I've noticed that more people participate in discussions and ask relevant (and not simply clarification) questions than in my other classes. I think that because the set-up is so different from what students are used to, they enter the class with a different mindset… and approach the lesson in a more open-minded manner."*

- This semester, a returning student, who already had a master's degree, is taking Dr. Lui's new pilot studio physics course to satisfy graduate school requirements. She admits that physics is hard, but she continuously expresses how much she enjoys the class and working with other students. She feels as though she is learning much more than in a traditional class.

College Bulletin

May 2012

Celebrating Students and Alumni

Student Christie Lieu, an interior design major, received an Award of Distinction, Student Citation, from the National Kitchen and Bath Association (NKBA) Baltimore-Washington Chapter. She was honored for her kitchen design entry in the 2012 Chapter Design Competition, sponsored by the local NKBA Chapter and *Home & Design Magazine*.

Alex Bonilla, who earned a certificate in landscape technology from the College, is one of three full-time horticulturalists at the British Embassy. Last month, he and his colleagues gave Professor Steve Dubik and 25 landscape technology students a tour of the grounds. In addition, the landscape technology students learned about the protocol for testing orchids for viruses. Bonilla plans to return to the College to complete his associate's degree in landscape technology.

Julian Mesick, a math major who transferred to the University of Maryland this spring, placed in the top 15 percent of college and university students nationwide who participated in the William Lowell Putnam Mathematical Competition—an exam administered by the Mathematical Association of America. To solve the 12 problems on this exam, which are based on undergraduate mathematics, a student must demonstrate depth and breadth of knowledge as well as creative insight. Typically, the median score is 1 or 2 out of 120. Mesick scored 11 out of 120. Of the 4,467 students who took the exam, only 645 students scored higher.

Celebrating College Faculty, Staff, and Administrators

Dr. Laura Anna, professor of chemistry, co-organized a symposium for the annual meeting of the American Chemical Society in San Diego, California. The session featured innovative ways of incorporating nuclear magnetic resonance analysis methods into the undergraduate chemistry curriculum.

Dr. Lori Kelman, professor of biotechnology, spoke to the National Association of Active and Retired Federal Employees about the history of transgenic organisms.

Dr. Eun-Woo Chang, instructional dean of science, engineering and mathematics, served as a project reviewer for the National Science Foundation (NSF) STEM Talent Expansion Program (STEP), which funds higher education institutions to increase retention, graduation, and transfer rates in STEM disciplines. As a reviewer, he evaluated progress and provided valuable input for improving the projects.

In addition, Dr. Chang facilitated a workshop, "Models for Undergraduate Research Involving Community College Students," and led a discussion on "Community College Issues" at the NSF STEP Grantees meeting in Arlington, Virginia. Session summaries are posted on the NSF STEP Center website http://stepcentral.net/.

Dr. Lucy Laufe, professor of anthropology, offered a workshop at the Baltimore Society for Applied Anthropology Meeting with Dr. Ruth Sando from Sando and Associates and Dr. Karen

Mudar from the National Park Service. The workshop, "Fieldwork Inside-Out: A Toolkit for Building a Professional Life," explored how the ethnographic toolkit used to study others can also be employed to advance success in applying for scholarships, graduate programs, and jobs.

Librarians Diane Cockrell, Kathy Swanson, and Christine Tracey presented at the Law Library Association of Maryland Conference held in Baltimore. Their presentation, "Full Disclosure," showcased the resources and services that the College's libraries provide to the community.

Dr. Percy North, professor of art, published an essay in a new book, *Amalie Rothschild,* and in April she led a tour of the concurrent exhibition, "Vestments by Amalie Rothschild," at Baltimore's Maryland Institute College of Art.

Art Professor Michaele Harrington exhibited her work in a group exhibition in March and April at the ART House in Sandy Spring, Maryland.

Art Professor Amelia Hankin conducted a workshop in April at the National Museum of Women in the Arts in Washington, D.C. The museum holds a series of role model workshops, and her workshop focused on monoprint techniques for students ages 14 to 18.

Associate Professor Pamela Gragg, coordinator of the interior design program, was appointed education chair for the Washington Metro Chapter of the National Executive Women in Hospitality (NEWH). Professor Gragg identifies schools with programs and students who would be eligible for NEWH scholarships and encourages program and student participation.

Inside Higher Ed recently interviewed English Professor Jill Kronstadt for an article related to *The Washington Post* opinion piece about the value of community college faculty.

English Professor Teresa Petro's poem, "Not All Things Asymmetric are Cubism," was published in ModCloth's online literary journal, *The Written Wardrobe*. The literary magazine for which she is poetry editor, *Shady Side Review*, released the spring 2012 issue.

A College-produced polysomnography informational video won a Telly Award, which honors the very best film and video productions; groundbreaking online video content; and outstanding local, regional, and cable TV commercials and programs. Montgomery College Television staff members and students Ashanafi Debell, Keith Hopkins, Najmeh Molaei, and Ellen Valley collaborated on the video.

Safety and Security Officers Jeff Wilson and Yasmel Rodriguez received the American Heart Association's Heartsaver Hero Award for using CPR to revive a female student who had passed out during class.

Dr. Judy E. Ackerman, vice president and provost of the Rockville Campus, was invited to join the board of the Rockville Science Center, which cosponsors the annual Rockville Science Day, which was held in April on the Rockville Campus.

Dr. Ackerman also received the Lincoln Park Historical Foundation Heritage Achievement Award during the Gospel Train Ride to Freedom program in February. The award recognizes those who are involved with tracking and documenting the footprints of African American contributions and accomplishments. Dr. Ackerman has been involved in several of the foundation's projects, and Montgomery College actively sends students to intern with the organization.

Earlier last month, Dr. Sanjay Rai, vice president and provost of the Germantown Campus, served as a panelist on a STEM roundtable hosted by the Tech Council of Maryland and AT&T. Denis Dunn, regional vice president for external affairs at AT&T, moderated the discussion.

Workforce Development & Continuing Education (WD&CE) launched a new program, the Professional Skills Exchange, to facilitate knowledge sharing and materials among employees. WD&CE created a Skills Exchange group portal, which includes a database of mentors who are available to assist with specific work-related topics such as Microsoft Office, social media technology, program management, and faculty development.

Montgomery College will once again receive the Workplace Excellence, the Health and Wellness Trailblazer, and the EcoLeadership awards from the Alliance for Workplace Excellence. Additionally, the College will be recognized as a Leading Practitioner in Diversity and Inclusion. In recognition of these accomplishments, *Capital Business*, *The Washington Post*'s weekly business and daily online publication will feature the College's accomplishments. The College will receive the awards at a public event in early June.

Montgomery College has been named a National Center of Academic Excellence in Information Assurance Two-year Education by the National Security Agency and the Department of Homeland Security for academic years 2012 through 2017. This designation specifically applies to the College's cybersecurity degree and certificate programs. It states that Montgomery College's curriculum follows guidelines established by the National Security Agency and Department of Homeland Security in the cybersecurity or information assurance discipline. Furthermore, as students search for positions in the cybersecurity or information assurance field, Montgomery College graduates will have a unique certification that many other graduates will not have.

Speakers and Events

March Events

- The Montgomery College Cultural Arts Center and the Paul Peck Humanities Institute presented "Art, Memory, and Healing: A Panel Discussion on One Survivor's Journey" at the Cultural Arts Center in early spring. The event included the Maryland premiere of "Through the Eye of the Needle: The Art of Esther Nisenthal Krinitz" and a panel discussion moderated by Bernice Steinhardt, president of Art and Remembrance.

- The College's Office of Academic Initiatives and Germantown Campus leadership met with principals from Montgomery County Public School's (MCPS) upcounty elementary, middle, and high schools in March. The MCPS administrators listened to detailed presentations from faculty, administrators, and prominent student leaders about the Montgomery College experience.

April Events

- The Rockville Office of Student Life and the American Red Cross hosted a two-day blood drive on the Rockville Campus.

- "Fire Safety Engineering" highlighted the month's Spectrum Lecture at the Germantown Campus, led by Jason Averill, a group leader at the National Institutes of Standards and Technology. Averill, an author or coauthor of more than 60 scientific works, focuses his research on fire hazards.

- In partnership with the National Institutes of Health and the Federal Office of Minority Health, the AIDS Awareness Resource Center presented a Global HIV/AIDS Awareness event at the Takoma Park/Silver Spring Campus to students, faculty, and members of the health care industry. Dr. Ijeoma Otigbuo, professor of microbiology, is the director of the AIDS Awareness Resource Center.

- The Takoma Park/Silver Spring Campus hosted Maureen Walsh, a theology lecturer from Georgetown University, who spoke about "Commemorating Death before Birth: Pregnancy Loss Memorials in Japanese Buddhism and American Catholicism." The lecture was organized in response to President Obama's Interfaith Initiative.

- The Department of Sociology, Anthropology and Criminal Justice organized a student research poster session, which featured students' social science research projects displayed alongside related design projects from the College's illustration students.

- The Department of Health Enhancement, Exercise Science and Physical Education held an annual health and wellness fair featuring educational exhibits and interactive activities that tested fitness knowledge and skill.

- College students and faculty raised funds for the Democratic Republic of the Congo through Women for Women International, a nonprofit organization that helps women survivors of war. The students and faculty participated in the Flip 'N Run 5K, an event organized by the Montgomery College Running Club and the women's studies program.

- The Rockville Department of Computer Science and Information & Interactive Technologies hosted its annual programming competition for area high school students. Ninety students and 45 teams competed to solve programming problems.

- The Rockville Campus celebrated Earth Week with a healthy eating class, an Oxfam banquet, a campus clean up, and a service project, all of which culminated in an Earth Day festival.

- The Rockville Art Department mounted its annual exhibition of student artwork in the Sarah Silberman Art Gallery. More than 150 students from a variety of art disciplines presented about their artwork.

- The College's Center for International and Multicultural Students held an information session in Globe Hall to talk about the many programs and resources available for learning English. Representatives from the American English Language Program, Workforce Development & Continuing Education, Montgomery Coalition for Adult English Literacy, Adult ESOL (high school programs), Literacy Council, and Montgomery Works provided valuable information to attendees.

- The Do Something Now Club conducted a one-day fundraiser and raised more than $125 to help build water wells in developing nations. The club also hosted a movie screening and discussion of the Invisible Children documentary, *Kony 2012*.

- Diabetes University, a free program cosponsored by the Marriott Hospitality Center and the Diabetes Action Research and Education Foundation, was held at the Rockville Campus for the 11th consecutive year. The program offers advice and information for those with diabetes, their families, caregivers, and educators. More than 120 attendees participated.

- In early spring, more than 120 students, faculty, and community members attended a dramatic reading of Rabindranath Tagore's short story, "A Wife's Letter," an event sponsored by the peace and justice studies community, the women's studies program, and the Paul Peck Humanities Institute.

- The Takoma Park/Silver Spring Department of Visual Arts and Design exhibited prints and paintings by artist Julio Valdez at the King Street Gallery. A native of the Dominican Republic, Valdez draws his inspiration from childhood memories of that island.

Select May Event

- The Paul Peck Institute for American Culture and Civic Engagement will hold its eighth anniversary commemorative Jefferson Café at Monticello, Thomas Jefferson's home in Charlottesville, Virginia, on Wednesday, May 23.