Section V: Institutional Effectiveness and Student Learning

The relationship between assessment of student learning and its influence on continuing improvements to our academic offerings is introduced in some depth in Section II.B.6, in response to the four internal recommendations centered on this topic. There we describe the Provost’s Commission on Learning Outcomes Assessment and its role in the development of an infrastructure for institutionalizing assessment practices across campus. Here we develop the discussion a bit further and describe additional assessment practices that influence student learning and success.

More detail on assessment of student learning is also provided in the Student Learning Outcomes Assessment (SLOAR) report, submitted annually to the Maryland Higher Education Commission. The first full cycle of assessment of undergraduate and graduate programs was completed in 2010. The 2011 SLOAR report, included as Appendix O, contains numerous specific examples of assessment results and changes in curriculum that resulted.

At the conclusion of the first four-year cycle, the review process for undergraduate programs was streamlined, with units providing a brief annual report of assessment results, plans for the coming year, and any changes implemented in the prior year. The first cycle of these reports was submitted in Fall 2011. Following review of these materials by the Undergraduate College Coordinators, refinement of the guidance provided to undergraduate programs continued. A set of materials that include a Best Practices document, a rubric to indicate expectations for learning outcomes assessment in the programs, and a template for providing an annual summary of activities, can be found at the Learning Outcomes Assessment Web site: http://www.umd.edu/LearningOutcomes.

The vast majority of graduate programs provided annual reports to the Commission during the first four-year cycle, and in the final year four-year plan, all programs provided overall assessments. As discussed in Section II.B.6, the graduate and undergraduate processes have been separated to allow for a more tailored process at the graduate level. Planning for a new process for graduate outcomes assessment began in Fall 2010, with an initial focus on doctoral programs. More details are in Section V.B below.

We note here that, while not discussed in detail in this report, there is a substantial and growing culture of assessment among the many student-focused initiatives that are not part of the formal educational curriculum. The Division of Student Affairs maintains a Web site for assessment and research on activities and initiatives within the Center for Campus Life and the University Counseling Center. Many reports can be found there (http://www.studentaffairs.umd.edu/research.asp). In addition, the Campus Assessment Working Group (http://www.umd.edu/CAWG) carries out numerous studies to gather and exchange information about the overall experiences of students across campus. These reports inform the educational process in important ways. Two recent reports, one on student finances and another on graduate students are included in Appendix K. Online course evaluations also contribute to analysis of faculty teaching and student learning, and aspects of the course evaluations are used in the appointment, promotion, and tenure process as well as in annual merit reviews. The details of the course evaluation process can be found at https://www.irpa.umd.edu/Assessment/crs_eval.shtml.

Four examples of how learning outcomes are becoming embedded in the academic and functional processes of the University are shared below.

V.A: Program Management and Review

Learning Outcomes, and a plan for their assessment, are required at both the course and program level for new courses and programs. Proposals for new programs, or significant changes in program curricula, follow a multi-step process of review. They are first either developed or given a thorough review by a
departmental Programs, Curricula, and Courses (PCC) committee, then equivalently by a college PCC committee before signoff by the college dean. Undergraduate programs proceed to a Senate PCC committee. Graduate programs undergo review by the Graduate PCC committee, and in some cases by the full Graduate Council, prior to this step. Review of curriculum changes is complete at this step. Review of a new program proposal proceeds to the University Senate for a vote of endorsement before approval by the provost and then president. Once campus approval is granted, new programs undergo further review by the USM Board of Regents and by the Maryland Higher Education Commission.

Individual courses are reviewed through the Vice President’s Advisory Committee (VPAC), a group largely consisting of assistant and associate deans who oversee the large operations of course delivery within their colleges and schools. Course proposals are submitted via an online form that requires course learning outcomes and a generic syllabus. Proposals are reviewed at the department, college and campus level with final course approval by the provost’s representative.

According to University policy, each academic unit is expected to undergo a thorough review of its faculty, organization, and academic programs on a seven-year cycle. The portion of the review related to academic programs feeds into the University System of Maryland process for academic program review. The policy for academic unit review is included in Appendix I, along with the policies for review of deans and of department chairs and directors (both of which are carried out on a five-year cycle). The process includes a self-study, an external review by experts in the discipline, and then an evaluation by the dean, culminating in a meeting with the provost and other senior administrators in which recommendations are provided. For the undergraduate programs, academic units are expected to reflect on their learning outcomes assessment process and how it has influenced any changes to the program since the last review. As the graduate outcomes assessment process continues to develop it will also be codified in the graduate program review criteria. The impact of a culture of learning outcomes assessment is becoming evident, as these examples illustrate.

- The Department of English completed its unit review in 2009. Analysis of assessments in the undergraduate program revealed a need for more structure in the major in the third year curriculum, with a particular focus on student writing. New 300-level courses in writing about literature, pedagogy workshops for faculty, and a section of Professional Writing aimed at students interested in graduate work in the humanities are under development.

- The Department of Materials Science and Engineering completed its unit review in 2011. Its Self Study details its extensive assessment process linked to its accreditation by ABET. It clearly articulates the program’s learning objectives, benchmarks for achieving them, and the process of review. One particular course, ENMA 471 (“Kinetics, Diffusion and Phase Transformations”), was significantly modified to incorporate more exposure to modern literature and coordinated student presentations to better develop students’ critical analysis and communication skills.

- The Department of Animal Science completed its Self Study in 2011. It identified a stronger need in its graduate program for students to learn to draw conclusions from their research, anticipate new directions in their field, and to better develop their presentation skills. The department is working on improvements to research seminar courses to give students more opportunity to practice these skills.

As the assessment process continues to mature, we anticipate that most of the unit review self studies will use the student learning outcomes materials and assessment results as means of refining their curricula.
V.B: Graduate Outcomes Assessment

The first full cycle of graduate program assessments revealed a need for a different style and focus of assessment for graduate-level instruction. At the doctoral level, programs tend to be smaller, take longer to complete, and the core of most programs is individualized research work outside of the classroom. Data in sufficient quantity to be usable for feedback for program improvement comes at a slower pace than for undergraduate programs. However, reports from the initial four-year cycle do indicate that programs have used these data to implement improvements.

In recognition of these facts, the graduate assessment process at UMCP is evolving in new and important directions, although it will continue to be closely coordinated with the undergraduate assessment process. A working group was formed in 2010, comprised of faculty and administrators from seven colleges and schools. They worked throughout the AY 2010-2011. Groups consisting of department chairs, graduate directors, and graduate faculty reviewed draft criteria and guidelines, and reviewed and reaffirmed the fundamental principles that should inform doctoral-level outcomes assessment. These include the recognition of significant disciplinary differences within doctoral education and the fact that successful doctoral education entails the student’s creating new knowledge, and not just learning existing knowledge.

A Graduate Outcomes Assessment Committee was created to manage the new process. A set of materials that includes general guidelines for assessment criteria, a timetable for reporting, guidance on the differences between benchmarking and assessment, as well as a set of broad recommendations from the Directors of Graduate Studies from each unit are available to academic units through the Graduate School’s Web site, [http://www.gradschool.umd.edu/DGOA.html](http://www.gradschool.umd.edu/DGOA.html). Recommendations for benchmarks throughout the graduate program are provided, as well as a set of “best-practice” examples from across campus, each of which uses a different process or set of rubrics and will serve as a diverse set of templates for the first new cycle of review. As of early 2012, academic units have submitted assessment plans to the Graduate Outcomes Assessment Committee and first reports are expected in Fall 2012. Because of the slower time scale for data collection, reports will be submitted bi-annually. The initial reports are likely to be based on data accumulated from both the old and the new process, until the first full cycle is complete.

A separate plan for assessment of masters programs, which is likely to be a hybrid between the doctoral and undergraduate assessment processes, will also be developed and this work is expected to begin in AY 2012-2013.

V.C: The Kuali Student Project

The campus is in the process of implementing a new curriculum management system as part of the larger Kuali Student project, replacing our current mainframe and standalone student information systems. This system will be modular, open source, and standards-based. (Additional information can be found at [http://www.kuali.org/ks](http://www.kuali.org/ks)). It is being developed, with support from the Andrew W. Mellon Foundation, by seven founding institutions, of which UMCP is one, and an additional five partner institutions. It will integrate into a single system the functionality of processes that are currently spread across several platforms and that are often challenged to communicate with each other. These include program proposal development and approval, course proposal submission and approval, scheduling, and student registration. Kuali Student is still in its development phase, and over the next several years modules will be made publicly available for any institution to adopt. The first module, Curriculum Management, was released publicly in March 2011 and implemented at UMCP as “Testudo CM” in April 2012.
As a founding institution, UMCP has been involved in design and development since the inception of this project. UMCP has been instrumental in designing and promoting functionality to support learning outcomes assessment. By dedicating our own development resources to creating this component, we have succeeded in having learning outcomes assessment functionality incorporated as an integral part of the curriculum management module. Identification of learning outcomes at the course and the program level are supported, either through category labels or as free text. The category labels are organized by type and include skills, accreditation elements, and subject-specific elements. Users can search for learning outcomes by keyword or category and copy them into a new course or program; this allows programs to re-use standard learning objectives when appropriate.

The combination of fully developed learning outcomes and category tags will facilitate searches of the curriculum inventory. Students will be able to search for courses based on learning outcomes and therefore could, in principle, select courses based on skills that they wish to acquire. Department heads and program managers can use the system to create a curriculum map, easily identifying the skills, subjects, and accreditation areas most frequently addressed in the courses as students make their way through to program completion. Representatives from partnering institutions have also embraced this functionality, and acknowledged that having the ability to develop and codify a collected set of learning outcomes will be a significant benefit.

V.D: General Education

As outlined in Section II.B.3.d, the University is currently in the process of implementing a new General Education program. Details of the plan are in Appendix F and at [http://www.gened.umd.edu](http://www.gened.umd.edu). The development of General Education is an example of how the University is practicing an outcomes approach to program design. All components of the new General Education program are defined by sets of learning objectives. As indicated in Section II.B.3.d, faculty committees defined the learning outcomes for each of the course categories, considering both field specific outcomes and expectations regarding the skills and knowledge that every student who earns a University of Maryland degree should acquire, regardless of their chosen major. Assessments from our existing CORE general education program and review of the pilot programs informed the work of the committees.

Every course that will be used to satisfy General Education requirements must be submitted for review regarding its alignment with the outcomes of the relevant area. This applies to both new courses and existing CORE general education courses. The first phase of this review process is nearly complete and it will continue as new courses are proposed. A custom Web-based course submission and review package was developed to support the review process. Those who submit courses are expected to “demonstrate how the course will (1) give students the ability to meet the learning objective and (2) determine that students were successful in meeting the learning objective.” This course application approach guides faculty to consider the design of their course according to the learning outcomes approach, and, because of the large number of faculty involved in the process, has served to support the campus commitment to learning outcomes directed student learning. The review process has already resulted in modifications to courses, even prior to delivery, to align them more closely with the new learning outcomes.

The ultimate success of the new General Education program will depend strongly on our assessment of its ability to meet the intended goals. While formal assessment of the learning outcomes for General Education will require the program to be well underway and is thus a few years off, the various faculty learning communities and review boards support the faculty who are at the forefront of its delivery and provide opportunities for informal assessment to proceed. In FY 2012, the Commission on Learning Outcomes Assessment will focus on assessment methods for the new categories of General Education:
Analytic Reasoning, Oral Communication, Scholarship in Practice, and the I-Series Courses, and for the two new diversity categories, Understanding Plural Societies and Cultural Competence. The General Education faculty boards will define the rubrics that will accompany the learning outcomes to be assessed in each category, and the Provost's Commission on Learning Outcomes will provide support by advising on the details, including the selection of the specific courses to be used in the assessment process.

The significant number of faculty communities now engaged in peer groups, review boards, and committees directed towards outcomes-directed student learning provides a platform for sustaining and improving the effectiveness of assessment in our instructional process, as well as opportunities for faculty professional development.