

University of Maryland Baltimore County
Student Learning Outcomes Assessment Report (SLOAR) 2011
Submitted to the Maryland Higher Education Commission
June 30, 2011

Instructions: Each institution should use this template to report on its key student learning assessment activities. Part One should provide a summary of all institutional assessment activities in which your institution is currently engaged. Part Two should describe key student learning outcomes assessment activities for each of the four major competency areas. Part Two also provides space in which to highlight up to three additional institution-specific competency areas. Part Three should summarize modifications and adjustments to your institutional assessment activities since 2007. The template can be expanded, if necessary. The body of this report should not exceed 20 pages. Up to 5 pages of appendices may also be included.

Part One: Summary of Assessment Activities

Provide a summary of all institutional assessment activities and guidelines used. Part I should highlight your institution's activities that align with Middle States standard 7, 12 and 14. Include the organizational structure and institutional leadership for assessment activities. Limit to two pages.

UMBC engages in the assessment and evaluation of its academic programs and administrative activities on a continuous basis. In 2008, our campus developed an Assessment Plan for improving institutional effectiveness through the shared governance process and convened the UMBC Assessment Committee, composed of faculty and staff representatives of Academic Affairs and other administrative units, to guide the campus in its initial stage of implementation. Building on UMBC's history of assessment, the plan established a better documented approach to assessment than existed at the time of the *UMBC 2007 SLOAR*. UMBC's Assessment Plan consists of plans from each college and school, the general education assessment plan, and the assessments plans of all administrative divisions and academic support units. In addition, all academic departments created program-level plans for student learning outcomes assessment, which were approved by the dean prior to implementation on a biennial schedule. UMBC now has a comprehensive process to ensure that our administrative units and academic programs are assessed on a regular basis and that the results of these assessments are used to ensure continuous improvement. The results of these efforts are decisions related to program content, program delivery, administrative practice, and/or allocation of resources to ensure improved institutional effectiveness. Assessment has been institutionalized as a component of regularly scheduled activities that occur annually and periodic academic program reviews that are conducted on a seven-year cycle with a subsequent internal third-year progress review.

Overall responsibility for implementation of the *UMBC Assessment Plan* rests with the Provost; the Vice Presidents assume responsibility for assessment within their divisions, and the Deans oversee implementation of assessment plans within their academic units. To support comprehensive assessment, the UMBC Faculty Development Center provides departments and faculty with resources and guidance for the development of effective program-level and general education course assessment. In addition, the Office of the Provost has sponsored a series of workshops guided by external and

internal experts to support the development and implementation of effective assessment. Workshops held in 2008 helped department chairs and faculty members understand the process and develop program-level assessment plans. Additional workshops were held in 2010 and 2011 to guide administrators, departments and faculty in the use of direct evidence in course-level assessment of general education functional competencies. The Division of Student Affairs also has sponsored a series of assessment workshops and hosts an assessment and research committee.

The UMBC General Education Committee (GEC) is responsible for monitoring general education assessments and results. In collaboration with the Council of Deans (COD) and the Assessment Committee, the GEC reviews assessment data and provides reports regarding general education and UMBC's Assessment Plan to the Provost and the COD. The Provost and the COD disseminate the Committee's analysis and recommendations to the academic departments and the campus community for discussion and policy-making purposes. The section below outlines a streamlined process that was adopted at the recommendation of the GEC to efficiently and effectively integrate general education student learning assessment with the institutional processes that are already underway.

General Education and Assessment: A Streamlined Process

(Approved by the Provost April 2009; Amended by GEC March 2010)

Initial and Continuing Course Review for General Education Designation (UMBC Assessment Plan, II.F)

- Initial course review for general education designation is conducted by the GEC. The review focuses on: 1) accessibility to a broad undergraduate student community; 2) whether the course meets criteria for the proposed distribution area; and 3) whether the course addresses a minimum of one of the five functional competencies.
- Continuing review of general education courses is conducted by the GEC in accordance with the seven year Academic Program Review (APR) cycle. The department will resubmit GEP courses which have not been reviewed since the last APR.

Review of Course Level Learning Outcomes (Assessment Plan II.G)

- As part of the biennial submission of department assessment reports, departments will provide a summary of learning outcomes for one general education course.
- Course selection will be made by the department to ensure that, over time, a sample of courses addressing the various functional competencies is represented
- Information submitted will include: 1) summary of how the course addresses the distribution area(s) designated; 2) summary of how the course addresses and measures each of the functional competencies designated; 3) examples of learning activities and assessment criteria for measuring designated functional competencies; 4) summary of assessments results on student learning outcomes regarding designated functional competencies; and 5) changes made or proposed to improve student learning.

Review of Program Level Learning Outcomes

- As part of the seven year APR cycle, departments will provide a summary of assessment of an identified sample of general education courses.
- The report will summarize information on: 1) assessments and outcomes that are consistent with the review of course level learning outcomes; 2) strengths and weaknesses of the courses; and 3) changes made or proposed at the course and/or program levels to improve teaching and enhance student competencies.

Part Two: Four Major Competency Areas

For each of the four competency areas listed below, discuss the institution's current activities. Space is provided for three additional competencies, if applicable. Part Two, including additional competencies, should not exceed 12 pages.

I. Written and Oral Communication

A. Institution's definition of competency

- Understand and apply both the verbal and nonverbal aspects of communication, by utilizing fundamental rhetorical strategies and conventions, such as purpose, audience, genre, tone, format, and structure.
- Understand writing as a process that involves multiple drafts, incorporating feedback, revising, editing, and proofreading.
- Identify, select, and evaluate appropriate sources, including print and electronic texts, cultural artifacts, or artistic creations.
- Acknowledge and document sources used to support an argument or presentation.
- Develop a foundation for cross-cultural communication.

B. Level(s) at which the competency is assessed (e.g., department, program, course)

The general education functional competency is assessed at the course level. Faculty teaching courses designated as fulfilling the general education requirement gather both direct and indirect data on student learning outcomes related to that functional competency and appropriate to the discipline. Departments report these data biennially for a sample of courses and as part of the academic program review cycle every seven years. The General Education Committee gathers these results and reviews them for each department.

Department and program goals that mirror functional competencies are assessed in capstone experiences, such as specific courses, internships, or research courses and are reported in annual or biennial assessment reports (depending on the college) and academic program reviews. These assessment reports are reviewed by the Dean of the respective college and by the university Assessment Committee. Department academic program reports are reviewed by an external team during the review process and by university senior administration.

For example, the American Studies Department submitted a biennial assessment report in 2010-11 and included assessment results for their course AMST 382 that meets the general education requirement and addresses the functional competencies of oral and written communication and critical analysis and reasoning. The department submitted this report to the Dean of the College of Arts, Humanities, and Social Sciences and to the university-wide General Education Committee for review and feedback.

C. Process(es) used to evaluate competency (i.e., methods, measures, instruments)

The functional competency of oral and written communication is usually directly assessed by faculty evaluating samples of students' written work or their oral presentations using a rubric or scoring the work against a set of criteria based on the functional competency. The department as a whole or a designated group of faculty then reviews data on average rubric scores and the percentage of students meeting some predetermined level of mastery of the competency as represented in the rubric scores. If the student outcomes fall outside of a department expectation, then the department recommends various changes in curriculum or pedagogy to address the deficiency.

Two indirect measures of assessment typically gathered by departments include student surveys of their own perceptions of how well they meet the competency and overall student grades on work that requires students to demonstrate the competency.

D. Describe the results of the assessment work related to this competency.

Detail results of assessment efforts, and where possible, provide data which demonstrate the assessment outcomes.

All courses that address the functional competency of oral and written communication assess students' learning at least indirectly through student surveys of their own perceptions of how well they meet the competency and overall student grades on work that requires students to demonstrate the competency.

In this section we include specific examples of department efforts to assess this functional competency, both in the general education courses departments offer that are designed to address this functional competency, and in some department courses for the major program that have learning outcomes that mirror this functional competency.

Examples from department general education courses addressing this functional competency:

AMST: Functional Competencies Addressed: I. Oral and written communication and III. Critical and analytical reasoning. The instructor of AMST 382 used rubrics to evaluate written communication skills and critical analysis and reasoning skills in students' final papers, a policy analysis. The instructor found students performed well on the rubric in general with an average score on the criteria of 3.7 and 3.9 out of 5 respectively. But the instructor also felt that students needed to improve in their ability to select and evaluate primary and secondary sources and provide adequate supporting evidence for

their proposed policies. Ideas for addressing these needs include devoting more class time to research practices and policy analysis process.

DANC: Functional Competency Addressed: I. Oral and written communication. Faculty teaching DANC 201, a general education course, added a discussion board and student oral presentations to the course to address this functional competency. Students were evaluated on both quality and quantity of discussion board postings. Oral presentations were also graded on content, use of sources, and quality of research, in addition to presentation and demonstration of a grasp of the content. The instructor found that these strategies increased student engagement in the course, but the quality of the students' discussion board postings was highly variable. Changes planned include making the qualities of a good post clearer to students at the beginning of the course.

HIST: Functional Competencies Addressed: I. Oral and written communication and III. Critical and analytical reasoning. The instructor of HIST 345, a general education course, used a rubric to evaluate students' papers both for the students' ability to communicate effectively in writing in terms of constructing arguments (functional competency I) and to identify scholarly arguments and analyze primary sources (functional competency III). Her results showed that students were able to construct an argument and draw conclusions, but they were not able to analyze written arguments to her satisfaction. She proposed creating more effective assignments that trained students to question sources, not just read them. Her plan is that learning to question will help students learn to analyze.

Examples from department major courses with learning outcomes that mirror this functional competency:

ENGL: Learning Outcome: Students will be able to engage in research using appropriate methodology. The English department analyzed samples of student papers in their six senior seminars using a rubric based on the program learning objectives. The data they gathered revealed that their students' skills in conceiving, conducting and writing research were weak for 20-30% of their graduates. Indirectly, their senior exit survey also confirmed this finding. They are instituting a requirement for two junior level courses that develop students' research skills and will reassess their students' progress in the next two-year cycle after making this change.

GWST: Learning Outcome: Students will develop skills in information literacy, critical thinking, effective research, and effective writing. Instructors in the capstone course, GWST 495, evaluated student work in terms of how well students were prepared for and exhibited effective research practices. Instructors also interviewed students about their perceptions of their abilities to carry out research projects. In their written report instructors noted that students needed more support in engaging scholarship effectively, framing research questions and drafting research findings. Assignments in prerequisite courses, GWST 100 and 300 were subsequently redesigned to focus more on developing students' research skills. The instructors in the capstone course conduct evaluations of student work yearly to monitor the effects of these changes.

MLLI: Learning Outcome: Students will expand their written and oral communication skills in the language. All of the language programs offered through MLLI employ

extensive rubrics to assess students' written and oral communication skills in the language. They also survey students' perceptions of their achievement of these skills. The Spanish program, as an example, analyzed their students' oral and written communication skills using detailed rubrics and determined that students were significantly more proficient in oral expression than in writing. They propose curricular changes to SPA 300 and 400 to emphasize writing skills in the language more specifically. They also are considering a Spanish Writing Center for student support modeled after the new pilot of the German Writing Center.

II. Scientific and Quantitative Reasoning

A. Institution's definition of competency

- Understand and use mathematical and scientific methods of inquiry, reasoning, processes, and strategies to investigate and solve problems.
- Organize, interpret, draw inferences, and make predictions about natural or behavioral phenomena using mathematical and scientific models and theories.
- Recognize the ethical and social implications of scientific inquiry and technological change, and distinguish science from non-science and pseudoscience.
- Recognize that mathematical, statistical, and scientific evidence requires evaluation.

B. Indicate level(s) at which the competency is assessed (e.g., institutional, program, course)

The general education functional competency is assessed at the course level. Faculty teaching courses designated as fulfilling the general education requirement gather both direct and indirect data on student learning outcomes related to that functional competency and appropriate to the discipline. Departments report these data biennially for a sample of courses and as part of the academic program review cycle every seven years. The General Education Committee gathers these results and reviews them for each department.

Department and program goals that mirror functional competencies are assessed in capstone experiences, such as specific courses, internships, or research courses and are reported in annual or biennial assessment reports (depending on the college) and academic program reviews. These assessment reports are reviewed by the Dean of the respective college and by the university Assessment Committee. Department academic program reports are reviewed by an external team during the review process and by university senior administration.

As one example, the Chemistry Department submitted a periodic assessment plan in 2010 that included assessment of CHEM 101 and 102, general education courses that address the scientific and quantitative reasoning functional competency. The department submitted this report to the Dean of the College of Natural and Mathematical Sciences for review.

C. Process(es) used to evaluate competency (i.e., methods, measures, instruments)

The functional competency scientific and quantitative reasoning is usually directly assessed using student performance on tests, such as standardized national exams (e.g. course-specific American Chemical Society exams), or specific questions on tests or questions answered during classes using classroom response systems (“clickers”) that address the functional competency. In laboratory classes faculty may assess student work on laboratory reports typically scored with a rubric. The department as a whole or a designated group of faculty then reviews data on student performance. They compile information on the percentage of students meeting some predetermined level of mastery of the competency as represented in the test scores, scores on individual questions, or rubric scores on laboratory reports. If the student outcomes fall outside of a department expectation, then the department recommends various changes in curriculum or pedagogy to address the deficiency.

Two indirect measures of assessment typically gathered by departments include student surveys of their own perceptions of how well they meet the competency and overall student grades on work that requires students to demonstrate the competency.

D. Describe the results of the assessment work related to this competency.
Detail results of assessment efforts, and where possible, provide data which demonstrate the assessment outcomes.

All courses that address the functional competency of scientific and quantitative reasoning assess students’ learning at least indirectly through student surveys of their own perceptions of how well they meet the competency and overall student grades on work that requires students to demonstrate the competency.

In this section we include specific examples of department efforts to assess this functional competency, both in the general education courses departments offer that are designed to address this functional competency, and in some department courses for the major program that have learning outcomes that mirror this functional competency.

Examples from department general education courses addressing this functional competency:

The Biology Department courses that address the general education functional competency of scientific and quantitative reasoning include 100 and 100 laboratory (Concepts of Biology), 301 (Ecology and Evolutionary Biology), 302 and 302 laboratory (Genetics). Faculty teaching the courses ask questions that are related to the functional competency on exams and/or during class via clickers. In addition, the laboratory portion is evaluated by review of student laboratory reports. The Department Assessment Committee reviewed the reports from the course instructors and concluded that numerical scores provided for each evaluation criterion for each course met the expectations for student learning of the department.

The Chemistry Department administers the American Chemistry Society’s exam for general chemistry at the end of the two-semester sequence of CHEM 101 and 102,

courses that meet the general education requirement and address the functional competency of scientific and quantitative reasoning. The class averages on these exams are above the national average which the department feels meets their expectation of student success.

Examples from department major courses with learning outcomes that mirror this functional competency:

PHYS: *Learning Outcome: Students will be able to formulate problems in the language of mathematics and to use both mathematical and computational skills to solve physical problems.* The department assessed this outcome for the BS program in PHYS 424, quantum mechanics, by examining the results on specific exam questions pertaining to that outcome, as well as homework and in-class observation. Based on three semesters of student learning data, the department recommended emphasizing and monitoring this skill starting earlier in their curriculum and is adding assessment data from PHYS 220, Computational Physics, to their overall plan.

III. Critical Analysis and Reasoning

A. Institution's definition of competency

- Identify and formulate questions and problems and evaluate various methods of reasoning and verification.
- Identify and evaluate stated and unstated assumptions, supporting evidence and data, alternative points of view, and assess implications and consequences of particular courses of action.
- Construct cogent arguments, provide supporting evidence, articulate reasoned judgments, and draw appropriate conclusions.
- Apply fundamental critical thinking skills to the analysis and interpretation of a variety of subjects, including ideas and issues, cultural artifacts, or aesthetic works.

B. Indicate level(s) at which the competency is assessed (e.g., institutional, program, course)

The general education functional competency is assessed at the course level. Faculty teaching courses designated as fulfilling the general education requirement gather both direct and indirect data on student learning outcomes related to that functional competency and appropriate to the discipline. Departments report these data biennially for a sample of courses and as part of the academic program review cycle every seven years. The General Education Committee gathers these results and reviews them for each department.

Department and program goals that mirror functional competencies are assessed in capstone experiences, such as specific courses, internships, or research courses and are reported in annual or biennial assessment reports (depending on the college) and academic program reviews. These assessment reports are reviewed by the Dean of the respective college and by the university Assessment Committee. Department academic

program reports are reviewed by an external team during the review process and by university senior administration.

For example, the Anthropology Department submitted a biennial assessment report in 2010-11 and included assessment results for their course ANTH 211 that meets the general education requirement and addresses the functional competencies of oral and written communication, scientific and quantitative reasoning, critical analysis and reasoning, and technological competency/information literacy. The department submitted this report to the Dean of the College of Arts, Humanities, and Social Sciences and to the university-wide General Education Committee for review and feedback.

C. Process(es) used to evaluate competency (i.e., methods, measures, instruments)

The functional competency of critical analysis and reasoning is usually directly assessed by: faculty evaluating samples of students' written work using a rubric or scoring the work against a set of criteria based on the functional competency, and/or faculty using student performance on specific tests, such as national exams, or questions on course exams, or questions answered during classes using classroom response systems ("clickers"). The department as a whole or a designated group of faculty then review data on average rubric scores or exam performance and the percentage of students meeting some predetermined level of mastery of the competency as demonstrated by these scores. If the student outcomes fall outside of a department expectation, then the department recommends various changes in curriculum or pedagogy to address the deficiency.

Two indirect measures of assessment typically gathered by departments include student surveys of their own perceptions of how well they meet the competency and overall student grades on work that requires students to demonstrate the competency.

D. Describe the results of the assessment work related to this competency.

Detail results of assessment efforts, and where possible, provide data which demonstrate the assessment outcomes.

All courses that address the functional competency of critical analysis and reasoning assess students' learning at least indirectly through student surveys of their own perceptions of how well they meet the competency and overall student grades on work that requires students to demonstrate the competency.

In this section we include specific examples of department efforts to assess this functional competency, both in the general education courses departments offer that are designed to address this functional competency, and in some department courses for the major program that have learning outcomes that mirror this functional competency.

ANTH: Functional Competencies Addressed: Functional Competencies Addressed: I. Oral and written communication. II. Scientific and quantitative reasoning, III. Critical and analytical reasoning, and IV. Information literacy. Instructors in the ANTH 211 course address the multiple functional competencies in a variety of assignments. One assignment that requires intellectual work that encompasses all the functional

competencies is that of a comparison paper near the end of one section. As the department describes it, the grading rubric used to assess the assignment “evaluates students’ abilities to develop a strong comparison (competencies 2, 3, and 4) and a clear line of argument (competency 3) that is presented in a well-structured, well-written essay (competency 1).” An observation assignment requires students to analyze a topic using the systematic observation skills of the discipline in connection with class readings and discussions in theory. The grading rubric as the department notes, “evaluates students’ adherence to the research method and their use of observational field notes as evidence (competency 2), the presentation of a claim and a grounded argument (competency 3) that adheres to formal science writing styles (competency 1).”

DANC: Functional Competencies Addressed: III. Critical and analytical reasoning. The instructor of DANC 202, a GEP course, evaluated select essay exam questions for students’ ability to analyze the issue involved. Her results suggested that students were not taking a deep enough approach to their thinking on issues. She worked with the Director of the Faculty Development Center both to reframe the essay questions to evoke a deeper response from students and to think about activities to model this kind of analysis during class.

ECON: Functional Competencies Addressed: III. Critical and analytical reasoning. The department administered the Test of Understanding in College Economics (TUCE) exam to students in the ECON 101 and 102 courses, in some cases pre-test as well as post-test. The developers of the TUCE exam provide a means to analyze test question responses based on cognitive emphasis. One of these emphases is that of “explicit application of basic terms, concepts, and principles in order to solve problems or recognize incorrect, improbable, or unsupportable applications of economic theory.” Student results on questions classified for this cognitive emphasis allow a measure of students’ demonstration of their critical and analytical reasoning. The instructors found that students’ performance on questions of this type was as good as, if not significantly better than, the performance of students at a series of comparable institutions.

IV. Technological Competency

A. Institution’s definition of competency

- Use information technology as one tool for solving problems, identifying and evaluating information sources, and analyzing reports and presentations.
- Use a variety of online or technology-assisted means to present work, such as web pages, email, online forums, word processing, and presentation and spreadsheet software.
- Understand the essentials of technology, including hardware and software, networks, and systems.

UMBC currently separates the functional competency of information literacy from technological competency, but we combine these in this report as per MHEC practice. The functional competency of information literacy at UMBC is described as the ability to:

- Identify and access a variety of documentary sources of information effectively and

efficiently via traditional and electronic-based retrieval systems.

- Evaluate information sources and content in terms of accuracy, authority, bias, and relevance.
- Use information effectively to support a particular argument or to produce a result.

- Respect and observe appropriate laws and institutional policies regarding the legal and ethical retrieval and use of information.

B. Indicate level(s) at which the competency is assessed (e.g., institutional, program, course)

The general education functional competency is assessed at the course level. Faculty teaching courses designated as fulfilling the general education requirement gather both direct and indirect data on student learning outcomes related to that functional competency and appropriate to the discipline. Departments report these data biennially for a sample of courses and as part of the academic program review cycle every seven years. The General Education Committee gathers these results and reviews them for each department.

Department and program goals that mirror functional competencies are assessed in capstone experiences, such as specific courses, internships, or research courses, and are reported in annual or biennial assessment reports (depending on the college) and academic program reviews. These assessment reports are reviewed by the Dean of the respective college and by the university Assessment Committee. Department academic program reports are reviewed by an external team during the review process and by university senior administration.

C. Process(es) used to evaluate competency (i.e., methods, measures, instruments)

Technological competency may be directly assessed through performance on specific exam questions and presentation of projects that require knowledge of and use of various technological skills and tools when these are scored with a rubric.

The functional competency of information literacy is usually directly assessed by: faculty evaluating samples of students' written work using a rubric or scoring the work against a set of criteria based on the functional competency, and/or faculty using student performance on specific tests or questions on course exams. The department as a whole or a designated group of faculty then review data on average rubric scores or exam performance and the percentage of students meeting some predetermined level of mastery of the competency as demonstrated by these scores. If the student outcomes fall outside of a department expectation, then the department recommends various changes in curriculum or pedagogy to address the deficiency.

Two indirect measures of assessment typically gathered by departments include student surveys of their own perceptions of how well they meet the competency and overall student grades on work that requires students to demonstrate the competency.

D. Describe the results of the assessment work related to this competency.

Detail results of assessment efforts, and where possible, provide data which demonstrate the assessment outcomes.

All courses that address the functional competency of technological literacy and information literacy assess students' learning at least indirectly through student surveys of their own perceptions of how well they meet the competency and overall student grades on work that requires students to demonstrate the competency.

In this section we include specific examples of department efforts to assess this functional competency, both in the general education courses departments offer that are designed to address this functional competency, and in some department courses for the major program that have learning outcomes that mirror this functional competency.

Examples from department general education courses addressing this functional competency:

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Examples from department major courses that mirror this functional competency:

HIST: Learning Outcome: Students will be able to demonstrate basic research techniques used by historians. Faculty evaluated a sample of papers from the senior capstone courses for demonstration of the student learning outcomes. They also compared some student work from HIST 201 to determine if students showed greater development of these skills as they progressed to the senior course. The department determined that students showed acceptable levels of achievement of the program goals in the capstone courses. They did determine, however, that certain skills needed strengthening, such as the ability to use proper citation of sources. The department decided that students did not have enough additional practice in research skills between the 200-level course and the capstone course. They held a department seminar to discuss pedagogical ways to build a better bridge between the two courses in their other courses. They also discussed curricular ways to address this issue by possibly changing some 400-level courses into 300-level ones to help better sequence this skill development.

SOCY: Learning Outcome: Students will be able to understand and apply social science research methods to collect and analyze data. In SOCY 301 students learn

about different data collection and analysis methods, including statistical software such as SPSS. Students demonstrate their achievement of this learning outcome related to the functional competency by their performance on a set of questions addressing this outcome administered at the beginning and again at the end of the course. The average score on the post-test was significantly higher than that on the pre-test. The department considered this increase sufficient in meeting its expectations for this learning outcome.

Part Three: Evolution of Assessment Activities

Provide concrete examples of how your institution's assessment activities have impacted and/or improved teaching and learning. Also, describe how the assessment of the major competency areas has been integrated into the structure of the institution.

Assessment has become a constant and dynamic feature of our institutional culture. We have made great progress on program level assessment at UMBC and have gained significant momentum for general education assessment and the use of outcomes to improve student learning. Our approach has always engaged faculty "in the trenches," as well as deans and the senior administration in this process and, although not always seamless, it has served us well. A review of the assessment summary reports provided to date by the College of Arts, Humanities and Social Sciences (CAHSS), the College of Natural and Mathematical Sciences (CNMS), and the College of Engineering and Information Technology (COEIT) reveal that departments recognize the value of assessment to determine how students are performing in their programs or courses and of using that data to improve student success. UMBC will continue to increase the use of direct evidence in the assessment of functional competency student learning outcomes. First, the Faculty Development Center has continued to make the processes of assessment as direct and transparent as possible by working closely with departments and faculty to efficiently and appropriately incorporate direct measures into their work. Second, UMBC has continued to strengthen a "culture of assessment" through promotion of a "learning-centered" model of teaching as inquiry. In that regard, the University has begun a new Teacher-Scholar Program this spring to cultivate a mindset of learning-centered inquiry within a supportive faculty cohort. Best practices from this Program will be disseminated to deans, chairs and faculty by the Faculty Development Center.

Evolution of General Education Assessment since the 2007 SLOAR

2007

- UMBC creates a new set of general education requirements.
- UMBC adopts five functional competencies identified by MSCHE and MHEC as general education student learning goals.

2007 - 2008

- New general education program (GEP) goes into effect.

- Systematic assessment of key general education with large enrollments and selected First Year Seminars (FYS) assessment initiated with reliance on indirect evidence.
- UMBC Assessment Plan adopted and GEC charged with oversight of general education Student Learning Outcomes (SLO) assessment.

2008 - 2009

- Program-level department assessment plans reviewed, revised and approved.
- First round of biennial *program-level* assessment initiated.
- GEC assesses campus "readiness" to move forward with distinct general education course-level assessment; simplifies reviews of assessment outcomes and proposes *General Education and Assessment: A Streamlined Process*.
- UMBC Assessment Committee revises Assessment Plan to incorporate the GEC proposal.
- UMBC Faculty Senate approves revised Assessment Plan.

2009 - 2010

- Second round of biennial program-level assessment initiated.
- General education assessment summaries included in APR self-study reports.
- GEC review of biennial reports and APR self-study reports determines that substantial progress had been made. Many reports reflect the adoption of both direct and indirect assessments as well as the use of data for improvement; some provided clear alignment of instruction, assessment and the general education functional competencies. However, the GEC identified continuing challenges to complete implementation of effective general education assessment of student learning outcomes.
- The GEC report recommends several actions: 1) Guidance and reference materials for effective general education assessment should be provided to departments and individual faculty through the UMBC Faculty Development Center; 2) Principles and mechanisms for assessment of general education courses should be consistent with those already identified by departments for program-level assessment; 3) To facilitate consistency and coherence of reporting, specific course review guidelines should be included in the APR self-study instructions and the biennial report template.
- UMBC Assessment Committee endorses, and the Faculty Senate approves, the GEC recommendations and amends *General Education Assessment: A Streamlined Process* to include specific guidelines (i.e., "Information submitted will include:") for course-level and program-level general education reviews.

2010 - 2011

- Series of General Education Functional Competencies Assessment Workshops conducted by internal and external experts for administrators, chairs, and faculty. Includes targeted workshops for departments preparing for Academic Program Review (APR).
- Second series of workshops focuses on assessment of GEP Writing Intensive courses.

- Under the leadership of a new director with assessment expertise, Dr. Linda Hodges, the Faculty Development Center now serves as primary resource to department and individual faculty for the development of effective student learning assessment.
- Preliminary review of biennial general education course assessments submitted June 1, 2011 indicate continued increases in use of direct evidence to assess student learning outcomes to functional competencies and outcomes to improve student learning.

Progress in Departments Using Assessment to Drive Changes to Practice

Colleges' Dept Reports AY 2009 and 2010	% Proposing Changes Based on Assessment	% Using Direct Measures of Assessment	% Proposing Changes from Direct Measures
CAHSS depts (23)	78%	52%	39%
CNMS depts (4)	25%	100%	25%
COEIT depts (5)	40%	60%	20%

Examples of Using Assessment of Learning Outcome to Improve Teaching and Learning

PART II of this report provides specific examples of using the results of course-level assessment of functional competencies to improve teaching and learning. Often in these examples assessment results allow faculty to recognize the need for pedagogical or curricular change to support students' intellectual development. For example, faculty in several departments, including American Studies, English, and History, discovered through their assessment of student writing that students needed more support in the development of research skills and use of proper disciplinary conventions for citation in research arguments. In the case of American Studies the faculty plans to strengthen classroom activities to support this skill development in students in the course being assessed. The History Department also plans to change pedagogical practice, but they recognize that this skill development needs to start sooner in the curriculum. Thus, they added more emphasis on this kind of work in certain key courses earlier in their sequence of courses. The English Department came to a similar conclusion. The Physics Department likewise in assessing their students' quantitative skills in a senior capstone course realized that students were not receiving enough practice in this kind of work in the 200-level courses. Thus, the assessment of specific courses affects the entire department curriculum.

Some departments' assessment efforts point out the need for more student support. The Spanish faculty, for example, recognized that students needed more help in writing

in a new language than faculty could provide in class. Thus, they plan a Spanish Writing Center modeled after the German Writing Center to supplement classroom activities.

In some cases, the results of assessment confirm that course activities are allowing students to meet the department expectations for their learning. This finding may help keep departments focused on those practices that are more effective in promoting student learning and prevent curricular drift or random choices in pedagogical practice. When assessment results do not meet department standards, then faculty may begin to recognize the challenges students face in developing the habits of mind faculty value. These challenges provide meaningful opportunities for faculty and curricular development.