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## STRATEGY GROUP MID-YEAR REPORT

STRATEGY GROUP: Innovative Curriculum and Pedagogy

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**PRIMARY GOAL:** Develop innovative curricula and academic programs that support and enhance the

success of our undergraduate and graduate students and prepare them for meaningful careers, lifelong learning, and engaged citizenship; and thereby maintain and enhance our

position as a national leader in undergraduate and graduate education.

**SUPPORTING GOALS:** 1) In view of the range of current curricular and pedagogical practices, to develop

strategies that are in keeping with UMBC mission and values that will enable the

University to enhance student learning in the future. 2) To develop a fuller understanding of what opportunities and challenges demographic trends might hold for the future of UMBC's student base, and develop strategies to position the University's academic programs (including all degree and innovative non-degree credentialing options) to respond to this change effectively. 3) To develop the appropriate measures of student success and assessment strategies to support continuous improvement and development in innovative programs, partnerships, curricula, classroom practices and all course modes.

**RESEARCH QUESTIONS:** How does the current profile of our faculty, students, and mix of programs compare with

our aspirational peers, and how does this profile align with the University's mission? What approaches used by peers might UMBC adopt to strike an appropriate balance between

in- and out-of-state students, the distribution of students among programs, and

demographic characteristics such as gender and socio-economic status to better align our

student profile with the University's mission in the future?

What are the lessons learned from studies of retention and graduation rates at UMBC and elsewhere, and how can this information guide us to increase student success by developing innovative programs, curricula, classroom practices, and instructional modes at the undergraduate and graduate levels?

What measures of success for students have we used in addition to retention and graduation rates? What should we use as the critical measures of academic success? How can we use assessment of these critical measures to support continuous improvement of student learning outcomes at UMBC?

What are the current best practices in innovative curriculum and pedagogy at our peer institutions and nationally? How have UMBC programs leveraged resources, partnerships, technology, and innovations to enhance student learning? What additions would be needed to significantly improve student learning and how should they be prioritized? What specific opportunities and challenges related to classrooms, infrastructure, technology support, and faculty development exist to support curricular and pedagogical innovations and partnerships across the curriculum?

Drawing on national best practices, how can UMBC balance supporting existing academic programs and the development of new programs? What metrics can we use to track whether we have achieved the appropriate balance as well as the best mix of academic fields and degree levels/options?

Drawing on national best practices, what is the appropriate balance between supporting the instructional duties of the faculty in: 1) areas of existing strength, 2) areas that need strengthening, and 3) areas of academic innovation? How can new support and the reallocation/redesign of existing support be used to enhance classroom infrastructure, technology, and faculty development in all three areas? What best practices in faculty reward and recognition, including P&T and prestigious awards, can UMBC utilize to support high quality teaching and encourage curricular and pedagogical innovation?

**RESEARCH PROCESS:** 

The initial Work Group meetings in the late spring of 2014 focused on establishing a strong "esprit de corps." Several steps were also taken through these meetings to engage the research questions. We reviewed the general terrain of curriculum at UMBC and familiarized ourselves with the USM 2020 goals. The group also sorted its research tasks, to identify which questions we would need to address first. Essentially, we began with fact finding in the fall 2014 semester and will engage in external, best-practices research, and the more evaluative tasks in the spring 2015 semester. This approach will enable us to develop strongly data-driven recommendations. We also adopted a team-based approach, dividing into sub-committees that would each take responsibility for in-depth research in specific areas, the results of which are shared with the full group. In this way members would be able to develop knowledge and expertise in a number of areas. Initially we organized four sub-committees dealing with 1) UMBC's student and program profile, 2) the social infrastructure supporting innovative teaching, 3) the physical infrastructure supporting teaching, and 4) student success metrics. During the fall, subcommittees 1 and 4 combined and 2 and 3 combined and will work together as recommendations are developed. Throughout the fall, the work group met regularly in both sub-committee and full committee meetings.

#### STAKEHOLDER ENGAGEMENT:

During the summer and fall, the subcommittees met with a variety of campus offices charged with student recruitment and success, faculty development, and data warehousing to gather information about current practices. These included Admissions, Facilities Management, the Registrar, The Faculty Development Center, and IRADS. In addition, the Co-Chairs led breakout sessions with self-selected campus members during the University Retreat and with Department Chairs, Steering Committee members, and Senior Advisors during two retreats in the fall. In each case, the Co-Chairs were able to use the time to address big picture questions that have informed the scope and approach of the work group's activities. Finally, recognizing that our group is fundamentally dependent on internal data-capture processes, we have invited the IRADS Director and his designees to participate in our meetings on a regular basis. This has enabled us to get immediate answers about what we do know and can know, as well as to brainstorm solutions to data gaps we have identified.

## **NOTABLE FINDINGS:**

The answers to the research questions for ICP work group depend greatly on internal data sources. The data warehouse project has made extensive progress in making the wealth of information captured in the student information system available to the campus. However, systems that capture information about facilities, faculty status, faculty development, program assessment, curriculum, and alumni are outdated and/or decentralized, limiting the amount and quality of information that can be captured. This produces knowledge gaps and confusion about the state-of-the-art in innovative curriculum and classroom practices, as well as about classroom and course utilization patterns. This information gap limits the ability of faculty to identify resources that would help them adopt new innovative approaches in their courses. However, the committee has found a rich variety of ongoing innovative curricular and pedagogical activities. We have identified some of the sources of challenges to the success of those activities, and some of the information and administrative systems that it would benefit the campus to improve.

## **EMERGING THEMES:**

In order to support the **continuous expansion and improvement of active learning and innovation in the classroom**, the university needs to develop a robust internal information system that allows us to track the number, quality, and use of teaching spaces and course offerings. This may include: a) improving space utilization reporting so that we have a consistently accurate and agreed upon definition and census of classrooms (it should also provide information about how classrooms are equipped so that we can better assess fit of courses to spaces and needs for additional spaces); b) developing a more robust system of notation for describing the format/pedagogical approach of courses. (The old system of lecture, lab and discussion is no longer sufficient to inform students of what to kind of classroom practice to expect in a given course); c) evaluating the current course scheduling model (day/time patterns) for its effectiveness in meeting campus needs for active learning teaching; d) establishing a regular funding stream and schedule for classroom renovation/improvement, increasing the membership of faculty on the Classroom Committee, and establishing a routine means of surveying faculty about classroom quality in advance of classroom renovations.

To build a campus culture of assessment that supports continuous improvement in student learning outcomes while respecting academic freedom, the university needs to develop a robust internal information system that allows us to track student success throughout their career at UMBC. The system should be based on a broad definition of

success arrived at through campus-wide discussions that take account of classroom performance, student engagement on campus, and overall wellbeing. It should tie success measures to SLOs, and class format/pedagogy in order to support Academic Program Review and Bi-Annual Assessment processes. It should also allow us to tie SLOs to the quality of the physical environments of student learning. In addition, it may include development of 1) a new and more robust course evaluation system that adds questions about innovation, and student well-being to program assessment process; 2) a list of attributes/skill sets that students should have as defined by potential employers/graduate schools, and national disciplinary organizations; and 3) assessment tools that evaluate these skills as students progress through their academic career, and a plan for interventions for students not achieving "milestones;" and 4) surveys and metrics to ascertain student perceptions of interactions with faculty and staff, and with involvement in civic engagement, student organizations, extracurricular activities, and assistantships for graduate students. Such metrics should measure outcomes for different student groups such as traditional students, adult learners, part-time students, transfer students, and online students, as well as different demographic groups. These data can subsequently be used to compare UMBC to peer institutions.

In order to maintain and enhance our reputation for outstanding undergraduate and graduate education and to provide an honors university experience for a majority of UMBC students, the university needs to increase the proportion of full-time faculty on campus and in first and second year learning experiences. This will involve development of 1) a faculty hiring plan the balances disciplinary and interdisciplinary programmatic needs with university-wide initiatives; and 2) enhanced efforts to recruit, retain, and promote a talented and diverse faculty of teacher/scholars. In addition, it may include development of 1) a funding source to support a robust system of full-time visiting faculty to bring first rate scholars to UMBC on a temporary basis, to replace full-time research faculty during sabbaticals and fellowship leaves, and to support participation in UMBC undergraduate honors experiences by full-time faculty; 2) an increase in the number of ranks, the prestige, and the salaries for fulltime lecturers, who are some of the most innovative teachers on campus. Their commitment should be recognized and rewarded with greater opportunities for advancement, greater participation in shared governance at senior ranks, and at least as many ranks options as exist for tenured faculty; 3) development of new mechanisms for part-time funding to support the growth of a robust and diverse curriculum, at times and places when full-time faculty appointments are not feasible; and 4) reduce teaching loads and FTE expectations in recognition of the greater faculty time and effort involved in the development and delivery of active, studentcentered, learning.

In addition to augmenting faculty resources and to effectively support faculty in completion of their teaching role, the university needs to **restructure the Faculty Development Center (FDC) to make it a campus Center for Teaching Excellence.** This may involve securing outside funding to expand the Center's mission of training and support for in-class activities, course redesign, and research on teaching and learning. The expanded FDC mission would also provide support for training adjunct faculty, graduate students and undergraduate teaching assistants, including establishing and supporting learning communities and teaching circles. Such training is particularly important to enhance the development of graduate students, a large fraction of whom will be career teachers. Expanded pedagogical training would make our students and post- docs much

more competitive. The Center could expand opportunities for faculty and graduate student training by identifying and funding workshops and seminars during the summer that enable faculty to explore and develop expertise in national models for innovative pedagogies specific to their fields. In addition, the Center could lead development a more robust course evaluation system that gathers information about student learning, pedagogical innovation, and teaching quality. And it could support the development of a campus-wide policy and standards for on-line and hybrid courses.