

University-wide platform for Educational Innovation

SUMMARY

Initial Charge

Projects proposed from the University-wide platform for Educational Innovation working group, or Quad, will contribute to enhanced teaching and learning experiences for students and faculty. This will afford students opportunities for a more active and participatory learning experience. For faculty, projects will provide opportunities to explore and test experimental teaching methods.

Proposals

1. Establish a Platform for Excellent Teaching and Learning (PETAL)
2. Expand multidisciplinary engagement programs
3. Reorganize and invest in academic technology
4. Enhance existing programs through additional actions

Measuring Progress

Quantitative:

- Increase number of students and faculty who:
 - take advantage of educational opportunities outlined in this proposal
 - author individual and collaborative publications
 - speak at national and regional conferences
- Improve learning outcomes
- Create dual tenure track
- Increase funding for educational innovation and endowed chairs on Gables & RSMAS campuses

Qualitative:

- Student survey data demonstrating a high value of programs in enhancing academic experience
- Positive feedback through surveys and focus groups of faculty, staff, students and community representatives

University-wide platform for Educational Innovation

Introduction

The creation, re-creation, translation and utilization of knowledge are the fundamental aims of a research university. For students to investigate, innovate and create, they must be able to learn independently, underpinned by innovative academic infrastructure and teaching. Through independent primary research and discovery, artistic creation and invention, effective and meaningful teaching, and sustained and engaged learning, the University of Miami seeks to strengthen the capacity of its graduates to be innovative leaders.

Communities thrive with a diversity of talent that is allowed to grow in new ways. Creating an environment that enables and nurtures this new growth is fundamental to transformation and innovation in education. Advances in cognitive science, technological possibilities and the labor market are driving a revolution in education. Cognitive science has demonstrated that “learning is not a spectator sport.” (American Association for Higher Education Bulletin, March 1987) Active learning and student-centered instruction strengthens students’ ability to transfer their learning to new settings and events and to gain a deeper understanding of the knowledge they acquire. Learners have changed; the ways in which they engage with technology and the world around them is vastly different than generations before. And employment opportunities for our graduates will be dramatically different in 2025. Technological innovation will not only make certain jobs obsolete, advances in these fields are also catalysts for new and unimagined career paths that will be available in the future.

With its sights set on this future horizon, the Educational Innovation Quad recommends that the University create several new programs and realign and increase resources for existing programs. The proposals in this paper can make intellectual, artistic, and educational innovation a defining trait of the University of Miami as it approaches its second century. This work includes three major organizational strategies and a number of additional recommendations.

Proposal 1: Establish a Platform for Excellent Teaching and Learning (PETAL)

The UM Platform for Excellent Teaching and Learning (PETAL) should partner with new and existing entities to foster creativity and innovation in teaching and learning across the University. PETAL should build a connection between culture, colleagues and capacity to establish a community of shared interest focused on enhancing student learning and faculty development, which are key for the continuous improvement of our learning eco-system. The programming will be open to all faculty and students, including graduate and professional students. We recommend that the University consider a position to oversee the platform and collaborate with all schools and colleges, libraries, academic technologies, and other units to:

- Stimulate scholarly endeavors through communication, collaboration and experimentation with technology;
- Foster curriculum reform and innovation;
- Enhance student learning outcomes through programming; and
- Establish a baseline standard for teaching and assessment.

University-wide platform for Educational Innovation

PETAL will support and connect a number of new and existing initiatives, suggestions include:

Academy of Educators: This program, based on the model at the Miller School of Medicine, should be broadened to include faculty across the University. The Academy of Educators will promote excellence in teaching, facilitate the use of technology and new teaching methods, endorse interdisciplinary collaboration among educators, advance educational scholarship, and facilitate appropriate reward, recognition and academic promotion for educators. This academy will offer programs, seminars, and workshops as well as funding opportunities for educational innovation.

A leader should be appointed to guide the initiative and work in conjunction with in schools and colleges. The University should consider designated leads in schools and colleges for this effort. Funding for the Academy of Educators should be viewed as a high priority.

Faculty Learning Communities: Currently in existence, Faculty Learning Communities are a collaborative effort among the divisions of Undergraduate Education, Academic Technologies and Libraries. The quad recommends that this initiative be folded into the new platform.

Alternative Year Program: A new program that establishes an interdisciplinary set of courses, research initiatives and creative projects that draw together the talents of faculty and students from all schools and colleges in one shared space. The goals of the program are to:

- Provide interdisciplinary mentoring opportunities for students and build interdisciplinary relationships between faculty across all schools and colleges;
- Provide creative solutions for societal problems and create new knowledge; and
- Introduce fresh ideas and new faculty into schools and colleges through visiting professorships.

During an initial planning year, the program leader will accept proposals from full-time faculty for interdisciplinary research, courses and creative projects. Proposals could come from individuals, teams of two from any school or college, or a larger interdisciplinary team that includes a maximum of two people from any school or college. A mix of research and creative projects will be selected to enhance multiple perspectives on a single area of interest. For example, a proposal could include a law professor researching the history of death penalty legislation in Florida and a computer science professor with expertise in data visualizations. Together they could support a team to visualize the population currently on death row in Florida, teaching separate courses to students but with overlapping projects and interdisciplinary publications.

The program leader and a diverse faculty committee will select proposals. Faculty members will be excused from their existing teaching responsibilities and be assigned to PETAL for the academic year, and schools and colleges would be granted visiting professor slots to compensate. The Quad recommends that some of the hundred endowed chairs under consideration by the 100 Talents Quad could be a resource for this program. Each researcher or practitioner would work with 15-20 students on different aspects of their project each semester.

A separate summer program could focus on interdisciplinary international projects or projects that require extended off-campus commitments.

University-wide platform for Educational Innovation

Innovative technologies program: There is synchronicity in the focus of Academic Technologies and PETAL, therefore we propose a review of options for the Office of Academic Technologies to be better aligned with PETAL.

Through PETAL, Academic Technologies can deliver programs on new techniques, share best practices, and embed new ways of working through current programs. For example, the Faculty Showcase for Narrative Techniques in Technology, a research and pedagogical project funded by the Knight Foundation, helps faculty deliver online classes using techniques such as simulations and storytelling. This could serve as a model for other innovations in teaching and learning.

New course development: New course development should address the three trends mentioned earlier in this paper as the underpinnings of the revolution in education: new insights from cognitive science about the process of teaching and learning; technological advances changing learning opportunities; and the evolving labor market. This working group recognizes the significance of instructional designers in educational innovation and, therefore, recommends that a new master's program is developed for instructional design with collaboration from the School of Education and Human Development (SEHD), School of Communication (SoC) and College of Engineering (CoE).

UM Platform for Excellent Teaching and Learning Resources

- A number of personnel would be required in addition to the PETAL leadership position. This may include instructional designers, administrators and others.

It is estimated that PETAL may require offices and program space for the Academy of Educators, Innovative Technologies, Alternative Year Program, Faculty Learning Communities and related seminar, collaboration and laboratory spaces. The required space could be achieved by renewing the Richter Expansion plan which would co-locate these programs with related library programming.

A great model for similar collaborative learning space is the new Hunt Library at North Carolina State University. The Hunt Library and numerous other research universities in North America use automated book storage and retrieval systems to dramatically decrease space requirements and management costs. Installation of such a system at Richter has the potential to free up significant space in the library stacks tower for educational programming and save the high cost of building an addition.

Proposal 2: Expand multidisciplinary engagement programs

The University of Miami should expand opportunities for multidisciplinary engagement as a key method for encouraging educational innovation. The Civic and Community Engagement (CCE) Task Force should consider a new effort to focus attention from across UM on a single critical issue each year, with the suggested name UFocus.

UFocus will identify and select an issue or question each year and invite all academic units to design activities to garner public awareness, generate solutions and impact public policy. For example, there is a great deal of activity at UM related to sea level rise within marine sciences, architecture, geography and other disciplines, however, disciplines such as the arts and humanities that are not traditionally included can be engaged through the UFocus program.

University-wide platform for Educational Innovation

UFocus would include an annual speaker series featuring distinguished experts enhancing the understanding of the topic through presentations and a week-long residency. At the end of each year, the University will sponsor a research colloquium, a variety of exhibits and performances by students and faculty, and publish an online UFocus prospectus highlighting UM's intellectual and practical contributions to address the focus topic. Related performances and exhibits could travel beyond the campus to increase awareness.

This effort would require the Civic and Community Engagement Task Force to identify a UFocus lead, with expertise in the selected content area and to designate an administrative lead from faculty for each school and college. The success of this work will also require a budget to support the activities outlined above.

Proposal 3: Reorganize and invest in academic technology

Several existing groups maintain classroom spaces at UM. The Office of Classroom Management controls general-purpose classrooms on the Coral Gables campus, and individual schools or colleges maintain all other classrooms. To date, classrooms have been updated based on the availability of funds during a particular year. As a result, classrooms are not maintained in a standardized manner across the University.

An annual, centralized budget to refresh classrooms would provide funding across the University enabling these spaces to be updated on a predictable schedule in partnership with Office of Classroom Management, Academic Technologies and schools and colleges. Technology in classrooms would be refreshed every four years and a more comprehensive update of technology and classroom furniture/equipment (chairs, whiteboards, screens, etc.) would occur every eight years.

The University should continue to invest in collaborative and technology-enabled learning spaces and support programs such as the Richter Library's Learning Commons. This initiative will design and create a centralized hub for academic services on the first floor of Richter Library (Writing Center, Math Lab, Academic Resource Center and Academic Technologies) that connects to other service locations on the University's three campuses. This hub is a "learning commons," meaning a facility "designed to support relationships in the service of learning."

Proposal 4: Enhance existing programs through additional actions

Training and mentoring program: Ongoing professional development and mentoring are essential aspects of becoming and remaining a great teacher, and excellent teaching is at the heart of educational innovation. The Provost, in collaboration with PETAL, should work with deans and departments to ensure that:

- Every academic unit will design and implement appropriate professional development and mentoring systems that meet the specific needs of their faculty.
- Every faculty member eligible for promotion, regardless of their track (tenure, educator, clinical, etc.) be assigned a minimum of one senior faculty mentor. Many successful mentoring programs assign a senior tenured faculty member and a second mentor who is a senior colleague with a similar research or creative agenda; ensure that individual academic units determine the appropriate mentoring program for their faculty and that participation be encouraged for all faculty at the early stages of their career.

University-wide platform for Educational Innovation

Reexamine tenure track: In addition to being a prolific scholar, criteria for recruitment and tenure of faculty should include innovation, teaching excellence, public service, mentoring, leadership and creativity. The current multi-tiered system of faculty designations, with tenure track reserved solely for candidates with a terminal degree does not actively promote educational innovation, allow all schools and colleges to recruit and retain top professional and creative talent, or foster the best collegial culture.

An additional complicating factor is the lack of guidelines for Masters of Fine Arts (MFA) degree programs, which is considered a terminal degree. One program currently awards students a terminal MFA after completing 36 credit hours, another requires 66 credit hours, and other fall somewhere in between.

Professors of Practice are currently hired into one-year renewable terms, compared with tenure track assistant professors who have at least three years to prove their value. It is extremely challenging to recruit top-tier professionals into one-year positions, especially from outside of Miami.

The Librarian Professor series as outlined in the Faculty Manual is a non-tenure series. However, the review and promotion structure parallels the tenure-track regular faculty model.

Many leading journalism schools have adopted a dual tenure track. The University of North Carolina, one of the top ranked media schools in the world, has had such a program for more than 35 years. The University of North Carolina School of Media and Journalism faculty handbook states, "With its two-tenure-track system, the School has an appropriate balance of faculty members with scholarly expertise and faculty members with professional expertise. Indeed, a good number of both. The basic philosophy is that everybody does not have to be cut from the same cloth. Importantly, individual faculty respect each other and work collaboratively."

The UM Faculty Senate should consider a dual tenure track system for those schools and colleges that currently employ educator faculty, including those within the clinical educator track at the Miller School of Medicine. A small committee led by the Provost and Chair of the Faculty Senate should consider designing a new tenure track - the Professional Tenure Track - cognizant that there may be unique criteria for different fields.

Facilitate team teaching: Data gathered from UM stakeholders provides evidence that team teaching is a mechanism to promote interdisciplinary learning, engage students with varied learning styles and develop "T-shaped" skills for both students and faculty. T-shaped capacity reflects deep disciplinary knowledge paired with the ability to work across boundaries effectively utilizing critical thinking, communication, teamwork and project management skills.

Barriers cited range from teaching load to finances. The deans and the budget office should collaborate to examine and eliminate barriers to team teaching.

Minimize curricular barriers to study abroad: The quad strongly agrees with philosopher Alexander von Humbolt, who wrote, "The most dangerous world view is the worldview of those who have not viewed the world." An international academic experience is an important part of an innovative undergraduate education. Curricular barriers prevent many students who desire to study abroad from doing so because none or too few courses required for their major are offered abroad, which can result in taking a semester of electives while abroad and necessitating an additional semester or year of study at UM. This

University-wide platform for Educational Innovation

is particularly true for upper level students; those who often have the maturity and intellectual curiosity to benefit most from an international experience.

Some degree programs are rigidly controlled by outside accreditation standards and organizations, and therefore have limited or no ability to accept study abroad elective credits. And other factors including global political instability, parental concerns and financial constraints can impact the decision to pursue international study. The Dean of Undergraduate Education and the Office of Study Abroad should undertake a study in each school and college to determine and eliminate curricular and financial (via the Access with Excellence Quad) barriers to international study.

Develop interactive information capability: There is a general concern about the lack of easy access to information that would help: build interdisciplinary bridges; foster student, faculty and staff interaction; facilitate collaboration across disciplines, campuses and areas of interest; and make navigating the complex UM landscape easier. Based on feedback from stakeholders, two approaches should be pursued:

1. The Cognate Program for general education: The cognate program allows undergraduate students to focus their education within their areas of interest, however there is concern about the limited number of options, especially in STEM, and the limited number of cognates that provide interdisciplinary focus. UM should create additional cognates that offer courses within two or more of our nine undergraduate schools. These should include civic engagement cognates.

An awareness campaign should be launched to make students aware that they have the ability to create cognates and expand currently available choices. The Cognate Search Engine currently allows students to see [cognates](#) that match their interests.

The Quad believes that the concepts and goals behind the undergraduate cognate program are applicable to the ongoing discussions regarding a more interdisciplinary approach to graduate education and encourages the Graduate School to consider a parallel program.

2. The UApp: UM should design and create a personalized mobile application to increase access to information, with the suggested name UApp.

UApp would streamline the search for institutional resources enabling users to see library catalogue entries, events, colleagues, grants, courses, cognates and volunteer opportunities related to a given search criteria or topic. UApp should be accessible across platforms and mobile devices to anyone with a C number. This information is currently available only through multiple, extensive searches. The University should develop an integrated app to leverage existing University data sources and create a centralized source to learn about research and learning opportunities. The Education Advisory Board (EAB) student guide may evolve to fulfill this mandate and the Office of Academic Technologies should own this process.

The University should extend its investment in Elsevier's 'Pure' database to include all UM faculty, lecturers and researchers, to make visible research activities and connections across the University.

Enhance, expand, and remove barriers to service engagement: The Butler Center for Service and Leadership provides a plethora of co-curricular civic engagement opportunities for students. These opportunities would be enhanced by the engagement of faculty mentors for civic scholars to increase

University-wide platform for Educational Innovation

academic advising for the program. Every student would be required to meet with their civic scholar faculty mentor once a semester.

A permanent position should be created to oversee the Civic Scholars Program, mentor civic scholars throughout their academic careers, and ensure that they meet all academic requirements for the program, particularly their faculty-supervised capstone project.

QEP (Quality Enhancement Plan): Consultation with University stakeholders highlighted the need for experimental, interdisciplinary, and non-traditional classrooms and courses. To this end, a plan for introducing 6 interdisciplinary Harkness table courses should be included in the upcoming QEP plan. A QEP is required for each institution seeking reaffirmation of institutional accreditation by the Southern Association of Colleges and Schools which accredits University of Miami.

Harkness tables are small, discussion-based classes that would be team taught or feature regular guest lecturers and capped at 15-20 students. The Harkness approach, used in educational settings across the country, emphasizes students as the leaders of discussion and is centered on participatory, active learning. These courses would be offered three times over an initial four-year period starting with upperclassmen. The topics of these seminars would bridge disciplines. Students would learn about a given topic from multiple perspectives, going beyond the Academic Standards preference for courses to be taught on a subject in which two fields claim expertise.

Open to the entire University, these courses would encourage interaction among all students including Foote fellows, Hammond and Singer scholars, and other UM students. The interdisciplinary nature of these courses coupled with the discussion-based format would allow students to bring their unique knowledge base to bear on the course topic.

Instructors could apply for summer grants to develop these new courses and the Academic Standards Committee of the Faculty Senate would assess the program and advise on courses with greatest potential for the program.

Submitted for consideration by:

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