

# FLORIDA INTERNATIONAL UNIVERSITY BOARD OF TRUSTEES ACADEMIC POLICY AND STUDENT AFFAIRS COMMITTEE

Monday, January 28, 2019 8:00 a.m. Florida International University Modesto A. Maidique Campus Graham Center 243

#### Committee Membership:

Cesar L. Alvarez, *Chair*; Natasha Lowell, *Vice Chair*; Jose J. Armas; Dean C. Colson; Michael G. Joseph; Joerg Reinhold; Sabrina L. Rosell; Marc D. Sarnoff

## **AGENDA**

1. Call to Order and Chair's Remarks

Cesar L. Alvarez

2. Approval of Minutes

Cesar L. Alvarez

3. Discussion Item

AP1. FIU Strategic Plan 2025

Mark B. Rosenberg Kenneth G. Furton

4. New Business (If Any)

Cesar L. Alvarez

5. Concluding Remarks and Adjournment

Cesar L. Alvarez

The next Academic Policy and Student Affairs Committee Meeting is scheduled for Monday, March 4, 2019.

# THE FLORIDA INTERNATIONAL UNIVERSITY BOARD OF TRUSTEES

## Academic Policy and Student Affairs Committee

January 28, 2019

Subject: Approval of Minutes of Meeting held: December 5, 2018

#### **Proposed Committee Action:**

Approval of Minutes of the Academic Policy and Student Affairs Committee meeting held on Wednesday, December 5, 2018 at the FIU, Modesto A. Maidique Campus, Graham Center Ballrooms.

#### **Background Information:**

Committee members will review and approve the minutes of the Academic Policy and Student Affairs Committee meeting held on Wednesday, December 5, 2018 at the FIU, Modesto A. Maidique Campus, Graham Center Ballrooms.

**Supporting Documentation:** Minutes: Academic Policy and Student Affairs

Committee Meeting, December 5, 2018

Facilitator/Presenter: Cesar L. Alvarez, Academic Policy and Student Affairs

Committee Chair





# FLORIDA INTERNATIONAL UNIVERSITY BOARD OF TRUSTEES ACADEMIC POLICY AND STUDENT AFFAIRS COMMITTEE MINUTES DECEMBER 5, 2018

#### 1. Call to Order and Chair's Remarks

The Florida International University Board of Trustees' Academic Policy and Student Affairs Committee meeting was called to order by Committee Vice Chair Natasha Lowell at 9:57 a.m. on Wednesday, December 5, 2018, at the Modesto A. Maidique Campus, Graham Center Ballrooms.

Committee Vice Chair Lowell welcomed all Trustees and University faculty and staff to the meeting.

General Counsel Carlos B. Castillo conducted roll call of the Academic Policy and Student Affairs Committee members and verified a quorum. Present were Trustees Natasha Lowell, *Vice Chair*; Dean C. Colson; Joerg Reinhold; Sabrina L. Rosell; and Marc D. Sarnoff.

Trustees Cesar L. Alvarez, Committee Chair; Jose J. Armas; and Michael G. Joseph were excused.

Trustees Leonard Boord, Justo L. Pozo, Rogelio Tovar, and University President Mark B. Rosenberg were also in attendance.

Provost and Executive Vice President Kenneth G. Furton announced that after more than nine years serving as the Vice Provost for the Biscayne Bay Campus (BBC), Steven Moll will be returning to the faculty of the Chaplin School of Hospitality and Tourism Management at the end of 2018. Provost Furton reported that effective spring 2019, Dr. Pablo Ortiz, Vice President of Regional Academic Locations and Institutional Development, will serve as BBC's Vice Provost. Provost Furton also announced that Robert Sackstein, M.D., Ph.D., has been appointed as the new Dean of the Herbert Wertheim College of Medicine (HWCOM) and Senior Vice President of Health Affairs effective January 2, 2019.

#### 2. Approval of Minutes

Committee Vice Chair Lowell asked that the Committee approve the Minutes of the meetings held on Wednesday, September 5, 2018 and Friday, November 2, 2018. She requested to amend the Minutes of the Committee's November 2, 2018 meeting in terms of removing the reference to her request for definitions.

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A motion was made and unanimously passed to approve the Minutes of the Academic Policy and Student Affairs Committee meetings held on Wednesday, September 5, 2018 and Friday, November 2, 2018.

#### 3. Action Items

#### AP1. Honorary Degree Nomination

Committee Vice Chair Lowell noted that the honorary degree nominee Joseph "Pepe" Badia was recommended by the Faculty Senate and approved by the University President and Provost to receive an honorary degree.

In response to Vice Chair Lowell's inquiry, Provost and Executive Vice President Kenneth G. Furton explained that, if approved by the FIU Board of Trustees, Mr. Badia's honorary degree will be conferred by spring 2019.

A motion was made and unanimously passed that the FIU Board of Trustees Academic Policy and Student Affairs Committee recommend that the Florida International University Board of Trustees endorse Mr. Joseph "Pepe" Badia as a recipient of a doctoral degree *honoris causa* from Florida International University.

#### AP2. Tenure as a Condition of Employment Nominations

Committee Vice Chair Lowell noted that there were two candidates submitted for Tenure as a Condition of Employment based on the caliber of their scholarly work. Provost Furton added that the two candidates were fully vetted in terms of their qualifications.

A motion was made and unanimously passed that the FIU Board of Trustees Academic Policy and Student Affairs Committee recommend that the Board of Trustees approve two candidates for Tenure as a Condition of Employment.

#### AP3. New Program Proposal: Bachelor of Science in Interdisciplinary Engineering

Senior Vice President for Academic and Student Affairs Elizabeth M. Bejar presented the new program proposal for the Bachelor of Science in Interdisciplinary Engineering. She explained that the B.S. in Interdisciplinary Engineering is a 120-credit program and would be the first of its kind in the Florida State University System. Sr. VP Bejar indicated that students will have the ability to engage in total project management, will work across multiple disciplines, will achieve results in a real world team environment, and will work with faculty and research laboratories. She mentioned that according to the U.S Department of Labor Statistics, there are 140,000 new jobs available across the country for engineers, specifically engineers with the ability to address engineering management components. Sr. VP Bejar stated that while the proposed program is considered a new degree given that a CIP code will be added to the University's inventory, there will be no new net associated costs because existing curriculum offerings are being redesigned and faculty are already in place.

A motion was made and unanimously passed that the FIU Board of Trustees Academic Policy and Student Affairs Committee recommend that the Florida International University Board of Trustees approve the new program proposal: Bachelor of Science in Interdisciplinary Engineering (CIP 14.0101).

Florida International University Board of Trustees Academic Policy and Student Affairs Committee December 5, 2018 Minutes Page | 3

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#### AP4. New Regulation: Children's Creative Learning Center

General Counsel Castillo presented the new regulation pertaining to the Children's Creative Learning Center (CCLC) for Committee review. He explained that the CCLC, which was created in 1987, is a state educational research center for child development and a SAACS nationally accredited early learning school with a curriculum that focuses on social and emotional development and communication skills. He indicated that the CCLC is a self-supporting University auxiliary and that enrollment at the CCLC is open to children of FIU students, faculty and staff, alumni, and the local community. General Counsel Castillo provided an overview of Florida Board of Governors regulation 10.004, which mentioned covers educational research centers for child development, and provides that each university board of trustees shall adopt regulations for the operation of an educational research center for child development on its campus. He stated that the proposed regulation, FIU 2502, would ensure that FIU is compliant with Board of Governors Regulation.

A motion was made and unanimously passed that the FIU Board of Trustees Academic Policy and Student Affairs Committee recommend that the Florida International University Board of Trustees approve the creation of Regulation FIU-2502 Children's Creative Learning Center at FIU.

#### 4. Information/Discussion Items (No Action Required)

#### 4.1 FIU/ Torrey Pines Institute for Molecular Studies Update

Provost Furton provided an update on the Torrey Pines Institute for Molecular Studies, explaining that FIU has been in collaboration with Torrey Pines for over five years and the discussion of a possible merger of Torrey Pines with FIU dates back to three years when Torrey Pines contacted FIU. He stated that research is important because it attracts and retains the best faculty, which will attract the best students. He reported that there is a two-phase approach, phase one would be collaboration through a laboratory space lease and phase two is the FIU Acquisition of Torrey Pines.

He added that if FIU were to acquire Torrey Pines, FIU would have to upgrade and brand them similar to our other locations. He noted that FIU is proposing to secure remaining talent that is there at Torrey Pines and hire some additional talent. He mentioned that FIU is still in the process of due diligence in terms of title searches.

In response to Trustee Dean C. Colson's comment regarding FAU pursuing an opportunity to acquire Torrey Pines, Provost Furton explained that FAU is focused on the Jupiter area given the partnerships with the Scripps Research Institute. In response to Trustee Roger Tovar's inquiry, Provost Furton explained that the approach consisted of a short term lease with 30 days notice with an opt out clause in the event it is deemed prudent and added that in addition to the facility, the University will seek out the acquisition of the existing funded researchers.

In response to Committee Vice Chair Lowell's inquiry, Provost Furton indicated that the three to six month lease does not require Board of Trustees approval.

In response to Trustee Marc D. Sarnoff's comment, Vice President for Research and Economic Development, Andres G. Gil stated that real challenges are faced when recruiting top researchers, given the University's limited research space and that this offers a less costly approach in terms of research given that core facilities are already available at Torrey Pines.

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Trustee Sabrina L. Rosell commended the approach given the expanded research opportunities for graduate and undergraduate students.

Trustee Tovar conveyed his support and urged the University to move quickly towards acquisition given the benefits but shared concerns in terms of distance and rent expense. Trustee Joerg Reinhold relayed his personal experience with commuting to an out-of-state laboratory for over 20 years, and mentioned that this is common in terms of research work.

For the next regularly scheduled Committee meeting, Trustee Leonard Boord requested detailed financials on Torrey Pines in terms of current operating expenses, deficit, and operating expenses.

#### 4.2 Strategic Plan Update

Provost Furton provided an update on the University's Strategic Plan, explaining that workgroup recommendations and related priorities will be presented to the Board of Trustees in January. He then presented a timeline, indicating that following the January meeting with the Board of Trustees, a discussion with the Faculty Senate will ensue. He stated that the final Strategic Plan will be presented to the Board of Trustees for approval in April 2019, which will then subsequently require Florida Board of Governors approval by June 2019.

In response to Committee Vice Chair Lowell's inquiry regarding the January 2019 Strategic Plan Update Meeting, Provost Furton explained that the Board's input will be solicited in terms of any changes to the broader vision components stemming from the workgroup recommendations.

#### 4.3 Title IX Presentation

Director of Equal Opportunity Programs and Diversity Shirlyon J. McWhorter explained that the Title IX office collaborates with the FIU community to stop, prevent, and remedy interpersonal violence and gender-based discrimination through education, culture change, accountability, and empowerment. She indicated that the Title IX office provides options and resources to all students, faculty and staff affected by these issues and is committed to providing a fair, thorough, and prompt investigation and adjudication process. She stated that a total of 6,818 undergraduate students registered for the sexual assault prevention two-part training and that 80% of undergraduate students have completed part one of the trainings and 40% have completed part two. Ms. McWhorter explained that training for University students is critical in that it provides them with working knowledge of what is expected of them and what the consequences are in terms of violations to FIU policy.

In response to Trustee Colson's inquiries regarding reporting numbers and how these compare to other universities, Ms. McWhorter explained that the reporting numbers do not overlap and that the numbers are steady and comparable to other universities.

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#### 4.4 Academic Affairs Regular Reports

There were no questions from the Committee members in terms of the reports included as part of the agenda materials: FIU*BeyondPossible2020*; Academic and Career Services; Engagement; Enrollment Management and Services; Information Technology; Research and Economic Development/ University Graduate School; and Student Affairs.

#### 5. New Business

No new business was raised.

#### 6. Concluding Remarks and Adjournment

With no other business, Committee Vice Chair Natasha Lowell adjourned the meeting of the Florida International University Board of Trustees Academic Policy and Student Affairs Committee meeting on Wednesday, December 5, 2018 at 11:30 a.m.

Trustee Request	Follow-up	Completion Date
1. For the next regularly scheduled Committee meeting, Trustee Leonard Boord requested detailed financials on Torrey Pines in terms of current operating expenses, deficit, and operating expenses.	Provost and Executive Vice President, Kenneth G. Furton	Next regularly scheduled meeting

KS December 13, 2018

# The Next Horizon 2025 Strategic Plan

# Our Story: "Our Demography is our Destiny"

As Miami's first and only public research university, Florida International University (FIU) is perfectly positioned to lead the charge in higher education to radically transform the 21st Century (C21st) knowledge economy. FIU is a top-tier research university at the forefront of leading change by producing knowledge creators and cultivating learners who are disruptive leaders, innovators, and inventors. For over four decades, FIU has positioned itself as one of South Florida's anchor institutions, leading the world in technological, environmental, educational, and cultural innovations designed to solve some of the greatest challenges of our time. FIU has always been focused on simultaneously enriching the lives of our local and global communities, particularly because of the rich ethnic, racial, cultural, and linguistic diversity reflected by our students, faculty, and staff (graphic 1).

# Our Vision: Top 50 in Excellence and Access:

FIU aspires to be a top 50 public university concurrently, for student success, excellence in research, and upward economic and social mobility. As a result of FIU's commitment to diversity and inclusion, we recognize that we have an even greater obligation to creatively respond to the changing landscape of higher education. By 2025, most of our graduates will enter a workforce in which machines will process data, perform technological functions, and compute scientific calculations more efficiently and accurately than humans. Therefore, it is our responsibility to look forward, towards the next horizon in higher education, to ensure our graduates are C21st workforce ready. Whether entrepreneurs or employees, or both, FIU students will graduate possessing the intellectual, cultural, and technological agility to lead the next generation.

To this end, FIU will continue to advance the institution as a global research university by placing laser-like focus on FIU's academic investment and performance, refining institutional priorities, and setting goals and measuring outcomes.

This plan honors the accomplishments of past strategic plans and continues the commitment to learner success and top-tier research and innovation (graphic 2). At the same time, this plan - FIU Next Horizon 2025 - is intentionally disruptive and agile to effectively respond to the rapid changes in higher education and the world of work. Integral to this effort are **FIVE STRATEGIC PRIORITIES**, which are outlined below. We see these priorities, rooted in pragmatism and measurable outcomes, as both foundational and integrative to our Next Horizon 2025 plan aimed to position FIU as a global solutions leader in responding to the challenges

and opportunities of our time. At the same time, these priorities are built by and grounded in FIU's core belief that it our civic responsibility to serve as a beacon for our community, as a place to explore the breadth and depth of what it is to be fully human.

#### **Vision Statements:**

- Top 50 Public Research university for student-centered state of the art learning, impact-oriented research and innovative local and global engagement for solving problems.
- Top 50 Public Research University for upward economic mobility, timely student graduation, impactful sustainable solutions and innovative community engagement.
- Ranked Top 50 in research excellence concurrent with social impact and mobility.

#### **STRATEGIC PRIORITIES:**

- 1. Engagement & Affinity
- 2. Student/Learner Success
- 3. Preeminence & Research Excellence
- 4. Responsible Stewardship/Sustainability
- 5. Global Expansion

# 1. Engagement & Affinity:

• **Goal:** Provide every FIU prospective and current student with a meaningful experience at our university

## Objectives:

- 1. Create an Incoming Expectations Database (Rec 1)
- 2. Foster meaningful engagement and build affinity (Rec 3)
- 3. Tailor engagement opportunities based on past behaviors (Rec 4)
- 4. Build "high-touch", personally engaging, success coaching experiences for students (Rec 5)
- 5. Establish a Peer Success Mentor (PSMs) Program (Rec 21)
- **Goal:** Connect with alumni and our communities (local, regional, national, global) through targeted marketing/communication campaigns, foster engagement opportunities for current students, and build corporate/business and philanthropic partnerships

#### **Objectives:**

- 1. Facilitate engagement opportunities with Alumni for students enrolled in "Gateway to Graduation Courses" (Rec 6 from 1D)
- 2. Implement Brand Tracker system/tool to measure our FIU brand (Rec 29 from 2C)

- 3. Strengthen and enhance FIU's Marketing and Communications Plan (Rec 30 from 2C)
- 4. Alumni Giving (Rec 52)
- 5. Increase and enhance FIU brand recognition in Central and South America (Rec 58 from 4B)
- *Goal:* Ensure an inclusive and supportive university climate that promotes health, development, and well-being

#### **Objectives:**

- 1. Develop a university-wide campaign "Well-Being: Help for the [Whole Campus] Institution" (Rec 20)
- 2. Create cross-institutional "Equity Collaborative" to align university and community efforts to increase access and success of underrepresented students, especially students of color (Rec 31)
- 3. Leverage and expand current Advisor Model (Rec 22 (from 1A)

#### 2. Student/Learner Success

 Goal: Provide exceptional and accessible educational experiences at every level of the university

#### Objectives:

- 1. Articulate a "Vision of Teaching Excellence" and expand administrative and peer-to-peer support for engaged faculty (Rec 9)
- 2. Expand Support for Online Teaching (Rec 8)
- 3. Expanding Students-as-Partners Initiatives, including Learning and Writing Assistants programs (LAs and WAs) (Rec 10)
- 4. Introduce Additional Teaching Recognitions, including Awards per Unit and Grants which reward active learning innovations (Rec 11)
- Goal: Ensure timely graduation for all admitted students

#### **Objectives:**

- 1. Leverage success of FIU's Gateway Project (2nd year retention) and create a "Gateway to Graduation" project (Rec 7)
- 2. Increase scheduling efficiencies towards student-driven course availability and course selection (Rec 2)
- 3. Establish an Early University Credit Academy to increase and streamline High School and Network Partnerships (Rec 60)
- *Goal:* Align curriculum with industry needs to ensure career readiness and post-graduation success

#### **Objectives:**

1. Develop a Center for 21st Century Skills Development/21st Century Workforce Readiness (Rec 12)

- 2. Increase opportunities for interdisciplinary education for undergraduate students (Rec 17 from 3C)
- 3. Identification and Badging of "Essential Skills" (Rec 13)
- 4. Alignment of "Essential Skills" to University Core Curriculum (Rec 14)
- 5. Identification and Badging of Industry-Recognized Credentials throughout Degree Programs (Rec 15)
- 6. Identify employment opportunities at FIU for students in some areas currently staffed by full-time employees (Rec 45)
- 7. Student Engagement On-Campus Employment (Rec 46 from 1D)
- **Goal:** Provide our community with continuing education opportunities aligned with workforce advancement

#### **Objectives:**

- Development and alignment of Continuing Education opportunities with industry needs for workforce advancement (Rec 16)
- 2. Reengage non-completers through Interdisciplinary Studies by creating more diverse, agile, and non-traditional modes of curricular delivery (Rec 51)

#### 3. Preeminence:

• *Goal:* Cultivate novel and interdisciplinary research, scholarship, and creative activities across all levels of the university

#### *Objectives:*

- 1. Establish an Office of Undergraduate Research and Creative Activities, which includes coordination of mentorship, badging, interdisciplinary opportunities, grant applications, etc. (Rec 32)
- 2. Increase Undergraduate student participation in interdisciplinary research (Rec 35 from 3C)
- 3. Streamline mentorship system between faculty and graduate students to enhance research and creative activities (Rec 33)
- 4. Develop mechanisms for Badging of Research and Creative Activities (Rec 34)
- *Goal:* Support and continue to grow our preeminent programs *Objectives:* 
  - 1. Refine Initial/Continuing Designation Rubric for Preeminent/Emerging Preeminent Programs and create a sustained performance review (Rec 23)

- Promote/facilitate national and international collaboration involving our Preeminent/Emerging Preeminent Programs (Rec 25)
- 3. University Graduate School (UGS) Preeminent/Emerging Preeminent Fellowship for Supporting Ph.D. Students (Rec 61 from 3B)
- **Goal:** Amplify our culture of innovation and entrepreneurship by providing viable opportunities for technology transfer

#### **Objectives:**

- 1. Differential assignments to facilitate faculty engaged in entrepreneurial ventures (Rec 38)
- 2. Increase industry (or community/nonprofit) partnerships at FIU (Rec 39)
- 3. Recognize Innovation as "important academic work" (Rec 37)
- 4. Cultivate an Entrepreneurial Spirit though creating faculty internships (Rec 40 from 4B)
- 5. Provide support for faculty seeking funding in terms of marketing, networking, and outreach (Rec 62)
- 6. Provide three-dimensional support for faculty engaged in active fundraising and large project management (Rec 63)
- 7. Establish Guidelines for New Faculty Recruitment (Rec 64)
- Goal: Prioritize Key Rankings, Surveys and Metrics
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# Objectives:

- 1. Improve data collection/analysis to impact rankings and reputation by developing a predictive model of interactions among key metrics (Rec 27).
- 2. Review and optimize reporting of data elements to targeted surveys (Rec 28)

# 4. Responsible Stewardship/Sustainability

- *Goal:* Establish a remote workforce in support of efficiency and productivity *Objective:* 
  - 1. Leverage Remote Workforce to reduce carbon footprint (Rec 47)
- *Goal:* Ensure that all investments are in support of the university and its mission

#### Objective:

1. Strengthen current Industry Partnerships on campus to ensure capital improvements, which enhance student, faculty, and staff quality of life and provide post-graduation employment opportunities for students. (Rec 53)

• *Goal:* Optimize operations

#### *Objectives:*

- 1. Establish a taskforce to conduct assessments of current and best practices for university shared services models (Rec 44)
- 2. P-3 Monetization for University Assets (Rec 54)

# 5. Global Expansion

• Goal: Establishment and commitment to a global strategy

#### *Objectives:*

- 1. Develop and implement a cross-institutional Global Strategy (Rec 55)
- 2. Expand FIU Global Center Locations and enhance current Global Center arrangements (Rec 56)
- *Goal:* Increase our international enrollments

#### *Objectives:*

- 1. Establish an International Pathways to Enrollment (Rec 57)
- 2. Create mechanism for providing International Early University Credit (Rec 59)

## FIU NEXTHORIZON 2025 Proposed Framework

#### **STRATEGIC PRIORITIES:**

- 1. Amplify Learner Success & Institutional Affinity
- 2. Accelerate Preeminence & Research Impact
- 3. Assure Responsible Stewardship for Resilience

## 1. Amplify Learner Success & Institutional Affinity:

• *Goal:* Provide every FIU prospective and current student with a meaningful and personal experience at our university

#### Objectives:

- 1. Create an incoming expectations database to personalize each student's pathway to graduation (Rec 1)
- 2. Improve retention using predictive data analytics to facilitate student integration and affinity within the campus community (Rec 3 & 4)
- 3. Build a "high-touch" personally engaging success coaching/mentoring program to support student success (Rec 5 & 21)
- *Goal:* Connect with alumni and our communities (local, regional, national, global) through targeted marketing and communication campaigns, foster engagement opportunities for current students, and build corporate/business and philanthropic partnerships

#### *Objectives:*

- 1. Develop an Alumni Panel Series geared towards specific disciplines (Rec 6)
- 2. Enhance and broaden FIU brand recognition through targeted marketing and communication campaigns (Rec 29, 30 & 58)
- 3. Intensify efforts to increase our Alumni giving rate (Rec 52)
- *Goal:* Ensure an inclusive and supportive university climate that promotes health, development, and well-being

#### *Objectives:*

- 1. Develop a university-wide campaign to promote "Well-Being: Help for the Institution" (Rec 20)
- 2. Launch a cross-institutional "Equity Collaborative" to align university and community efforts to increase access and success of underrepresented students (Rec 31)
- 3. Boost the current advisor model to include a more personalized approach (Rec 22)

• *Goal:* Provide exceptional, accessible, and personalized educational experiences at every level of the university

#### *Objectives:*

- 1. Develop professional development and mentorship opportunities to increase faculty utilization of evidence-based teaching strategies (Rec 9)
- 2. Magnify support for online teaching through additional programming for faculty, quality matters certifications, and peer-to-peer collaboration (Rec 8)
- 3. Expand *Students-as-Partners* initiatives, including learning and writing assistant programs (Rec 10)
- 4. Introduce additional faculty recognitions for excellence in teaching, including awards per unit and grants that reward active learning innovations (Rec 11)
- Goal: Ensure timely graduation for all admitted students

#### *Objectives:*

- 1. Establish an Early University Credit Academy to streamline enrollment and facilitate timely graduation (Rec 57, 59 & 60)
- 2. Implement policies and procedures to ensure students are not engaging in undesirable course taking behaviors (Rec 2)
- 3. Create and launch a "Gateway to Graduation" project aimed at pinpointing upper division courses that are roadblocks to a 4-year graduation (Rec 7)
- *Goal:* Align curriculum with industry needs to ensure career readiness and post-graduation success

#### Objectives:

- 1. Create a Center for Career Readiness (21st Century Skills Development) to enhance learner experiences, certify workforce competencies, and verify industry-recognized credentials (Rec 12-15)
- 2. Increase opportunities for interdisciplinary education (Rec 17)
- 3. Expand on-campus student employment opportunities, potentially in areas currently staffed by full-time employees (Rec 45 & 46)
- Goal: Provide our community with continuing education opportunities aligned with workforce advancement

#### **Objectives:**

1. Develop and offer continuing education opportunities that facilitate workforce/career advancement (Rec 16)

2. Reengage non-completers through Interdisciplinary Studies and creating more diverse, agile, and non-traditional modes of curricular delivery (Rec 51)

## 2. Accelerate Preeminence & Research Impact:

• *Goal:* Cultivate novel and interdisciplinary research, scholarship, and creative activities across all levels of the university

#### **Objectives:**

- 1. Strengthen infrastructure to coordinate efforts that support research, scholarship, and creative activities, such as mentorship, badging, interdisciplinary opportunities, and grant applications (Rec 32, 33 & 34)
- 2. Increase Undergraduate student participation in interdisciplinary research (Rec 35)
- *Goal:* Support and continue to grow our preeminent programs *Objectives:* 
  - 1. Refine the initial and continuing designation rubric for Preeminent/Emerging Preeminent Programs and create a sustained performance review mechanism (Rec 23)
  - 2. Facilitate national and international collaboration involving our Preeminent/Emerging Preeminent Programs (Rec 25)
  - 3. Launch a University Graduate School (UGS) Preeminent/Emerging Preeminent Fellowship for supporting Ph.D. Students (Rec 61)
- Goal: Amplify our culture of innovation and entrepreneurship by providing viable opportunities for technology transfer

#### **Objectives:**

- 1. Recognize innovation as important academic work by implementing differentiated assignments to facilitate faculty engagement in entrepreneurial ventures (Rec 37 & 38)
- 2. Increase industry partnerships at FIU to expand funding and technology transfer opportunities (Rec 39)
- 3. Create a faculty internship program with community/business partners to stimulate creativity and innovation (Rec 40)
- 4. Provide support for faculty seeking funding in terms of marketing, networking, outreach, active fundraising and large project management (Rec 62 & 63)
- 5. Establish guidelines for new faculty recruitment in support of our strategic goals (Rec 64)

• *Goal:* Enhance FIU's national and global reputation among prioritized rankings, surveys and metrics

#### Objectives:

- 1. Improve data collection and analyses that impact rankings and reputation by developing a predictive model of interactions among key metrics (Rec 27)
- 2. Optimize reporting of data elements to targeted surveys (Rec 28)
- 3. Implement global strategy to strengthen institutional collaborations and establish Global Centers with thematic hubs that leverage current preeminent programs (Rec 55 & 56)

# 3. Assure Responsible Stewardship for Resilience

- *Goal:* Establish an agile workforce in support of efficiency and productivity *Objective:* 
  - 1. Implement agile workforce strategies that foster engagement, productivity, creativity, and innovation (Rec 47)
- *Goal:* Ensure that all investments are in support of the university and its mission

#### *Objective:*

- 1. Strengthen on-campus industry partnerships to include services, scholarships, internships, employment opportunities, and capital improvements to enhance the student experience (Rec 53)
- *Goal:* Optimize operations

#### *Objectives:*

- 1. Establish a taskforce to conduct assessments of current and best practices for university shared services models (Rec 44)
- 2. Explore P-3 options to monetize university assets (Rec 54)



# Student Success Pillar – Workgroup 1A Recruiting and strategically enrolling students into success pathways

# 1. Recommendation #1 – Incoming Expectations Database

# **1.1.** Description and justification of program, savings, or efficiency recommendation (supported by data/research/best practices)

As mandated by our workgroup's charge, we will personalize each student's pathway to graduation. In their assessment of student perceptions concerning digital badges, Ashby and Exter (2015) highlight the value of student, self-reported data in designing pathways that maximize student commitment to their pursuit of educational goals. We propose to harness student generated data to develop a more comprehensive understanding of our students' expectations prior to their initial enrollment and chart the evolution of these expectations as students complete their initial experiences at FIU. To this end, we propose the development of an incoming database through which we will capture information concerning student expectations across several dimensions; these include (but are not limited to):

- 1. Intended time to degree completion
- 2. Interest in professional certifications and badges
- 3. Specific descriptions of desired competencies (potentially outside of major)
- 4. Short employment needs/intentions
- 5. Aspects of social, familial, and economic support
- 6. Long term career aspirations

As proposed, this database constitutes an extension of the work completed by enrollment managers at California Polytechnic State University, San Luis Obispo in their "intent-to-register" project (EAB, 2016). Our iteration of this effort will capture data concerning student intentions that goes beyond traditional course enrollment and intended (formal) majors. Our database will be amenable to querying and have key fields that will allow integration with

all of our enterprise data platforms. Students will provide us with information concerning their expectations after students submit all required admissions documentation but before they matriculate. To accommodate our efforts to understand the evolution of these expectations, we will include a sequence number or a date stamp for each student entry. This key format (Student ID x Sequence Number x Date) will allow us to maintain a time series record for each student.

Each department will use the expectations data in a manner that supports students as they work to meet their own expectations. For example:

- 1. Admissions will incorporate these data into their efforts to place each student into a pathway and cohort that is appropriate for the set of stated expectations.
- 2. Advisors can use the data to structure course selections, suggest badging experiences, and maximize the likelihood that students meet their expectations; advisors can also use initial information to facilitate refinement in students' understanding of their own expectations (achieving enhanced levels of self-awareness)
- 3. Curriculum planners can use the dataset in their efforts to understand student demand for certificate, badging, and competencies. This understanding can guide the development of learning experiences that support students' as they pursue both certifiable learning experiences (for short and intermediate term career aspirations) and degrees.

Through the effective implementation of this effort, we intend to enhance our graduation rates, increase enrollment, diversify enrollments across different modalities, and harness (and enhance) student self-awareness in our planning efforts.

#### **1.2.** Targeted Metric(s)

This proposal will have an impact across several aspects of student success; however, we considered the following metrics from our charge when developing this proposal:

- 11 Competency-based delivery
- 14 Number of current FIU students enrolled in badging/micromasters courses
- 14 Number of non-traditional students enrolled in targeted badging courses

#### 1.3. Feasibility Assessment

### 1.3.1. Implementation considerations and timeline

Implementation timeline:

- 1. Develop project team from IT, Academic & Career Success, University Admissions, Admissions Operations, Office of the Registrar, and Academic Affairs (week 1 of project)
- 2. Develop data elements (Delphi Method), key fields, and format for each element (8 weeks)
- 3. Outline requirements for integration with PeopleSoft, EAB, and other satellite software products (6 weeks concurrent with data element development)
- 4. Build database in a test environment (2 weeks)
- 5. Test integration with PeopleSoft (3 weeks)
- 6. Develop standard in Oracle BI (6 weeks)
- 7. Deploy in stage environment for user acceptance testing (2 weeks)

- 8. Refine data elements and reporting strategies (2 weeks)
- 9. Assess the influence of the project on values of the metrics (ongoing)

#### 1.3.2. Projected costs or savings of implementation

#### 1.3.2.1. Startup or phase-in (one-time) costs

Table 1
Incoming Expectations Database Start Up Cost Estimate

	Unit or Hourly		
Resource	Cost	Units	Extension
PeopleSoft Developer for Database Development	\$26.96	80	\$2,156.80
Fluid/Portal Developer (SF Developer)	\$26.96	80	\$2,156.80
Oracle BI Developer	\$36.76	100	\$3,676.00
Functional Area Staff (testing)	\$21.40	80	\$1,712.00
Trainer (training and documentation)	\$27.45	100	\$2,745.00
Total Start Up Cost			\$12,446.60

#### 1.3.2.2. Recurring costs or savings, as applicable

None anticipated

#### 1.3.3. Space needs or space savings, as applicable

None anticipated

#### 1.4. Accountability Plan

### 1.4.1. Measure(s) of impact (assessment plan)

#### Formative

- 1. Percentage of incoming students for whom we have records in the expectations database
- 2. Advisors acceptance and use of BI reports derived from expectations database (derived from OPER ID and advisor self-reporting data)
- 3. Number of badging programs derived from demand indicators

#### Summative

- 1. Disbursement of credit hours across modalities
- 2. Count and Percentage increases in students completing badges (year one is an assumed pilot/baseline population of 100)
- 3. Graduation rates for 4-year cohort, 6-year cohort, and AA-transfers

#### **1.4.2.** Proposed benchmark(s)

#### **Formative**

- 1. Percentage of incoming students for whom we have records in the expectations database
  - a. Incoming FTIC (4-Year Graduation Cohort)
    - i. First cycle following implementation (Year 1) = 60%
    - ii. Second cycle following implementation (Year 2) = 80%
    - iii. By 2022 = (approximating) 100%
  - b. Incoming FTIC (6-Year Graduation Cohort)
    - i. First cycle following implementation (Year 1) = 60%
    - ii. Second cycle following implementation (Year 2) = 80%
    - iii. By 2022 = (approximating) 100%
  - c. All other incoming undergraduate students
    - i. First cycle following implementation (Year 1) = 25%
    - ii. Second cycle following implementation (Year 2) = 50%
    - iii. Third cycle following implementation (Year 3) = 75%
- 2. Advisors acceptance and use of BI reports derived from expectations database (derived from OPER ID and advisor self-reporting data)
  - a. By the first cycle following implementation:
    - i. 60% academic advisors with FTIC advisees will access Oracle BI analyses associated with these
    - ii. Of the advisors who used the system, 75% will report that the analyses were useful to very useful in their efforts to advise students
    - iii. Of the advisors who used the system, 25% will offer suggestions concerning system improvement
  - b. By the second cycle following implementation:
    - i. 90% academic advisors with FTIC advisees will access Oracle BI analyses associated with this database
    - ii. Of the advisors who used the system, 75% will report that the analyses were useful to very useful in their efforts to advise students
    - iii. Of the advisors who used the system, 25% will offer suggestions concerning system improvement
  - c. By the third cycle following implementation
    - i. All academic advisors with FTIC advisees will have accessed Oracle BI analyses associated with this database
    - ii. 90% of advisors who use the database will report that they analyses were useful in their efforts to advise students
    - iii. 10% of the advisors who use the database will provide recommendations concerning reporting changes
- 3. Number of badging programs derived from demand indicators
  - a. One year after implementation = 2 fully subscribed badge programs
  - b. Two years after implementation = 6 fully subscribed badge programs
  - c. By 2022 = 15 fully subscribed badge programs

#### Summative

#### 1. Disbursement of credit hours across modalities

Table 2
Summative Credit Hour Distribution Goals

	Year					
Delivery Method	2019-2020	2020-2021	2021-2022	2022-2023	2023-2024	2024-2025
Competency-based	0%	0%	2%	2%	4%	5%
Face-to-Face	55%	45%	35%	27%	11%	10%
Hybrid	10%	15%	20%	25%	35%	35%
Online	35%	40%	43%	46%	50%	50%

- 2. Count and Percentage increases in students completing badges (year one is an assumed pilot/baseline population of 100)
  - a. Year two = 150 (50% increase over baseline)
  - b. Year three = 175 (75% increase over baseline)
  - c. Year four = 200 (100% increase over baseline)
  - d. By 2024 = 350 (250% increase over baseline)
- 3. Graduation rates for 4-year cohort, 6-year cohort, and AA-transfers
  - a. By 2022, our graduation rate for students admitted to the four-year graduation cohort will be 60%; by 2025, this rate will be 61%
  - b. By 2020, our graduation rate for students admitted to the six-year graduation cohort will be 70%; by 2025, this rate will be 72%
  - c. By 2020, 70% of the students who transferred to FIU as AA transfers in 2016 will graduate; by 2025, 72% of the students who transferred to FIU as AA transfers in 2021 will graduate.

#### 1.5. References and Appendices

Education Advisory Board. (2016). Promoting timely degree completion: Reconciling Student Choice and the four-year graduation imperative: Intent-to-register plans (EAB Pdf, pp 57-61).

Ashby, I. & Exter, M. (2015). What's in it for me? A look into first-year students' perceptions of a digital badge system (Paper ID # 12807). 122<sup>nd</sup> ASEE Annual Conference & Exposition. Seattle, WA. 2015. American Society for Engineering Education.





# Student Success Pillar – Workgroup 1A Recruiting and strategically enrolling students into success pathways

1. Recommendation #4: Tailor engagement opportunities that target groups or sub groups of students based on their past behaviors and interests as well as current and future interests, career goals and scheduling needs

#### 1.1. Description & Justification (supported by data/research/best evidence)

In keeping with our workgroup's goal of enhancing the enrolled student's experience (#2), and looking at the data included in the 2017 Florida International Highlights Freshmen Report, the CECE Undergraduate Student Survey, and the Summary of NSSE Engagement Indicators since 2014, some key points can be noted:

- When compared to other universities (in all comparisons except one) FIU was rated higher for key factors such as cost of attendance, scholarship opportunities, extracurricular activities, quality of faculty, quality of social life, and special academic programs (2017 Florida International Highlights Report, p. 12).
- An overwhelming majority of our undergraduate students (83%) who participated in the Culturally Engaging Campus Environments (CECE) survey indicated that they received important information about new learning opportunities at the university (p. 17).
- FIU consistently ranked lower on academic reputation compared to others on factors such as academic reputation, availability of majors, and personal attention ((2017 Florida International Highlights Report, p. 12).
- Only 36% of our students who completed the CECE survey reported having had people at the university check in with them regularly for support. Another 57% reported knowing they had someone they could trust that they could go to if they ran into any problems (p. 17).
- Engagement indicators in the NSSE Engagement analysis show that as of 2018 the university had seen some valuable increases in overall satisfaction (p. 2), especially as related to learning strategies, teaching practices, and the quality of interactions (p. 1). The same report showed a flat and low trend regarding student satisfaction with student-faculty interactions and discussions with diverse others (p. 1).

The data provided in the aforementioned reports represent student sub-groups—first year versus senior, high achieving admitted students versus all admitted students. The responses also vary by group or category. It is thus important to recognize that the recommended approach to student engagement would also be multi-pronged.

Below is a description of what the recommendation itself would entail:

We could build a tool or survey that students would fill out during orientation that would allow them to share what kind of involvement they've had in the past (whether in high school or at a state college), what their career goals are, and what they are looking to do while at FIU. Given that we work with a large commuter population, as part of the proposed survey or assessment of new student goals, plans and expectations, we could capture information on availability – asking about current work schedules and personal commitments of time. The goal here is to have for each student explicit windows of availability (at least generally). A system would then be created (i.e., salesforce) that would "match" student current and previous interests and available hours to events on campus and *PUSH* notifications to that student about events they may want to consider attending. A team could be appointed as well to leverage social media, emails, texts to students with "We want to see you there" messages.

We could also examine the student engagement behaviors of students of ours who perform well and graduate on time to identify any common themes that could better help us create an engagement model for future students. This can allow us to create subgroups of students with whom we can communicate based on their interests. The communications that would be shared with them, as noted above, can be automated and targeted through salesforce.

There should be strong collaboration with the academic colleges and units to ensure that the central-to-local commitment and communication of activities is seamless and efficient.

#### 1.2. Targeted Metric(s)

The following would be the targeted metrics:

- FTIC 2-year retention with GPA above 2.0
- FTIC 4-year graduation rate
- AA 4-year graduation rate
- Total number of FIU students enrolled
- Bachelor's degrees awarded to minorities
- Number of Fist Gen graduates

#### **1.3.** Feasibility Assessment

As a part of the proposed survey/assessment of new student goals/plans and expectations, we could also capture information on availability – asking about work schedules and personal commitments of time. The goal here is to have for each student explicit windows of availability (at least generally). A system would then be created (salesforce?) that would "match" student available hours to events on campus and PUSH notifications to that student about events they may want to consider attending. A team could be appointed as well to leverage social media, emails, texts to students with "We want to see you there" messages. In the event that the number and variety of such events are not available, a commitment must be made to develop more events that are likely to suit our students' needs by group or category.

#### 1.3.1. Implementation considerations and timeline

The proposed data collection could take place over the course of a new student orientation season. As has been done with some of the larger campus projects (PSN, for example) it would probably work well to either pilot the program with a small sub-set of the new student population. This can be done by college and may be based on colleges that are interested in piloting the project and that already have a high level of engagement and communication with their students so that it provides a platform from which to grow and build upon. The timeline would include building the survey, testing it, identifying a timeline to collect data (at the first new student orientation through the last), establishing a timeline to analyze the data and organize the students into subgroups, and lastly feeding the CRM with the programming information that will then be pushed out to students. In almost a parallel fashion, there would be communication of activities and coordination between the academic units and the central offices to ensure that valuable programming and engagement opportunities are being organized and fed into the CRM in a well-coordinated manner. A "check in" or assessment of the student's perception of the outreach should be conducted 4-6 months into the semester.

#### 1.3.2. Projected costs or savings of implementation

#### **1.3.2.1.** Startup or phase-in (one-time) costs

Table 1
Start Up Cost Estimate

Resource		Unit or Hourly Cost	Units	Extension
Instrument/Survey development		\$20.00.00	50	\$1,000.00
Deployment via CRM		0	0	\$0.00
Coordinator		\$35,000.00	100	\$35,000.00
	Total Start Up Cost			\$36,000.00

#### 1.3.2.2. Recurring costs or savings, as applicable

None anticipated

#### 1.3.3. Space needs or space savings, as applicable

None anticipated

#### 1.4. Accountability Plan

#### 1.4.1. Measure(s) of impact (assessment plan)

- 1. Percentage of students who feel supported and engaged by the resources set in place to support their success
- 2. FTIC 2-year retention with GPA above 2.0
- 3. FTIC 4-year graduation rate
- 4. AA 4-year graduation rate
- 5. Total number of FIU students enrolled in badging programs

6. Bachelor's degrees awarded to minorities

#### **1.4.2.** Proposed benchmark(s)

- 1. Graduation rates for 4-year cohort, 6-year cohort, and AA-transfers
  - a. By 2022, our graduation rate for students admitted to the four-year graduation cohort will be 60%; by 2025, this rate will be 61%
  - b. By 2020, our graduation rate for students admitted to the six-year graduation cohort will be 70%; by 2025, this rate will be 72%
  - c. By 2020, 70% of the students who transferred to FIU as AA transfers in 2016 will graduate; by 2025, 72% of the students who transferred to FIU as AA transfers in 2021 will graduate.
- 2. Bachelor's degrees awarded to minorities
  - a. Year two = 7,200
  - b. Year three = 7,450
  - c. Year four = 7,650
  - d. Year five = 8,000
- 3. Number of badging programs derived from demand indicators
  - a. One year after implementation = 2 fully subscribed badge programs
  - b. Two years after implementation = 6 fully subscribed badge programs
  - c. By 2022 = 15 fully subscribed badge programs
- 4. By the second year of the program, we will achieve an FTIC retention rate of .92

#### 1.5. References and Appendices

2017 Florida International Highlights Report Freshmen.

Florida International University 2017-2018 Institutional Report. National Institute for Transformation and Equity. Culturally Engaging Campus Environments Undergraduate Student Survey.

Summary of NSSE Engagement Indicators since 2014.



# FLORIDA INTERNATIONAL UNIVERSITY STRATEGIC PLAN 2020-2025

# Student Success Pillar – Workgroup 1A Recruiting and strategically enrolling students into success pathways

#### Recommendation #3 - Meaningful Engagement and Affinity Building 1.

#### 1.1. Description and justification of program, savings, or efficiency recommendation (supported by data/research/best practices)

There is evidence in the higher education literature suggesting that campus integration and engagement have a positive impact on student retention. To facilitate campus integration and engagement, it is imperative that institutions allocate their resources to encourage student participation through learning opportunities that are experiential and purposeful (Kuh, 2001, as cited in Wolf-Wendel, Ward & Kinzie, 2009).

Relevant to the target population and existing student body at FIU, it has been noted, "low income and First Generation students are less likely to be engaged in the academic and social experiences that foster success in college (often referred to as academic and social integration)" (Engle & Tinto, 2008, p. 21).

Based on this evidence and in concert with previous recommendations by our workgroup, we propose the development of meaningful, engaging, and affinity-building activities to ensure alignment around our community efforts, especially those directly related to providing access and a framework for success for underrepresented students defined as black/African American and/or low SES. These activities include:

- 1. Access to FIU badges prior to enrollment as part of their pre-college experience (e.g., data literacy, transition readiness, communication, collaboration, etc.)
- 2. Provide the FIU One Card to students who commit to attending FIU, and developing an outreach communication plan to engage students in a myriad of activities and programs.
  - a. Connect4Success and Dual Enrollment offer students the FIU One Card, which provides access to the library, athletic games, and other events.
- 3. Assign students to Success Coaches at the point of pre-college program enrollment through the first term (or first 30 credits) of enrollment at FIU. Success Coaches would work in tandem with pre-college programs staff to identify student needs and interests as well as advising, tutoring, experiential opportunities.
- 4. Tailor sections of first year experience to meet needs specific to FTIC that we admit in spring; this effort will incorporate analyses from the incoming intentions database.
- 5. Match financial aid packages for minority students with exceptional academic readiness, as appropriate.

#### 1.2. Targeted Metric(s)

This proposal will have an impact across several aspects of student success; however, we considered the following metrics from our charge when developing this proposal:

- 10 Bachelor's degree awarded to minorities
- 11 Total headcount
- 14 Number of current FIU students enrolled in badging/micromasters courses
- 14 Number of non-traditional students enrolled in targeted badging courses

#### **1.3.** Feasibility Assessment

#### **1.3.1.** Implementation considerations and timeline

Implementation timeline:

- 1. Identify the work group team to include leadership and staff from Student Access and Success, Student Support Services, Office of Engagement, and faculty who have a special interest in underrepresented student populations and/or are involved in associated research activities. (4 weeks)
- 2. Environmental scan of existing activities in each of the pre-college programs, including those yielding particularly successful outcomes. Identify the deepest gaps. (4 weeks)
- 3. Enhance existing programs, as appropriate, based on identified gaps. Develop tracking and evaluation measures. (1 week)
- 4. Request and review, from AIM, the application, admission, enrollment, retention, and graduation data related to our defined target populations. (1 week)
- 5. Enhance grant capabilities for existing programs, as appropriate. (ongoing)

### 1.3.2. Projected costs or savings of implementation

N/A

#### 1.3.2.1. Startup or phase-in (one-time) costs

Table 1
Start Up Cost Estimate

	Unit or Hourly		
Resource	Cost	Units	Extension
Coordinator (see Recommendation 1)	35,000	1	35,000.00
Success Coaches	40,000	3	120,000.00
Manager of Success Course (Committed to Project)	26.86	40 hrs	1,074.40
Project Total			156,074.40

#### 1.3.2.2. Recurring costs or savings, as applicable

Success coaches (120,000/year)

#### 1.3.3. Space needs or space savings, as applicable

None anticipated

#### 1.4. Accountability Plan

#### 1.4.1. Measure(s) of impact (assessment plan)

#### Formative

- 1. Percentage of incoming students who earned badges prior to enrollment
- 2. Percentage of applications received from target population
- 3. Percentage of students from target group admitted
- 4. Percentage of students from target group enrolled
- 5. Percentage of students from target group retained

#### Summative

- 1. Number of students completing badges (year to year comparisons)
- 2. Targeted population retention rates
- 3. Graduation rates
  - a. 4-Year Cohort
  - b. 6-Year Cohort
  - c. AA Transfer

#### 1.4.2. Proposed benchmark(s)

#### Formative

- 1. Percentage of incoming students who earned badges prior to enrollment (YR1 20%, YR2 40%, YR3 60%, YR4 80%, YR5 100%)
- 2. Percentage increase in applications received from target population
  - a. Percentage of students from target group admitted
  - b. Percentage of students from target group enrolled
  - c. Percentage of students from target group retained
  - d. Percentage of students from target group graduated

#### Summative

- 1. Count and Percentage increases in students completing badges (year one is an assumed pilot/baseline population of 100)
  - a. Year two = 150 (50% increase over baseline)
  - b. Year three = 175 (75% increase over baseline)
  - c. Year four = 200 (100% increase over baseline)
  - d. By 2024 = 350 (250% increase over baseline)
- 2. Targeted population retention rates
  - a. Year one = 80%
  - b. Year two > Institutional overall rate
  - c. 2025 = 90%

- 3. Graduation rates for 4-year cohort, 6-year cohort, and AA-transfers
  - a. By 2022, our graduation rate for students admitted to the four-year graduation cohort will be 60%; by 2025, this rate will be 61%
  - b. By 2020, our graduation rate for students admitted to the six-year graduation cohort will be 70%; by 2025, this rate will be 72%
  - c. By 2020, 70% of the students who transferred to FIU as AA transfers in 2016 will graduate; by 2025, 72% of the students who transferred to FIU as AA transfers in 2021 will graduate.

#### 1.5. References and Appendices

Engle, J. & Tinto, V. (2008), *Moving beyond access: College for low-income, first generation students (p. 21)*. The Pell Institute. Washington, D.C. Retrieved from https://files.eric.ed.gov/fulltext/ED504448.pdf

Kuh, G.D. (2001). Assessing what really matters to student learning: Inside the National Survey Student Engagement. *Change*, *33*(3), 10-17.

Wolf-Wendel, L., Ward, K., & Kinzie, J. (2009). A Tangled Web of Terms: The Overlap and Contribution of Involvement, Engagement, and Integration to understanding College Student Success. *Journal of College Student Development*, *5*(4), 407-428.



# Student Success Pillar – Workgroup 1A Recruiting and strategically enrolling students into success pathways

1. Recommendation #5: Build "high-touch" personally engaging, success coaching experiences for students

#### 1.1. Description & Justification (supported by data/research/best evidence)

Student engagement is not only about offering appealing activities that will contribute to a student's academic and professional growth. It is also about providing the "checks" and support system that students will need to complete their degrees successfully (Tinto, 1993). Tinto's student development theory on attrition and retention provides a good foundation for understanding student departure and the critical relationship that exists between integration, retention, and successful completion. The more invested the student is in academic, and social life, and the more that we can support their goals and decrease barriers (at times administrative) the greater their sense of belonging and the more likely they are to persist and complete.

An inaugural study conducted by Gallup-Purdue and the Lumina Foundation sought to link college life experiences and behaviors to graduate outcomes. The subsequent report published in 2014 Gallup revealed the critical impact that meaningful relationships (mentors) and "deep experiential learning" had on the students' post-graduate success in the workplace. For example, "if graduates recalled having a professor who cared about them as a person, made them excited about learning, and encouraged them to pursue their dreams, their odds of being engaged at work more than doubled, as did their odds of thriving in all aspects of their well-being" (Ray & Marken, 2014).

A "success coaching" model that is intrusive in the first six months of a student's college experience, would be most helpful, especially for students who in their surveys demonstrate a level of "risk" for attrition or lack of engagement. This could be different from or together with the traditional advisor outreach for FTIC's. The check points would be scheduled early in the student's career and the conversation would include some of the items that the student already declared in the entry survey mentioned in our previous recommendations.

We understand that "success coaching" at scalable levels might seem almost unattainable or impossible to implement. However, there are universities, especially large online universities, such as Western Governors University, that have somehow figured out how to make that large-scale coaching model work (<a href="https://www.chronicle.com/article/How-One-University-Connects/242495">https://www.chronicle.com/article/How-One-University-Connects/242495</a>). Their model is not conventional in any way—they have faculty teaching and mentors mentoring, which is a different way of approaching coaching. However, there is an opportunity here to learn from some of what institutions such as WGU have done to ensure

student retention, engagement and post graduate success.

#### 1.2. Targeted Metric(s)

The following would be the targeted metrics:

- FTIC 2-year retention with GPA above 2.0
- FTIC 4-year graduation rate
- AA 4-year graduation rate
- Total number of FIU students enrolled
- Bachelor's degrees awarded to minorities
- Number of First Generation graduates

#### **1.3.** Feasibility Assessment

The university should look at several case studies in which success coaching was implemented at scale, how it was done, and what outcomes were reported. Additionally, it would be important to first assess the students in groups or subgroups within academic units that have the greatest need for success coaching. The university could then prioritize allocation of resources for success coaches by academic unit and develop a plan to embed a number of success coaches into the academic units in period of 1-3 years.

#### 1.3.1. Implementation considerations and timeline

The implementation of the proposed strategy would require several months of planning, ensuring commitment and buy-in at all levels, especially within the academic units. As an initial approach, the university could select some of the colleges or academic units in which students reported feeling the least engaged or supported to begin to roll out smaller "success coaching" models. While there should be central coordination, ideally the success coaches would be integrated into the academic units, specializing in all matters related to how that academic unit or college operates, and how to best leverage college and university resources to impact student success at a more local level.

#### **1.3.2.** Projected costs or savings of implementation

#### 1.3.2.1. Startup or phase-in (one-time) costs

Table 1
Start Up Cost Estimate

Resource		Unit or Hourly Cost	Units	Extension
Success Coaches		\$40,000.00	3	\$120,000.00
Training		\$20.00	80	\$1,600.00
Documentation		\$40.00	100	\$4,000.00
Functional Area Staff (testing)		\$21.40	80	\$1,712.00
	Total Start Up Cost			\$127,312.00

#### 1.3.2.2. Recurring costs or savings, as applicable

#### 1.3.3. Space needs or space savings, as applicable

#### 1.4. Accountability Plan

#### 1.4.1. Measure(s) of impact (assessment plan)

- 1. Percentage of students who feel supported and engaged by the resources set in place to support their success
- 2. FTIC 2-year retention with GPA above 2.0
- 3. FTIC 4-year graduation rate
- 4. AA 4-year graduation rate
- 5. Total number of FIU students enrolled in badging programs
- 6. Bachelor's degrees awarded to minorities

#### 1.4.2. Proposed benchmark(s)

- 1. Graduation rates for 4-year cohort, 6-year cohort, and AA-transfers
  - a. By 2022, our graduation rate for students admitted to the four-year graduation cohort will be 60%; by 2025, this rate will be 61%
  - b. By 2020, our graduation rate for students admitted to the six-year graduation cohort will be 70%; by 2025, this rate will be 72%
  - c. By 2020, 70% of the students who transferred to FIU as AA transfers in 2016 will graduate; by 2025, 72% of the students who transferred to FIU as AA transfers in 2021 will graduate.
- 2. Bachelor's degrees awarded to minorities
  - a. Year two = 7,200
  - b. Year three = 7.450
  - c. Year four = 7.650
  - d. Year five = 8.000
- 3. Number of badging programs derived from demand indicators
  - a. One year after implementation = 2 fully subscribed badge programs
  - b. Two years after implementation = 6 fully subscribed badge programs
  - c. By 2022 = 15 fully subscribed badge programs
- 4. By the second year of the program, we will achieve an FTIC retention rate of .92
- 5. By the end of the planning cycle, we expect all participating students to report (via a survey) a feeling that they are well supported and feel accountable for their success.

#### 1.5. References and Appendices

Tinto, V. (1993). *Leaving college: Rethinking the causes and cures of student attrition* (2nd ed.). Chicago: University of Chicago Press.

Supiano, B. (2018). How one university connects students and mentors with surprising success. The Chronicle of Higher Education. <a href="https://www.chronicle.com/article/How-One-University-Connects/242495">https://www.chronicle.com/article/How-One-University-Connects/242495</a>

Ray, J. & Marken, S. (2014). Life in College Matters for Life After College.





# FLORIDA INTERNATIONAL UNIVERSITY STRATEGIC PLAN 2020-2025

## Student Success Pillar – Workgroup 1D Coordinating and accelerating academic and career success

#### 1. Recommendation #21 – Establish a Peer Success Mentor (PSMs) Program

## 1.1. Description and justification of program, savings, or efficiency recommendation (supported by data/research/best practices)

- Increase student engagement through student organizations, events, and on-campus employment.
- Improve engagement opportunities between students and have senior students or post-bac students serve as Peer Success Mentors (PSMs) within their majors.
- Intent would be to have representation for every major.
- Students can serve as liaisons for university resources and encourage involvement in student organizations.
- Train PSMs on appropriate content to discuss and how to interact with students (i.e., what information is appropriate to ask, how to ask for sensitive information without making the student feel uncomfortable or violating FERPA, CAPS Kognito Training, etc.)
- Provide a private meeting space (physical or virtual) to discuss sensitive information; such as grades, progression towards degree and other confidential information.
- Offer a badging program, zero credit course, or paid position to recognize the PSMs.

#### 1.2. Targeted Metric(s)

- FTIC 2-yr Retention Rate
- FTIC 4 & 6 year Graduation Rate

#### 1.3. Feasibility Assessment

#### 1.3.1. Implementation considerations and timeline

- Phase 1 Fall 19 soft launch with one college (CASE pilot) implementing PSMs
- Phase 2 Spring 20 through Summer 2020 additional colleges

College Targets	2019	2020
CASE	FALL	
COB/HOSPITALITY		SPRING
SIPA/COE		SPRING
CARTA/NURSING		SUMMER
PUBLIC HEALTH		SUMMER

#### 1.3.2. Projected costs or savings of implementation

- Training for PSMs
- Cost of hiring PSMs (if we go the route of employment vs badging/zero credit course)

#### **1.3.2.1.** Startup or phase-in (one-time) costs

#### 1.3.2.2. Recurring costs or savings, as applicable

#### 1.3.2.3. Space needs or space savings, as applicable

• Space may be saved if the meetings take place in a virtual platform (Zoom, AdobeConnect, etc.)

#### 1.4. Accountability Plan

#### 1.4.1. Measure(s) of impact (assessment plan)

- PSMs in place by college target attainment.
- FTIC 2-yr Retention Rate
- FTIC 4 & 6 year Graduation Rate

#### **1.4.2.** Proposed benchmark(s)

- Target attainment (refer to chart above).
- Retention rate of students is 2% higher with assigned PSMs
- Graduation rate of students is 2% higher with assigned PSMs

#### 1.5. References and Appendices

## Student Success Pillar – Workgroup 1D Coordinating and accelerating academic and career success

\*\* joined with recommendations set forth by workgroup 1A \*\*

#### Recommendation 6 – Exposing students in gateway courses to alumni

## 1.1. Description and justification of program, savings, or efficiency recommendation (supported by data/research/best practices)

Promoting student engagement with alumni is various industries will help promote engagement by allowing them to see relevance of their discipline and possible career paths. Targeting students early in their academic careers will be crucial in helping them to make decisions about selecting their majors and career paths.

Alumni panels and various career panels are presented within various departments at FIU. The STEM Career fair hosted by CASE in the Spring and the Exploratory panels for majors are two examples. However, most panels are not well attended (averaging around 10 students). This is not encouraging to our alumni either who take time out of their busy schedules to come present to our students. Because we are a commuter campus, it is hard to get our students to go to events outside of class. So we need to find a way to bring the information conveyed by these panelists to the students.

In the future, we suggest that these panel discussions be recorded and placed in an online repository where it will be available to all instructors. It will also help is attract alumni because we can inform them that this will be reaching more than the 10 students who actually made it to the panel in person.

We suggest targetting large gateway courses to allow us to engage a maximum number of students. A link can be made available to instructors which they can place within their Canvas course. Instructors can create an assignment for students to watch the entire video and post on the class discussion board in small groups, moderated by the instructor and Learning Assistants in the course. This also ensures that class time is not used unless the instructor wishes to do this in class.

A list-serv could be used to communicate with the instructors to notify them when a new video is uploaded. Once a repository is built, instructors could pick and choose which videos to use in their classes. Departments could be encouraged to host and record their own panels to add to the repository.

#### 1.2. Targeted Metric(s)

- FTIC 2-yr Retention Rate
- FTIC 4 & 6 year Graduation Rate

#### **1.3.** Feasibility Assessment

#### 1.3.1. Implementation considerations and timeline

- Phase 1 Fall 19 soft launch with selected STEM gateway courses implementing students a STEM career related discussion board.
- Phase 2 Spring 20 through Summer 2020 additional courses

<b>College Targets</b>	2019	2020
CASE	FALL	
COB/HOSPITALITY		SPRING
SIPA/COE		SPRING
CARTA/NURSING		SUMMER
PUBLIC HEALTH		SUMMER

#### 1.3.2. Projected costs or savings of implementation

- Recording costs associated with filming alumni panels
- Costs associated with hosting the recordings on a secure site

#### 1.3.2.1. Startup or phase-in (one-time) costs

#### 1.3.2.2. Recurring costs or savings, as applicable

#### 1.3.2.3. Space needs or space savings, as applicable

• Recordings will need to be hosted on a secure platform

#### 1.4. Accountability Plan

#### **1.4.1.** Measure(s) of impact (assessment plan)

- College target attainment.
- FTIC 2-yr Retention Rate
- FTIC 4 & 6 year Graduation Rate

#### 1.4.2. Proposed benchmark(s)

- Target attainment (refer to chart above).
- Retention rate of students in their majors will increase
- Graduation rate of students will increase

#### 1.5. References and Appendices

### Preeminence Pillar – Workgroup 2C Enhancing university reputation to improve metrics and rankings

\*\* will be joined with recommendations from workgroup 2B \*\*

Recommendation #29 – Create a system to measure brand reputation for the University

## 1.1. Description and justification of program, savings, or efficiency recommendation (supported by data/research/best practices)

We are seeking to understand the perception of the university among higher ed constituents, influencers, stakeholders, researchers, and community members to uncover insights and formulate a strategic marketing and communications plan. Without a system to measure branding and perception, the only measures we rely on are very limited.

Starting with our own campus stakeholders is key to the success of the brand reputation given that this audience serves as brand ambassadors who may also validate the FIU locally, nationally and even internationally. The audiences that will be included in the brand study will be the individuals that can influence our national and international rankings as well as our student and alumni population, faculty, staff, prospective students and parents, community leaders, donors, etc.

Surveying these audiences will allow the university to analyze the big picture and generate recommendations for optimization. This system mirrors a similar mechanism built by Arizona State University, which is implemented by the internal brand and marketing teams. ASU has a \$700,000 annual brand research budget.

#### **1.2.** Targeted Metric(s)

As part of the brand reputation study, we will implement a brand tracker tool which will be based on the metrics associated with a longitudinal benchmark mapping out the important attributes associated with the brand. Success of this strategy will result in the creation of annual surveys to the targeted audiences and the creation of a data dashboard that will display these data. Specific KPIs will be defined with consulting firm and AIM team after project approval.

#### **1.3.** Feasibility Assessment

#### 1.3.1. Implementation considerations and timeline

We are looking to implement the brand study with subject matter experts that will contribute from different perspectives to the overall goal. We are considering a research firm such as Stamats, which can tap into the market research for those individuals that influence the rankings. Another partner for consideration is Qualtrics, which can provide strategic consultation for branding and the development and deployment of the surveys, brand tracker and dashboard.

The estimated timeline is as follows:

- Kickoff project and development of tracker: 1-2 months
- Development and deployment of surveys and results: 2-3 months
- Strategic consultation and development of dashboard: 3-4 months

#### 1.3.2. Projected costs or savings of implementation

\$185-195,000 first year to set up mechanism with consultation and deployment + \$165-180,000 annually to conduct surveys and measure trends and results.

Recurring annual fee includes Stamats scope, tools and strategic consultation from Qualtrics.

- Stamats: qualitative research with US News & World Report influencers
- Stamats: web survey of regional high school counselors
- Qualtrics: strategic consultation for brand tracker and dashboard, survey development, deployment, and results
- Market Research/Brand Analyst: full-time person dedicated to analyzing data and reports (annual salary is included in budget)

## **1.3.2.1. Startup or phase-in (one-time) costs** \$185-195,000 first year

**1.3.2.2.** Recurring costs or savings, as applicable \$165-180,000 annually

## 1.3.3. Space needs or space savings, as applicable N/A

#### 1.4. Accountability Plan

AIM Team and External Relations would execute this tracker annually and present findings to university leadership including recommendations and action items.

#### **1.4.1.** Measure(s) of impact (assessment plan)

The first year would give us a baseline to allow for measuring the impact of any reputational work we do. This recommendation is actually to create the measurement tool.

#### 1.4.2. Proposed benchmark(s)

This mechanism and tool will allow us to create benchmarks after we establish the baseline as well as annual goals.

#### 1.5. References and Appendices

Weber Shandwick was retained to conduct a comprehensive assessment of communications and marketing function and processes and to recommend steps FIU should consider to better convey its overall story and enhance its brand positioning. DATA was one of the main recommendations.

(https://drive.google.com/file/d/1efRXkFGLEqdbwBDAc8lUd4VAvmOkbcYR/view?usp=sh aring)

#### Sample Job Description

https://drive.google.com/open?id=11NT1o2AZHwk rxoVwiNngAsT-8TBuofD

#### Generic Qualtrics proposal

This was just a sample proposal for one audience. We would be able to save budget by having AIM team process raw data

https://drive.google.com/file/d/1OIc2wZ1v492dUcG\_J3O1cgPzGZk724Lq/view

#### Generic Qualtrics proposal for dashboard

https://drive.google.com/file/d/1Vr VvJzvHFXZLS0EbDADSTdwJHcvtndi/view?usp=sharing

#### Sample Dashboard for Brand Reputation

https://drive.google.com/file/d/1d6feEZTMMBlLAd3FjB FdnfkoCeeclmC/view?usp=sharing

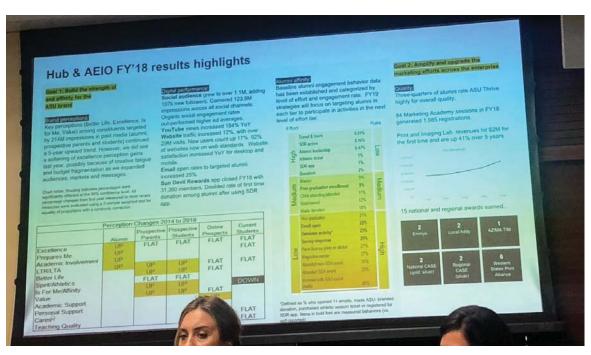
STAMATS Proposal for President's & Provosts and High School Counselors

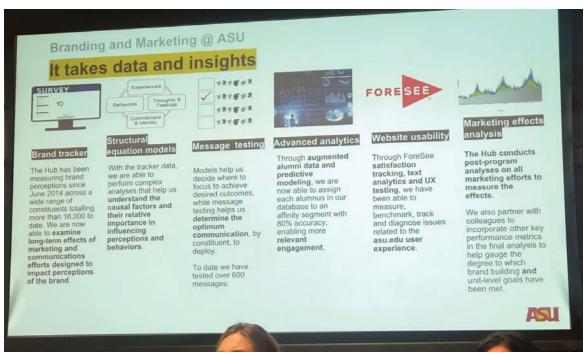
https://drive.google.com/file/d/1LaUj4qY7LHLpd4h2E-op2uwVN3lFcgZW/view?usp=sharing

#### Audiences we need to survey. Some of these may already be addressed at the college level.

Audience	Database
Presidents, provosts and deans	Stamats
High school counselors	Stamats
National community leaders including CEOs, Founders, C-level executives	FIU database + Qualtrics
Existing and prospective donors	FIU database
Students and alumni	FIU database
Staff and faculty	FIU database
FIU Partners & Vendors	
Prospective students and parents	FIU database
Academics (US/International-India, Europe, China)	FIU database + Potential Email Vendor
Researchers (US/International-India, Europe, China)	FIU database + Potential Email Vendor

#### Screens from ASU Brand Tracking by audience









### Preeminence Pillar – Workgroup 2C Enhancing university reputation to improve metrics and rankings

\*\* will be joined with recommendations from workgroup 2B \*\*

Recommendation #30 - Create and execute a marketing and communications plan

## 1.1. Description and justification of program, savings, or efficiency recommendation (supported by data/research/best practices)

While individual colleges may have executed some communications, the university has never had a campaign targeting the audiences that can influence our rankings.

There are only 3 university level rankings (US NEWS, THE, QS) that include reputation as a factor and only 2 of those have audiences that can be addressed directly. However, it is important to note that there are many indirect audiences that will need to be addressed with faculty being one of the most important.

Ranking	Reputation Audience	Link
Times Higher Education	Academic staff and Researchers - Elsevier database (15% Teachers, 15% Researchers)	https://www.timeshighereducation.co m/world-university-rankings
US News Top Public	Top college administrators, president, provost and dean of admissions, corporate recruiters, High school guidance counselors (low statistical value)	https://www.usnews.com/best-college s/rankings/national-universities/top- pu blic
QS World University Rankings	Unknown audience (100K+) with the exception of the 400-800 we will be submitting this year.	https://www.topuniversities.com/univ e rsity-rankings/world-university- ranking s/2019

College level rankings provide us even more opportunities to influence reputation with some relying 100% on reputation.

In addition to communicating directly with the identifiable audiences this plan will also need to address our faculty and other indirect audiences. Specifically, how do we get buy in and how do we empower them to carry the FIU message when they attend and speak at conferences or other events? Faculty are the influencers when it comes to rankings.

Here are some ideas that should be included in the formal plan:

- Central budget for national brand opportunities that relate directly to reputation (funding rank badges and communications that address audiences which influence rankings)
- Establishing a university level reputation/ranking committee to approve college/schools proposals for ranking/reputation communication funding. Similar to tech fee proposals
- Annual review of boiler plate with an eye toward national and international use
- Establishing Resources and communications for faculty researchers: Powerpoint and presentation help for faculty; Tool Kit (including FIU templates with logos, etc.)
- "Quick View" publications distribution, regular communications on brand to faculty
- FIU News for faculty edition
- Media Relations: Consistent pitching for specific publications: Times Higher Ed, QS World Ranking
- Social Media strategy both for our own channels and faculty and for using other channels to reach audiences that correlate to rankings.
- Strategic partnerships with associations, conferences, events, etc., where influencers have an active presence (i.e.: APLU, ACE, etc.)
- Use of internal expertise. Regular communications and programs from our Business/Communications professors to train faculty on best practices for social and other communications.

#### 1.2. Targeted Metric(s)

Ultimately the rankings themselves are the metrics we will use to measure success however the brand reputation tracker (previous recommendation) will provide a more consistent method for tracking results. Execution of this recommendation is contingent on the other

#### 1.3. Feasibility Assessment

#### 1.3.1. Implementation considerations and timeline

- Kickoff project and development of the plan: 2-3 months
- Begin execution of year 1 objectives determined by the plan: 3-6 months
- Plan adjustment based on the first Brand Tracker Report: after 12 months

#### 1.3.2. Projected costs or savings of implementation

#### Year One Funding: 500K

While the creation of a plan does not have any costs associated, the implementation would be between \$500,000-\$1.5m annually. Our references and appendices sections have some samples of the kinds of elements that would be included in an annual reputation plan.

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#### **1.3.2.1.** Startup or phase-in (one-time) costs

The startup costs are the development of the tracker (previous recommendation). Without this there would be no way to track the communications work.

#### 1.3.2.2. Recurring costs or savings, as applicable

Annual Recurring Funding: 1M
After tracking the results for 2 years, costs would be evaluated

#### 1.3.3. Space needs or space savings, as applicable

N/A

#### 1.4. Accountability Plan

Every audience affected in the communication plan would be tracked using the brand tracker.

#### 1.4.1. Measure(s) of impact (assessment plan)

The only way to measure the impact of this plan is using the "brand tracker" suggested by previous recommendation.

#### 1.4.2. Proposed benchmark(s)

TBD

#### 1.5. References and Appendices

Proposed reputation enhancing tactics that should be evaluated further prior to commitments. This gives us a starting point and an idea of the commitment required.

#### Advertising

Estimated Budget	Media	Frequency	Content	Audience
\$100,000	Chronicle of Higher Education*	10 ads a year	Preeminent Programs/ Reputation	Higher Education Influencers
\$100,000	Inside Higher Ed	Combination of ads and event sponsorship	Preeminent Programs/ Reputation	Reputation campaign package
\$30,000	Social Media	60 boosted facebook posts (2 per month)	Content that supports Strategic Plan	Targeted using email look-a- like lists or conferences geared at higher ed professionals

<sup>\*</sup>We learned in a phone call that a local private institution is investing 200K in Chronicle alone.

#### Production, research and other tactics

Estimated Budget	Tactic	Qty	Notes
\$150,000	Production Costs & Media buying	N/A	Translations, Editorial, Design, Media N/A
\$250,000	Brand reputation event participation	6 per year	HACU, APLU, ACE, LASA and at least 2 premier events in DC co-branded with top-tier institutions; similar events in New York and Miami.
\$150,000 (TBD)	Increasing conference	TBD	Establish a fund for professors and leaders to participate in national and international conference.
\$50,000- 100,000	Ranking Badges	TBD	This budget is specific to allow the use of the US News official logo in FIU marketing materials
\$100,000	Direct communication	2 times a year	Direct communications and mailing to 6,000+ opinion leaders who impact rankings. (Presidents and Provosts)
\$150,000	National PR firm to place FIU in national media	Annual	Hire a specialized firm to negotiate earned media placements in predetermined set of national and international media outlets, focused on higher education.
\$5,500	Email list for presidents, provosts and deans	Once a year	Purchase an email list to target individuals as part of on-going marketing campaigns

#### Survey Samples

 $\underline{https://drive.google.com/drive/folders/1105y0lTlxjv8qF4WV20KH3BBGCB9PZSj?usp=sharing}$ 

Notes and Items which require further discussion:

- Departments versus Centers and Institutes. It was brought up that departments come up more in rankings.
- Being strategic with department names? Establishing a review prior to name creation.
- Affiliating with ranked programs securing relationships and partnership with ranked programs
- Social Shares for Faculty. Establishing a system for faculty and other influencers to easily share reputation related news.
- Leverage the findings of marketing review and implementation of the Marketing Plan provided by consultants, due 129 of 206 9.

## Preeminence Pillar – Workgroup 2B Prioritizing facts that maximize targeted university rankings

\*\* joined with ideas from workgroup 4B on revenue generation \*\*

Recommendation #52 - Increase / Enhance Alumni Giving Rate

## 1.1. Description and justification of program, savings, or efficiency recommendation (supported by data/research/best practices)

FIU is currently ranked 142 in US News and World Report for alumni giving rate. It is unclear whether FIU is reporting data in a manner consistent with other universities. Although only counting as 5% of the total for US News rankings, FIU scores very low in alumni giving and should be able to make considerable gains in this area. In addition, improving this metric likely will have cascading positive impacts on the university that will improve other metrics. It is possible that changes in reporting practices would result in rapid improvements in this metric, but this **should not** be seen as a replacement for a concerted effort to increasing the number of alumni giving to FIU regardless of giving level. We have not been able to fully vet tactics for improving alumni giving rates. We, therefore, suggest

- Reporting practices be optimized immediately
- A working group that involves college/school leadership and advancement staff be convened to assess tactics for improving interactions with alumni and facilitating alumni giving. Budgetary implications of tactics should be explicitly considered as should the roles of the central alumni office, colleges/schools, and departments.

#### 1.2. Targeted Metric(s)

Proportion of Alumni Giving

#### **1.3.** Feasibility Assessment

#### **1.3.1.** Implementation considerations and timeline

Assessing reporting practices and formation of a workgroup should be done immediately. These steps have no financial cost. The workgroup should be expected to provide recommendations before March 1, 2019 so they can be integrated into the 2025 strategic plan.

### **1.3.2.** Projected costs or savings of implementation \$0

#### 1.3.2.1. Startup or phase-in (one-time) costs

\$0

#### 1.3.2.2. Recurring costs or savings, as applicable

N/A

#### 1.3.3. Space needs or space savings, as applicable

N/A

#### 1.4. Accountability Plan

### 1.4.1. Measure(s) of impact (assessment plan)

Alumni giving rate; \$ raised from alumni

#### 1.4.2. Proposed benchmark(s)

Alumni giving rate should have a goal of reaching 10% within 18 months and 20% by 2025.

#### 1.5. References and Appendices

## Financial Base Pillar – Workgroup 4B Driving organizational efficiencies and increasing revenues

\*\* will be joined with ideas from Workgroup 4C on our global strategy \*\*

#### Recommendation #58 - Brand Recognition in Central and South America

#### 1.1. Description and justification of program

FIU should be THE UNIVERSITY for Central and South American students. FIU can highlight the diversity, opportunity, safety and a superior education offered in Miami.

#### 1.2. Targeted Metric(s)

Understanding there is already a base program to market the University internationally, this "program" would more specifically target students from those aforementioned regions. Enrollments from those regions would be the most direct metric to determine the validity of this program. Increasing international enrollment is particularly of value as we have such a strong on-line presence and should be able to offer a social media and academic program that is of interest to the possible students.

#### **1.3.** Feasibility Assessment

#### 1.3.1. Implementation considerations and timeline

Implementation of a program such as this could be based off prior international and social media marketing campaigns, so we are not reinventing the wheel. Timeline is not an issue.

#### **1.3.2.** Projected costs or savings of implementation

Projected costs will be determined in advance and can be considered prior to contractual obligation.

#### 1.3.2.1. Startup or phase-in (one-time) costs

No start up as the basic logistics should be in place to continue to market the University. This is simply an attempt to target market our most likely-consumer and costs may be determined by the marketing teams.

#### 1.3.2.2. Recurring costs or savings, as applicable

Again, the marketing teams will be able to determine costs for such target marketing.

1.3.3.	Space needs or space savings, as applicable N/A
1.4.	Accountability Plan
1.4.1.	Measure(s) of impact (assessment plan) Enrollments of all types.
1.4.2.	Proposed benchmark(s) TBD
1.5.	References and Appendices



## FLORIDA INTERNATIONAL UNIVERSITY STRATEGIC PLAN 2020-2025

### Student Success Pillar – Workgroup 1D Coordinating and accelerating academic and career success

#### Recommendation #20 – Well-Being: Help for the Institution 1.

#### 1.1. Description and justification of program, savings, or efficiency recommendation (supported by data/research/best practices)

The safety, mental health and well-being of students, faculty, and staff are inextricably entwined and there is a strong connection between mental health, well-being and academic success. The fact that the number of students seeking mental health services has exponentially outpaced the growth of enrollments needs to be addressed in a comprehensive, holistic, university-wide strategic initiative to support students' academic retention and success. In addition, the wellbeing, job satisfaction, retention, and productivity of faculty and staff will be positively impacted through this strategic initiative.

#### **Recommendations:**

- A University-wide inclusion of well-being (physical and mental health, wellness, psychological safety, resilience, and interpersonal skills) as a strategic priority for all departments in the institution and in the curriculum through the next QEP.
- Allocate financial resources to bring up and maintain the staffing level of FIU's Counseling and Psychological Services/Victim Empowerment Program, to provide mental health treatment for students seeking assistance within the existing scope of service.
- Under the auspices of the Dean of Students Office, allocate resources to hire and support case managers to facilitate the referral and coordination of community based mental health services for students' whose severe or persistent mental health needs exceed the scope of services provided by CAPS/VEP.
- Conduct a comprehensive assessment of existing programs and services that are addressing components of these dimensions (academic advisors, wellness education, health education, mentorship programs, academic department's community service programs, peer support programs).
- Create an interconnected network of individuals, groups, units, programs, that are currently contributing to well-being, with the academic advisor at the center of the network of caring. Identify and fill gaps in the network (peer to peer counseling, peer to peer support and mentorship, etc.). Develop a structure and process to communicate between and among each other, develop internal and external partnerships, to address student well-being.
- Fully Implement mental health literacy training (Kognito "At-Risk...") to create a fully trained and empowered community to effectively identity and assist students in distress at every point of contact in the university.
- Establish Collegiate Recovery and LGBTQ Center to provide support for marginalized students to (Collegiate Recovery Center, LGBTQ Center, etc.)

• Launch a Doctoral Program in Clinical or Counseling Psychology to train terminal degree mental health professionals to serve emerging adult (18-25) students. This will provide an on-campus mental health treatment option for FIU students that could be structured in such a way as to offer long-term and specialized services (trauma, eating disorders, family therapy). Such a department located in Miami would be highly desirable for academicians with research programs focused on underserved racial and ethnic communities, multicultural competence, mental health disparities, etc.)

#### Justification:

U.S. national data sets show that from 2009-10 to 2014-15, counseling center utilization grew five times faster than institutional enrollment growth. This trend is expected to continue. There are many reasons for this increase. Awareness of mental health needs and the existence of oncampus services has increased due to extensive outreach efforts geared toward reducing the stigma of mental health problems. Public education campaigns have successfully promoted help-seeking, health and the importance of emotional well-being. Young people are experiencing higher degrees of stress that prior cohorts, as evidenced by the American Psychological Association's Stress in America report (2018) as well as a profoundly compelling opinion piece in the national news titled "I am 18. Part of the Massacre Generation."

The number of students who have been formally diagnosed with a mental illness as well as the number of those taking prescribed medications has also drastically increased. Increased demand is having a profound effect on students seeking services as well as counseling center staff in many ways. Students are receiving fewer and infrequent counseling appointments. There are delays between the first consultation and the next one. Although students are assessed for risk of harm to self or others, between the first and second session (a lag of two to three weeks at certain times of the semester) students' needs and concerns often escalate. This has a negative impact on their personal well-being and academic performance. For clinicians, the drastic increase in demand increases their stress levels, challenges their confidence in the effectiveness of the clinical interventions that are provided, and generates frustration that the mental health treatment that has been documented (see note that follows this section) to support academic persistence is becoming increasingly scare because clinical resources are taken up by the increasing demand and the number of clinical staff at CAPS is not yet sufficient to meet the treatment demands of the students who present for mental health services.

At FIU's Counseling and Psychological Services over the past 5 years there has been a 45% increase in the number of students seeking mental health services. At the same time, the number of sessions provided to students has increased by 23%. This discrepancy shows that the amount of assistance provided has not kept pace because the volume of demand has outpaced the clinical staff capacity to provide the same level of treatment as evidenced by the number of sessions. At large public institutions on average, one mental health clinician can be expected to treat 100 students each year. In FY2018 CAPS/VEP staff of 18 clinicians treated 3,151 students at FIU. This shows that one average, each clinician worked with approximately 175 students.

Developing a hiring plan for mental health clinicians for CAPS/VEP is necessary to resolve the shortfall between the number of clinicians and the number needed to adequately treat FIU students. In addition, it will be essential to effectively engage non-clinical student academic success resources, such as academic advisors, success coaches, learning assistants, etc. and work collaboratively to implement the recommendations, noted above, to support students' well-being, mental health and resilience.

In addition, CAPS/VEP is not currently staffed to serve students with intensive and persistent mental health needs. These students' needs exceed the scope of services that can be provided with the ratio of one clinician to 100 students. However, referrals to other university's low cost community focused clinics or community mental health agencies rarely result in students following through. They reject the referrals because of distance, lack of transportation, or discomfort with seeing someone external to FIU.

There is a critical shortage of community mental health services that can adequately meet the needs of undergraduate and graduate students. In many other major metropolitan areas there are many local providers who have training and expertise working with emerging and young adults. This is not the case in South Florida.

Adoption of this strategic initiative will have far-reaching benefits for students, faculty and staff, as evidenced by increased well-being, physical and psychological health and perceptions of safety, and intrinsically support students' academic persistence and success. There will be additional benefits for faculty and staff satisfaction, retention, and productivity.

#### Note:

For the 2017-18 FTIC cohort, CAPS clients had a first-to-second year persistence rate of 89.1% (89.5% for the overall university), which was a 5% increase from the previous CAPS freshman cohort (2016-17). In terms of retention with a 2.00 GPA or higher, the 2017-2018 FTIC CAPS Clients had a first-to-second year retention rate of 84.8%, which was approximately a 6% increase from the previous freshman cohort (i.e., 79.0% to 84.8%). (Internal evaluation done by Danilo Le Sante, Division of Academic and Student Affairs, November, 2018.)

#### **1.2.** Targeted Metric(s)

- FTIC 2yr Retention Rate (GPA>2.0)
- FTIC 4yr graduation rate
- Percent of Bachelor's degrees without excess hours
- Percent Bachelors graduates employed

#### 1.3. Feasibility Assessment

#### **1.3.1.** Implementation considerations and timeline

A comprehensive plan with targets, timelines, and deliverables will be developed to determine the cost of the recommendations. There are a number of recommendations that are part of this initiative and a few, some or many may be authorized.

- 1.3.2. Projected costs or savings of implementation
- 1.3.2.1. Startup or phase-in (one-time) costs
- 1.3.2.2. Recurring costs or savings, as applicable
- 1.3.2.3. Space needs or space savings, as applicable
- 1.4. Accountability Plan
- 1.4.1. Measure(s) of impact (assessment plan)
  - Analysis of Utilization of specific groups retention
  - Monitor the average number of sessions provided per student goal to increase the average number of sessions for students who are formally diagnosed (per DSM-V)
  - Increase utilization of CAPS services by first year FTIC students, transfer, and graduate students
  - Increase referrals to and between on-campus resources such as: academic advisors, university learning center, success coaches, wellness workshops, resilience training, peer mentoring, counseling, etc.
  - Track number of licensed mental health clinicians providing direct treatment services to undergraduate and graduate students, the number of sessions provided, the average number of sessions.
  - Incentivize and track completion of Kognito's mental health literacy training for faculty (optional/recommended)
  - Incentivize and track completion of Kognito's mental health literacy training for staff (required)
  - Track completion of Kognito's mental health literacy training for students (mandatory/prior to first semester as first year/transfer student/graduate student)
  - Annual progress report on Recommendations

#### **1.4.2.** Proposed benchmark(s)

Comparison with University of Florida, Florida State University, Florida Atlantic University

#### 1.5. References and Appendices

American Psychological Association, (2018). 2018 Stress in America<sup>TM</sup> survey. www.stressinamerica.org accessed on 11/30/16.

Center for Collegiate Mental Health, 2017 Annual Report

DeBate, R. September, 2018. Student Mental Well-being: A Status Update. Presentation to the State University System Board of Governors, Drugs, Alcohol and Mental Health Task Force, Sarasota, FL.

Dougher, K. (November, 2018). Mental Health: Overview. Presentation to the State University System Board of Governors, Drugs, Alcohol and Mental Health Task Force, Florida Atlantic University, Boca Raton, FL.

EAB – Student Affairs Forum - Meeting the Escalating Demand for Mental Health Services – Targeted Interventions for Key Student Segments; Creating a Sustainable Scope of Services. Accessed from www.eab.com on 11/30/18.

I am 18. I belong to the massacre generation. Published in the Washington Post, https://www.washingtonpost.com/outlook/2018/11/01/i-am-i-belong-massacregeneration/?utm term=.9351c762c2f3 , accessed on 11/30/18.

Keeling, R.P. Mental Health and Learning: Fostering the Emergence of an Integrated Person, June, 11, 2013.

Kingkade, T, "The Number of College Students Seeking Mental Health Treatment is Growing Rapidly," Huffington Post, January 13, 2016.

Locke, B., Wallace, D., Brunner, J. (2016). Emerging Issues and Models in College Mental Health Services, in New Directions for Student Services, no. 156, Winter 2016 © 2016 Wiley Periodicals, Inc.

Published online in Wiley Online Library (wileyonlinelibrary.com) • DOI: 10.1002/ss.20188

Number of College Students Seeking MH Care Nearly Doubles Over Decade - Psychiatric News Alert, accessed on 11/7/18 http://alert.psychnews.org/2018/11/college-students-seeking-mental-health.html

PBS NewsHour, More stress, less stigma drives college students to mental health services, 9/2/15.

Peale, Cliff, "Students flood college counseling offices," USA Today, April 7, 2014

https://www.eab.com/research-and-insights/student-affairs-forum/studies/2018/meeting-the-escalating-demand-for-mental-health-services





# Student Success Pillar – Workgroup 1A Recruiting and strategically enrolling students into success pathways

\*\* will be joined with the ideas of workgroups 2B and 2C \*\*

#### **Recommendation #31 - Equity Collaborative**

## 1.1. Description and justification of program, savings, or efficiency recommendation (supported by data/research/best practices)

Higher education can play a fundamentally transformative role in the lives of students. A part of Florida International University's (FIU) history has been to support the social transformation of the South Florida community, and we recognize that student agency, the ability of students to make choices to impact their lives and the world around them, needs to be reflected in the career and academic choices that students make (Basu & Calabrese, 2009; Czerniewicz, Williams, & Brown, 2009). As the university seeks to enhance its competitiveness, both in regard to the Board of Governors (BOG) metrics, and in national ranking systems, we strongly believe that it is also critical to retain the heart and spirit of FIU's mission of transformation for the diverse communities we serve. We propose the development of an Equity Collaborative similar to those of Ohio State, Purdue, Berkley, and UNCC, leading to greater alignment of existing community based and university efforts. This recommendation leverages FIU's existing programs as well as faculty and staff committed to working with underrepresented (Black/African-American and low SES) prospective students to foster self-determination and enhanced connectedness to FIU:

- 1. Clearly align FIU local outreach, recruitment, and community efforts: Education Effect, TRIO, McNair, Upward Bound, Upward Bound Math and Science, Golden Scholars, Invitational Scholars, After-School All Stars, UStar, CROP, Talent Search, Fostering Panther Pride, Ronald Reagan Teaching Academy, Dual Enrollment.
  - a. The current structure of alignment of the above efforts does not allow for all the directors to regularly meet and discuss their efforts and to identify gaps, overlaps, and common challenges, as the directors of the programs and initiatives are housed across varying departments and colleges within the university.
  - b. This connection enhances the efficacy of FIU's recruitment efforts for targeted populations (see data from application and admissions)
  - c. Removes the silos, reduces redundancy and overlap in programs, conserves resources, and enhances the ability of FIU to recruit and strategically enroll students
  - d. Solidifies a community to FIU college pipeline

- e. Creates a reporting structure that incorporates communication, resources, and availability
- **f.** Matches financial aid packages to students who may be successful as pre-eminent scholars

#### 2. Creation and coordination of the Equity Collaborative

- a. The Equity Collaborative would create a network of programs, research, activities, and faculty that exists at FIU to promote equity and access to programs and degrees on campus. It would allow those members of the FIU community, who are vested in equity, social justice, academic, social, economic, and environmental issues.
- b. The coordinator, in conjunction with Success Coaches and support staff of the Collaborative, would facilitate the sharing of information, projects, research opportunities, and dissemination of outcomes and knowledge of the various programs associated with the Collaborative.
- c. The Collaborative would identify the faculty and staff who connect across and between disciplines and initiatives in order to enhance the efficacy of the formal and informal collective efforts.
- d. Allows the largest urban university and colleges in Florida to identify and address the diverse issues that face our immediate and global communities.
- e. The Equity Collaborative will be responsible for the alignment of community efforts and meaningful engagement of underrepresented minorities.

#### 1.2. Targeted Metric(s)

This recommendation addresses student agency as part of the committee's charge to address student success. Within the recommendation, the workgroup considers student recruitment, time to degree, student support, and overall impact on personalizing student pathways. This proposal will have an impact across several aspects of student success; however, we considered the following metrics from our charge when developing this proposal:

- 10 Bachelor's degree awarded to minorities
- 11 Total headcount
- 14 Number of current FIU students enrolled in badging/micromasters courses
- 14 Number of non-traditional students enrolled in targeted badging courses

#### **1.3.** Feasibility Assessment

#### **1.3.1.** Implementation considerations and timeline

Implementation timeline:

- 1. Create the **Equity Collaborative**, as a unique stand-alone initiative (Summer 2019-Fall 2019)
- 2. Develop the responsibilities for the Collaborative and the duties of the coordinator and support staff (Summer 2019)

- 3. Hire a coordinator for the Collaborative (Fall 2019)
- 4. Coordinator hires support staff and Success Coaches (Fall 2019)
- 5. Gather data regarding student success initiatives in urban communities and at FIU (Fall 2019)
- 6. Launch of **Equity Collaborative** (Spring 2020)

#### 1.3.2. Projected costs or savings of implementation

#### 1.3.2.1. Startup or phase-in (one-time) costs

Table 1

Equity Collaborative Cost Estimate

	Unit or Hourly		
Resource	Cost	Units	Extension
Equity Collaborative Coordinator	\$35,000	1	\$35,000
Staff for Collaborative	\$35,000	1	\$35,000
Success Coaches	\$40,000	3	\$120,000
Office and Space	\$50,000	1	\$50,000
Total Startup Costs			\$240,000

#### 1.3.2.2. Recurring costs or savings, as applicable

\$190,000 annual cost in human resources

#### 1.3.3. Space needs or space savings, as applicable

#### 1.4. Accountability Plan

#### 1.4.1. Measure(s) of impact (assessment plan)

- 1. Bachelor's degrees awarded to minorities
- 2. Count and Percentage increases in students completing badges (year one is an assumed pilot/baseline population of 100)
- 3. Graduation rates for 4-year cohort, 6-year cohort, and AA-transfers

#### 1.4.2. Proposed benchmark(s)

- 1. Bachelor's degrees awarded to minorities
  - a. Year two = 7.200
  - b. Year three = 7,450
  - c. Year four = 7.650
  - d. Year five = 8,000

- 2. Count and Percentage increases in students completing badges (year one is an assumed pilot/baseline population of 100)
  - a. Year two = 150 (50% increase over baseline)
  - b. Year three = 175 (75% increase over baseline)
  - c. Year four = 200 (100% increase over baseline)
  - d. By 2024 = 350 (250% increase over baseline)
- 3. Graduation rates for 4-year cohort, 6-year cohort, and AA-transfers
  - a. By 2022, our graduation rate for students admitted to the four-year graduation cohort will be 60%; by 2025, this rate will be 61%
  - b. By 2020, our graduation rate for students admitted to the six-year graduation cohort will be 70%; by 2025, this rate will be 72%
  - c. By 2020, 70% of the students who transferred to FIU as AA transfers in 2016 will graduate; by 2025, 72% of the students who transferred to FIU as AA transfers in 2021 will graduate.

#### 1.5. References and Appendices

Basu, S. J., & Calabrese, Barton, A. (2009). Critical physics agency: Further unraveling the intersections of subject matter knowledge, learning, and taking action. *Cultural Studies of Science Education*, 4(2), 387-392.

Czerniewicz, L., Williams, K., & Brown, C. (2009). Students make a plan: understanding student agency in constraining conditions, ALT-J, 17:2, 75-88, DOI: <u>10.1080/09687760903033058</u>

National Forum on Higher Education for the Public Good: *Education Collaboratives for Community Engagement and Improvement*. Retrieved from https://files.eric.ed.gov/fulltext/ED515231.pdf



# Highest Research Pillar – Workgroup 3A Engaging undergraduate students in research and creative activities

Recommendation #32 - Establishment of an Office of Undergraduate Research and Creative Activities

#### 1.1. Description & Justification (supported by data/research/best evidence)

The Carnegie Foundation for the Advancement of Teaching classifies Florida International University in its highest category: R1 Doctoral Universities- Highest Research Activity. With a student body of more than 53,000 students (Fall 2017 enrollment), and more than 15,000 degrees awarded during the 2017-2018 academic year FIU is the largest university in South Florida. "Worlds Ahead" for Florida International University is an attitude that inspires our global perspective and commitment to superlative programs, research and service. Therefore, we propose an **Office of Undergraduate Research and Creative Activities** (URCA) whose primary goal will be to engage undergraduate students in research and creative activity projects.

The development of an Office of Undergraduate Research and Creative Activities (URCA) is essential for enhancing the research culture and atmosphere at FIU. FIU currently lacks a central location where students may visit to learn about research and curriculum-enriching opportunities. Interested students may learn about opportunities from their peers and are left to wander from place to place to find out how to get involved. According to this workgroup's Census and Survey Sub-committee, approximately 50% of faculty respondents\* who currently engage undergraduates in their research or other projects say they find these students in their classes and 47% say they receive email inquiries from students. Only 11% of faculty said that they engage students through a formal program. Survey results from the University of Michigan report similar findings regarding in-class and email contact with students, though 30% of faculty identify students through their well-established Undergraduate Research Opportunity Program (UROP, for freshmen/sophomore) and Research Scholars Program (junior/senior).

We propose an **Office of Undergraduate Research and Creative Activities** (URCA) whose primary goal will be to engage undergraduate students in research and creative activity projects.

The office will recruit **50 Emerging Scholars** (freshmen/sophomore) and **50 University Scholars** (junior/senior) to apply for competitive research funding awards. Emerging Scholars will be expected to participate in 6-10 hours per week on their projects and University Scholars will be expected to participate in 11-20 hours per week on their projects. Emerging Scholars will be eligible to apply to participate in the **Peer Mentoring Program** or the **Research Ambassadors Program** which will provide additional research funding awards. All Scholars will participate in training, workshops, recruitment and other events organized by URCA. All

University Scholars will be expected to present their findings or creative works at the Conference for Undergraduate Research at FIU (Emerging Scholars will be encouraged to present). Peer Mentors will assist URCA with providing additional guidance to Emerging Scholars and any FIU undergraduate student who "just wants to learn more." Research Ambassadors will assist URCA with tabling events, visiting classrooms, recruitment at local high schools, and more.

URCA and its resources and activities will be available to all FIU undergraduate students, whether they participate as a scholar or not.

Utilizing resources from the National Mentoring Research Network, the Office will establish mentor research training and provide resources for faculty mentors. Additionally, URCA will recognize outstanding faculty mentors via website spotlights and mentor awards. Monthly research seminars will be held to expose undergraduates to various research projects in all disciplines.

One of the benefits of utilizing an office is that it allows for better tracking of student activity.

This office would track student engagement in undergraduate research or creative activities; provide a streamlined, uniform application and training process; direct students to opportunities on and off campus; offer mentorship training to faculty; provide leadership opportunities for students in the form of peer mentors and research/creative activity ambassadors; and provide venues for undergraduates to disseminate their research findings and/or creative works, such as at the Conference for Undergraduate Research at FIU.

This office would serve as a triage of sorts to direct students to existing programs and would also support students with start-up funds for their proposed projects as well as offer travel awards. The office could also track enrollment in research credits, zero-credit internships, and research intensive designated courses and might potentially oversee the Research Badging recommendation of this workgroup.

Establishing an office would also reduce the duplication of efforts in training undergraduates. The office would create a calendar of common workshops including Responsible Conduct in Research Topics, Abstract Writing, Library Resources, etc. and post these on the website for all students and established programs' use. Data presented at the Council for Undergraduate Research Institute's *Initiating and Sustaining Undergraduate Research Programs* showed that what matters most to students in relation to their college experiences are: 1) peer groups; 2) interactions with faculty outside the classroom; 3) feeling competent and valued; and 4) faculty's championing/celebrating their accomplishments. Student engagement in undergraduate research and creative works will satisfy these needs and build affinity for FIU.

Studies have shown that engagement in undergraduate research improves retention rates and student success of first- and second- year students, first generation students, and especially those that are members of traditionally underrepresented minority groups (Gregerman 2008, Ishiyama 2001, Fechheimer et al. 2011, McIntee et al. 2018). The creation of formal programming in undergraduate research has been shown to increase participation in undergraduate research (Gregerman 2008 and Dickter et al. 2018). Students from the groups listed above are less likely to have access to support systems (Haeger et al. 2018) which provide information, assistance and guidance to navigate academia, which Haeger et al. refer to as "Hidden Curriculum." Exposure to and engagement in undergraduate research and targeted academic and professional development activities provides critical mentorship and preparation for navigating the road to graduate education, internships and competitive employment opportunities. Even shorter term undergraduate research projects embedded in course curriculum have a positive effect on students' research mindset, personal discovery, applied career development, team preparation and appreciation, and reflective and corrective growth (Sims et al. 2018).

The University of Michigan's well-established Undergraduate Research Opportunities Program (UROP) started as a small pilot project of 14 students, which now serves over 1000 undergraduates per year. Their aim in 1988 was to increase retention rates and academic success of historically underrepresented students. They discovered that early engagement increased retention rates in STEM fields, encouraged more students to pursue graduate education, and improved student's overall academic performance (Gregerman 2008). Michigan's UROP has honed in on seven critical components to a successful undergraduate research program (or office). They include: 1) Research Activities (mentored), 2) Peer Advisors, 3) Research Seminars, 4) Skill Building Workshops, 5) Research Projects 6) Research Symposia and 7) Compensation in the form of academic credit or work-study (Gregerman 2008). Following a large scale assessment of UROP, it was shown there was an increase in retention rates of African American sophomore participants, increase in degree completion for African-American males, increase in degree completion rates for Africa-America males and Latina women in engineering and *all participants* were significantly more likely to go on to graduate or professional school. Additionally, participants spent significantly more time talking with professors, participating in academic discussions, working and studying (Gregerman 2008).

Many universities in the Florida State University System (and nationally) have two phases of engagement, one that focuses on exposure and engagement of freshmen and sophomores and one that focuses on advanced engagement in research which encourages project development, experimental design, data collection and analysis and dissemination of results via poster or oral presentation at local conferences or symposia.

The proposed Mission and Vision Statement of this office mirrors FIU's:

**FIU's Mission Statement:** Florida International University is an urban, multi-campus, public research university serving its students and the diverse population of South Florida. We are committed to high-quality teaching, state-of-the-art research and creative activity, and collaborative engagement with our local and global communities.

Office of Undergraduate Research and Creative Activity (*May be named*) Mission Statement: The mission of the Office of Undergraduate Research and Creative Activity is to enhance student learning across disciplines by providing opportunities for all Florida International University students to engage in scholarly inquiry, research, and exploration within classrooms, laboratories, and the community.

**FIU's Vision**: Florida International University will be a leading urban public research university focused on student learning, innovation, and collaboration.

Office of Undergraduate Research and Creative Activity (*May be named*) Vision: The Office of Undergraduate Research and Creative Activity will enhance student learning through inquiry, research, and exploration by promoting innovation and collaboration.

Office Leadership will promote early engagement in research among FIU's undergraduate students. The staff will recruit a diverse population to participate in research, creative activities and research-related activities to enrich their undergraduate curriculum and prepare students for competitive graduate programs, internships, and employment. Office duties may include:

- Collaborate with all undergraduate research programs to promote their activities in order to expose a broader group of students to research, workshops, seminars, networking opportunities, and recruiters
- Facilitate workshops, information sessions, and recruiting events to advance students' professional and academic development and oversee marketing of events
- Collaborate with faculty to submit research education and training grants for undergraduates and high school students
- Seek sponsorship for undergraduate research activities
- Collect baseline data on university-wide undergraduate research participation and assess comparative data as it relates to strategic planning
- Supervise office of undergraduate research that provides resources to students and recruit peer mentor and research ambassadors
- Direct/manage undergraduate research programs which may fall beneath the Office of Undergraduate Research and Creative Activity (may be existing or new undergraduate or high school programs)
  - Manage day-to-day operations including administrative, financial, progress reports and renewals
- Collaborate with other departments and units to ensure compliance with university guidelines and regulations relating to student research engagement
- Cultivate strong relationships with other departments in order to assist and accommodate students with academic, financial, administrative or research-related issues
- Travel to Undergraduate Research Conferences to support FIU student research and collaborate with other institutions to learn best-practices in undergraduate research
- Promote FIU's research activities to local community
- Provide strong stewardship of financial resources and manage budgets, as necessary

<sup>\* 87</sup> FIU Faculty responded to the survey which was sent from the Office of the Provost \*

#### 1.2. Targeted Metric(s)

Engagement in undergraduate research and creative activities will impact:

- 1 FTIC retention rate: Providing additional community and support to students through advising, peer mentors and mentorship will positively impact FTIC retention rate.
- 2 FTIC 6 & 4-year graduation rate: Engagement in research and creative activities and providing additional advising and encouragement to complete the degree will positively impact graduation rates.
- 12 Research Doctoral/Total Doctoral Degrees per year: Exposure to research and the possibility of graduate school will impact the number of students applying to graduate programs at FIU.
- 5 Percent bachelor's graduates employed or enrolled: Curriculum-enhanced activities will provide experiential learning, hands on training, and networking opportunities that will lead to job opportunities, competitive internships and graduate programs.
- 6 Bachelor's degrees in strategic emphasis: Showcasing research and creative activity opportunities will attract local high school students to FIU and increase enrollment in strategic degree plans.
- 9 Median wages of Bachelor's graduates employed FT: Additional skills will lead to more competitive job opportunities.
- 10 Bachelor's degrees awarded to minorities: Showcasing research and creative activity opportunities will attract local high school students to FIU.
- 19 Private Gifts: The office and various activities allow for "naming" opportunities, such as the "XYZ Office of...", or the "XYZ Workshop series," or named student research awards.
- 21 Total research expenditure: The office will apply for research and arts training funds to support undergraduate research and creative activities.

#### 1.3. Feasibility Assessment

#### 1.3.1. Implementation considerations and timeline

Program implementation consideration is contingent on space acquisition and renovation. The renovation process will be a four-month process. The first month will be the planning phase, which includes floor plan development and quotes for construction, tech equipment, software, furniture, and FIU services. Once budget has been approved and funds released, the construction/renovation and purchasing phases can begin. These phases can run concurrently and will last about two to three months. Equipment and furniture installation will take about two weeks to complete once building permitting has been approved.

#### 1.3.2. Projected cost of implementation

#### 1.3.2.1. Startup (One-time) cost - \$190,292

2000 square feet of office space, with half devoted to student activities and the other half dedicated to staffing requirements

**Physical space:** 2000sf - \$45 per sf / renovation cost (\$90,000.00). This estimate includes demolition costs, flooring and lighting purchase and installation, asbestos and HVAC testing, painting, drywall, door/frame and a/c modifications. The space will have (500sf combined) offices for Director, Assistant Director, Administrative Assistant, Program Coordinator, and Program Assistant, a 250sf conference/presentation practice area, a 125sf student assistant/reception space, and a 1,125sf open and collaboration area with modular partitions.

#### **Tech Equipment:**

- 7 Computers: (\$1200 each) = \$8,400
- 2 Laptops (\$950 each) = \$1900
- 4 Display monitors: (\$850 each) = \$3,400
- 2 Video/photo cameras: (\$300 each) = \$600
- 1 3 Lights video production kit: \$700
- 1 Large format printer with supplies: \$6,200
- Tech equipment total: \$21,200

#### **Software:**

• 3 Adobe creative cloud license – (\$275 each) = \$825

#### **Furniture:**

- Student and mentor collaboration areas: \$30,000. Steelcase seating buoys, whiteboards, mobile media boards, mobile easels, personal tables, group work tables, half-lounge seating, big lounge seating, end-tables, stools, mobile partitions, and 25 stackable chairs with casters.
- Office area: (\$2,500 each for 5 offices) = \$12,500. Desks with work chair and 2 guest chairs and storage cabinets in each office.
- Reception and student assistant areas: (\$2,500). L-shaped reception desk with 2 work chairs, 2 lobby room chairs and 1 waiting room table.
- Furniture total: \$45,000

#### **General Operation:**

- Website Development: \$7,200 (Developer contract and website plugins)
- 6 Office phones: (\$402 each and monthly charges of \$150/month for 1 year) = \$4,412
- Printing: (Toshiba MFC monthly charge of \$120 for 1 year plus supplies) = \$1,530
- Mailing: TBD
- Supplies: TBD
- General operation total: \$33,267

Recurring costs as applicable: \$349,600

**Staff: \$250,000** Advisory Board: \$0 Director: \$100K

Assistant Director: \$65K

Administrative Assistant/Office Manager: \$40,000

Program/Event Coordinator: \$40,000

Program Assistant: \$30,000 Student Assistant: \$15,000

Student Research Awards: \$53,000

Emerging Scholars: 50 X \$125/semester = \$12,500 University Scholars: 50 X \$250/semester = \$25,000

**Peer Mentors:** 10 X \$500/year in research supply/travel award = \$5000

a. Polo Shirts with logos  $10 \times $25 = $250$ 

**Research Ambassadors**: 10X \$1000/year in research supply/travel award = \$10,000

a. Polo Shirts with logos  $10 \times $25 = $250$ 

Student Travel: \$30,000

Students will apply for competitive travel awards. Budgets will vary depending on location, ability to share lodging, mode of transport, etc. Based on the common undergraduate research and creative/performing arts conferences, such as National Conference for Undergraduate Research, Florida Undergraduate Research Conference, Florida Undergraduate Research Leadership Summit, Annual Biomedical Research Conference for Minority Students, Society for Advancing Chicanos/Hispanics and Native Americans in Science, Florida Education Music Association Conference, Florida Orchestra Association Conference, National Association of Music Merchants Conference, College Art Association Conference, Southeastern College Art Conference, we would expect to award \$500-\$1000 per student applicant or groups of students.

#### **Administrative Travel: \$8000**

URCA Administrators would attend and chaperone at least four of the major undergraduate research conferences with administrative professional development opportunities and attend the Council for Undergraduate Research and CUR Statewide Symposium annually. Budgets will vary per trip.

**Events: \$8,600** 

Monthly Speaker Series, Fall Symposium, Office swag for tabling events/outreach, collaboration/sponsorship of university programs, mentor and student awards

#### **Accountability Plan**

#### 1.3.3. Measure(s) of impact (assessment plan)

The URCA will be assessed on the basis of how it serves to enhance and improve specific student-focused metrics as denoted in 1.2. However, baseline data needs to be collected regarding current student engagement in order to establish targets. The Office's aim would be to have 100% of Emerging Scholars retained and graduate within 4 years.

Curriculum-enhanced activities will provide experiential learning, hands-on training, and networking opportunities that will lead to job opportunities, competitive internships, and graduate programs.

Showcasing research and creative activity opportunities will attract top local high school students to FIU and increase enrollment in strategic degree plans. We will recruit a

diverse group of students and expect 50 applicants for the Emerging Scholars Program (freshmen/sophomore) and 50 applications for the University Scholars Program (junior/senior).

#### 1.3.4. **Proposed benchmark(s)**

Following quantitative analysis of new data streams, URCA will

- 1. Increase the number of FIU undergraduate students engaged in URCA
- 2. Increase FTIC retention rates
- 3. Increase the current rate of employment among Bachelor's graduates from among the cohort who have undertaken URCA
- 4. Admit and enroll a greater percentage of high school students in fields of strategic emphasis
- 5. Increase the average starting salaries of recent Bachelor's graduates who have undertaken UR
- 6. Recruit diverse and underrepresented students to engage in URCA

#### **References and Appendices**

- Dickter, C. L., Hudley, A. H., Franz, H. A., & Lambert, E. A. (2018). Faculty Change from Within: The Creation of the WMSURE Program. Council on Undergraduate Research Quarterly, 2(1), 24-32. doi:10.18833/spur/2/1/6
- Fechheimer, M., Webber, K., & Kleiber, P. B. (2011). How Well Do Undergraduate Research Programs Promote Engagement and Success of Students? CBE—Life Sciences Education, 10(2), 156-163. doi:10.1187/cbe.10-10-0130
- Gregerman, S. R. (2008). The Role of Undergraduate Research in Student Retention, Academic Engagement, and the Pursuit of Graduate Education. National Academy of Science: Promising Practices in STEM Education.
- Haeger, H., Fresquez, C., Banks, J. E., & Smith, C. (2018). Navigating the Academic Landscape: How Mentored Research Experiences Can Shed Light on the Hidden Curriculum. Council on Undergraduate Research Quarterly, 2(1), 15-23. doi:10.18833/spur/2/1/7
- Ishiyama, J. (2001). Undergraduate Research and the Success of First-Generation, Low-Income College Students. Council on Undergraduate Research Quarterly, 36-41.
- Mcintee, F., Evans, K. R., Andreoli, J. M., Fusaro, A. J., Hwalek, M., Mathur, A., & Feig, A. L. (2018). Developing Undergraduate Scientists by Scaffolding the Entry into Mentored Research. Council on Undergraduate Research Quarterly, 2(1), 4-14. doi:10.18833/spur/2/1/5
- Morrison, J.A., Berner, N.J., Manske, J.M., Jones, R.M., Davis, S.N., & Garner, P.W. (2018). Surveying Faculty Perspectives on Undergraduate Research, Scholarship, and Creative Activity: A Three-Institution Study. Council on Undergraduate Research Quarterly, 2(1), 43-54. doi:10.18833/spur/2/1/1
- Sims, J.D., Dore, A., Vo, M., & Lai, H. (. (2018). Diverse Student Scholars: A Five-Faceted Model of Student Transformation from Embedded Research Mentorship in Marketing Courses. Council on Undergraduate Research Quarterly, 2(1), 33-42. doi:10.18833/spur/2/8

#### **Appendix**

- 1. National Research Mentoring Network: https://nrmnet.net/#undergrad
- 2. Offices of Undergraduate Research in the State University System

USF: Research through Honors College and Research through Office of UR

- Honors: <a href="https://www.usf.edu/honors/current-students/thesis.aspx">https://www.usf.edu/honors/current-students/thesis.aspx</a>
- University: https://www.usf.edu/undergrad/undergraduate-research/
- Undergraduate Research Society (CSO Club)
- Staff: Director, Assistant Director, Graduate Student, 3 student assistants and 3 peer mentors
- Office housed under Undergraduate Studies

UCF: Research through Honors College and Research through Office of UR

- Honors: <a href="https://honors.ucf.edu/research/">https://honors.ucf.edu/research/</a>
- University: <a href="https://our.ucf.edu/">https://our.ucf.edu/</a>
- Staff: Director, Assistant Director, Admin Assistant, Program Coordinator, Program Assistant, 3 student assistants and 2 editors for UR journal
- Office reports to the <u>Division of Teaching and Learning</u> which, along with their College of Undergraduate Studies, reports to the Vice Provost for Reaching and Learning/ Dean of the College of Undergraduate Studies

UF: Research through Honors College (however, they refer to their Center of Undergraduate Research and don't have a formal program within Honors) and Research through Center for UR which houses a massive ambassador program that takes charge of most events and organizes workshops and seminars

- Honors: http://www.honors.ufl.edu/current/research/
- University: https://cur.aa.ufl.edu/
- Staff: Director, Administrative Assistant, four student assistants in charge of each of four programs (Ambassador Program)
- Housed under the Provost's Office

#### FSU:

- Honors: https://honors.fsu.edu/university-honors/graduation-requirements
- Staff: Director, Associate Director, two Assistant Directors
- University: <a href="https://cre.fsu.edu/programs/undergraduate-research-opportunity-program-urop">https://cre.fsu.edu/programs/undergraduate-research-opportunity-program-urop</a>
- Director, three Associate Directors, two Graduate Assistants

#### UNF:

- Honors: <a href="http://www.unf.edu/hicks/current/Hicks">http://www.unf.edu/hicks/current/Hicks</a> Honors College Fellows Program.asp <a href="http://www.unf.edu/hicks/current/Hicks">x</a>
- Dean, Associate Director, Honors Senior Fellow, Assistant Director of Academics and Advising, Sr. Academic Advisor, Administrative Assistant
- University: <a href="http://www.unf.edu/ugstudies/our/">http://www.unf.edu/ugstudies/our/</a>

#### UWF:

- Honors: <a href="https://uwf.edu/academic-engagement/departments/kugelman-honors-program/prospective-students/benefits-of-honors/">https://uwf.edu/academic-engagement/departments/kugelman-honors-program/prospective-students/benefits-of-honors/</a>
- Director, Assistant Director, Program Coordinator
- University: <a href="https://uwf.edu/offices/undergraduate-research/">https://uwf.edu/offices/undergraduate-research/</a>
- Director, Program Assistant

#### NCF:

- Honors: Considers itself 'the Honors College of Florida'
- University: <a href="https://www.ncf.edu/academics/research-at-new-college/orps/">https://www.ncf.edu/academics/research-at-new-college/orps/</a>
- Director, Assistant Director

#### FGCU:

- Honors:
  - https://www.fgcu.edu/honors/currentstudents/honorsthesis.aspx#WhatisanHonorsThesis
- Director, Associate Director, Director (Office of Competitive Fellowships), Coordinator of Programming and Outreach, Office Manager, Program Assistant
- University: <a href="https://www2.fgcu.edu/WhitakerCenter/ugresearch.html">https://www2.fgcu.edu/WhitakerCenter/ugresearch.html</a>
- Director, Administrative Assistant, Senior Secretary

FAU: Office of Undergraduate Research and Inquiry (OURI) housed under the Harriet L. Wilkes Honors College

- Honors: <a href="http://www.fau.edu/honors/undergraduate-research/research-symposium/">http://www.fau.edu/honors/undergraduate-research/research-symposium/</a>
- <a href="http://www.fau.edu/honors/faculty/">http://www.fau.edu/honors/faculty/</a> Dean, Associate Dean of Academic Affairs, Associate Dean of Campus & Community Engagement, Assistant to the Dean, Program Assistant, Business Manager, Director of Advancement/Alumni, Coordinator of Administrative Services, Honors College Sr. Secretary, Assistant Director for Honors College Marketing & Enrollment Services</a>
- University: http://www.fau.edu/ouri/

#### FAMU:

- Honors: http://www.famu.edu/index.cfm?honorsProgram&ProgramRequirements
- Undergraduate Research Organization (Club) https://orgsync.com/130390/chapter

\*Universities fall on a spectrum of not having an honors college/research program, having one with no mention of research, having one which requires research or at least includes research as a method of completing requirements, etc. It appears that FAMU does not have an office for undergraduate research at all, even university-wide, however they have honors within the major.

# FLORIDA INTERNATIONAL UNIVERSITY STRATEGIC PLAN 2020-2025

# Student Success Pillar – Workgroup 1B Improving course pedagogy and rewarding faculty improving student learning

Workgroup 1. was charged with proposing recommendations through which to improve pedagogy and reward faculty, a charge which recognizes that 1) faculty have been identified as a key variable with respect to student success, 2) teaching practices, in particular, are powerful levers for student learning and success, and 3) that faculty deserve to be rewarded for their many contributions. It is important to note that our charge extends initiatives supported by the BP2020 plan and that several of the recommendations involve the expansion of existing teaching and learning efforts, an acknowledgement that we do not need to "start from scratch" and can build on an excellent foundation. This work also intersects directly with newer initiatives such as FIU's Evaluating & Rewarding Teaching Project. Here, a nascent vision of teaching excellence of FIU was articulated, one characterized by learning-centeredness, evidence-based practice, and cultural responsiveness. Although the vision is not mentioned explicitly in the recommendations below, they informed our thinking, and the strategies described aim to improve pedagogy at FIU toward this vision and reward faculty for their efforts to this end.

1. Recommendation #9 – Expand Peer-to-Peer and Administrative Support for Faculty toward Vision of Teaching Excellence

### **1.1.** Description and justification of program, savings, or efficiency recommendation (supported by data/research/best practices)

Studies have outlined that the educator is the sole variable that has the most impact on student success. Since, effectively spreading and sustaining faculty use of evidence-based teaching practices is a significant barrier for improving undergraduate courses, "mentor practices that focus on instruction and learning have greater impact on student achievement" (Empson, 2018). Instruction includes both content and pedagogical practices which shape classroom experience and has a direct impact on graduation rates and student retention. There is evidence that some strategies can promote faculty change towards research-based instructional strategies. Based on that research, we propose to leverage existing successful programs at FIU and elsewhere to expand faculty support:

(1) <u>Develop faculty communities and mentorship opportunities around teaching excellence</u> Instructors will typically experience challenges when designing and implementing changes in their pedagogical practices. Informal social interactions provide a significant communication channel in the dissemination process of evidence-based strategies (Dancy et al, 2015). Science education research strongly support the value of professional learning communities in supporting faculty teaching innovation (Owens et al, 2018).

More extensive mentorship programs have also been suggested as avenues for supporting faculty through feedback and discussions on active learning. Faculty would enjoy the benefits of additional mentorship opportunities by adapting the model of FIU's Faculty Mentor Program to focus around teaching excellence. Mentoring, then, is shaped through collaborative planning, reciprocal classroom observations and debriefing, periodic checkin, explanations, and discussing goals, objectives, student outcomes before, during, and after implementation. A Mentorship for Teaching Excellence program can be reinforced by initiatives like Teaching Squares, in which teams of four faculty meet together regularly, share teaching strategies, and observe each other's classes (Owens et al, 2018). These initiatives will solidify a culture of evidence-based instructional practices across the institution.

(2) Expand the numbers of faculty utilizing evidence-based strategies through a professional development cycle with intentional support and incentives

Transforming a course to include active learning in a meaningful way is a time- and resource-intensive endeavor for faculty. The FIU HHMI program has successfully supported faculty reforming courses in biology, chemistry, physics, and math; through intentional high-touch support and incentives. Adapting this model to support faculty in additional disciplines and critical courses would expand the number of faculty using active learning strategies. The key elements of the program include: (1) summer salary support to design and plan pedagogical interventions; (2) comprehensive one-on-one assistance and feedback during design and implementation phases; (3) support with evaluation design, and data collection and analysis; and (4) Learning Assistant funding. Faculty that have participated in the one-year program have successfully implemented active learning strategies that have led to gains in student success. Additionally, all 37 faculty that have participated have maintained their reform efforts, even increasing the scope of the reform in their course or reforming additional courses.

#### 1.2. Targeted Metric(s)

- Student 2-year Retention Rate
- Student 4 Year Graduation Rate
- Student 6 Year Graduation Rate

#### **1.3.** Feasibility Assessment

- **1.3.1.** Implementation considerations and timeline
- 1.3.2. Projected costs or savings of implementation
- **1.3.2.1.** Startup or phase-in (one-time) costs

#### 1.3.2.2. Recurring costs or savings, as applicable

- Summer salary support to design and plan pedagogical interventions;
- Comprehensive one-on-one assistance and feedback during design and implementation phases (postdocs and faculty fellows);
- Support with evaluation design, and data collection and analysis; and
- Learning Assistant funding
- 1.3.3. Space needs or space savings, as applicable
- 1.4. Accountability Plan
- 1.4.1. Measure(s) of impact (assessment plan)
- **1.4.2.** Proposed benchmark(s)





### Student Success Pillar – Workgroup 1B Improving course pedagogy and rewarding faculty improving student learning

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#### 1. Recommendation #8 – Expand Support for Online Teaching

### 1.1. Description and justification of program, savings, or efficiency recommendation (supported by data/research/best practices)

As we continue to increase the number of online courses offered and credit hours offered online, we will need to monitor student achievement and performance metrics and assure that we are giving faculty the resources they need to develop and teach high-quality online courses. This recommendation proposes that we do so through 3 mechanisms: 1) expanding programming for faculty (similar to support currently provided for hybrid courses), 2) leveraging the Panther Quality initiative, including QM certification, and 3) creating an Online Faculty Fellows program to provide critical peer support to colleagues within departments in the development of online course materials and instructional design.

AIM analyses indicate that passing rates (as well as enrollment) in online math courses were substantially lower than face-to- face taught courses, and that enrollment in fully online courses gradually increased from freshman to senior year. As students advance in their academic careers, get closer to graduation, take on internships, and jobs, it is likely that they find online courses to be more flexible and accommodating to their schedule than face-to-face courses. These findings suggest that providing additional support for online math courses may be especially impactful to the metrics, and that the availability of upper-level online courses and student performance therein may bear on graduation rates.

#### **1.2.** Targeted Metric(s)

Metric 1: FTIC 2-year Retention Rate (GPA > 2.0) – when we work with gateway courses

#### 1.3. Metric 2: FTIC 6 and 4-year Graduation rate. Feasibility Assessment

#### 1.3.1. Implementation considerations and timeline

Semester 1: CAT Online & Hybrid leadership and FIU Online

- Identify online courses to target during 2020-2022: those with high enrollments and high differentials between online pass rates and face-to-face pass rates, perhaps including math and ones identified as Gateways to Graduation courses
- Develop plan for supporting faculty and units toward their improvement, and for evaluating progress,
- Identify respective capacity needs to support this effort, likely in the form of online faculty fellows,
- Repeat.

#### **1.3.2.** Projected costs or savings of implementation

#### 1.3.2.1. Startup or phase-in (one-time) costs

None available

#### 1.3.2.2. Recurring costs or savings, as applicable

Continuous investment

#### 1.3.3. Space needs or space savings, as applicable

#### 1.4. Accountability Plan

#### 1.4.1. Measure(s) of impact (assessment plan)

- Increase in the number (50%) of Panther Quality designated fully online and hybrid/blended classes.
- Measure to determine the baseline and incremental retention rate of students taking Panther Quality designated fully online and hybrid classes.
- Measure to determine baseline and increase in the performance and graduation rate of students enrolled in Panther Quality designated online courses.

#### **1.4.2.** Proposed benchmark(s)

#### 1.5. References and Appendices

State University System of Florida. Board of Governors (2015, November 5). Online education: 2025 Strategic Plan Task Force for Strategic Planning for Online Education (2015). Online quality report

# FLORIDA INTERNATIONAL UNIVERSITY STRATEGIC PLAN 2020-2025

### Student Success Pillar – Workgroup 1B Improving course pedagogy and rewarding faculty improving student learning

Workgroup 1. was charged with proposing recommendations through which to improve pedagogy and reward faculty, a charge which recognizes that 1) faculty have been identified as a key variable with respect to student success, 2) teaching practices, in particular, are powerful levers for student learning and success, and 3) that faculty deserve to be rewarded for their many contributions. It is important to note that our charge extends initiatives supported by the BP2020 plan and that several of the recommendations involve the expansion of existing teaching and learning efforts, an acknowledgement that we do not need to "start from scratch" and can build on an excellent foundation. This work also intersects directly with newer initiatives such as FIU's Evaluating & Rewarding Teaching Project. Here, a nascent vision of teaching excellence of FIU was articulated, one characterized by learning-centeredness, evidence-based practice, and cultural responsiveness. Although the vision is not mentioned explicitly in the recommendations below, they informed our thinking, and the strategies described aim to improve pedagogy at FIU toward this vision and reward faculty for their efforts to this end.

1. Recommendation #10 – Expanding Students as Partners Initiatives (including LAs)

# **1.1.** Description and justification of program, savings, or efficiency recommendation (supported by data/research/best practices)

There is a long history of scaffolding peer involvement in classrooms to promote student engagement and improve student cognitive and affective outcomes. The FIU Learning Assistant and Writing Assistant programs use this model to bring knowledgeable undergraduates into courses to facilitate discussions and support practices.

Learning Assistants (LAs) are undergraduate students who, through the guidance of weekly preparation sessions and a pedagogy course, facilitate discussions among groups of students in a variety of settings that encourage active engagement. The FIU LA program is now the largest in the nation with over 300 LAs per semester working with 70+ faculty in 11 departments and reaching over 10K student enrollments per semester. Numerous studies have shown the benefits of implementing LA-supported classrooms, including greater student learning outcomes and higher graduation and retention rates. Additionally, the LA program provides a regular feedback mechanism to faculty since they can provide additional insight into student difficulties, appropriateness of curricular materials, and student perceptions and attitudes. LAs also act as change agents and accelerate the movement of courses towards more active learning modalities by developing as education leaders and advocates within and outside the courses they work in.

Writing Assistants (WAs) are advanced undergraduate students trained by the Center for Excellence in Writing, who are embedded in course sections to provide feedback on student writing and to help facilitate in class activities. The program also features support for faculty through the Writing Across the Curriculum program and the Center for the Advancement of Teaching. Since its inception in Spring 2011, the Writing Assistants program has served roughly 3,220 FIU students. Gateway survey results have shown that students are more comfortable turning to peers for academic support than they are with faculty. Surveys of students who have worked with WAs support further the value of peer tutoring and mentoring. For example, in a Spring 2018 survey that received responses from 96 student participants 98.9% rated their interaction with a WA in the classroom as "very helpful" or "helpful" and 87.5% of student respondents believed they improved as writers over the course of the semester.

The WA and LA programs also provide a means through which faculty may maintain high quality content, delivery, and mastery of course material in an active learning environment that leads to higher student success. For example, with WAs faculty can assign more writing, even in large courses. With the help of WAs and LAs, coursework can include more active learning; students can receive more feedback; and LAs and WAs can gain valuable experience as educators and mentors. Moreover, both LAs and WAs may be able to secure certification/badges of the skills acquired through their training.

Besides acting as peer leaders and facilitating student learning, undergraduate students can also play important roles in supporting faculty change towards active learning strategies. *Student Consulting on Teaching (SCOT)* programs train students to become partners with faculty by meeting with them, observing their classes, and providing valuable feedback (along with suggestions, if requested) for improved teaching. SCOTs generally function in one or more roles to provide feedback to instructors. These roles can include providing a record of what went on in the classroom, acting as a faux student, recording the class, interviewing students in the class to get feedback, and providing feedback or suggestions about classroom activities. Additionally, SCOTs could be trained to provide meaningful data collection and analysis support to faculty, which is necessary for continuous course improvement but, generally, a difficult task for faculty to accomplish without support.

Based on education research and the success of programs at FIU and elsewhere, we propose to expand the involvement of students in institutional change towards teaching excellence and to better integrate the efforts that involve students as teaching partners:

(1) <u>Deploy Learning Assistants and Writing Assistants to new courses</u>. (a) Provide support for increasing the numbers of LAs and WAs, to expand to additional disciplines/courses including upper division classes deemed critical to matriculation. Currently the LA program focuses on STEM courses while the WA program focuses on humanities writing-intensive courses. Both programs can be adapted to support all disciplines by thoughtfully expanding and adapting the current course offerings to prepare LAs and WAs. (b) Provide additional administrative support/expertise to help train LAs and WAs and manage the programs. To maintain high quality practices and as the number of LAs and WAs increase, it is necessary to add additional experienced personnel for teaching the pedagogy courses and supporting LAs and faculty. Additionally,

organizational structures are needed, such as campus management systems to handle large number of applications and track students, and additional support for department liaisons that can support faculty in the departments. (c) Create structures to support collaborations between the WA and LA programs, and other related units on campus (e.g. CAT). There are tremendous synergistic opportunities between current programs on campus, including the LA and WA programs. There would be positive outcomes and cost-benefits of creating structures that support collaborative work between these units. (d) Create Postbaccalaureate ("Postbac") opportunities for former LAs and WAs. Since many students take a gap year before continuing to professional school, FIU should provide Postbac opportunities that would mutually benefit former students and the institution. For example, Postbac LAs/WAs could work in key upper division courses that are difficult to recruit LAs/WAs for or provide additional support to faculty in a more advanced LA/WA roles. (e) Provide additional incentives for WAs and LAs. As the programs expand, there can be opportunities to recruiting more students and employing them on campus. Campus employment has been shown to positively influence our students' success. Increasing the base salary of LAs (currently about \$10/hr) or restructuring it to increase pay with experience would prevent some students from having to take additional work outside campus. Additionally, these programs can support the creation of micro certificates/badges for LAs and WAs, which will add an extra incentive for students and make them more competitive for the workforce.

- (2) Expand the SCOT program to provide additional opportunities for faculty to get feedback from new perspectives. More frequent feedback opportunities are necessary to move towards improved course design and student outcomes. Expanding the SCOT program to impact a larger number of faculty and SCOTs would increase the feedback cycle and accelerate improvement of courses. The program should recruit strategically from students in the LA, WA, or FIUteach (a STEM teacher preparation program) programs, thus benefitting from the expertise those students have developed.
- (3) Expand support for faculty using LAs and WAs to maximize effective use of the model and increase student success. (a) Provide incentives to faculty who wish to redesign courses to incorporate active learning strategies that are facilitated by LAs and WAs. Incentives should include stipends for participation in professional development opportunities, travel awards to appropriate conferences, and summer salary support to redesign courses to incorporate LAs/WAs (b) Provide additional per course incentive to adjuncts who choose to work with WAs and LAs. Support structures should be expanded to include regular contingent faculty teaching key courses. Additionally, effective use of LAs/WAs should be considered as motivators to provide contingent faculty with permanent positions.

#### 1.2. Targeted Metric(s)

Student 2-year Retention Rate Student 4 Year Graduation Rate Student 6 Year Graduation Rate

1.3.	Feasibility Assessment
1.3.1.	Implementation considerations and timeline
1.3.2.	Projected costs or savings of implementation
1.3.2.1.	Startup or phase-in (one-time) costs
1.3.2.2.	Recurring costs or savings, as applicable
1.3.3.	Space needs or space savings, as applicable
1.4.	Accountability Plan
1.4.1.	Measure(s) of impact (assessment plan)
1.4.2.	Proposed benchmark(s)



# Student Success Pillar – Workgroup 1B Improving course pedagogy and rewarding faculty improving student learning

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- 1. Recommendation #11 Introduce Additional Teaching Recognitions, including Awards per Unit and Grants
- 1.1. Description and justification of program, savings, or efficiency recommendation (supported by data/research/best practices)

<u>Teaching awards</u> are a simple, low-cost way of encouraging and rewarding excellent pedagogy. There are a variety of teaching awards available at FIU at various levels (departmental awards, Top Scholar awards, Faculty senate awards, etc.), but coverage is inconsistent. We recommend that there be teaching awards at each level of the university hierarchy: department, school, college, and university (hereafter, level). These awards should ideally have the following features:

- 1. Zero application cost: Awards that require an applicant to prepare an application or recruit a nominator raise a barrier to entry. The awards should, ideally, be awarded to applicant without the applicant even knowing they are being considered. Significant paperwork to justify the award is a barrier and should be avoided.
- 2. <u>Automatic</u>: The standard procedures of each level should automatically start the process of identifying and awarding these teaching awards. A good way to do this is to integrate the award process into an existing process, e.g., chair evaluations.

- 3. <u>Physical Token</u>: The award should, at a minimum, come with some sort of plaque or trophy that the faculty member can display. This raises the visibility and prestige of the award.
- 4. <u>Ceremoniously Given</u>: The awards should be given at a gathering during which many of the faculty covered by that level are present. This raises the visibility and prestige of the award.
- 5. <u>Financial Bonus</u>: Although the award token and ceremonious giving are the most important features of the award itself, a monetary sum given to the faculty as a bonus can increase the prestige and desirability of the award. The bonus amounts at department and school level can be nominal, say, \$250.
- 6. <u>Connection to Teaching Evaluation</u>: The criteria for the awards should align with the recommendations accepted with regard to evaluating teaching, but only in cases where levels do not have an established award that fits the list of above desired criteria.

\*To promote collaboration amongst colleagues and within departments, we recommend that awards be granted to pairs, teams, and academic units. It is also crucial that adjunct faculty be included in our awards systems. As we look ahead to a future in which learning how to learn, analytics, data mining, humanics, and other literacies become increasingly relevant, awards can be designated for these categories to promote faculty engagement toward them. Finally, promoting all teaching awards through our External Relations work elevates their significance and impact.

Certificates of Implementation can provide tangible evidence of progress in pedagogy, similar to the role of publications in pre-tenure reviews. Faculty will be given the opportunity to submit a description of their implementation of a teaching and learning strategy, innovation, or intervention and to describe the outcome on student learning. Other institutions have used similar programs to "make teaching and learning more visible and to provide evidence of the efforts of faculty members for their use in their professional portfolios and/or as evidence of reflection on effective teaching practices and the impact on student learning in annual evaluation, review, reappointment, or promotion materials" (Central Michigan University, FaCIT). Certificates can be awarded in a number of categories, including but not limited to teaching in active learning classrooms, leveraging Canvas for learning, teaching with Learning/Writing Assistants, cultural responsiveness, etc.

<u>Teaching Grants.</u> We recommend launching a targeted grants program to support faculty for course development and professional development. A Teaching Grants program signals to faculty that FIU truly values teaching.

Course development grants should be awarded to faculty with a clear plan to implement new teaching approaches or enhance their practice, through an application process. Redesigning a course to implement new course pedagogies (active learning, team-based learning, learning assistants) requires a significant commitment of time on the part of the faculty. Teaching grants in the form of either summer salary or course buyout during the academic year free up time and allows faculty to devote the necessary effort.

(Note that faculty with research assignments supported by federal grants cannot devote effort to course development or even mentoring of their peers, unless they are being compensated for this effort.)

Professional development grants support travel to conferences or workshops by faculty to either learn about new teaching pedagogies and/or to share their own development efforts.

#### 1.2. Targeted Metric(s)

2<sup>nd</sup>-year retention, graduation

Criteria can include but certainly not be limited to increases in student performance.

#### **1.3.** Feasibility Assessment

#### 1.3.1. Implementation considerations and timeline

- Draft a university wide policy (x amount of time)
- Assess the coverage of teaching awards (this is already underway at the Provost's office)
- Allocate funds from the budget to support the awards.
- Follow-up in 1 year to ensure that all levels have the appropriate awards

•

#### 1.3.2. Projected costs or savings of implementation

C = # of colleges; S = # of schools; D = # of departments.

Assume cost of a trophy is \$15, and assume that 40% of departments/schools already give tokens for their awards and 10% already give a financial bonus. Then the cost of the trophies and bonuses are:

(C + 0.6\*S + 0.6\*D)\*(\$260) / year

No cost is needed for the ceremonies, as the awarding will be integrated into the many already existing celebrations.

CAT and the STEM Institute can coordinate the review process, partnering with colleagues in other units providing faculty support. Capacity needs will likely include faculty fellows. Summer teaching grants should be for a period of at least 2 weeks, one pay period. Average costs for this should be around \$5,000 w/out benefits. The cost for 15 such grants would be \$75,000. These should be considered recurring costs for at least several years. A typical professional development grant would be in the order of \$2500.

#### **1.3.2.1.** Startup or phase-in (one-time) costs

The time involved in drafting the policy.

#### **1.3.2.2.** Recurring costs or savings, as applicable

See above.

#### 1.3.3. Space needs or space savings, as applicable

None.

#### 1.4. Accountability Plan

#### 1.4.1. Measure(s) of impact (assessment plan)

Number of courses reformed.



# Student Success Pillar – Workgroup 1B Improving course pedagogy and rewarding faculty improving student learning

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- 1. Recommendation #7 Expand Gateway Project: Adding Gateways to Graduation Courses
- **1.1.** Description and justification of program, savings, or efficiency recommendation (supported by data/research/best practices)

The Gateways to Graduation recommendation is an expansion of FIU's multi-year Gateway Project which has resulted in more than 8,000 additional instances of course passing since AY14-15. Whereas the original gateway project provided coordination and support for courses in which student performance has a strong correlation to students' 2<sup>nd</sup>-year retention, the Gateways to Graduation recommendation proposes that we expand our focus and begin supporting courses identified by AIM as having a strong correlation between student performance and 4-year graduation. More specifically, AIM has identified an initial set of courses where there is a big difference in graduation rate for those who did and did not pass the course. For example, 41% of students in Course A who passed the course graduated in 4 years, while only 7% of those who failed it graduated in 4 years (41% - 7% = 34%). In contrast, 17% of students who passed Course B graduated in 4 years, while 6% of those who failed it still graduated in 4 years (17%-6% = 11%). It therefore appears that passing Course A is a greater contributor to the 4-year graduation rate than passing Course B.

Because the courses are identified on the basis of graduation as an outcome, we feel confident that dedicating additional institutional attention, resources, and support will result in increased student performance and an increase in the 4-year graduation rate.

#### **1.2.** Targeted Metric(s)

4 and 6-year graduation rate

#### 1.3. Feasibility Assessment

#### 1.3.1. Implementation considerations and timeline

A great deal of the project implementation will be modeled on and informed by lessons learned during the original Gateway Project. For instance, it will be essential to convene teams for each identified course consisting of faculty, the department chair, representatives from the STEM Institute or CAT, etc. Initial programming will likely consist of a course re-design institute and the development of an evaluation plan for the course that accounts for both learning and performance. Data will need to be collected throughout both to celebrate progress and identify areas for refinement, such that AIM will be, as always, an invaluable partner.

Timeline: 5 courses can be identified in the first term for maximum impact. This will ensure sufficient support. If Learning Assistants (LAs) or Writing Assistants (WAs) are identified as important to student success, they can be recruited and implemented in Year 2 to allow for faculty members to prepare to make the most of them. An additional 5 courses can be added per year.

#### 1.3.2. Projected costs or savings of implementation

#### 1.3.2.1. Startup or phase-in (one-time) costs

#### 1.3.2.2. Recurring costs or savings, as applicable

- Stipends for faculty to participate in course institutes/programming (\$15,000 per year)
- Postdoc or Graduate Assistant to assist with data collection and analytics support from AIM
- Pending CAT staff capacity (based on implementation timeline), faculty fellows may be necessary to make it possible for the CAT leadership to coordinate this project and facilitate programming - \$4,000 per fellow per semester
- LAs or WAs per course, as needed (\$10/hour)

#### 1.3.3. Space needs or space savings, as applicable

#### 1.4. Accountability Plan

#### 1.4.1. Measure(s) of impact (assessment plan)

• As with the original gateway project, the assessment plan will track student outcomes, including changes in DFWI rates, and student perceptions of their experiences in these courses. This iteration will be more explicit about tracking student learning gains.

#### 1.4.2. Proposed benchmark(s)



# Student Success Pillar – Workgroup 1D Coordinating and accelerating academic and career success

\*\* will be merged into Recommendation #1 submitted by Workgroup 1A \*\*

Recommendation #2 – Demand-side strategies on course offerings and support

1.

### 1.1. Description and justification of program, savings, or efficiency recommendation (supported by data/research/best practices)

Prior research has established that the higher proportion of lower socio-economic and minority students in an organization results in higher dropout rate (Rhee, 2008). "FIU is a majority-minority institution" (Florida International University, 2018), and is, therefore, much more vulnerable to having student retention issues which means it has to be more aggressive than its peers to address the demographics of its student population.

"Increased institutional rates of student success do not arise by chance. They are the result of a series of intentional institutional actions, policies, and practices that are consistently applied over the long term" (Tinto and Pusser, 2006).

Whereas other recommendations submitted by our workgroup focus on providing supply-strategies by enhancing the technology available to administrators, the following recommendations will focus on improving current institutional actions, practices and policies. These recommendations aim at preventing students from engaging in negative behaviors that will ultimately affect their ability to progress through the curriculum in a timely manner:

- a. FIU should provide automated structures to identify, warn, and, in some cases, prevent undesirable course taking behaviors
- b. Course dropping and subsequent enrollment should be limited in "gateway to graduation" courses (as discussed in recommendations by Workgroup 1B)
- c. Identify and redirect students "hiding" in degree programs.

Students who are not clear on the path they would like to follow often tend to lack motivation and show up to the class not necessarily to learn but rather to figure out what they are interested in (Grubb and Worthen, 1999). It is for this reason that it is critical to identify students who are hiding early on in order to actively intervene to ensure their success.

d. Automate suggestions for scheduling with and around prioritized courses

#### 1.2. Targeted Metric(s)

- 1. FTIC 2-yr Retention Rate (GPA>2.0)
- 2. FTIC 6-yr Graduation Rate and FTIC 4-yr Graduation Rate
- 3. Percent of Bachelor's Degrees Without Excess Hours

#### 1.3. Feasibility Assessment

- 1.3.1. Implementation considerations and timeline
- 1.3.2. Projected costs or savings of implementation
- 1.3.2.1. Startup or phase-in (one-time) costs
- 1.3.2.2. Recurring costs or savings, as applicable
- 1.3.3. Space needs or space savings, as applicable

#### 1.4. Accountability Plan

- 1.4.1. Measure(s) of impact (assessment plan)
- 1.4.2. Proposed benchmark(s)

#### 1.5. References and Appendices

Florida International University Accountability Plan. 2018. Retrieved from <a href="https://www.flbog.edu/board/\_doc/accountabilityplan/ap\_2018/FIU\_2018\_Accountabilityplan/ap\_2018/FIU\_2018\_Accountabilityplan/ap\_FINAL2.pdf">https://www.flbog.edu/board/\_doc/accountabilityplan/ap\_2018/FIU\_2018\_Accountabilityplan/ap\_2018\_Accountabilityplan/ap\_2018

Grubb and Worthen. 1999. Honored But Invisible: An Inside Look at Teaching in Community Colleges. Retrieved from: https://books.google.com/books?id=rDLDxTzplPUC

Rhee, B. 2008. Institutional climate and student departure: A multinomial multilevel modeling approach. *The Review of Higher Education*, 31(2), 161-183

Tinto, V. and Pusser, B. 2006. *Moving from Theory to Action: Building a Model of Institutional Action for Student Success*. Retrieved from: https://nces.ed.gov/npec/pdf/Tinto Pusser Report.pdf

#### **Workgroup Whitepaper Template**

**Recommendation #60 - International Early University Credit— HS and Network Partnerships** 

- 1.1. Description and justification of program, savings, or efficiency recommendation (supported by data/research/best practices)
- Capture opportunities presented by globalization to broaden access to higher education at FIU for international high school students.
- Tap into global networks and current and prospective partnerships worldwide to extend non-degree seeking online opportunities to international high school learners. Offer up to 15 lower-division credits to high school students within the framework of international school systems, particularly targeting SACSCASI-accredited high schools.
  - o Develop partnerships with school systems and networks using a self-supporting approach.
  - o Integrate outreach with future world centers, international alumni networks, and international dual-degree, articulation, exchange, and offshore credit programming partners.
- As part of the outreach, create awareness to, and brand identification with, FIU to develop recruiting pipelines to FIU for eligible students and support progression toward FIU degrees.
  - Develop a short-term self-supporting summer residential noncredit program at FIU for international high school students enrolled in non-degree seeking courses as a way to create affinity to FIU.

#### **1.2.** Targeted Metric(s)

- #11: Total Headcount
- #13: Number of Dual Enrollment Students in International High Schools
- #16: Percentage of International Students
- # 25 Top 50 Public University National Ranking

#### **1.3.** Feasibility Assessment

#### 1.3.1. Implementation considerations and timeline

Enrollment/Headcount Targets	2020-21*	2021-22	2022-23	2023-24	2024-25
Non-credit Summer Residential		25	25	25	25
Summer Pilot Online		50			
Fall - Enrollment		200	450	850	1000

<sup>\*</sup>Special Note: The academic year of 2020-21 will be dedicated to the recruitment and hiring staff and marketing and outreach. There is the potential to implement the summer pilot credit program in June 2021, as well as the non-credit residential program. In this case, enrollment would be part of 2020-21 year.

#### 1.3.2. Projected costs or savings of implementation

- Proposed cost to international high school students within HS partnership/network is \$989.31 for one online course (for pilot and subsequent offerings), based on a minimum cohort number of 50 students.
- This should be for credit to make it worth the expense/ more marketable. Cost to international high school students within HS partnership/network for short-term (two weeks) summer non-credit residential program at FIU is \$3,168.40, including room and board and non-credit enrichment instruction and materials, and inter-campus travel and travel to Miami museums (excluding airfare, visa, travel/health insurance, and other travel-related expenses).

Summer Non-Credit Residential Program (Two Weeks)						
Instructional Cost	\$1400	#25	\$	35,000.00		
<b>Room 25 Students + 3 Chaperones</b>	\$50	#28	\$	18,200.00		
Board	\$30	#28	\$	11,760.00		
Chaperone(s) per week	\$500	3 weeks	\$	4,500.00		
<b>Instructor for Chaperone Training</b>		30 hr.				
plus lunch for chaperones	\$75 hr.	training	\$	2,250.00		
Overhead 10% for Non-Credit			\$	7,200.00		

Cost to Student (self-funded) \$ 3,168.40

79,210.00

Total \$

#### 1.3.2.1. Startup or phase-in (one-time) costs

**ASSUMPTION**: PRE-STRATEGIC FUNDING WOULD BE AVAILABLE FOR FALL 2019 (see below) (if the funds are unavailable, the feasibility study would be conducted in 2021).

#### • Staffing:

PRE-STRATEGIC FUNDING PHASE (2019-20): Total of \$40,000

**Consultant:** an individual with international education expertise would be charged with determining the feasibility of developing high school partnerships and developing market research and corresponding list of prospective partners (including contact information and initial partner engagement) (\$15,000 plus selective pre-approved travel expenses totaling no more than \$5,000).

Consultant would meet regularly with assigned internal stakeholders (identified as Early University Credit Steering Group) to develop a viable workplan for implementation.

Marketing and recruitment: \$20,000 to launch pilot.

#### STRATEGIC FUNDING PHASE (2020-25):

Computers and laptops (\$8,000), website development (\$5,000), and phone equipment for three employees (\$1200).

#### 1.3.2.2. Recurring costs or savings, as applicable

- Staffing: an associate director (\$85,000 plus benefits), a program manager (\$60,000 plus benefits), and an OPS (\$20,000), for a total annual cost of \$218,200.
- Ongoing marketing and travel to recruit students to participate in non-degree seeking online opportunities and non-credit residential summer program: \$\frac{\$5,000}{3,000}\$ a trip per staff for a total of six trips a year (i.e., \$\frac{\$18,000}{3}\$ a year per person equals \$\frac{\$36,000}{3}\$).

#### 1.4. Accountability Plan

#### 1.4.1. Measure(s) of impact (assessment plan)

- Non-degree seeking online enrollment target attainment.
- Admission yield as coordinated with the FIU Office of International Admission.

#### 1.4.2. Proposed benchmark(s)

• Target enrollment attainment (refer to enrollment chart above).

#### 1.5. References and Appendices

- Education & Training Services Guide, 2018 Edition, US Department of Commerce (<a href="https://build.export.gov/build/idcplg?IdcService=DOWNLOAD\_PUBLIC\_FILE&RevisionSelection">https://build.export.gov/build/idcplg?IdcService=DOWNLOAD\_PUBLIC\_FILE&RevisionSelection</a> Method=Latest&dDocName=2018educationguide120695)
- SACSCASI website showing the International Registry for Accredited Institutions (<a href="http://www.advanc-ed.org/oasis2/u/par/search">http://www.advanc-ed.org/oasis2/u/par/search</a>)
- Academic Planning and Accountability's IAMS Database of Agreements and Memoranda of Understanding





# Student Success Pillar – Workgroups 1C & 1D Enhancing learner experience and certification of workforce competencies + Coordinating and accelerating academic and career success

- 1. Recommendation #12 Development of the *Center for 21st Century Skills Development*
- 1.1. Description and justification of program, savings, or efficiency recommendation (supported by data/research/best practices)

Given the movement to artificial intelligence, automation, and the fact that we are in the midst of the 4<sup>th</sup> Industrial Revolution, it is critical that FIU ensure all students are developing a core set of skills that places them at an advantage in the workforce.

Furthermore, FIU has just earned APLU's national designation as an Innovation and Economic Prosperity (IEP) University. According to the APLU,

The IEP Universities program helps institutions to codify, elevate and advance their "economic engagement" enterprise which encompasses the many and varied ways universities work with their public-private partners to carry out:

- Talent and workforce development
- Innovation, entrepreneurship and technology-based economic development
- **Place** development through public service, outreach, extension, and community engagement

This NextHorizon strategic student success plan is designed to ensure that FIU has sustainable, systematic structures in place to continue to meet those objectives and to prepare our students for the 21<sup>st</sup> century workplace. The plan will assure that FIU can 1) prepare our student to be career-ready and have viable pipelines for employment upon graduation, 2) understand and respond quickly to the needs of our local industries, 3) cultivate solutions to the workforce challenges of our community, and 4) demonstrate the relevance of FIU degrees to the professional success of our students. Workgroups 1C and 1D have jointly tackled addressing these topics. This joint recommendation proposes a coordinated university-wide effort, led by a small administrative team who is already engaged in this work.

The workgroups believe that while some of the recommendations posed can take place within siloed programs, it is imperative to change the FIU culture through leveraging the many strengths that both academic and administrative units provide. Buy-in, amongst faculty, staff, and students, is crucial. Therefore, to achieve these goals, the following framework is needed:

#### 1. Adequate Staffing:

- Strategic Leads: Identify 1 Administrator in APP and 1 in ACS who are working on these tactics already and can serve as strategic leads. Allocate funds for administrative increments or re-allocation of duties. The APP oversight will include specialization related to badging, assessment/accreditation, and curricular alignment; the ACS oversight will include integration with existing CTD services, student career pipelines, and integration into the overall university student success plan.
- Assistant Director: This Assistant Director will serve as the primary external relationships manager for specific industry needs/inquiries. They will work with various units (engagement, CTD, colleges/schools) to support these relationships. Under the guidance of the strategic leads, they will work with APP/ACS staff to integrate knowledge gained into appropriate programming.
- Coordinator: The coordinator will support the Asst. Director in fielding industry
  inquiries, coordinating meetings, and support the strategic leads in coordinating
  the committee meetings. The coordinator will work with APP/ACS staff to further
  goals related to badging, student career pipelines, and workforce development in
  general.
- The role of this team would include:
  - i. Fostering affiliations with local workforce development boards, industry trade unions, and business and industry leaders throughout South Florida in partnership with applicable FIU offices
  - ii. Monitoring and analyzing labor market research to identity opportunities and understand changing trends
  - iii. Promoting and supporting curricular and non-curricular collaboration between colleges and employers in alignment with the badging initiative
  - iv. Developing a network of internal partners throughout FIU to bridge the gap between employer needs and our learners' and graduates' skill sets. These partnerships will include Career and Talent Development, Continuing Education, Academic Programs and Partnerships, University Advancement Corporate Relations, External Relations, and Office of Engagement
  - v. Generating new employment pipelines for our students, learners, and alumni including internships, apprentice programs, and training programs
  - vi. Assuring FIU remains on the forefront of university-employer relations, life-long learning, and workforce development

- 2. A dedicated standing committee (revised 21<sup>st</sup> Century Workforce Competencies Taskforce), formally recognized as a job requirement for identified staff committed to developing an industry outreach framework. The strategic leads mentioned above will provide appropriate guidance for the committee. This framework must address the skills gap, in demand industry credentials, and development of pipeline programs for our students, graduates, and where appropriate, community at large. To ensure students gain critical skills and that every unit across the university defines skills in the same way, a committed, cross-functional committee is needed. Sub-committees can facilitate specific goals or outcomes (curriculum, pipelines, etc...)
  - i. Propose at least one full-day retreat per year for internal committee members + monthly meetings
  - ii. Industry partner focus groups or roundtable events
- 3. Industry Responsiveness
  - A shared e-mail/form of contact (website form) for a select administrative group to address immediate industry needs or concerns
    - i. This group will include the Strategic Leads, Assistant
      Director/Coordinator described above, the Office of Engagement, Office
      of Governmental Relations, Career and Talent Development.
    - ii. Suggestion of a referral tool in *Appendix A*.
  - Development of a response framework to outline appropriate steps to inform stakeholders/constituents of needs

Aligning FIU with the needs of the job market is necessary to remain relevant to students, the community, and the State. According to the 2017 Strada-Gallup College Student Survey, only a third of students believe they will graduate with the skills and knowledge to be successful in the job market (34%) and in the workplace (36%). Strada-Gallup also found that "the more relevant that consumers find their courses to be in their work and daily lives, the greater their belief that they received a high-quality education and that it was worth the cost."

The disconnect between employers' perception of students' skills and the students' perception of their proficiency can be seen in the 2018 Job Outlook Survey conducted by NACE. NACE found over a 40% gap between the students' perception of their Professionalism/Work Ethic competency and the employer's perception. This disconnect can be seen in almost every category.

COMPETENCY	% OF EMPLOYERS THAT RATED RECENT GRADS PROFICIENT*	% OF STUDENTS WHO CONSIDERED THEMSELVES PROFICIENT**			
Professionalism/Work Ethic	42.5%	89.4%			
Oral/Written Communications	41.6%	79.4%			
Critical Thinking/Problem Solving	55.8%	79.9%			
Teamwork/Collaboration	77.0%	85.1%			
Leadership	33.0%	70.5%			
Digital Technology	65.8%	59.9%			
Career Management	17.3%	40.9%			
Global/Intercultural Fluency	20.7%	34.9%			

This recommendation serves a strong foundation for the collaboration and strategic direction needed to ensure that we can close the skills gaps and proficiency gap for our students.

#### 1.2. Targeted Metric(s)

- 1. FTIC 4yr graduation rate
- 2. Percent Bachelors graduates employed

#### **1.3.** Feasibility Assessment

#### **1.3.1.** Implementation considerations and timeline

- Development of positions, posting, and hiring can take place within 6 months
- Implementation would involve an assessment of the fraternity house for costs related to 1) the redesign of the restrooms (currently only men's restrooms exist), 2) repainting of the rooms which can be used as offices, 3) removal of some walls to create space for employers to hold and 3) furniture.
- Once staff are hired, the strategic leads will develop a plan for the redesigned 21<sup>st</sup> Century committee; industry response framework; and needed website.

#### 1.3.2. Projected costs or savings of implementation

#### **1.3.2.1.** Startup or phase-in (one-time) costs

• 105,000 in startup costs for Assistant Director and Coordinator

#### **1.3.2.2.** Recurring costs or savings, as applicable

- Administrative Increments/Re-Allocation of duties for Strategic Leads: \$40,000 + Fringe = \$53,504
- Assistant Director: \$65,000 + Fringe = \$86,944.00
- Coordinator: \$48,000 + Fringe = \$64,204.80
- 1 retreat per year for committee (breakfast and lunch for 25 people x 5) + \$500 in materials X = \$6,250
- Industry meetings @ 6 per year x \$500 catering = \$15,000

Annual Total Costs: \$225,902.80

#### 1.3.3. Space needs or space savings, as applicable

Will need appropriate office space for Assistant Director, Coordinator, and consistent meeting space for committee and industry meetings. We propose the renovation of one of the fraternity houses to be a visible symbol of our commitment to the development of ongoing relationships with industry and business leaders, corporate partners, and federal and municipal agencies.

In addition to the above, the house can support the following:

- Workforce development focused conferences
- On-campus training space for employers
- Career and internship fairs
- Interview space and employer engagement opportunities

#### 1.4. Accountability Plan

#### 1.4.1. Measure(s) of impact (assessment plan)

- Increased partnerships with small to medium-sized enterprises
- Increased internship opportunities
- Higher levels of alignment of skills and competencies of FIU graduates and learners with South Florida industry needs as measured through curricular alignment (e.g. badges, curriculum mapping)
- Higher levels of alignment between students' perception of their skill set and employers' perception of students' skill set

#### **1.4.2.** Proposed benchmark(s)

#### 1.5. References and Appendices

2017 College Student Survey: A Nationally Representative Survey of Currently Enrolled Students: Strada-Gallup (<a href="https://news.gallup.com/reports/225161/2017-strada-gallup-college-student-survey.aspx">https://news.gallup.com/reports/225161/2017-strada-gallup-college-student-survey.aspx</a>)

From College to Life: Relevance and the Value of Higher Education: Strada-Gallup (http://www.stradaeducation.org/consumer-insights/relevance-and-higher-education/)

 $\underline{https://www.naceweb.org/job-market/trends-and-predictions/job-outlook-fall-recruiting-for-the-\underline{class-of-2018/}$ 

#### Appendix A: Sample Industry Partnership Referral Tool

https://oir.mines.edu/contact-form-companies/

Submit

To start a conversation about how your company can become part of the Mines community, please complete the form below or contact Donny Boulanger at 30 273-3144. Company \* Name \* First Last Title \* Email \* Phone \* Desired areas of corporate engagement \* ■ Engage and recruit employees Raise awareness on campus for your company ■ Provide technical expertise and collaborate on research Develop your workforce Access Mines facilities □ Secure intellectual property to develop new products / services Network with other industry peers ■ Provide campus support (Check all that apply.) **CAPTCHA** I'm not a robot

We will be touch soon to discuss your request. Thank you for your interest in being part of the Mines community!





# FLORIDA INTERNATIONAL UNIVERSITY STRATEGIC PLAN 2020-2025

### **Student Success Pillar – Workgroup 1C** Enhancing learner experience and certification of workforce competencies

#### **Executive Summary**

- 1. Current Situation
- 2. Objectives
- 3. Recommended Strategies

This workgroup set out to develop recommendations related to enhancing the student experience through certification of workforce competencies. There are four core recommendations that the group has put forth:

- a. Identification and Badging "Essential" Skills
- b. Identification and Badging Industry-Recognized Credentials throughout degree programs
- c. Alignment of Essential Skills to University Core Curriculum
- d. Development and/or Alignment of Continuing Education for Workforce Development
- 4. Overall Budgetary Request

#### **Core Budget Needs for Proposal**

Human Resource Needs:

- \$15,000 in startup costs
- \$2,085,760 over 5 years

Technological Needs

• \$455,000 over 5 years

Meeting Costs (committee, industry, and education/training)

• \$36,250 over 5 years

#### Additional budget needs from 1C proposals:

- Stipends for faculty/staff to entice them to add badging/align skills to courses
  - o Global Learning model \$500 to design and \$250 to align a course to an existing model
  - o \$100,000.00 over 5 years
- Stipends for committees to review assessments submitted outside of course work/monitored cocurricular
  - o \$250 dollars per semester for reviewers
  - o \$112,500 over 5 years
- \$227,500 over 5 years

Overall estimated budget: \$2,819,510 over 5 year

#### Recommendation #13 – Identification and Badging of "Essential" Skills

#### **Description & Justification (supported by data/research/best evidence)**

Our first recommendation is that all FIU students should have the opportunity to earn badges in core competencies necessary for post-graduation success. We know that a 'skills gap' exists, but research is mixed on exactly which skills students need<sup>1</sup>. Our research indicates that there are a core set of skills that most employers look for, such as critical thinking, communication, and collaboration – in addition to others that have surfaced based on the increasing automation of the US workforce.<sup>2</sup> The 21<sup>st</sup> Century Workforce Competencies Taskforce has preliminarily identified the following core competencies as a requisite for a 21<sup>st</sup> Century Learner:

- Teamwork & Collaboration
- Critical Thinking
- Oral Communication
- Written Communication
- Cultural Agility
- Creative Problem Solving
- Entrepreneurship and Innovation
- Leadership
- Systems Thinking
- Data Literacy
- Technological Literacy

The taskforce has also identified the below competencies as prevalent in the literature; however, they must be more fully vetted to determine if these core competencies are most relevant to FIU students or are subsets of the above competencies:

- Workforce & Career Readiness
- Resilience
- Empathy
- Ethical Decision Making
- Civic Engagement

Our recommendation for the strategic planning process is to move forward with piloting vetted competencies in Spring and Summer 2019 and to convene a committee to determine the remaining core competencies.

The badges awarded to students as part of this recommendation will be comprised of Student Learning Outcomes (SLOs) that are applicable across all majors and many co-curricular activities. During the pilot process, students can choose to complete the badging requirements on their own through objective assessments or through academic courses or co-curricular activities that have applied for their course/program to offer "badgeable" opportunities. Once skills have been mapped across majors, students will be required to complete badges (inclusive of culminating reflections) as part of their degree program.

 $<sup>^1\</sup> https://www.naceweb.org/talent-acquisition/trends-and-predictions/is-there-really-a-skills-gap/$ 

<sup>&</sup>lt;sup>2</sup> We have references, need to add them!

To facilitate success of this initiative, we propose developing a website that helps students identify the skills that are most in demand related to their majors and which badges can help them develop these skills.

While the workgroup recognizes that it is critical for all selected competencies to be integrated throughout the UCC and upper-division coursework, this will take time to fully integrate. The workgroup proposes developing fundamental badges in the selected essential skills and pilot testing them in selected majors. Furthermore, students will have the option to earn these fundamental badges through guided online study or through approved co-curricular "badgeable" opportunities. The committee will identify academic units interested in integrating additional badging levels throughout their upper division coursework as the project progresses and in conjunction with the skills that arise out of recommendation #2 (industry skillsets and credentials).

To implement this badging program successfully, the following will be required:

- 1. A website that outlines the 21st century competencies and industry-recognized skills needed for majors; how students can achieve these skills or competencies; and how this knowledge will be certified (badging, certificates, etc...)
- 2. A systematic process of identifying relevant skills and competencies and communicating this to appropriate colleges and units
- 3. Commitment to assessment, accountability, and alignment in terms of ensuring microcredentials are credible and valid; and integrating workforce competencies throughout the curriculum.
- 4. A system to document learning
- 5. Development of a narrative so that a student understands that the degree that they are earning is not only providing them with content knowledge, but also with transferable skills that can be used in a myriad of jobs and careers. This may include the following:
  - K-12 pipeline engagement, to include badging
  - Re-designed orientation focused on applied learning and practicing what will be expected of students as they
  - Integration of 21<sup>st</sup> century skills and related badges throughout the UCC with advanced level skills and badges offered throughout upper division program of study.
- 6. Buy in and education. This effort will require training for faculty, staff, students, and employers (as related to 21st skills broadly, but more specifically to badging and assessment).
- 7. Strategic Marketing
  - Our first recommendation related to strategic marketing is to separate the implementation process into two university subgroups: Academic Units and Student Engagement co-curricular activities. A key part of the implementation process is to identify strategic marketing plans for all groups identified. This strategic marketing is intended to make these specific populations understand why they have been identified and the credentialing/badging/certification opportunities associated with the unit.

- A second recommendation for the strategic marketing process is to establish liaisons within each identified unit within the university subgroups that will streamline the implementation process and assess its operationalization. The liaison model will seek reduce the overhead in creating a complete new department for badging/certifications and identify a larger network of support for learners. Liaisons should participate in the credentialing/badging pilot program during the Spring 2019 academic term to acquire active knowledge of what a learner may experience as they navigate the process. The 21st Century Taskforce will work to identify appropriate liaisons from each of these two population.
- 8. Touchpoints with advisors and career counselors
  - It will be critical to integrate these touchpoints along each pathway and to make sure that those working with students on preparing for post-graduation success can help students turn their e-portfolios and badges into high-impact talking points.

### **Targeted Metric(s)**

- FTIC 2-year Retention Rate
- FTIC 4- & 6-year Graduation Rate
- Percent of Bachelor's Graduates Employed (\$25,000) or Enrolled
- # of current FIU students enrolled in badging/micro masters courses

### **Feasibility Assessment**

### Implementation considerations and timeline

- December 2018
  - Complete draft of Critical Thinking essential skill pathway and validate with faculty from relevant academic units.
  - o Finalize inventory of current badging initiatives and develop plan for each (SLO development; assessment details; Portfolium linkages).
  - o Complete draft framework that outlines full application process.
  - Continue working with existing badge programs to develop SLOs and pathways within Portfolium.
  - Create plan to present framework to present to Faculty Senate (application, review committee structure).
- Spring 2019
  - o Pilot test alignment of "Badge-able Opportunities" application through alignment of existing initiatives/activities/experiences linked to essential skills pilot badges.
  - Prepare to launch pilot of Critical Thinking badge in partnership with Department of English
  - Determine additional core competencies that should be included in badging program
  - Review inventory of programs available that would be appropriate for cocurricular badging activities
  - o Identify Academic and Student Engagement liaisons and provide Panther Connect and Portfolium training

- Review inventory of programs and create a strategic plan for Summer 2019 in terms of development and pilot testing
- Hold 21<sup>st</sup> Century Taskforce meetings once per month to develop framework for operationalization; schedule retreat
- Begin alignment of developed fundamental badges to UCC courses see recommendation #3
- o Identify UCC gaps/opportunities for potential development of new courses (e.g. data literacy and technical literacy) see recommendation #3
- Collect and Evaluate data

### • Summer 2019

- Launch 2 additional core competency badges in partnership with identified curricular and co-curricular partners
- o Identify and train second cohort of liaisons
- o Hold 21<sup>st</sup> Century Taskforce meetings once per month
- o Collect and Evaluate data

#### • Fall 2019

- Launch 3 additional core competency badges in partnership with identified curricular and co-curricular partners
- o Identify and train third cohort of liaisons
- o Continue UCC alignment project
- o Hold 21st Century Taskforce meetings once per month
- o Collect and Evaluate data

### • Spring 2020

- o Evaluate progress, determine launch schedule for remaining essential skills
- Develop strategic plan to engage remaining academic and student engagement units
- Hold focus groups with students and send out surveys to students who started and/or completed badges; survey entering students who were exposed to marketing but did not choose to start/earn badges
- o Review data and adjust marketing plan if needed
- o Draft annual impact report and develop 2020 2021 implementation plan

### **Projected cost of implementation**

### Startup (One-time) cost

- \$15,000 in startup costs for new hires
- Website Cost = \$5,000 (startup + maintenance)
- Badging module design in Canvas for essential skills badges (critical thinking, communication, etc...) earned independently from courses or co-curricular = \$1,500 per course for primary faculty developer = **\$15,000**. It is important to have a primary faculty developer involved in this process, as their guidance and feedback will ensure that we are designing authentic assessments for each skillset.

### Recurring costs as applicable

- $21^{st}$  Century Skills Manager (APP) =  $$60,000 + Fringe = $80,256.00 \times 5 = $401,280$
- $21^{st}$  Century Skills Coordinator (APP) = \$45,000 + Fringe = \$60,192.00 x 5 = \$300,960
- $21^{st}$  Century Skills Graduate Assistants (2 APP/APA) = \$19,200 + Fringe = 21,312 x 10 = \$213,120
- Portfolium (or earmarked for other software TBD) \$90,000 per year
- Faculty/Staff/Student Trainings = 6 per year x \$500 in catering = \$15,000

### Space requirements as applicable

### **Accountability Plan**

### Measure(s) of impact (assessment plan)

In addition to the below measures, it is important to note that for this initiative to be successful, quality assurance is key. Appendix B includes an example of a "badgeable" opportunity application. Programs wishing to align their curriculum will need to provide the assessment artifact that will be aligned to specified learning outcomes; agree to use the standardized rubric to assess the artifact; commit to receiving coaching about how to present this opportunity to their class; learn how to use Portfolium; and include recommended language in their syllabus. The staff hired as a result of this recommendation will follow up with faculty annually to ensure continued compliance with all required policies and procedures. The committee will work closely with the Academic Planning and Accountability staff to align assessments as to streamline this process as much as possible.

The liaisons identified within each academic and student engagement unit as a result of this recommendation will follow up with the central badging manager/coordinator (individuals who will be leading the badging process) on a semester basis to ensure continued compliance with all required policies and procedures. Liaisons should also meet with learners who have started a badging process to ensure completion on a semester basis.

We also note that it will be important to gauge the value of badges throughout the process. We will use analytics provided by Portfolium and PantherConnect to compare rates that students start badges and complete badges.

- # of students earning "Essential/Soft Skill" Badges
- # of badges started vs. earned
- # of programs with "badgeable" opportunities
- Employment rate of students with badges
- Retention rate of students with badges
- Graduation rate of students with badges
- Faculty/Staff/Liaisons engaged in badging process

### **Proposed benchmark(s)**

- # of students earning "Essential/Soft Skill" Badges (curricular and co-curricular)—currently 0 goal for end of fall 2019 is 100
- # of badges earned currently 0 goal for end of fall 2019 is 100
- # of programs with "badgeable" opportunities (curricular and co-curricular)— currently 0 goal for end of fall 2019 is 10
- Employment rate of students with badges 68%
- Retention rate of FTIC students with badges 87%
- 4-year Graduation rate of students with badges 33%

### **Notations**

The National Association of Colleges and Employers (NACE) worked with University of South Florida (USF) faculty and staff, human resources professionals working in organizations that hire recent USF graduates, and other key stakeholders to identify the eight essential skills (or Career Readiness Competencies) needed to be successful when entering the workforce.

NACE formed a Career Readiness Competencies Model Team in 2014 that was responsible https://www.usf.edu/career-services/career-ready/index.aspxidentifying and defining the competencies, working with a diverse group of educators, business and human resources leaders, and key stakeholders. The eight competencies that team identified in their 2017 updated version of the model are:

Career Management
Critical Thinking/Problem Solving
Digital Technology
Global/Intercultural Fluency
Leadership
Oral/Written Communications
Professionalism/Work Ethic
Teamwork/Collaboration

In the badging program that was developed at USF, students are encouraged to identify and discuss their skills, strengths, knowledge, and experiences relevant to their career goals with Career Services staff members in order to identify which collection of badges would most align with those goals.

The eight essential skills targeted at USF include:

### Communications

Speaking or presenting in public settings, expressing ideas to others, and writing and editing clearly and effectively.

### Critical Thinking

Demonstrating originality and inventiveness to analyze issues, making decisions, and overcoming problems.

### Global Citizenship

Demonstrating openness, inclusiveness, and sensitivity, and interacting respectfully with all people.

### Leadership

Leveraging the strengths of others to achieve goals and using interpersonal skills to coach and develop them.

### Professionalism

Exhibiting accountability and acting responsibly, maintaining punctuality, working productively, and managing time effectively.

#### Teamwork

Working within a team structure, negotiating and managing conflict, and building collaborative relationships.

### Technology

Adapting to new technologies, and leveraging them to solve problems, completing tasks, and accomplishing goals.

The program helps students connect all of the experiences they have during their tenure at USF, including their coursework, internships, on-campus employment, and co-curricular activities, to the eight essential skills employers are looking for in new hires. A key component of the program is designed to teach students how to use these experiences on their resumes, cover letters, job applications, and in job interviews.

Students who participate in the program will proceed through structured activities for each of the eight essential skills. In the "Learn It" stage they are asked to share how they acquired the knowledge for each specific competency. This is done by indicating the successful completion of coursework in the competency area or completing specific activities, such as workshops, online programs, or participation in events with designated partners. Students also complete an assessment in a Career Services Canvas course that's designed to help them connect what they learned to workplace situations.

In the second stage, "Do It," students are required to submit evidence of completing 20 (or more) hours of experiential learning activities. This can include internships, Cooperative Education, oncampus employment, Federal Work Study, volunteering, service learning, and participating in research. The goal is to have students apply what they've learned in a real-world setting. Using what they learn, students complete an online reflection piece, as well as construct relevant job search tools, like resumes and cover letters.

Finally, students complete the "Show It" stage by recording a video response to an interview question asked by a member of the Career Services team or a Tampa Bay Area employer. This is designed to help students build confidence in talking about the competency, the knowledge, skills, and abilities they have in the competency area, and the specific, related experience(s) they have had during an interview (University of South Florida, 2017).

Although the utilization of badges has been in practice for many years, the evolution of thinking about micro-credentialing has raised new awareness and approaches for badging design, development and deployment. In a recent study, it was shown that badges awarded for participation are valued less meaningfully than skill-based badges; and, that skill-based badges must have evidence of mastery associated with them (Carey, Stefaniak 2018). This raises concern for developing a structured system for certifying achievement of the skill represented by the badge.

### **References and Appendices**

- Critical Thinking Pathway (Appendix A)
- "Badgeable" opportunities application (Appendix B)
- Include examples of Academic and Student Engagement Units as an example of who we should engage with (Appendix C)
- "Infinite Combinations: Career Readiness Badging Program." (2017, August 17). University of South Florida. Retrieved From: https://www.usf.edu/career-services/career-ready/index.aspx
- An Exploration of the Utility of Digital Badging in Higher Education Settings. Carey, Kimberly L. and Stefaniak, Jill E. Educational Technology Research & Development. October 2018 Vol. 66 Issue 5 pp 1211-1229. DOI 10.1007/s11423-018-9602-1 https://link-springer-com.ezproxy.fiu.edu/content/pdf/10.1007%2Fs11423-018-9602-1.pdf

# Recommendation #14 – Alignment of "Essential Skills" to University Core Curriculum (UCC)

### Description & Justification (supported by data/research/best evidence)

Our next recommendation is to completely revisit the University Core Curriculum (UCC) to ensure that all students have a minimum subset of core competencies identified in the recommendation above. Beyond five group 1 courses mandated by the state, universities have great leeway in creating their UCC. Yet the University Core Curriculum is relatively unchanged from 2003. This is inconsistent with a 21<sup>st</sup> century education model.

Because certain competencies such as critical thinking and oral/writing communication are already guaranteed as part of the Academic Leaning Compact for every program, and because of other requirements, such as a Global Learning Requirement, we find that aligning these essential skills to the UCC is possible and will provide value to our students.

For this recommendation, we propose a pilot approach that preliminarily addresses 5 to 7 UCC courses that can be aligned with the initial essential skill badge development. Based on a successful spring 2019 pilot, we would recommend that UCC reform be put forth as a QEP recommendation for our SACS-COC accreditation.

### **Targeted Metric(s)**

- Percent of Bachelor's Graduates Employed (\$25,000) or Enrolled
- FTIC 2-year Retention Rate
- FTIC 4- & 6-year Graduation Rate.

### **Feasibility Assessment**

### Implementation considerations and timeline

- Spring 2019
  - o Faculty Senate should convene a committee in Spring 2019 to start work on this with the goal of identifying and aligning 5-7 UCC courses to essential skills badges, effective fall 2020.
    - Initial courses/competencies targeted for alignment include:
      - Global Learning courses could be aligned to the Cultural Agility essential skill badge
      - Data Literacy courses that include Big Data, Artificial Intelligence, or Machine Learning from the School of Computing and Information Sciences, but targeted for non-majors, or majorspecific computing courses developed by each unit; could be extensions of the Quantitative Group 2 courses
      - Some competencies, such as Workforce & Career Readiness, could be embedded in one-credit courses, with requirements to find at least three credits of various competencies. However, modifications should be done in a manner that is credit-preserving for nearly all students

### Projected cost of implementation

### **Startup (One-time) cost**

• \$5,000 in startup costs for Assessment Coordinator

### Recurring costs as applicable

• Assessment Coordinator (APA) =  $$45,000 + Fringe = $60,192.00 \times 5 = $300,960$ Space requirements as applicable

• Space can be provided within the APA offices

### **Accountability Plan**

To successfully align and/or redesign the UCC, it is imperative that this process be closely tied to assessment. The committees must work closely with the central university assessment office to develop a sustainable and meaningful process. This process should be facilitated through technology (e.g. Portfolium/Canvas LTI) to increase efficiency and effectiveness. Furthermore, the courses must follow a reasonable standardized format to ensure that students receive exposure to the same skills and badging opportunities regardless of modality or instructor.

### Measure(s) of impact (assessment plan)

- FTIC 2-year Retention Rate
- FTIC 4- & 6-year Graduation Rate.

### **Proposed benchmark(s)**

- Retention rate of students completing the new UCC is 2% higher than those completing the old UCC.
- Graduation rate of students completing the new UCC is 2% higher than those completing the old UCC.

### **Notations**

University of Central Florida has established that badges are awarded for successful completion of each of their institution's Information Literacy Modules. The individual modules are grouped into three functional categories: *Gather, Evaluate,* and *Use.* Students who successfully complete all of the modules in one of the categories are awarded a secondary badge validating their competency in this functional area. Students who earn all three of the secondary badges (*Gather, Evaluate,* and *Use)* are awarded a culminating, high-level badge recognizing mastery of foundational information literacy skills and knowledge required within UCF's academic context. Students may choose whether or not to "claim" badges earned. Additionally, students may choose to make some or all of their badges viewable publicly. (For each badge earned, an email will be sent to Knights email from "UCF via Credly" with an option to "Save and Share" the badge via Credly.com (University of Central Florida, 2018).

UCF Students earn a digital badge when they score 80% or higher on a module quiz. An email is automatically sent to each student acknowledging their accomplishment and providing a link to claim their badge. This is a completely automated process and is not intended to interfere with course-level implementation of the Information Literacy Modules.

Concurrently, Digital literacy is a prerequisite for understanding the concept of digital badges and using them adequately; while recognizing that, although students are assumed to be digital natives with sophisticated digital skills, research indicates that the label is a myth (Mah 2016). Staging of the movement toward integrating micro credentialing, particularly badging, will require gaining a better understanding of how students may view, experience and attach value to them. Research is needed to determine how a more organized and structured approach to building comprehensive credentialing may affect student motivation, engagement and retention. Colorado State University's digital badge programs allow individuals to customize their education to meet their specific needs and interests. They can take the courses they want to take, and build their own unique set of credentials.

Badges earned through CSU are organized in a hierarchy that can be built upon through a stacking process:

- Trek Badges Earn Trek Badges for each single course completed.
- Quest Badges Earn Quest Badges for completing either a single course or a group of courses, depending on the program.
- Mastery Badge Earn a Mastery Badge upon completion of all courses within a program. (Colorado State University, 2018).

Some universities are now aiming to map undergraduate courses directly to third-party badges. Northeastern University, for example, is currently working to match up courses like Forensics in Informational Technology and Software Vulnerabilities to badges of corporate partners, similarly to what Northeastern has done with IBM (Rubin, 2018).

It has been recognized that the combination of transcripts with ePortfolio resources enable students to assemble and display a more robust collection of credentials. The inclusion of badges as elements within the ePortfolio allows students to more strategically capitalize on the many value propositions associated with badge acquisition. There is significant evidence that the benefits can involve:

- Supporting goal setting, planning and self-reflection
- Feedback provision through abstraction and integration of learning traces from various learning environments
- Recognition of otherwise un- or under-recognized skills and prior learning
- Developing the sense of community membership

These values are drawn out of the notion of developing Digital Learning Ecosystems and the practice of Connected Learning that are core aspects of learner-centered practices, which gives students significant freedom and flexibility in shaping their learning environments (Devedzic, Jovanovic 2015). Following goal-setting exercises, this provides students with a framework from which to decide on the collection of learning experiences and supporting evidence that will best support the achievement of those goals.

### **References and Appendices**

- "InfoLit" (2018, December) University of Central Florida. Retrieved From: https://infolit.ucf.edu/students/badges/
- "Digital Badges." (2018, December) Colorado State University. Retrieved From: https://www.online.coloradostate.edu/badges
- Rubin, Courtney (2018, January). Colleges Offer Resume-Boosting Digital Badges. U S News & World Report. Retrieved From: https://www.usnews.com/education/best-colleges/articles/2018-01-11/colleges-offer-resume-boosting-digital-badges
- Learning Analytics and digital Badges: Potential Impact On Student Retention In Higher Education. Mah, Dana-Kristin. 2016, October Vol. 21 Issue 3 p 285-305. Technology, Knowledge and Learning.
- Developing Open Badges: A Comprehensive Approach. Devedzic, Vladan and Jovanovic, Jelena (2015). 63:603-620. Educational Technology Research & Development.

# Recommendation~#15-Identification~and~Badging~Industry-Recognized~Credentials~throughout~the~degree~programs

### Description & Justification (supported by data/research/best evidence)

This recommendation is tied closely to our first recommendation. The purpose of this recommendation is to suggest integrating credentials throughout the curriculum using a formal accountability process.

While "essential skills" represent competencies that all students should be able to demonstrate upon graduation, there are additional industry- or career- specific credentials that are also critical for students to earn along with their degree. FIU can use badging to certify these types of skills in two ways:

- 1. Academic units can identify industry-recognized certifications and align their curriculum to integrate knowledge requirements throughout coursework. These skills can be badges along the degree pathway, and once a student completes the pathway, they will be reminded that they have the required knowledge and skills to take the certification exam. This integration and alignment is critical, as a New America (2016) report indicated that "adults with certifications have higher employment and earnings than adults with other types of nondegree credentials, such as certificates and licenses"...and "students enrolled in Illinois community colleges who earned a CompTIA certification made more money than students who tried but failed to earn a certification". <sup>3</sup> Broward College has recently undergone a curriculum design process that embeds certifications throughout degree programs and has found success with this model, as have Miami Dade College and Florida State College at Jacksonville, after adopting similar strategies. <sup>4</sup>
- 2. For majors that do not easily align to certifications, FIU can develop advanced level badges that address important skillsets to gaining entry to the workforce or graduate school. For example, while all students may earn the Critical Thinking or Communication essential skills badges, English majors may go on to develop advanced certifications in the competencies as this would be important for their field of practice.

The badges awarded to students as part of this recommendation will be comprised of Student Learning Outcomes (SLOs) that are applicable to specific majors or desired skillsets.

To facilitate success of this initiative, we propose developing a website that helps students identify the skills that are most in demand related to their majors and which badges can help them develop these skills. This effort will require partnership throughout the university and will depend upon the liaisons identified in recommendation 1 to ensure alignment of curricular/co-curricular opportunities and identified skillsets.

<sup>&</sup>lt;sup>3</sup> https://www.newamerica.org/education-policy/reports/building-better-degrees-using-industry-certifications/background/

<sup>&</sup>lt;sup>4</sup> https://www.newamerica.org/education-policy/reports/building-better-degrees-using-industry-certifications/how-broward-college-is-rebundling-degrees-with-certifications

Both industry and faculty buy-in are crucial to the success of integrating workforce competencies throughout degree programs. The 21<sup>st</sup> Century Taskforce will play an important role in ensuring FIU is meeting the needs of our industry partners. We must be nimble and responsive to changes in skills and reflect this in our badging and curricular processes.

The success of the badging program will also rely heavily on touchpoints with advisors or career counselors, in addition to the required reflective experiences. It will be critical to integrate these touchpoints along each pathway and to make sure that those working with students on preparing for post-graduation success can help students turn their e-portfolios and badges into high-impact talking points.

### **Targeted Metric(s)**

- FTIC 2-year Retention Rate
- FTIC 4- & 6-year Graduation Rate
- Percent of Bachelor's Graduates Employed (\$25,000) or Enrolled
- # of current FIU students enrolled in badging/micro masters courses

### **Feasibility Assessment**

### Implementation considerations and timeline

- November 2018
  - o Finalize inventory of current badging initiatives and develop plan for each (SLO development; assessment details; Portfolium linkages)
  - Continue work with Cybersecurity Fundamentals badge to align programs to established framework
  - o Complete draft framework that outlines full application process
  - Review inventory of programs and create a strategic plan for Spring/Summer
     2019 in terms of development and pilot testing
  - Continue working with existing badge programs to develop SLOs and pathways within Portfolium
- December 2018
  - Create plan to present framework to present to Faculty Senate (application, review committee structure, micro-masters conversation as well)
  - o Prepare pathways for badges that have been were developed in November
  - o Determine development timeline for Spring 2019

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- Spring 2019
  - Hold 21st Century Taskforce meetings once per month to develop framework for operationalization; schedule retreat
  - o Identify industry "verticals" and schedule first focus group
  - o Complete design and validation of badges in pipeline
  - Coordinate with other units to develop a skills identification and curricular alignment strategy
  - Develop sequential badges with English department (to follow launch of applicable fundamentals badges)
  - Collect and Evaluate data

### Summer 2019

- o Launch curriculum and skills alignment strategy for degree programs
- Hold second roundtable series with employers and work to develop applicable badges
- o Continue pilot work with English and identify additional pilot partners
- Collect and Evaluate data

### • Fall 2019

- o Maintain strategic launch of badges aligned with industry needs
- o Continue strategic partnerships with colleges aligned to industry needs
- o Survey students and industry partners re: experience with process
- Continue to collect and evaluate data

### **Projected cost of implementation**

**Startup (One-time) cost** 

Recurring costs as applicable

Space requirements as applicable

### **Accountability Plan**

### Measure(s) of impact (assessment plan)

In addition to the below measures, it is important to note that for this initiative to be successful, quality assurance is key. There will be an application process for units that wish to award badges. Appendix D includes an example of a badge application. An interdisciplinary committee will review each application. Badges must be supported with proof of industry demand and support from a relevant academic unit.

Badging Applications must include student learning outcomes, required student artifacts, and rubrics for how the artifacts will be assesses. Programs wishing to align their curriculum to approved badges need to provide the assessment artifact that will be aligned to specified learning outcomes and agree to use the standardized rubric to assess the artifact. Anyone who applies to award a badge must commit to receiving coaching about how to present this opportunity to their students; learn how to use Portfolium; and include recommended language in their syllabus.

Badges will be awarded centrally through Academic Programs and Partnerships. Central management of this initiative is key to guarantee quality assurance and intentionality. The staff hired as a result of this recommendation will follow up with faculty annually to ensure continued compliance with all required policies and procedures. The staff and badging committee will work closely with the Academic Planning and Accountability staff to align assessments as to streamline this process as much as possible.

We also note that it will be important to gauge the value of badges throughout the process. We will use analytics provided by Portfolium to compare rates that students start badges and complete badges.

- # of students earning major-specific/technical badges
- # of badges earned
- # of industry-approved badges
- Employment rate of students with badges
- Retention rate of students with badges
- Graduation rate of students with badges

### **Proposed benchmark(s)**

- # of students earning "major-specific/technical" badges currently 0 goal for end of fall 2019 is 100
- # of badges earned currently 0 goal for end of fall 2019 is 100
- # of approved badges—currently 0 goal for end of fall 2019 is 5
- Employment rate of students with badges 68%
- Retention rate of FTIC students with badges 87%
- 4-year Graduation rate of students with badges 33%

### **Notations**

The importance of skill-based badges has grown as employers across a spectrum of industries have begun to question how well a college degree represents the ability of the graduate to contribute to their organization. Data reflects that there is, indeed, a problem as employers don't necessarily look to a formal degree as an indicator of the presence of certain skills or competencies on the part of candidates, and, that they might even see this education as relatively meaningless when screening for abilities that are not readily apparent on a transcript (Ippoliti, Baeza 2017). Higher Education institutions are challenged by these demands from industry to find new ways of reflecting not only what someone has learned, but what they can do. Recognizing these elevated expectations from industry, colleges and universities will need a mechanism for aligning the collection of badges assembled by a student with their career goals and aspirations. It has been found that badging can be effectively used to manage the connection between goals and learning performance in order to optimize the effects of goal setting on learning; and, that badging could strengthen learning experiences, improve learner autonomy and facilitate the achievement of learners' intrinsic learning motivation (Cheng, Watson, Newby 2018). The implication for accomplishing this alignment is that there will have to be coordination among the various interests involved in student success initiatives, particularly focusing on student advising.

Northeastern University — a top-ranked global research university recognized for its deep engagement with employers via experiential learning — recently announced a collaboration with IBM that made it the first university to recognize IBM digital badge credentials toward graduate degree programs and certificates, providing a seamless pathway from workplace learning to traditional academic credentialing. This articulation of badge-certified industry knowledge into prior-learning credit followed a rigorous mapping of the IBM badge curriculum against Northeastern's existing course offerings (Leaser, Gallagher 2018).

The spike in digital badge adoption is not unique to higher education institutions, though. Like IBM, Dell and HP are examples of other similar companies integrating digital badge awards into their internal training programs. Dell's social media and community team launched Social Media and Community University as an internal training and certification program to teach employees more about the company's social media strategy and practices. Similarly, the Indianapolis-Based CPA Center of Excellence has awarded 271 digital badges for seven courses covering topics like leadership, communications, critical thinking, decision-making, entrepreneurship, collaboration and networking, and social media. All but the last two were identified as core competencies of the CPA profession, and are also widely accepted as vital business skills needed by all business professionals (Diaz, 2016). The opportunity appears to exist for collaboration across a multitude of industry sectors in order to more formally structure badge offerings that meet mutual interests.

Recent research on badges indicated that while numerous digital badge systems are functioning in many contexts, badges are still not widely valued by hiring officials, and therefore not yet widely valued by many learners. Digital badges carry the credibility of the organization that issues them, but another way to enhance their credibility and value is to build them in collaboration with professional societies or associations that are valuable to future professionals and employers. In the digital badging program made available through Educause, it includes badges for leadership programs, IT management, and a popular joint badge in blended learning issued in conjunction with the University of Central Florida (Diaz, 2016).

### **References and Appendices**

- Include badge application (Appendix D)
- Appendix of units that have expressed interest in badging (Appendix E)
- Using Digital Badges To Organize Student Learning Opportunities. Ippoliti, Cinthya and Baeza, Victor. 2017 Vol. 29 No. 4 p 221 –235
- Goal Setting And Open Digital Badges In Higher Education. Cheng, Zui; Watson, Sunnie Lee; Newby, Timothy James. (2018 62:190-196) Association For Educational Communication And Technology. Tech Trends.
- Convergence Of Credentials: How Corporations And Colleges Are Teaming To Skill Up The Technology Workforce. Leaser, David and Gallagher, Sean (2018, February). Next Generation Learning Challenges. Educause. Retrieved From: https://nextgenlearning.org/articles/convergence-of-credentials-how-corporations-and-colleges-are-teaming-to-skill-up-the-technology-workforce/
- Digital Badgess And Academic Transformation. Diaz, Veronica (2016, September) Transforming Higher Ed. Educause Review. Retrieved From: https://er.educause.edu/blogs/2016/9/digital-badges-and-academic-transformation



# Highest Research Pillar – Workgroup 3C Expanding innovation and entrepreneurship for social and economic impact

\*\* joined with workgroup 1C recommendations on modernizing our curriculum \*\*

- 1. Recommendation #17 Increase Opportunities for Interdisciplinary Education for Undergraduate Students
- 1.1. Description and justification of program, savings, or efficiency recommendation (supported by data/research/best practices)
  - Create faculty advisors to support student-centered and student-led interdisciplinary tracks. Professional advisors are trained to support the student within their discipline, need a faculty advisor to guide student to choose the classes (outside of their major) that interest them.
  - In order not to go into excess credit hours, design a "Global Learning" type environment for interdisciplinary curriculum. Faculty can be given administrative increments, course releases or some other beneficial stipend to support the efforts within the Schools and Colleges.
  - Allow students to design their own course. Carnegie Mellon allows student to design the course that they would like to see offered and must present it and argue for it with their faculty member. College/School can create the Design Your Own Course faculty member who is selected based on his/her ability to encourage this type of activity and support it. If we have an Interdisciplinary Faculty Fellow in each College, they can be trained by the Center for Leadership, Global Learning or StartUP FIU to do this work and to train other faculty ambassadors.
  - Establish interdisciplinary track for each department (may require Global Learning type infrastructure). Current models include physics and honors college courses.
  - Enhance course-catalog search capabilities to include interdisciplinary search function, e.g. entrepreneurship + engineering.

### 1.2. Targeted Metric(s)

- 2-year Retention Rate
- 4-year graduation rate
- 6-year graduation rate
- FIU Tech Startup (ATUM)
- Increase Industry-funded Research

- Total Research Expenditures
- Graduates Employed
- Wages of Graduates

### 1.3. Feasibility Assessment

### **1.3.1.** Implementation considerations and timeline

Establish interdisciplinary education taskforce in Spring 2019 – include students and faculty. If we mirror the Global Learning infrastructure, that is a considerable multi-year investment from FIU.

### 1.3.2. Projected costs or savings of implementation

\$75,000-\$1,000,000 per year depending on infrastructure and goals

### **1.3.2.1.** Startup or phase-in (one-time) costs

N/A

### 1.3.2.2. Recurring costs or savings, as applicable

\$75,000-\$1,000,000 per year depending on infrastructure and goals

### 1.3.3. Space needs or space savings, as applicable

As needed and organized by student with their respective faculty member

### 1.4. Accountability Plan

### 1.4.1. Measure(s) of impact (assessment plan)

Retention and Graduation Rate

Increase industry partnerships and possibly investment

More engaged students

### 1.4.2. Proposed benchmark(s)

Improvements in identified measures of impact within 3 years of implementation

### 1.5. References and Appendices



# Financial Base Pillar – Workgroup 4B Driving organizational efficiencies and increasing revenues

Recommendation #45 – Transition from Full Time Employees to Student Support Workers

### 1.1. Description

Transition from full time positions to a student workforce when possible. Transitioning would allow the same or enhanced levels of support with a reduction of fixed salary and benefit expenses. This program provides additional learning in a working environment and transitional occupational skills to help students prepare for the full-time positions. Perhaps we can expand it to include a student loan forgiveness program in the form of a bonus to help retire student debt.

Studies have shown that students perform better academically when working on campus rather than off campus.

Table below depicts \$15k annual savings realized converting one full time position into a student-supported workforce.

	Acct Clerk	3 OPS	Variance
<b>Base Salary</b>	\$36,000.00	\$ 37,584.00	\$ (1,584.00)
Fringe	\$16,920.00		\$ 16,920.00
Total	\$52,920.00	\$ 37,584.00	\$ 15,336.00

OPS Support						
Rate		Hours	<b>Employees</b>		To	tals
\$	12.00	40		3	\$	1,440.00
			Vearly Cost		ς:	27 584 00

## **1.2.** Targeted Metric(s)

- Percent of Bachelor's Graduates Employed and/or Continuing their Education Further 1 Yr. after Graduation
- Median Average Wages of Undergraduates Employed 1 Yr. after Graduation

### 1.3. Feasibility Assessment

## 1.3.1. Implementation considerations and timeline

Implementation would begin by evaluating and identifying tasks that require special skills unique to the role that students would be able to fill. The implementation process would be completed in phases. The phase would begin with developing standard operating procedures for tasks and continue with transitioning tasks to student employees with guidance from key staff personnel. Examples: Website Designs, Social Media, Accounts Payable, Data Mining and Reporting, Scheduling, CDL Drivers, Inventory Management

### 1.3.2. Projected costs or savings of implementation

The cost of implementation are the training and development of staff. The potential savings would be using federal work-study students where only 25% of the total cost of the employee paid by the department and 75% by government program. Additional savings can be found in software implementations creating automated processes reducing labor.

### 1.3.2.1. Startup or phase-in (one-time) cost

The phase in cost would be the purchase of furniture and computer equipment to create additional workspaces.

### 1.3.2.2. Recurring costs or savings, as applicable

Employee turnover will require a cyclical review of training and assessment of the efficiency of processes.

### 1.3.3. Space needs or space savings, as applicable

An office space that was normally occupied by one full time employee will be converted into multiple work stations for students.

### 1.4. Accountability Plan

## 1.4.1. Measure(s) of impact (assessment plan)

Financial comparisons

### 1.4.2. Proposed benchmark(s)

Over the last six months Parking, Sustainability and Transportation has supported the Financial operations of the department with student employees. Using students to fulfill tasks historically supported by full time employees allowed the department to provide an internship model of learning

### 1.5. Talent Management/ Productivity

Create roles for students that produce a learning environment outside of the classroom and develop skills that will compliment degrees earned and assist in transitioning to full time roles with similar tasks.

### Core Workforce Skills:

Time Management Work Ethic

Critical Thinking/Problem Multitasking/Prioritizing
Solving Customer Service Skills

Cross cultural competency

Organization

### Technical Skills:

CDL License Basic Life Saving Techniques

ADA Transportation Forklift Operation

### 1.5.1 Degree Centered Skills

### Computer Science & IT Majors:

Creation of Directional Maps for communications & way finding Interactive Display – creating Website management templates for user interface Video Editing Constant Contact management Graphic Design Running Reports from Parking

Provide technical support for pay

Software

stations, phones, tablets, hardware on Monitoring of Transportation

vehicles Services
Operational Plan development Social Media

### Business Administration & Accounting Majors:

Attendance Tracking Receiving of Supplies & Equipment

Departmental Schedule Management
Web/Credit Sales Reconciliations
Front Office Deposits
Inventory Tracking
Service Scheduling
Training manuals

Cash Audits Peer Trainings/ Productivity Reports

Supply ReplenishmentInternal AuditsRequisition SubmissionsInvoicing/BillingPurchase Order TrackingCollection Process



# Student Success Pillar – Workgroup 1D Coordinating and accelerating academic and career success

\*\* joined with ideas from Workgroup 4B on student on-campus employment \*\*

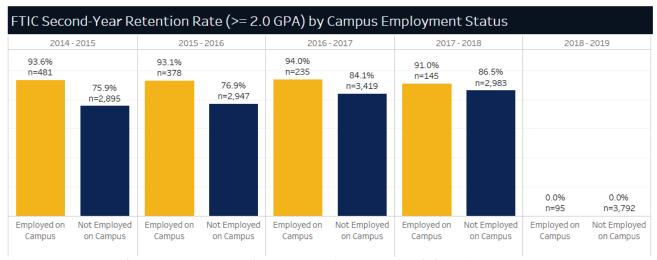
Recommendation #46 – Engaging more students through on-campus employment

# 1.1. Description and justification of program, savings, or efficiency recommendation (supported by data/research/best practices)

Many of FIU's undergraduate students work either part-time or full-time while attending school. Most students are also commuting to FIU. These two characteristics often put FIU students at risk of dropping out, partly due to the lack of connection to FIU and its community. In an effort to increase student retention and promote timely graduation, a focus should be placed on student engagement. One strategy to improve student engagement is to increase the number of oncampus employment opportunities for FIU students.

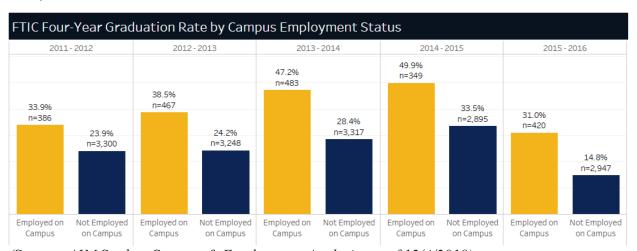
The benefits of on-campus employment are multi-faceted. For one, students are able to work while attending school to satisfy their financial needs. On-campus positions often have more flexible hours that enable students to schedule work around classes, allowing school to remain the primary focus. Staying on campus can lead to increased use of resources, such as professors' office hours and tutoring, and can enable student participation in on-campus organizations. By hiring students internally, FIU employers can also incorporate career-readiness skills and professional development to further develop career success in our graduates.

The benefits of on-campus employment can be seen through comparing retention and graduation rates between FTIC students employed on campus and those not working on campus. In looking at the last four FTIC cohorts, FTIC second-year retention (GPA  $\geq$  2.0) is consistently higher for students employed on campus than those not employed on campus. According to FIU's Office of Analysis and Information Management (AIM), 91.0% of 2017 FTIC students working on campus were retained (n=145), as compared to 86.5% of students not employed on campus (n=2,983). For the 2016 FTIC cohort, 94.0% (n=235) of students working on campus were retained, as compared to 84.1% (n=3,419) of students not employed on campus. The differences in FTIC retention can be seen in the graph below (from AIM Student Success and Employment Analysis Dashboard).



(Source: AIM Student Success & Employment Analysis, as of 12/4/2018)

Furthermore, FTIC students employed on campus exhibit higher four-year graduation rates as compared to those not employed on campus. In the 2014-2015 FTIC cohort, for example, FTIC students that worked on campus had a 49.9% four-year graduation rate (n=349), while those that were not working on campus had a 33.5% four-year graduation rate (n=2,895). These trends are consistent through the past several years, as shown in the AIM Student Success and Employment Analysis Dashboard shown below.



(Source: AIM Student Success & Employment Analysis, as of 12/4/2018)

In addition to the benefits to FTIC retention and on-time graduation for student employees, strategic on-campus employment opportunities can impact a wider range of students. In order to benefit as many students as possible, it is recommended that additional student employment opportunities be created in peer tutoring positions and learning assistant (LA) positions. Creating additional tutoring and LA positions can engage more students through on-campus employment, while also providing academic assistance to FIU students through peer support. Hiring additional students as tutors may also contribute to higher pass rates in courses, further aiding to improve retention rates, on-time graduation, and a reduction in excess credit hours for students.

To this end, it is recommended that FIU work to create additional student employment opportunities in the 2019-2020 academic year. These additional positions can be distributed within each College and throughout various offices on campus. Examples of potential student positions include:

- Research assistants within academic units
- Learning assistants
- Peer tutors
- Student assistants (office assistants)
- Helpline and/or technical support positions
- Internship/apprenticeship positions within various offices (marketing, human resources, etc.)

The new student positions can target students with specific skill sets (software knowledge, technical skills, etc.), but should also target students earlier in their academic careers. Many students leave FIU between the second and third year. An emphasis should be placed on hiring FTIC students during their first and second years. Engaging students in the first two years of their academic careers could prove more effective in improving retention and graduation rates for FTIC cohort students.

### 1.2. Targeted Metric(s)

Increasing the number of students employed on campus may contribute to improvements to the following metrics:

- FTIC 2-Year Retention Rate (GPA  $\geq$  2.0)
- FTIC 4-Year/6-Year Graduation Rate

Furthermore, if additional positions are created as peer tutors and/or Learning Assistants, there is a potential to improve course pass rates. Increasing course pass rates will help students graduate more quickly and aid in the reduction of students facing excess hours.

### **1.3.** Feasibility Assessment

### **1.3.1.** Implementation considerations and timeline

Proposed schedule for implementation is as follows:

Spring 2019:

- Determine employment opportunities to advertise for students.
- Reach out to Colleges and departments to encourage student employment in research assistantships, student assistant positions, etc. Provide data showing the effectiveness of on-campus employment and increased retention and graduation rates.

### 2019-2020 Academic Year:

- Post new student positions to FIU's Human Resources website throughout academic year.
- Target 2018 and 2019 FTIC students.
- Hire new student employees.

Continue cycle as new positions are made available. Hiring students for on-campus jobs can be an on-going process. Student positions can be made available year-round as needed.

The effects of on-campus employment on student retention can begin to be evaluated after one year.

### 1.3.2. Projected costs or savings of implementation

- Student salary: \$10/hour at 20 hours/week = \$200/week. 15 week semester will be \$3000 per semester per student employee (20 hours work week)
- Consideration can be given to hire students for 10 hours per week, reducing the cost to \$1500 per semester per student employee.

### 1.3.2.1. Startup or phase-in (one-time) costs

New student employees will require training based on the position.

### 1.3.2.2. Recurring costs or savings, as applicable

Salary for student employee positions will be a recurring cost.

### 1.3.3. Space needs or space savings, as applicable

Possible space needs for additional tutoring positions. Can investigate expanded hours and/or online tutoring to avoid additional space requirements.

Other on-campus jobs will aim to fill needs that currently exist within the University to avoid creating a need for additional space and resources.

### 1.4. Accountability Plan

### **1.4.1.** Measure(s) of impact (assessment plan)

- Track students hired on-campus. Measure retention and graduation rates and compare with those students that are not working on-campus.
- Track the students that utilize services resulting from student employment (tutoring, learning assistants). Evaluate changes to pass rates in courses utilizing tutoring and/or LA positions.

### **1.4.2.** Proposed benchmark(s)

- Evaluate effects on student retention after one year.
- Evaluate effects of additional learning assistants and peer tutors on specific courses each semester. Compare pass rates with previous semesters.
- Evaluate effects on four-year graduation rate by tracking students in the target cohorts (2018 FTIC, 2019 FTIC, etc.)

### 1.5. References and Appendices

See attached graphs and tables from AIM's Student Success and Employment Analysis dashboard. Data was generated on December 4, 2018.

# Recommendation~#16-Development~and/or~Alignment~of~Continuing~Education~for~Workforce~Development

### **Description & Justification (supported by data/research/best evidence)**

The final recommendation of the workgroup relates to developing new badging or other microcredential initiatives, inclusive of micro-masters, for learners not currently enrolled at FIU or aligning existing programming to fit these frameworks. While websites such as Lynda or Skillshare provide learners with opportunities to gain new skills, they do not possess a robust system to certify that a learner can apply the skill. This recommendation builds upon the demand for these services through intentional identification of in-demand skills and development of assessment processes that ensure learners can adequately demonstrate competency.

The workgroup believes that the following can benefit from these credentials:

- Recent Graduates
- Alumni
- Community-at-large
- Employers seeking upskilling or skill "refresh" courses for employees

Strategic marketing plans must be developed for each of these groups to ensure success. As with the other two recommendations, the badges awarded to learners as part of this recommendation will be comprised of Student Learning Outcomes (SLOs) that are applicable to specific majors or desired skillsets. It is important to note that not all continuing education programs must award badges. To ensure the "value" of a badge, programs must meet all set assessment requirements.

Furthermore, the workgroup proposes that the 21<sup>st</sup> Taskforce develop policies for PLA and CBE that allow for appropriate continuing education badges and micro-credentials to "stack" together and count towards a degree program.

The workgroup recommends alignment of university-wide workforce training programs (e.g. UpLabs., Construction Apprenticeship program) to ensure these programs are following a framework that is based in assessment best-practices and is grounded in industry need.

### **Targeted Metric(s)**

- # of nontraditional students enrolled in targeted badging courses
- # of students enrolled in micro masters courses

### **Feasibility Assessment**

### Implementation considerations and timeline

- December 2018
  - o Complete draft framework that outlines full application process
  - Draft framework and associate policies for CBE and PLA in relationship to badging and other related programs on campus (PODs)
  - Create inventory of existing programs that can be aligned to badging processes
  - Create plan to present framework to present to Faculty Senate (application, review committee structure, and micro-masters conversation as well)

- o Determine development timeline for Spring 2019
- Spring 2019
  - Hold 21st Century Taskforce meetings once per month to develop framework for operationalization; schedule retreat
  - o Determine pilot process for continuing education programs
  - Explore option of Focus groups or surveys of recent grads and alumni within the first 5 years of their professional experience may reveal practical skills that young professionals lack coming out of college, and inform the development of programs beyond a review of industry standards.
  - Work with UpLabs and Construction Management to identify opportunities for credentialing
  - o Meet with Continuing Education to identify opportunities for credentialing
  - o Meet with academic units to discuss micro-masters and interest in piloting
- Summer 2019
  - O Develop and pilot 2-4 micro masters programs
  - o Pilot identified badges from spring 2019 meetings
  - Collect and evaluate data
- Fall 2019
  - Continue pilot process
  - Collect and evaluate data
  - Develop strategic plan for spring 2020 re: micro-masters and additional continuing education badges.

### Projected cost of implementation

**Startup (One-time) cost** 

Recurring costs as applicable

Space requirements as applicable

### **Accountability Plan**

### Measure(s) of impact (assessment plan)

In addition to the below measures, it is important to note that for this initiative to be successful, quality assurance is key.

There will be an application process for continuing educations badges. *Appendix C* includes an example of a badge application. An interdisciplinary committee will review each application. Badges must be supported with proof of industry demand and support from a relevant academic unit.

Badging Applications must include student learning outcomes, required student artifacts, and rubrics for how the artifacts will be assesses. Anyone who applies to award a badge must commit to receiving coaching about how to present this opportunity to their students; learn how to use Portfolium; and include recommended language in their program materials.

Badges will be awarded centrally through Academic Programs and Partnerships. Central management of this initiative is key to guarantee quality assurance and intentionality. The staff hired as a result of this recommendation will follow up with faculty annually to ensure continued compliance with all required policies and procedures. The staff and badging committee will work closely with the Academic Planning and Accountability staff to align assessments as to streamline this process as much as possible.

These micro-credential programs must also meet all other applicable Continuing Education requirements.

We also note that it will be important to gauge the value of badges throughout the process. We will use analytics provided by Portfolium to compare rates that students start badges and complete badges.

- # of learners earning continuing education badges
- # of learners enrolled in micromasters programs
- # of students who are admitted into a connected Master's degree after completing a micro masters program
- # of badges earned
- # of badge-earners who continue into an FIU degree or certificate program

### **Proposed benchmark(s)**

- # of learners earning continuing education badges
- # of learners enrolled in micro masters programs
- # of students who are admitted into a connected Master's degree after completing a micro masters program
- # of badges earned
- # of learners who continue in an FIU program
- # of badge-earners who continue into an FIU degree or certificate program

### **Notations**

In Higher Education professional development, upon the completion of a focus group conducted in March 2017, it became evident to the Human Resources administrators at North Carolina Agricultural & Technical State University (NCAT), that in order to create a pathway to achieve the university's vision of having a "faculty and staff of the future," they would need a digital badge credentialing system. It was entitled AggiesLEAD, offering the opportunity for faculty and staff members to achieve digital badges and certificates in various focus areas related to the "faculty and staff of the future" competencies (North Carolina Agricultural & Technical State University, 2018).

All badges in the AggiesLEAD program have core courses which are mandatory, and a large selection of elective courses from which participants can choose. In order to be awarded badges and certificates, participants must complete all of the core courses in the curriculum and choose a set number of elective courses.

In a recent study (Barry, Cator 2016) it was highlighted that the State of Florida's "guide" for teacher relicensing addresses the importance of professional development plans. The state priorities in those plans include several areas in which micro-credentials could become a mechanism for collecting and assessing evidence of educator growth on specific competencies.

Oregon Institute of Technology (OIT) which currently offers more than 20 badges in areas such as Healthcare and Information Technology. Although they've started with courses, they have plans to expand to any assessment-based offering at the institution, including exams, awards, and even the successful completion of a coding boot camp. Digital badges contain searchable tags, and since they can and frequently are posted to social networking sites like LinkedIn, they provide an additional way for employers and recruiters to identify employees who possess desirable skills sets—especially those in quickly changing fields like technology (Diaz, 2016).

Badges have been used to stimulate engagement in corporate professional and continuing education initiatives. For example, digital badges are a feature of the Deloitte Leadership Academy, an online learning environment for the company's leaders. The site is populated with rich content from top business schools, as well as videos, tests, and quizzes designed to align with users' career plans. Even so, Deloitte's leaders weren't using the site.

Badges were added to the site to motivate more use of its features, according to Jason Bender, a digital partner at Deloitte. "We found that by adding game-based reinforcement in the form of missions, badges, and leaderboards to the platform, users were more likely to complete the online training programs," he says, "and that lifts the quality of our leadership."

Using social tools, leaders at Deloitte can now interact by posting questions and answers about the site's content, "following" other users, and posting status updates. Since game-based features were added to the site, the number of learners returning to it daily and weekly has increased and course completion has sped up by 50 percent.

There are more than 200 badges on the Deloitte Leadership Academy site. Many recognize small steps such as completing orientation to the site and personalizing a homepage. Others recognize cumulative achievements such as the number of videos watched or the amount of information contributed and rated.

"The badges are built to encourage the questing and exploration that drives learning," says Bender. But the badges are not the complete answer to building learner engagement, he adds. "You must monitor, measure, and adapt the site continually to keep the learning process engaging. You must create value, not just points." (Galagan, 2014)

Additionally, Colleges and universities use digital badges to guide, motivate, document, and validate formal and informal learning, according to Educause Review Online. While a degree attests to a person's deep vertical knowledge, badges confirm skills arising from shorter, less formal learning opportunities such as internships, mentoring programs, and professional development seminars. As such, they can be more useful than grades in showing a student's actual competencies, and they can document continual learning throughout a career. Some people believe they also are better predictors of performance on the job.

The University of Utah digital badging program currently awards badges for non-credit professional certificates and micro-certificates that are offered through Professional Education. The university is a strong supporter of lifelong learning which helps students stay competitive and relevant by continually updating their skills. Digital badges can help track and organize a lifetime of learning. Following are examples of the different types of badge earners benefiting from a lifelong learning mindset:

- Degree-seeking students investing their time in co-curricular activities
- University of Utah alumni preparing to make a career pivot
- Experienced professionals taking a non-credit certificate to secure a promotion at work
- Recent graduates just launching their professional career by adding technical skills to a liberal arts background
- Kids starting out a lifetime of learning in a STEM oriented summer camp

University of Utah digital badges contain metadata that allows anyone to understand the skills, knowledge and actions taken to earn the badge. Information includes the following items:

- Who the badge was issued by
- Who the badge was issued to
- The date of issue
- The expiration date of the badge if any
- The skills verified by the badge
- What the requirements are for earning the badge
- If the badge meets any outside accrediting standards
- Evidence of skills or knowledge earned for example a report or project
- Recommendations for additional badges that can be earned

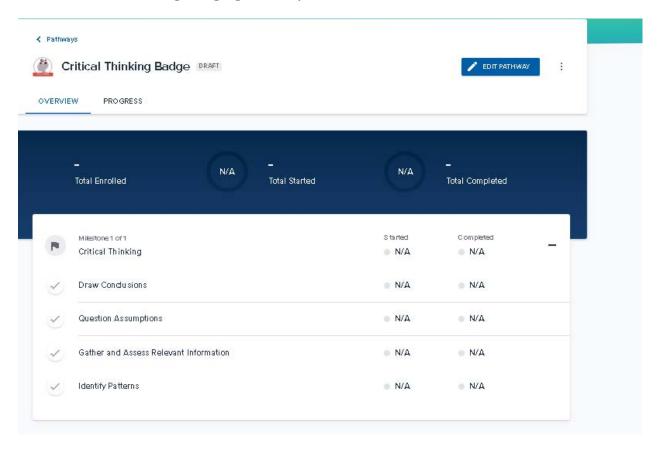
The University of Utah maintains that the digital badge program is designed to assist students validate and differentiate their skills and to provide tools to tell their professional story (University of Utah, 2018).

### **References and Appendices**

- Include badge application (Appendix D)
- Appendix of units that have expressed interest in badging (Appendix E)
- "AggiesLEAD Digital Badges." (2018, December). North Carolina Agricultural and Technical State University. Retrieved From: https://www.ncat.edu/hr/cloe/aggies-lead/index.html
- Micro-Credentials: Driving Teacher Learning & Leadership. Barry, B. and Cator, K. (2016). Center for Teaching Quality and Digital Promise. Retrieved From: https://digitalpromise.org/wp-content/uploads/2016/06/Microcredentials Driving teacher learning leadership.pdf
- Digital Badges and Academic Transformation. Diaz, Veronica (2016, September 01). Transforming Higher Ed. Educause Review. Retrieved From: https://er.educause.edu/blogs/2016/9/digital-badges-and-academic-transformation

- "Playing Nice." Galagan, P. (2014, September Vol. 28 Issue 9). Training and Development.
- "Digital Badges: Earn, Claim, Share, Advance." (2018, December). University of Utah. Retrieved From: https://continue.utah.edu/proed/badges

# Appendix A: Critical Thinking Badging Pathway



# Appendix B: "Badgeable Opportunity" Application

# FIU Badge Opportunity Alignment Application

Each opportunity must be aligned to a specific outcome within an essential skills badge. Contact Person for Application:

BASIC BADGE OPPORTUNITY INFORMATION					
Title of badge that you are aligning this opportunity to:	Term Requested:				
Description of specific badge outcome that you are aligning this opportunity to:					
Description of artifact/activity to be approved for alignment?					
Init/Department: Author(s):					
STUDENT EVIDENCE: Artifact(s)					
Product Details					
Describe the artifact(s) that students must produce as evidence.	Rubric(s) used to assess artifacts:	Criteria for success (what is a passing score?)			
Identify the specific content standards, industry or community competencies, or habits of mind these artifact(s) are aligned to.					
How are the artifacts assessed (within Canvas; manually; through Portfolium)?					
STUDENT EVIDENCE: Metacognitive Reflection on Process					
Metacognitive Reflection Details – All essential skills badges require a standard final reflection using a standardized rubric.					

### Appendix C: List of Targeted Academic and Student Engagement Units

- Academic Units
  - Colleges/Schools
    - Badges aligned to curriculum will for an efficient delivery of skills and opportunity for all students to earn badges.
  - o FIU Online
    - FIU Online community provides unique opportunities to reach a variety of different types of learners. They have an established community.
  - Honors College
    - The Honors College is also a well-established community of learners that have both curricular and co-curricular programming that lends itself to enhancing student learning.
  - Dual Enrollment
    - Dual Enrollment provides direct access to learners early on in their academic journey which builds long term affinity and ties to the community.
- Student Engagement Units
  - Global Learning, Children's Learning Center, Orientation & Family Programs
    - Consideration: Office of Global Learning already has an established system for tracking student engagement for the Global Medallion process. Faculty and staff support these programming opportunities. Children's Learning Center ties student engagement to academic units, smaller trackable numbers. Orientation and Family Programs- critical interaction for students which will also have a virtual component that may provide an opportunity for badge-able opportunities.
  - Student Engagement: Center for Leadership, Women's Center, MPAS, Campus Life Leaders
    - These units represent the largest learner population on campus: Campus Life Leaders are comprised of approximately 22,000 individuals.

# **Appendix D: Badging Application**

# FIU Badging Application

# **Contact Person for Application:**

If you are submitting an application for a badge pathway (multiple milestone badges + a mastery badge), please provide an overview of the pathway and attach a separate badge application for each milestone.

BASIC BADGE INFORMATION					
Title of Badge:	Term Requested:				
Unit/Department:	Author(s):				
Prerequisites/other badges needed before this badge?	Who is eligible to earn this badge?				
Outcomes associated with badge:	Who issues the badge:				
Description of badge (competency statement) (200 words or less):					
Badge offers the following opportunities (i.e., currency for college and career):					
STUDENT EVIDENCE: Artifact(s)					
Describe the artifact(s) that students must produce as evidence.	Rubric(s) used to assess artifacts:	Criteria for success (what is a passing score?)			
Identify the specific content standards, industry or community competencies, or habits of mind these artifact(s) are aligned to.					
How are the artifacts assessed (within Canvas; manually; through Portfolium)?					
STUDENT EVIDENCE: Metacognitive Reflection on Process					
What written content does this badge require the student to reflect upon?		Rubric			
List additional resources to be provided for student to use.					

#### Appendix E: Units that Have Expressed Interest in Badging

- Continuing Education
  - o Center for Sea Level Rise Resilience for Small Business Program
  - UpLabs programs
  - Construction Management pre-apprenticeships
  - o Conflict Management Certificate
- Student Affairs
  - o Center for Leadership and Service
- Hospitality
  - Restaurant Management
- Honors College
  - Final Portfolio Project
- College of Medicine
- Cybersecurity Fundamentals
- Fundamentals of Game Development Badge
- Faculty Assessment Badge
- Academic and Career Success (existing credentials, pathways, etc...)
- History Department
- International Forensic Research Institute





### Financial Base Pillar – Workgroup 4B Driving organizational efficiencies and increasing revenues

Recommendation #51 - Reengage non-completers through Interdisciplinary Studies

### **1.1.** Description and justification of program, savings, or efficiency recommendation (supported by data/research/best practices)

We propose to re-engage and reactivate students that were not able to complete their undergraduate degrees. As for example for Fall 2010 and Spring 2011, there are 21,008 students that did not complete their degrees. Out of this total, 4,437 students have earned more than 90 credits or more toward degree.

We propose to create a fast lane/customized self-supporting program to assist these students attain the needed credits to graduate, through the BS in Interdisciplinary studies at a discounted rate.

#### **1.2.** Targeted Metric(s)

- Reactivate students in the Fall to increase number of graduates
- Percent of Bachelor's Graduates Employed and/or Continuing their Education Further 1 Year after Graduation
- Median Average Full-time Wages of Undergraduates Employed in Florida 1 Year after Graduation
- Increase # of Alumni

#### **1.3.** Feasibility Assessment

#### **1.3.1.** Implementation considerations and timeline

- Phase 1: Feasibility Analysis and Evaluation Fall 2020
  - Hiring of the staff to take on the initiative
- Phase 2: Targets

8	2020-	2021-	2022-	2023-	2024-	
	21	22	23	24	25	Total
Enrollment	100	250	350	400	400	1500
Graduation	100	200	200	250	250	1000
Grad						
Employed/CE		100	100	150	150	500

• Phase 3: Re-engage students through this program 2 years after inactivity to offer alternative path to graduation – On a continuing basis

#### 1.3.2. Projected costs or savings of implementation

- One Associate Director Salary and Benefits \$85,000 annually
- On Program Coordinator Salary and Benefits \$65,000 annually
- 5 Adjunct Professors to teach the courses Salary and Benefits \$32,500 per cohort
- Two Cohorts a year \$63,000
- Marketing \$40,000
- Office Space/miscellaneous \$20,000

#### **1.3.2.1.** Startup or phase-in (one-time) costs

The initial cost to engage and generate the enrollment for the first year is \$273,000

#### 1.3.2.2. Recurring costs or savings, as applicable

Same as above

#### 1.3.3. Space needs or space savings, as applicable

Two offices

#### 1.4. Accountability Plan

#### 1.4.1. Measure(s) of impact (assessment plan)

- Reactivate 1,500 students in the Fall to increase number of graduates at the end of Strategic Plan/Cumulative
- 1, 000 Percent of Bachelor's Graduates Employed and/or Continuing their Education Further 1 Year after Graduation at the end of Strategic Plan/Cumulative
- 500 Median Average Full-time Wages of Undergraduates Employed in Florida 1 Year after Graduation at the end of Strategic Plan/Cumulative

#### **1.4.2.** Proposed benchmark(s)

- Recruitment of first cohort of 100 students Fall 2020
- Graduation of first cohort of 100 students Fall 2021

#### 1.5. References and Appendices

FIU – Business Intelligence Unit. Query/report on the non-completers for the Fall 2010-Spring 2011, 5-18-2018.



## Highest Research Pillar – Workgroup 3A Engaging undergraduate students in research and creative activities

Recommendation #32 - Establishment of an Office of Undergraduate Research and Creative Activities

#### 1.1. Description & Justification (supported by data/research/best evidence)

The Carnegie Foundation for the Advancement of Teaching classifies Florida International University in its highest category: R1 Doctoral Universities- Highest Research Activity. With a student body of more than 53,000 students (Fall 2017 enrollment), and more than 15,000 degrees awarded during the 2017-2018 academic year FIU is the largest university in South Florida. "Worlds Ahead" for Florida International University is an attitude that inspires our global perspective and commitment to superlative programs, research and service. Therefore, we propose an **Office of Undergraduate Research and Creative Activities** (URCA) whose primary goal will be to engage undergraduate students in research and creative activity projects.

The development of an Office of Undergraduate Research and Creative Activities (URCA) is essential for enhancing the research culture and atmosphere at FIU. FIU currently lacks a central location where students may visit to learn about research and curriculum-enriching opportunities. Interested students may learn about opportunities from their peers and are left to wander from place to place to find out how to get involved. According to this workgroup's Census and Survey Sub-committee, approximately 50% of faculty respondents\* who currently engage undergraduates in their research or other projects say they find these students in their classes and 47% say they receive email inquiries from students. Only 11% of faculty said that they engage students through a formal program. Survey results from the University of Michigan report similar findings regarding in-class and email contact with students, though 30% of faculty identify students through their well-established Undergraduate Research Opportunity Program (UROP, for freshmen/sophomore) and Research Scholars Program (junior/senior).

We propose an **Office of Undergraduate Research and Creative Activities** (URCA) whose primary goal will be to engage undergraduate students in research and creative activity projects.

The office will recruit **50 Emerging Scholars** (freshmen/sophomore) and **50 University Scholars** (junior/senior) to apply for competitive research funding awards. Emerging Scholars will be expected to participate in 6-10 hours per week on their projects and University Scholars will be expected to participate in 11-20 hours per week on their projects. Emerging Scholars will be eligible to apply to participate in the **Peer Mentoring Program** or the **Research Ambassadors Program** which will provide additional research funding awards. All Scholars will participate in training, workshops, recruitment and other events organized by URCA. All

University Scholars will be expected to present their findings or creative works at the Conference for Undergraduate Research at FIU (Emerging Scholars will be encouraged to present). Peer Mentors will assist URCA with providing additional guidance to Emerging Scholars and any FIU undergraduate student who "just wants to learn more." Research Ambassadors will assist URCA with tabling events, visiting classrooms, recruitment at local high schools, and more.

URCA and its resources and activities will be available to all FIU undergraduate students, whether they participate as a scholar or not.

Utilizing resources from the National Mentoring Research Network, the Office will establish mentor research training and provide resources for faculty mentors. Additionally, URCA will recognize outstanding faculty mentors via website spotlights and mentor awards. Monthly research seminars will be held to expose undergraduates to various research projects in all disciplines.

One of the benefits of utilizing an office is that it allows for better tracking of student activity.

This office would track student engagement in undergraduate research or creative activities; provide a streamlined, uniform application and training process; direct students to opportunities on and off campus; offer mentorship training to faculty; provide leadership opportunities for students in the form of peer mentors and research/creative activity ambassadors; and provide venues for undergraduates to disseminate their research findings and/or creative works, such as at the Conference for Undergraduate Research at FIU.

This office would serve as a triage of sorts to direct students to existing programs and would also support students with start-up funds for their proposed projects as well as offer travel awards. The office could also track enrollment in research credits, zero-credit internships, and research intensive designated courses and might potentially oversee the Research Badging recommendation of this workgroup.

Establishing an office would also reduce the duplication of efforts in training undergraduates. The office would create a calendar of common workshops including Responsible Conduct in Research Topics, Abstract Writing, Library Resources, etc. and post these on the website for all students and established programs' use. Data presented at the Council for Undergraduate Research Institute's *Initiating and Sustaining Undergraduate Research Programs* showed that what matters most to students in relation to their college experiences are: 1) peer groups; 2) interactions with faculty outside the classroom; 3) feeling competent and valued; and 4) faculty's championing/celebrating their accomplishments. Student engagement in undergraduate research and creative works will satisfy these needs and build affinity for FIU.

Studies have shown that engagement in undergraduate research improves retention rates and student success of first- and second- year students, first generation students, and especially those that are members of traditionally underrepresented minority groups (Gregerman 2008, Ishiyama 2001, Fechheimer et al. 2011, McIntee et al. 2018). The creation of formal programming in undergraduate research has been shown to increase participation in undergraduate research (Gregerman 2008 and Dickter et al. 2018). Students from the groups listed above are less likely to have access to support systems (Haeger et al. 2018) which provide information, assistance and guidance to navigate academia, which Haeger et al. refer to as "Hidden Curriculum." Exposure to and engagement in undergraduate research and targeted academic and professional development activities provides critical mentorship and preparation for navigating the road to graduate education, internships and competitive employment opportunities. Even shorter term undergraduate research projects embedded in course curriculum have a positive effect on students' research mindset, personal discovery, applied career development, team preparation and appreciation, and reflective and corrective growth (Sims et al. 2018).

The University of Michigan's well-established Undergraduate Research Opportunities Program (UROP) started as a small pilot project of 14 students, which now serves over 1000 undergraduates per year. Their aim in 1988 was to increase retention rates and academic success of historically underrepresented students. They discovered that early engagement increased retention rates in STEM fields, encouraged more students to pursue graduate education, and improved student's overall academic performance (Gregerman 2008). Michigan's UROP has honed in on seven critical components to a successful undergraduate research program (or office). They include: 1) Research Activities (mentored), 2) Peer Advisors, 3) Research Seminars, 4) Skill Building Workshops, 5) Research Projects 6) Research Symposia and 7) Compensation in the form of academic credit or work-study (Gregerman 2008). Following a large scale assessment of UROP, it was shown there was an increase in retention rates of African American sophomore participants, increase in degree completion for African-American males, increase in degree completion rates for Africa-America males and Latina women in engineering and *all participants* were significantly more likely to go on to graduate or professional school. Additionally, participants spent significantly more time talking with professors, participating in academic discussions, working and studying (Gregerman 2008).

Many universities in the Florida State University System (and nationally) have two phases of engagement, one that focuses on exposure and engagement of freshmen and sophomores and one that focuses on advanced engagement in research which encourages project development, experimental design, data collection and analysis and dissemination of results via poster or oral presentation at local conferences or symposia.

The proposed Mission and Vision Statement of this office mirrors FIU's:

**FIU's Mission Statement:** Florida International University is an urban, multi-campus, public research university serving its students and the diverse population of South Florida. We are committed to high-quality teaching, state-of-the-art research and creative activity, and collaborative engagement with our local and global communities.

Office of Undergraduate Research and Creative Activity (*May be named*) Mission Statement: The mission of the Office of Undergraduate Research and Creative Activity is to enhance student learning across disciplines by providing opportunities for all Florida International University students to engage in scholarly inquiry, research, and exploration within classrooms, laboratories, and the community.

**FIU's Vision**: Florida International University will be a leading urban public research university focused on student learning, innovation, and collaboration.

Office of Undergraduate Research and Creative Activity (*May be named*) Vision: The Office of Undergraduate Research and Creative Activity will enhance student learning through inquiry, research, and exploration by promoting innovation and collaboration.

Office Leadership will promote early engagement in research among FIU's undergraduate students. The staff will recruit a diverse population to participate in research, creative activities and research-related activities to enrich their undergraduate curriculum and prepare students for competitive graduate programs, internships, and employment. Office duties may include:

- Collaborate with all undergraduate research programs to promote their activities in order to expose a broader group of students to research, workshops, seminars, networking opportunities, and recruiters
- Facilitate workshops, information sessions, and recruiting events to advance students' professional and academic development and oversee marketing of events
- Collaborate with faculty to submit research education and training grants for undergraduates and high school students
- Seek sponsorship for undergraduate research activities
- Collect baseline data on university-wide undergraduate research participation and assess comparative data as it relates to strategic planning
- Supervise office of undergraduate research that provides resources to students and recruit peer mentor and research ambassadors
- Direct/manage undergraduate research programs which may fall beneath the Office of Undergraduate Research and Creative Activity (may be existing or new undergraduate or high school programs)
  - Manage day-to-day operations including administrative, financial, progress reports and renewals
- Collaborate with other departments and units to ensure compliance with university guidelines and regulations relating to student research engagement
- Cultivate strong relationships with other departments in order to assist and accommodate students with academic, financial, administrative or research-related issues
- Travel to Undergraduate Research Conferences to support FIU student research and collaborate with other institutions to learn best-practices in undergraduate research
- Promote FIU's research activities to local community
- Provide strong stewardship of financial resources and manage budgets, as necessary

<sup>\* 87</sup> FIU Faculty responded to the survey which was sent from the Office of the Provost \*

#### 1.2. Targeted Metric(s)

Engagement in undergraduate research and creative activities will impact:

- 1 FTIC retention rate: Providing additional community and support to students through advising, peer mentors and mentorship will positively impact FTIC retention rate.
- 2 FTIC 6 & 4-year graduation rate: Engagement in research and creative activities and providing additional advising and encouragement to complete the degree will positively impact graduation rates.
- 12 Research Doctoral/Total Doctoral Degrees per year: Exposure to research and the possibility of graduate school will impact the number of students applying to graduate programs at FIU.
- 5 Percent bachelor's graduates employed or enrolled: Curriculum-enhanced activities will provide experiential learning, hands on training, and networking opportunities that will lead to job opportunities, competitive internships and graduate programs.
- 6 Bachelor's degrees in strategic emphasis: Showcasing research and creative activity opportunities will attract local high school students to FIU and increase enrollment in strategic degree plans.
- 9 Median wages of Bachelor's graduates employed FT: Additional skills will lead to more competitive job opportunities.
- 10 Bachelor's degrees awarded to minorities: Showcasing research and creative activity opportunities will attract local high school students to FIU.
- 19 Private Gifts: The office and various activities allow for "naming" opportunities, such as the "XYZ Office of...", or the "XYZ Workshop series," or named student research awards.
- 21 Total research expenditure: The office will apply for research and arts training funds to support undergraduate research and creative activities.

#### 1.3. Feasibility Assessment

#### 1.3.1. Implementation considerations and timeline

Program implementation consideration is contingent on space acquisition and renovation. The renovation process will be a four-month process. The first month will be the planning phase, which includes floor plan development and quotes for construction, tech equipment, software, furniture, and FIU services. Once budget has been approved and funds released, the construction/renovation and purchasing phases can begin. These phases can run concurrently and will last about two to three months. Equipment and furniture installation will take about two weeks to complete once building permitting has been approved.

#### 1.3.2. Projected cost of implementation

#### 1.3.2.1. Startup (One-time) cost - \$190,292

2000 square feet of office space, with half devoted to student activities and the other half dedicated to staffing requirements

**Physical space:** 2000sf - \$45 per sf / renovation cost (\$90,000.00). This estimate includes demolition costs, flooring and lighting purchase and installation, asbestos and HVAC testing, painting, drywall, door/frame and a/c modifications. The space will have (500sf combined) offices for Director, Assistant Director, Administrative Assistant, Program Coordinator, and Program Assistant, a 250sf conference/presentation practice area, a 125sf student assistant/reception space, and a 1,125sf open and collaboration area with modular partitions.

#### **Tech Equipment:**

- 7 Computers: (\$1200 each) = \$8,400
- 2 Laptops (\$950 each) = \$1900
- 4 Display monitors: (\$850 each) = \$3,400
- 2 Video/photo cameras: (\$300 each) = \$600
- 1 3 Lights video production kit: \$700
- 1 Large format printer with supplies: \$6,200
- Tech equipment total: \$21,200

#### Software:

• 3 Adobe creative cloud license – (\$275 each) = \$825

#### **Furniture:**

- Student and mentor collaboration areas: \$30,000. Steelcase seating buoys, whiteboards, mobile media boards, mobile easels, personal tables, group work tables, half-lounge seating, big lounge seating, end-tables, stools, mobile partitions, and 25 stackable chairs with casters.
- Office area: (\$2,500 each for 5 offices) = \$12,500. Desks with work chair and 2 guest chairs and storage cabinets in each office.
- Reception and student assistant areas: (\$2,500). L-shaped reception desk with 2 work chairs, 2 lobby room chairs and 1 waiting room table.
- Furniture total: \$45,000

#### **General Operation:**

- Website Development: \$7,200 (Developer contract and website plugins)
- 6 Office phones: (\$402 each and monthly charges of \$150/month for 1 year) = \$4,412
- Printing: (Toshiba MFC monthly charge of \$120 for 1 year plus supplies) = \$1,530
- Mailing: TBD
- Supplies: TBD
- General operation total: \$33,267

Recurring costs as applicable: \$349,600

**Staff: \$250,000** Advisory Board: \$0 Director: \$100K

Assistant Director: \$65K

Administrative Assistant/Office Manager: \$40,000

Program/Event Coordinator: \$40,000

Program Assistant: \$30,000 Student Assistant: \$15,000

Student Research Awards: \$53,000

Emerging Scholars: 50 X \$125/semester = \$12,500 University Scholars: 50 X \$250/semester = \$25,000

**Peer Mentors:** 10 X \$500/year in research supply/travel award = \$5000

a. Polo Shirts with logos  $10 \times $25 = $250$ 

**Research Ambassadors**: 10X \$1000/year in research supply/travel award = \$10,000

a. Polo Shirts with logos  $10 \times $25 = $250$ 

Student Travel: \$30,000

Students will apply for competitive travel awards. Budgets will vary depending on location, ability to share lodging, mode of transport, etc. Based on the common undergraduate research and creative/performing arts conferences, such as *National Conference for Undergraduate Research Florida Undergraduate Research Conference, Florida Undergraduate Research Leadership Summit, Annual Biomedical Research Conference for Minority Students, Society for Advancing Chicanos/Hispanics and Native Americans in Science, Florida Education Music Association Conference, Florida Orchestra Association Conference, National Association of Music Merchants Conference, College Art Association Conference, Southeastern College Art Conference, we would expect to award \$500-\$1000 per student applicant or groups of students.* 

#### **Administrative Travel: \$8000**

URCA Administrators would attend and chaperone at least four of the major undergraduate research conferences with administrative professional development opportunities and attend the Council for Undergraduate Research and CUR Statewide Symposium annually. Budgets will vary per trip.

**Events: \$8,600** 

Monthly Speaker Series, Fall Symposium, Office swag for tabling events/outreach, collaboration/sponsorship of university programs, mentor and student awards

#### **Accountability Plan**

#### 1.3.3. Measure(s) of impact (assessment plan)

The URCA will be assessed on the basis of how it serves to enhance and improve specific student-focused metrics as denoted in 1.2. However, baseline data needs to be collected regarding current student engagement in order to establish targets. The Office's aim would be to have 100% of Emerging Scholars retained and graduate within 4 years.

Curriculum-enhanced activities will provide experiential learning, hands-on training, and networking opportunities that will lead to job opportunities, competitive internships, and graduate programs.

Showcasing research and creative activity opportunities will attract top local high school students to FIU and increase enrollment in strategic degree plans. We will recruit a

diverse group of students and expect 50 applicants for the Emerging Scholars Program (freshmen/sophomore) and 50 applications for the University Scholars Program (junior/senior).

#### 1.3.4. Proposed benchmark(s)

Following quantitative analysis of new data streams, URCA will

- 1. Increase the number of FIU undergraduate students engaged in URCA
- 2. Increase FTIC retention rates
- **3.** Increase the current rate of employment among Bachelor's graduates from among the cohort who have undertaken URCA
- **4.** Admit and enroll a greater percentage of high school students in fields of strategic emphasis
- **5.** Increase the average starting salaries of recent Bachelor's graduates who have undertaken UR
- 6. Recruit diverse and underrepresented students to engage in URCA

#### 1.4. References and Appendices

- Dickter, C. L., Hudley, A. H., Franz, H. A., & Lambert, E. A. (2018). Faculty Change from Within: The Creation of the WMSURE Program. *Council on Undergraduate Research Quarterly*, 2(1), 24-32. doi:10.18833/spur/2/1/6
- Fechheimer, M., Webber, K., & Kleiber, P. B. (2011). How Well Do Undergraduate Research Programs Promote Engagement and Success of Students? *CBE—Life Sciences Education*, 10(2), 156-163. doi:10.1187/cbe.10-10-0130
- Gregerman, S. R. (2008). The Role of Undergraduate Research in Student Retention, Academic Engagement, and the Pursuit of Graduate Education. *National Academy of Science: Promising Practices in STEM Education*.
- Haeger, H., Fresquez, C., Banks, J. E., & Smith, C. (2018). Navigating the Academic Landscape: How Mentored Research Experiences Can Shed Light on the Hidden Curriculum. *Council on Undergraduate Research Quarterly*, 2(1), 15-23. doi:10.18833/spur/2/1/7
- Ishiyama, J. (2001). Undergraduate Research and the Success of First-Generation, Low-Income College Students. *Council on Undergraduate Research Quarterly*, 36-41.
- Mcintee, F., Evans, K. R., Andreoli, J. M., Fusaro, A. J., Hwalek, M., Mathur, A., & Feig, A. L. (2018). Developing Undergraduate Scientists by Scaffolding the Entry into Mentored Research. *Council on Undergraduate Research Quarterly*, 2(1), 4-14. doi:10.18833/spur/2/1/5
- Morrison, J.A., Berner, N.J., Manske, J.M., Jones, R.M., Davis, S.N., & Garner, P.W. (2018). Surveying Faculty Perspectives on Undergraduate Research, Scholarship, and Creative Activity: A Three-Institution Study. *Council on Undergraduate Research Quarterly*, 2(1), 43-54. doi:10.18833/spur/2/1/1
- Sims, J.D., Dore, A., Vo, M., & Lai, H. (. (2018). Diverse Student Scholars: A Five-Faceted Model of Student Transformation from Embedded Research Mentorship in Marketing Courses. *Council on Undergraduate Research Quarterly*, 2(1), 33-42. doi:10.18833/spur/2/8

#### **Appendix**

- 1. National Research Mentoring Network: https://nrmnet.net/#undergrad
- 2. Offices of Undergraduate Research in the State University System

USF: Research through Honors College and Research through Office of UR

- Honors: https://www.usf.edu/honors/current-students/thesis.aspx
- University: https://www.usf.edu/undergrad/undergraduate-research/
- Undergraduate Research Society (CSO Club)
- Staff: Director, Assistant Director, Graduate Student, 3 student assistants and 3 peer mentors
- Office housed under Undergraduate Studies

UCF: Research through Honors College and Research through Office of UR

- Honors: https://honors.ucf.edu/research/
- University: https://our.ucf.edu/
- Staff: Director, Assistant Director, Admin Assistant, Program Coordinator, Program Assistant, 3 student assistants and 2 editors for UR journal
- Office reports to the <u>Division of Teaching and Learning</u> which, along with their College of Undergraduate Studies, reports to the Vice Provost for Reaching and Learning/ Dean of the College of Undergraduate Studies

UF: Research through Honors College (however, they refer to their Center of Undergraduate Research and don't have a formal program within Honors) and Research through Center for UR which houses a massive ambassador program that takes charge of most events and organizes workshops and seminars

- Honors: http://www.honors.ufl.edu/current/research/
- University: https://cur.aa.ufl.edu/
- Staff: Director, Administrative Assistant, four student assistants in charge of each of four programs (Ambassador Program)
- Housed under the Provost's Office

#### FSU:

- Honors: https://honors.fsu.edu/university-honors/graduation-requirements
- Staff: Director, Associate Director, two Assistant Directors
- University: <a href="https://cre.fsu.edu/programs/undergraduate-research-opportunity-program-urop">https://cre.fsu.edu/programs/undergraduate-research-opportunity-program-urop</a>
- Director, three Associate Directors, two Graduate Assistants

#### UNF:

- Honors: <a href="http://www.unf.edu/hicks/current/Hicks">http://www.unf.edu/hicks/current/Hicks</a> Honors College Fellows Program.asp <a href="http://www.unf.edu/hicks/current/Hicks">x</a>
- Dean, Associate Director, Honors Senior Fellow, Assistant Director of Academics and Advising, Sr. Academic Advisor, Administrative Assistant
- University: <a href="http://www.unf.edu/ugstudies/our/">http://www.unf.edu/ugstudies/our/</a>

#### UWF:

- Honors: https://uwf.edu/academic-engagement/departments/kugelman-honorsprogram/prospective-students/benefits-of-honors/
- Director, Assistant Director, Program Coordinator
- University: <a href="https://uwf.edu/offices/undergraduate-research/">https://uwf.edu/offices/undergraduate-research/</a>
- Director, Program Assistant

#### NCF:

- Honors: Considers itself 'the Honors College of Florida'
- University: https://www.ncf.edu/academics/research-at-new-college/orps/
- Director, Assistant Director

#### FGCU:

- Honors:
  - https://www.fgcu.edu/honors/currentstudents/honorsthesis.aspx#WhatisanHonorsThesis
- Director, Associate Director, Director (Office of Competitive Fellowships), Coordinator of Programming and Outreach, Office Manager, Program Assistant
- University: <a href="https://www2.fgcu.edu/WhitakerCenter/ugresearch.html">https://www2.fgcu.edu/WhitakerCenter/ugresearch.html</a>
- Director, Administrative Assistant, Senior Secretary

FAU: Office of Undergraduate Research and Inquiry (OURI) housed under the Harriet L. Wilkes Honors College

- Honors: <a href="http://www.fau.edu/honors/undergraduate-research/research-symposium/">http://www.fau.edu/honors/undergraduate-research/research-symposium/</a>
- http://www.fau.edu/honors/faculty/ Dean, Associate Dean of Academic Affairs, Associate Dean of Campus & Community Engagement, Assistant to the Dean, Program Assistant, Business Manager, Director of Advancement/Alumni, Coordinator of Administrative Services, Honors College Sr. Secretary, Assistant Director for Honors College Marketing & Enrollment Services
- University: http://www.fau.edu/ouri/

#### FAMU:

- Honors: http://www.famu.edu/index.cfm?honorsProgram&ProgramRequirements
- Undergraduate Research Organization (Club) https://orgsync.com/130390/chapter

\*Universities fall on a spectrum of not having an honors college/research program, having one with no mention of research, having one which requires research or at least includes research as a method of completing requirements, etc. It appears that FAMU does not have an office for undergraduate research at all, even university-wide, however they have honors within the major.

## Highest Research Pillar – Workgroup 3A Engaging undergraduate students in research and creative activities

Recommendation#33 – Development of Novel and Innovative Mentorship Programs for Emerging Mentors and Emerging Researchers to Enhance Research and Creative Activities at FIU

#### 3.1. Description & Justification (supported by data/research/best evidence)

As higher education is profoundly evolving to meet the requirements of the emerging workforce, there is an urgent need in transformation of academia. Based on the National Academy of Sciences, Engineering and Medicine (NASEM) report published in May 2018, STEM education requires substantial cultural change throughout the system to meet the needs of the a fully modern science and technology enterprise and the nation it serves (1). The optimum cultural changes heavily depend on the changes in the faculty incentive system. There is an increased emphasis on realigning the current incentive system to rewarding the best and most effective practices of teaching, mentoring, and advising, instead of research output in form of publications which the current system is heavily weighted on (1). This is consistent with the American Academy of Arts & Sciences (AAAS) report on the Future of the Undergraduate Education, published in 2017, which indicates: "faculty are rarely trained, selected, and assessed as teachers, and their effectiveness as instructors is rarely recognized or rewarded" (2). Furthermore, AAAS emphasizes on the integration of teaching training in the Master's and PhD program curricula in light of preparing the emerging academic workforce to meet the highest standards of excellence in teaching and mentorship in the 21st century (2). There is an urgent need in increasing support, training, and recognition of best practices in teaching and mentoring.

It is suggested that engaging undergraduate students in research and creative activities can affect student retention, academic engagement and the pursuit of graduate education (3). Based on a report by the National Academy of Sciences, implementation of an undergraduate research program at the University of Michigan could successfully increase the retention rate and degree completion rate among minority groups while increasing the likelihood of pursing graduate and professional degrees across all racial groups (3). We conducted a survey among faculty members at FIU to assess the current status of engagement of undergraduate research at FIU. Although the participation rate was low (about 200 faculty), we learned that lack of time to train undergraduate students, lack of resources, lack of institutional support, lack of recognition in promotion and tenure process, and lack of a access to qualified and interested undergraduate students are the

major reasons why some faculty members are not encouraged to engage undergraduate students in research and creative activities (Appendix 1). Furthermore, only 25% of the faculty reported inclusion of undergraduate students in their grants (Appendix 2). Some of the encouraging factors for the faculty for inclusion of undergraduate students in their research were: consideration of undergraduate students research in faculty annual evaluations, templates for requesting funding for undergraduate research, links to programs to identify diverse interested students, and workshops on best practices for engaging undergraduate students in research (Appendix 3). Most of the faculty currently engaging undergraduate students in their research reported that they identify them in their classroom (Appendix 4). However, this may not work for departments with no undergraduate programs and for full-time research faculty.

FIU is perfectly positioned to foster opportunities to create dynamic learning environments for faculty, graduate students, and undergraduate students at FIU and beyond with a sense of community and support. We recommend development and implementation of mentorship programs which will benefit FIU and non-FIU faculty, postdoctoral fellows, graduate students, and undergraduate students:

## Arm 1) Making FIU a hub for training and certification of emerging mentors in mentoring/E-mentoring, teaching/E-teaching, and grant writing by creation of an online/hybrid course series

This startup project aims to make FIU a regional hub for supporting and training of emerging mentors. These online/hybrid course series will focus on development of structured teaching/E-teaching, mentoring/E-mentoring, and grant writing training for emerging mentors with a focus on undergraduate research. These courses will help the emerging mentors in advancing their mentorship, teaching, and grant writing skills. Once the participant has completed the course, they will be interviewed to ensure the programs success of preparing them to be effective mentors. Participants will receive a certificate/badge upon the completion of each course.

#### Incentives:

-FIU-based participants: FIU faculty, postdoctoral fellows, and PhD students will receive stipends to participate in the course. Completion of this course series and achievement of certification should be considered in junior faculty evaluation.

-External participants: will be required to pay for the course. Teaching/E-teaching: \$800 for faculty, \$400 for students

Mentoring/E-mentoring: \$800 for faculty, \$400 for students

Grant writing: \$800 for faculty, \$400 for students Bundle of 2: \$1500 for faculty, \$700 for students Bundle of 3: \$2000 for faculty, \$1000 for students

#### Building on the strengths of our current programs:

We have several programs already in place which can support this new initiative: Advance Florida Network Women in STEM Scholars (AFN-WISS) program offered by the Office of Women, Equity and Diversity supports FIU tenure-track female faculty and postdocs in STEM to be hosted at USC/USF/FIU. With the assistance of this preexisting program, we can sponsor/host

female faculty from USC/USF to participate in the hybrid course series FIU will offer. We also have a faculty mentorship program at FIU which focuses on connecting junior faculty and senior faculty, however, this program is limited to FIU and only to the faculty members (and not PhD students and postdocs). Furthermore, center for advancement of teaching and learning can play a key role in implementation of this initiative.

#### Justification for inclusion of grant writing:

Based on a recent survey's result, FIU faculty seek training for grant writing and inclusion of undergraduate students in their grants (such as templates and etc).

#### Justification for inclusion of PhD students:

Currently some PhD students are solely on the Research Assistant (RA) track during their entire PhD education while some are solely on the Teaching Assistant (TA) tracks. This may result in lack of teaching or mentoring experience for some PhD graduates and hardship in pursuing an academic career upon graduation. Furthermore, there is no specific program at FIU which prepares PhD students as emerging mentors/educators. It is recommended that in a student-centric education system, students shall be encouraged to explore diverse career options through courses, seminars, internships and other tools.

#### Arm 2) Emerging Mentors and Emerging Researchers Joint (EMERJ) Program

EMERJ will serve as a matchmaker to connect mentors (faculty, postdoctoral fellows, Masters Students, and PhD candidates) to the pool of interested undergraduate students who are seeking research opportunities. The mentors of this program are required to complete the courses mentioned in arm 1 in advance *or* can receive approval from their department chairs to participate. The emerging researchers (undergraduate students) must be cleared by their academic advisor to participate in the EMERJ program. It is recommended that in a student-centric education system, students shall be encouraged to explore diverse career options through courses, seminars, internships and other tools. Development and implementation of these programs will help our faculty and students to use their knowledge and sophistication across the full range of possibilities to address real world problems. Junior faculty/postdocs/PhD students should be assigned to only 1-2 emerging researcher at time. Faculty will receive credits for participation in the EMERJ program during their annual evaluations. Participation in EMERJ for both FIU faculty and students is free of charge. **Upon success of the program, it can serve as a recruitment tool regionally.** 

#### How will EMERJ work?

A website will be created to post all the available undergraduate research opportunities at FIU within different programs and departments. All interested undergraduate students should create a profile on the website first. Both mentors and students will have access to the pool of opportunities and interested students. Students can filter opportunities based on the discipline and duration of the project. Mentors will have access to the student's academic information (major, year of admission, academic standing). Interested students can contact the mentor to follow up with the possibilities. Academic advisors should approve matching of mentors and mentees.

#### Justification:

Based on the results of a recent survey, FIU faculty expressed concern about lack of institutional support for undergraduate research and how to find qualified undergraduate students. The majority of faculty currently engaging undergraduate students in their research indicated that they recruit them in their classes, however, this may not work for the programs that do not have undergraduate students, the faculty who do not teach undergraduate courses, and for full-time research faculty. There is a need for a unit focused on undergraduate research and an interdisciplinary program that ensures the success of both emerging mentors and emerging researchers (undergraduate students). Currently, there are faculty who mentor undergraduate students and this program will serve as the centralized hub that will be a resource and track existing partnerships.

## Arm 3) Development of Undergraduate Course to guide, support, and assist in undergraduate research and creative activities in the humanities and related social sciences.

As educators, it is our duty to cultivate and nurture the intellectual elasticity that will allow our students to navigate the rapidly changing and increasingly technologized world which includes an "AI takeover." Ideally, all academic research and engagement, including that of undergraduates, is enlivened by critical and creative thinking which are blessedly not reducible to data and replaceable by AI. The age old value of critical thinking and the creativity implied therein, for decades lauded by humanists, is rightfully occupying its place on center stage. If it is genuine, critical thinking is creative, boundless, extensive, and radically interdisciplinary. It cannot be siloed. FIU and its students are perfectly poised to take advantage of our historical moment which increasingly values and rewards expansive, critical, and creative thinking, skills which AI cannot master. As first-generation US Americans, the hyphenated status of most of us at FIU gives us a unique vantage point and a leg up in thinking multiply, metaphorically, and in terms of narratives. Harvard Professor Doris Summer, author of *Bilingual Aesthetics*, understands this clearly as she proclaims that "Teaching bilinguals deconstruction is redundant" (Summer 6).

Therefore, we propose a fundamentally interdisciplinary undergraduate course which recognizes and builds upon the skills that most of our students and many of our faculty already have. This course and the mentorship inherent therein would be undergirded by a fundamental appreciation of the creativity and interdisciplinarity in genuine critical thinking and the unique powers and abilities of our FIU students to harness it.

The structure and content of the course would be modeled after the HSI Pathways to the Professoriate summer seminar currently being held at FIU, and the centerpiece of FIU's Pathways Program. It invokes all of the humanities and related social sciences at various points of intersection and overlap (and could and hopefully one day will fold in the STEM disciplines). Active learning (including workshops in and outside of the classroom) and continuous "real world" references and relevance are crucial components of the course.

#### 3.2. Targeted Metric(s)

Arm 1) Making FIU a hub for training and certification of emerging mentors in mentoring/E-mentoring, teaching/E-teaching, and grant writing by creation of an online/hybrid course series:

- \* 12 (Research Doctoral/ Total Doctoral Degrees Per Year)
- \* 14 (Number of current FIU students enrolled in Badging/Micromasters courses)
- \* 17 (FIU Tech Startup)
- \* 20 (Auxiliary Income per year)
- \* 21 (Total Research Expenditures)
- \* 22 (Disciplines ranked in the top 100 research expenditures)

Arm 2) Mentors and Emerging Researchers Joint (EMERJ) program

- \* 1 (FTIS 2-yr Retention Rate)
- \* 2 (FTIS 6-yr Graduation Rate, FTIS 4-yr Graduation Rate)
- \* 4 (Percent of Bachelor's Degrees Without Excess Hours)
- \* 5 (Percent of Graduates Employed Without Excess Hours)
- \* 10 (Bachelor's Degrees Awarded to Minorities)
- \* 12 (Research Doctoral/ Total Doctoral Degrees Per Year)
- \* 21 (Industry Funded Research Expenditures)
- \* 22 (Disciplines ranked in the top 100 research expenditures)
- \* 23 (FIU faculty members of National Academies)
- \* 25 (Top 50 Public University Ranking)

#### Arm 3)

- \* 1 (FTIS 2-yr Retention Rate)
- \* 2 (FTIS 6-yr Graduation Rate, FTIS 4-yr Graduation Rate)

#### 3.3. Feasibility Assessment

#### 3.3.1. Implementation considerations and timeline

*Program Administration:* The vision for this program is to be house within the proposed Office for Undergraduate Research and Creative Activities. In the absence of this office, the program should be assigned to work in partnership with the *University Graduate School.* Both components of this proposal, the creation of a certification process for mentors and the mentorship program, will require facilitators responsible for overseeing the successful execution of its purpose.

Certification process and benefits: In providing an opportunity for participation within the certification program which serves to equip mentors, stipends will need to be taken into account for the purpose of incentivizing mentors. This will allow for the program to attract the best mentors and since it is being offered to externally, this will create an opportunity for the university to generate revenue and position itself as a resource. The inclusion of an interview process upon completion of the certification is intended to emphasize the need for interpersonal skills that will contribute to the mentors ability to lead their designated mentee. The certification will not be required for all mentors to participate since there are currently faculty who conduct similar mentorships; in these unique cases, this will require department chair approval for participation.

*Intentional Mentorship:* In order to ensure that students are equipped with the necessary tools, workshops should be facilitated by program that will provide them with the context of the program structure. These students will be vetted based off of their academic and student code of conduct standing for participation within the program.

*Undergraduate Course:* Identifying mentors with proven track record of success in mentoring undergraduates. As HSI Pathways Coordinator I have already done this labor in select departments vis a vis conversations with Chairs and have a core set of faculty who successfully contribute to the Program. In order to more comprehensively identity potential mentors and instructors system of mentor assessment must be put in place at departmental level, collected by Chairs, and reported to Deans. Each faculty member would be required to list the number of students they have mentored into graduate program, to present at conferences, or to publish, and at what schools they will be matriculating in the coming academic year, at what conferences they have presented at and in what journal they will be published.

Identifying potential students with ability and desire to conduct undergraduate research and/or attend graduate programs. Each faculty member teaching undergraduate courses should be required to comprise a list (for each course) of highly motivated and capable students. They would be required to report this information to their chairs whose office would then email these students directly and inquire regarding their interest in the Theory and Methods course.

*Undergraduate course:* Resources are already available in the form of FIU faculty in the humanities and related social sciences, with proven success in mentoring students to graduate programs which necessarily involves undergraduate research (the 15-20-page writing sample that is the central portion of graduate school applications). Other requisite course success component is cultural (including class) and linguistic bi or multi lingualism which already exists (and is a rarity). The ADVANTAGES of said population in terms of creativity and critical thinking have yet to be exploited.

#### 3.3.1.1. Startup (One-time) cost

- Associated start-up costs are detailed below:
  - Creation of course content: This can be done by offering faculty course releases for the development of the content. They should be able to develop the content within one semester.
  - o *Course design:* Working in conjunction with FIU online, the on-set cost of creating a new course should be taken into account.
  - o *Undergraduate course:* Resources are already available.

#### 3.3.1.2. Recurring costs as applicable

Course and Mentorship Facilitation: In the absence of an Office for Undergraduate Research and Creative Activities, the cost of a facilitator for both the course and mentorship program should be taken into account. The course facilitator does require hiring a new faculty member, it can be designated to an exiting faculty member. The mentorship program is comparable to the

role of an advisor as they will serve as a liaison and resource for both students and mentees; this position should be fully devoted to the EMERJ program.

*Undergraduate course:* Coordinator and faculty compensation unless negotiated via course releases or as part of current faculty load. This would though be one less course taught in primary department of each mentor. If compensation occurs via stipends and each faculty mentor presents for one week of a six-week seminar- a 2000 stipend would likely suffice. As such, 12,000 would be necessary per course (to pay 6 faculty 2000 stipends). Coordinator would be there daily and would facilitate workshops and active learning components and thus require a minimum of 12,000. Total cost per course would thus be roughly 24,000.

#### 3.3.2. Space requirements as applicable

*Undergraduate course:* Class room space (GL on MMC has available rooms at no cost for entire summer)

#### 3.4. Accountability Plan

#### 3.4.1. Measure(s) of impact (assessment plan)

Measure(s) of impact (assessment plan) The hybrid/online course series could be assessed regularly by the new standard FIU SPOT structure and receive support and guidance through CAT's resources. The success of the program could be measured by the exit surveys of graduating seniors, increase in research expenditure, and increased participation of junior faculty in undergraduate research. If there is not currently a query concerning "participation in undergraduate research and creative activities," one can be added and it can be tracked by department or by a centralized office of undergraduate research (should one eventually exist).

#### *Undergraduate course:*

- **Student accountability** At end of course students would have a completed project related to their individualized learning pathway. Such a final product could include any of the following: a research paper that can be used to apply to graduate programs, a work of fiction or creative non-fiction, a painting, sculpture, or piece of performance art.
- **Faculty accountability** each faculty member would "turn in" their presentation of a particular theoretical and/or methodological approach (could be in any form: PowerPoint, narrative, digital media, etc.) for coordinator AND CAT review.
- **Coordinator accountability** the coordinator would compile the faculty presentations into a larger one and include their own process for reiterating and reinforcing the theory and methods lessons through active learning and distribute to CAT for review.

• Class accountability: Number of students with viable and completed product, number of faculty with comprehensive lesson plans, innovation of workshopping and active learning, and overall assessment of success by CAT.

#### 3.4.2. Proposed benchmark(s)

Proposed benchmark(s) The student rates of participation in undergraduate research and creative activities at schools within the Florida State system, particularly UF and FSU, could be used as benchmarks for success. CAT should be consulted as they likely have this research and data already. Other forward-thinking Universities such as Northeastern may be consulted for long-term goals and inspiration.

*Undergraduate course benchmarks*: Percentage of students in class who 1.) ultimately apply to graduate school 2) gain entrance into graduate programs 3) present their work at a local or national conference. HSI Pathways Program, Mellon Mays, and possibly other similar programs. HSI Pathways at FIU currently at 100% success rate.

#### 3.5. Limitations

The recommendations above are mostly focused on STEM fields. Upon successful implementation in STEM, they can be adjusted to serve the needs of non-STEM disciplines. Matching of mentors with undergraduates for MERJ program should be done under the supervision of the student's academic advisor.

#### 3.6. References and Appendices

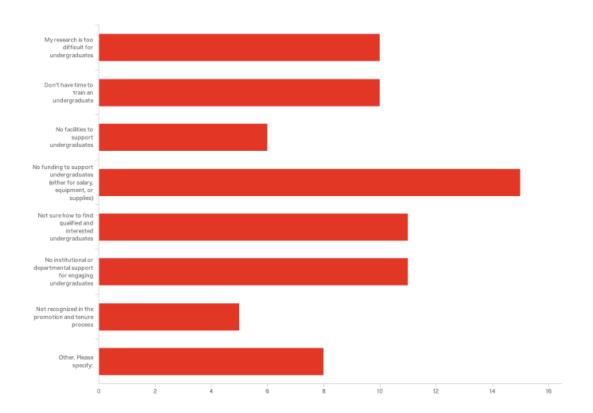
#### References

- 1. National Academies Press, 2018, (800) 624-6242
- 2. American Academy of Arts & Sciences Report, 2017, isbn: 0-87724-118-x
- 3. <a href="https://sites.nationalacademies.org/cs/groups/dbassesite/documents/webpage/dbasse\_072631.pdf">https://sites.nationalacademies.org/cs/groups/dbassesite/documents/webpage/dbasse\_072631.pdf</a>
- 4. Aoun, Joseph. *Robot-Proof: Higher Education in the Age of Artificial Intelligence.* MIT Press: Cambridge. 2017.
- 5. Summer, Doris. *Bilingual Aesthetics: A New Sentimental Education.* Duke University Press: Durham. 2004.

#### **Appendices**

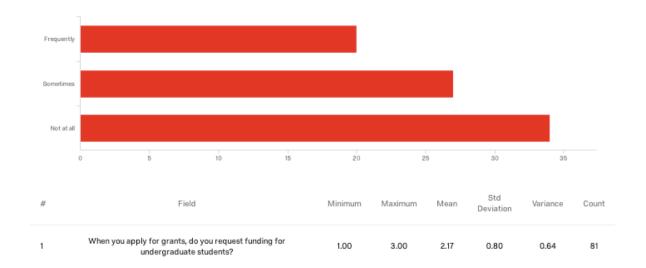
#### Appendix 1

Q13 - Please indicate why you do not currently engage undergraduate students in your research or creative activities. Please check all that apply.



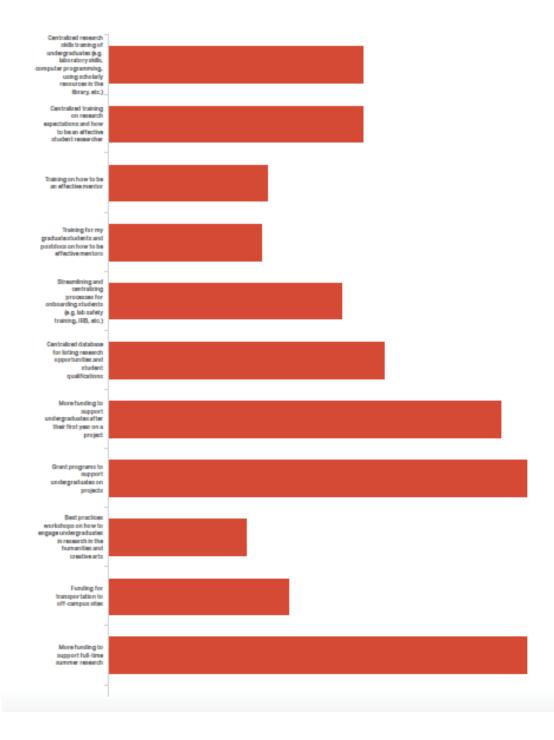
#### Appendix 2

#### Q11 - When you apply for grants, do you request funding for undergraduate students?



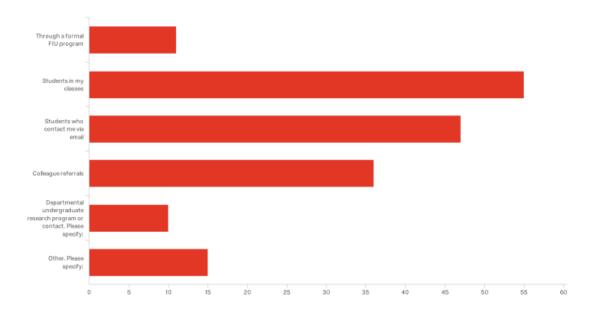
#### Appendix 3

Q19 - Which of the following resources or services would encourage you to engage more undergraduate students in your research or creative activities? Please check all that apply.



#### Appendix 4

Q12 - How do you identify undergraduates to participate in your research or creative activities? Please check all that apply.



#### **Appendix 5**

#### Hispanic Serving Institutions Pathways to the Professoriate Program

Funding: Andrew P. Mellon Foundation

PI: Elizabeth Bejar

The HSI Pathways Program is a collaboration between eight partner institutions, aiming to prepare undergraduate students in the humanities and related fields to pursue a career in the professoriate through engaged mentorship and programming, **opportunities to participate in research**, a summer program focused on methodology in the humanities and social sciences, and a collaborative cross institutional conference focused on students' research.

The HSI Pathways intensive summer session is a six week program with various components intended to prepare students for the application to graduate school process. Students receive daily classroom training in "Theory and Methods" and by the end of the Program must have completed an original research project. The following Spring, after graduate school applications are due, they present their research at a Cross Institutional Conference at the University of Pennsylvania.

The Theory and Methods component of the program is comprised of eight hours per week of lecture and discussion on contemporary theoretical and methodological approaches. It is interdisciplinary by design and consists of content developed by faculty from the departments of Literature, Rhetoric and Composition, Philosophy, Anthropology, Sociology, and History. Current approaches covered include the following: Phenomenology, Deconstruction, Post-Colonial theory, Critical Race theory, Feminist/Queer theories, and Ecocriticism. The chosen faculty have proven track records of success mentoring undergraduate students in research and onto graduate programs. Historically, this work has been unrecognized, uncompensated and overwhelmingly undertaken by female faculty. The program compensates each faculty member with a stipend for their labor (250/hr.). Most of the faculty presenters are also mentors within the Pathways Program and receive a 2,000 per year stipend for their work throughout an academic year closely and 250/ per hour reimbursement for lectures presented during the summer seminar.



# FLORIDA INTERNATIONAL UNIVERSITY STRATEGIC PLAN 2020-2025

## Highest Research Pillar – Workgroup 3A Engaging undergraduate students in research and creative activities

Recommendation #34 – Utilize a badging system to create individualized learning pathways that prepare undergraduate students to engage in innovative, 21st century research and creative activities

#### 4.1. Description & Justification (supported by data/research/best evidence)

Ideally, all academic research and engagement, including that of undergraduates, is enlivened by critical and creative thinking which is not reducible to data and replaceable by artificial intelligence (Aoun, 2017). The age-old value of critical thinking and the creativity implied therein, for decades lauded by humanists, is rightfully occupying its place on center stage. If it is genuine, critical thinking is creative, boundless, extensive, and radically interdisciplinary. It cannot be siloed.

There are, however, practical limitations that may inhibit the participation of FIU undergraduates in research and creative activities. For faculty, one factor limiting the inclusion of undergraduates in their work is students' lack of relevant basic skills and competencies. Faculty are often already operating under time constraints and do not have the resources to individually train undergraduates interested in assisting them. In a rapid assessment of FIU faculty conducted by this workgroup in November 2018, a majority of faculty who do not currently engage undergraduates in their creative endeavors cited lack of time for training or students' lack of basic skills as potential disadvantages to including undergraduates in their work (27% and 35%, respectively). A similar general pattern in responses related to the disadvantages of including undergraduates in their work was observed among faculty who currently do so (28% and 26%, respectively; see Appendix 1 for survey details). Students, on the other hand, are often limited to pursuing curriculum within their planned course of study and do not necessarily have the additional credit hours available to take research methods courses, many of which are currently only available to graduate students.

A badging system addresses these limitations. Badging is a strategy to certify competence in a designated skillset that has gained increased attention among higher education and professional development experts in recent years (Coleman, 2018; Law, 2015). The University of Maryland System has begun implementing a badging system among undergraduates for certifying skills required to transition to the workforce (University System of Maryland, 2018). Perdue University has begun using a badging system to certify laboratory skills (Hensiek et al., 2016; Hensiek et al., 2017).

The badging system as we envision it for FIU, and the personalized pathways it can foster, encourages interdisciplinary approaches, in both structure and content. It would address the necessity of cultivating and nurturing intellectual elasticity to allow our students to navigate a rapidly changing and increasingly technologized world (Aoun, 2017). When students are compelled to recognize the vital connections between disciplines, discourses, their lives, and their worlds, they become increasingly invested in their educational journey as well as more inclined to innovative and impactful thinking, research, and citizenship. Badges have the advantage of addressing both the importance of personalized educational pathways (invoking interdisciplinarity) and the provision of credentials necessary to compete in the current workforce (whether it be in higher education or otherwise).

We propose the following "menu" of badges, which are relevant across multiple disciplines and which faculty can select as required for students wishing to contribute to their research and creative activities. Students can select additional badges based on their individual interests and desires for skill development. Each badge will draw upon existing FIU resources, minimizing start-up costs.

Badge	Recommended Badging Components			
Fundamentals of	Lynda Online Module- Critical Thinking			
Critical and Creative	<ul> <li>Lynda Online Module- Creative Thinking</li> </ul>			
Inquiry				
Research Ethics	• Collaborative Institutional Training Initiative (CITI) Program Online			
	Module- Human Subjects Research			
	CITI Program Online Module- Responsible Conduct of Research			
	CITI Program Online Module- Conflicts of Interest			
	FIU ORED Course- FIU IRB Training Workshop			
Fundamental	• Lynda Online Module- Academic Research Foundations:			
Research Skills	Quantitative			
	FIU Library Online Guide- The Research Journey			
	Lynda Online Module- Technical Writing: Reports			
Contemporary	• This badge will serve as a foundational training component for			
Theoretical and	students interested in engaging with faculty creative and critical			
Methodological	activities and will be delivered as an in-person or hybrid class. It will			
Approaches in the	consist of an overview of the major theoretical and methodological			
Humanities and	frameworks underpinning the humanities and social sciences and is			
Social Sciences	therein fundamentally interdisciplinary. Content will draw upon			
	material that is currently part of a 6-week summer seminar offered to			
	Mellon Fellows in the Hispanic Serving Institutions Pathways to the			
	Professoriate Program (see Appendix 2 for details).			
Fundamental	FIU Environmental Health & Safety Course- Laboratory Hazard			
Laboratory Safety &	Awareness			
Skills	• FIU Environmental Health & Safety Course- Hazard			
	Communication (HAZCOM)			
	FIU Environmental Health & Safety Course- Fire Safety			
	Completion of introductory level chemistry and/or biology lab,			
	which includes training in basic laboratory techniques. (For			

		individuals outside of the major, this will require the use of elective credits.)
Fundamentals of	•	Completion of an introductory research course within a behavioral
Behavioral Research		science discipline. (For individuals outside of the major, this will
		require the use of elective credits.)
	•	Lynda Online Module: SPSS Statistics Essential Training
Project Management	•	Lynda Online Module- Project Management for Creative Projects
Skills for Research &	•	Lynda Online Module- Excel: Creating Business Budgets
Creative Activities		
Advanced Ethical	•	This badge will consist of completion of an FIU Humanities Ethics
Considerations for		Course. (For individuals outside of the major, this will require the
Research and		use of elective credits.)
Creative Activities		,

#### 4.2. Targeted Metric(s)

- FTIC 2-year retention rate
  - The proposed badging system will serve as a method to engage FIU undergraduates in research and creative activities, potentially improving the retention rate.
- FTIC 4 and 6-year graduation rates
  - One potential unintended negative consequence of increasing undergraduate participation is that the additional required training may add credit hours, affecting graduation rates. The proposed badging system will require minimal credit hours, and most badges can be completed as extracurricular activities. Related courses within the purview of the humanities and social sciences can be designated as Global Learning, which will further mitigate the "extra credit hours" issue.
- Research Doctoral/Total Doctoral Degrees Per Year
   Over the long term, we believe a badging system will engage a larger number of
   undergraduate students in the work currently being conducted by FIU's WorldsAhead
   faculty, leading to an increase in the number of undergraduates transitioning to doctoral
   programs.

#### 4.3. Feasibility Assessment

#### 4.3.1. Implementation considerations and timeline

#### **Implementation Considerations**

Program Administration. Ideally, this program would be administered under an Office
for Undergraduate Research and Creative Activities. In the absence of such an office, we
propose designating one administrative staff member within the Office of Research and
Economic Development (ORED) to coordinate implementation of the badging program.
This individual will be responsible for advertising the badging program to FIU Faculty
and Students and scheduling assessments for faculty issuing badges. This individual will
also implement a program to track issued badges, perhaps using Canvas and in
collaboration with FIU Online.

- Assessment Required for Issuing Badges. Robust assessment of knowledge and skills will be required prior to issuing each badge. These assessment methods will require development, but may include oral examination by a content expert, direct observation of laboratory skills, or evaluation of portfolios created for hypothetical projects.
- Development of Assessment Methods. We recommend that an expert educator from the Center for the Advancement of Teaching (CAT) lead development of robust assessment strategies and tools for each badge, as well as faculty training on best practices for administering the assessments. Since the fidelity of badging systems depend on robust assessment, we recommend that a majority of startup effort be dedicated to developing these assessment methods.
- Faculty Involvement. To standardize assessment methods and reduce individual faculty effort, we propose designating three faculty members (representing basic science, behavioral science, and humanities faculty) who are champions of undergraduate research and have a proven track record of successful student mentorship to serve as "badge issuers." These faculty will receive assessment training from CAT and protected effort to assess students participating in the badging system. Faculty will be recognized for their work with undergraduate students.
- Further Badge Development & Curriculum Review. We recognize that the selection of badges we have recommended here, as well as the competencies they represent and their recommended components, may not be exhaustive and will likely require additional development. However, many FIU resources currently exist that can be compiled to create the bulk of the content required for the badges. For example, even badges that will require more development, such as the "Contemporary Theoretical and Methodological Approaches in the Humanities and Social Sciences" badge, can be derived from material that is currently part of a summer seminar offered to participants in the Hispanic Serving Institutions Pathways to the Professoriate Fellowship (funded by the Mellon Foundation and coordinated by Dr. Luszczynska; see Appendix 2 for details). Furthermore, several research methods courses already exist in various disciplines that would fulfill the requirements of the badges "Fundamental Laboratory Safety & Skills" and "Fundamentals of Behavioral Research." We recommend an initiative to identify all such courses so that they may be recorded as eligible for fulfilling badging requirements.
- Documentation of Issued Badges. Ideally, completed badges will be included on official
  university transcripts to serve as documentation for future employers and graduate
  programs. We recognize that university policies and procedures for adding items to the
  official transcript may take time. In the interim, we propose that upon graduation,
  students receive a letter from the FIU Office of Research & Economic Development
  (ORED) delineating the badges that have been earned.

#### **Proposed Timeline**

- March August 2019: Collaborating staff and faculty are identified and recruited. Badge content and assessment methodologies are finalized.
- September 2019: Faculty receive training on best practices for assessment from CAT. Recruitment of FIU Faculty supporting undergraduate Honors College students participating in the Advanced Research and Creativity in Honors (ARCH) program are recruited and complete selection of the badges required for participating in their projects.

- October 2019-April 2020: The badging system is piloted among Honors College students participating in the ARCH program.
- May-July 2020: The badging system is advertised to all FIU undergraduates. Recruitment of FIU Faculty seeking undergraduate support are recruited and complete selection of the badges required for participating in their projects.
- August 2020: The badging system becomes available to all FIU undergraduates.

#### 4.3.2. Projected cost of implementation

#### 4.3.2.1. Startup (One-time) cost

The estimated startup cost is \$100,000 in salary expenses (without fringe). The startup/pilot time period will be March 2019-April 2010. Estimates are detailed below.

- 0.5 FTE for one year, the Office of Research and Economic Development. Effort of a research administrator will be needed to coordinate implementation of the badging program. This individual will also be responsible for advertising the badging program to FIU Faculty and Students, to schedule assessments once they are developed, and to implement a program to track issued badges (perhaps using Canvas, in collaboration with FIU Online). (Estimated salary cost, without fringe: \$30,000)
- 0.2 FTE for one year, the Center for the Advancement of Teaching. Effort of an expert educator will be needed to lead the development of robust assessment strategies and tools for each badge, and to train faculty on best practices for administering the assessments. (Estimated salary cost, without fringe: \$16,000)
- 0.2 FTE for one year, a Humanities faculty member. Effort from a Humanities faculty member will be required to contribute to the development of assessment strategies for related badges, and to administer the assessments once they are developed. The badging system will be piloted among FIU Honors College ARCH students (approximately 90 students). Estimated time per assessment is 1 hour; assuming this faculty member completes one assessment per student, time dedicated to assessment during the pilot period is a total of 90 hours. This will leave approximately 326 hours for other required startup activities, including adaptation of material from the Hispanic Serving Institutions Pathways to the Professoriate Fellowship for the "Contemporary Theoretical and Methodological Approaches in the Humanities and Social Sciences" badge (see Appendix 2 for details). (Estimated salary cost, without fringe: \$18,000)
- 0.2 FTE for one year, a Basic Science faculty member & lab researcher. Effort from a Basic Sciences faculty member will be required to contribute to the development of assessment strategies for related badges, and to administer the assessments once they are developed. The badging system will be piloted among FIU Honors College ARCH students (approximately 90 students). Estimated time per assessment is 1 hour; assuming this faculty member completes one assessment per student, time dedicated to assessment during the pilot period is a total of 90 hours. This will leave approximately 326 hours for other required startup activities. (Estimated salary cost, without fringe: \$18,000)

• 0.2 FTE for one year, a Behavioral Science faculty member & researcher. Effort from a Behavioral Science faculty member will be required to contribute to the development of assessment strategies for related badges, and to administer the assessments once they are developed. The badging system will be piloted among FIU Honors College ARCH students (approximately 90 students). Estimated time per assessment is 1 hour; assuming this faculty member completes one assessment per student, time dedicated to assessment during the pilot period is a total of 90 hours. This will leave approximately 326 hours for other required startup activities. (Estimated salary cost, without fringe: \$18,000)

#### 4.3.2.2. Recurring costs as applicable

Costs for the second year of implementation are estimated to be \$111,000. Costs may increase as student demand for the program grows. Estimates are detailed below.

- 0.5 FTE, the Office of Research and Economic Development. Effort of a research administrator will be needed to continue implementation of the badging system. (Estimated salary cost, without fringe: \$30,000)
- 0.3 FTE for one year, a Humanities faculty member. Increased effort from a Humanities faculty member will be required to administer the assessments and issue badges as the program scales up to become available to all FIU undergraduates. If the faculty member administers at least two assessments to 300 students, time dedicated to assessment is estimated to be 600 hours. (Estimated salary cost, without fringe: \$27,000)
- 0.3 FTE for one year, a Basic Sciences faculty member & lab researcher. Increased effort from a Basic Sciences faculty member will be required to administer the assessments and issue badges as the program scales up to become available to all FIU undergraduates. If the faculty member administers at least two assessments to 300 students, time dedicated to assessment is estimated to be 600 hours. (Estimated salary cost, without fringe: \$27,000)
- 0.3 FTE for one year, a Behavioral Science faculty member & researcher. Increased
  effort from a from a Behavioral Science faculty member will be required to administer
  the assessments and issue badges as the program scales up to become available to all FIU
  undergraduates. If the faculty member administers at least two assessments to 300
  students, time dedicated to assessment is estimated to be 600 hours. (Estimated salary
  cost, without fringe: \$27,000)

#### 4.3.3. Space requirements as applicable

Minimal additional space will be required, since only one new course (for the Contemporary Theoretical and Methodological Approaches in the Humanities and Social Sciences badge) will be created as part of the badging program. Depending on the type of assessments developed, office space (such as conference rooms) may be needed to administer assessments.

#### 4.4. Accountability Plan

#### 4.4.1. Measure(s) of impact (assessment plan)

#### **Near-Term Measures of Impact**

- Number of faculty members who have designated badges as requirements for participating in their research or creative activities
- Number of undergraduate students who have completed each badge
- Number of faculty reporting satisfaction with student level of competence when entering their labs
- Number of students per department who indicate having participated in undergraduate research in their graduating exit survey

#### **Long-Term Measures of Impact**

- Number of FIU undergraduate badge recipients who apply for graduate programs at FIU
- Number of FIU undergraduate badge recipients who apply for doctoral programs at FIU
- Number of undergraduate badge recipients reporting they have discussed their badges in the job interview process

#### 4.4.2. Proposed benchmark(s)

- September 2019: 20 FIU faculty supporting undergraduate Honors College ARCH students will have selected at least 1 badge as a requirement for participating in their work
- April 2020: 90 FIU Honors College ARCH students will have completed at least one badge
- August 2020: 50 additional FIU faculty will have selected at least 1 badge as a requirement for participating in their work
- April 2021: 300 additional FIU undergraduates will have completed at least two badges

#### 4.5. References and Appendices

#### References

Aoun, J.E. (2017). *Robot Proof: Higher Education in the Age of Artificial Intelligence*. Cambridge, Massachusetts: MIT Press.

Coleman, J.D. (2018). Engaging undergraduate students in a co-curricular digital badging platform. *Education and Information Technologies*, *23*, 211-224.

Hensiek, S., DeKorver, B.K., Harwood, C.J., Fish, J., O'Shea, K., Towns, M. (2016). Improving and assessing student hands-on laboratory skills through digital badging. *Journal of Chemical Education*, *93*, 1847-184.

Hensiek, S., DeKorver, B.K., Harwood, C.J., Fish, J., O'Shea, K., Towns, M. (2017). Digital badges in science: A novel approach to the assessment of student learning. *Journal of College Science Teaching*, 46, 28-33.

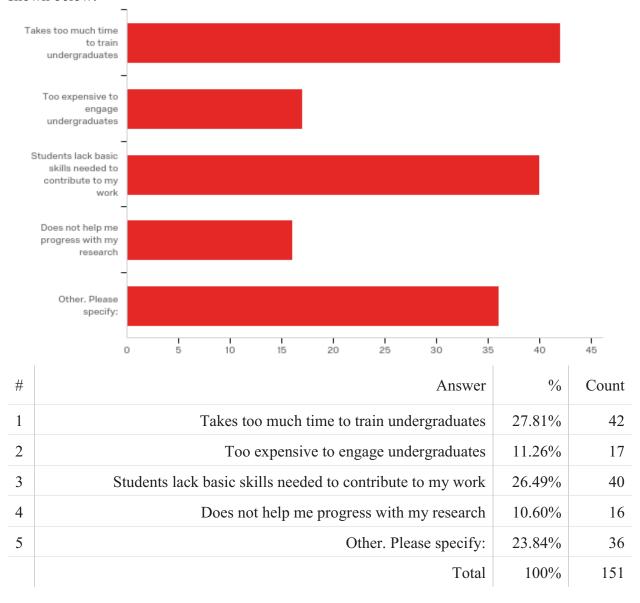
Law, P. (2015). Recognising informal elearning with digital badging: Evidence for a sustainable business model. *Open Praxis*, 7, 299-310.

University System of Maryland. (2018). University System of Maryland Digital Badges. Retrieved from: <a href="https://usm.credly.com/enterprise?tab=available">https://usm.credly.com/enterprise?tab=available</a>

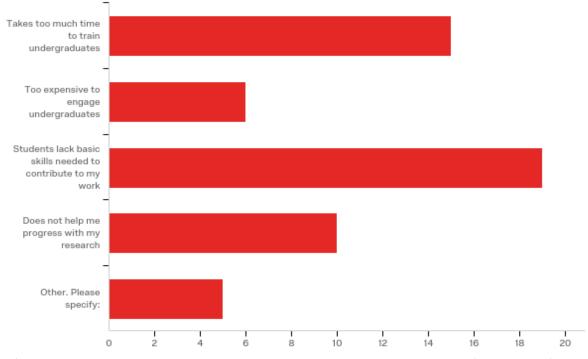
# **Appendices**

# Appendix 1. Rapid Assessment of FIU Faculty Research & Creative Activities Involving Undergraduates

Workgroup 3A administered a rapid assessment Qualtrics survey to FIU faculty during November 2018. The survey was distributed via the Provost's FIU faculty listsery. A total of 153 faculty responded; 133 indicated they were currently engaging in research or creative activities. Of these faculty, when asked if they currently engage undergraduates in their research, 55 (41%) indicated frequently, 44 (33%) indicated sometimes, and 32 (24%) indicated not at all. Faculty who responded that they frequently or sometimes engage undergraduates in their research were asked what they viewed as the disadvantages to doing so. Their responses are shown below:



Faculty who do not engage undergraduates in their work were similarly asked what they viewed as the potential disadvantages to doing so. Their responses are shown below:



#	Answer	%	Count
1	Takes too much time to train undergraduates	27.27%	15
2	Too expensive to engage undergraduates	10.91%	6
3	Students lack basic skills needed to contribute to my work	34.55%	19
4	Does not help me progress with my research	18.18%	10
5	Other. Please specify:	9.09%	5
	Total	100%	55

# Appendix 2. Hispanic Serving Institutions Pathways to the Professoriate Program

Funding: Andrew P. Mellon Foundation

PI: Elizabeth Bejar

The HSI Pathways Program is a collaboration between eight partner institutions, aiming to prepare undergraduate students in the humanities and related fields to pursue a career in the professoriate through engaged mentorship and programming, **opportunities to participate in research**, a summer program focused on methodology in the humanities and social sciences, and a collaborative cross institutional conference focused on students' research.

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# Highest Research Pillar – Workgroup 3C Expanding innovation and entrepreneurship for social and economic impact

\*\* joined with workgroup 3A recommendations on undergraduate research \*\*

**Recommendation #35 - Increase Undergraduate Student Participation in Interdisciplinary Research** 

# 1.1. Description and justification of program, savings, or efficiency recommendation (supported by data/research/best practices)

Traditionally, undergraduate students aren't considered when it comes to research. Support for student research is usually geared towards graduate students. However, research has shown that undergraduate students are more engaged and successful when they participate in research.

Adding to the challenge is creating research opportunities for undergraduate students that are *interdisciplinary*. It's difficult for both faculty and students to step outside of their own disciplines to collaborate because incentives are developed within disciplines. A recent survey of FIU undergraduates revealed that while students are generally interested in the idea their research would extend beyond the boundaries of their disciplines, most do not understand what interdisciplinary research entails. Education here is crucial.

- Prioritize interdisciplinary efforts for faculty members, similar to prioritizing STEM. This includes talking about it on the website, press releases, etc. Faculty would also encourage undergraduate students to publish, blog or create poster presentations at conferences as well (this would also enhance their cv's). Encourage FIU community to repost students' blogs or achievements on LinkedIn to raise profile and support their prospects for getting a job.
- Faculty incentives to support the student research would include professional development, project stipends, equipment, travel money, or course releases, not to exceed \$7,500. Faculty incentive could also be Admin or Executive parking passes.
- Create an environment for undergraduates participating in research to come together, similar to StartUP FIU space but perhaps with more benches for prototyping and research type work.
- Could students be given a per-credit reduced rate or incentives to graduate faster if they participate in interdisciplinary research?
- Assemble interdisciplinary team (Medicine, Public Health, Nursing, Business, Engineering, etc.) of faculty & students to develop a community project that targets supporting Sweetwater. Faculty and students would be working side by side to

develop projects to address the greatest needs among residents of Sweetwater. Startup costs could be provided by FIU but then external grants would support. This could be a model for community-based undergraduate research.

- Create awareness among students maybe a badge/credential starting their freshman year.
- Develop industry partnerships so that students can work directly in some type of apprenticeship role with industry executives. But the industry should come to FIU and help students directly in the lab.
- Develop avenues to encourage College of Medicine students to interact on interdisciplinary research. From College of Business to Bio-medical engineering, undergraduate students are very interested in working with and learning from College of Medicine students.

#### **1.2.** Targeted Metric(s)

- 2-year Retention Rate
- 4-year graduation rate
- 6-year graduation rate
- Increase Industry-funded Research
- Total Research Expenditures
- Graduates Employed
- Wages of Graduates

# **1.3.** Feasibility Assessment

## **1.3.1.** Implementation considerations and timeline

Establish interdisciplinary research taskforce in Spring 2019 – include students and faculty.

## **1.3.2.** Projected costs or savings of implementation

\$75,000-\$500,000 per year depending on suggestion.

## **1.3.2.1.** Startup or phase-in (one-time) costs

Space renovation for undergraduate student research.

#### 1.3.2.2. Recurring costs or savings, as applicable

\$75,000-\$500,000 per year depending on suggestion.

## 1.3.3. Space needs or space savings, as applicable

As needed based on projects students undertake and how big the program gets.

# 1.4. Accountability Plan

# 1.4.1. Measure(s) of impact (assessment plan)

- Retention and Graduation Rate
- Industry R&D or investment capital
- New partnerships with South Florida community
- Student learning outcomes
- Creates more alumni engagement opportunity which can be leveraged into supporting the program.
- Better jobs and higher salaries for graduates.

# 1.4.2. Proposed benchmark(s)

Improvements in identified measures of impact within 2-3 years of implementation

# 1.5. References and Appendices

Undergraduate student survey





# Preeminence Pillar – Workgroup 2A Leveraging preeminent program identification and assistance

Recommendation #23 - Refine Initial/Continuing Designation Rubric for Preeminent/Emerging Preeminent Programs

# 1.1. Description and justification of program, savings, or efficiency recommendation (supported by data/research/best practices)

# **Description:**

A new evaluation instrument (or process) will be recommended by the Committee that will consolidate the iREAL Self-Evaluation Instrument and the standards set by the 2018 Florida Statutes involving Preeminent state research universities program—under Section (2) Academic and Research Excellence Standards. It will be reviewed by the FIU leadership and the current directors of emerging and preeminent programs for review and feedback.

# Justification:

This will allow for a fine-tuned evaluation process of new applications and for the designation of future Emerging and Preeminent programs. The focus will be placed on metrics that are measurable and are most important for reaching preeminence designation. This same rubric could also be used to refine the Qualtrics Survey to gauge yearly progress of existing Emerging/Preeminent programs. In doing so, we become proactive and resolute for positioning FIU to move on to the next level from emerging to preeminence in our State and to rank in the top 50 institutions of higher learning as our major goal.

## **1.2.** Targeted Metric(s)

Same iREAL and SUS metrics currently in place for Emerging or Preeminence designation (see references 1 and 2)

#### 1.3. Feasibility Assessment

# 1.3.1. Implementation considerations and timeline

By next application for program designation; however,

- The iREAL rubric is in place and is being used for Emerging and Preeminent program application and designation.
- The <u>Academic and Research Excellence Standards</u>, as defined in website: <a href="http://www.leg.state.fl.us/Statutes/index.cfm?App\_mode=Display\_Statute&U\_RL=1000-1099/1001/Sections/1001.7065.html">http://www.leg.state.fl.us/Statutes/index.cfm?App\_mode=Display\_Statute&U\_RL=1000-1099/1001/Sections/1001.7065.html</a>. Is also in place and is being used for SUS designation of Institutions into Emerging or Preeminence

# 1.3.2. Projected costs or savings of implementation

No costs are associated with this recommendation.

# 1.3.2.1. Startup or phase-in (one-time) costs

N/A

# 1.3.2.2. Recurring costs or savings, as applicable

N/A

# 1.3.3. Space needs or space savings, as applicable

N/A

## 1.4. Accountability Plan

# 1.4.1. Measure(s) of impact (assessment plan)

Since all the metrics contemplated for use in the refined rubric will be measurable, each measure of impact will relate directly on the outcome of the annual Qualtrics survey, and the assessment plan will be in accordance to the outcome of recommendation on the annual meeting set forth below and with respect to Emerging/Preeminent program growth and long-term sustainability.

# **1.4.2.** Proposed benchmark(s)

The following benchmarks relate directly to what will be considered in redefining the rubric for Emerging/Preeminent program designation

- The iREAL rubric as in reference 1
- Academic and Research Excellence Standards as in reference 2

# 1.5. References and Appendices

- 1. For <u>the iREAL rubric</u>, see FIU beyondpossible.fiu.edu website (<a href="https://beyondpossible.fiu.edu/\_assets/docs/Application-Guidelines-for-Designation.pdf">https://beyondpossible.fiu.edu/\_assets/docs/Application-Guidelines-for-Designation.pdf</a>).
- 2. For the <u>Academic and Research Excellence Standards</u>, see <a href="http://www.leg.state.fl.us/Statutes/index.cfm?App\_mode=Display\_Statute&URL=10">http://www.leg.state.fl.us/Statutes/index.cfm?App\_mode=Display\_Statute&URL=10</a> 00-1099/1001/Sections/1001.7065.html.

Recommendation #25 - Promote/facilitate national and international collaboration involving our Preeminent/Emerging Preeminent Programs

1.1. Description and justification of program, savings, or efficiency recommendation (supported by data/research/best practices)

#### **Description:**

This recommendation is to ensure that infrastructure needs and executive/policy making structure is in place (1) to strengthen existing collaborations, (2) to establish new collaborations and (3) to support and sustain our national and international engagements at the institutional level and the Emerging/Preeminent Programs leadership level. Such collaborations will include support from Human Resources (HR) and the Office of Research and Economic Development (ORED)pertaining to immigration, taxation, research / work permissions, Memoranda of Understanding (MOU)s, IP protocols, networking, mentoring, etc. Through these extensive support mechanisms for national and international collaborations, current and successful FIU mentorship programs (e.g. ADVANCE) will be further augmented. This recommendation provides further help to junior faculty in crucial areas such as grant writing and establishing partnerships with leading researchers in academia and industry while also crediting senior faculty for time spent providing mentorship. This crucial recommendation applies also to our own FIU Preeminent and emerging preeminent programs; creating an environment that promotes transparency, respect of persons, and team science in fields related to Health, Environment and Resilient Infrastructure, Cybersecurity and Forensics, STEM and Public Humanities.

<u>Justification</u>: There is no better way to affirm program reputation than through national and international visibility. Such collaboration promotes knowledge sharing, mentorship, consolidation of strengths in human capital and infrastructure, academic rigor, data sharing, joint research endeavors (proposals and joint publications). Only through different perspectives and the merging of creative thinking could we envision to address the many complex and challenging problems we face today. Moreover, all funding agencies are encouraging multidisciplinary research across institutions here in the US and across the world. This could lead to national and international conferences that expose FIU research capabilities and promote joint research proposals with enhanced prospects for new findings. A win-win approach between institutions should be adopted to strengthen the bonds of such collaborations.

#### 1.2. Targeted Metric(s)

- Scope and strength of ongoing collaborations and newly established ones
- Productivity enhancements due to collaboration: Measured through the number of joint/ collaborative proposals that were submitted and the number of proposals that were funded
- Significant joint publications in top-ranked Quartile 1 journals
- Mentorship provided to junior faculty
- Established collaborations with renown leading researchers

# **1.3.** Feasibility Assessment

# 1.3.1. Implementation considerations and timeline

Such collaborations are ongoing at FIU and how many newly established ones would depend on the executive/policy making structure in place and the efforts extended by the emerging/preeminent programs at FIU in line with their diverse research portfolio. No timeline is required.

# 1.3.2. Projected costs or savings of implementation

This should be an intrinsic part of the research mission of the emerging/preeminent programs.

# 1.3.2.1. Startup or phase-in (one-time) costs

N/A

# 1.3.2.2. Recurring costs or savings, as applicable

N/A

# 1.3.3. Space needs or space savings, as applicable

Space needs will be based on the success of the programs through the establishment of research centers (e.g. ERC and STC from NSF and Centers established through other federal agencies such as NIH, DOD, NASA, etc.)

# 1.4. Accountability Plan

# 1.4.1. Measure(s) of impact (assessment plan)

- International forums held with FIU as participant or as lead institution
- Consolidation of expertise, existing resources, and data for enhanced capability in research and other creative activities.
- New National and International collaborations established by our Emerging/Preeminent programs.
- Mentorship provided by Senior Faculty members here at FIU and elsewhere
- Increase in FIU expenditures
- Increase in Postdoctoral and doctoral student support

#### **1.4.2.** Proposed benchmark(s):

Interesting proposed benchmark examples include:

- The Global Capacity-building Strategy report provided by UNESCO under the theme of Diversity of Cultural Expressions in reference 1.
- The eight core principles that guide MIT's international engagements" in the report found in reference 2.
- The European Commission Horizon 2020 for International Cooperation and for Global Research Partnerships in reference 3.

# 1.5. References and Appendices

- 1. <a href="https://en.unesco.org/creativity/files/global-capacity-building-strategy">https://en.unesco.org/creativity/files/global-capacity-building-strategy</a>
- 2. <a href="http://web.mit.edu/globalstrategy/A">http://web.mit.edu/globalstrategy/A</a> Global Strategy For MIT May2017.pdf
- 3. <a href="https://ec.europa.eu/research/iscp/index.cfm?pg=policy">https://ec.europa.eu/research/iscp/index.cfm?pg=policy</a>





# Highest Research Pillar – Workgroup 3B Improving Carnegie Highest Research and achieving SUS Research Preeminence

Recommendation~#61-University~Graduate~School~(UGS)~Preeminent/Emerrging~Preeminent~Fellowship~(PEF)

# 1.1. Description and justification of program, savings, or efficiency recommendation (supported by data/research/best practices)

In 2017-18 FIU produced 200 PhD degrees. This is a 26% growth over the past three years. Doctoral students assigned to large research centers with externally funded research graduate faster and are more successful post-graduation. In large research centers, doctoral students are exposed to collaboration with other doctoral students, as well as mentoring from postdoctoral fellows and multiple faculty members. Additionally, research centers tend to conduct interdisciplinary research, and thus doctoral students trained in research centers are more likely to engage in interdisciplinary research.

Currently, approximately 40% of the stipends for PhD students covered by the University derive fron the University Graduate School (UGS), and the remainder is covered by the colleges. PhD students are also supported through external grants, with approximately 50% of all PhD students currently supported through grants.

This proposal is for UGS to allocate 15-20% of the total stipends it distributes annually to a new UGS Preeminent/. Emerging Preeminent Fellowship (FEP). The FEP will be as follows:

# **UGS Preeminent/Emerging Preeminent Fellowship (PEF)**

The UGS will dedicate 15% of the PhD stipends to Preeminent/Emerging Preeminent Fellowships (PEF). These awards can only be for highly qualified incoming PhD students who will be engaged in research areas specific to a Preeminent or Emerging Preeminent program at FIU. Students will be awarded PEFs based on their potential to become outstanding scholars and contributors to the efforts of the Preeminent/Emerging Preeminent program. PEF recipients will be trained in an inter-disciplinary environment. They will conduct their dissertation research under the supervision of at least two major professors who are members of the Preeminent or Emerging Preeminent program. Special consideration will be given when the major professors are from different academic units.

PE Fellows receive a stipend of \$30,000 per twelve months for four years. The UGS will provide the stipend for two of the four years and the Preeminent/Emerging Preeminent (RA or TA) is expected to provide the stipend for the remaining years. In addition, the UGS will provide a tuition fee waiver for 24 credits per year and health insurance for all 4 years of the fellowship.

During the two years of support from UGS, there are no teaching obligations on the part of the recipient. During the third year of support from the program, the student is expected to have responsibilities consistent with the nature of the support, which may be either teaching or research assistantship.

#### **Evaluation Criteria:**

- o Outstanding GPA
- o Exceptional GRE or GMAT scores
- Other evidence of likelihood of outstanding future performance as a scholar
- Excellent match between the student's research interest and the focus of the Preeminent/Emerging Preeminent Program and proposed co-major advisors.

# **Minimum Eligibility:**

- o Minimum GRE score to be eligible is a 70th percentile (verbal and quantitative).
- o Undergraduate or graduate GPA is greater than or equal to 3.5.
- o Student is not currently enrolled in a doctoral program at FIU.

#### **Nomination Procedure:**

Each Preeminent/Emerging Preeminent program may submit **5 nominations**. The programs *must* rank nominations. The program must commit to the GA appointment equivalent to .50 FTE for two years at a minimum of \$30,000 (the support may come from major professors, academic unit offering the doctoral program or the Preeminent/Emerging Preeminent program).

Submit completed electronic applications in a single pdf file/application to the UGS at ugsfellows@fiu.edu. Hard copy submissions will not be accepted.

# **Timeline:**

Friday, February 8, 2019

Deadline for Director of Preeminent/Emerging Preeminent Program to submit completed electronic applications in a single pdf file/application in an email to **ugsfellows@fiu.edu.** 

Monday, March 4 – March 8, 2019

Selection Committee meets to make award recommendations

Friday, March 8, 2019

UGS notifies programs of awards and sends official letter to recipients

# **Supporting documentation:**

- 1. A cover letter from the Preeminent/Emerging Preeminent Program providing a justification for giving an award to this nominee.
- 2. Letters from the proposed co-major advisors. The letters should describe the advisors' research interests and qualifications, including his/her record of obtaining external award funding as well as a short narrative of previous mentoring experience (include the names of current and previously mentored graduate students, time to completion, research/academic productivity, and source of support for each).
- 3. Statement from the student describing any prior research and plans for future research.
- 4. Up to three letters of recommendation. If soliciting letters specifically for this application please ask references to indicate if the student is in the top 1%, 5% or 10% of all students recommended for graduate school. If the letter of recommendation comes via e-mail, please print out the e-mail message with the header showing the attached file.
- 5. PEF nominee's resume/CV.

# **1.2.** Targeted Metric(s)

- Total Research Expenditures
- Science & Engineering Research Expenditures
- Non-Medical Science & Engineering Research Expenditures
- Proportion of faculty with external research funding, and per capita faculty research funding

#### **1.3.** Feasibility Assessment

# 1.3.1. Implementation considerations and timeline

• This initiative can be implemented for the 2019-20 Academic Year.

# 1.3.2. Projected costs or savings of implementation

• There are no new costs, since this is a redistribution of existing funds from UGS

## **1.3.2.1.** Startup or phase-in (one-time) costs

• There are no startup costs

## 1.3.2.2. Recurring costs or savings, as applicable

• The recurring costs will be the annual Fellowships for students

#### 1.3.3. Space needs or space savings, as applicable

• Not applicable

# 1.4. Accountability Plan

# 1.4.1. Measure(s) of impact (assessment plan)

- Doctoral student recruitment.
- Support of PhD students from external grants
- Increases in the growth of PhD degrees

# 1.4.2. Proposed benchmark(s)

- Recruitment of better doctoral students based on admissions criteria.
- Increase of 20% in the number of PhD supported from external grants by year 3 of the initiative.
- Increases of 12% in PhD degrees awarded by AY 2021-22, and 25% increase by AY 2024-25 (250 PhD degrees).

# 1.5. References and Appendices



# Highest Research Pillar – Workgroup 3C Expanding innovation and entrepreneurship for social and economic impact

Recommendation #38 – Standardize Differential Assignments & Evaluate Faculty Based on Excellence within Actual Assignments

# 1.1. Description and justification of program, savings, or efficiency recommendation (supported by data/research/best practices)

The barriers that often keep faculty from participating in innovation and entrepreneurship activities are: 1) bandwidth, 2) not culturally accepted as important academic work, and 3) lack of awareness. This recommendation addresses the bandwidth challenge.

While most departments have differential assignments, they vary widely depending on the School/College/Department. For example, a research assignment in one College can be a 1/1, in another it is a 3/3/3. The latter does not allow for quality research to be done.

tandardizing differential assignments will allow the faculty member to focus on research or teaching thereby improving the quality of grant submissions (which may lead to more grants awarded) and improving the quality of teaching which helps student success metrics. Frees up faculty time for professional development – whether in designing new courses, teaching hybrid/online or in their field of research; time to build relationships with industry and/or time to work with students as faculty advisors or professional advisors to support student success.

Culturally faculty are expected to excel in Teaching, Research and Service. The most productive faculty are often stretched too thin because they juggle a multitude of activities within each category. They often have several grants and can carry a teaching load depending on departmental culture. They can also be excellent teachers but are still required to submit research grants. Additionally, they are often asked to serve on committees – both internally and externally. However, they are not rewarded for their achievements and often times, evaluations can feel punitive.

Since many of these concepts are not new and are already incorporated into the T&P manual, the challenge is to hold the Chairs and Deans accountable to implementing these ideas and changing the culture.

• Empower Chairs and Deans to shift the culture of faculty evaluations from having to do everything very well to having to perform on their assignments very well. Faculty can still receive excellent evaluations even if they did not conduct research if they were excellent in teaching and service, for example.

- Currently, faculty will inevitably get "dinged" for not being great in all three categories.
- Establish excellence metrics in evaluation category of service. Currently, excellence in Research and Scholarship are well established. One knows what good research and scholarship looks like. Metrics in evaluating excellence in Teaching is also being developed as a result of last strategic plan. But Service is still subjective. One can serve on committees that don't yield outcomes such as whitepapers or new processes, don't require attendance or much participation, or ones that do not further the profession.
- Give innovation and entrepreneurship service assignments to instructors, lecturers or adjuncts to increase participation by domain experts (adjuncts may have the technical expertise or industry experience but aren't tenured for example) who are crucial to innovation and entrepreneurship.

# 1.2. Targeted Metric(s)

- 4-year graduation rate
- 6-year graduation rate
- FIU Tech Startup (ATOM)
- Increase Industry-funded Research
- Total Research Expenditures

# 1.3. Feasibility Assessment

# 1.3.1. Implementation considerations and timeline

Need buy-in from Chairs, Deans, Faculty Senate and Union.

Work with Office of Faculty and Global Affairs.

Form committee to develop standards by Spring 2019. Ratify standards by January or June 2020 depending when committee gets formed in the spring.

Identify the college that implements the best differential assignment process.

## 1.3.2. Projected costs or savings of implementation

Hire more instructors or adjuncts. Or increase teaching assignments to best teachers. Support good teachers with TAs or LAs and good researchers with RAs, graduate students and Post-docs.

#### 1.3.2.1. Startup or phase-in (one-time) costs

Depends on the type of research.

# 1.3.2.2. Recurring costs or savings, as applicable

N/A

## 1.3.3. Space needs or space savings, as applicable

More office space for instructors. More research spaces for researchers (if necessary. If a faculty member simply has more bandwidth to conduct quality research, he/she may already have the lab space).

# 1.4. Accountability Plan

# 1.4.1. Measure(s) of impact (assessment plan)

Improved quality of grants submission (researchers should have more time to develop quality submissions and more time to build relationships with potential funders)
Increases in research expenditures and diversity of funding (industry, foundation, etc)
Increased student satisfaction in course selection and teaching (good teachers should be teaching gateway courses)

# **1.4.2.** Proposed benchmark(s)

Improvements in identified measures of impact within 1-2 years of implementation

# 1.5. References and Appendices

Refer to current Worlds Ahead faculty awards as example for innovation award. Notes from Workgroup meeting for more fleshed out ideas.





# Highest Research Pillar – Workgroup 3C Expanding innovation and entrepreneurship for social and economic impact

Recommendation #39 - Increase Industry (or community/nonprofit) Partnerships at FIU

# **1.1.** Description and justification of program, savings, or efficiency recommendation (supported by data/research/best practices)

It is not easy to establish mutually beneficial partnerships with outside organizations at FIU. Challenges include: time to complete agreement (1-3 years), equating industry investment with federal grants, being to slow to respond to opportunities.

- Workshops to educate faculty on how to partner with industry (or nonprofits, on contracts, etc.)
- Measure general counsel, business services and ORED on speed of contract/agreement/MOU completion.
- Recognize partners on FIU's website and materials to raise their visibility.
- Create infrastructure where support staff can prep contracts, agreements, or general details so faculty time can be maximized to add expertise.
- Hire staff with industry background and listen to their suggestions (there are many people at FIU with industry experience but we tend not to listen to them and still do things the same way).
- Recognize industry investment in T&P process.
- Partner with alumni or industry to teach a course to students. Students love hands-on industry knowledge and industry feel like they are shaping workforce and/or giving back.
- Establish relationships with key industry partners with an aim to license FIU technologies.
- Hold industry liaisons responsible to communicating their value and delivering tangible results. Faculty feel that the work with advancement and engagement can be too transaction with them doing most of the work (writing). And if the money comes in from industry, it's too little money for the proposed work. It would also be helpful to brief faculty and train them before meetings with potential partners.

## 1.2. Targeted Metric(s)

- FIU Tech Startup (ATOM)
- Increase number of licenses
- Increase Industry-funded Research
- Total Research Expenditures

# 1.3. Feasibility Assessment

# 1.3.1. Implementation considerations and timeline

- Establish task force to support faculty establish more industry relationships and develop necessary tools and policies to increase industry funding.
- Work with office of Technology Management and Commercialization to identify licensing opportunities and target specific companies by Fall 2019.
- Set goals for industry investment starting with FY21.
- Develop workshops schedule for FY20.

# 1.3.2. Projected costs or savings of implementation

Hire staff with experience in contracts, not just federal grants. Hire licensing associate to specifically target industries.

# 1.3.2.1. Startup or phase-in (one-time) costs

N/A

# 1.3.2.2. Recurring costs or savings, as applicable

N/A

# 1.3.3. Space needs or space savings, as applicable

N/A

## 1.4. Accountability Plan

# 1.4.1. Measure(s) of impact (assessment plan)

Increase in number of licenses

## **1.4.2.** Proposed benchmark(s)

Improvements in identified measures of impact within 3-4 years of implementation

# 1.5. References and Appendices

# FLORIDA INTERNATIONAL UNIVERSITY STRATEGIC PLAN 2020-2025

# Financial Base Pillar – Workgroup 4B Driving organizational efficiencies and increasing revenues

\*\* joined with workgroup 3C ideas on innovation and entrepreneurship \*\*

# Recommendation #40 - Cultivate an Entrepreneurial Spirit

Entrepreneurship as a process is described by noted academic H. Stevenson, as the relentless pursuit of opportunity without limitation of resources. It is also characterized as the art of turning an idea into a business. This search often challenges status-quo, and results in innovations that drive economic development. FIU currently has Startup FIU with its focus on startups. We need to do more in encouraging not just startups is home to the Small Business Development Center (SBDC). Going forward FIU needs more venture acceleration; small business development; creative thinking that spurs innovative curriculum development, win-win partnerships with industry and service vendors, and new academic programs for strategic markets offered at market-rate; and incentives that better rewards creativity and innovation. Examples:

- a) Leverage the value of current assets like Startup FIU, SBDC and Pino Entrepreneurship Center to create value for the external business community (SBDC) and for our community (Pino and Startup FIU);
- b) Create knowledge hubs (or networks) in our Professional schools (Public Health, Medicine, Law, Business, Hospitality and Tourism, and Engineering and Computer Science) to focus on opportunity recognition, concept development, resource determination and acquisition (including grants and other sources of funding), launch and growth activities utilizing social media to share stories of success, and venture evaluation. These hubs should facilitate collaboration and coordination across disciplines for research, joint discovery, and shared synergy in promoting commercialization of innovation for the benefit of students, faculty, university, and community.

#### 1.1. Targeted Metric(s)

A more competitive university operation to carry out its mission, of offering degrees in strategic areas of emphasis at both the undergraduate and graduate levels.

## 1.2. Feasibility Assessment

Assessment is a determination of the relative demand for a service and whether the opportunity and resources are available. Given the success to date of all our professional schools, and the continued demand for our degree options (see enrollment data), feasibility is considered medium-high. Resources can be better assessed as part of the upcoming capital campaign.

# **1.3.1.** Implementation Consideration

Time is a factor in any change event. Instilling an entrepreneurial culture will require significant time and effort, but more importantly will require consistency, championing agency and leadership commitment. Work closely with faculty to establish stronger incentives for rewarding creativity and commercialization activity.

# 1.3.2. Projected costs or savings of implementation

Varies depending of the nature of innovation

# 1.3.2.1. Startup or phase-in (one-time) costs

Varies but will be funded mainly through individual unit budgets and supported by revenue generated from market-rate programs.

# 1.3.2.2. Recurring costs due to operation activity

# 1.3.3. Space needs or space savings

Within Schools mainly, but could be shared through coordination – e.g Startup FIU, Innovation labs etc.

## 1.4. Accountability Plan

# 1.4.1. Measure(s) of impact (assessment plan)

- New products/programs/launches per year;
- new patents per year;
- new businesses partnerships;
- # of students seeking to commercialize projects, business ideas or inventions.

## **1.4.2.** Proposed benchmark(s)

Babson College

#### 1.5. References and Appendices

Hart, M. M., H. H. Stevenson, and J. Dial. "Entrepreneurship: A Definition Revisited." In *Frontiers of Entrepreneurship Research*, 1995: Proceedings of 15th Annual Entrepreneurship Research Conference, edited by W. Bygrave. Babson Park, MA: Babson College, 1996



# Highest Research Pillar – Workgroup 3B Improving Carnegie Highest Research and achieving SUS Research Preeminence

Recommendation #62 – Support Leading to Faculty Success (Workshops, Internal Reviews, Networking Programs)

# 1.1. Description and justification of program, savings, or efficiency recommendation (supported by data/research/best practices)

**Description:** Provide the three-dimensional support for faculty seeking funding.

The three dimensions include:

- 1) offering workshops for faculty on crucial funding tips
- 2) developing an internal review process for the submitted proposals
- 3) developing customized networking and outreach programs for faculty

#### **Rationale and Solution:**

<u>Dimension 1</u>: Today it is well-known that regardless of the technical competencies of the faculty, if they isolate themselves in their offices for paper/proposal writing, the chances for getting funding is not very high. Especially new faculty needs to recognize that their job is not just innovation but also marketing of their research, recruiting, execution, and effective communication. Therefore, they need to be trained by senior faculty/experts on various nontechnical concepts (in addition to writing skills) which can be made mandatory for new faculty as part of their assignments. Suggested workshops include but not limited to: 1) Funding Agencies 101: How to establish relationship with funding agencies and the program managers; 2) Your Research Community: How to and where to market your research and build your network?; 3) Keeping up with Trends: Understanding the popular research trends, interdisciplinary perspectives and industry needs.

<u>Dimension 2</u>: The success rate for submitted proposals is typically very low. Obviously this can largely be attributed to the competitiveness of the funding process from various agencies. However, another factor is the rushing of the proposals which results in poor writing, missing points and unconvincing ideas. Therefore, getting some early feedback from peers is very crucial to minimize these issues. If such a formal mechanism could be established, this can help improve the quality of the submissions and hopefully increase the chances of funding. To this end, each unit/department/college may setup (ad hoc) internal proposal review committees that can have at least two faculty members who have expertise in related fields. Depending on the choice of the proposal submitter, this committee could provide either early feedback to a concept paper (which may include (1) statement of the problem, (2) proposed project (as a solution); (3) activities; (4) team competency and composition; (5) timeline and budget) or review to the full proposal. The

submitter then uses these feedback to revise his/her proposal before submission. The service provided by these committee members could be counted as part of their annual service to the department/college/university.

<u>Dimension 3</u>: One of the main challenges of faculty in seeking funding is the marketing of their research and outreach. They need to introduce themselves to program managers in various funding agencies, know key researchers in their areas and invite industry leaders to campus for engagement. While these tips can be offered in the workshops (suggested in Dimension 1), faculty members still need concrete support and help in the initiation of these efforts. For instance, they will need be introduced to these people, they will need travel support and they will need staff support when organizing events. Therefore, we recommend that especially for the incoming junior faculty, a customized networking and outreach program is to be developed under their assigned mentors (or their chairs). This program will include: 1) An annual budget for faculty travel, event organizations and invitation of well-known researchers to campus talks; 2) Connection with FIU DC office and reaching out to their contacts; 3) Connection with local industry through StartupFIU, FIU Engagement and others; and 4) Connection with other SUS institutions.

# 1.2. Targeted Metric(s)

This recommendation targets the specific Preemient Research University Funding metrics:

- 1. Research Expenditures for both Science & Engineering and Non-Medical Science & Engineering
- 2. National Ranking in STEM Research Expenditures
- 3. Faculty External Award Success Rates
- 4. Proportion of Faculty with External Grant Funding

# 1.3 Feasibility Assessment

## 1.3.1 Implementation considerations and timeline

• Implementation will require a period of analysis of what would be the most effective support initiatives. This can be largely done through examining what have beeb the mist effective tactics and programs used by other universities. ORED has already embarked in such efforts as we work to increase faculty external funding. Through the Spring of 2019 these efforts can be completed and the initiative can be started during the summer and fall terms.

## 1.3.2 Projected costs or savings of implementation

• Costs are listed under 1.3.2.2 below

#### 1.3.2.1 Startup or phase-in (one-time) costs

• There are no one-time costs, as all costs are recurring

# 1.3.2.2 Recurring costs or savings, as applicable

- The costs associated with this initiative are related to the provision of workshops, costs of internal reviews of grant applications, and networking and outreach efforts for faculty. Universities that have been successful in efforts such as this have established "academies" that consist of a collaborative effort among the Research Office's Research Development unit, the colleges and the university's governmental relations unit. Such "academies" select the faculty with plans to submit grant applications, provide workshops and mentoring, as well as connect faculty with program officers in the relevant funding agencies. The recurring costs for this initiative would be as follows (with a total of \$125,000 annually):
  - o Workshop and Mentoring Consultants: \$75,000 annually
  - Travel to relevant conferences, workshops, and meeting progam officials: \$30.000
  - o Funding for grant review efforts: \$20,000 annually

# 1.3.2.3 Space needs or space savings, as applicable

• No new space needs

## 1.4 Accountability Plan

# 1.4.1 Measure(s) of impact (assessment plan)

- 1. Improvements in grant proposal success rates
- 2. Increases in the proportion of FIU tenure/tenure track faculty with external grant funding

#### 1.4.2 Proposed benchmark(s)

- 1) Improvements of proposal success rates by the university of 10% by year 2 of the establishment of the initiative, and 33% by 2025.
- 2) Increases in the proportion of faculty with external funding. During the past 4 years, there has been an increase of 25% in the proportion of faculty with external funding. The goal with the implementation of this initiative is for a 50% increase by 2025 (thus increasing the proportion of funded faculty from the current 27% to 40%.

## 1.5 References and Appendices





# Highest Research Pillar – Workgroup 3B Improving Carnegie Highest Research and achieving SUS Research Preeminence

Recommendation #63 – Multi-Dimensional Support Leading to Faculty Success

# 1.1. Description and justification of program, savings, or efficiency recommendation (supported by data/research/best practices)

**Description:** Provide three-dimensional support for faculty engaged in active fundraising and large project management.

The three dimensions include:

- (1) budget and other administrative support;
- (2) technological support via Department of IT (DoIT); and
- (3) ORED drive with updated proposal support materials.

#### **Rationale and Solution:**

<u>Dimension 1</u>: Faculty are not accountants and currently deal with minutia questions from ORED staff about their budgets. ORED budget staff assigned to an individual project should provide solutions and answers to the faculty member to lift a burden off their shoulders. They should also provide monthly budget updates of the expenditures to project managers and organize quarterly in-person meetings to discuss spending and possible budget amendments. Currently, communication responses from ORED take a few days, or more, which can jeopardize a submission. Having an ORED budget person dedicated to the proposal from the beginning would assist the PI greatly.

<u>Dimension 2</u>: Research faculty and prospective research faculty in many cases do not know what IT resources and support are available to them. DoIT can and should play a bigger role in helping faculty with fundraising and project management. During the research faculty recruitment process, DoIT literature outlining IT resources and support options should be given to the prospective hire. By request, subsequent meetings can be scheduled with DoIT to provide further details and provide a needs assessment, which can then be incorporated as an IT startup package to be included in offer letters. For strategic hires in preeminent or emerging preeminent programs, meetings with DoIT should be setup as a matter of regular process.

In the case of proposal submissions that need IT resources, injecting DoIT into the proposal preparation process can help ensure that the appropriate campus IT resources are included. This will help avoid duplicity and ensure the best IT solution possible is being proposed. One way of achieving this goals is to work with ORED to change or add new ePRAF IT questions, which when answered could trigger discussions with DoIT..

<u>Dimension 3</u>: Proposal submissions are often unnecessarily time-consuming and the process needs to be streamlined to ensure the submission of more and higher quality applications. Currently faculty, and especially new hires (who do not yet have working relationships with ORED staff), spend the majority of their time on preparing application appendices and support documents rather than focusing on forming strategic partnerships, writing proposal narratives and polishing research designs. ORED's Pre-Award should create a drive with separate folders for each major funding agency. For example, NSF, NIH, NIJ and DOD should have their own folders. These individual folders should have updated lists of requirements for the appendices and completed forms. As requirements for application submission change frequently, PIs will save a lot of time if someone at ORED prepares the required appendices and forms in the folders by funding agency.

# 1.2. Targeted Metric(s)

This recommendation targets the specific Preemient Research University Funding metrics:

- 1. Research Expenditures for both Science & Engineering and Non-Medical Science & Engineering
- 2. National Ranking in STEM Research Expenditures
- 3. Doctoral Degrees Awarded Annually
- 4. Number of Post-Doctoral Appointees

# 1.3. Feasibility Assessment

# 1.3.1. Implementation considerations and timeline

- 1. Hire and train additional grant support personnel (to assist with post-award needs) to be assigned to colleges.
- 2. Raise incoming Ph.D. student stipends each year to reach more competitive levels...
- 3. Create funding agency folders in ORED drive in first year.
- 4. DoIT to create IT resource and support recruitment literature in the first year

# 1.3.2. Projected costs or savings of implementation

From the implementation items listed above, the ones that will have specific costs are the ones pertaining to hiring research support personnel to assist in the colleges, increasing PhD student stipends, and postdoc stipends. Below are assumptions for each of these:

# 1) Hiring research administration and budget support personnel dedicated to each college:

• It would be be inefficient to have one additional research personnel per college, because for some colleges there is insuffient research proposal and award volume for one FTE. Another consideration is that once such staff is recruited, there should be other adjustments to ORED pre-award and post-award personnel that may create better support to faculty in other areas.
Therefore, the proposal may be to initially create three budget positions that provide support for the three colleges with the highest volumes (CASE, Engineering and Computing and Public Health & Social Work). There would be one position for CASE, one for Engineering and Computing and one for the combined Health Colleges (Public Health & Social Work, Medicine and Nursing & Health Sciences). Implementation may begin in

# Fall 2019, with three positions. Cost would be approximately \$75,000 per person (including fringe benefits) for a total of \$225,000 annually.

# 1.3.2.1. Startup or phase-in (one-time) costs

There are no one-time costs. All costs are recurring.

## 1.3.2.2. Recurring costs or savings, as applicable

Recurring costs are as follows:

- 1) Research Personnel Assigned to Colleges: \$75,000 per FTE, with three proposed FTEs, cost would be \$225,000 annually.
- 2) PhD Student Stipends: Cost is \$167K per student for each percentage point increase. This initiative may be a combination of removing some of the fees students pay and increasing stipend. If the increases are done over multiple years, one scenario may be as follows:
  - a. First annual increase of 3% would cost \$500K
  - b. Second annual increase of 2% would cost \$344K
  - c. Third annual increase of 2% would cost \$360K

# 1.3.3. Space needs or space savings, as applicable

Additional space will depend on the number of new hires, including graduate students, post-doctoral associates, and research professors who are working on funded research projects. This will also depend on potential new hires within ORED (e.g., additional budget specialists).

#### 1.4. Accountability Plan

# 1.4.1. Measure(s) of impact (assessment plan)

<u>Dimension 1</u>: Budget and other administrative support

- 1. % of faculty who are satisfied with budget and administrative support from ORED.
  - Datasource: online survey of the faculty whose projects are currently managed by ORED.
- 2. % of faculty who are satisfied with budget and administrative support from their department.
  - Datasource: online survey of the faculty whose projects are currently managed by ORED.
- 3. % of projects on which ORED has provided monthly budget updates to PIs. Datasource: budget analysts can be required to track this for their projects.
- 4. % of projects on which ORED has held quarterly meetings with PIs.

  Datasource: budget analysts can be required to track this for their projects.

# Dimension 2: Technological support via DoIT

- 1. % of new hires that are satisfied with help DoIT provided explaining IT resources, IT Support, Needs Assessment conducted.
  - Datasource: online survey of new hires (a sample if more than 30; or all of them if 30 or less).
- 2. % of faculty that are satisfied with the preparation support provided by DoIT for the IT sections of their proposals
  - Datasource: online survey of faculty who received DoIT's support (a sample if more than 30; or all of them if 30 or less).

# Dimension 3: ORED drive with updated proposal support materials

- 1. % of faculty who have used the ORED proposal support materials hard drive (Proposal Hard Drive PHD).
  - Datasource: online tracking of the drive visitors. The system will likely need to be (re)designed to track that.
- 2. % of faculty who are satisfied with Proposal Hard Drive (PHD). Datasource: online survey of faculty who used the Proposal Hard Drive (PhD).
- 3. % of faculty who believe that Proposal Hard Drive (PHD) is updated. *Datasource: online survey of faculty who used the Proposal Hard Drive (PhD).*

# 1.4.2 Proposed benchmark(s)

#### Dimension 1: Budget and other administrative support

- 1. % of faculty who are satisfied with budget and administrative support from ORED.
  - o Benchmark: >80% in 2020
- 2. % of faculty who are satisfied with budget and administrative support from their department.
  - o Benchmark: >80% in 2020
- 3. % of projects on which ORED has provided monthly budget updates to PIs.
  - o Benchmark: >95% in 2020
- 4. % of projects on which ORED has held quarterly meetings with PIs.
  - o Benchmark: >75% in 2020

# <u>Dimension 2</u>: Technological support via DoIT

- 1. % of hiring managers who are satisfied with the recruitment help provided by DoIT.
  - o Benchmark: >80% in 2020; >90% in 2025

- 2. % of hiring managers who are satisfied with the help provided by DoIT in creating IT Startup packages for possible inclusion in offer letters.
  - o Benchmark: >80% in 2020; >90% in 2025
- 3. % of new hires that are satisfied with help DoIT provided explaining IT resources, IT Support, Needs Assessment conducted.
  - o Benchmark: >80% in 2020; >90% in 2025
- 4. % of proposals that contain IT resources that have used DoIT support materials (Facilities & Data Management Plans).
  - o Benchmark: > 40% in 2021; >60% in 2023; >80% in 2025
- 5. % of PIs that are satisfied with the preparation support provided by DoIT for the IT sections of their proposals
  - o Benchmark: >80% in 2021; >90% in 2025

<u>Dimension 4</u>: ORED drive with updated proposal support materials

- 1. % of faculty who have used the ORED proposal support materials hard drive (Proposal Hard Drive PHD).
  - o Benchmark: >80% in 2020
- 2. % of faculty who are satisfied with Proposal Hard Drive PHD.
  - o Benchmark: >80% in 2020
- 3. % of faculty who believe that Proposal Hard Drive PHD is updated.
  - o Benchmark: >80% in 2020

## 1.5 References and Appendices





# Highest Research Pillar – Workgroup 3B Improving Carnegie Highest Research and achieving SUS Research Preeminence

## **Recommendation #64 – New Faculty Recruitment**

# **1.1.** Description and justification of program, savings, or efficiency recommendation (supported by data/research/best practices)

Faculty are the main driver of research growth at a University. To achieve SUS Preeminence, maintain Carngie R1 Highest Research Activity, and to improve national rankings, including reaching top 50 in the NSF research rankings, FIU must dedicate resources to recruiting incremental faculty. The addition of faculty will have an impact beyond research, as they also contribute to student success metrics.

In the 2018 NSF Higher Education Research and Development (HERD) report FIU was ranked #85 among all Public Universities in the U.S. This is an improvement from #100 in 2011; but a decline of two spots from the 2018 report. FIU also has 5 out of 8 NSF Science & Engineering fields ranked top 100 nationally; which is one of the SUS BOG research preeminence criteria. During the past three years, the public universities nationally ranked #50 have had \$300M in research expenditures. In 2018, the public university ranked #75 had \$193M in research expenditures. To achive \$300M in total research expenditures by 2025, while maintaining the current growth trajectory in research productivity among FIU faculty, the university would have to recruit 100 additional faculty.

The recruitment of the new faculty will have greater success if it is strategic. Some of the strategic approaches that may be taken include:

- a. Recruiting faculty into already identified preeminent programs or interdiscipilinary centers in the University,
- b. Recruit faculty into the most productive departments in terms of research funding and student success,
- c. Recruit faculty into cross-cutting BIG IDEAS in which FIU can become a national and international leader.
  - The BIG IDEAS could be guided by federal priorities, Grand Challenges identified by the National Academies, and think tanks such as The Milleniuml Project and Bill and Melinda Gates Global Grand Challenges.
- d. Recruit faculty using a mixed cluster hiring model; For every senior established tenure-line faculty member recruited, also recruit one or two tenure-line junior Assistant Professors with high promise independent of the senior recruit, such that a minimum of four tenure-line faculty form a cluster around the BIG IDEA. Additionally, recruit one or two research-track, non-tenure line faculty with partial (50%) salary support to strengthen the cluster.

From an execution standpoint, the points listed above (items a to d) can be accomplished by requiring that the recruitment of these faculty members is coordinated with the preeminent and emerging preeminent programs and the interdisciplinary centers in collaboration with departments; and that the productivity of the department be considered in the recruitment.

#### **1.2.** Targeted Metric(s)

- Total Research Expenditures
- Science & Engineering Research Expenditures
- Non-Medical Science & Engineering Research Expenditures
- Doctoral degree production

#### 1.3. Feasibility Assessment

## **1.3.1.** Implementation considerations and timeline

- To achieve 2025 targeted metrics, the recruitment of the targeted number of faculty should be completed by 2025.
- If the goal is to achieve \$300M in total research expenditures by 2025; the recruitment of the 100 new facultymay be staggered as follows:

	2019	2020	2021	2022	2023
\$300M Goal (100	15	15	20 faculty	20	30
faculty)	faculty	faculty		faculty	faculty
Cost	\$4.4M	\$4.5M	\$6.2M	\$6.5M	\$10M
\$315M Goal (100	20	22	25 faculty	35	35
faculty)	faculty	faculty		faculty	faculty
Cost	\$5.8M	\$6.6M	\$7.8M	\$11.3M	\$11.9M

## 1.3.2. Projected costs or savings of implementation

• See table on 1.3.1 above

#### 1.3.2.1. Startup or phase-in (one-time) costs

• See table on 1.3.1 above

# 1.3.2.2. Recurring costs or savings, as applicable

• See table on 1.3.1 above

•

#### 1.3.3. Space needs or space savings, as applicable

• Currently, the University has 316,721 s.f. of research space (plus core facilities). To accommodate the research growth of \$115M (from current \$185M to \$300M) an additional \$196,000 s,f, of research space will be needed.

#### 1.4. Accountability Plan

# 1.4.1. Measure(s) of impact (assessment plan)

- Accelerated research growth (awards and expenditures) beginning in FY 2020-21 with 10% higher growth than current growth trends.
- Accelerated research growth (awards and expenditures) beginning in FY 2022-23 with 15% higher growth than current growth trends.
- Accelerated research growth (awards and expenditures) beginning in FY 2024-25 with 20% higher growth than current growth trends.

# **1.4.2.** Proposed benchmark(s)

- Achieving SUS Research Preeminence
- Maintaing Carnegie Highesr Research designation
- Rankimng of top 50 among public universities in NSF HERD by 2025

## 1.5. References and Appendices





# Preeminence Pillar – Workgroup 2B Prioritizing facts that maximize targeted university rankings

Recommendation #27 – Develop predictive model of interactions among metrics

# 1.1. Description and justification of program, savings, or efficiency recommendation (supported by data/research/best practices)

A recurring challenge to effective decision-making is a lack of predictive models to understand down-stream consequences of particular interventions. This is especially true for prioritizing metrics because how metrics are calculated varies among surveys and different surveys that we would like to target have opposing foci (e.g. excellence vs social mobility) that make informed decision-making critical. Currently, we do not have an effective model framework for simulating potential interventions to predict their likely impacts on metrics and rankings. Here, we propose to develop a modeling initiative that will enhance university-wide decision making. It is likely that this proposal is echoed by other workgroups and could be built into a larger integrated modeling effort.

#### 1.2. Targeted Metric(s)

This effort, theoretically, targets all metrics.

#### **1.3.** Feasibility Assessment

#### 1.3.1. Implementation considerations and timeline

A dedicated postdoc should be hired to lead the modeling effort in consultation with a workgroup that includes individuals from Academic Affairs, ORED, and key Colleges/Schools. This should be initiated in Spring 2019. An initial model should be completed by Summer 2019.

## 1.3.2. Projected costs or savings of implementation

Depending on the level of the hire, this effort would cost approximately \$70,000 per year in salary and indirect costs. Further expansion of the effort could include PhD students in the Higher Education program tasked with specific modeling/analysis efforts.

#### **1.3.2.1.** Startup or phase-in (one-time) costs

N/A

#### 1.3.2.2. Recurring costs or savings, as applicable

Salary for postdoc and possibly graduate students

## 1.3.3. Space needs or space savings, as applicable

One office for the postdoc. Space for graduate students if the project is expanded

## 1.4. Accountability Plan

# 1.4.1. Measure(s) of impact (assessment plan)

For the purposes of our workgroup, the ultimate metrics will be FIUs rankings in State programs and National and International Surveys. Targeted assessments will be made for specified programs that are developed for each ranking. More specifically, however, we will be able to assess the predictive abilities of our model by comparing predicted and observed outcomes and use these to improve model performance.

## **1.4.2.** Proposed benchmark(s)

- 1) Maintain performance funding
- 2) Reach state university preeminence
- 3) Maintain Carnegie Classification of Institutions of Higher Learning
- 4) Achieve/Maintain Top 50 rankings in identified surveys

#### 1.5. References and Appendices



# Preeminence Pillar – Workgroup 2B Prioritizing facts that maximize targeted university rankings

# Recommendation #28 – Review and Optimize Reporting of Key Data Elements

# 1.1. Description and justification of program, savings, or efficiency recommendation (supported by data/research/best practices)

In several key metrics (e.g. the proportion of alumni giving, amount spent per student), it is unclear whether FIU is reporting data in a manner consistent with other universities. Although efforts will still be necessary to improve our performance in these areas, it is possible that changes in reporting practices would result in rapid improvements in these metrics. In addition, there are several surveys that require data reporting or pledges from the university that could improve our rankings while requiring little or no additional funding. Our subgroup proposes to 1) ensure that all reporting is completed in a manner consistent with other institutions that ensures our best possible scores and 2) FIU submit information needed to improve the Washington Monthly Ranking.

## **1.2.** Targeted Metric(s)

- Proportion of Alumni Giving
- Amount spent per student
- Participation in Segal AmeriCorps Education Award Matching
- Participation in the National Study of Learning, Voting, and Engagement (NSLVE)

#### 1.3. Feasibility Assessment

# **1.3.1.** Implementation considerations and timeline

These recommendations should be implemented as soon as possible with submissions occurring at the times required by the specific surveys affected.

Cost \$100 to \$5900 per student who received a Segal AmeriCorps Education Award.

# **1.3.2.** Projected costs or savings of implementation \$0

# **1.3.2.1.** Startup or phase-in (one-time) costs \$0

# 1.3.2.2. Recurring costs or savings, as applicable

N/A

# 1.3.3. Space needs or space savings, as applicable $N\!/A$

#### 1.4. Accountability Plan

#### 1.4.1. Measure(s) of impact (assessment plan)

#### **1.4.2.** Proposed benchmark(s)

Upon the review and revision of the metrics above, reporting criteria will be adapted to ensure maximum impact. Following review of reporting criteria, benchmarks will be created for each metric to capture the range of values that would allow FIU to break safely into the top 50 of each survey, as determined by BOG methodology.

Subsequently, based on the distance between FIU's current standing in the metrics and the proposed benchmarks, metrics will be prioritized to ensure the greatest return on investment across multiple surveys.

# 1.5. References and Appendices

Segal AmeriCorps Education Award Matching Application PDF National Study of Learning, Voting, and Engagement (NSLVE) Application PDF



# Financial Base Pillar – Workgroup 4B Driving organizational efficiencies and increasing revenues

Recommendation #47 - Leverage Remote Workforce

# 1.1. Description and justification of program, savings, or efficiency recommendation (supported by data/research/best practices)

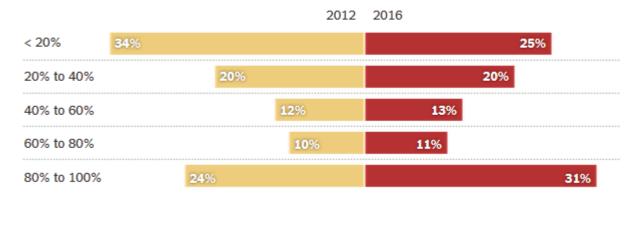
With mobility and remote working being a way of life today, organizations are opting for smaller desk numbers and employing unassigned and social spaces to accommodate mobile and remote workers when they are present. As stated by Global Workplace Analytics, a globally-recognized authority on creating agile workplace strategies, "Organizations that continue to use 19<sup>th</sup> Century workplace designs and 20<sup>th</sup> Century workplace practices to do 21<sup>st</sup> Century work will not survive." FIU has an opportunity to create an agile workforce that will foster engagement, productivity, creativity and innovation.

By definition, an agile workforce is the ability to have multiple work models that allows the organization to fluctuate between them to best serve the needs of the business. The traditional team that is on site, the teleworker working from home, temporary/seasonal employees and contractors are all examples of the type of teams that support the agile workforce model. According to population estimates released last year by the U.S. Census Bureau, millennials are not only the country's largest living generation but they've now become the largest segment of the U.S. workforce. They're tech-savvy, flexible and more independent than ever before.

Diversity, talent pool access and flexibility are some of the advantages of having remote workforce. The type of roles that lends itself to work remote are the ones that don't require collaboration but rather increased productivity. According to John Sullivan, a professor of management at San Francisco University who runs a human resource advisory firm, studies show that people who work at home are significantly more productive. Below a Gallup studies show that there in an increase in time employees spend working remotely has increased over the last four years confirming the nation's trend to adopting this type of approach.

# The Time Employees Spend Working Remotely

Americans who work remotely are doing so for longer periods of time.

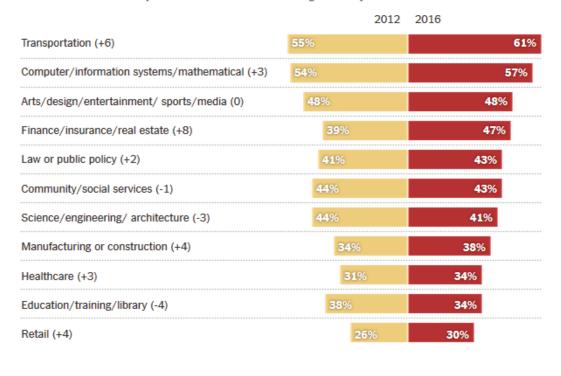


Source: Gallup

Although transportation and information technology are the industries that lead the amount of workers who spend some of the time working remotely, there is an opportunity for all industries.

## Most Industries Embrace Remote Work

Share of workers who spend some of the time working remotely.



Source: Gallup

Establishing a remote workforce will help ensure your team is more diverse, that it's assembled with the most talented people and that it will add more flexibility. "Gallup consistently has found that flexible scheduling and work-from-home opportunities play a major role in an employee's decision to take or leave a job," the polling agency wrote in a report on those and other workplace findings.

Some of the employer's benefits of having remote employees are:

- 1. **Lower Costs and Improved Productivity:** The most obvious advantage to a company's bottom line is the savings in office-related expenses. But, another hidden gem is increased productivity when employees are no longer on long commutes. If you hire the right people, you will actually get a better yield on time spent. <u>Lee Reams</u>, <u>ClientWhys</u>, <u>Inc.</u>
- 2. Less Overhead: Distributed teams enjoy certain advantages, especially reduced fixed costs. From an employee's perspective, there is no transportation cost and no investment of time for transportation. As for the employers, they save major overhead as a result of not having to rent office space for that employee. <a href="Ibrahim AlHusseini">Ibrahim AlHusseini</a>, The Husseini Group

3. Increased Cash Flow: Remote workers often mean more cash flow and greater productivity, increasing a company's bottom line. Allowing people to work remotely often cuts overhead by reducing expenses, such as a larger office space. Greater productivity, which again increases the bottom line, is typically achieved because employees have the freedom to work at their own pace, knowing they have a job to complete. - Justin Goodbread, Heritage Investors

In addition to the benefits described above, by reducing the use of current space allocated for the workforce, space can be reallocated for student learning areas to support student success initiatives. The additional space can also serve as research space for more labs increasing research staff/post-doctoral Fellows and research doctoral degrees.

#### **Employer Benefits:**

- Productivity
- Real estate and related costs
- Turnover
- Reduced absenteeism
- Additional parking
- Less traffic congestion

#### **Employee Benefits:**

- Gas
- Work related expenses
- Time

#### **Community Benefits:**

- Oil
- Greenhouse gases
- Accidents
- Highway Maintenance

#### 1.2. Targeted Metric(s)

#### **Performance metrics**

- Research staff/post-doctoral Fellows
- Research expenditures
- Research doctoral degrees

#### **Organizational metrics**

- Footprint efficiency
- Productivity
- Cost reduction

#### **People metrics**

- Employee engagement
- Employee satisfaction
- Health and well-being

# 1.3. Feasibility Assessment

## **1.3.1.** Implementation considerations and timeline

- Executive endorsement
- IT involvement is critical to make sure we have the correct technological infrastructure to be able to work anywhere.
- Strategic reallocation of space to research or student learning from reduced workforce footprint.
- Train managers to manage by results and develop trust-based practices and policies.
- Provide the tools, technology, and training people need to collaborate across distances
- Employees need to understand why they were or were not chosen for telework
- Employees should see telework as a benefit that is earned, not given.
- Standards of selection should be uniform.

# 1.3.2. Projected costs or savings of implementation

Costs:

- Training for Managers on how to manage remote workers and manage by performance( Internal cost)
- Cost of analysis on jobs that would lend themselves to telecommuting( Internal cost)
- Needed hardware for home office setup( Cost incurred by employee).

#### Savings:

#### Productivity

Employer – Productivity Assumptions:

- 27% increase in productivity on telecommuting days.
- Value of employee time = \$32,136 per man-year (Bureau of Labor Statistics average earnings)

Half-time telecommuting among those with compatible jobs could save employers over \$10,000 per employee per year – the results of higher productivity, reduced facility costs, lower absenteeism, and reduced turnover.

Annual Increase in Productivity for Businesses					
Telecommuters	50	100	500	U.S.	
Productivity Increase	\$288,176	\$576,351	\$2,881,756	\$235.4 B	

#### Real Estate, Electricity, Office Expenses

Employer – Real Estate Assumptions:

- Average office cost = \$16,422/year
- Reduction with half-time telecommuting = 18%
- Electricity savings = 4,400kWh per person, per year

Traditional offices are expensive, inefficient, inflexible, and difficult to scale (particularly down). Telecommuting programs can reduce the capital drain of owning or leasing a building. Along with the lease/purchase costs, a telecommuting program can save on parking lot leases, furniture, supplies, maintenance, security, janitorial, insurance, taxes, common area, and other related costs. Telecommuting strategies can also reduce ADA, EPA, and OSHA compliance costs.

Telecommuting programs can eliminate the need for new office structures. Some state and local governments already require a telecommuting feasibility study prior to all new office moves.

Telecommuting can help companies consolidate inefficient space and eliminate the need for a local presence in regionally regulated industries such as healthcare, insurance, and finance.

Through office hoteling and hot-desking programs, even part-time telecommuting can reduce office-related expenses.

Annual Saving in Real Estate & Electricity for Businesses					
Telecommuters	50	100	500	U.S.	
RE/Electricity Savings	\$151,846	\$303,692	\$1,518,462	\$124.0 B	

#### Absenteeism

Employer – Absenteeism Assumptions:

- Average reduction in absenteeism = 3.7 days a year
- Annual per person cost of unscheduled absences = \$1,800

Unscheduled absences cost employers billions. They necessitate staffing redundancies, they inconvenience co-workers and customers, and they reduce productivity. Telecommuting has proven to be the second most effective method of reducing absences (flexible scheduling is first).

Telecommuters often continue to work when they're sick. They're able to return to work more quickly following pregnancy or surgery. And they're able to handle personal appointments (e.g. cable installer, appliance delivery, teacher consult, etc.) without losing a full day of work.

Annual Saving Due To Reduced Absenteeism for Businesses					
Telecommuters	50	100	500	U.S.	
Absenteeism Savings	\$56,700	\$113,400	\$567,000	\$46.3 B	

#### Attraction and Retention

Employer – Attraction and Retention Assumptions:

- 25% reduction in attrition
- Cost of turnover = 138% of wages
- Average U.S. Wage = \$32,136

Almost 80% of employees say they would like to work from home, at least part of the time. More than a third say they'd choose the option to telecommute over a pay raise.

The cost of replacing an employee extends far beyond the recruiting process; it includes separation costs, temporary replacement costs, training costs, and lost productivity. A lost employee can also lead to lost customers, co-workers, and corporate intelligence.

## 1.3.2.1. Startup or phase-in (one-time) costs

- Make the workforce mobile by purchasing laptops.
- Invest in home monitor if needed

#### 1.3.2.2. Recurring costs or savings, as applicable

#### 1.3.3. Space needs or space savings, as applicable

• Faculty/Staff parking reduced and can be allocated to student parking.

#### 1.4. Accountability Plan

# 1.4.1. Measure(s) of impact (assessment plan)

- Employee satisfaction with work/life balance
- Employee engagement and retention
- Cost reduction
- Real estate/workspace reduction
- Employee productivity

# **1.4.2.** Proposed benchmark(s)

# 1.5. References and Appendices

Lister, Kate; http://TeleworkResearchNetwork.com (2010) Telecommuting Benefits: The Bottom Line.

"The once" ALTERNATIVE WORKPLACE STRATEGIES. Fifth Biennial Global Benchmarking Study 2018. Originated by New Ways of Working, 2008-2014.



# Financial Base Pillar – Workgroup 4B Driving organizational efficiencies and increasing revenues

**Recommendation #53 – Industry Partnerships** 

# 1.1. Description and justification of program, savings, or efficiency recommendation (supported by data/research/best practices)

The Office of Auxiliary and Enterprise Development (AED) is responsible for new enterprise development with emphasis on supporting the University's strategic plan its existing auxiliary operations. AED focuses on FIU's future by supporting new growth opportunities and existing collaborations throughout their lifecycle, thereby ensuring all necessary tools and resources are available.

Under the AED umbrella, the Office of Business Services (OBS) is an auxiliary that oversees all the retail and dining on campus. The relationship between OBS and its business partners involves multifaceted contracts. These contracts have evolved from a purely rental of space and/or commission to adding OBS marketing support, paid internships, and FIU scholarships. The latest contractual variation includes the addition of a jobs provision. OBS recently negotiated a contract for dining services with a new business partner. Our new partner is contractually committed to provide a certain level of services, scholarships, internships, and capital improvements to enhance the dining experience and student quality of life. Moreover, this new relationship involves an annual offering, for the length of the contract, of a significant number of jobs to FIU graduates at a minimum salary level.

This provision enables the University to guarantee employment after graduation to a significant number of qualified students. The progress of these students may also be tracked as their careers develop, significantly impacting performance metrics.

The mechanics of this new partnership as it relates to student benefits is as follows: FIU's designated liaison is Associate Provost, Academic Career Success or designee. FIU shall provide Business Partner's Human Resource Director and Director of Student Success with introductions to FIU's Career and Talent Development team and placement officers and notify vendor promptly of any personnel changes in these areas.

#### **Jobs for FIU Students**

Two hundred (200) students shall be extended full-time job offers within one (1) year of their graduation date each academic year over the length of the contract. The minimum salary is \$25,000 per hire, not including benefits. Job may be anywhere in the U.S. with a preference in Florida.

#### 1.2. Targeted Metric(s)

Florida's public university system operates under a Performance Funding Model, focusing towards increased accountability and efficiency. The following metrics from the Model have been identified as having the potential to be impacted by these industry business partnerships:

- 1 Percent of bachelor's graduates employed and/or continuing their education further one (1) year after graduation
- 2 Median average full-time wages of undergraduates employed in Florida one (1) year after graduation

To remain aligned with improvement of these metrics and ensure continual growth, the following critical performance indicators have been identified to track program performance:

- Detailed quarterly reporting by business partner(s) to OBS and the Career and Talent Development
- Incorporation of similar contract provisions with new/existing business partners and the University

#### 1.2.1. Projected costs or savings of implementation

#### 1.2.1.1. Startup or phase-in (one-time) costs

There is currently no start-up or other costs to FIU; all costs are absorbed by the business partner(s). An existing resource within FIU HR is assigned as a contact to the business partner(s), who in turn, has a dedicated person within their own HR team to handle much of this operation.

## **1.2.1.2.** Recurring costs or savings, as applicable

There are currently no recurring costs to FIU; all costs are absorbed by the business partner(s).

#### 1.2.2. Space needs or space savings, as applicable

There are currently no space needs or space savings associated with this operation.

#### 1.3. Accountability Plan

## **1.3.1.** Measure(s) of impact (assessment plan)

The Business Partner shall:

- Collaborate with the Career and Talent Development team and other University career centers to recruit, find, interview and place students into either a full-time job or paid internship.
- Attend at least two (2) career fairs annually for the Fall and Spring semesters and participate in more when available/feasible.
- Participate in other recruitment related activities on campus when available (information sessions/webinars, professional development workshops, mock interviews, resume reviews/critiques, networking sessions).
- Establish relationships with related student clubs/organizations on campus and partner with them in promoting/marketing these opportunities to their members (i.e., email blasts, and company presentations during their general meetings).
- Support on-campus recruitment and outreach efforts for full/part-time, hourly and salary opportunities.

• Shall have a designated Campus Recruiter to act as the primary point of contact and coordinator for all campus recruitment efforts to meet the targeted annual job offers to FIU recent graduates.

OBS in collaboration with the Career and Talent Development team shall track and report:

- Ensure the jobs are offered (number of jobs posted specific to the terms of each contract, minimum salary postings, number of FIU applicants and anticipated/actual graduation dates, number of offers, confirmation of position fulfillment, accepted salary).
- growth and progress at intervals during the first 2 years of employment with the business partner(s)
- the Percent of bachelor's graduates employed and/or continuing their education further one (1) year after graduation
  - the Median average full-time wages of undergraduates employed in Florida one (1) year after graduation

#### **1.3.2.** Proposed benchmark(s)

To grow the contractual jobs initiative across new and existing business partnerships and continue to track trends.

# 1.4. References and Appendices





# Financial Base Pillar – Workgroup 4B Driving organizational efficiencies and increasing revenues

Recommendation #44 – Establish a Taskforce to Conduct Assessments of Current and Best Practices for University Shared Services Models

# 1.1. Description and justification of program, savings, or efficiency recommendation (supported by data/research/best practices)

Seeking greater operational efficiency and effectiveness, innovative leaders continue to push their campuses and their own offices to implement shared services to achieve both quality and financial improvements. Research reveals that shared services extend to nearly every aspect of higher education operations, from printing services to donor prospect research.

The five most common functions for shared services are finance, information technology, human resources, procurement, and payroll. Most of these functions are largely considered "back office," in that they rarely interact with students or external constituents.

Higher education's estimated and realized results tend to lag behind the savings achieved by the private sector. Private sector organizations are more willing to cut staff and mandate changes more forcefully than higher education. In keeping with higher education's collaborative, consensus-driven culture, few system leaders seek to cut staff and mandate change from the top down as they implement shared services.

Procurement represents the best opportunity to build trust in shared services and to realize immediate financial savings. Human resources is the most difficult to implement due to the number of staff and duties involved. Information technology spans such a large portion of system and campus operations that it may take longer than any other functional area. However, information technology offers many opportunities for savings in staffing levels.

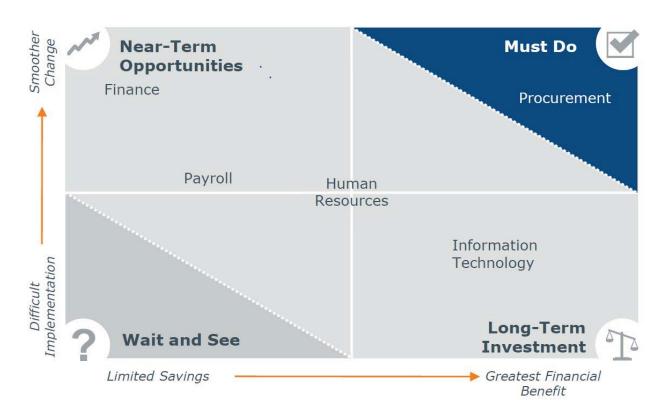
Finally, finance may not yield significant savings, but the transactional nature of the tasks makes them suitable for a shared services model. The ease of implementing shared services in this area has led some systems to start with finance to build credibility for future shared services initiatives. Many system leaders want the business processes within finance to be standardized for efficiency and quality purposes. System leaders should ensure that they engage the practitioners on individual campuses in standardizing the business processes and training before they implement any new practices or technology platform for the function. Other major benefits include error reduction, risk mitigation, process efficiency, and data integrity, with easier and improved reporting.

# 1.2. Targeted Metric(s)

By realizing savings or generating revenue through shared services models, FIU may redirect resources and reinvest savings in mission-critical initiatives and activities tied to university goals impacting metrics specific to student success and research excellence. These can also result in space management efficiencies and optimized space utilization.

#### **Feasibility Assessment**

	Financial Benefit	Range of Benefits Reported	Ease of Implementation	Reported Implementation Challenges
Procurement	High	\$7M- \$200+	High	Encouraging on-contract purchasing and e-procurement system usage
IT	High	\$3M-\$10 million	Medium	Campuses want customized IT solutions; Difficulty retaining highly skilled staff
Human Resources	Medium	\$300K-\$3M	Medium-low	High need for local staff and services; Many tasks performed by generalists
Payroll	Medium	\$250K-\$1.5M	Medium-high	Many tasks performed by generalists; Sensitivity around changing any pay-related system
Finance	Low	\$200K-\$600K	High	Many tasks performed by generalists; Difficult to ensure accounts payable/receivable compliance



# 1.2.1. Implementation considerations and timeline

The ease and speed of shared services implementation represents the greatest difference between higher education and the private sector. In higher education a collaborative culture and a firmly resistant faculty and staff may stall or fully stop a shared services effort.

Factors contributing to difficulty of implementation:

- Cost
  - Purchasing new technology
  - Hiring new staff
  - Engaging Consultants
- Complexity
  - Standardizing numerous business processes
  - o Installing new technology platforms and software
  - o Disrupting large numbers of staff
- Conflict
  - Overcoming faculty concerns
  - Managing union negotiations
  - o Campus concerns about autonomy

## 1.2.2. Projected costs or savings of implementation

Shared services do not exclusively provide financial benefits. Many organizations have moved to the model to reduce errors in functions like payroll, reduce risk in human resources, and create common data definitions.

- Error Reduction
  - o Resolve payroll event mistakes
  - Improve tax withholding accuracy
  - Reduce late vendor payments
- Risk Mitigation
  - Reduce EEOC complaints
  - o Prevent research grant administration errors
  - o Reduce IT security breaches
- Process Efficiency
  - o Find best practices across the institution
  - o Process employee reimbursements faster
  - o Identify process bottlenecks through standardized data
- Data Integrity
  - Common data definitions
  - More accurate cost accounting
  - Data backup redundancy
- Easier reporting
  - Less time spent reconciling data differences
  - o Faster generation of reports to key external audiences
  - o Greater trust in individual campus reports

#### 1.2.2.1. Startup or phase-in (one-time) costs

The recommendation is to establish an internal team of central administration

# 1.2.2.2. Recurring costs or savings, as applicable

Universities often struggle to document the financial savings and cost avoidance associated with shared services, reducing trust in the initiative. Cost savings and cost avoidance should be clearly delineated during and after implementation of shared services. After determining cost savings, institutions should be required to deposit those funds in dedicated accounts that can only be used to invest in mission-critical activities. This requirement helps document how shared services help campuses move resources from administrative functions to instructional or other student-facing or research activities.

#### 1.2.3. Space needs or space savings, as applicable

Shared services may result in optimizing facilities and the use and allocation of space by centralizing back-office processing staff which could free up new space for academics, student success, and research initiatives.

# 1.3. Accountability Plan

# 1.3.1. Measure(s) of impact (assessment plan)

Identifying quality concerns in current-state functions can help build trust that the move to shared services will improve upon frustrating processes. In addition, the identification of highly damaging errors like payroll or payment errors provide urgency for the transition to shared services.

Accountability requires input from several levels of campus administrations. Practitioners should share ideas with each other across and between locations and shared services units to identify areas for improvement as well as new services that may be needed.

Three essential tasks to ensure ongoing improvement:

- Solve process problems and identify new practices
  - o Practitioners share practices and ideas to continuously improve
  - o Modify original process design based on implementation realities and new needs
- Ensure service quality to customer units
  - o Functional area leaders receive reports on KPIs and service level agreements
  - o Given authority to modify current services if underperforming emerges
- Identify new service and service opportunities
  - o Senior leadership reviews service performance to determine need for new investments
  - Based on strategic priorities and financial situation, leaders identify potential for new services
- Necessary information and reporting
  - o Service level agreements
  - o KPIs
  - o Cost and quality comparisons of current state vs. pre-shared services state
  - o Anecdotal feedback from customer units and staff
  - o Strategic plans and analysis of how shared services may contribute
  - Proposals for new efficiencies or new services that add competitive advantage to the institution

## **1.3.2.** Proposed benchmark(s)

Key performance indicators and targets build accountability and trust. Cost is only one aspect of a baselining exercise. Baselining quality measures also helps build greater understanding of the effectiveness of shared services.

#### **Methods to Identify Quality Baselines**

- Conduct focus groups of practitioners and "customers"
- Use cost baselining exercise to determine where inefficient, bottleneck procedures exist
- Include in staff surveys about current duties
- Identify highly visible markers of quality such as:
  - Recurring audit findings
  - Errors in payroll
  - EEOC complaints files
  - o Time to receive expense reimbursement

# **Using Data to Inform Shared Services Decisions**

- Include quality metrics in service-level agreements
- Use the data to direct feedback gathering sessions with customer units and staff
- Report KPI results to governance groups at least annually

## 1.4. References and Appendices

EAB Maximizing the Benefits of System Shared Services: Overcoming Barriers to Implementation and Execution, 2016





# Financial Base Pillar – Workgroup 4B Driving organizational efficiencies and increasing revenues

## **Recommendation #54 – P3 Monetization for University Assets**

# 1.1. Description and justification of program, savings, or efficiency recommendation (supported by data/research/best practices)

Explore P3 options to monetize University assets using unlocked Parking & Housing equity and future revenue streams.

	Housing	Parking	Total
Revenues	\$31 M	\$15 M	\$46 M
Expenses	\$18M	\$5.6 M	\$23.6 M
Net			
Revenue	\$13 M	\$9.5 M	\$22.5 M
Long Term			
Liabilities	\$87 M	\$64 M	\$151 M

#### **1.2.** Targeted Metric(s)

Capable of supporting multiple metrics due to up-front payment from P3 offset by liabilities.

#### **1.3.** Feasibility Assessment

#### **1.3.1.** Implementation considerations and timeline

Projected Lease/Leaseback Structure: FIU can continue to manage operations and rate structures and take back assets when propitious for repurposing

Off balance sheet financing for balance sheet flexibility

Benefits of lease/leaseback vs. concession:

- FIU retains economic upside
- FIU retains operational control
- Early termination rights

Benefits also include: Unrestricted use of Proceeds

Drawbacks: Requires Enabling Legislation

# 1.3.2. Costs or savings of implementation

Anticipated upfront payment \$251 M – bond payoff \$151M = \$100M for strategic investment

- 1.3.2.1. Startup or phase-in (one-time) costs
- 1.3.2.2. Recurring costs or savings, as applicable
- 1.3.3. Space needs or space savings, as applicable
- 1.4. Accountability Plan
- 1.4.1. Measure(s) of impact (assessment plan)
- 1.4.2. Proposed benchmark(s)

Similar to the concession at Ohio State University but this proposal is a Lease/Lease-back to maintain benefits listed above.

## 1.5. References and Appendices



# Student Success Pillar – Workgroup 1D Coordinating and accelerating academic and career success

# 1. Recommendation #18 – Tool for Scheduling of Courses

# 1.1. Description and justification of program, savings, or efficiency recommendation (supported by data/research/best practices)

Strategies aiming at reducing time and credits-to-degree can be divided in two categories (Shulock and Koester, 2014):

<u>Demand Side Strategies</u>: their goal is to help students make good selections regarding their unit load, courses and majors which will result in an expeditious progress through the curriculum.

<u>Supply-side strategies:</u> they strive to offer a curriculum of well-structured programs and a course schedule which will allow students who employ informed enrollment and course-taking choices to make timely progress toward graduation.

The scope of this recommendation places emphasis on <u>supply-side strategies</u>, specifically as it relates to enhancing course availability from an administrative perspective by providing professional staff and unit heads the tools they need in order to make decisions about which courses are necessary in order for the students to advance through the curriculum.

While there are many technological tools available at FIU (Ad Astra, PDA's, 25-live, major-maps, etc.), there is not one single system which could provide information about scheduling needs based on demand, student choices and behavior, courses needed for graduation, etc. The current business practice of scheduling courses at FIU is an automatic roll-out of the schedule which mirrors the most recent semester term (Fall 2018 mirrors Fall 2017, Spring 2019 mirrors Spring 2018, etc.). While departments are able to submit changes within a very limited window of time, strategic scheduling of courses requires expert synthesis and analysis of the varied data provided so optimal scheduling across departments has not been achieved. Additionally, scheduling priorities can conflict or be uncertain particularly in service departments.

Students find critical courses needed to graduate or to advance in their careers at FIU are not always available. This leads to significant delays which result in highly frustrated students who struggle navigating through the FIU systems and resources in order to find courses.

In order to address this problem, we propose an initiative to identify and strategically schedule bottleneck courses for each major which will make information about student course taking needs readily and easily available to all stakeholders.

We propose different strategies to accomplish this recommendation:

- a. Provide easy access dashboards for each unit
- b. Provide professional development for schedulers or enrollment managers for larger units (or clusters of smaller units)
- c. Colleges and departments develop course offering priorities along with centralized enrollment management and local deployment plans.
- d. Use technology to alert students of course offerings that will best meet their needs as established by major-maps

#### 1.2. Targeted Metric(s)

- 1. FTIC 2-yr Retention Rate (GPA>2.0)
- 2. FTIC 6-yr Graduation Rate and FTIC 4-yr Graduation Rate
- 3. Percent of Bachelor's Degrees Without Excess Hours

#### 1.3. Feasibility Assessment

- 1.3.1. Implementation considerations and timeline
- 1.3.2. Projected costs or savings of implementation
- 1.3.2.1. Startup or phase-in (one-time) costs
- 1.3.2.2. Recurring costs or savings, as applicable
- 1.3.3. Space needs or space savings, as applicable
- 1.4. Accountability Plan
- 1.4.1. Measure(s) of impact (assessment plan)
- 1.4.2. Proposed benchmark(s)
- 1.5. References and Appendices

Shulock N. and Koester, J. *Maximizing Resources for Student Success by Reducing Time- and Credits-to-Degree*. Retrieved from: <a href="http://www.hcmstrategists.com/maximizingresources/papers.html">http://www.hcmstrategists.com/maximizingresources/papers.html</a>



# Student Success Pillar – Workgroup 1D Coordinating and accelerating academic and career success

# 1. Recommendation #19 – 12-month Academic Year for Faculty

# 1.1. Description and justification of program, savings, or efficiency recommendation (supported by data/research/best practices)

Data from public regional universities suggest that institutional practices that do not aim at fostering or motivating effective student selections may in fact hinder time-to-graduation and retention (Shulock and Koester, 2014). Students have identified inability to get the courses they need as a barrier to their success (Complete College America, 2013). It is, therefore, critical to continue to gear all efforts towards providing a strategic, timely and comprehensive course schedule to the students.

This recommendation also focuses on the <u>supply-side strategies</u>. In order to achieve the ultimate goal of allowing students to make efficient choices (demand-side), as an institution FIU needs to ensure that courses that are identified as crucial to student progress and graduation are offered when needed. The following are suggested tactics to achieve this recommendation:

a. FIU needs to guarantee students that courses appearing on their degree map as a suggestion for a particular semester, these courses will be offered - particularly when these courses are needed for graduation. For this reason, FIU departments should prioritize gateway to graduation courses in their schedules for all semesters including summer.

Indiana, through House Bill 1348, requires public universities to offer the course for free in a future semester if the courses appearing on the degree map are not offered for a particular semester the student requires it. While this might be an extreme measure, FIU has the technical tools to make these determinations at the college level and, therefore, prioritize the requisite classes at the departmental level (see recommendation 1.c)

b. Course offerings are significantly affected by the availability of resources, particularly with regard to summer funding allocations for full-time faculty. The current system is costly and does not ensure that needed classes are offered in summer semesters. We recommend a12-month academic year calendar by staggering 9-month faculty assignments and increase use of 12-month faculty to teach prioritized classes.

- c. In order to offer a 12-month academic year schedule, it is also highly recommended to:
  - i. Fund summer as needed
  - ii. Summer course offerings scheduled similarly to fall and spring semesters and off-calendar schedules for emergent cases of courses needed for graduation (i.e. can be offered as needed with non-traditional timing)
  - iii. Prioritize faculty lines for classes which have a high demand and are needed for graduation
  - iv. Provide learning assistants (LA's) and teaching assistants (TA's) positions as needed for summer schedule (application process required for LAs funded through the Provost's office).
- d. At FIU it is widely believed that online students perform poorer as their face-to-face peers. However, student success in online courses varies greatly; sometimes even outperforming the face-to-face courses. For example, while Finance Management has a slightly higher online pass rate (70%) than its face-to-face counterpart (68.4%), World Civilization has a markedly lower online pass rate (61.5%) than the face-toface sections (79.9%) (data for 2010 - 2018 from analytics.fiu.edu). This is consistent with the literature related to student performance between face-to-face and online modes of instruction (Ni, 2013): higher dropout rates in online setting (Carr, 2000), in other cases the delivery method has been independent of the mode of instruction (McLaren, 2004), whereas in other studies online group sections have in fact scored slightly higher (Thirunarayanan & Perez-Prad, 2001). We recommend identifying both positive and negative pass rate differential for face-to-face and online courses, particularly in gateway to graduation course and, with consultation from online teaching and learning specialists, determine next steps by course. This may include increasing online enrollment for the positive differences and redesigning/refining courses with negative differences.

The new UFF collective bargaining agreement (CBA) establishes that each unit shall develop their own policies and/or procedures as it relates to faculty differential assignments. The separate overload compensation structure for online courses was removed and now all courses, regardless of modality, will be paid at the minimum rate of \$1,000 per credit hour. This change provides a unique opportunity for departments to be able to enhance the quality of online courses by providing additional resources which will enhance the student's experience through the course while compensating adjuncts and faculty accordingly.

The following recommendations aim at addressing the quality issues identified above and taking advantage of the recent CBA changes to incentivize enhanced support and professional support for online courses:

- i. Create group to examine online course taking success
- ii. Faculty are offered LA/TA support for highly online enrolled courses
- iii. Develop a professional development and course redesign for prioritized courses (similar to hybrid course design program)
- iv. Provide data to colleges and departments that will assist them in the development of policies and procedures to properly compensation full time faculty and adjuncts for online instruction
- e. Prior research shows that adjunct teaching is negatively related to retention rates (Schibik and Harrington 2004; Ehrenberg and Zhang 2005). It is widely believed that non-permanent faculty hinder the student's ability to establish long-lasting relationships with their teachers and thereby creating an affinity with the institution (Baldwin and R.Wawrzynski1, 2011). Therefore, it is important to aggressively convert experienced and popular adjuncts to full time faculty, especially in courses that are highly enrolled such as UCC courses.

## **Targeted Metric(s)**

- 1. FTIC 2-yr Retention Rate (GPA>2.0)
- 2. FTIC 6-yr Graduation Rate and FTIC 4-yr Graduation Rate
- 4. Percent of Bachelor's Degrees Without Excess Hours
- 1.2. Feasibility Assessment
- 1.2.1. Implementation considerations and timeline
- 1.2.2. Projected costs or savings of implementation
- 1.2.2.1. Startup or phase-in (one-time) costs
- 1.2.2.2. Recurring costs or savings, as applicable
- 1.2.3. Space needs or space savings, as applicable
- 1.3. Accountability Plan
- 1.3.1. Measure(s) of impact (assessment plan)
- 1.3.2. Proposed benchmark(s)

Online vs. face-to-face passing rate

#### 1.4. References and Appendices

- Baldwin1, R. and Wawrzynski1, M. 2011. Contingent Faculty as Teachers: What We Know; What We Need to Know. *American Behavioral Scientist*, 55(1), 1485-1509.
- Carr, S. (2000). As distance education comes of age, the challenge is keeping the students. *Chronicle of Higher Education, Information Technology Section*. Retrieved from http://chronicle.com/free/v46/ i23/23a00101.html
- Collective Bargaining Agreement. 2018. The Florida International University Board of Trustees and The United Faculty of Florida-FIU Collective Bargaining Agreement 2018-2021. Retrieved from: <a href="https://academic.fiu.edu/AcademicBudget/www/2018-2021%20FIU%20UFF%20CBA%20FINAL%209.13.18.pdf">https://academic.fiu.edu/AcademicBudget/www/2018-2021%20FIU%20UFF%20CBA%20FINAL%209.13.18.pdf</a>
- Complete College America. 2013. *Guided pathways to success: Boosting college completion. Indianapolis*, IN: Author.
- Ehrenberg, R. G., & Zhang, L. (2005). Do tenured and tenure-track faculty matter? Journal of Human Resources, 40(4), 647-659.
- McLaren, C. H. (2004). A comparison of student persistence and performance in online and classroom business statistics experiences. Decision Sciences Journal of Innovative Education, 2(1), 1-
- Ni, A. (2013). Comparing the Effectiveness of Classroom and Online Learning: Teaching Research Methods. *Journal of Public Affairs Education*, 19(2), 199-215. Retrieved from http://www.jstor.org/stable/23608947
- Shulock N. and Koester, J. 2014. *Maximizing Resources for Student Success by Reducing Time-and Credits-to-Degree*. Retrieved from: http://www.hcmstrategists.com/maximizingresources/papers.html
- Schibik, T. & Harrington, C. (2004). Caveat emptor: Is there a relationship between part-time faculty utilization and student learning retention? *Association for Institutional Professional*, 91.
- Thirunarayanan, M., & Perez-Prad, A. (2001). Comparing web-based and classroom-based learning: A quantitative study. *Journal of Research on Computing in Education*, 34(2), 1310137

# Recommendation #24 – Annual Meeting among Preeminent/Emerging Program Leadership and University Leadership

# 1.1. Description and justification of program, savings, or efficiency recommendation (supported by data/research/best practices)

#### **Description:**

The intent of this meeting is to (1) communicate and clarify the FIU leadership expectations for the Preeminent/Emerging as they propel FIU to preeminence status (ranked in the top 50); and (2) communicate and clarify the expectations that Preeminent/Emerging Preeminent Programs have of FIU leadership to support these programs in terms of infrastructure and human capital. Through this meeting, FIU leadership and Preeminent/Emerging Preeminent Program leaders should identify successful strategies that should be continued to strengthen these programs and overcome barriers to success. Furthermore, philanthropic and endowment commitments should begin with our FIU Foundation to assist in identifying and matching potential donors. A development officer should be identified in relation to the themes addressed by the emerging/preeminent programs that most likely will help realize and honor the donors' aspirations. The role of alumni networks in this process will grow increasingly important over time, as FIU becomes a well-established and highly-ranked institution (Goal: top 50).

#### **Justification:**

It is essential for these expectations from both sides be understood (FIU Leadership and program directors) so that effective planning is made to meet set objectives and to collectively (data from the Qualtrics survey from all emerging/preeminent programs) move FIU as a state institution from the current emerging status to preeminence status by improving on the SUS measures that are yet to be met (refer to recommendation 3).

#### **1.2.** Targeted Metric(s)

Targeted metrics will be associated with the means provided for assistance in infrastructure improvement, human capital to include faculty hires, networking capability, FIU tech startup, patenting (already well-established at FIU), IT, PR, media, etc.

#### 1.3. Feasibility Assessment

#### **1.3.1.** Implementation considerations and timeline

Implementation will begin in early fall semester of each year, and the reporting will be on the previous academic year with a summary on projected goals for the coming year

#### **1.3.2.** Projected costs or savings of implementation

Since the meeting will be held on campus, the costs associated with this annual meeting are minimal and relate to the overhead of the meeting place and any catering provided.

#### **1.3.2.1.** Startup or phase-in (one-time) costs

N/A

# **1.3.2.2.** Recurring costs or savings, as applicable:

Recurring costs associated are with the meeting room and catering charges.

# 1.3.3. Space needs or space savings, as applicable

Meeting space (Graham Center preferred secondary to its central location and logistic)

## 1.4. Accountability Plan

#### 1.4.1. Measure(s) of impact (assessment plan)

Impact will be reflected through completed Qualtrics survey/ responses from Emerging/Preeminent program leaders on an annual basis, one month prior to the meeting date for assessing the provided data.

#### **1.4.2.** Proposed benchmark(s)

This is similar to any retreat that can take place at any academic institution but perhaps of shorter duration. This type of meeting in itself could become a benchmark for other institutions if it is well-planned and executed involving key leaders that could move FIU to a top 50 ranking.

## 1.5. References and Appendices

https://web.uri.edu/academic-planning/files/academic\_plan\_handbook.pdf http://wvde.state.wv.us/schoolimprovement/documents/guidebook.pdf



## FLORIDA INTERNATIONAL UNIVERSITY STRATEGIC PLAN 2020-2025

#### Preeminence Pillar – Workgroup 2A Leveraging preeminent program identification and assistance

\*\* joined with workgroup 3B ideas on new faculty recruitment \*\*

Recommendation #36 – Establish procedures for faculty/cluster hires in relation to FIU's mission, vision and values that align with FIU leadership and the preeminent/emerging programs leaders on the basis of the broad themes they address

#### 1.1. Description and justification of program, savings, or efficiency recommendation (supported by data/research/best practices)

This recommendation focuses on

- A) Expanding and exploring best practices on hiring
- B) Seeking faculty candidates whose areas of expertise fit with the research themes and needs in relation to
  - federal funding agencies (NIH, NSF, DOD, DOE, etc.) and funding prospects across their directorates, and for
  - workforce development in areas of critical need to industry and the nation
  - policy /strategy for developing critical research and educational thrusts
- C) Defining a merit process through ORED to assign and recognize grant amount attributed to the Co-PI(s) (especially relevant for those on tenure track). This will encourage cross disciplinary and multidisciplinary collaboration and will compel a cultural change at the department and college levels, especially for tenure evaluation to include such funds in the tenure and promotion deliberation process.
- D) Augmenting the mentorship program using existing ones such as (ADVANCE) and through the various ongoing collaborations and to be established ones (see Recommendation 2).
- E) Invest on grant writers and editors to help with large grants and applications for Centers such as the NSF Engineering Research Centers (ERC), and Science &Technology Centers (STC), etc.

#### **Justification:**

Hiring of faculty and cluster hires should be in areas of critical need to the nation including: Health and Social dimensions, Big Data, Resilient Infrastructure, Cybersecurity Environment, Energy, Robotics, Machine Learning, Internet of Things, Artificial Intelligence, Quantum Mechanics, Sensing and Information Processing, Space Technology, Imaging, (BRAIN Initiative), Treatment and Cure of Disease, Disease prevention, Health disparities, among others will certainly (a) expand FIU research expenditures, (b) consolidate the strength of the existing emerging/preeminent programs, leading to new programs, more Ph.D. graduates, more

postdoctoral support, more patents granted, and more creative activities. See as examples the 10 Big Ideas for Future NSF Investments in reference 1, NIH-FY2016-2020 Strategic Plan in reference 2, NASA Strategic Plan in reference 3, and DOD Research Priorities in reference 4.

#### **1.2.** Targeted Metric(s)

- Data gathered form pertinent questions on the established web-based Qualtrics Survey analysis that the program directors are asked to fill annually.
- Overall progress of the hired faculty in terms of grants, significant publications and other creative activities.
- Success in seeking tenure and promotion.
- Yearly tenure evaluations
- Letters provided to PIs and Co-PIs by VP of ORED and/or Emerging/Preeminent Program Director providing credit for the portion of funds appropriated to Co-PIs
- Midterm evaluation for tenure and promotion (if such funds were taken into account)

#### 1.3. Feasibility Assessment

#### 1.3.1. Implementation considerations and timeline

This depends on availability of faculty lines.

#### 1.3.2. Projected costs or savings of implementation

Projected costs relate to salaries and start-up funds requested by the new hires.

#### 1.3.2.1. Startup or phase-in (one-time) costs

Startup funds requested mainly from junior faculty hires

#### 1.3.2.2. Recurring costs or savings, as applicable

**Faculty Salaries** 

#### 1.3.3. Space needs or space savings, as applicable

Lab space for new hires

#### 1.4. Accountability Plan

#### 1.4.1. Measure(s) of impact (assessment plan)

- Data gathered form pertinent questions on the established web-based Qualtrics
   Survey analysis that the program directors are asked to fill annually.
- Curriculum Vitae of faculty hired in support of the emerging and preeminent programs.
- Overall progress of the hired faculty in terms of grants, significant publications and other creative activities.
- expansion of multidisciplinary and interdisciplinary research
- creation of interdisciplinary and auxiliary programs
- Success in seeking tenure and promotion.
- Significant increase in expenditures

#### **1.4.2.** Proposed benchmark(s):

- The 10 Big Ideas for Future NSF Investments
- NIH-Wide Strategic Plan
- NASA Strategic Plan
- DOD Research Priorities

#### 1.5. References and Appendices

- 1. The 10 Big Ideas for Future NSF Investments: https://www.nsf.gov/about/congress/reports/nsf big ideas.pdf
- 2. NIH-Wide Strategic Plan, Fiscal Years 2016–2020: Turning Discovery into Health, <a href="https://www.nih.gov/news-events/news-releases/nih-unveils-fy2016-2020-strategic-plan">https://www.nih.gov/news-events/news-releases/nih-unveils-fy2016-2020-strategic-plan</a>
- 3. NASA Strategic Plan 2018 https://www.nasa.gov/sites/default/files/atoms/files/nasa 2018 strategic plan.pdf
- 4. DOD Research Priorities <a href="https://www.bu.edu/federal/2018/05/04/dod-research-chief-lays-out-priorities/">https://www.bu.edu/federal/2018/05/04/dod-research-chief-lays-out-priorities/</a>





# Financial Base Pillar – Workgroup 4A Managing and administering funds in support of performance goals

Recommendation #43 – Establishment of the 2025 Commission on Strategic Investments

### 1.1. Description and justification of program, savings, or efficiency recommendation (supported by data/research/best practices)

In order to ensure the strategic investment funds are distributed in alignment with our strategic goals for 2025, it is recommended that FIU establish the "2025 Commission on Strategic Investments." The tasks of this commission would include but not be limited to:

- (1) A redesign of the "Strategic Investment Form" used to recommend/not recommend requests for funding related to our strategic goals
  - a. Amongst the suggested changes are (1) an emphasis on initiatives impacting metrics related to student success and research preeminence (2) the addition of a preset accountability process as designed by the 2025 Commission and (3) implementation of an improved review process where the 2025 Commission makes recommendations on funding using a scale such as not recommend, recommend with reservations, recommend and highly recommend.
- (2) Establishment of a "check-in" process for approved projects
  - a. The check-in will be on a timed-schedule and include review of milestones set forth in the approval process and can result in disinvestment from certain investments should they not be yielding results as expected.
- (3) Lead a systematic review of previously approved projects
  - a. This review will ensure that all approved projects approved using our previous Strategic Investment Form/process adhere to new guidelines and are operational in meeting the metrics they originally submitted.
- (4) Lead a historical review of Legislative appropriations
  - a. An in-depth review of recurring Legislative appropriations awarded to FIU in the past 20 years will allow us to see if there are any monies that can be re-directed towards the goals of our 2025 Strategic Plan.

#### **1.2.** Targeted Metric(s)

Strategic investment of funds and the processes described above will allow us to reach various metrics in our performance funding model, the BOG preeminence model and targeted national rankings. The emphasis on funding initiatives targeting metrics that can make the biggest impact in multiple rankings and models can catalyze FIU's upward movement and achievement of key metrics.

#### 1.3. Feasibility Assessment

#### **1.3.1.** Implementation considerations and timeline

Implementation of the 2025 Commission on Strategic Investment will immediate. However, considerations before formally beginning to meet and take on the tasks above include:

- (1) Composition of the Commission
  - a. Besides those assigned to the workgroup on "managing and administering funds in support of performance goals" who else needs to be included?
    - i. Suggestions include representatives from University Advancement, from Colleges not represented in workgroup membership, from the Office of Analysis and Information Management, from the Office of the Provost and from the Office of the President.
- (2) 2025 Strategic Planning Outcomes
  - a. Review of the work being done by all workgroups involved in the strategic planning process will have to be reviewed to ensure that the areas of emphasis for the Strategic Investment Form are in line with the recommendations being set forth.

#### 1.3.2. Projected costs or savings of implementation

At the moment, there are no projected costs for implementation. Startup or phase-in (one-time) costs

- 1.3.2.1. Recurring costs or savings, as applicable
- 1.3.3. Space needs or space savings, as applicable
- 1.4. Accountability Plan
- 1.4.1. Measure(s) of impact (assessment plan)
- 1.4.2. Proposed benchmark(s)
- 1.5. References and Appendices
  - (1) University of Maryland 2020 Commission
  - (2) FIU's Current Strategic Investment Form <a href="https://ofp.fiu.edu/wp-content/uploads/sites/87/2018/07/Strategic Investment Request Form.xlsx">https://ofp.fiu.edu/wp-content/uploads/sites/87/2018/07/Strategic Investment Request Form.xlsx</a>



## Financial Base Pillar – Workgroup 4B Driving organizational efficiencies and increasing revenues

Recommendation #49 – Develop and License Non-Credit Tracking System

#### 1.1. Description & Justification (supported by data/research/best evidence)

FIU presently does not have a system in place that can systematically track non-credit activity across the University. Presently, the Office of Continuing Education must depend on manual reporting from units. FIU is not alone in this challenge and many other institutions of higher education do not have a system in place either. Currently, there is no readily available off the shelf solution. With non-credit enrollment playing a larger role in the future, accurate tracking and reporting will be necessary in order to make timely informed strategic decisions. Per our last workgroup discussion, our CIO indicated that this is a known challenge and that the current practice is to share best practices/developments with other institutions in an open source format.

Venture capitalist look for opportunities whereby someone has developed a solution to a problem that affects many. In this case, there is a clear problem/challenge and it is affecting institutions potentially across the United States. At some point, someone is going to develop the code, package it and license it to other institutions. Just like with ERP systems, FIU can also charge consulting fees for initial system integration with existing platforms, tech support, periodic updates, etc. Companies like PeopleSoft do not open source their enterprise solutions and FIU doesn't need to either. We have an opportunity to solve a problem that affects many and if we are successful with being the solution drivers, FIU can stand to benefit significantly, which is what venture capitalist want, a strong return on investment.

The benefits to FIU would be new incremental revenues from entrepreneurial activities. FIU brand recognition as a leader in the national and possibly global space for being the solution architect driver would also grow. The aforementioned could also improve our US News and World rankings since more institutions will become more familiar with FIU, especially if we are solving a problem for them. Reputation, which is subjective, still accounts for a large percentage of the US News and World reporting voting algorithm so a concept like this can have farreaching benefits. Improved strategic decision making based on timely data reporting for institutions. As institutions are venturing deeper into non-traditional/non-credit activities, someone is going to come up with the solution sooner or later. FIU has an opportunity right now to become a pioneer and truly lead the way for other institutions. Over the past years, there has been a lot of talk about becoming more entrepreneurial, thinking outside the box, framing things differently, finding creative solutions, etc. This is an opportunity to demonstrate that we truly embody that spirit and yes there is a risk that it may never pan out but nothing ventured is nothing gained.

#### **1.2.** Targeted Metric(s)

Metric 1 – Percent of Bachelor's Graduates Employed and/or Continuing their Education Further 1 year after graduation. (The later part of this metric would be applicable if non-credits courses count)

While this proposal is limited in the manner in which it can **directly** impact the BOG metrics, the **indirect** benefits can be significant. If this venture becomes a successful revenue generator for the University, the incremental revenue source can then be invested in new strategic faculty hires, student advisors, space, research, labs, building renovations, etc. that can ultimately improve the University's performance on the 10 BOG metrics.

#### **1.3.** Feasibility Assessment

#### 1.3.1. Implementation considerations and timeline

The implementation would require individuals skilled at code development working in partnership with individuals who understand the problem and what the needs assessment looks like. If necessary, an investment in hiring code writers could be necessary including having them sign non-disclosure forms if the necessary skill set cannot be found in house. Timeliness to market is important since we would want to have as big a market share as possible. While my skill sets do not reside in the IT/Tech sector, I would estimate one to one and a half years for development and testing. It is important that the final product be relatively bug free since licensing a poorly designed product can be detrimental to FIU's brand recognition as well.

#### **1.3.2.** Projected cost of implementation

I have to defer this question to FIU's CIO for a more qualified response. This product would need to be patented or copy righted as a barrier to competitor entry into the market and to protect the investment made so there would be some legal cost for the aforementioned.

#### 1.3.2.1. Startup (One-time) cost

Same as reply to 1.3.2

#### 1.3.2.2. Recurring costs as applicable

Cost of individuals who maintain the system, provide tech support, test upgrades and new functionality. Cost of space to house the aforementioned individuals. A qualified response would require input from FIU's CIO.

#### 1.3.3. Space requirements as applicable

Minimal since this can be incubated from space in a trailer on the west side of campus, MARC Bldg., BBC, etc. Space needs should be minimal since if successful, space for server(s) would be needed as well as space for some of the individuals needed to provide the functionality noted in 1.3.2.2. If successful, the licensing revenue stream should offset the cost of office space and server space by a significant multiplier.

#### 1.4. Accountability Plan

This should be treated as a pure investment just like venture capital and for every dollar invested; FIU should realize a minimum return on investment of 60%. Since startup investment cost will be needed, a timeline with milestones will be needed to keep the project on time.

#### 1.4.1. Measure(s) of impact (assessment plan)

FIU's ability to assess and report on non-credit activity for strategic decision-making purposes. Feedback from other implementing institutions regarding their successes or challenges. FIU's ability to keep the products functionality relevant with changing market conditions as well as ahead of competitors seeking to take away market share. Additional measures of success would be year over year new customer acquisitions, percentage of existing customers renewing licensing, market share dominance, year over year revenue growth, etc. It is important to stay abreast of any changing market conditions and potential competitors to ensure that the product does not become obsolete.

#### 1.4.2. Proposed benchmark(s)

Presently it appears that none exist and thus the opportunity that exists to be a market leader.

#### **1.5.** References and Appendices

Not available due to new undeveloped nature of this software product.





## Financial Base Pillar – Workgroup 4B Driving organizational efficiencies and increasing revenues

**Recommendation #50 - Centralized Registration System for Credit and Non-Credit Activities** 

## 1.1. Description and justification of program, savings, or efficiency recommendation (supported by data/research/best practices)

Traditional educational models are being challenges by the latest technological breakthroughs of the 4<sup>th</sup> Industrial Revolution. Accommodating industry expectations are imperative to the employability of our students once they graduate. A very effective manner to expose our students to the latest skills needed by industry to remain competitive in the global market is non-credit continuing education programming. Centralizing the registration system for non-credit activities will add to FIU's competitive advantage by adding validity, organizing and providing greater access to students.

#### **1.2.** Targeted Metric(s)

- Phase 1: Feasibility study of databases available
- Phase 2: Purchase database and integrate with Panthershoft
- Phase 3: Training for academic units
- Phase 4: Reporting and strategies development to create better alignment to industry
  - o Comprehensively organize programs and strategies across the university
  - o Provide access to general student population

#### 1.3. Feasibility Assessment

#### 1.3.1. Implementation considerations and timeline

• Phase 1: Fall 2020

• Phase 2 and Phase 3: Spring 2021

• Phase 4: Spring 2021

#### **1.3.2.** Projected costs or savings of implementation

The cost include the purchasing, customization and installation of the software

#### **1.3.2.1.** Startup or phase-in (one-time) costs

• \$250,000 was the initial quote from Peoplesoft to incorporate a patch to Panthersoft that will handle the registration system for non-credit activities

#### 1.3.2.2. Recurring costs or savings, as applicable

• \$50,000 cost of the yearly maintenance.

### 1.3.3. Space needs or space savings, as applicable $N\!/\!A$

#### 1.4. Accountability Plan

#### 1.4.1. Measure(s) of impact (assessment plan)

- Greater number of FIU students taking non-credit programming to supplement/complement their education.
- Non-credit activities to be listed in the students 'official transcript.
- A better organized non-credit system

#### 1.4.2. Proposed benchmark(s)

- Have the system operational by spring 2021.
- Units to start discontinuing other existing databases/systems by end of spring 2021/conversion
- Units will start using the new system by spring 2021

#### 1.5. References and Appendices