

How can we best leverage the innate entrepreneurial spirit of our students, staff, faculty, and alumni¹?

The purpose of the Commission is to undertake a review of the iREAL issues and opportunities for FIU by tackling identified strategic challenges; this study will be incorporated into the iREAL vision document.

The iREAL vision document is to guide the preparation of the next FIU strategic plan by reviewing the issues associated with a specific challenge and identifying optimal and specific responses that will advance the financial and community viability of FIU.

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Executive Summary

The vision for leveraging the entrepreneurial spirit of FIU's students, faculty, staff and alumni is to create a university-wide ecosystem of entrepreneurship. The necessary components for executing this vision are:

1. An executive champion whose sole responsibility is fostering entrepreneurship by engendering this vision and executing the strategy
2. Integrated cross-disciplinary collaboration, course listings, communication, events etc. "Silos" are anathema to entrepreneurial activity.
3. Clear and robust incentives for faculty, students, administrators and alumni to act entrepreneurially and support entrepreneurship.

The centerpiece of this effort is the integration of multiple disciplines and functions both across the university and with external partners, to transform the university into a community and regional "solutions center".

Success at this entrepreneurship strategy is measured by the number of startups enabled and created as well as funding secured to support entrepreneurial activities. Benefits to the university will encompass improving FIU's performance on SUS accountability metrics, dominance in our target market, strengthening of the FIU brand as the entrepreneurship home of the Americas and increased alumni affinity due to early support of their entrepreneurial aspirations.

¹ Hereinafter referred to as "constituents" for the sake of brevity. The term "stakeholders" was also considered and is in many cases appropriate.

Introduction

“Entrepreneurial activity is the enterprising human action in pursuit of the generation of value, through the creation or expansion of economic activity, by identifying and exploiting new products, processes or markets.”²

According to the Kauffman Foundation, *“Conventional wisdom nowadays has it that classroom education by bricks-and-mortar universities may be under threat of disintermediation by online education. If so, higher education may need to emphasize the things you can learn and do at a university that you cannot learn and do in classes online, and it will need to offer reasons to do them here, at this university and in this community, as opposed to anywhere else. Entrepreneurship education is a laboratory for the development of new kinds of curricular and locational value.”³*

Entrepreneurship creates jobs and drives growth. It has become a huge building block for some countries and as a result leading universities are embracing entrepreneurship.

This is a competitive space and students have a lot of choice on where to acquire entrepreneurship skills. With other universities offering skill sets very relevant in today’s society, FIU needs to carve out a niche in this space.

By many substantive measures⁴, FIU has seen relatively little entrepreneurial activity⁵ and ranks among the lowest in the State University System (SUS) on key performance indicators. In thinking about the possible reasons for this we consider:

1. Entrepreneurship is not a leading university priority. With university-wide effort/support absent, entrepreneurial efforts are often attempted in isolation and unsupported with no clear path toward growth.
2. Lack of cross-discipline integration. Much activity is fragmented, dispersed in various centers across the institution and not coordinated in any way. Efforts at cross-disciplinary collaboration are sporadic.
3. Few incentives to engage in or support entrepreneurial activities. Faculty engagement with potential student entrepreneurs is at their discretion, without recompense and is not part of their assessments.
4. Small base of constituents with entrepreneurial skill set. Entrepreneurship is taught mainly to business students, potentially leaving students, faculty and staff in other disciplines without the essential skill set to successfully plan and execute entrepreneurial initiatives.

² The Organization for Economic Co-operation and Development (OECD)

³ See page 17 of the Kauffman Foundation’s report: Entrepreneurship Education Comes of Age on Campus at http://www.kauffman.org/~media/kauffman_org/research%20reports%20and%20covers/2013/08/eshipedcome_sofage_report.pdf

⁴ See FIU's Accountability Report: http://www.flbog.edu/about/_doc/budget/FIU_2011-12_Accountability_Report_FINAL.pdf

⁵ Especially in comparison with UCF, which is similar in size and age

5. No coordinated messaging internally or to external partners to engage with FIU entrepreneurs. No published metrics on entrepreneurial activities on which “angels” could base investment decisions. No central point of contact (“411”) for partners wishing to engage as mentors. FIU units such as the Pino Center for Entrepreneurship and the Accelerating Innovation Research (AIR) Initiative

What will happen if the issue is not resolved?

- Reduction in FIU’s potential for job creation in the community. Entrepreneurial activities create the jobs needed to bring innovation in new products and services to market. FIU support for entrepreneurship means FIU support for job creation.
- Risk of losing performance funding from the state. FIU already has low achievement on recently implemented SUS performance metrics⁶ which address economic development
- Diminished overall competitiveness and relevance as high-performing entrepreneurs self-select away from FIU in favor of more entrepreneurially supportive institutions
- Missed opportunities for alumni support and funding. Typically, successful entrepreneurs are known to give back to their universities. As universities rely increasingly on alumni affinity for support, failure to nurture entrepreneurial aspirations in current constituents means missed opportunities to bind those future successful entrepreneurs to the institution
- Failure to brand FIU as the premier entrepreneurial brain trust of the Americas that is locally focused but globally engaged, or to participate in the potentially lucrative entrepreneurial initiatives

Solutions

No single action, declaration or event can improve the university’s ability to leverage the entrepreneurial spirit of our constituents. Rather, to have a lasting and meaningful impact requires the creation of a continuous, flexible ecosystem to support and incentivize entrepreneurial efforts. This ecosystem is envisioned to nurture FIU’s entrepreneurs via in-person learning and empowered doing.

A good example of such a strategy at work is at the University of North Carolina’s [Carolina Startup](http://www.startup.unc.edu/)⁷ which provides a plethora of opportunities and resources on campus for students, staff and faculty (Funding, Educating, Incubating and Connecting) and promotes ways for alumni and others to connect with UNC startups and each other.

While UNC and many other universities have a focus on tech transfer, FIU’s tech transfer may not be the only focus for entrepreneurial efforts in the short and medium terms, for the following reasons:

⁶ See the Board of Governors Accountability Report on page 9

⁷ <http://www.startup.unc.edu/>

- The university does not at present produce a significant volume of technological innovations
- Licensing university patents to the highest bidder risks alienating private sector partners that are essential to the entrepreneurship ecosystem
- “84% of universities [are] operating technology transfer in the red”⁸, a prospect FIU cannot afford.
- Meaningful university investment in startups can entail significant amounts of scarce funding

Because of the sizeable venture capital required and the statistically low incidence of success associated with investing in startups, this paper is deliberate in the vision of initially creating/supporting potential entrepreneurial winners, not picking winners. That said, there are short-term and longer-term solution elements to leveraging the entrepreneurial spirit of FIU constituents.

There are also various pathways to Entrepreneurship. Research opportunities with patentable discoveries have a relatively established pathway through FIU. Non-research opportunities have a less defined path and can also include Intrapreneurship⁹.

The following action points address a problem-solving entrepreneurship paradigm for the most pressing challenges, both locally and globally, and can help bring to market products and services for the social good.

Short Term (12 months)

1. Establish entrepreneurship as an FIU priority. Gain consensus from all stakeholders on the relative importance of entrepreneurship in the ranking of FIU priorities
2. Map out the vision for embracing entrepreneurship as an ecosystem
3. Create the strategic plan for implementation; identify the infrastructure needed.

Medium (1 Year onward)

1. Establish a clear pathway to success for budding entrepreneurs by:
 - a. Mapping and communicating the critical path for new businesses
 - b. Simplifying and updating internal processes
 - c. Providing consultative guidance and support¹⁰ to entrepreneurial efforts.

There are also constituents who may not yet realize they are entrepreneurs-to-be or do not yet have the skill set needed to achieve their goals. Addressing the needs of these constituents is a longer-term proposition with elements to:

2. Implement the infrastructure

⁸ <http://www.brookings.edu/research/papers/2013/11/university-start-ups-technology-transfer-valdivia>

⁹ *Intrapreneurship* is the act of behaving like an entrepreneur while working within a large organization <http://en.wikipedia.org/wiki/Intrapreneurship>

¹⁰ e.g. like an internal version of the Florida SBDC Network

- a. Enlist the President as “entrepreneurship evangelist” to establish entrepreneurship as an important goal both within the university and outside.
 - b. Hire the university’s executive champion (VP of Entrepreneurship). The person filling this position must have gravitas, be influential and report to highest leadership in FIU.
 - c. Create a central unit to act as clearinghouse, collaborator, enabler, representative of the executive champion. This unit pursues grant support for Entrepreneurship, tracks and promotes key metrics, acts as the central contact point for entrepreneurship, and coordinates entrepreneurship efforts across the university and with external partners.
 - d. Allow colleges/schools to define and implement entrepreneurship programs themselves, starting with buy-in by the Deans and VP of Research
 - e. Make Entrepreneurship a communications priority to tout achievements and create momentum both internally and externally. Measure and publish entrepreneurial metrics.
 - f. Signal the priority of entrepreneurship and ensure sustainability by combining university funding with monies from ongoing dedicated fund-raising activities.
3. Reduce functional and academic silos
- a. Develop and promote entrepreneurship academic and co-curricular programs which integrate disciplines.
 - b. Integrate students and faculty in cross-discipline, cross-listed courses/elements in every college/school, including a minor in Entrepreneurship.
 - c. Include an introductory level entrepreneurship course (i.e. Entrepreneurship 101) that is taught to all students. Include a MOOC version for the practical knowledge needed to evaluate, plan and execute capital-efficient startups.
 - d. Incorporate liberal arts, experiential learning and co-curricular options geared toward enhancing entrepreneurial skills
4. Incentivize FIU constituents to pursue and support entrepreneurial aspirations locally, regionally and globally. High visibility is important in the following examples:
- e. Incentivize faculty to support and pursue entrepreneurship: greater recognition of faculty entrepreneurs, integrating entrepreneurship into the faculty tenure and selection process, and increasing faculty connections to outside partners locally and regionally - through externships, engagement with business, and targeted resources for startup creation.
 - f. Institute clear rewards for intrapreneurial efforts. Design the reward system to spur intrapreneurial action on initiatives of strategic importance to the university.

- g. Engage and mobilize students as drivers of change¹¹ through co-curricular programs (pitch and launch competitions, clubs/groups)
- h. Drive alumni engagement locally, regionally and globally through outreach and post-graduation partnerships
- i. Connect entrepreneurs-to-be with Investor and Mentorship Networks and to other centers of entrepreneurship in the Americas ¹²

The Benefits

The development of an active entrepreneurial environment is a long-term endeavor with potential financial returns likely some years away. Less tangible but equally important benefits accrue from our unique geographic and cultural position as the gateway to the single market of all the Americas. These include:

- Improve FIU's performance on SUS accountability metrics.
- Creation of high level jobs in the community and the region through FIU-source startups
- Increased affinity with and gifts from alumni who were well-supported in their early entrepreneurial trajectories
- An institutional reputation as a major driver of entrepreneurial activity attracts more like-minded students and faculty to FIU from the community and the region.
- A multiplier effect drawing regional entrepreneurs and regional venture capitalists to Miami in general and FIU in particular
- Standing as a successful training hub for entrepreneurship; generates follow-on funding in support of teaching and driving entrepreneurship
- Branding FIU as the Entrepreneurship hub of the Americas

Action

Funding

University funding of the infrastructure, manpower, programs and incentives (both cash and non-cash) needed to launch and sustain an entrepreneurship ecosystem is an essential signal of the importance of this as a university priority. University funding would need to be substantially supplemented by gifts and donations as part of the capital campaign starting at the beginning of implementation of the Strategic Planning horizon. Any funds raised over those needed for infrastructure support could provide modest "start-up" funding and an opportunity for the university to obtain an equity interest in worthy projects.

At least initially, entrepreneurial finance will continue to depend on the ability of FIU constituents to develop capital-efficient enterprises and to raise funds in non-

¹¹ <http://www.whitehouse.gov/blog/2013/09/06/inspired-innovate-students-drive-entrepreneurship-campus-0>

¹² Examples: Internally, the Pino Center, and Externally, The LAB Miami, Miami Innovation Center etc.

traditional ways such as <http://www.kickstarter.com/>. FIU will prioritize the development of a financial network connecting the private sector with those potential start-ups seeking seed-funding.

Less certain and much further into the future are potential financial returns to the university as the entrepreneurship programs mature. For that reason this vision does not initially contemplate the reinvestment of any such revenues.

Championship

1. Executive level championship and support to implement elements necessary to create an entrepreneurial culture. Entrepreneurship must also become a regular part of the President's roadshow.
2. A communication strategy for both internal and external audiences which creates momentum by touting achievements and matures along with the ecosystem.

Human Capital

- A central unit headed by the executive champion and directed by an Advisory Panel of FIU students, faculty and staff (including Tech Transfer) along with community and business leaders. This unit is staffed by highly experienced and well-connected professionals.

Integrating mechanisms

- Assist in the creation of and coordinate formalized collaboration schemes for cross-functional, cross-discipline teams
- Work with administrators to establish and maintain a clear path toward university-wide integration of efforts
- Develop internal forums and provide other support
- Connect FIU aspiring entrepreneurs to external support

Evaluation

Evaluation measures will be defined in more detail during the strategic planning process.

The common measures of entrepreneurial activity are related to Tech Transfer: licensing revenue, licensing volume and the creation of start-up companies. While mindful that these form the main body of SUS performance metrics on which state funds are appropriated for the university, this paper recognizes that entrepreneurial activity is not limited to the transfer of technology, but may be found in innovations of method, medium or any number of other paths. As such, this document recommends the following alternative/additional evaluation metrics:

- Number of students, staff, faculty, others (community) trained
- Number of businesses started¹³
- Number of businesses assisted and funding brought in (by faculty, staff, etc.)

¹³ An SUS Accountability Report key performance metric

- Value of Fee-for-service income related to FIU entrepreneurship efforts (government contracts, etc.)
- Net gains from Intrapreneurial initiatives.
- Number of businesses at profitability within 3 years of startup
- Number of businesses at profitability within 5 years of startup
- Gifts and donations in recognition and support of FIU's Entrepreneurship efforts
- Gifts and Donations from successful entrepreneur alumni

Board of Governors Accountability Report

TECHNOLOGY TRANSFER

<u>FIU</u>	<u>2007-2008</u>	<u>2008-2009</u>	<u>2009-2010</u>	<u>2010-2011</u>	<u>2011-2012</u>
Invention Disclosures	18	16	24	15	20
US Patents Issued	0	1	1	3	1
Patents Issued per 1,000 Full-Time, Tenured and Tenure-Earning Faculty	0	1.6	1.5	4.7	2
Licensing / Options Executed	0	1	1	0	0
Licensing Income Received	\$9,423	\$39,819	\$24,942	\$12,000	\$62,034
Number of Start-Up Companies	0	0	0	0	0
<u>UCF</u>	<u>2007-2008</u>	<u>2008-2009</u>	<u>2009-2010</u>	<u>2010-2011</u>	<u>2011-2012</u>
Invention Disclosures	93	83	96	109	127
US Patents Issued	57	41	91	76	67
Patents Issued per 1,000 Full-Time, Tenured and Tenure-Earning Faculty	74	0	122	97	85
Licensing / Options Executed	6	5	12	14	11
Licensing Income Received	\$327,176	\$640,008	\$411,393	\$500,966	\$560,135
Number of Start-Up Companies	2	3	7	1	5
<u>SUS</u>	<u>2007-2008</u>	<u>2008-2009</u>	<u>2009-2010</u>	<u>2010-2011</u>	<u>2011-2012</u>
Invention Disclosures	647	626	656	710	793
US Patents Issued	156	165	248	300	262
Patents Issued per 1,000 Full-Time, Tenured and Tenure-Earning Faculty	19	21	32	39	241
Licensing / Options Executed	125	159	155	201	208
Licensing Income Received	\$56	\$57	\$49	\$33	\$37
Number of Start-Up Companies	24	18	23	25	30

Board of Governors Accountability Report (continued...)

Centers of Excellence ECONOMIC DEVELOPMENT EFFECTIVENESS

	FIU		UCF		SUS	
	Cumulative to date	2012-13	Cumulative to date	2012-13	Cumulative to date	2012-13
Number of Start-Up companies with a physical presence, or employees, in Florida	0	0	5	0	37	0
Jobs Created By Start-Up Companies Associated with the Center	5	0	63	3	849	29
Specialized Industry Training and Education	0	0	2	0	369	162
Private-sector Resources Used to Support the Center's Operations	\$68,600	\$68,600	\$96,809	\$96,809	\$41,000,000	\$27,000,000