
THE HOGAN ENTREPRENEURIAL LEADERSHIP PROGRAM: AN INNOVATIVE MODEL OF ENTREPRENEURSHIP EDUCATION

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ABSTRACT

This paper presents the Hogan Entrepreneurial Leadership Program, a four-year, university-wide undergraduate program, as a proven, innovative model for undergraduate entrepreneurship education. The paper will discuss the following: (1) context and mission of the program; (2) distinguishing features of the program; (3) structure and funding of the program; (4) student and program outcomes, and (5) lessons learned.

INTRODUCTION

This article describes the Hogan Entrepreneurial Leadership Program, a proven successful, innovative, model of undergraduate entrepreneurship education, founded at Gonzaga University in 2000. Following a brief literature review, the context and mission of the program are presented. We then describe the distinguishing features of the program's curriculum and co-curriculum. The program's structure, funding and other support are then documented. Student outcomes and other program outcomes are then highlighted. The paper concludes with a summary of the lessons we have learned in creating and sustaining a successful undergraduate entrepreneurship program. We believe that our model and the lessons learned can be readily applied to other institutions.

LITERATURE REVIEW

The following scholars have investigated entrepreneurship education on a variety of topics (e.g., programs, curriculum, entrepreneurship centers, faculty, jobs, trends, etc.): Brush, Duhaime, Gartner, Stewart, Katz, Hitt, Alvarez, Meyer & Venkataraman (2003), Dickson, Solomon & Weaver (2008), Finkle (2005; 2006; 2007; 2010; 2012), Finkle & Deeds (2001), Finkle, Kuratko & Goldsby (2006), Finkle, Menzies, Kuratko & Goldsby (2010; 2012), Finkle, Soper, Fox, Reece & Messing (2009), Gartner & Vesper (1994), Kabongo & McCaskey (2011), Katz (2003; 2008), Klapper & Tegtmeier (2010), Kuratko (2005), Menzies & Tatroff (2006), Neck and Green (2011), and Van Auken, Fry & Stephens (2006).

Despite these studies, sparse research has been done on the in-depth analyses of specific programs. While broad-based studies like Brush et. al., (2003) and Finkle et. al., (2006) and others have made significant contributions to entrepreneurship education, the field needs more in-depth knowledge of the inner workings of specific programs so we can use these findings as benchmarks for others. As the field continues to grow, studies such as these will become ever more imperative.

A few studies have been done in this area. In 2000, Charney and Libecap compared University of Arizona entrepreneurship graduates to graduates of other business **programs** at the school. They concluded that entrepreneurship education helped to produce self-sufficient enterprising individuals, successful business leaders and champions of innovation (Kauffman Foundation, 2001). On average, graduates of their entrepreneurship program were three times more likely to be involved in the creation of a new business venture than non-entrepreneurship business students. Entrepreneurship graduates working for large companies made \$23,500 more than other business school graduates. Furthermore, entrepreneurship graduates received an average annual income that was 27% higher than the average income of non-entrepreneurship graduates. Additionally, after graduation, entrepreneurship graduates accumulated 62% more in personal assets than non-entrepreneurship students.

Finkle, Soper, Fox, Reece, and Messing (2009) described the creation of a new non-profit entity called the Entrepreneurship Education Consortium (EEC). The EEC is a coalition of seven universities and colleges whose mission is to teach university-wide students from each school about entrepreneurship. They created a viable model for fruitful inter-university collaboration and cooperation in entrepreneurship programming. Their model (including entrepreneurship centers and programs) was highly successful and can be used by other regions to plant seeds for entrepreneurial ventures.

Papayannakis, Kastelli, Damigos, and Mavrotas (2008) discussed the challenges of introducing entrepreneurship education to engineering students. Wielemaker, Gaudes, Grant, Mitra, and Murdock (2010) examined the challenges and opportunities of setting up a new entrepreneurship program at a university in Atlantic Canada as well as the method of program assessment. They stated that the development of new entrepreneurship programs will only advance the field if it is accompanied with proper assessment of program effectiveness.

Based on the preceding review, it is evident that the field needs more research to evaluate and understand the inner workings of successful entrepreneurship programs. This paper will contribute toward that goal.

CONTEXT AND MISSION

The Hogan Entrepreneurial Leadership Program was founded in 2000 by Father Robert J. Spitzer, S.J., then President of Gonzaga University, and the major benefactors, Ed and Lynn Hogan who founded the Hogan Family Foundation. *The mission of the Hogan Family*

Foundation is to promote the entrepreneurial spirit through the creation and operation of educational, civic-minded and humanitarian programs designed to encourage a more productive and contributory society (Hogan Family Foundation, Inc., 2011). The mission of the Hogan Family Foundation is highly consonant with the mission of Gonzaga University. Gonzaga belongs to a long and distinguished tradition of Jesuit, Catholic, and humanistic education. Jesuit education aims to transform the world by engaging students in the service of the human community (Gonzaga University Mission Statement, 2011). Given this context, and the compatibility of their visions, the founders of the Hogan Program sought to create a cross-campus undergraduate program in entrepreneurial leadership to attract highly capable and independent thinkers who want to make a positive difference in the world. While the focus on Jesuit, Catholic and humanistic values is unique to Jesuit institutions, other value-based traditions could be incorporated into similar entrepreneurship programs.

Mission of the Hogan Program

The mission of the Hogan Entrepreneurial Leadership Program is “to prepare students to create new ventures or initiatives that make a positive difference in society. This student-centered Program is designed for promising individuals who demonstrate academic excellence, leadership, creativity, and a commitment to serve others. The Hogan Program embraces students from all academic majors, tailoring the entrepreneurial curriculum and co-curriculum to compliment the students’ major fields of study, and providing them with the concepts, tools, and experiences to responsibly create successful new commercial and social enterprises”.

While the Hogan Program immerses students in the fundamental concepts and practices of entrepreneurship, its aim is much broader than creating new ventures. The goal is to provide students with the ability to seek, find, and take exploit opportunities that result in the creation of new commercial or social enterprises and/or other corporate or community initiatives. Thus, graduates of the Program will become entrepreneurial leaders in their chosen career fields, creating new enterprises or initiatives that contribute to the common good. The program has four distinguishing features that, in combination, make it highly unique:

1. Honors Program Model

Admission to the program is competitive and students enter as a cohort in the freshman year. About twenty-five students are admitted to each entering class; the ratio of the students enrolled to applications for the past three entering classes was: 2011 - 14.7%; 2010- 17.8%; 2009-20.8%. Students are selected based on their academic achievement and potential, as well as their demonstrated leadership, service, and creativity. By enrolling bright, creative, action-oriented students, and providing them with a rigorous curriculum and co-curricular experience, we prepare graduates who will be exemplary entrepreneurial leaders.

2. Concentration with Any Major

The four-year curriculum is designed to accommodate any academic major and still allow the student to graduate in four years. The Entrepreneurial Leadership curriculum was tailored from its inception to meet the needs of non-business students, which comprise about 60% of the program's enrollment.

3. Immersion in Entrepreneurial Contexts

An extensive co-curriculum is integrated with the curriculum and provides opportunities throughout the four-year program for students to experience entrepreneurial leaders, organizations and practices. These experiences include: required participation in the New Venture Lab; required internship in an entrepreneurial context; participation in idea and business plan competitions, visitation to incubators and companies; speaker series with entrepreneurs and business leaders; community service projects; and networking events.

4. Jesuit Educational Values

The Hogan Program is founded on the Jesuit philosophy of educating the whole person. Students are taught principles of ethical leadership and encouraged to develop moral values and a commitment to the common good. The primary goal is to graduate students who use their education, knowledge, and other unique gifts to make a positive difference in their careers and communities by creating new commercial and social enterprises, and/or by creating new initiatives (intrapreneurship or community initiatives) that produce positive change.

Admission

Admission to the Hogan Entrepreneurial Leadership Program is very competitive. Students are admitted as freshman and admission is limited to a select cohort of 25 students per year. Entry into the program is based on a separate application and interview process that includes the following criteria: SAT and ACT scores, grade point average, demonstrated leadership, creativity, and service to others. The program seeks students who are high achievers, academically strong, creative, independent, risk-takers who want to make a positive difference in the world. An applicant can have career interests in virtually any field or industry, for-profit or not-for-profit. Students in the program complete the requirements for a bachelor's degree in business, engineering, the arts and sciences, or education, along with a Concentration in Entrepreneurial Leadership. Students must satisfy the University and college core curricula relevant to their specific major.

There are about 100 students (In 2011, approximately 48% female and 52% male) in the program at any one time. The average entering class statistics for the current Hogan Program (all four classes) include an SAT score of approximately 1330 and a GPA of 3.84. In addition, virtually all of the entering students have held leadership positions and have been involved in community service in their high schools and/or communities; many students have also had entrepreneurial experience creating a new venture or initiative. The following majors are represented: business (39%), arts and sciences (38%), and engineering (23%). This proportion of majors has remained very stable since the program's inception.

HOGAN PROGRAM COMPONENTS

The curriculum and co-curriculum have evolved over the past ten years of the program's existence due to new initiatives inspired by students, administrators, benefactors and community partners. However, the following components, although modified to some extent over the years, have remained as central features of the program.

Curriculum

The Entrepreneurial Leadership Concentration consists of a four-year sequence of courses (See Exhibits 1 and 2). Students in each class move through the curriculum as a cohort. Thus, class sizes are small and students form a strong, interdisciplinary learning community. Business students major in accounting or business administration and take an additional 18-credit hour Concentration in Entrepreneurial Leadership. Nearly all business students in the program also take an additional Concentration in one of the traditional disciplines like finance, marketing, operations, MIS, or human resource management. For non-business students, the Concentration requires 24 credit hours because these students also take microeconomics (3-credits) and financial/ managerial accounting (3 credits) during their freshman and sophomore years.

Co-Curriculum

The Hogan Program is much more than just course work. Students are also required to participate in a variety of integrated co-curricular activities exposing them to entrepreneurial organizations, leaders, and practices. Among the most prominent of these activities are the following:

a. Internships

The Hogan curriculum requires students to do an internship. The ideal internship is one in which the student applies concepts and analytical tools from her/his curriculum in an

entrepreneurial context. Entrepreneurial contexts could be for-profit or not-for-profit organizations that are start-ups, new ventures, or established companies that are considering or creating new business ventures. **Internships** are designed to provide benefits to both students and businesses or not-for-profit partners. Interns gain valuable practical experience in applying concepts and analytical tools from their curriculum. In addition, they may receive academic credit, wages, and increase their marketability and productivity in the job market. Internship partners receive highly capable and dedicated students and exposure to current academic expertise, fresh ideas and different perspectives.

b. New Venture Lab (NVL).

All students are required to participate in the NVL sometime during their four years at Gonzaga. The NVL is a student-run consulting service that teams students with local entrepreneurs and intrapreneurs to conduct feasibility analyses, market research, business planning, and other services (See Exhibit 3). The NVL is open to all students at Gonzaga. It has grown rapidly since its inception in 2004, averaging 15-20 projects with 80-90 students a year over the past several years. While Hogan students provide most of the NVL leadership, over the past few years, half of the project team members and many of the project managers are non-Hogan students. In addition to a student-led project team, most projects also include a coach from the local entrepreneurship community who provides mentorship to the team. The NVL has established collaborations with Gonzaga's Engineering and Law schools, as well as regional business incubators and angel groups, to provide basic services where needed. An active NVL board of advisors (successful entrepreneurs and program alums) who advise on strategy and operations is certainly one of the most important parts of the NVL learning experience.

c. Regional Business Plan Competition (BPC).

The BPC was launched by the Hogan Program in 2000 for all Gonzaga students. In 2003, the competition was expanded to include three separate categories: 1) Student-Generated (including business ideas originating with students), 2) Community-Based (including projects in which students work on ideas originating with local entrepreneurs), and 3) Social Enterprises (including for-profit or non-profit ideas originating in the community or with students). In 2004, the Program initiated a collaborative effort with two other institutions in the Inland Northwest -- Eastern Washington University and Whitworth University. For each of the past six years, an average of seventy-two students participated and an average of forty business plans were submitted across these participating schools. Due to program and budgetary considerations, the competition will be discontinued after 2011. Instead, an alternative form of idea competition is being developed by the Hogan Program Director and Advisory Board.

d. Other Co-Curricular Activities.

In addition to the primary experiential learning activities outlined above, the Hogan Program has implemented a variety of other co-curricular experiences such as guest speakers by entrepreneurs and business leaders, site visits, service projects, and student clubs. Several examples are highlighted below.

Three official Gonzaga clubs were created by Hogan Students. Two Hogan students saw a need for learning the basics of investing and formed the Bulldog Investment Group in 2006. They persuaded a group of local investors (members of a 40 year old investment club) to seed a portfolio with \$18,000 and mentor them as they started. In spring of 2006, two Hogan Program students established a Collegiate Entrepreneurs Organization (C.E.O.) chapter at Gonzaga University. This student-run club sought to extend entrepreneurship education and experience to all students at the University. The CEO Club held a successful “Business Battle” sponsored by a local entrepreneur in spring 2007. Teams of students competed to generate the most profits by selling coffee on campus in an eight hour period. All profits from the competition were donated to a local charity. In 2008, at the invitation of the University of Miami, Ohio, the Hogan Program became a franchise operator of *Edun Live on Campus*, a social enterprise whose mission is to sell T-shirts that are made in sub-Saharan African countries. This social venture is operated by a team of Hogan Program students.

From 2007-09, during the summer between their junior and senior years, all Hogan students made a three-day field trip, called the Seattle Sojourn, to Seattle, Washington. Each student was matched up with an entrepreneur in the student’s chosen field of interest for an afternoon at the entrepreneur’s place of business (including non-profit organizations). There were two scheduled social networking events where students met other entrepreneurs in the Seattle community. The Sojourn ended with a class visit to a major Seattle company; site visits have included Microsoft, Amazon, and Accenture. This initiative was discontinued in 2010 due to budgetary constraints.

In 2007, a team of senior student leaders in the Hogan Program initiated a Legacy Project to start a business and donate the proceeds to a local charity. Students working on the Legacy Project solicited a number of local businesses and advertisers to underwrite a board game called “Zagopoly”. This game, a variation on *Monopoly*, was sold to students, alums, parents, and friends during the current academic year. The profits of \$7,000 from this venture were presented to a local charity selected by the students.

STRUCTURE AND FUNDING OF THE PROGRAM

The Hogan Program was designed initially by a team that included the President and Academic Vice President of the University, as well as the Deans of the schools of Business, Engineering, and Arts and Sciences and several faculty members. The intention of this team was to implement the vision of the founders by creating a unique, student-centered program that would attract and educate a select group of students representing a wide variety of majors on campus.

Since its inception, the Hogan Entrepreneurial Leadership Program has evolved to become an established Center of Excellence in the University. The program is featured by the Admissions Department as one of the most attractive and successful academic programs on campus. Although housed in the School of Business Administration building, the Hogan Program is structured as a campus-wide program with its own budget. The Program is staffed with a full-time Director, a full-time Entrepreneur-in-Residence, and a full-time Program Coordinator. Three tenure-track faculty members and one or two non-tenure track faculty members teach courses in the Entrepreneurial Leadership Concentration. A Hogan Student Leadership Team of twelve students provides leadership and direction on Program initiatives.

An Advisory Board of about twenty-five entrepreneurs, university administrators, faculty, and students provides additional guidance and support. Key faculty liaisons in engineering, computer science, and law collaborate with the Hogan Program staff and students to develop cross-disciplinary senior design projects and NVL projects. For example, a former NVL project for a start-up company that planned to make carbon fiber wheel chairs included an engineering student to design a prototype for the product. Business students worked on the market and financial feasibility of the product. The Dean of the School of Business Administration (SBA) provides some administrative guidance and support for the Hogan Program and several faculty of the SBA serve as student advisors. Additionally, the Associate Dean of the MBA and Masters of Accountancy Programs collaborates with the Hogan Program to offer entrepreneurship courses in the MBA program.

The Hogan Program enjoys strong and sustainable financial support from benefactors and the University. Initial funding came from the founding benefactors, who continue to be the primary funders with a perpetual annual gift. The Hogan Program has also received grants for various initiatives over the years, including funding from: 1) the Herbert B. Jones Foundation, for the Business Plan Competition and enhancements to the curriculum and co-curriculum; 2) the Coleman Foundation, for enhancements to the New Venture Lab and the creation of new courses; 3) “Hogan Angels”, entrepreneur benefactors who pledge annual support and/or who provide student scholarships for the program; and (4) Gonzaga University, for continuing financial support to augment the funds raised from these outside sources.

In addition, a substantial gift was contributed by the Hogan Family Foundation for the building of the Hogan Entrepreneur Center, which opened in December 2004. This facility,

included as part of an extensive renovation of the School of Business Administration, provides classroom space, New Venture Lab space, offices, and a board room dedicated to support Hogan Program coursework and co-curricular activities. In 2008, through the initiative of the Hogan Program Director, the University also approved funding for an additional tenure-track faculty member in entrepreneurship, whose role is to teach courses in the Hogan Program, and also to offer entrepreneurship courses open to non-Hogan students in the School of Business Administration and across the university.

STUDENT AND PROGRAM OUTCOMES

The Hogan Entrepreneurial Leadership Program offers several benefits to students and other stakeholders. The students gain entry into a highly selective and prestigious program. The Hogan Program is considered as one of Gonzaga's Centers of Excellence and it enjoys a strong positive reputation in the University and community. Students are exposed to a rigorous four-year curriculum and co-curriculum that prepares them to identify and seize opportunities for creating new ventures and other initiatives. The program emphasizes values-based entrepreneurial leadership, differentiating it from many other entrepreneurship programs. Graduates of the program have gained employment at large companies, new ventures, and non-profits; many have continued their education in graduate schools.

The Gonzaga University community benefits through: a) cross-campus emphasis that stimulates innovative, entrepreneurial thinking and activity among students, faculty, and administrators; b) specific collaborations with Schools of Business Administration, Engineering and Applied Science, and Law; c) a high-profile program that has become one of the University's centerpieces for recruiting high-caliber students; and d) success in attracting new resources from benefactors and foundations to the University.

The local/regional community benefits through: a) engaging entrepreneurs and entrepreneurial companies through a variety of co-curricular activities both on campus and in the community; b) offering assistance to entrepreneurs through the New Venture Lab and business plan competitions; c) connecting talented students to the business and non-profit communities through internships, mentorships, and networking events; and d) stimulating entrepreneurial activity in the region by leading a cross-institutional business plan competition and through the New Venture Lab.

Student Outcomes

Student and alumni accomplishments have been outstanding to date. Students have consistently reported high satisfaction with the curriculum and co-curricular activities and the program continues to be refined in part based on the results of annual program evaluations. Within one year of graduation, nearly all of the graduates have gained employment in major

companies, start-up ventures, or non-profit organizations, or have continued their education at top graduate programs around the country (see Exhibit 4). Student and alumni feedback indicates that the Hogan Program education and experience are key differentiators in their employment and acceptance into graduate schools. Many Hogan Program alumni report continued success in their early careers and graduate school work.

Several of the student teams have been finalists in prestigious national, regional, and local competitions (see Exhibit 4). For example, in 2005, *Original Lacrosse*, won first place in the Gonzaga University Business Plan Competition, Student-Generated category, and placed among the eleven semi-finalists in the *Fortune* Small Business Competition. Also in 2005, a Hogan Program team, *Mentor Partnering Resources*, winner of the Gonzaga University Business Plan Competition, Social Enterprise Category, was a semi-finalist in *Microsoft* Imagine Cup Business Plan Competition. In 2012, a team of engineering students won a first place \$90,000 grant in the U.S. Environmental Protection Agency's 8th annual *People, Prosperity, Planet* competition. Over the 10 years of its existence, the Gonzaga Business Plan Competition has resulted in the launching of 24 new commercial or social ventures, about half of which had the direct involvement of Hogan Program student teams.

Other Hogan Program Outcomes

In addition to its contribution to successful student outcomes, the Hogan Program has been recognized as a successful model of entrepreneurship education by several organizations and foundations. Moreover, the program has been a catalyst for change at Gonzaga University. Opportunities for entrepreneurship education and experience have been expanded to include programs and students beyond the initial select few who were fortunate to be admitted to the Hogan Program.

Awards and Grants

The Hogan Program was selected as Organization of the Year by the Spokane region's *Technet* Catalyst Awards in October 2005. The program was also one of eleven recipients of the competitive Excellence in Entrepreneurship in Teaching Colleges grants awarded by The Coleman Foundation. This three-year grant of \$150,000 provided an opportunity to expand entrepreneurship education and experience to students across the university. In 2008, the Hogan Program was awarded grant of \$150,000 from the Herbert B. Jones Foundation to collaborate with the Spokane Community College (SCC) on a project that linked the entrepreneurship programs from both institutions through the New Venture Lab. The Hogan Program provided consultation on curriculum to SCC and the NVL provided student consultation on SCC student business plans. The Hogan Program was also a key collaborator with the School of Engineering and Applied Science in securing a competitive \$50,000 grant (one of 22 schools nationally) from

the Kern Family Foundation. This grant is intended to incorporate an entrepreneurial mindset among students and faculty in engineering. The successful implementation of this grant has led to the subsequent awarding of two subsequent grants from the Kern Family Foundation totaling over \$250,000.

New Entrepreneurship Courses for Non-Hogan Students

Since its inception, the Hogan Program has attracted increasing attention to entrepreneurship education at Gonzaga. Many students who applied for admission to the program, but were not accepted, were still interested in taking entrepreneurship courses. Moreover, other non-Hogan students who participated in the New Venture Lab, Business Plan Competition and other experiential activities, wanted additional course work in entrepreneurship. To respond to this increasing demand for entrepreneurship education, the Hogan Program successfully attained a three-year (2005-2008), \$150,000 competitive grant from the Coleman Family Foundation's Excellence in Entrepreneurship for Teaching Colleges Program for the purpose of expanding course offerings to students not in the Hogan Program.

Beginning in 2006, three courses were developed and opened to all junior-level, non-Hogan students campus-wide. BENT 491 Creating New Ventures is an entry level course focusing on the fundamentals of entrepreneurship, the business planning process, and raising funds. BENT 495 New Venture Lab is an experiential course for students who participate in the New Venture Lab. MBUS/MACC 696 New Venture Lab is an experiential course for students enrolled in the MBA or Master of Accountancy programs. BENT 493 Social Entrepreneurship is a course in social entrepreneurship that focuses on opportunity recognition for social enterprises with an emphasis on feasibility analysis.

Then in 2011, as a sign of continuing momentum, the School of Business Administration approved a new undergraduate Concentration in Entrepreneurship and Innovation. As part of this concentration, a new introductory course was created called Creativity, Innovation, and Entrepreneurship. In 2012, a campus-wide Minor in Entrepreneurship and Innovation was approved by the faculty and will be offered beginning in fall 2013. The minor includes a new course option in Technology Entrepreneurship.

New Entrepreneurship Faculty

As noted earlier, in 2008 the Hogan Program Director secured a line for an additional faculty member in entrepreneurship who would be responsible for teaching courses in the Hogan Program as well as several newly created undergraduate and graduate courses. Also in 2008, the University established the Pigott Professor in Entrepreneurship, an endowed professorship that, in addition to teaching and research, is responsible for faculty and curriculum development in

entrepreneurship across the University. The chair was hired in the Fall 2010 and currently teaches entrepreneurship courses within the Hogan Program and university-wide.

LESSONS LEARNED

In the process of launching and growing the Hogan Program, we have learned some important lessons that other institutions might want to consider:

1. Vision tied to university vision/mission. A major factor in the success of the Hogan Program is its mission of providing rigorous entrepreneurial leadership education and experience in a campus-wide effort steeped in the Jesuit educational tradition. This values-based mission is compelling to University and community leaders, benefactors, faculty, and students.
2. Top management support. The University President, along with Mr. and Mrs. Hogan, were the visionaries for the program and committed financial and other support from the beginning. In addition, the President, the Academic Vice President, the Deans of the Schools of Business Administration, Engineering, and Arts and Sciences, and several key faculty leaders, crafted the initial structure and framework for the program.
3. University-wide structure and support. The program was initially established as a campus-wide effort and reported directly to the President of the University. The President, Academic Vice President, the Deans of the Schools of Business Administration, Engineering, and Arts and Sciences all served on the program's Advisory Board.
4. Strong advisory board. In addition to representation of university leadership noted above, the Advisory Board consists of recognized community entrepreneurs and business leaders. Student leaders and faculty are also integral participants on the Advisory Board. In addition, a cross-campus Faculty Advisory Committee was established to provide additional input and direction for the Program.
5. Focus on students, faculty and community. A successful program is a result of effectively managing the "three-legged stool" of students, faculty and community, including benefactors. Our focus has remained squarely on the education of students. We engage the students, faculty, community leaders and benefactors in a continuous effort to improve our ability to execute the program's mission of education.
6. Invite campus-wide participation. Through the Advisory Board, the Faculty Advisory Committee and the students, there is a concerted effort to establish partnerships across the institution. The New Venture Lab, Business Plan Competition, and new entrepreneurship courses are open to all students, regardless of major.
7. Connect students with community. The Hogan Program actively establishes and maintains relationships with a variety of entrepreneurs and leaders of early stage companies and non-profit organizations. These partnerships open doors to internships, site visits, guest speakers,

- advisory board members, BPC judges, networking, and other learning opportunities for students and faculty.
8. Connect the program with other academic and administrative support groups on campus. Since the curriculum of the Hogan Program is unique and requires careful coordination with other departments, we have established close working relationships with Deans, department heads, and faculty advisors. In addition, we have forged mutually beneficial partnerships with University Admissions, Financial Aid, and University Relations departments. We look for projects that can add value to others. For example, the Hogan Program's network of relationships with entrepreneurs has introduced a new group of potential benefactors to the University.
 9. Strong balance of academic and practitioner leadership. The program's first director was an academic, the assistant director was an entrepreneur, and many of the advisory board members were entrepreneurs. The first Director's successor was an entrepreneur and business leader in the community; at that time an academic director was retained to assist with curriculum and faculty matters. Today, the program is led by an academic with significant business experience and the program has appointed an entrepreneur-in-residence as assistant director. Maintaining this dual emphasis on both academics and practice is important to the integrity and credibility of the program both on and off campus.
 10. Stay focused. In the start-up stage of the program, there were many distractions and bumps in the road (note, we started in 2000 during the dot.com bust). Because we engaged a wide variety of constituents and stakeholders (as described above) there were many different opinions about the structure, direction and operations of the program. It is absolutely critical during these times to stay focused on the program's essential mission – the education of outstanding entrepreneurial leaders. As the program has evolved, there are also many opportunities to expand through grants and benefactor gifts. Here again, it is essential stay focused and avoid “mission creep” -- be selective in accepting only new resources that add sustainable value to the primary mission.

CONCLUSION

Over the ten years since its inception, the Hogan Program has become a viable model for innovative, undergraduate entrepreneurship education. Based on the outcomes cited above, we believe that the mission and goals of the program are being achieved. The students are immersed in a curriculum and co-curriculum with a rigorous foundation in the content and practice of entrepreneurial leadership. In addition, they are challenged to exercise leadership skills in recognizing and pursuing opportunities to contribute to society, whether by starting new commercial or social ventures, engaging in corporate intrapreneurship, or by creating initiatives to address societal needs. Many Hogan Program students have been recognized in national competitions for their business plans or other accomplishments. Program graduates have been

successful in gaining employment in large firms, start-ups, new ventures, not-for-profit organizations, and volunteer organizations around the world. Many graduates have continued their education in medicine, law, engineering, the sciences and other graduate programs. Beyond the students' and graduates' accomplishments, the Hogan Program has been a catalyst for growth in entrepreneurial activity at Gonzaga University and in the greater Spokane community.

As noted earlier, even though the core elements of the Hogan Program have remained stable over the past ten years, we have operated under a philosophy of continuous improvement. Currently, we are considering several changes to the Program's structure and content. First, we anticipate moving to a three-year model. Under the current four-year model, students do not take any classes in the spring semester of their freshman and sophomore years. We have found that some students become less engaged in the program due to the lack of meaningful contact during these gaps in the curriculum. In the three-year model, students would enter the program in their sophomore year, and would take courses in every semester throughout the Program. In addition, the selection of new students would be conducted in the freshman year and would incorporate more face-to-face contact, including personal interviews, between the Program administrators and prospective Hogan Program candidates. This will make the selection process more accurate in selecting students who are most likely to benefit from and thrive in the Program. These changes will help consolidate the curriculum and intensify the experience and, thereby, provide for a more consistently engaged cohort. In addition, we plan to move away somewhat from an emphasis on business planning and place more emphasis on feasibility analysis. Creating a full business plan will still be required in the senior incubation project course, but students will be required to conduct feasibility analyses on a variety of other projects throughout the Program. Finally, we are making a more concerted effort to engage our alumni to continue to participate in the program in meaningful ways. For example, several of our alums serve on the Hogan Program Advisory Board and the New Venture Lab Advisory Board. Some students serve as guest presenters in classes; several graduates are consistent financial contributors. Many alums have served as mentors to existing students and have introduced opportunities for internships and employment. Now with over two hundred Program graduates dispersed around the world, we view the continued engagement of our alumni as an extremely valuable resource, yet to be fully tapped.

No doubt, the Hogan Program will continue to evolve. As it does so, it will remain focused on rigorous, values-based education that provides our students with the ability to recognize and exploit opportunities to create new ventures and initiatives that make a positive difference in their organizations, communities and society. We believe that the core elements of this model and the insights gained from our experience can be readily applied by other universities and colleges.

AUTHORS' NOTE

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EXHIBIT 1: COURSE REQUIREMENTS FOR THE ENTREPRENEURIAL LEADERSHIP CONCENTRATION

First Year

- ENTR 101 The World of Entrepreneurship, 2 credits One of the following three courses *
- ECON 201 Microeconomics (for any major), 3 credits
- ECON200 Economic Analysis (for engineering majors)
- ECON 270H Honors Economics (for any major, with permission)

*These credits count towards core social science requirements for Arts and Sciences majors.
Can be taken in second year if necessary.

Second Year

- ENTR 201 Social Entrepreneurship, 2 credits
- ACCT 263 Accounting Analysis, 3 credits

* Business students must take ACCT 260 Principles of Accounting I (3 credits) and Principles of Accounting II (3 credits).

Third Year

- ENTR 490 New Venture Creation, 5 credits
- ENTR 497 Internship, 0-3 credits

Fourth Year

- ENTR 494 Incubation Project, 5 credits
- ENTR 498 Entrepreneurial Leadership, 3 credits

EXHIBIT 2: COURSE DESCRIPTIONS FOR THE ENTREPRENEURIAL LEADERSHIP CONCENTRATION

- ENTR 101 The World of Entrepreneurship** 2.00 credits
An introduction and overview of the world of entrepreneurship including an introduction to economics, the role of society and government, legal and ethical issues, fundamentals of entrepreneurship, creating and managing new ventures in the commercial or non-profit sectors, and the various functional areas of business. Fall
- ENTR 201 Social Entrepreneurship** 2.00 credits
This course provides students with an introduction to social entrepreneurs, the ventures they create, and how these ventures create social value. It provides students with concepts and tools they will need to pursue their own social enterprises. Students will address each of the following key components: opportunity/problem recognition, solution identification (value proposition), concept development, venture creation, value assessment, and the communication of the idea and venture goals. Fall. Prerequisite: ENTR 101
- ENTR 490A New Venture Creation** 1.00 credit
This segment of the course focuses on marketing research and planning for new ventures. Topics include: idea generation, estimation of demand, segmentation analysis, competitor analysis, using secondary and primary data in marketing research, and marketing strategies for new ventures. Fall. Prerequisite: ENTR 201
- ENTR 490B New Venture Creation** 2.00 credits
This segment of the course focuses on financial analysis and management of new ventures. Topics include: capital budgeting, time value of money, net present and future value, cash flow, risk/return, valuation, and approaches to financing new ventures. Students will also learn to develop pro forma financial statements for new ventures. Fall. Prerequisite: ENTR 490A
- ENTR 490C New Venture Creation** 2.00 credits
This course integrates material from previous courses and includes the following topics: organizational life cycle, legal issues, industry analysis, entrepreneurial strategy, creating and sustaining a competitive advantage, attracting and maintaining an effective leadership team and managing growth. Prerequisite: ENTR 490A & B
- ENTR 494A Incubation Project** 3.00 credits
First semester of an applied incubator experience in which students apply entrepreneurial concepts and analytical tools to the creation of an actual new commercial or social venture. Students can develop their own project or work on projects for local incubators or entrepreneurs. The end result of this project is to produce a fundable business plan. Fall. Senior Standing.
- ENTR 494B Incubation Project** 2.00 credits
Second semester of an applied incubator experience in which students apply entrepreneurial concepts and analytical tools to the creation of an actual new commercial or social venture. Students can develop their own project or work on projects for local incubators or entrepreneurs. The end result of this project is to produce a fundable business plan. Spring. Senior
- ENTR 497 Internship** 3.00 credits
An approved internship is required for completion of the concentration in entrepreneurial leadership. The ideal internship allows the student to apply concepts and analytical tools from the curriculum in an entrepreneurial context. Approved internships consist of a minimum work requirement of 180 hours and completion of a written report summarizing the learning experience.
- ENTR 498 Entrepreneurial Leadership** 3.00 credits
A capstone course that examines the leadership characteristics, including ethical virtues, of successful entrepreneurs. The course emphasizes the understanding that entrepreneurs bear a social responsibility to contribute to the common good through their business endeavors. Spring. Senior Standing.

EXHIBIT 3: NEW VENTURE LAB

The **New Venture Lab (NVL)** is a student-run lab that provides initial assessment and evaluation of potential business ideas, development of business plans, research and other activities that prepare new ventures for funding. A student Leadership Team manages the NVL and provides direction and operational support with guidance from a team of advisors from the business community.

The NVL addresses two major needs.

- A “learning laboratory” where students can apply new entrepreneurial skills in real business situations.
- A “hands-on” incubator of early stage business ideas in the region.

The NVL provides added value to entrepreneurs by:

- Applying students’ current knowledge of state-of-the-art principles and practices.
- Tapping students’ energy, motivation, and persistence.
- Leveraging students’ access to expert faculty, advisors, and staff.

The NVL Activities

Three levels of new venture development services are provided. These are performed by Hogan Program students under the guidance of experienced faculty, advisors and staff.

Idea - Initial Assessment and Evaluation

Hogan Program students help identify potential new ventures by screening business ideas and proposals from the community and other students. Students interview pre-qualified individuals who have business ideas and assess and evaluate the potential of the ideas using specified criteria, reviewing these new venture ideas with a board of experienced entrepreneur advisors. Based on this review, a determination is made whether to pursue the idea in the NVL. A response to the entrepreneur explains the decision, outlines the next steps or suggests alternatives the entrepreneur may wish to pursue.

Proof of Concept – Research and Analysis

For those ideas that become NVL projects, students provide appropriate research to validate:

- The need for the solution provided by this idea.
- The “value proposition” for customers of this solution.
- The feasibility and/or practicality of the product.
- The competition and potential for competitive barriers.
- The potential market capable of generating needed revenue.
- The solution’s manufacturability and/or profitability.

Business Plan – Preparation for Funding

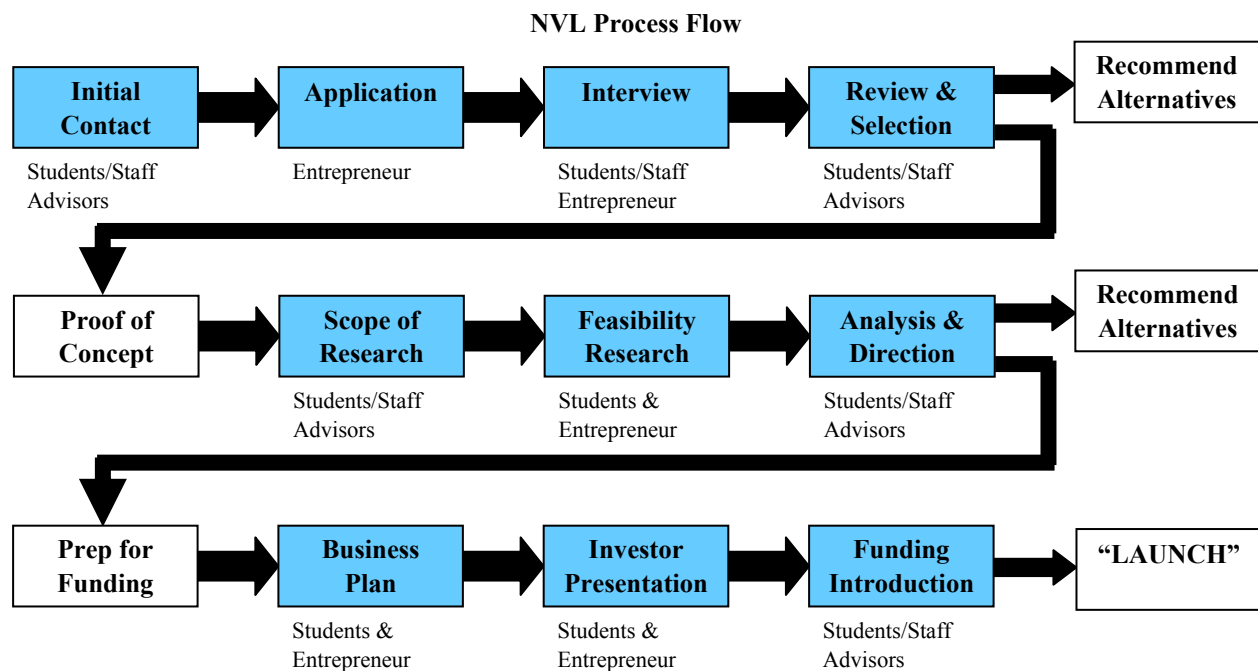
Upon completion of the “Proof of Concept” level, students provide coaching on how to prepare and present an effective Business Plan. This includes activities such as:

- Preparing an Executive Overview that will capture investor interest.
- Ensuring that claims and forecasts are supported with quality research.
- Completing a financial plan that is realistic and achievable.

- Developing a compelling presentation for potential investors.
- Demonstrating that the proposed management team is capable.

Collaboration

The NVL collaborates with several entities, both on campus and in the business community, to apply the best possible talents and services to each project. Because the Hogan Program includes students from all major fields of study, those students have access to the entire faculty, staff, lab and research resources of the university. The Hogan Program is actively engaged with other entrepreneurial programs in the community including Connect NW, Sirti, Spokane Alliance of Angels, EWU, Whitworth, PNNL and the many trade and economic development associations.



Note: Each New Venture idea will have a unique path through the process.

EXHIBIT 4: SELECTED HOGAN PROGRAM STUDENT ACCOMPLISHMENTS

Note: The highlights below reflect some of the accomplishments of about 200 students that have graduated from the Hogan Program.

Employment: Our graduates are now employed at major companies such as *Medtronic, Intel, CH2M Hill, Nestle, Raytheon, PWC, Ernst & Young, Google, KPMG, NBC, Booz Allen, Boeing, Disney, Ingersoll Rand, and Deloitte*. Some are employed at start-up ventures and small businesses like *GenPrime, Desautel Hege, Manta Ray Consulting, ATX Sports, Fizzy Media, Ivycorp, Next IT and Green Cupboards*. Others are working at non-profit organizations: *Fred Hutchison Institute, Children's Research Institute, Future foundation (London), Salt Lake Aviary, Sarah's Hope (Baltimore), Jesuit Volunteer Corps, Teach for America, Human Rights Guatemala, Colegio Americano Mexico, Institute for Systems Biology, Peace Corps*, and elementary and secondary schools.

Graduate School: Our graduates have continued their education at graduate schools across the world : University of Texas (Civil Engineering), University of Washington (Electrical Engineering, Medicine), Seattle University (Law), Columbia University (Public Policy, Nursing), Emory University (Medicine), Creighton University (Dentistry, Medicine), University of Portland (MBA), Gonzaga University (MBA, Law), WSU (English, Computer Science), Oxford (Entrepreneurship), Trinity Dublin (International Studies), London School of Economics (Micro-Finance), U of Minnesota (PT), USC (Finance), UC Berkeley (MBA), Boston (Law), Penn State (PhD), Indiana (Social Development), OHSU (Medicine), American U (Micro-Fin.), Colorado State (PhD Engineering), and Hastings (Law).

Some Notable Achievements:

- Oxford MBA # 2 in class, # 2 in International VC competition at Stanford.
- Fulbright scholar in Ukraine now teaching at Ukrainian Catholic University.
- Teaching fellowship in Infectious Diseases at UW Med School and ISB.
- Rocket Scientist in R&D lab at Raytheon.
- Project Manager for billion dollar particle accelerator in New York.
- Co-founded Alloken, built lead product, and sold company all while working for Google.
- Peace Corps in Ethiopia, event mgr Spokane, MBA Trinity, Dublin & now in Rwanda.
- Hastings Law, Commissioned in Navy JAG Corp.

Business Plan Competitions: National/International/Regional

- Team of engineering students won a first place \$90,000 grant in the U.S. Environmental Protection Agency's 8th annual People, Prosperity, Planet competition, 2012.
- *Original Lacrosse*, semi-finalist in *Fortune* Small Business Competition, 2005; incorporated.
- *Mentor Partnering Resources*, semi-finalist in Microsoft Imagine Cup Business Plan Competition, 2005; incorporated as *mentors4students* in 2006.
- *Flying M Washout*, selected as First Place Winner in the Pacific Northwest Student Entrepreneur Competition, Sponsored by The Entrepreneurship Center, St. Louis University, 2003. This student was one of fifteen finalists in Global Student Entrepreneur Award Competition, Chicago, 2003.
- *Light House Entertainment*, First Place in Gonzaga University Business Plan Competition, 2006.
- *Bounce Free*, Finalist in University of Washington Business Plan Competition, 2005.
- *Experience Art*, Finalist in University of Washington Business Plan Competition, 2005.
- *Original Lacrosse*, First Place in Gonzaga University Business Plan Competition, 2005.
- *Spokane Community Market*, First Place in Gonzaga University Business Plan Competition, 2005.

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