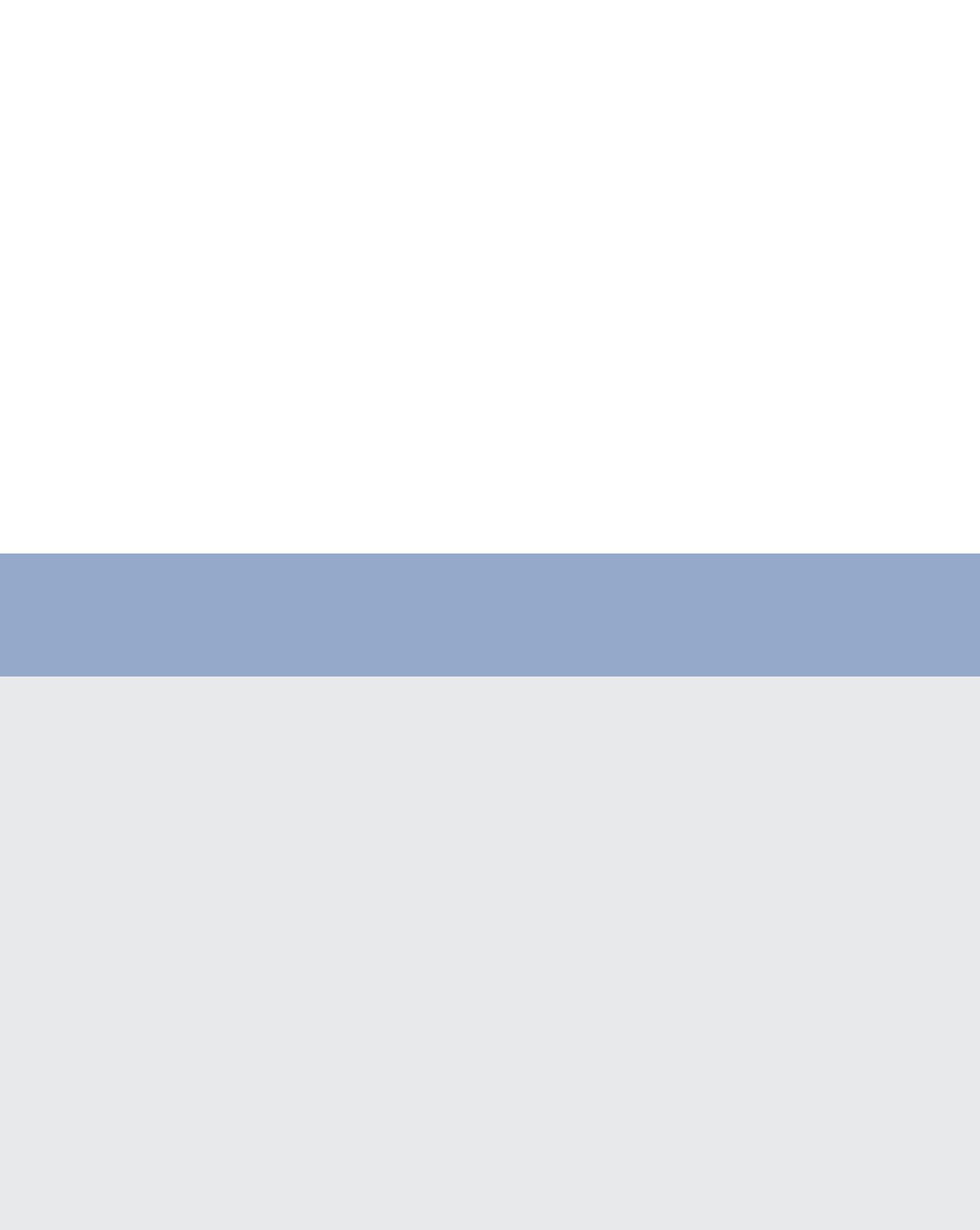


# Entrepreneurship in American Higher Education

KAUFFMAN

The Foundation of Entrepreneurship

A Report from the Kauffman Panel on  
Entrepreneurship Curriculum in Higher Education



# Preface

By Carl J. Schramm, Kauffman Foundation President and CEO

In January 2006, the Kauffman Foundation convened a multidisciplinary panel of distinguished educators to think with us and advise us about the place of entrepreneurship in America’s colleges and universities. Though entrepreneurial activity has played a dominant role in the U.S. economy for decades, the study of entrepreneurship is relatively new to higher education. We asked the Kauffman Panel on Entrepreneurship Curriculum in Higher Education to take an extensive look at higher learning in the United States and offer recommendations for a comprehensive approach to teaching entrepreneurship to college students. This report, “Entrepreneurship in American Higher Education,” presents the results of the Panel’s deliberations.

The report explains why entrepreneurship matters to American higher education and offers broad recommendations about the potential of entrepreneurship as a key element in undergraduate education, the major, graduate study, the evaluation of faculty, topics referred to as the “co-curriculum,” and the management of universities. In reaching its conclusions, the Panel examined an array of educational models and practices and also discussed the possibility of a disciplinary canon for entrepreneurship. It concluded—wisely, in our view—that the diversity of institutional types and educational missions of American colleges and universities make a single approach to entrepreneurship both unrealistic and inauthentic. Thus, the report aims to be suggestive rather than prescriptive and supplies illustrations from a variety of colleges and universities as concrete exemplars of its general points.

The members of the Panel represent both private and public universities and include experts in science, social science, and the humanities from schools of arts and science, business, and engineering. The Panel’s Founding Chairman was the late Richard Newton, Ph.D., dean of the College of Engineering at the University of California-Berkeley, who passed away on January 2, 2007. Dean Newton’s extraordinary vision led the Panel to take a fresh and deep look at current instructional approaches

to entrepreneurship and to consider truly multidisciplinary approaches that are responsive to the real needs of a marketplace. After Dean Newton's untimely death, William Scott Green, senior vice provost and dean of Undergraduate Education at the University of Miami, agreed to chair the Panel and lead in drafting its report. The Foundation and the Panel regard the report below as a tribute to the insight, conviction, intelligence, and collegiality of Rich Newton. Without his leadership, the work would not have been possible.

We hope this report will stimulate fresh discussion and educational change across and throughout American university and college campuses. The Kauffman Foundation's Web site, [www.kauffman.org](http://www.kauffman.org), contains resources that can usefully contribute to these efforts. The Kauffman Foundation concurs with the Panel's judgment that "entrepreneurship is higher education's authentic and natural ally" and that our nation's future significantly depends on our nurturing that alliance. We hope this report is a meaningful step in that direction.

### Panel Members

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- William Scott Green, Ph.D., senior vice provost, dean of Undergraduate Education, Professor of Religious Studies, University of Miami
- R. Glenn Hubbard, Ph.D., dean of the Columbia Business School at Columbia University
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- Linda Katehi, Ph.D., provost, University of Illinois at Urbana-Champaign
- George McLendon, Ph.D., dean of the faculty of Arts and Sciences at Duke University
- Jim Plummer, Ph.D., dean of the School of Engineering at Stanford University
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## Introduction

Higher education is basic to the future of American life. The nation's ability to prosper and to thrive in an increasingly knowledge-based global society and economy depends on our having a progressively well-educated population. The values and practices of pure research—discovery, originality, innovation—shape and motivate American university learning. The American bachelor's degree has other objectives as well. Among the most frequently stated are critical thinking, scientific and quantitative reasoning, preparation for citizenship, moral reflection, readiness for work, respect for diversity, broad intellectual knowledge, the transmission of culture, and appreciation of our national values. At the root of all these legitimate and important goals is an even more fundamental purpose of learning: intelligibility. We cannot improve a world we do not understand, and we cannot advance if we do not comprehend ourselves, our strengths, limitations, and motivations. By making the world and ourselves increasingly comprehensible and thereby manageable, education establishes a foundation for human growth, creativity, fulfillment, and progress.

If intelligibility is a fundamental goal of learning, then American higher education must reflect the experience and conditions of contemporary life. Higher education cannot make intelligible a world from which it is removed or does not address. College learning

must teach students how to make sense of and how to affect the reality in which they will actually live. Education cannot succeed if it becomes insular and static. To be sure, studying great works of the past and the persisting questions of human nature is basic to becoming an educated person. But a distinctive strength of American higher education also should be dynamism and adaptability, a capacity to address urgent, current questions of nature, society, and human experience as well as classic ones.

Entrepreneurship is a dominant force in contemporary America. It generates ongoing innovation and improvement of our goods, services, and institutions. It makes them more efficient, affordable, and, thus, effective. Entrepreneurship enhances the quality of our collective and individual lives. It changes the way we work, the way we communicate, the way we live. Innovation and improvement depend on intelligibility. In the final analysis, we cannot devise or enhance the incomprehensible. We cannot repair what is mysterious to us. Because intelligibility is a fundamental purpose of higher education, and generating new knowledge is the highest expression of American learning, entrepreneurship and college education are inextricably bound to one another. Each has an ineluctable interest in the success of the other. Against this background, entrepreneurship should be both a legitimate subject in American undergraduate education and a pervasive approach to learning and the management of universities.

## Why Entrepreneurship Matters

Entrepreneurship is the transformation of an innovation into a sustainable enterprise that generates value. An entrepreneur is “any entity, new or existing, that provides a new product or service or that develops and uses new methods to produce or deliver existing goods and services at lower cost.”<sup>1</sup> “Entrepreneurs innovate new ways of manipulating nature, and new ways of assembling and coordinating people....The innovator shows that a product, a process, or a mode of organization can be efficient and profitable, and that elevates the entire economy.”<sup>2</sup> Entrepreneurs take risks to develop a novel, sustainable enterprise—a new or improved product, service, or mode of organization that can exist independent of its originator—that benefits the economy and society.

Though entrepreneurship can involve—and thus often is mistaken for—invention, creativity, management, starting a small business, or becoming self-employed, it is neither identical with nor reducible to any of them. The defining trait of entrepreneurship is the creation of a

novel enterprise that the market is willing to adopt. Hence, entrepreneurship entails the commercialization (or its functional equivalent) of an innovation. New ideas, products, or organizational schemes matter little until they achieve concrete reality in the marketplace—that is, until they are actually used. The market judges utility and need along with excellence. It does not value—and does not need to value—every good idea. The entrepreneur’s risk, therefore, is not a gamble but an informed calculation about the viability of the new enterprise in the market, about its capacity to meet a demand or need of others.

Entrepreneurship emerges from the realm of commerce, but it cannot be restricted there. Business is part of society. Cultural and social values and economic policies and behaviors shape and validate one another. For entrepreneurship to be a mainstream and routine business practice, it must reflect its society’s view of how the world should work and how human beings should behave. Social attitudes, political practices, economic policies, and the legal system must support creativity, risk-taking, and the implementation of new enterprises. Entrepreneurship cannot thrive if its society’s values undermine it.

Entrepreneurship is a process of fundamental transformation: from innovative idea to enterprise and from enterprise to value. The very ordinariness of entrepreneurship in American commerce points to a society that prizes originality and improvement and the human traits that enable both. Thus, entrepreneurship

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<sup>1</sup> William J. Baumol, Robert E. Litan, and Carl J. Schramm, *Good Capitalism, Bad Capitalism, and the Economics of Growth and Prosperity* (Yale University Press, 2007), p. 3. This definition reflects the authors’ critical distinction between “‘replicative’ entrepreneurs—those producing or selling a good or service already available through other sources” and “‘innovative’ entrepreneurs,” who matter for economic growth.

<sup>2</sup> J. Bradford DeLong, “Creative Destruction’s Reconstruction: Joseph Schumpeter Revisited,” *The Chronicle of Higher Education*, December 7, 2007, [www.chronicle.com](http://www.chronicle.com); Section: The Chronicle Review, Volume 54, Issue 15, Page B8.

is more than a business practice. As a distinct mode of thought and action, it derives from business but can operate in any realm of human endeavor. Entrepreneurship merges the visionary and the pragmatic. It requires knowledge, imagination, perception, practicality, persistence, and attention to others. Entrepreneurship is a self-actualizing and a self-transcending activity that—through responsiveness to the market—integrates the self, the entrepreneur, with society. Unavoidably, therefore, entrepreneurship is an exercise in social responsibility. To suppress or constrain innovation and improvement—and their implementation—ignores a society’s needs and wants, holds it back, and diminishes its future. Entrepreneurship is the unique process that, by fusing innovation and implementation, allows individuals to bring new ideas into being for the benefit of themselves and others. It is *sui generis*, an irreducible form of freedom.

## Why Entrepreneurship Belongs in College

Our recommendation is based on four key considerations. First, entrepreneurship is critical to understanding and succeeding in the contemporary global economy. Second, entrepreneurship is already an expanding area of American college learning. Third, entrepreneurship is becoming a basic part of what universities themselves do. Fourth, entrepreneurship meets many of the goals of a quality American undergraduate education.

To neglect entrepreneurship or relegate it to the educational sidelines makes undergraduate learning orthogonal to the world it is supposed to help students learn to understand.

Entrepreneurship has long been overlooked as a topic of economic study, but recent scholarship has underscored its leading role as a major generator of wealth in the contemporary economy. The continual creation of new enterprises is a fundamental reason for the economic growth and technological innovation of the American economy over at least the past two decades. Entrepreneurship’s centrality to the steady improvement of human welfare explains its pertinence to American college learning.

Although entrepreneurship has been a relatively standard component of the curricula of business schools, it has begun to emerge as a discrete area of study of ever broadening interest and applicability. The increased importance of entrepreneurship is evident in the academy. Entrepreneurship is one of the fastest growing subjects in today’s undergraduate curricula. In the past three decades, formal programs (majors, minors and certificates) in entrepreneurship have more than quadrupled, from 104 in 1975 to more than 500 in 2006. The development of discrete courses in entrepreneurship has been exponential. The Kauffman Foundation has stimulated and helped focus this curricular development with its Kauffman Campuses<sup>SM</sup> Initiative, which fosters cross-campus education in entrepreneurship and now covers nineteen universities of varying sorts across the United States. The exceptional curricular expansion of entrepreneurship is a

good reason to rethink its place in the general undergraduate curriculum.

Increasingly, universities themselves are agents of entrepreneurship. Through offices of “technology transfer,” schools encourage and enable their faculty to create ventures that transform their research into products for the market. Research universities are an important—though not the only—source of innovation and the creation of new products and processes that become the foundation of new firms and enterprises. For universities to advocate entrepreneurship as a core activity for faculty and then fail to teach that activity broadly to their students disconnects the school’s mission from its practice and is educationally incoherent.

Finally, although it is among the newer subjects in the academy, entrepreneurship fulfills many of the established goals of a high-quality education. Entrepreneurship is not an isolated activity. It is embedded in larger structures. Even if conceived narrowly as solely a business practice, entrepreneurship ultimately is unintelligible without knowledge of the interlocking and reinforcing systems of law, economics, politics, finance, and cultural values that make it plausible and thereby foster it. Moreover, because entrepreneurship has a practical focus, its study naturally and easily demonstrates how ideals and theories—so called “pure” knowledge—actually affect behavior. Indeed, entrepreneurship’s focus on the pragmatic can channel the ambition and talent of young people away from fanciful speculation and toward concrete projects. As a magnet for the authentic integration of varied

fields of learning and as a bridge between theory and practice, entrepreneurship is a superb vehicle with which to achieve the aims of the broad, effective, and integrated learning that marks a strong college education.

Entrepreneurship is a distinctive form of human agency that fuses the human desire for the ever better with confidence in the human ability to fulfill that desire. It mixes optimism with realism. As a defining characteristic of American society, economics, and culture, entrepreneurship has a valuable role to play in American higher education.

## How Entrepreneurship Fits in College

If entrepreneurship belongs in college learning, how should we teach it and learn it? Does it need to become a distinct field of learning, a discipline, in order to find a durable place in the overall curriculum?

Like philosophy or music, entrepreneurship is a field of study that generates—rather than discovers or encounters—its subject matter. Unlike history, sociology, or anthropology, for instance, entrepreneurship creates what it studies. Because of its practical focus, entrepreneurship’s greatest exponents are its innovators and practitioners—the creators of new enterprises, firms, products, and services—rather than its students. Like music, but unlike philosophy, entrepreneurship requires more than other professionals to be consequential. Philosophers may write primarily for other

philosophers, but entrepreneurs and musicians (both composers and performers) require a population of amateurs in order to be complete. For music, that population is the audience. For entrepreneurs, it is the market. To see how entrepreneurship can find its place in a college curriculum, a comparison of entrepreneurship to music is instructive.

Education in entrepreneurship, as in music, operates along a continuum of learning that extends from the professional to the amateur. In music, at one end of the continuum is the composer or the virtuoso performer. At the other end is the audience, which values what the composer and performer do. Along the way are multiple, discrete aspects of music—conducting, mastering a specific instrument, theory, history, etc.—that contribute to the overall intelligibility of the subject and improve performance. Comprehensive and substantive education in music embraces this continuum and neglects none of it. It teaches the virtuoso how to improve and the amateur how to appreciate. It shows how music works, charts its changes, and analyzes its elements. Increasingly, it examines the conditions of music's creation and persistence.

In the final analysis, music is not and cannot be solely self-referential. It reaches outwards to non-specialists to bring benefit and enrichment to their lives. Music also is a competitive field and therefore a meritocracy. But its notion of merit is neither pristine nor absolute. It is affected by the audience, which helps to shape the subject and determine the kind and quality of music that will matter. The higher the audience's taste and level of expectation, the better the music becomes and must become.

Because of its focus on the audience, music has a capacity to affect a vast population.

Nearly everything that is true for music also is true for entrepreneurship. At one level, education in entrepreneurship must be about the entrepreneur, the practitioner. Entrepreneurship education must give students the practical, how-to technical skills to create, manage, assess, and sustain new enterprises. Among other things, they need to learn to devise a product, create a business plan, find new resources, build a company, market their innovation, and so forth. To be sure, skills alone hardly generate new enterprises, but they surely facilitate their development. At the other end of the continuum, education in entrepreneurship also must be for the amateur, the consumer, who is the ultimate focus of entrepreneurship. The amateurs constitute the market. They consume, and, in so doing, they assess. Just as education can help students who are not musicians learn how to appreciate the skills, intelligence, and artistic values that go into the creation and performance of great music, so education can help students who are not entrepreneurs understand the skills, intelligence, and the political, cultural, and economic infrastructure that enable the generation of new enterprises.

Entrepreneurship also is a matter of merit, but, as in music, what counts as entrepreneurial merit is constrained by the market. Between the ends of this continuum of learning, as in music, there are many discrete elements of entrepreneurship—some applied, some theoretical—that can constitute the foci of individual courses and projects.

When one views the comprehensive framework of entrepreneurship education against the diverse institutional types and educational missions that comprise American higher learning, it seems unlikely that any single set of educational practices or programs can apply uniformly across the board. Different schools have discrete populations, histories, cultures, and purposes, and American colleges and universities serve a variety of educational functions with increasingly diverse age groups. For instance, entrepreneurship in a university with a business school may differ from entrepreneurship in a university without one. Entrepreneurship in community colleges, which educate an important sector of the American population, may diverge from entrepreneurship in a research university. Entrepreneurship cannot be a “one size fits all” discipline. Each program will have a particular set of outcomes, a defined target audience, and will fit into a local ecosystem. Our aim, therefore, is not to prescribe a single set of educational practices. Rather, we want to encourage educational communities, including their faculties, administrations, staffs, students, parents, and trustees, to devise the kinds of education in entrepreneurship that are appropriate to their goals, populations, heritages, and resources, and that find a legitimate place in the continuum of learning sketched above. Education in entrepreneurship needs to be as responsive to the concreteness and integrity of its diverse contexts of learning—its varied markets—as entrepreneurship itself.

This report focuses on three major areas:

the curriculum, the co-curriculum, and the management of universities. We aim to be suggestive rather than prescriptive, to indicate both substantive rationales and concrete measures that universities can adopt to make entrepreneurship fundamental to what they do and how they do it.

## Entrepreneurship in the Curriculum

### Entrepreneurship in General Education

All—or nearly all—American colleges and universities share a basic interest in general education. This is the realm of learning that aims to equip American college students with both a set of skills—quantitative, verbal, analytical, etc.—that is essential to all fields but particular to none and a breadth of intellectual experience that can help them integrate knowledge from different fields. By definition, general education articulates the core educational mission of a college or university. As such, it is the province of no discrete school or department. It represents institution-wide, trans-disciplinary learning. Increasingly, general education requirements focus on helping students gain basic competence in writing, quantitative analysis, interdisciplinary, research, globalization, ethics, and citizenship. General education is where students are expected to acquire the fundamentals of learning that they can then apply to more specialized areas of study and to the rest of their lives.

Entrepreneurship is ideal for general education because it is a practice that applies to many fields and because it provides a revealing lens for studying how cultural values, social institutions, economic policies, and legal practices interrelate to shape human behavior. Entrepreneurship naturally and authentically draws together subjects usually taught and studied separately.

For example, an introductory, foundational course in entrepreneurship—designed for all students—can explore and explain how core cultural values come to expression in a broad range of human activities—from economics to law to politics to culture to religion—and how these realms must collaborate to make entrepreneurship routine in American society. To take one instance, contemporary American entrepreneurship depends on the legal concept of “intellectual property,” the notion that ideas can be “owned” and their use restricted to and by the owner. Beneath this legal concept are logically prior notions of the self, the autonomy of the individual, and that our ideas come from within us and therefore belong to us. This range of values and practices is the context for our practice of entrepreneurship. The entrepreneurial lens illustrates concretely how big theoretical, philosophical, and sometimes theological constructs become real, practical, and affect everyday life—in short, how values matter. In doing so, a foundational course in entrepreneurship can admirably fulfill the ideals of broad, interconnected, and relevant learning that mark a quality general education. It also

brings entrepreneurship into the mainstream of students’ discourse about their own education and helps them apply it when they turn to more specialized study.

For general education, entrepreneurship has yet another pertinence. In the United States, entrepreneurship is a primary way in which our free society grows and improves not only our economy, but our cultural and social lives as well. Entrepreneurship is a fundamental means by which a free society comes to know itself. Through the continual innovation, the ongoing transformation of ideas and enterprises, and the persistent testing which takes place in the market, American society learns about itself and its culture in the very process of developing that culture. Nothing else we do—even, and particularly, holding elections—gives us such comprehensive collective self-knowledge. By showing students how American politics, law, culture, and economics actually interact—and must interact—to produce tangible results, the broad study of entrepreneurship in general education can be a fresh and stimulating way for students to achieve a realistically comprehensive picture of the concrete machinery of their own economy and society. The study of entrepreneurship thereby helps ready students for informed citizenship.

## Entrepreneurship and the Disciplines

American baccalaureate education is built around academic disciplines. Whatever else they may do in college, all students pursue a “major”

or “concentration” in a particular subject or subjects. Recent scholarship makes clear that disciplinary learning—at least as much as, and possibly more than, general education—is central to students’ experience.

*...the academic disciplines shape students’ educational experience in every way. What students learn about diversity, critical thinking, writing, quantitative reasoning, information literacy, and technology—including how these terms are defined—is mediated by the disciplines, as are the best pedagogical strategies to teach students these skills.*

*This mediation is not only true for students’ third and fourth years in college... but for the first two years as well....[T]here is no such thing as an undergraduate education; instead we have many undergraduate educations filtered through the lenses of particular disciplines....<sup>3</sup>*

If this account is even reasonably accurate—and there are reasons to think it is more than that—entrepreneurship must find its place among and within the disciplines to become genuinely mainstream.

Entrepreneurship’s natural and broad applicability enables such curricular integration

at the level of both the discrete course and the disciplinary program, the major or concentration. The relevance of entrepreneurship to studies in business and economics goes without saying. But courses in history or literature could focus on entrepreneurs or entrepreneurial themes. The study of the impact of government policies on entrepreneurship easily fits within political science or economics. Entrepreneurship is becoming increasingly relevant in nursing and the delivery of health care. The broad area of environmental studies and sustainability is rich with entrepreneurial possibility. Religion and political science offer interesting options to explore the power of entrepreneurial activity outside the realm of business.<sup>4</sup> A very promising area that may well become fundamental to entrepreneurship education builds on research in psychology and sociology. This area of learning analyzes and teaches the traits that correlate with entrepreneurial achievement, such as creativity, innovation, and self-efficacy.

Integrating entrepreneurship into discrete courses—however valuable—addresses only part of students’ experience with the disciplines. The major, the collection of courses that constitutes an extended and integrated program of learning, shapes what students know about their most important subject and how they know it. The

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<sup>3</sup> Catherine Hoffman Beyer, Gerald M. Gilmore, and Andrew T. Fisher, *Inside the Undergraduate Experience: The University of Washington’s Study of Undergraduate Learning* (Bolton, Mass., Anker Publishing Company, 2007), p. 23

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<sup>4</sup> Political movements and evangelical religions, both of which outlive their founders, may be inherently entrepreneurial, though their markets, in the first instance, are not economic. In some forms of contemporary Protestantism, the connection between religion and entrepreneurship is explicit. See, for instance, [www.pastorpreneur.com](http://www.pastorpreneur.com).

major brings them into a community of inquiry and, teaches them an intellectual discourse, the discipline's language of knowledge. The courses in the major reinforce habits of mind, analytical practices, and approaches to problem-solving. Entrepreneurship will have its most durable impact on higher education if it not only finds an appropriate place in the disciplinary subjects, but shapes the major itself. For example, to enhance students' sense of entrepreneurial possibility, some educators suggest that courses in commercialization should be available to, if not required of, students who major in any of the STEM (science, technology, engineering, mathematics) subjects.

The issue goes deeper than this. Since the major is likely the most influential component of students' learning, it is the logical context in which they can explore and experience what we might call the entrepreneurial move from intelligibility to innovation. An entrepreneurial approach to the major might stress both the mastery of basic information and insight into the new ideas that have altered a field of learning over time. While the major conventionally gives students extensive exposure to a subject, its structure often does not address systemic innovation in a field. Thus, students cannot always see how change and progress have affected their own learning and thinking. An articulated emphasis in the major on how a field has improved analysis, advanced understanding, and implemented change could help students learn to innovate about what they know and thereby make

innovation itself more a part of their educational experience and discourse. Again, the analogy to music may be helpful. Departments of music composition cannot make students creative. But studying how great music is made can ignite whatever creativity students possess and help bring it to expression. The aim of studying composition is to unpack works of genius and excellence and thereby lead students beyond imitation to originality.<sup>5</sup> Students are more likely to practice innovation if their education values it, and it is a basic part of their learning. So it is with entrepreneurship. Making innovation intelligible may help students to imagine and engage in entrepreneurial activities they otherwise might not have considered.

The integration of entrepreneurship into the major is more than a departmental matter. Academic guilds and accrediting agencies determine the form and contents of majors in many fields, particularly those outside of arts and sciences and traditionally deemed as "preprofessional," i.e., business, education, communication, engineering, architecture, etc. Any movement to make majors more entrepreneurial will ask the guilds and accrediting agencies to rethink the so-called "learning outcomes" of their subjects and to establish new standards and directions of educational consequence for them. This is particularly pertinent to undergraduate business programs,

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<sup>5</sup> This formulation derives from Shelton Berg, dean of the Frost School of Music, University of Miami.

which traditionally attract the nation's largest numbers of majors, and where entrepreneurship is assumed to have its most natural educational home. Altering certified majors can be a slow process, and we encourage universities, learned societies, and accrediting agencies not to delay in initiating serious discussions about entrepreneurial change.

The arguments for entrepreneurship in the undergraduate major apply with even greater force to graduate and professional studies. As graduate students craft their own independent research projects and thereby fulfill the American educational ideal of a career in the work of discovery and creativity, exposure to entrepreneurship may trigger an awareness of how their new ideas can have broad impact. In principle, graduate education need not be inimical to the creation of new enterprises. Indeed, in some graduate programs, new products are the natural outcomes of research. The educational practices of such programs could be adapted and applied to other fields and institutions. This is not to suggest that graduate work must be applied research, but rather that an entrepreneurial climate can offer an enriched perspective on the consequences of pure research.

## Entrepreneurship in the Co-Curriculum

By its very nature, entrepreneurship in college cannot be limited to the classroom. Students interested in it and committed to it will

want the opportunity to try it out—to actually do it. For students drawn to business or engaged in addressing persisting social problems, entrepreneurship's emphasis on implementing new enterprises provides a constructive and practical outlet for their natural idealism and its associated enthusiasm. It can help them see how to solve problems and get things done. In this regard, the environment outside the classroom is critical. Again, a comparison to music is illustrative. Because it depends on an audience, music, unlike most other academic subjects, thrives outside as well as inside the classroom. Most American colleges and universities regard musical performance as a natural part of campus life. They routinely sponsor multiple co-curricular, non-credit musical groups—from a *capella* ensembles, to glee clubs, to orchestras, to jazz and rock bands. With a supportive campus environment, American undergraduates can increase their musical skills and fulfill their interests in music whether or not they study and perform it for credit.

So it should be for entrepreneurship. Students interested in starting their own businesses or other enterprises benefit from a campus environment that takes entrepreneurship seriously and supports it. Some universities have opened dedicated offices and workspaces that allow student entrepreneurs to find both the resources of information and fellowship that help to foster their work. Other schools have established special residence halls for entrepreneurs or created programs of student-initiated and student-owned

businesses. Many university career centers provide regular opportunities for students to meet and learn from local and alumni entrepreneurs. The Enterprisers program, offered by Cambridge University, is a useful example of a short, focused co-curricular program with consequential results, particularly in concert with internships and other practical experiences.<sup>6</sup> These activities easily can be applied to students' efforts in the nonprofit sector as well. All university efforts along these lines help student entrepreneurs find substantive advice and meaningful encouragement to persist with their projects.

The universities also benefit. Student entrepreneurs bring a distinctive vitality and energy to campus life. They help make a college campus fun and exciting. Entrepreneurship is among a handful of careers—most of which are not represented in the curriculum—that students can pursue while they are in college. Student entrepreneurs integrate learning with the off-campus world of work, problem-solving, and achievement. They add a rich and leavening dimension to a campus culture.

## Entrepreneurship and the Management of Universities

Students learn best when they can live what they learn. By being more entrepreneurial in their academic and administrative practices, universities

can help students become independent and innovative risk-takers. The more comprehensively students encounter entrepreneurial concepts and behaviors in their college experience, the more likely they are to assimilate them. The proliferation of offices of technology transfer suggests that universities increasingly recognize the economic benefit of entrepreneurship. But most students and faculty encounter technology transfer only indirectly. The more basic issue is how entrepreneurial values can become broadly integral to a university's culture.

Entrepreneurship is about devising and implementing new ideas and practices or improving old ones. In a progressively technological, scientific, and interconnected world, the quality of innovation in large measure increasingly relies on superior advanced learning. A strong educational foundation helps ensure that new ideas will be effective and substantive. Because entrepreneurship promotes, implements, and rewards innovation, it necessarily correlates with education. In this light, a key task of American higher education surely is to continue to stress and reward innovation and its implementation as a core educational goal.

Curriculum is the basic enterprise of education. In American universities, our administrative processes for curricular innovation, at the levels of both the course and the program, run the gamut from open to restricted. Continuous curricular innovation is hardly a uniform practice. An educational culture of what we might call curricular entrepreneurship would create

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<sup>6</sup> [www.enterprisers.org.uk](http://www.enterprisers.org.uk)

budgetary practices and incentive structures to reward faculty and departments for curricular innovations, fresh interdisciplinary partnerships, experiments with new modes of instruction, etc. A more explicit educational focus on innovation and its implementation—to be sure, in ways that respect the integrity of the varied academic disciplines—would help encourage university faculty and academic departments continually to adopt, apply, and assess methods of teaching and learning that foster creativity and originality.<sup>7</sup>

The same considerations should apply to the areas of research and tenure. One obvious consequence of universities' new emphasis on technology transfer is a fresh perspective on and appreciation of translational research. In our view, universities should treat translational research as basic research, and the "measure of impact" of research should be part of the review for tenure and promotion.

An academic culture animated by entrepreneurial values not only enhances innovation in research, it also creates a comprehensive educational climate for students. Good teachers are more than sources of information for students. They can be important role models as well. Entrepreneurial students will learn most from entrepreneurial teachers.

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<sup>7</sup> For example, see the work of the Hasso Plattner Institute of Design at Stanford University: [www.stanford.edu/group/dschool/projects/labs.html](http://www.stanford.edu/group/dschool/projects/labs.html)

## Conclusion

There are compelling reasons to make entrepreneurship a mainstream subject and an animating force in American higher education. As the world's natural resources ebb and technology advances, humanity increasingly will live by its wits. Human understanding, ingenuity, and inventiveness will become ever more critical to creating a sustainable future. But innovation alone will not suffice. We will need people who know how to implement new ideas and make them accessible to large populations. An entrepreneurial society will not emerge or persist by accident. We will have to build it and maintain it. To do both, we will have to understand why entrepreneurship matters, how it works, and how to sustain it. That understanding is the result of education.

Advanced education is one of our nation's greatest cultural resources. Students from all over the world come here to learn in the unique research-based and research-driven educational framework of American universities—an environment defined by free inquiry, autonomous thinking, intellectual passion, and originality. In American education, intelligibility is a basic goal, and innovation and discovery are the most consequential results. Entrepreneurship is higher education's authentic and natural ally. An entrepreneurial education is an enabling education. The union of the two is our best hope to bring humanity the greatest benefit from the finest outcomes of independent and creative learning.

## Profiles of Innovative Entrepreneurship Education Programs

During the past two decades, tremendous growth has occurred in the number of entrepreneurship courses offered by colleges and universities. In 1985, studies indicate there were about 250 entrepreneurship courses offered across all college campuses in the United States. Today, more than 5,000 entrepreneurship courses are now offered in two-year and four-year institutions.

The profiles on the following pages offer a few examples of innovative courses and programs in entrepreneurship that colleges and universities now offer to introduce and engage students into the process, opportunities, and excitement generated through entrepreneurship. While these are by no means the only exciting things happening in universities across America, these profiles do illustrate concretely how the suggestions in this report can and have been implemented.

## Arizona State University

Tempe, Arizona  
www.asu.edu  
Year Founded: 1885  
Enrollment: 64,394

### InnovationSpace

When a group of students from Arizona State University interviewed female firefighters, they discovered that most of the equipment and clothing firefighters wear is typically too big for women and smaller-sized men. In response, they developed Aeroflex, a lightweight, streamlined, ergonomic backpack-oxygen system designed to be fully adjustable to fit men and women firefighters of all sizes.

These students are part of Arizona State's two-semester, trans-disciplinary InnovationSpace program co-taught by faculty from industrial design, visual and communications design, engineering entrepreneurship, industrial engineering, and marketing.

In this program, senior-level students work in teams to create unique, real-world, money-making products that contribute to a better society. In addition to preparing a comprehensive proposal, they also present their products to private sector groups and university researchers with the hopes that someday their products will be commercially available to those who need them most.

Innovation Space  
<http://innovationspace.asu.edu>  
Contact: Kimberly Loui  
[kimberly.loui@asu.edu](mailto:kimberly.loui@asu.edu)  
(480) 965-8688

### p.a.v.e.—The Performing Arts Venture Experience

When the founder of Phoenix's Progressive Theatre Workshop needed funding to get his venture off the ground, he became part of something that is progressive in its own right—p.a.v.e.

p.a.v.e. (The Performing Arts Venture Experience) is the arts entrepreneurship program of the Arizona State University School of Theatre and Film, which seeks to educate students, artists, and educators about ways that entrepreneurship can help them in the development of artistic ventures of all kinds.

In addition to funding the Progressive Theatre Workshop, p.a.v.e. awarded grants in support of a performance festival for greater Phoenix, an interactive art installation on sustainability, and a media marketing concept, all with the intent of providing grantees with real-world experience as art entrepreneurs.

Beyond its grant program, p.a.v.e. sponsors a lecture series featuring arts entrepreneurs, workshops, live performances, symposia, and various other events aimed at helping both students and faculty better understand where the arts and entrepreneurship intersect.

p.a.v.e.—The Performing Arts Venture Experience  
<http://theatrefilm.asu.edu/initiatives/pave.php>  
Contact: Kimberly Loui  
[kimberly.loui@asu.edu](mailto:kimberly.loui@asu.edu)  
(480) 965-8688

### Master of Healthcare Innovation

Can the future of healthcare be in the hands of an architect or an engineer? Faculty at Arizona State University's College of Nursing and Healthcare Innovation think so. They've teamed up with the College of Design and the Hugh Downs School of Human Communications to offer the Master of Healthcare Innovation, a unique, thirty-three-credit master's degree program aimed at creating innovators who can transform the way problem-solving and innovation occur in both traditional and nontraditional healthcare organizations.

Unlike traditional approaches to nursing, this program will teach both nursing and non-nursing students to think beyond the status quo by encouraging them to approach systemic issues in healthcare from multiple perspectives, including business, leadership, technology, and system design programs.

Even the way the degree is taught is innovative. Students enrolled in the program will participate in four-to-five day immersion sessions at the beginning of each semester, followed by two-day sessions mid-semester. The rest of the coursework will be delivered over the Internet, using voiced-over lectures, discussion boards, and other online course delivery and management tools.

Master of Healthcare Innovation  
<http://nursing.asu.edu>  
Contact: Kimberly Loui  
[kimberly.loui@asu.edu](mailto:kimberly.loui@asu.edu)  
(480) 965-8688

## Cornell University

Ithaca, New York  
www.cornell.edu  
Year Founded: 1865  
Enrollment: 20,638

### Principles of Entrepreneurship and Business

Although not all students are destined to become entrepreneurs, having an appreciation and solid understanding of entrepreneurship helps them develop a strong foundation for their chosen course of study.

At Cornell University, Principles of Entrepreneurship and Business (AEM 120) provides such a foundation. It is designed to inform, engage, and inspire students about entrepreneurship and show them how it applies to their own personal career choice. At the same time, for those students who wish to pursue entrepreneurship further, it introduces them to other entrepreneurship opportunities available across the curriculum at Cornell.

In the first half of the semester, students in AEM 120 learn about the nature of entrepreneurial opportunity and the basics of marketing, finance, and strategic management. In the second half, they gain a deeper understanding of the managerial, human resources, enterprise growth, and development perspective. Additionally, students generate a total of twenty-five original business ideas and develop a proposal for one idea with two fellow classmates.

Principles of Entrepreneurship and Business  
<http://eship.cornell.edu>  
Contact: John P. Jaquette, Jr.  
[jjp7@cornell.edu](mailto:jjp7@cornell.edu)  
(607) 255-9675

## Lake Erie College

Painesville, Ohio  
www.lec.edu  
Year Founded: 1856  
Enrollment: 1,100

### Equine Entrepreneurship Program

For equestrians wanting to make a difference in their field, Lake Erie College offers a major in Equine Entrepreneurship. This multi-disciplinary program provides students with a solid background in basic equine knowledge coupled with a strong understanding of the management skills needed to operate a successful equine business.

Students learn about equine health care and prevention as well as the business side of the industry and its economic value to society. Additionally, they are encouraged to study abroad and experience one of several international equestrian experiences.

The major includes Equine Venture Consulting where teams of students develop a consulting project for an equine entrepreneurial venture that has been in business for less than four years. For students interested in starting their own businesses, the Equine Venture Creation course provides an opportunity for them to conduct research and develop plans for equine small business ventures.

Equine Entrepreneurship Program  
[http://www.lec.edu/catalog/equine\\_entrepreneurship\\_details](http://www.lec.edu/catalog/equine_entrepreneurship_details)  
Contact: John Meehl  
[jmeehl@lec.edu](mailto:jmeehl@lec.edu)  
(440) 375-7129

## Purdue University

West Lafayette, Indiana  
www.purdue.edu  
Year Founded: 1869  
Enrollment: 69,594

### Entrepreneurial Leadership Academy

To create a community of faculty championing entrepreneurship on campus through coursework and other initiatives, Purdue University has created the Entrepreneurial Leadership Academy. This Academy selects ten Purdue faculty members annually to meet monthly in a series of faculty workshops, lunches, dinners, and meetings to network, brainstorm, and discuss Purdue entrepreneurship curricula and activities. Faculty members selected to the Entrepreneurial Leadership Academy carry the title of Kauffman Entrepreneurship Fellow for the year, receive an honorarium, and meet with senior Purdue administrators and successful entrepreneur leaders from outside the University. Aside from monthly meetings, Academy members are tasked with proposing and undertaking a high impact project to foster campus entrepreneurship and entrepreneurial leadership.

An additional component of the Entrepreneurial Leadership Academy is the Kauffman Entrepreneurial Faculty Scholar. At the end of the year, one Academy member is recognized and designated the Kauffman Entrepreneurial Faculty Scholar based on their focal interests, participation in Entrepreneurial Leadership Academy activities, and leadership in these Academy activities. The chosen individual is given an additional honorarium for the upcoming year to work with the Center for Entrepreneurship and Discovery Park to further their own and Purdue-wide entrepreneurship interests.

Entrepreneurial Leadership Academy  
[www.purdue.edu/entrepreneurship](http://www.purdue.edu/entrepreneurship)  
Contact: Kenneth B. Kahn, Ph.D.  
[kbkahn@purdue.edu](mailto:kbkahn@purdue.edu)  
(765) 496-6400

## Stanford University

Stanford, California  
www.stanford.edu  
Year Founded: 1891  
Enrollment: 19,782

### Stanford Biodesign

The Stanford Biodesign program works to develop leaders in biotechnology innovation. The mission is to train students, fellows and faculty in the Biodesign Process: a systematic approach to needs finding and the invention and implementation of new biomedical technologies. Key components of the program include Biodesign Innovation Fellowships; classes in medtech innovation; mentoring of students and faculty in the technology transfer process; career services for students interested in medtech careers; and community educational events.

The Stanford Biodesign Fellowship is a highly focused one-year fellowship designed to provide the knowledge and skills essential for the invention and commercialization of new biomedical technologies. Teams of four, including postgraduate engineers, business professionals and physicians, collaborate in a process that includes clinical immersion, identification and verification of clinical problems, invention, prototyping, early-stage testing, and project planning. Additionally, time is spent researching the patent and market landscape to ensure that new technologies being developed address major unsolved clinical needs.

As part of the university-wide Bio-X community, Biodesign includes faculty and students from over 40 departments across the Schools of Business, Engineering, Humanities & Sciences, Law and Medicine.

Stanford Biodesign  
<http://biodesign.stanford.edu/bdn/index.jsp>  
Contact: Roula El-Asmar  
[biodesign@stanford.edu](mailto:biodesign@stanford.edu)  
(650) 736-1158

### Creativity & Innovation Course

Do you know what inhibits creativity? Do you know what stimulates it? Students at Stanford University have a unique opportunity to discover the answers to both questions through its Creativity & Innovation course.

Offered through the Stanford Technology Ventures Program (STVP), the entrepreneurship center within the School of Engineering, the Creativity & Innovation course is designed to help students discover what encourages and hinders creativity in individuals as well as organizations.

Students explore the subject of creativity through workshops, case studies, team projects, field trips, and classroom lectures by experts in the field. Additionally, they form teams that conduct an in-depth study of an organization they find to be innovative, and then present their findings to the class in the most creative way possible. Past presentations have turned the lecture hall into a jelly bean factory (Jelly Belly) and a circus (Cirque du Soleil).

The philosophy of Creativity & Innovation is that every problem is an opportunity for a creative solution. With this in mind, students are encouraged to attempt new approaches to creative problem solving in a variety of environments.

Creativity & Innovation Course  
<http://creativity.stanford.edu>  
Contact: Tina Seelig  
[tseelig@stanford.edu](mailto:tseelig@stanford.edu)  
(650) 725-1672

## University of Maryland, Baltimore County

Baltimore, Maryland  
www.umbc.edu  
Year Founded: 1966  
Enrollment: 12,041

### ACTiVATE—Achieving the Commercialization of Technology in Ventures through Applied Training for Entrepreneurs

Developing technology is one thing. Commercializing it is another. Already known for its technology development program, the University of Maryland, Baltimore County has found a way to get products to market.

Through ACTiVATE, an innovative, year-long program developed by the university, women with significant business or technical experience are trained to take technologies developed by Maryland research institutions or federal agencies to market.

Program participants are taught how to perform an opportunity analysis and develop a business plan and proposal to help them launch their ventures.

In addition to encouraging the development of women as entrepreneurs, ACTiVATE serves as a model for commercializing innovations at other universities and federal labs. This model demonstrates how research universities and their technology transfer offices, state funding agencies, corporate partners, entrepreneurs, and other service providers can work together to achieve the common objective of creating new companies.

ACTiVATE  
<http://www.umbc.edu/activate>  
Contact: Vivian Armor  
[armor@umbc.edu](mailto:armor@umbc.edu)  
(410) 455-5740

## University of Miami

Coral Gables, FL  
www.miami.edu  
Year Founded: 1925  
Enrollment: 15,400

### The Greatest Story Ever Told...Retold

While entrepreneurs are traditionally thought of as individuals with a product or service to sell, the University of Miami is reframing how its students see entrepreneurs. Students enrolled in a special topics course, "The Nature and Foundations of Entrepreneurship," reexamine the traditional view of an entrepreneur, while also considering how someone's ideas may lead to an enterprise that generates intellectual, social, cultural, religious, or economic value.

The course is cross-listed in the departments of Management and Religious Studies and is taught through a series of readings, case studies, guest lectures, and independent research. Students review a range of definitions of entrepreneurship and examine how economics, law, history, and culture interact to affect, generate, or suppress entrepreneurial values and behavior. Through the study of comparative examples from different nations, the course attempts to identify how distinctive aspects of different societies shape entrepreneurial culture and practice. The course culminates in a final project and presentation, either individual or collaborative.

The Nature and Foundations of Entrepreneurship  
www.as.miami.edu/religion  
Contact: William Green  
wgreen@miami.edu  
(305) 284-2006 (office)

## University of North Carolina at Chapel Hill

Chapel Hill, North Carolina  
www.unc.edu  
Year Founded: 1789  
Enrollment: 27,700

### First-Year Seminars

How does entrepreneurship fit into the study of Biology? English? If you're thinking it doesn't, think again. At the University of North Carolina, freshmen in the College of Arts and Sciences have an opportunity to examine the relationship between entrepreneurship and more than 300 areas of scholarship across all disciplines through the First-Year Seminars program.

Offered through the Carolina Entrepreneurial Initiative (CEI), First-Year Seminars give students the chance to explore topics of interest in small groups with a senior faculty member.

Students can choose from a variety of topics relating to a wide range of disciplines. For example, in Biologists as Entrepreneurs students learn how to write grant proposals to support research, and in Economic Saints and Villains: The Entrepreneurial Spirit in Early English Literature, they explore how England—from the sixteenth to the nineteenth centuries—envisioned new economic orders through plays and novels.

First-Year Seminars in Entrepreneurship  
<http://www.unc.edu/fys>  
Contact: John Kasarda  
John\_kasarda@unc.edu  
(919) 962-8201

### Launching the Venture

No matter how good the idea, if you don't have the right knowledge, skills, and connections, chances are you won't succeed. That's why the Carolina Entrepreneurial Initiative at the University of North Carolina at Chapel Hill offers Launching the Venture.

Offered jointly by the Kenan-Flagler Business School and UNC's Office of Technology Development, this two-semester program is designed to help UNC-Chapel Hill faculty, staff, and students successfully launch commercial and nonprofit ventures.

The program is broken down into Feasibility, Launch, and Venture Finance phases. In the Feasibility Phase, teams refine and test their ideas for market acceptance in weekly workshops. In the Launch Phase, those with potentially viable ventures are coached by experts and MBA student consultants to develop a business plan and launch strategy. In the Venture Finance Phase, students learn about the various types of private financing available and develop a plan to attract it.

All of this knowledge is no guarantee that the business will succeed, but the chances are definitely increased. Since its inception, more than forty new ventures—both commercial and nonprofit—have been launched.

Launching the Venture  
www.unc.edu/cei/launch  
Contact: John Kasarda  
John\_kasarda@unc.edu  
(919) 962-8201

## University of Rochester

### Carolina Challenge

Not all learning takes place inside the classroom. Sometimes, the best way to learn a concept is to do it. Carolina Challenge, a student-led entrepreneurial business plan competition at the University of North Carolina at Chapel Hill, provides students with just such an opportunity.

A program of the Carolina Entrepreneurial Initiative, Carolina Challenge is designed to identify and support outstanding entrepreneurial ventures, both commercial and nonprofit. Teams—which must include at least one North Carolina faculty, staff, or student—compete annually for top honors and \$50,000 in total prize money.

Activities leading up to the competition begin in the fall with recruitment and team-formation events designed to attract the best ideas. Teams are encouraged to include members with a variety of skills and a broad knowledge base who can implement the venture idea. When the teams officially enter the competition in December, they are given access to a wide range of resources to help them turn their ideas into viable business plans.

Teams compete by presenting their plans to panels of entrepreneurs, venture capitalists, philanthropists, and foundation executives, many with the hopes of successfully launching their venture in the future.

Carolina Challenge  
[www.carolinachallenge.org](http://www.carolinachallenge.org)  
Contact: John Kasarda  
[John\\_kasarda@unc.edu](mailto:John_kasarda@unc.edu)  
(919) 962-8201

Rochester, New York  
[www.rochester.edu](http://www.rochester.edu)  
Year Founded: 1850  
Enrollment: 8,700

### Eastman School of Music New Venture Challenge

The days of the starving artist are coming to an end. Thanks to programs such as The Eastman School of Music New Venture Challenge at the University of Rochester, musicians today are learning how they can orchestrate their own futures.

The New Venture Challenge is a contest to promote innovative ideas designed to revolutionize the world of music. Through this contest, students have the opportunity to transform their ideas into entrepreneurial enterprises.

The contest is open to all full-time students in good academic standing enrolled in an Eastman degree program. Individuals or teams of up to three students can participate.

To take part in the contest, students create and present a business plan demonstrating creativity and the potential for success. These plans are then evaluated by a panel of judges in a preliminary round. From this group, three student entries are selected to participate in a final round where the enterprises are evaluated on the written plan as well as an oral presentation. Winners receive cash prizes to help launch their ventures.

Eastman School of Music  
New Venture Challenge  
<http://www.esm.rochester.edu/iml/entrepreneurship/kauffevents.php>  
Contact: Duncan T. Moore  
[moore@optics.rochester.edu](mailto:moore@optics.rochester.edu)  
(585) 275-5248

### Kauffman Entrepreneurial Year Program

What's your passion? Is it music? Is it the environment? Is it community service? Now imagine being able to spend an entire year pursuing that passion, with an eye toward creating a successful entrepreneurial venture based on it. For students participating in the Kauffman Entrepreneurial Year Program (KEY) at the University of Rochester, the idea is fast-becoming a reality.

Students participating in the program receive a fifth, tuition-free year during which they have the opportunity to define and develop their ideas into an entrepreneurial venture. The hope is that students will use their entrepreneurial creativity to pursue an endeavor about which they are personally passionate while solving a problem that will affect future generations.

Take, for example, the team of students conducting research in the area of renewable energy. Their goal is to have the University of Rochester join a small number of universities formulating a comprehensive solution to one of the most important scientific and social challenges of the 21st century.

To accomplish this goal, the students formed the University of Rochester Virtual Institute for Energy (URVIE) and will work with a number of researchers, government agencies, and others to study opportunities to create sustainable energy for future generations.

Kauffman Entrepreneurial Year Program  
<http://www.rochester.edu/college/ccas/AdviserHandbook/KEY.html>  
Contact: Duncan T. Moore  
[moore@optics.rochester.edu](mailto:moore@optics.rochester.edu)  
(585) 275-5248

## University of Wisconsin–Madison

Madison, Wisconsin  
www.wisc.edu  
Year Founded: 1848  
Enrollment: 42,041

### WEB—Wisconsin Entrepreneurial Bootcamp

If you're serious about entrepreneurship, the Wisconsin Entrepreneurial Bootcamp (WEB) is designed to help you start off on the right foot. This intensive, five-day program introduces Physical/Life Science and Engineering graduate students to the world of technology start-ups and provides them with basic entrepreneurial skills, from opportunity recognition to commercialization.

WEB is taught by international entrepreneurial experts, University of Wisconsin faculty, and top professionals. They use case studies, expert panels, specialized experimental exercises, and social events to teach students about the issues they will face in technology entrepreneurship.

Additionally, WEB introduces students to other entrepreneurial opportunities on campus such as MBA courses in entrepreneurship, a doctoral minor, non-credit workshops, and a cross-campus business plan competition.

WEB—Wisconsin Entrepreneurial Bootcamp  
<http://www.bus.wisc.edu/weinertcenter/web.asp>  
Contact: Charles Hoslet  
hoslet@ocr.wisc.edu  
(608) 263-2840

## Washington University in St. Louis

St. Louis, Missouri  
www.wustl.edu  
Year Founded: 1853  
Enrollment: 11,010

### Student Owned Business Program

The Student Owned Business Program provides undergraduate students with the true entrepreneurial free market experience of founding or purchasing a business while at school. Owner/founder teams have full responsibility for operations, marketing, and financial outcomes for their enterprises. All students are required to sell their equity to other students prior to graduation.

This is one of many non-academic credit examples of how Washington University students are challenged to learn entrepreneurship by doing. None of the university's thirty-seven entrepreneurship courses is required as prerequisite for this program. The university offers prime-location, high-traffic retail storefront leases to any undergraduate student, including freshmen. The sale of successful businesses requires that new owners satisfy program requirements. Students founding a new business (storefront or virtual based) must submit a business plan for review and approval by a university advisory board.

Student Owned Business Program  
<http://step.wustl.edu/index.php>  
Contact: Ken Harrington  
harrington@wustl.edu  
(314) 935-9134

## Kauffman Campuses<sup>SM</sup>—An Overview

The Kauffman Foundation has spent much of the last fifteen years helping accelerate the development of entrepreneurship programs at colleges and universities, most recently operating on the belief that teaching students about running an enterprise and thinking innovatively should not be solely the province of business schools.

In 2003, the Kauffman Foundation announced its commitment to the idea of cross-campus entrepreneurship programs by launching the Kauffman Campuses<sup>SM</sup> Initiative, awarding a total of \$25 million to eight American institutions of higher education. The recipients were selected after a high-profile competition among twenty-six colleges and universities. Building on the success of those grants, the Kauffman Foundation awarded a total of \$23 million in Kauffman Campuses<sup>SM</sup> grants to eleven more schools in late 2006. “Kauffman Campuses II,” as the program has been dubbed, not only builds on the best aspects of “Kauffman Campuses I,” it significantly leverages the Foundation’s investment through partnerships with other funding sources.

By involving others in the program, the Kauffman Foundation hopes to leverage its commitment and get foundations and other entities thinking entrepreneurially as well. The goal, as it always has been, is to create a cultural transformation on college campuses that results in graduates who are dynamic thinkers and risk-takers—no matter what major areas of study the students pursue.

### Inaugural Kauffman Campuses

- Florida International University
- Howard University
- University of Illinois at Urbana–Champaign
- University of North Carolina at Chapel Hill
- University of Rochester
- University of Texas at El Paso
- Wake Forest University
- Washington University in St. Louis

### Kauffman Campuses Second Round

- Arizona State University
- Georgetown University
- Purdue University
- Syracuse University
- University of Maryland, Baltimore County
- University of Wisconsin–Madison

*Northeast Ohio College Entrepreneurship Program  
in partnership with the Burton D. Morgan Foundation:*

- Baldwin-Wallace College
- Hiram College
- Lake Erie College
- Oberlin College
- The College of Wooster





# KAUFFMAN

The Foundation of Entrepreneurship

4801 Rockhill Road  
Kansas City, Missouri 64110  
[www.kauffman.org](http://www.kauffman.org)

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