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Intellectual Entrepreneurship

A Vision for Graduate Education

f you ask graduate students what causes
them to lose sleep at night, you will likely hear stories lamenting their prospects
for employment and professional achievement following graduation. Tensions mount as students wonder
if they possess the qualifications and flexibility to suc-

ceed as academic professionals in the decades ahead. Graduate degree programs are responsible for providing students with rigorous, in-depth train-

ing in academic fields, and for teaching them to conduct original research.

In addition to this education, though, what accounts for and predicts their success? We argue that successful and resilient academic professionals are "intellectual entrepreneurs." They appreciate the enormous value of their scholarly expertise. They construct bold, but attainable, visions for putting it to use.

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They are willing to take risks, seize opportunities, and marshal all available resources to bring their visions to fruition. They understand the importance of collaboration and teamwork. Moreover, they have the passion and skills to use and sustain their expertise in multiple settings over the long course of a career.

Consider a recent PhD in English who is a consultant to the World Bank Institute: He is using his expertise in literacy and technology to assist educators in developing countries to adapt instructional technology to meet the needs of diverse students and curricula. Or consider the doctoral student in molecular biology who, in addition to a scholarly career devoted to specialized research, plans to take the technical concepts of his field to a larger and more general audience.

Witness the newly minted PhD in mechanical engineering who, with the help of a historian, is developing story telling techniques that will enhance the scientific literacy of students. And consider the doctoral candidate in theater whose historical research on the role of theater in community development led her to begin designing an entrepreneurial plan for a local arts incubator.

These examples are just a few of the exciting outcomes of a new way of thinking about graduate education that forms the basis of the Intellectual Entrepreneurship (IE) program in the Graduate School at the University of Texas at Austin. Unlike some efforts that seek to reform or indict graduate education, IE celebrates what is appropriate and valuable about the research orientation of graduate education. In fact, we implore our students, "Never apologize for being a scholar." The challenge facing both graduate students and faculty is discovering the value of their scholarly expertise and documenting it for others.

We hope to demonstrate that any institution—regardless of size or fiscal constraints—can incorporate the core values of IE to benefit both individuals and society. Underlying our argument is the assumption that graduate education will be improved only if we craft plans that avoid the counterproductive tensions that historically have pitted our various educational enterprises against each other and that often inhibit change (arguments about teaching versus research, academic versus nonacademic uses of research expertise, depth versus breadth, scholars serving their community at the expense of potential contributions to their disciplines, discovery versus application, and so on).

In addition, the IE philosophy embraces the idea that innovation in graduate education should seek to harness and integrate our nation's creative and intellectual resources wherever they may be found.

INTELLECTUAL ENTREPRENEURSHIP: THE TEXAS PROGRAM

Intellectual Entrepreneurship at UT at Austin is a university-wide program in the Graduate School that, in partnership with the provost's office, strives to provide opportunities for graduate students to discover how they can use their expertise to make meaningful and lasting differences in their academic disciplines and communities—to be what the program calls "citizen-scholars."

These opportunities are presented through 16 cross-disciplinary, credit-bearing, elective courses and internships (addressing topics such as writing, pedagogy, consulting, ethics, entrepreneurship, communication, and technology); community-based "synergy groups"; nine doctoral and master's portfolio programs; a consulting service; a Preparing Future Faculty program; and a variety of workshops. (A complete description of IE initiatives and information from students about the program's impact is available at www.utexas.edu/ogs/development.html.)

From its inception in 1997, the goal of the IE program has been to maximize the value of graduate education for students and society by enabling students to own and be accountable for their education. Graduate education often is seen as its own final product, that is, the acquisition of a degree entitling recipients to certain benefits and outcomes. The IE philosophy holds that graduate education opens up a lifelong process of discovery and learning, challenging students to construct a vision for their professional lives inside or outside of academe, and to acquire the tools and resources that will enable them to meet, sustain, and modify their vision.

We believe the IE program has proved remarkably successful in this endeavor. In the past three years, over 3,000 students from nearly 90 academic fields have participated in IE initiatives. Comments made by a doctoral candidate in sociology are representative of student evaluations of the program: "IE has given me a much greater understanding of my skills and their value. It has led me to reevaluate my future, to strive for a career that I want and not settle for less."

A doctoral student in anthropology illustrates the profound impact of such reevaluation. Describing the IE consulting class as a "critical moment" in her professional life, when she truly began to appreciate the value of her academic training, this soon-to-be PhD is now seeking a position in the Foreign



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ly accepted and assigned a diplomatic position, I will be able to realize my newfound goal of pursuing teaching as both a practice and a profession, as a citizen-scholar."

The core of the IE program consists of the 16 cross-disciplinary courses that constitute the curriculum from which all other IE initiatives are generated. The classes are "customized" in that they build on projects and ideas that students are already undertaking as part of their teaching, research, and coursework. These courses challenge students to think boldly and imaginatively about themselves and the value of their research. Each begins by asking students to articulate, often for the first time, what it means to embrace the scholarly perspective of their discipline, as well as why and for whom such expertise has value.

The topics covered in these classes represent the various skills, resources, and ways of thinking that will assist students in communicating the value of their expertise to chosen audiences. Class titles include, for example, "Academic and Professional Communication," "Entrepreneurship," "Academic and Professional Consulting," and "Academic and Professional Uses of Technology."

Other IE initiatives follow this model; instead of focusing on traditional methods of professional development (such as adding skills on top of disciplinary credentials), they serve as incubators, creating opportunities for graduate students to discover their personal and professional identities by asking them to identify the things about which they are passionate and then helping them focus and channel their efforts to realize those passions.

One such initiative allows faculty and students to use their expertise collaboratively with individuals outside the academic community. "Synergy groups" bring together people from various academic fields with stakeholders from the public and private sectors to work on problems such as illiteracy, lack of access to health care, environmental degradation, and the growing digital divide.

Typically, solutions to complex problems require the expertise found in multiple academic disciplines as well as diverse segments of society. Creating this collaborative opportunity challenges graduate students and faculty, as well as individuals in the public and private sectors, to think creatively and comprehensively about the intellectual resources available to a community.

Synergy groups constitute a cross-disciplinary, multiinstitutional and integrative approach to discovery and learning. They are "action-seminars" that encompass a wide range of objectives, including the production of public policy recommendations, funded and published research, corporate strategies and plans, student internships and employment opportunities, issue-oriented classes taught on and off campus, and communities of practice (groups and structures that continue the process). In 2001-2002, the IE program began a Healthcare Synergy Group, with goals to increase the enrollment of eligible families in Medicare and the state-supported insurance plan for children and to develop a regional plan for promoting health and wellness. In 2002-2003, a second synergy group will be started in the area of workforce development, using the vast intellectual assets of the university not only to design curricula and training materials, but to devise innovative approaches to improving the Austin-area workforce.

INTELLECTUAL ENTREPRENEURSHIP: THE PHILOSOPHY

Both the synergy group project and the core curriculum courses underscore the philosophy that intellect is not limited to the academy, and entrepreneurship is not limited to business. As we see them, intellectual entrepreneurs, both inside and outside the university, take risks and seize opportunities, discover and create knowledge, employ innovative strategies, collaborate, and solve problems in diverse social realms, including corporate, nonprofit, government, and education.

The success of the IE program (evidenced by the fact that more than twice as many students wish to enroll in IE initiatives as space allows, as well as the testimony of participants) is owed not only to the manner in which this philosophy is delivered, but also to the core values and principles upon which IE is based. Four values rest at its heart: vision and discovery, ownership and accountability, integrative thinking and action, and collaboration and teamwork. A brief discussion of each documents how the IE philosophy can be tailored and scaled to any academic institution or other organization embracing these values.

Vision and Discovery. Intellectual entrepreneurs develop visions for their academic and professional work by imagining the realm of possibilities for themselves. This is a discovery process in which individuals continually and regularly learn more about themselves and their areas of expertise. It is also a rediscovery process in which professionals not only invent, but also reinvent, themselves. To accomplish this, intellectual entrepreneurship requires individuals to do more than simply perform their jobs (for example, heading corporations, conducting research, developing public policies, teaching undergraduates, running nonprofit organizations). It also requires individuals to contemplate who they are, what matters most to them, and what possibilities are available to them.

In the IE program, graduate students are asked to reflect on themselves and their disciplines, ascertaining what is important to them both professionally and personally as a basis for constructing an academic professional vision. This, in turn, allows them to make conscious choices in tune with their interests and passions. A case in point is a doctoral student in government. Following the events of September 11, and as a direct result of reflection about his academic professional vision that

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began in an IE class, he decided to create a network of scholars in his discipline who are interested in using political theory to address real-world concerns. He has become an even more dedicated political scientist—one whose passion is producing a vision that capitalizes on the potential value of scholarship in political theory.

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Describing intellectual entrepreneurship as exactly the right way to conceive of graduate education, Bartholomew Sparrow, a UT professor of government, notes, "I describe academic life to others outside of the academy in precisely that language [intellectual entrepreneurship]: the successful academic creates a body of work that distinguishes that same scholar from the others by reputation, much as a brand name or particular product distinguishes a category of goods. There is risk-taking and there is creation. But I make no immediate association with capitalism, since an entrepreneur (see 'enterprise') is simply one who undertakes some project and bears the risk. An artist or film producer could be an entrepreneur, not just the small businessman. Risk-taking by an academic could be within the scientific lab, within the concert hall, or in the pages of a manuscript."

Imagine a system of graduate education that begins by asking students to think about what matters most to them and then uses their answers to create research programs, while simultaneously exploring possibilities for using that knowledge. This approach applies to more than just educational institutions. What organization would not be improved by creating opportunities for its workers to discover what they do well and what they desire most, and then formulating plans to harness this passion and talent?

Ownership and Accountability. Based on the preceding discussion, it follows that intellectual entrepreneurs own their education and professional development. Education is not handed to them. Having discovered more about themselves and their disciplines, intellectual entrepreneurs take responsibility for acquiring the knowledge and tools required to bring their vision to fruition.

Jobs are not predetermined outcomes or entitlements acquired after completing an education or obtaining a certain level of proficiency. Instead, jobs are "possibilities." IE students are challenged (often well in advance of their final year of study) to think about the wide array of audiences to whom their expertise may be important. Professional development is presented as being fundamentally connected to the initial and continuing choices that each individual will make about his or her intellectual identity, not as something that happens after the student's intellectual development is complete.

Controlling one's future is a major part of ownership and, therefore, has enormous implications for professional success. It is easy for people to doubt themselves if they believe they have no control over their futures. This self-doubt can be especially debilitating for graduate students, who tend to be in competitive, rigorous environments where they must "jump through the hoops" to succeed as budding scholars.

In the words of one engineering graduate student, IE allows "students to re-empower themselves, so they can get back control over their own education, their own future." A good example of this re-empowerment is a PhD in mathematics. Although his advisor preferred that he take a postdoctoral position at a prestigious research university, this graduate chose to accept a faculty position at a small liberal arts college where he could pursue his first love—teaching.

The link between ownership and accountability is important. Once individuals gain control over their own destinies, it follows logically that they will assume greater responsibility for decisions and their outcomes. "'Accountability' is this program's watchword and ethic," says Katie Arens, a professor of Germanic studies at UT. "It is the core of the new scholarly community that must be 'citizen-scholars,' not just specialists with senses of entitlement."

The English PhD mentioned in the introduction of this article is a poignant illustration of accountability in action. Believing that his research in technology and literacy has profound implications for how developing nations educate their students, he has begun holding himself accountable for making sure that his state-of-the-art research translates into effective pedagogy and instructional technology. Accountability such as this does not come from a sense of being entitled to a job following completion of the doctorate; it results from an attitude regarding the importance of owning one's professional identity and taking responsibility for creating one's future.

Integrative Thinking and Action. Intellectual entrepreneurs, in our conception, know the limits of partial knowledge and particular perspectives; they understand the myopia that results when people work and think as individuals in a vacuum. For intellectual entrepreneurs, "synergy" is more than a buzzword; it means that something greater than the sum of the parts can indeed be produced when people engage in integrative thinking.

This requires individuals to move beyond conventional notions of discrete academic disciplines and lone scholars in search of the truth. The reality that complex issues and problems frequently don't fit neatly into one discipline is made clear in IE classes, which are made up of students from multiple disciplines. Synergy groups also encourage participants from different disciplines and organizations to devise solutions to problems that reflect an integration of perspectives.

Exposed to this philosophy, graduate students in the IE program are thinking in novel ways and are seizing new opportu-

nities. A doctoral student in psychology comments, "The experience I have gained in the health synergy group taught me more about my discipline, more about myself, and more about what I have to offer once I graduate. This alone makes the experience invaluable; but when it coexists with the chance to be an active participant in my community, the combination is unbeatable."

This student, like others in the health synergy group, gained a fuller appreciation for how the research questions she selects are of critical importance because they have direct implications for real people. The synergy group underscored for her in a very vivid manner how research might benefit more than a handful of scholars in a discipline who read the academic journals in which research findings are published. As a result, she now thinks regularly about picking research questions that matter and seizing opportunities to integrate research with issues faced by the community in which she lives.

This reaction reflects one of the IE program's mottos: "I know, therefore I must act." Take the case of another IE stu-

dent whose graduate specialty is poetry. Knowing that graduation was imminent, she began to ask: "What am I going to do with my degree?" The answer emerged when she enrolled in an IE class and began to develop a vision for "getting writing into the community," proposing that poetry might be used as a way to address community issues.

A focal point became teaching poetry and writing skills to schoolaged children not only to increase their creativity and critical thinking, but also to promote self-expression and self-confidence. She reasoned that children could write poetry as a way to deal with their problems, and

she ultimately developed consulting contracts to conduct writing and creativity workshops with area high schools, the Austin Public Library, and several local writing groups. Her venture, "Creativity Matters," exemplifies what transpires when a student constructs a vision, takes ownership of her education and turns integrative thinking into action.

Collaboration and Teamwork. Collaboration and teamwork are clearly integral to the process we describe. People and relationships are the intellectual capital that make possible integrative thinking and synergy. While ideas are the commodity of academic institutions and, therefore, have been the traditional focus of the delivery of graduate education, intellectual entrepreneurs understand that creativity and ideas are generated when people and networks are viewed as the primary resource.

In IE classes and synergy groups, students work collaboratively in undertaking scholarly projects and tackling complex issues. They quickly learn that many obstacles inside and outside of the academy stem from an inability to determine who really controls the resources required to take an idea or a project to the next step. When they discover that universities and intellectual communities are composed of vast networks of people to whom they can turn for help, students experience an

epiphany. They realize, perhaps for the first time, that they "are not in it alone" and that answers to some of the most vexing challenges involve human resources—people who can help them overcome obstacles to their research or logistical barriers impeding completion of their degrees.

CONCLUSION

More than a specific program or a particular vehicle for delivering professional development, intellectual entrepreneurship is a philosophy of graduate education. It is also a philosophy for conceptualizing how universities should work more collaboratively with their communities to solve complex problems

Hence, it doesn't take an enormous infusion of money or an organization of a certain size to accept the IE philosophy and incorporate it into existing and new practices for educating students. It does, however, require institutions to be true to the philosophy, assuming, as do all entrepreneurs, the risks associated with change. Coming up with novel ideas, identifying worthwhile problems to work on, securing resources needed to conduct research, and disseminating findings are all entrepreneurial.

The philosophy and practice of intellectual entrepreneur-

ship serve as a catalyst, allowing students to identify opportunities to put their training and expertise to use in creative and innovative ways, whether in business or scholarship. Intellectual entrepreneurship

> mandates that students own and be accountable for their education. It recognizes the importance of students' discovering their personal and professional identities, and then developing

an academic professional vision. Intellectual entrepreneurship assumes that creativity and innovation are inherently collaborative—that the ability to integrate different viewpoints is critical to success—and it obligates individuals to act on what they know.

Intellectual entrepreneurship is a way of thinking that harkens back to our earliest Western intellectual traditions—to a time when theory and practice were united. John Campbell, a scholar of classical rhetoric, sums up the approach:

Intellectual entrepreneurship seeks to reclaim for the contemporary world the oldest strain in our common intellectual tradition: the need for thought and reflection in the midst of the world of action. As the experiment of the original Greek teachers of practical affairs demonstrated, and as Plato demonstrated through his reflections on these very themes, some of the deepest problems of thought emerge from the affairs of practical life. When one brings together the demands for action and the equally unrelenting demands for reflection characteristic of the new electronic and global marketplace, the term "intellectual entrepreneur" describes a new form of union between the academy and the world and between the academy and its own deepest traditions.