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## ***Promoting Discovery and Ownership: Graduate Students as Intellectual Entrepreneurs***

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Graduate students exist in a limbo of potential. They no longer are “just” students; nor are they full-fledged scholars. Their unique place in the academy exposes them to pressures from all sides. Departments expect graduate students to be natural-born teachers as well as productive junior scholars. They are required to begin building programs of research and are reminded that “publish or perish” is academe’s mantra; the transition from student-hood to scholar-status includes rigorous peer review. Meanwhile, the off-campus community voices other demands, insisting that graduate students use and explain their expertise in readily accessible ways. The public anticipates an applicable bang for its tax buck. In short, over the course of one’s graduate study the calls abound: Do more. Write prolifically. Stand out. Teach well. Generate theory. Be pertinent.

There is nothing wrong with high expectations. Indeed, there is nothing wrong with departments requiring productivity or communities demanding accountability. And there certainly is nothing inappropriate about graduate students aspiring to climb the academic ladder. These desired outcomes, however, pose an enormous challenge. They obligate graduate students early in their careers to consider who they are and what they seek. Unfortunately, while most of the time graduate students are instructed to “produce” and “perform,” rarely are

they encouraged to “pause” and “reflect.” With focus increasingly on outcomes, it would be odd to find “reflection time” in the graduate curricula. There is little space for graduate students to contemplate their personal, professional and intellectual identities—the kind of rumination that yields sustained productivity and satisfaction.

To correct this deficiency, we claim, graduate students should become “intellectual entrepreneurs.” Intellectual entrepreneurship is premised on the belief that intellect is not limited to the academy and entrepreneurship is not restricted to or synonymous with business. The academy does not have a monopoly on intellect or intelligence any more than the corporate world “owns” the entrepreneurial spirit. Intellectual entrepreneurship is not about “selling” scholars or scholarship. Nor is it about slogans or commercializing the academy. While amassing material wealth is one expression of entrepreneurship, at a more profound level entrepreneurship is a process of cultural innovation. It is an attitude for engaging and changing the world. Intellectual entrepreneurs seek opportunities, discover and create knowledge, innovate, collaborate and solve problems. They undertake the responsibilities and tolerate the inevitable uncertainty that comes with genuine innovation. They leverage their intellectual capital for social good.

This chapter introduces intellectual entrepreneurship as a vibrant and constructive philosophy for graduate education. Specifically, it recommends particular strategies to graduate students for becoming intellectual entrepreneurs. This is a process that should not be delayed. Graduate students must begin thinking like intellectual entrepreneurs long before graduation. What we advocate is not a career path or an area of specialization. Intellectual entrepreneurship is not another auxiliary program or curriculum vitae add-on; it is an educational philosophy and lifelong pedagogy for learning. For graduate students, intellectual entrepreneurship is an opportunity to brand their identities, devising strategies and marshalling resources for accomplishing their goals. Intellectual entrepreneurship empowers graduate students to invent and re-invent themselves throughout the course of their academic/professional lives, always imagining what is possible, and acquiring tools to bring their visions to fruition.

## **BACKGROUND AND THEORY OF INTELLECTUAL ENTREPRENEURSHIP**

A transformation is underway in higher education. The conditions for research and teaching are reshaping the modus operandi of academic institutions. Recent heated debates address “the Idea” of the university and its role in society (Gibb & Hannon, 2006). The U.S. Secretary of Education’s Commission on the Future of Higher Education reports, “As higher education evolves in unexpected ways, this new landscape demands innovation and flexibility from the institutions that serve the nation’s learners” (2006, p. xi). More to the point, “universities face enormous challenges in the 21st century: waning fiscal support, a loss of public confidence, and a persistent lack of diversity” (Cherwitz, 2005a, p. 48). These challenges require universities to grapple with several serious and complex issues. The first issue is accountability. Perhaps more than ever before we are cognizant of the relationship between universities and “stakeholder communities” (Gibb

& Hannon, 2006). Close attention now is paid to universities' capacity for delivering much-needed professional and vocational as well as intellectual training. Among the questions posed are: Do universities serve society in optimal ways (Pretty, 2007)? Do they respond to urgent, material needs? The second issue concerns the effectiveness of doctoral education. Many question how well we prepare students and whether Ph.D. skills translate for lay audiences and into productive "off campus" careers (Anderson, 1999; Devine, 2001; Leatherman, 1998; Nyquist, 2002). Professional development, while helpful, appears to some as "after the fact" and disconnected from disciplinary education (Cherwitz, 2007). Third, diversity in the academy remains illusive, particularly at the graduate level (Hurtado, 2007; Rasperry, 2005). Old recruitment strategies show limited success. Fourth, while imploring students to make authentic and informed choices, universities lack methods for teaching them how to do so. Many graduate and undergraduate students do not grasp fully what opportunities are available and how best to determine which ones are most appropriate for them. Large research universities are a case in point, containing a wide array of "student resources" but offering few spaces for learning how to harness and integrate them.

The current model of graduate education is based on "apprenticeship, certification, and entitlement" (Cherwitz and Sullivan, 2002; Cherwitz, 2007, p. 22). This is the path that departments chart for their students. On paper, this model of education seems suitable because its effectiveness is empirically measurable. Graduate students know this model from personal experience. They work closely with an academic advisor in a relationship resembling artisan apprenticeships. Frequently this relationship functions mimetically, cloning particular types of scholars. It is not uncommon for graduate students to take up their advisor's scholarly interests and/or civic agendas. This is natural; the apprenticeship process is tantamount to a kind of baton-passing in which the pupil carries on the master's program. It culminates in disciplinary and institutional certification. Graduate students complete a series of tasks, each rendering a higher level of academic accreditation. They write theses to earn a Master's degree. To be labeled "Ph.D.," students take comprehensive exams, defend research proposals, and write dissertations. Each step—hoop—garners a new reward, until one day the final certificate qualifies the certified for employment. The assumption is that a degree automatically can be "cashed in" for something else: a job, a title, etc. Traditionally the path from apprenticeship through certification rewards successful students in such a way as to generate a sense of entitlement.

Intellectual entrepreneurship radically alters this model of graduate education, introducing instead a trajectory of "discovery-ownership-accountability" (Cherwitz, 2007, p. 22; Cherwitz and Sullivan, 2002; Shaver and Scott, 1991). From the outset, students are encouraged to discover their personal, intellectual, and professional interests and to make explicit and thoughtful connections among these goals. As intellectual entrepreneurs, they function as explorers and ethnographers of their discipline and their lives. Rather than being assigned or defaulting to research questions, they are invited to formulate their own. Discovery is the means of forming collaborative relationships. A student who realizes that her current advisor does not facilitate the research program she envisions should, as an intellectual entrepreneur, approach a different faculty member. Genuine

discovery eventually leads to ownership. Graduate students who build their own research program and teaching philosophy are more intimately connected to their work. They have an entirely different claim to it than graduate students who merely do as expected. And graduate students who own their scholarship and pedagogy assume greater accountability. Accepting accountability for an enterprise for which one was responsible is more easily accomplished than answering for something over which one has little control. Imagine as an illustration an inventor, laboring with enthusiasm, discovering the pieces that fit together, owning the discovery, and accepting accountability for the outcome. Why shouldn't graduate students be intellectual entrepreneurs, operating with an inventor's outlook?

## **CASE STUDY: THE INTELLECTUAL ENTREPRENEURSHIP (IE) PRE-GRADUATE SCHOOL INTERNSHIP**

There are countless ways of being an intellectual entrepreneur. Indeed, one is limited only by intellect and entrepreneurial spirit. In most instances, graduate students do not need campus infrastructure to infuse intellectual entrepreneurship into their routines. Formal university support is not required. To illustrate how the mindset of intellectual entrepreneurship can be manifested, we introduce a case study: the University of Texas at Austin Intellectual Entrepreneurship Pre-Graduate School Internship. Our goal is to demonstrate what a programmatic embodiment of the intellectual entrepreneurship philosophy is. While replicating the internship at other institutions is certainly possible, that is not our argument and is beyond the scope of this chapter. We are not promoting a particular program; rather, we wish to articulate a vision and philosophy of education empowering graduate students to become productive and resilient “citizen-scholars” (Cherwitz and Sullivan, 2002).

The Pre-Graduate School Internship is a learning incubator for undergraduate and graduate students. Offered for academic credit on a one-semester basis, it is open to students from all colleges and departments. As “interns,” undergraduate students work one-to-one with graduate student mentors, investigating their chosen field of study. They explore those aspects of graduate study making it distinct from the undergraduate experience (e.g., conducting research, writing for scholarly audiences, participating in seminars, serving as teaching and research assistants, publishing articles in professional journals, becoming members of scholarly organizations, preparing for an academic or professional career, etc.). Additionally, interns attend closed sessions, a “safe space” where they candidly exchange insights on what they're learning about themselves, their disciplines, the culture of graduate school, and the academy. The meetings address issues like graduate school admission and funding, as well as the value of an advanced degree—concerns germane across disciplinary boundaries. At the end of the semester, interns write reports reflecting upon their experiences and share them with their fellow interns.

The program operates with minimal centralized organization. Interns and mentors pair up in organic ways, often based on previous relationships. A graduate

student teaching assistant may identify a particularly motivated undergraduate student and approach that student about the internship. The next step is a conversation between the would-be intern and mentor during which they design a “syllabus,” a list of projects, activities, and assignments that match their shared interests and goals. These are then formalized in a contract submitted to and approved by the program director.

For graduate student mentors, the Pre-Graduate School Internship affords professional development. It complements conventional teaching experiences with something more dynamic and autonomous. Many communication graduate students serve as teaching assistants for lower division courses like public speaking. In contrast to those courses, which typically have a pre-set syllabus, the internship structure is less didactic and more flexible—it builds “from the student up” (Cherwitz, 2007). Its design is negotiated between mentor and intern; no two internship contracts are identical. For this reason the mentoring experience is similar to the kind of relationship that faculty members develop with graduate students. Serving as mentors prepares graduate students for the professoriate, departing from the traditional educational model. Tapping the needs of each intern, graduate mentors function as academic coaches and learning facilitators rather than instructors spoon-feeding knowledge.

Below are excerpts from graduate student mentors who have participated in the program. As their statements reflect, mentoring is both personally gratifying and professionally energizing. Each graduate student mentor narrative reveals precisely what it means to be an intellectual entrepreneur. Collectively, these comments constitute the basis for our recommendations about how to become intellectual entrepreneurs.

- As a graduate student mentor, this course allowed me to co-design a curriculum, an unusual opportunity for an A.I. and one that will assist in job searching as well as in future work. Even more exceptional was the chance to conduct an informal, one-to-one course whose topic allowed me to reflect on my own graduate school career and further refine my goals.
- Being an IE Pre-Grad mentor is different than teaching a regular class in that the student has to define the project in all stages and organize his time and efforts to finish it. This made the IE internship a valuable course.
- As rewarding as it was for [my intern] Jill, I have to say it might have been even more rewarding for me. From a professional standpoint, graduate students entering academia will eventually need to learn to manage graduate students under them. While graduate students have always had the option of getting volunteers to assist them, the IE program formalizes this into a true mentor-mentee relationship, giving me valuable insight into what kind of advisor I will be one day, where my strengths are, and where I still need to improve. I doubt that anything available to us is closer to the role we will fill later in our careers.
- Acting as a mentor through the IE Pre-Grad Internship has given me a new perspective on my academic discipline and my role within it. I probably gained as much from the experience as my mentee did. It was terrific watching him discover something and to see him examine what it means to be a graduate student through honest eyes.

- My mentorship was enlightening and useful for future instructional opportunities. As a possible candidate for academic employment, working with students on research projects will be a fundamental responsibility. Surprisingly, I was reminded of the issues confronting graduating seniors and prospective graduate students. Those issues include the formulation of research problems, design of research projects, and execution of those projects. Additionally, I had to balance the time I could spend with the student with other responsibilities. Such lessons in time management must be learned to become a successful faculty member.

As these comments indicate, graduate students who take on this “faculty” role experience what it means to be an intellectual entrepreneur. They are challenged to design a curriculum responding to and sustaining their interns’ passion and curiosity.

What attracts undergraduate (and graduate) students to the Pre-Graduate School Internship is that it is student driven. It is an entrepreneurial laboratory licensing students to investigate the natural connections between education and their own personal and professional aspirations. It invites students to consider how higher education prepares them to serve their communities in productive ways (Hurtado, 2007). This is especially important for underrepresented minority and first-generation students who, not coincidentally, comprise nearly fifty percent of the Pre-Graduate School Internship roster (Cherwitz, 2005b). For many of them graduate study is not a realistic option; their families and local communities, which shape from childhood how students think about education, often discourage graduate school (particularly in the arts, humanities, and social sciences, where education may seem more disconnected from the rough and tumble of the real world). In the Pre-Graduate School Internship students re-conceptualize the potential of graduate study. They re-envision academic disciplines as useful lenses for analyzing and solving problems. Consequently, pursuing graduate school becomes a viable option for addressing real-life problems.

Graduate student mentors are keenly aware of the challenges interns face. Their testimonials direct attention to the populations and problems the academy frequently neglects. Consider the following excerpts from mentors who worked with first-generation or underrepresented minority interns. Their narratives shed light on how graduate students become intellectual entrepreneurs.

- As both a graduate student of color and a first-generation college student myself, I live the pains, challenges, and triumphs associated with persistence through an education system designed for mainstream youth. My motives for serving in this capacity were to somehow share with her much of the knowledge gained about the graduate school experience through my lived experiences, academic pursuits, and from the advice of my own mentors—Latina/o and/or first-generation college students themselves.
- My motives for mentoring fellow Latinos, especially Latinas, came from my own experiences as a Latina undergraduate at a large university. I’m the youngest of ten children and daughter of two extremely hard working Mexican immigrants who sacrificed their dreams for mine, but who lacked the academic skills to guide me through the maze of financial aid bureau-

crazy, writing a cohesive and compelling research paper, and navigating the intimidating world of undergraduate life.

- As a Latina, but especially as a first or second generation Mexican-American, there are certain cultural traits that are engrained in our beings which cause for us to at times doubt our strength, capabilities and our position within the dominant society as well as within our own Latino culture. If I can share my story—my insecurities, failures and triumphs with someone so that she knows that she isn't alone in the process and so she can find the strength to continue working toward her goals—I'll know that I'm doing my part to help another hermana as well as mi comunidad (community).
- What my intern has experienced so far, as opposed to my undergrad experience, is a prime example of the adversity she will experience if she pursues a graduate education [. . .]. I am speaking from experience as a graduate student [African-American] at UT. I have not received much encouragement since I have been here, and I am preparing her to be aware of this potential type of treatment in the future. Students of color and first generation college students *need more guidance and encouragement!* This type of support must start in the classroom and the university itself.

As these passages demonstrate, graduate students can have a powerful impact on one of the most critical issues facing higher education. Increasing diversity on campus is an opportunity—one that begins with a personal commitment to thinking like an intellectual entrepreneur.

## **STRATEGIES FOR BECOMING AN INTELLECTUAL ENTREPRENEUR**

While the Pre-Graduate School Internship illustrates the philosophy of intellectual entrepreneurship, it certainly does not exhaust programmatic possibilities. What it underscores is that graduate students at any university can become intellectual entrepreneurs. What must be asked is: What are the available means of becoming graduate student intellectual entrepreneurs? What does the intellectual entrepreneurship mindset entail? Below are four ways of structuring the graduate student experience in accordance with the intellectual entrepreneurship philosophy. The four recommendations have different levels of salience for graduate students at different stages of their education; all, however, are strategies that can be adopted from the first day of one's graduate program.

### ***Make Deliberate Choices***

Making choices may sound simple but is sometimes easier said than done. For graduate students, many choices are pre-determined. A clear path through post-graduate degrees is already blazed. When graduate students begin their Master's or doctoral programs, they typically are assigned an academic advisor; faculty members share the advising load by dividing new graduate student

cohorts among themselves. These pairings are expected to last productively for years. Implicit departmental norms and prior practices often discourage students from changing advisors, even though technically they are allowed to do so. Expectations are part of academe's institutional culture, covertly constraining graduate students' decisions.

Becoming an intellectual entrepreneur means consciously reflecting on available alternatives and making choices that serve one's unique goals. It means considering how different courses of action lead to different outcomes. In terms of an advisor, it is imperative that graduate students select the best possible mentor. The right academic advisor can mean the difference between two to six exciting and stimulating years and an eternal endurance test. Graduate students should ask: With which faculty member do I share research interests, methodology, and/or theoretical orientation? With whom do I connect on an interpersonal level? Who keeps the same hours as I do and has the same attitude toward a work-life balance? Who will allow me to participate fully in my own education, supporting whatever career choices I make? Asking these questions is essential. The worst strategy for picking an advisor is letting someone else, including the department, do the choosing—a strategy, which despite being well-intended, is thoroughly paternalistic and antithetical to optimal learning. Instead, graduate students are best served by letting choices emerge organically. However, they should select a mentor with deliberate intent.

Picking an advisor is only the first in a series of important decisions graduate students make. As their scholarly interests take shape they must also consider what different personal and professional dimensions comprise their identity. Graduate students are more than the sum of course credits and conference presentations. They also are members of multiple communities: sons and daughters, partners, parents, businessmen/women, etc. Graduate students have many different interests and personal priorities that according to the traditional paradigm may not belong in academe. For example, graduate student activists often are warned that, while it is okay to maintain this "hobby," it should be done on their own time.

Intellectual entrepreneurs make deliberate choices, discovering and creating the natural connections between personal, intellectual, and professional aspirations. Rather than reacting defensively to the academic establishment's skepticism, intellectual entrepreneurs lead with their passion; they initiate by explaining what they do and why they do it. They declare: "Here are my beliefs about the world and my own place in it; here is how those beliefs inform my theoretical framework as a scholar; and here is what my research productively brings to the problems my community faces." Consider the following illustration. A graduate student in organizational communication is personally concerned with the increasing number of homeless families in Austin, Texas. He *chooses* graduate seminars about non-profit organizations and organizational leadership. He *chooses* an advisor who works closely with a local shelter. His eventual dissertation topic focuses on inter-organizational relationships in something called CAN, the Community Action Network. Choosing to behave like an intellectual entrepreneur means designing one's research projects relative to other personal and professional ideals.



## ***Reconceptualize the Meaning of Scholarly Invention and Production***

Universities, especially large research institutions, make it easy to measure success. They employ quantitative metrics to tabulate the products of scholarship; producing a certain number of articles in top-tier journals gains tenure, and raising a threshold number of extramural grant dollars leads to promotion or merit salary increases. Even though graduate students are not yet part of the tenure and promotion cycle, they experience a related form of product-oriented evaluation; perhaps one single-authored publication means receiving the department's prestigious fellowship, and numerical course instructor survey data determines who is awarded summer funding. Early in their studies, graduate students learn about the academic coin of the realm. Every item—every line on the curriculum vitae—is a triumph; it is proof of productivity.

The intellectual entrepreneurship philosophy invites graduate students to rethink what they produce and why. It interrupts the chorus of voices that clamor for more of the same thing. The strategy we are recommending is not a call for decreasing scholarly rigor or vindicating those who produce weak or no scholarship. Framed in that manner, intellectual entrepreneurship would be discarded as something other than and in stark competition with scholarship. Instead, we encourage graduate students to broaden the scope of their work and its contribution. They should consider whether their research speaks to more than one audience. To be sure, publishing an article in a peer-reviewed journal is an accomplishment worthy of praise and celebration. The audience that one is likely to reach with such a publication is important; a continuous dialogue among specialists is vital to disciplinary health and knowledge. However, there is more to scholarly productivity than academic publications. Journals and books consumed by a handful of academics need not be the exclusive end of scholarship.

Many communication graduate students harbor insecurity about the relevance of their scholarship. They worry that their research is less useful, especially when compared to more tangible inventions produced by disciplines like engineering. Those who study social processes typically think of themselves as “critics” more than “producers.” Initially, therefore, it may be hard to imagine what graduate students in communication can “export” of value to those outside of the ivory tower. To counter this misperception, the “export” metaphor must be recast. Graduate student intellectual entrepreneurs interrogate the assembly line (export) model of research—not because they cannot “make it” on those terms but because they know that their scholarship is worth more. Criticism is indeed a type of invention. Scholars who analyze and deconstruct communication practices invent; their inventions, however, assume a different form than those of engineers and scientists. For example, while not always explicitly stated nor thoroughly developed, criticism can inform and improve communication practices; critics simultaneously can deconstruct and engineer communication—but only if they choose to do so. Intellectual entrepreneurs dare to explore the inherent relationship between theory and action, understanding that their discoveries might actually change the world by producing new and more effective ways of communicating. Intellectual entrepreneurs think of their scholarship as inventions, owning those

inventions and contemplating what good those inventions can render beyond a curriculum vitae.

### ***Pursue Allies Inside and Outside of the Academy***

As discussed above, intellectual entrepreneurship replaces the traditional metaphor for the relationship between academe and the community. Instead of a one-way “knowledge transfer” model, wherein universities export their inventions and discoveries to be put to practical use, a dialogue begins. Scholars recognize that they are not the only experts and teachers are not the only ones with lessons to share. As Pretty (2007) notes:

Pedagogy is no longer restricted to teacher transmission of established chunks of knowledge. Learning now includes student engagement outside the university, through practical response to real life challenges, within new environments where they have the opportunity to work with a range of experienced and professional people. (pp. 57–58)

Simply stated, academics have just as much to learn from professionals and community leaders as the latter do from academics. There are natural allies for different kinds of research spread across a university campus and within the community. In view of the complexity of challenges facing the world, the idea that academic researchers unilaterally and exclusively provide answers to “real life” problems is archaic and absurd.

Graduate students need not revolutionize the academic enterprise to become intellectual entrepreneurs. Their best strategy may not be to challenge philosophically the above mentioned tradition. A more prudent plan is to create change by enacting it one case at a time. As future leaders of their discipline, graduate students have the power to influence how scholarship is defined. They immediately can start reshaping the idea of what it means to be a “scholar” by forging productive town and gown dialogue. Graduate students can become the kind of “engaged scholars” who, emboldened by an entrepreneurial mindset, coordinate the efforts of researchers from different disciplines and professionals from different sectors of society.

Some of these interdisciplinary and on- and off-campus collaborations already exist. Interpersonal communication scholars frequently team up with researchers in sociology, psychology, and family sciences. Rhetoric scholars incorporate theory and artifacts from American studies, history, composition, and political science. Media scholars interact with those in design fields and radio-television-film. Organizational communication researchers connect with community groups, businesses and corporations to address a variety of concerns. This is only the tip of the iceberg; the real challenge is to discern new, unimagined, and unexplored possibilities—to move beyond communication’s obvious and traditional cognate disciplines as well as to collaborate and partner with non-academics. We must ask: Are there disciplines with which interpersonal communication has not partnered that are capable of generating fresh perspectives? What are the disciplines with which organizational communication has yet to discover common themes? Why shouldn’t rhetoric, which sometimes is thought of as esoteric and purely theoretical, re-embrace its classical heritage, seriously exploring its

contributions to the world of prudential affairs? To ask these questions—to broach cross-disciplinary and community collaborations with the potential to create outcomes larger than any one academic field—is to be an intellectual entrepreneur.

These questions are apropos for graduate students because they expose uncharted terrains upon which young scholars might build research agendas and professional careers. Imagine a research project about sustainable development involving rhetoricians, ecologists, economists, engineers, and urban planners—one that produces both academic knowledge and public action. Imagine research focusing on addiction and family relationships that brings to the table interpersonal communication scholars, biochemists, neuroscientists, psychiatrists, ethicists, and governmental leaders—research that generates changes in both personal and public policies. By envisioning these possibilities and including people from a variety of academic disciplines and sectors of society, and by participating in these “action seminars,” graduate students will become intellectual entrepreneurs—“citizen-scholars” who produce academic knowledge and leverage that knowledge for the greater good. What is especially attractive is that this new way of thinking about graduate education and research addresses the question of how to make scholarship accessible and socially relevant, thus directly responding to several of the serious challenges faced by higher education delineated earlier in this chapter. Deeply complex yet understudied issues like environmental sustainability and addiction provide incubators where academic and non-academic communities can team up to solve problems. Society’s most vexing issues require inter- and cross-disciplinary collaborations—not because such partnerships are trendy but because, without them, solutions remain unattainable. To be sure, becoming a graduate student intellectual entrepreneur is a challenge; yet adopting this mindset can immediately offer potential for enormous personal, professional, and intellectual payoffs.

### ***Assume an Integrated Sense of Responsibility and Agency***

Graduate students often have a hard time establishing a personal sense of ownership of their work. They do what their professors and departments expect without demanding much autonomy. This is particularly true in the early stages of graduate education, before students complete course requirements. Graduate study may seem like an endless series of tasks designed and predetermined by others. This disconnect exacerbates the difficulty of assuming personal responsibility. It means that, if not personally connected to the products and processes of their scholarship, feeling responsible is unlikely. Nevertheless, much is at stake in this relationship between graduate students (junior scholars) and their work. How can we expect future scholars to ask original questions, be creative, and make new discoveries when their education is based on a didactic model of learning rather an entrepreneurial one, where ownership and accountability are paramount?

By contrast, graduate students who mentor undergraduates, exposing them to the realities of the academy, assume responsibility not only for themselves and their work but also, in some small sense, for the future of the university.

As seen in the earlier cited narratives, by mentoring underrepresented minority or first-generation undergraduates, graduate students unearth new opportunities for those populations; they have a modest yet significant impact on the university by changing it from the ground-up. Consider, moreover, how this relationship engenders a sense of personal agency. It empowers graduate students to be decision makers, despite the initiation practices of academe's culture. It places graduate students in charge of designing and implementing a curriculum, enabling them to create *their* pedagogy. Mentoring is but one example of graduate students assuming agency and functioning as intellectual entrepreneurs.

It is never too early for graduate students to ask: What is the terminus of my research and teaching? To what ends will these activities eventually be used? Am I ready to take responsibility for the consequences of my scholarly discoveries and inventions? Does my teaching philosophy educate the kind of students of whom I can be proud? When graduate students pose these questions they assume ownership of their education. They cease thinking of themselves as minions, now recognizing the power they possess to shape their world. This leads to an epiphany: Like Dorothy in the Wizard of Oz, graduate students discover they "had it all along." It is at this turning point that the relationship between graduate students and their work must change. If graduate students find they are not producing scholarship for which they can be responsible, then a reconceptualization must transpire. These turning points represent the essence of being an intellectual entrepreneur, providing as well an important way to safeguard the ethics of the academy.

## CONCLUSION

Whether a scientist or a humanist, an intellectual entrepreneur is someone who takes risks and seizes opportunities. Intellectual entrepreneurs discover knowledge and utilize that knowledge to make a difference—striving to "do well by doing good." They embody a particular vision of the academy that is revolutionary yet incremental; although the philosophy challenges the academic standard at its core, becoming an intellectual entrepreneur requires only modest changes. That is why it is never too early to start. As this chapter describes, there are several strategies that graduate students might implement to become intellectual entrepreneurs: making deliberate choices, reconceptualizing scholarship, pursuing allies inside and outside of the academy, and assuming an integrated sense of responsibility and agency for their education.

While this chapter draws examples from The University of Texas Intellectual Entrepreneurship Pre-Graduate School Internship as a way of illustrating how to become intellectual entrepreneurs, our objective has not been to promote a particular program. One size may not fit all; what works at one institution does not necessarily transfer to another, nor should it. The intellectual entrepreneurship philosophy, however, is vibrant, constructive, and potentially useful to students at all educational institutions and at all levels of learning. What intellectual entrepreneurship counsels is that graduate students examine their professional, intellectual, and personal commitments and the connections among them, owning and being accountable for their education with a new-found intent and zeal.

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