Creating a Pipeline of Innovation at Your College or University

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Here's how department chairs, deans, and unit directors can do what it takes to support the innovations that will help their institution thrive in the years to come.

Besides entrepreneurs, one can find many intrapreneurs among the faculty, staff, and students at a college or university -- those creative individuals who have ideas for improving the internal processes of the institution itself so that the institution can better fulfill its mission. Unlike the entrepreneurs whose ventures are focused on society outside the institution, these intrapreneurs often receive little support for their ventures; they are isolated. Yet those who succeed often start programs, units, and organizations that grow and eventually become transformative for the institution, bringing in grants, increased net tuition revenue, gifts from donors and foundations, and increased reputation and position within the institution's market.

What would it look like if there were a pipeline of support for such ventures? If college and university leaders had an active process for identifying such promising intrapreneurs, testing their ideas, and developing them with both the skills and resources needed for their ventures to mature? What would it look like if support for such efforts wasn't haphazard and ad hoc, but structured and planned?

Many write about building a "culture of innovation," but this book gives you a roadmap for actually doing that. Whether you are at a research-intensive university, regional university, baccalaureate institution, or community college you will get guidance for improving the culture and the support system for positive change. The book shows how leaders and innovators can work together to improve any aspect of the campus mission. It provides detailed examples and inspiring case studies from more than forty institutions. Each of the twelve chapters presents new concepts, insightful analyses, and real examples that readers can draw upon. Each chapter concludes with worksheets to facilitate application.

The key messages of this book are:

1. The capacity for innovation is the factor that will determine which colleges and universities survive and which will thrive in the future.

2. The partnership between leaders and innovators is the key to building this capacity.
3. The innovations that improve the school in significant ways take the form of enterprises or ventures within the institution.
4. These ventures go through predictable stages of entrepreneurial development. We need to do more to help innovators at each stage of this developmental arc.
5. When these innovators, who could be justly called *intra*preneurs, have the support they need at each stage of their innovative venture, we have a pipeline for innovation.
6. It is this pipeline that will, in turn improve the institution's performance, its competitive position, and attractiveness to donors and funders. In effect, the arc of development becomes the proverbial "rainbow with the pot of gold" at the end.

Bottom line: It's worth investing in innovation as a process of continuing improvement. No, more than that, the pipeline for innovation is a "must have" for institutions who seek to be successful in a world of constant change and ever-shifting competitive forces.

Readers will find thorough discussions of three critical questions:

- As a leader, what can I do to promote a culture of innovation?
- As an innovator, what can I do to assure my ideas for positive change become programs that help students, faculty, and the community?
- How can we, partnering as innovators and leaders, build a pipeline for innovation at our institutions of higher learning?

To visualize what this might mean, let's take just one example of what such a pipeline for innovation might look like in the realm of teaching. (We could just as easily give examples for research, public service, student life, or improving campus operations and facilities.) This example is a composite of several of the real cases from actual institutions of higher education presented in my book, *Creating a Pipeline for Innovation Within Your College or University*. Below, the phrases and sentences *in italics* describe the supports that are in place at each stage of venture development. Taken together, they are a version of the pipeline for innovation, but each institution, must, of necessity, create its own unique pipeline. This is just an example and model of what you *could* do.

Segment 1 of the pipeline:
From *idea* to *pilot*

A faculty member in the sciences has an idea to help undergraduates get involved in research and problem-solving earlier in their academic careers. She is passionate about this, saying, "If we taught baseball like we teach science, students would not play a game until graduate school."

A sympathetic department chair *refers her to a course the Provost's Office runs in how to turn ideas into projects.* The faculty member enrolls in the course and designs a pilot program (based on a survey of promising similar initiatives at other schools) for a summer school course she is teaching. The course is very successful. *With help from a staff member from the Office of Teaching and Learning,* she creates a strategic plan to grow her effort.

Segment 2 of the pipeline:
From *pilot* to *program*

The first step of the strategic plan was to sell the idea to faculty members who might be sympathetic. An *Associate Dean of the College of Arts and Sciences, part of whose job is to foster new ventures,* provides her department with funds to support a course buy-out so she can do the proselytizing and recruiting necessary to get other faculty involved. During the next semester, she recruits a group of faculty colleagues in different disciplines who are willing to try out her idea, and *the Development Office connects her to an interested foundation.*

Segment 3 of the pipeline:
Growing the program

The foundation makes some additional funds available to help faculty try out the idea of undergraduate research and to pay some teaching assistants to help professors who sign on. Because students get to work on real research projects and are solving real problems, it is a big hit—and demand increases. The faculty member is given a one course reduction for the next year to continue work on this project, which now has a name, and she is given the title of "coordinator." She is *invited to*

participate in a support group of fellow innovators from across the institution. In this group they develop their ideas and brainstorm how to overcome obstacles along the way.

Segment 4 of the pipeline:
The institution embraces the innovation

Encouraged by the growing success of the program, increasing student demand, faculty excitement, and alumni and parent recognition, *the College of Arts and Sciences sets up an office to really boost this effort.* The faculty member who developed the idea, now tenured, becomes an Associate Dean for Undergraduate Research and Discovery Learning. An interested donor *solicited by the College's development officer* funds four term professorships for faculty advisors, one in each division of the College (i.e., Arts, Humanities, Social Sciences, and Natural Sciences).

Segment 5 of the Pipeline:
From *innovation* to *impact*

In a few years hundreds of students at the institution are affected, and the school uses this program in its promotional materials to recruit the best students. The "Program on Undergraduate Research and Problem-Solving" becomes a selling point for the institution. Students find that their college experience, now enhanced, better prepares them for the workplace and for graduate study. An alumni donor who has just hit it big in the tech world gives $25,000,000 to assure that every student can take advantage of this opportunity. This program now distinguishes the school from its closest peers.

This model of progressive assistance in five stages can be adapted to many different types of institutions and to many types of innovations. It is based on my twenty years of experience in working with campus innovators, on cases from several dozen innovative institutions, and from interviews with some of the country's most innovative senior higher ed leaders. The model is also informed by my decades of study of change leadership and by my consulting career with leaders not only in higher education, but also across a wide spectrum of government, non-profit, and commercial enterprises.

Overview of Contents

The book *Creating a Pipeline for Innovation* is divided into two parts. Part One explains the framework and the evidence base and gives many examples of the key concepts. Part Two shows how to build the five-segment pipeline of innovation as part of a self-renewing innovative ecosystem.

Part One (Chapters 1-6)

Chapter 1: How innovation happens.

The first chapter presents evidence that each institution has a typical pattern of innovation that is "baked into" its culture. Two key variables differentiate: whether the institution favors a more incremental or transformational approach, and to what degree innovators at the top, middle, or bottom of the institution drive change. By becoming more aware of their own institution's pattern, leaders can see ways of extending and enhancing their institution's capacity for innovation. By learning about how their institution typically innovates, intrapreneurs become more savvy change agents.

Chapters 2-4: Academic intrapreneurs, their innovative roles and contributions.

Chapter 2 reveals an asset that has long been hidden in plain sight: the *academic intrapreneurs.* Whether located in the upper, middle, or lower ranks, these "innovators within" display entrepreneurial vision, talent, and drive. Their success helps the institution thrive.

In Chapter 3, readers will find many examples of how these academic intrapreneurs, working with leaders at all levels, create programs that improve outcomes for students, faculty, and staff, while delivering the value that can motivate major gifts, grants, and contracts. The net result is an improved institutional reputation and an improved competitive position.

Chapter 4 suggests that it's not that easy, though. Academic intrapreneurs face many obstacles. Chapter 4 details what leaders and intrapreneurs alike need to do to overcome these. Without attention to the twelve strategies presented in Chapter 4, the best ideas are not likely to become viable and valuable programs and initiatives. In this chapter, readers get a "heads up" about the barriers common to all types of campuses. They also get a "helping hand" in seeing what it takes to be successful in overcoming these barriers.

Chapters 5-6: An encouraging culture plus supportive structure leads to innovation.

In Chapter 5, the reader will learn, in simple terms, what a culture of innovation sounds like. *Hint: It's all about whether the conversations between innovators and leaders are skillfully collaborative.* Readers learn this based on accounts at several different colleges and universities and from a review of the literature. Readers will see how to assess and improve their own ability to carry on conversations that lead to constructive and positive change.

It's one thing to be encouraging and constructive, but Chapter 6 describes the practical support structures and practices that are also needed. This support is based on the five critical stages of development for an innovation:

1. Generating creative ideas
2. Turning good ideas into promising pilot ventures
3. Building the pilots into programs of demonstrable worth and impact
4. Taking the most valuable programs to scale within the institution
5. Building on the successful innovations to achieve major improvements, extraordinary new revenues, and reputational success

Chapter 6 explains each stage in detail and outlines the organizational investments in programs and activities that are required to help the new ventures grow, adapt, evolve, and finally become defining features of the institution itself.

Part Two (Chapters 7-12)

Part Two provides an imaginative and practical vision of the truly innovative college or university. I explain in detail how to construct each of the five segments of the pipeline for innovation. I describe helpful programs that currently exist on one or more campuses that readers can adapt to their own settings. And I show how the parts of the pipeline may be connected and how the people and organizations may be networked. Bringing all the innovation support programs together into one dynamic system of innovation is the breakthrough contribution and value added of this book.

Chapter 7: From idea to pilot.

This chapter helps the reader to identify what institutions can do to create a continuous flow of ideas for positive change, including surveys, listening sessions, and innovation forums. Chapter 7 draws on examples as diverse as the Seneca College of Applied Arts and

Technology in Toronto and Georgetown University in Washington, DC. This chapter showcases courses and programs at several universities and colleges that provide guidance to would-be intrapreneurs so they can transform their ideas into working pilot projects.

Chapter 8: From pilot to venture.

This chapter shows how colleges and universities may initiate a pipeline of innovation. The author developed a successful course at UNC-CH for this purpose, and this chapter allows the readers to understand this program at a deep level and explore how to adapt it for their institution. We also look at examples of similar programs at Broward County Community College and Boise State University.

Chapter 9: Growing the venture.

By adapting certain aspects of programs in the private sector (e.g., business incubators and accelerators), colleges and universities can help academic innovators expand a pilot program into a functioning venture. Chapter 9 draws on examples from a variety of campuses including Kentucky State University, National Louis University, Jefferson University's Sidney Kimmel Medical College, and Duke University. This chapter describes and documents models of peer mentoring, training, coaching, small grants programs, and released time options for innovators on the faculty or staff who may be developing the next creative enterprise that will propel the institution forward.

Chapter 10: Scaling and institutionalizing innovation.

This stage is about assessing promise and investing strategically. We discuss what colleges and universities need to have in place to take innovations to this next critical stage. The Alamo College District in San Antonio presents an inspiring example in this regard, as does Becker College in Worcester, Massachusetts, the University of Minnesota-Crookston, MIT, and Washington University in St. Louis. We also talk about how some once-vital and successful ventures may falter and what processes and supports are needed to renew them and restore them as key contributors to the well-being of the institution.

Chapter 11: Innovation for high impact.

This chapter showcases what can happen when universities and colleges build strong, innovative, and distinctive programs. The book provides numerous examples where already strong programs attract major resources (i.e., $100 million or more) because they demonstrate value in research, teaching, or public service that excites funders and donors. As a result, the impact and capacity of the institution itself is enhanced and enlarged. Examples from schools as diverse in size and mission as UNC-Chapel Hill, Catawba College, and

Metropolitan State University of Denver are presented. This chapter clinches the argument that advancement professionals need to be involved with emerging campus innovations at the earliest stages.

Chapter 12: Creating an innovative ecosystem.

This chapter provides a case example of how one university (UNC-CH) is working to enlarge and connect its own system of supports into a self-renewing ecosystem of innovation. This example is then bolstered and extended by bringing in similar experiences from a wide range of institutions. This is the final stage of the process: making innovation fundamental, continuing, extensive, and self-renewing.

Why This Book Matters and Why It Delivers

Overall, *Creating a Pipeline for Innovation* speaks to the current crises faced by our modern institutions of higher education such as the struggle for relevance, for accessibility, for affordability, the need to address pressing social, technological, cultural, and political challenges, and, of course, charting a viable economic course that allows growth and development.

This book's extensive survey of innovation—of how to make any campus more creative, adaptive, and prosperous—includes a workbook section following each chapter. By responding to the prompts in the worksheets, individuals and groups may reflect on the content, self-assess, and plan actions for improvement.

While there is no single silver bullet that will address all the problems the higher education sector faces, this book makes the case that supporting the innovators within, creating a pipeline for innovation, and encouraging innovative partnerships between leaders and innovators is our best way forward. By enlarging the possibilities of innovation in many disparate areas of our institutions through a pipeline of support, we help our institutions adapt and thrive in a rapidly changing and highly competitive environment.

Learn more in *Creating a Pipeline for Innovation Within Your College or University*.

David has worked in faculty development at the University of North Carolina at Chapel Hill, Duke University, and other universities and colleges since 2001.