

## A Network Approach to Preparing Underrepresented Students: The LEAD Model

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**Abstract** Results are reported from an empirical study of an interorganizational collaboration to prepare underrepresented students for elite postsecondary education and beyond. The LEAD (Leadership Education and Development) Program in Business is an initiative involving twelve U.S. universities, nearly forty multinational corporations, a federal government agency, and a nonprofit organization working together to introduce students to business education and careers in business. This article analyzes the conditions that give rise to the collaboration, its essential structural characteristics, and the consequences that flow from it.

**Key words** interorganizational collaboration · diversity · pre-college outreach · academic–business partnership

Equalization of opportunity for racial and ethnic minorities in the United States has been a consistent public policy and education imperative for several decades, and yet significant disparities persist. College attendance and completion rates for underrepresented minorities—particularly African Americans and Hispanics—remain lower than those for non-minorities (e.g., Karen and Dougherty 2005). Closing this gap in access and success has been a high priority for educators; but other organizations (namely, government agencies, nonprofit organizations, private foundations, and corporations) are playing an increasingly influential role in such efforts, ostensibly because their own practical interests and wider societal interests are served by diversity. For example, it is now quite common for companies to assert that diversity is profitable in an era of globalization, and corporate

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recruiting offices uniformly invest in special efforts to attract minority candidates for employment (Siegel 2006).

This is the backdrop against which several major pre-college, “pipeline development” initiatives have evolved in the United States to prepare underrepresented students for postsecondary education and beyond, a development that in turn helps to incrementally address larger issues of social and economic justice. There is a whole spectrum of these programs; for example, they can be found in the fields of business, medicine, public health, engineering, science, and mathematics. These programs have in common the broad objective of overcoming the limitations of insufficient funding to attend college, inadequate preparation to succeed, or unclear understanding about higher education (Hagedorn and Tierney 2002). They range from remedial programs to enrichment programs for gifted and talented students.

One prominent program of this type is LEAD (Leadership Education and Development), the goal of which is to introduce underrepresented high school students to business education and careers in business. LEAD is a partnership of (1) the non-profit umbrella organization (LEAD Program in Business or LEAD National), (2) twelve top American universities<sup>1</sup> which host residential Summer Business Institutes (SBIs) chiefly through their business schools, (3) a federal government agency, and (4) nearly forty corporations<sup>2</sup> which provide financial support and often take an active role in the overall education experience. While LEAD is most visibly a partnership of organizations comprising the four distinct sectors, it also includes a number of affiliates, such as campus units and colleagues, for example, or corporate entities that are not “full” partners but host site visits which are critically important to the education experience.

In this article, I present several findings from an in-depth study of LEAD and consider the conceptual and cultural significance of the network approach it represents. LEAD treats the underrepresentation of minorities in professional life as a societal problem to be addressed, and the organization is particularly interested in the prospects for systemic reform (Nora 2002) suggested by a cross-sector strategy. The conceptual framework guiding the analysis focuses on the *conditions* that establish this network approach to the problem, its essential *characteristics*, and the *consequences* that flow from it. Variations on these three dimensions are commonly used by scholars of interorganizational collaboration for analytic purposes (e.g., Gray and Wood 1991). To put the study in context, I begin by briefly sketching LEAD’s origins and its main programmatic features.

## History and Description of the Program

The LEAD program was a corporate invention. In 1979, executives from McNeil Pharmaceuticals, a division of Johnson & Johnson, were fresh from a recruiting trip when

<sup>1</sup>Affiliated institutions are the University of Pennsylvania, the University of Michigan, Northwestern University, the University of California-Los Angeles, Duke University, the University of Minnesota, the University of Virginia, Dartmouth College, Cornell University, Stanford University, the University of Illinois, and Georgetown University.

<sup>2</sup>Corporate (or other organizational) partners are 3M, Alcoa, American Express, Apple, ArvinMeritor, Bank of America, Campbell Soup, Credit Suisse, Dell, Deutsche Bank, ExxonMobil, Ford Motor Company, General Mills, General Motors, Goldman Sachs, Hilton Hotels, IBM, Jannsen, Johnson & Johnson, JPMorgan Chase, Lehman Brothers, Marsh/Guy Carpenter, McKinsey, MCI, McNeil, Merrill Lynch, Owens Corning, PepsiCo, Pfizer, Popular, PriceWaterhouseCoopers, Rohm & Haas, SC Johnson, State Street, UBS, U.S. Department of State, and Young & Rubicam.

they approached the University of Pennsylvania's Wharton School with a proposition. They had observed a distressing lack of minority students pursuing the M.B.A. degree, certainly not enough to satisfy growing corporate interest in diversifying management personnel. McNeil offered to supply an experiential component, provide financial support, and recruit other businesses to the cause if Wharton would provide an academic experience for talented minority students. In the series of planning discussions which ensued, it became clear that the program would have to be a pre-college initiative in order to begin putting students on the path toward a career in business. The program was launched at Wharton the following year, in 1980. On the basis of a successful inaugural year, the partners decided to expand the network to include other top business schools. With the Wharton program serving as the prototype, the LEAD network was born. A formal process of incorporation was undertaken so that LEAD could operate as a tax-exempt nonprofit organization. Over time, the nonprofit LEAD has served as the center of gravity for the cross-sector effort to introduce talented underrepresented students to business education and careers in business, which remains its stated mission.<sup>3</sup>

Every summer, participating schools host approximately thirty students each for a Summer Business Institute lasting three or four weeks. Here students learn the basics of a range of subjects—accounting, finance, marketing, strategy, operations, ethics, leadership, entrepreneurship, and others—from senior business faculty and corporate presenters. Additionally, students receive tips on applying to college and interact with corporate sponsors through site-visits and in-class presentations.

The entire process is managed collaboratively by organizational liaisons. These include a curriculum director and operations director at each school—typically a faculty member and a staff member, respectively—and managers at the participating corporations and federal government agency. These individuals assume responsibility for LEAD in addition to their customary duties. The nonprofit coordinating organization, LEAD Program in Business, is the hub of the network and is managed by a president and program director.

### **The Study: Framework and Methodology**

The purpose of the study was to examine the partnership dynamics within the LEAD network of organizations in order to determine their unique contribution to the educational experience made available to students. Expressed in the form of a broad research question, how do social institutions collectively organize to prepare underrepresented students for access to—and success in—postsecondary education and beyond? One of the starting assumptions behind the study was that an integrated effort involving powerful organizations from various sectors might produce a unique experience for students, one that no organization or sector acting on its own could provide. A key goal, then, was to isolate and analyze the mode of organizing as facilitative of a qualitatively different learning experience.

The discourses of network organizations, interorganizational domains, and triple helix (university–industry–government) collaborations offer complementary perspectives on the central issue of comprehensively preparing underrepresented students for postsecondary education and beyond. Defined in terms of their structural properties, networks are interorganizational linkages that are voluntary, self-regulating, loosely coupled, and oriented toward goals that exceed the self-interest of the individual member organizations

<sup>3</sup>Additional information about LEAD can be found at <http://www.leadnational.org>.

(Chisholm 1998). Network forms of organizing are collaborative responses to problems or challenges that are complex, large-scale, and “involve sets of interconnected problems” (Chisholm 1998, p. 16). Socioeconomic issues like poverty, marginalization of individuals based on group characteristics, and inadequate access to health care are problem domains (Trist 1983) that often call for interorganizational (and typically intersectoral) solutions (Hardy and Phillips 1998). An interorganizational domain, then, is a population of organizations engaged with a particular “societal problem area” (Trist 1983, p. 270) of mutual interest and concern to members.

As Lewis et al. (2005) have observed, network society has become a powerful metaphor for describing the complexity of social relations, and networked forms of organization are often presented as a kind of “normative ideal” or “structural inevitability” (p. 58) in the face of global cultural and economic changes. Indeed, DiMaggio (2001) went so far as to suggest that “the network is the central trope of organizational change, just as the assembly line was at the beginning of the twentieth century” (p. 212). Still, relatively little is known about the experiences of social agents as they actively create and develop networks. This is especially true of the growing interrelationships among universities, government, and industry, which Etzkowitz and Leydesdorff (1997) have described as a triple helix.

The insights presented in this article are drawn from a larger study of the LEAD partnership model. With generous financial support from Lumina Foundation for Education, a private foundation focused on issues of student access and success, I spent the period from June 2005 to September 2006 “in the field” attempting to understand the dynamics involved in designing, developing, and delivering an educational experience that relies on the collaborative efforts of far-flung entities.

A comprehensive list of liaisons at each participating organization was provided by LEAD’s president, who also sent an initial letter of introduction on my behalf explaining the purpose of the study and encouraging full participation. I worked from this list to make initial email contact with all individuals in the network. Additional participants in each organization were identified by key contacts using the snowball sampling method, and site visits were scheduled. There was 100% participation from the academic, government, and nonprofit sectors. Only 20 of the 36 corporations elected to participate in the study; the two reasons cited for non-participation were scheduling difficulties and lack of substantive involvement in LEAD beyond financial contributions.

Over a 15-month period, I conducted semi-structured interviews with 40 interviewees across all twelve universities, 33 corporate interviewees across 20 firms, 2 interviewees at the federal government agency, and two interviewees at LEAD National. With the exception of eight corporate interviews conducted via telephone, all interviews were conducted face-to-face in campus, corporate, government, and nonprofit settings. Interviewees included deans, faculty members, admissions directors, corporate and foundation relations officers, workforce development specialists, heads of diversity recruiting, vice presidents of human resources, corporate foundation directors, and the president and program director of LEAD. An interview protocol guided the process and ensured that all interviewees were asked the same questions in slightly modified ways to reflect their varied level of involvement in the initiative. Questions were divided into the broad categories of “initiating conditions” and “partnership dynamics” in order to construct a full picture of each organization’s involvement in LEAD. All interviews were digitally recorded, transcribed verbatim, and imported into QSR NVivo qualitative research software.

I spent a minimum of two days at each university. Corporate and government site visits were usually accomplished in a single day. Two site visits were made to LEAD National in

order to conduct interviews with the president and program director and to analyze archived documents on the premises.

Separately, I conducted direct field-based observations of portions of five Summer Business Institutes in an attempt to experience the learning environment in context. These were one- to two-day visits, and they allowed for observations of corporate interaction with the students in university classrooms, in corporate boardrooms, in manufacturing plants, and in other facilities.

In a manner consistent with Miles and Huberman (1994), data analysis was conducted in three phases: (1) initial coding, in which text segments from transcribed interviews, field notes, and documents were assigned to categories or containers identified as salient in the theoretical and empirical literature on interorganizational collaborations; (2) pattern coding, a further data reduction technique in which codes were grouped into the three broad categories of conditions, characteristics, and consequences; and (3) development of an organizing scheme illustrating the interaction between the initial motivations and rationales, the characteristics of the network, and the consequences flowing to students and participating organizations. In this last phase of data analysis, the themes were meaningfully related to each other by investigating the literature on interorganizational domains, network forms of organizing, and the triple helix model of intersectoral relations.

## Findings

### Conditions Motivating Participation

What are the contextual features that advise collaboration rather than a go-it-alone strategy or no strategy at all? What prompted member organizations of the LEAD network to get involved in the initiative in the first place? Recognizing that the starting conditions motivating participation may have ceased to be relevant over time, what forces or factors compel member organizations to remain in the network?

The emergence of a global economy, the rise of multicultural markets, growing recognition of the advantages of a diverse workforce, pressures for corporate social responsibility and corporate citizenship on a broader scale, changing demographics, and the business case for diversity were identified by corporate interviewees as the key drivers of an overall strategy of inclusion in American enterprise. For example, a workforce development executive offered,

With diverse representation and diverse backgrounds comes diversity of thought, innovation, increased collaboration—all of the things that are necessary for us as a company to remain viable and competitive in years to come in the marketplace that we operate in.

More specifically, corporate interviewees indicated that reaching students early in the process is a recruiting imperative and that programs like LEAD help facilitate this objective. A New York investment bank recruiting executive stated, “We’re trying to connect these students as early as possible.” Extreme competition for talent (what one executive characterized as a “a war for talent”) defines the recruiting environment faced by companies, so efforts to secure a competitive advantage begin farther back in the pipeline and through high-quality interactions like those in LEAD. Access to talent emerged as the single most cited rationale for corporate decisions to participate in LEAD. Two corporate executives, representing different companies, explained that “access is everything.” A head of diversity recruiting for a Wall Street investment bank stated that LEAD offers “the correct entry point in building our pipeline.”

Once students attend a Summer Business Institute, they become part of corporate recruiting pipelines through which firms will have opportunities to cultivate students' interest over time. An interviewee at a financial services firm explained the importance of early relationship building:

I think there's an appreciation for the fact that it is hard to source minority students. If you want to do a good job and really capture them, your pipeline has to start earlier. LEAD starts quite early. I would almost argue it starts too early for us, because we're not down at that high school level. But, in the last two years, it's become clear that we have to move into the junior, sophomore and maybe even freshman year of college, to start getting to know these students early, and to start to educate them early. So, for that reason a program like LEAD is going to be valuable.

The conditions most frequently cited by business school interviewees included the desire to build a recruitment pipeline in recognition of the value of diverse perspectives to the overall learning environment, corporate desire for diverse talent, and a general awareness of the problem of underrepresentation of minorities in business education and business careers. Some combination of at least two of these three interrelated conditions was referenced in every site. The single most consistent finding across the business school interviews—mentioned in 100% of the sites—was that the LEAD partnership was pursued out of some degree of self-interest; but self-interest was uniformly presented as subsidiary to the broader objective of social progress, a community interest. Interviewees in every one of the schools articulated a variation on the theme that LEAD was “the right thing to do” or necessary “for the greater good.” This was emphasized especially in the graduate schools of business. Whatever benefit was accorded them was understood to take place over the long term.

Collectively, LEAD member organizations subscribe to the philosophy that a networked strategic effort is required to achieve gains in the representation of minorities in management education and business careers. As one corporate representative remarked, “it takes a village” to prepare students for academic and career challenges. The attraction of the network approach is that it operates at multiple stages and levels of engagement in order to shape student interest, preparation, and competencies.

### Characteristics of the Network Approach

Three major characteristics of the LEAD model emerged from the interviews as indicative of a network approach. The network approach expands the traditional notion of education—what gets taught, who designs and delivers it, and the spatial and temporal parameters that mark it. Perhaps the central feature underlying the network approach is that it starts with a holistic and systemic view of the pipeline. The task of preparing underrepresented students is viewed as a multifaceted proposition and is framed in terms of mutual obligation (Loury 2002), with many sources converging to simultaneously serve one goal: to generate and nurture student interest in business through exposure to institutions, content knowledge of business principles, and procedural knowledge of how to work the channels of opportunity.

*The Curriculum and the Extended Curriculum* The education experience itself reflects an ethic of collaboration. As an example, business school interviewees indicated that course content is often designed to accommodate or highlight key elements of corporate presentations as a way of bringing the material to life and seamlessly connecting it to the students' recent or forthcoming real-world encounters.

While the instruction and experiences provided by corporate entities officially constitute what one Summer Business Institute director referred to as “the extended curriculum,” the boundaries between the curriculum and the extended curriculum are continually blurred. During the Institute, students work on case studies supplied by corporate partners, participate in simulations, complete extensive and integrative business plans that they will present to a panel of outside judges, and interact with corporate leaders formally and informally. Corporate site visits typically include some combination of panel discussions, presentations by executives, and facilities tours. The following is an excerpt of my recorded field notes from a direct observation of students on a corporate site visit in the summer of 2005, and it fairly illustrates the efforts made by corporate hosts throughout the network to challenge students to integrate their developing knowledge of business concepts in the completion of an assigned task:

Following their plant tour, students gather in the R&D lab, where they are assigned to teams and given a task. Their mission is to design a candy bar in 30 minutes. Additionally, they will be responsible for manufacturing, packaging, and marketing the product they create. Tables are set out with plastic containers of chocolate, peanuts, crisps, caramel on a tray, and a bar. The atmosphere inside the R&D lab starts to crackle with energy as students, wearing their white lab coats and gloves, huddle over the tables and confer about the task at hand, their faces screwed up in concentration. The students have the bare essentials in front of them—their imaginations will transform all of this into a consumable product geared to a specific target market.

During their engagement with students, corporate representatives expose students to career opportunities in their organizations through panels of representatives who talk about constructing a career and share personal stories of their own career paths. Students are also introduced to the recruitment process—what to expect, how to navigate it successfully, how to prepare well in advance by choosing coursework and experiences that will position them for favorable consideration by elite companies, and other mechanics that are specific to the host companies or can be extrapolated to industry recruiting more generally. In all five of my direct observations of Summer Business Institutes, these activities were a prominent part of corporate interactions with students.

Many of the students have never set foot in a corporation, have never had access to corporate role models, and possess only a dim awareness of what it is that companies actually do behind the scenes. The education these students receive is as much about peeling away as layering on, in the sense that the nature of business is demystified for them or brought out of obscurity. A global head of human resources explained it this way in an interview:

The analogy I draw is, if you start taking your children on trips with you when they’re young, then they’re not intimidated by travel. When they travel with you, they’re engaged in the experience. They’re not intimidated by the process, and I think this is what this does...it makes it *accessible* on a human level.

*Interplay of Role Differentiation and Integration* Each of the four sectors involved in the collaboration has framed the preparation of underrepresented students according to its own needs, objectives, and perceived span of control over the situation. Different entities handle the specialized functions for which they are equipped. Officially, LEAD National, as the nonprofit coordinating organization, is responsible primarily for recruitment and selection

of students, their placement into Summer Business Institutes, tracking the students once they become alumni of the program, and cultivating corporate partnerships in support of the program. Business schools host the Summer Business Institutes, are responsible for the overall quality of the curriculum and extra-curriculum, and act as the central coordinating entity in creating the learning environment and experience for students. Corporations and the federal government agency fund the program, help in many cases to design and deliver the content, and undertake efforts to recruit students for summer internships and full-time employment through a continuous process of relationship building facilitated by LEAD. Across the interviews, role differentiation was identified by interviewees as central to the success of the initiative. It was uniformly acknowledged (not a single dissenting viewpoint) that the program relies on the resources, competencies, capabilities, and creativity of each set of partners in order to run smoothly and effectively while producing a high-quality experience for the students who participate in the program.

An investment banking executive suggested that the model of interorganizational collaboration is critical for the following reason:

It's not our business. I mean, the reason we partner with organizations like LEAD is because that's *not* what we do. We're a financial service. We're an investment bank. And while we *are* good at recruiting and some of the HR elements of our business, our core competency is not creating programming and initiatives targeting pre-college youth.

Similarly, a Silicon Valley executive explained:

A lot of programs break down because you have a non-profit that's trying to function like a business as well. Here, LEAD is this non-profit in the middle, trying to coordinate these two resources. A company does the company thing. They bring people in, they provide money, they showcase, they do something that's well within the lines of what they already do. And the business school does what it does. It teaches people about business. So, no one's really asked to stretch too far outside of what they normally do.

Even though each sector operates within its own sphere of expertise, it is also the case that member organizations take on many of each other's responsibilities, contributing to role hybridization or blending. Business schools, due to their strong relationships with local corporations, often play the role of fundraiser. Corporations become content providers. The overall education experience may be fairly characterized as co-designed, co-developed, and co-delivered by organizers in the macro sense, although corporate involvement was observed to be highly variable in this regard. In one case, for example, a locally-based multinational company is an equal partner with a business school in nearly all aspects of program design and implementation. Clearly, there is an expansive notion of "business educators" at work in LEAD, with business school faculty and corporate executives often jointly assuming the instructional role and its associated responsibilities.

*Space–Time Elasticity* LEAD stretches spatial and temporal boundaries. The LEAD partners create a learning laboratory—or an extended learning environment—that is not place-bound in the conventional sense. The learning "space" is distributed; students visit corporate headquarters, manufacturing facilities, and R&D labs, and business executives bring their milieus into the classroom when they step onto campus for a presentation or other interaction.

The time dimension is perhaps more concrete and certainly more important to partnering organizations. While the Summer Business Institute engagement results in a compressed

and accelerated learning experience, there is a longer time horizon over which value can be extracted by all parties through tracking and follow-up. The capability to monitor and, to some degree, manage the future trajectory of LEAD alumni is one of the critical components of the program, according to corporate representatives. From this perspective, LEAD provides a platform for sustained involvement after the initial engagement is completed. Corporate recruiting offices reach out to students and invite them to receptions or invite them to apply for scholarships or internships. A database of LEAD alumni is available to corporate recruiters as a source of experienced talent. A recruiting executive with a Wall Street investment bank noted that “it’s basically about multiple touch points.” However, one of the most consistent findings was that corporate partners do not fully leverage or utilize LEAD for identifying talent, developing and maintaining relationships, or “staying sticky” with students over time, as one executive put it.

Nevertheless, LEAD can help to facilitate “longitudinal connections.” An example of the kind of follow-up that corporations in the network practice was provided by a New York investment bank recruiting executive, who spoke in an interview about the importance of his opening keynote address to one of the Summer Business Institutes in the summer of 2006:

Starting the relationships on that day, what I hope is that by 2008, when they’re looking for jobs as summer interns as sophomores in school, we would have built up to that point in time a nice relationship, where I understand what it is they want to do. I can source them appropriately as far as our summer programs are concerned... trying to figure out exactly where they would fit in, then helping them with their academic studies to gear them to be better prepared when they come in for those opportunities during the internships.

Students also have extensive interaction with admissions offices during their Summer Business Institute. These offices often help recruit students, share information about scholarships and financial aid, and coordinate efforts to secure applications from LEAD students. Business school faculty members and staff, too, make phone calls and send target messages to encourage application. A business school dean explained the process:

We try to keep in touch with all the students who were here last summer. We know this is the time when they are applying to schools, so we are keeping in touch with them, making sure they know about...do they have any more questions about our program, but also we are helping them to go through those motions. I think the first goal is to see if we can attract them to business because not all of them ultimately still come to business schools. And then we talk about coming to [our school] for that.

In the words of another business school dean, “You have to be a long-term builder or a tree planter” to appreciate the value of this approach. Expectations of a direct or immediate return on investment in the form of applicants or matriculants, noted business school officials, must be leavened with the long-range commitment to building the pipeline.

### Consequences of the Network Form of Organizing

What difference does the network approach make in the preparation of students or to the entities that constitute it? Interviewees indicated that the arrangement has important consequences both for students and for partnering organizations.

According to interviewees, the benefits that accrue to students include exposure to the relationship between conceptual and practical knowledge (a focus on learning in context), the development of social capital (see Loury 2002) in academic and corporate settings that can be accessed and activated for various purposes (education and career counseling,

employment, further networking), lifelong affiliation with a program that acts to connect alumni to each other and to organizations within the network, a positive message of empowerment, and early socialization into the cultures of the academy and the corporation so that these environments become more familiar and less intimidating. As an executive director of human resources at a large manufacturing company noted, LEAD “broadens the vision” of participating students, helps them imagine themselves in executive roles, and provides a roadmap for realizing their ambitions. In short, students are given access to the gatekeepers of their educational and occupational futures; and they develop “savvy” in leveraging their contacts.

LEAD facilitates a reduction in the “information gap” (Karen and Dougherty 2005) often faced by minority and disadvantaged students. A lack of information about financing options, admissions requirements, college choice, and the academic preparation necessary for various careers can lead to depressed aspirations or missed opportunities; and LEAD addresses this deficit. A Wall Street investment banking representative noted the following about many minority and disadvantaged students:

If they’re not picking this because they don’t know about it, it’s a lost opportunity. If they’re not picking this because they’re making an educated decision, that’s fine. But our concern is that...they’re not understanding that this is a viable career opportunity.

The LEAD experience also functions as a credential that has exchange value in the academic and commercial marketplaces. Students are encouraged to include LEAD on their resumes, and many interviewees indicated that their organizations recognize and assign value to the LEAD affiliation. LEAD acts as a screening device or “marker” for corporate recruiters: one head of talent acquisition indicated that “if we see a student has been involved in LEAD, they automatically shoot higher up on the list as someone we’d like to consider, because we know the training that they’ve had.” A LEAD Summer Business Institute director put it in similar terms:

I know the people in admissions are really supportive of LEAD kids, and they see LEAD on an application and it jumps them up a few notches immediately. So it is an indicator to someone in admissions that this kid is somebody special, and we really need to take a serious look at the kid.

According to an interim report of the LEAD Program in Business issued in 2004 and included among the documents reviewed for this study, 66% of students who attended a Summer Business Institute in 2004 subsequently attended a top 50 national university or top 50 liberal arts college in the United States. Fifty percent of students subsequently attended one of the 11 universities hosting a Summer Business Institute. In particular, eighteen LEAD students enrolled at the University of Pennsylvania in 2005, 16 entered Cornell University, and 11 attended the University of Minnesota.<sup>4</sup>

From the perspective of the organizational participants (universities, multinationals, the government agency, and the nonprofit LEAD), the network provides a comparative context for assessing diversity-related efforts, a mechanism for sharing best practices with a wide sweep of institutions, a forum for experimenting with content and pedagogical techniques that can be integrated into the full college curriculum, opportunities to live more fully the organizational commitment to diversity, and a form of intelligence gathering—on minority

<sup>4</sup>Admissions data is based on information received from 156 (48%) of the 326 students who participated in 2004 LEAD Summer Business Institutes. There were only 11 Summer Business Institutes in 2004.

and youth markets, for example—that can be uplifted into the organizations of interest. A business school interviewee noted that participation in LEAD aids organizational learning:

It gives us an entrée into the minds and the thinking of students that we normally don't deal with at (the school), and those are really bright high school students. It's like a little laboratory for seeing where the *real* youngsters are today. We have no other way of knowing except for our own kids going through high school.

There was also evidence that LEAD has acted as an incubator or generator of other outreach programs that have adopted the basic framework of multi-sector partnership to serve different populations or address different stages of the education pipeline. Interviewees at three business schools credited their LEAD experience with helping to conceptualize new plans along these lines or to improve existing initiatives.

Finally, several business school interviewees suggested that participation in LEAD also promotes or reinforces a sense of altruism. A business school dean described the initiative as having a feeling of “spiritual oneness” in terms of connecting organizations to a common cause. According to a business school professor, “LEAD brings us together as an institution doing something that is not in our own short-term best interest.”

## Conclusion

As demonstrated by the success of the LEAD program, the collaboration between academe, the private sector, government, and the nonprofit sector provides a potentially powerful arrangement for accomplishing educational aims, one in which several entities share the responsibility historically assumed by educational institutions. This organizing principle challenges traditional notions of who runs higher education in a competitive world, dispersing that authority among many constituencies. As such, it serves as a concrete example of the movement towards a more networked, decentralized, and disaggregated form of education, one that is structured largely according to the logic of markets (e.g., Newman et al. 2004).

Importantly, LEAD also reflects an evolving model of voluntary public–private partnership in education—more of a grassroots movement made up of relevant special interests than a centrally mandated action required by higher authorities. As is characteristic of social movements, LEAD has adopted a proactive stance in attempting to break the cascade of minority underrepresentation in American public life. To be sure, LEAD's efforts to manage the academic and career prospects of underrepresented students must be understood as incremental progress at best, but the promise of this “small win” (Weick 1984) is that it may multiply over time to produce meaningful social change.

To what extent can programs like LEAD be viewed as a corrective force in education? That is, can LEAD-style initiatives compensate for deficiencies elsewhere in the system, essentially functioning as a filler of gaps? In many ways, this is precisely what LEAD does, in the sense that it takes a 360-degree view of the challenge of preparing young students for positions of leadership. Indeed, one of the implications suggested by the study is that more attention should be paid not just to educational solutions but to extra-educational ones (Karen and Dougherty 2005). This is essentially an argument for recognizing the complexity and multidimensionality of key problems facing education, and it is not a novel idea. The potential of a network design to contribute to the solution of such complex and multidimensional problems, however, is still a relatively untested proposition in higher education.

The principles underlying the network approach utilized by LEAD, however, can be easily abstracted from the business context and applied to other spheres. In fact, this is already happening to a limited extent (e.g., Erwin et al. 2004). Perhaps the overarching lesson to be drawn from LEAD is that form follows function; a network approach *itself* must matter in the solution of a problem. This is tantamount to letting an issue or challenge confronting a field of interdependent entities serve as the fulcrum of the enterprise. A network created for its own sake may have little utility aside from simply following the popular rhetorical injunction to collaborate.

Based on LEAD's example, there are four main considerations in any attempt to apply the LEAD model outside of the realm of business. These may be understood as stages in a process. A mutual recognition, appreciation, and framing of the issue represents the crucial first step in network formation (Chisholm 1998). As a practical matter, issue identification is sometimes the result of universities/colleges and their units opening themselves up to the concerns of their major stakeholders, as was the case when McNeil approached the Wharton School with the idea that became LEAD. Other times, universities/colleges and their units play the role of instigator, mobilizing existing external relationships or cultivating new relationships around a specific issue of common concern. The second stage involves developing a shared understanding of how the problem domain affects each organization or sector independently and all organizations or sectors collectively. In other words, on what grounds—or in what ways—does resolution of the problem further the interests of prospective participating organizations or appeal to their specialized competencies in helping to address a problem? The priority in the third stage is to organize collectively in a way that surrounds the problem domain with the differentiated resources and expertise of partners. In this stage, pieces of a puzzle are being fit together to produce an integrated response. The fourth stage requires management and development of the network approach so that it continues to strike a balance between self-interest and community interest. As networks are voluntary initiatives, members will likely come and go over time. The recruitment and socialization of new entrants becomes necessary for the sustainability of the program.

In the process of transforming the lives of students, the organizations that support LEAD are themselves transformed. Whyte (2001) has written that individuals—and, it might be added, organizations—need “a conversation with something larger than themselves, a felt participation, a touch of spiritual fulfillment and the mysterious generative nature of that fulfillment” (p. 5). Perhaps one of the implications of a collaboration of the type represented in LEAD is that it permits a more acute sense of spiritual fulfillment, a connection to something larger than immediate self-interest, and a greater sense of wholeness and fullness.

## References

- Chisholm, R. F. (1998). *Developing network organizations: Learning from practice and theory*. Reading, MA: Addison-Wesley.
- DiMaggio, P. (2001). Conclusion: The futures of business organization and the paradoxes of change. In P. DiMaggio (Ed.), *The twenty-first century firm: Changing economic organization in international perspective* (pp. 210–243). Princeton, NJ: Princeton University Press.
- Erwin, K., Blumenthal, D. S., Chapel, T., & Allwood, L. V. (2004). Building an academic-community partnership for increasing representation of minorities in the health professions. *Journal of Health Care for the Poor and Underserved*, 15, 589–602.
- Etzkowitz, H., & Leydesdorff, L. (1997). *Universities and the global knowledge economy: A triple helix of university–industry–government relations*. London, UK: Continuum.

- Gray, B., & Wood, D. J. (1991). Collaborative alliances: Moving from practice to theory. *Journal of Applied Behavioral Science*, 27, 3–22.
- Hagedorn, L. S., & Tierney, W. G. (2002). Introduction. In W. G. Tierney & L. S. Hagedorn (Eds.), *Increasing access to college: Extending possibilities to all students* (pp. 1–8). Albany, NY: State University Press of New York.
- Hardy, C., & Phillips, N. (1998). Strategies of engagement: Lessons from the critical examination of collaboration and conflict in an inter-organizational domain. *Organization Science*, 9, 217–230.
- Karen, D., & Dougherty, K. J. (2005). Necessary but not sufficient: Higher education as a strategy of social mobility. In G. Orfield, P. Marin, & C. L. Horn (Eds.), *Higher education and the color line: College access, racial equality, and social change* (pp. 33–57). Cambridge, MA: Harvard Education Press.
- Lewis, T., Marginson, S., & Snyder, I. (2005). The network university? Technology, culture, and organizational complexity in contemporary higher education. *Higher Education Quarterly*, 59, 56–75.
- Loury, G. C. (2002). *The anatomy of racial inequality*. Cambridge, MA: Harvard University Press.
- Miles, M. B., & Huberman, A. M. (1994). *Qualitative data analysis (2nd edition)*. Thousand Oaks, CA: Sage Publications.
- Newman, F., Couturier, L., & Scurry, J. (2004). *The future of higher education: Rhetoric, reality, and risks of the market*. San Francisco, CA: Jossey-Bass.
- Nora, A. (2002). A theoretical and practical view of student adjustment and academic achievement. In W. G. Tierney & L. S. Hagedorn (Eds.), *Increasing access to college: Extending possibilities to all students* (pp. 65–77). Albany, NY: State University Press of New York.
- Siegel, D. J. (2006). The diversity project as a joint venture: How higher education and industry collaborate to move the needle of progress. *Industry & Higher Education*, 20, 165–174.
- Trist, E. L. (1983). Referent organizations and the development of inter-organizational domains. *Human Relations*, 36, 269–284.
- Weick, K. E. (1984). Small wins: Redefining the scale of social problems. *American Psychologist*, 39, 40–49.
- Whyte, D. (2001). *Crossing the unknown sea: Work as a pilgrimage of identity*. New York, NY: Riverhead Books.