ENGAGING THE ADAPTIVE CHALLENGE:

HOW TWENTY INDIVIDUAL HIGHER EDUCATION LEADERS

THINK ABOUT CORPORATIZATION IN AMERICAN HIGHER EDUCATION

Dissertation

Submitted to

The School of Education and Health Sciences of the

UNIVERSITY OF DAYTON

In Partial Fulfillment of the Requirements for

The Degree of

Doctor of Philosophy in Educational Leadership

By

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May 2018

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ABSTRACT

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Contending with powerful economic, political, cultural, and financial pressures, American higher education faces an adaptive challenge of grand proportion. According to adaptive leadership theory (e.g., Heifetz, 1994), an adaptive challenge is one in which the problem is not clear-cut; instead, it is a complex web of interdependent challenges. The solution is also not clear-cut; the human system must resolve the challenge by generating a wholly original adaptation. Corporatization—which refers to the ways higher education is becoming more corporate-like and includes managerialism, privatization, and academic capitalism—has dominated higher education's response to the adaptive challenge. Yet, is corporatization the best possible adaptation? Great benefit could result from higher education leaders collectively examining this question.

Adaptive leadership theory and the closely-related complexity leadership theory (e.g., Lichtenstein, 2014) would suggest a nontraditional approach to this examination. In

these theories, leaders come from anywhere in an organization and do not plan or direct organizational change. Instead, leaders create conditions that enable the emergence of innovative new order, and three conditions are critical: engagement with the adaptive challenge, divergent thinking, and interaction among individuals. Higher education leaders might use the literature on corporatization to help foster these conditions, but the literature is limited: It describes causes, effects, and views of corporatization but is dominated by conceptual not empirical works and by faculty voices to the near exclusion of others.

Therefore, the purposes of this study were two: increase knowledge about views of corporatization held by members of higher education and produce findings leaders could use to foster the three primary conditions for adaptation and emergence. The study used a qualitative approach to the research question: How do higher education leaders think about corporatization in American higher education? The setting was a large, public, Midwestern university. The sampling strategy maximized diversity of viewpoints, and the 20 participants included trustees, administrators, faculty, and staff. The study used idiographic causal mapping (e.g., Eden, 2004), a type of qualitative cognitive mapping, to explore participant views of the causes and effects of corporatization and semi-structured interviews to explore participant ideas for responding to corporatization. Because causal mapping may not have been used before in higher education leadership research, the report includes raw causal map data and protocols for the data collection and analysis processes. These may help readers assess the study and help researchers duplicate the study or employ the method.

The report presents within-case findings as 20 interpretive essays in which the researcher attempts to portray each participant's unique way of structuring the problem of corporatization and of thinking about related issues. The report presents across-case findings as five tentative patterns of thinking about corporatization: mourners, critics, pragmatists, welcomers, and enthusiasts. The report also discusses implications for leadership practice in higher education, use of the findings to foster the three conditions, and research that might further those same conditions. Finally, the report discusses the potential use of causal mapping in higher education to capture divergent perspectives, promote dialogue about complex issues, and explore solutions to consequential problems.

Dedicated to my husband.
Our hands, one long and one sturdy, will always be holding each other
even when they've turned to sparkling dust.

ACKNOWLEDGEMENTS

Many years ago, before I had ever seen mountains, my friend Marla and I drove to Vail, Colorado to visit my sister. We spent hours on the road, crossing the Flint Hills and then the ironed-out expanses of western Kansas, crossing into Colorado as the sun went down. Perhaps we expected the mountains to begin at the edge of Colorado, I don't know. I do know that, as the sky darkened, our bewilderment grew. Where were the mountains we had expected to see? Hadn't we driven far enough yet? We kept driving, the moonless sky turned black, and still no mountains. As the road became curvy, we both leaned forward, peering into the darkness for mountains and then looking at each other with furrowed brows. How could we miss something like mountains, of all things? Then I looked through the window to my left, and my eyes shifted their focus. I realized the mountains WERE RIGHT THERE, their black faces shooting straight up just feet from our car. Having driven into the mountains unaware, we were surrounded by them, contained by them and dwarfed by them. The rush of this discovery filled us with sudden astonishment for the world and our place in it.

This story captures some of the feelings and experiences the dissertation process created in me. It was a very long road. It took me into unknown territory. It stymied my plans, confounded my expectations, and threw me into long periods in which I had no solid answers; it unmoored me from surety. Eventually, it also yielded sudden insights,

new understandings, and a deeply rewarding sense of the greater majesty that is the world around me; it placed me in context and filled me with joy.

Whom am I to thank for such an experience? So many people. First, though, is my dissertation chair, Dr. Carolyn Ridenour. I could not have had this transformative experience without her, and I will be forever grateful. She agreed to be my chair when she had a multitude of dissertation students. She met with me weekly when I had no clear research idea, allowing me to meander in my thoughts and patiently joining me in exploration. She helped my thinking to develop naturally, like a trickle of water wending its way through rocks, finding a path, and gathering strength. At the same time, she questioned me, challenged my thinking, and shined bright lights on my ideas, which helped me discern what was well-formed and what was half-baked. Later, when I faced unexpected challenges with the causal mapping method, she was calm and abiding, offering counsel but allowing me to experiment and problem-solve. Eventually, when the research process began yielding new meanings, she celebrated my sensemaking with me. I am grateful for Dr. Ridenour's deep expertise, wise counsel, penetrating insight, graceful mind, and generous, humane spirit.

Second, I am deeply grateful for my dissertation committee members, Dr. Molly Schaller, Dr. Treavor Bogard, and Dr. Jill Lindsey. From the beginning, each expressed enthusiasm for joining the committee, and their support never abated in spite of my long road to completion; they helped me to persevere to the end. In addition, they offered challenging and perceptive feedback at critical junctures, which helped me refine and improve my ideas. I thank Dr. Molly Schaller for her expertise in higher education, frankness, insight, and enjoyment of my work. I thank Dr. Treavor Bogard for his

expertise in qualitative research, imagination, insight, and kindness. I thank Dr. Jill Lindsey for her expertise in leadership theory, challenging ideas, insight, and mentoring spirit. I thank all of them for their time, guidance, encouragement, and generosity.

In addition, I am grateful for Dr. Barbara De Luca, Dr. William Place, and Dr. Charles Russo, faculty and administrators in my program who facilitated my path through the program, assisted me in overcoming obstacles, and helped me complete the program successfully.

I also want to express my gratitude for the twenty members of Evans State University who agreed to participate in this study without compensation, donated their time, expressed their deeply held views of corporatization, and shared their hopes and fears for higher education. The generous way they engaged in the study made my spirit soar and gave me hope for the future of higher education.

I want to thank my fellow doctoral students, Allison, Carrie, and Jason, for the fun, high-spirited, helpful, and encouraging dissertation writing group.

Finally, I am immensely thankful for my friends and family. Although I reserve my fullest expression of gratitude for my private life, I thank in particular my beloved imp-angel of a husband, Dan, my much-loved step-daughters Sarah and Claire and their beautiful families, my heart friend Julie, and my feisty cheerleader Bonnie. I also thank Margaret for throwing open all the doors and windows.

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CHAPTER 1:

THE PROBLEM

Perhaps the ship of American higher education has always battled tempestuous seas. Even so, there are reasons to believe the current storm-at-sea is unprecedented in its scale and strength; the external and internal pressures on American colleges and universities are abundant, powerful, and consequential. The strongest of the external pressures are fraught funding, a tempest around the rising cost of college, strident calls for accountability, and an increasingly skeptical public. The most potent internal pressures are the remaking of the faculty into an increasingly contingent workforce and the adoption of other business practices that upend the traditional ways of the academy.

External Pressures on Higher Education

One of the primary external pressures is funding for higher education, which has become increasingly fraught. State governments' share of higher education's revenue has declined precipitously: from 61% in 1976 to 46% in 1981, 36% in 1994, and 27% in 2005 (Cohen & Kisker, 2010). Beginning in 2008, the recession further reduced state appropriations to higher education, and these have been slow to bounce back: Per-student state funding of higher education in 2014 was still 18.9% below 2008 levels (State Higher Education Executive Officers Association [SHEEO], 2015). In the words of

Kezar, Carducci, and Contreras-McGavin (2006), "the fat days with regular increases from state governments are long over" (p. 1).

Meanwhile, concerns mount about the growing cost of higher education. Colleges and universities' cost per student is "increasing faster than inflation or family income" (U.S. Department of Education [USDOE], 2006, p. 10), and institutions of higher education have responded with repeated tuition increases. Consequently, public college tuition has risen 300% since the 1980s, and tuition at four-year institutions has climbed 66% in the last decade alone (Harkin, 2013). Because students and families are bearing more of the cost of college, total student loan debt has grown larger than $1 trillion, and the average individual debt exceeds $26,000 (Harkin, 2013)—in spite of the fact that most contemporary college students work while in school. For example, 80% of the 1999-2000 undergraduate class worked, and they worked a median 39.4 hours per week (USDOE, 2002).

Another reason for unrest in higher education is that colleges and universities face growing calls for accountability. Kezar et al. (2006) grant that accountability can be a "way to ensure that institutions maintain the public trust" (p. 94), yet others describe accountability as a problematic presence in higher education. It manifests, according to Cohen and Kisker (2010), as pressure from funding entities for higher education to document the connection between expenditures and quantifiable results, often accompanied by calls for increased productivity. Problems arise, these authors claim, because the complexity and diversity of the higher education system confound attempts to measure simple outcomes and to draw valid conclusions from these data (Cohen & Kisker, 2010). In addition, many scholars object to the dominant focus on financial measures. In Currie's (1998) study of globalization in higher education, a university professor says:

> This notion of accountability... has become a watchword for financial accountability for public funds per se, and what that has done is to narrow the debate away from issues about representation and styles of decision making and the nature of democratic institutions... (p. 19)

In spite of these objections, almost all states in the last few decades have mandated accountability for publicly funded higher education, requiring data on a variety of outcomes such as time to degree, graduation rates, student-faculty ratios, enrollment, persistence, and salaries of graduates among others (Cohen & Kisker, 2010). A growing number of states have tied funding to various performance measures (McLendon & Hearn, 2013). For its part, the federal government contends that higher education is unable to provide the data required to assess its performance. Charged by the USDOE with assessing America's higher education system, the Spellings Commission reported "limited and inadequate" data systems and "a remarkable shortage of clear and accessible information about crucial aspects of American colleges and universities" (USDOE, 2006, p. 4). The Commission concluded that these shortcomings "prevent [higher education] from demonstrating its contribution to the public good" (USDOE, 2006, p. 4).

In this climate, the American public has grown increasingly skeptical of the value of higher education. As students and families bear more of the financial burden, "public anxiety over college costs" has reached new heights, and, not surprisingly, more people question the value of the college degrees they hold or pursue (Fischer, 2011, p. A1). Despite the fact that non-profit colleges depend on donations and public subsidies, the public frequently misperceives them as business corporations seeking to increase their profit (Whitney, 2006). Seeking a return on their own investments, students increasingly view college as their pathway to employment (Cohen & Kisker, 2010), bringing a consumer mindset to their college experience. The quest for individual benefit from college has become so dominant that, in the view of Cohen and Kisker (2010), "the idea of [higher education] contributing to the public good has atrophied" in American society (p. 517).

In addition to funding, cost, accountability, and public distrust, other factors add to the external pressure on higher education. Notable among them are technology, student demographics, and competition. The emergence of the global Internet and associated technologies has raised student expectations for university technology, demanded new competencies of faculty and staff, and ushered in new ideas about teaching and learning (Lechuga, 2006). Dramatic changes in student demographics have brought challenges. The new face of American college students—the product of immigration policies, an aging citizenry, and the changing structure of family in society—requires higher education to adapt to the needs of multicultural student bodies, underprepared students, and students of non-traditional age and lifestyle (Keller, 2001). Competition is yet another external pressure. Reduced state funding has spurred rivalry among institutions of higher education for donor money and corporate funding for research (Cohen & Kisker, 2010), while the "geriatrification" of the American population means a shrinking pool of potential students (Schuster & Finkelstein, 2006a, p. 12). Online education has furthered competition by blurring the boundaries of traditional service areas and fostering growth in for-profit higher education (Lechuga, 2006). In this global era, American higher education also competes for international students and international standing. Yet, other countries have eclipsed the once preeminent American system of higher education on a number of measures. One example is that the United States now ranks 12th worldwide in the percentage of 25-34 year-olds with a college degree (Organisation for Economic Co-operation and Development [OECD], 2014).

Internal Pressures in Higher Education

As external pressures buffet American colleges and universities, forces within these institutions add to the turbulence. Perhaps the most consequential is the movement to remake the traditional faculty role. Describing this as a shocking level of unprecedented change, Schuster and Finkelstein (2006b) hold that academic appointments are "moving, seemingly inexorably, toward creating a predominantly contingent workforce," where contingent describes a time-limited, non-tenure-track position, either full- or part-time (p. 53). Kezar and Lester (2011) substantiate this claim, reporting that two-thirds of American faculty hold contingent appointments and that the proportion is growing: Three-fourths of new faculty hires are contingent. A related measure, the proportion of full-time academic appointments, has declined for the past thirty years: In the mid-1980s, over 70% of faculty were full-time; in the mid-1990s, the number had dropped to 60%; and in 2005, only 52% were full-time (Cohen & Kisker, 2010).

As a result, according to Cohen and Kisker (2010), higher education is dismantling the tenure system simply by replacing tenured professors who leave with non-tenure-track hires. This weakening of the tenure system, in the view of the American Association of University Professors (AAUP), weakens the traditional protection of academic freedom (2008). Additionally, the growing ranks of part-time faculty earn much less than full-time, tenured professors earn. For example, AAUP (2008) claims a university could hire “eight part-time faculty (each teaching three courses per year) for approximately the same pay that one full-time assistant professor would earn” (p. 17). Another critical effect of this academic restructuring is the redistribution of academic work. Research, according to Schuster and Finkelstein (2006b), is accomplished largely by the diminishing ranks of full-time, tenure or tenure-track faculty, while contingent faculty are usually limited to the teaching function. All types of faculty, the authors claim, have a diminished and diminishing role in institutional governance (Schuster & Finkelstein, 2006b).

A related source of tension within colleges and universities is the adoption of business practices and ideas across the enterprise. Deem and Brehony (2005) report growing managerialism in higher education, which they describe as the adoption of corporate management practices like top-down decision-making, pursuit of efficiency, focus on financial goals, and the monitoring of employee performance. Cohen and Kisker (2010) express concern about privatization, defining it as the increasing dominance of market ideology. Slaughter and Leslie (1997) detail the rise of academic capitalism, a phenomenon they define as “institutional and professorial market or market-like efforts to secure external moneys” (p. 8). Academic capitalism, according to Kezar and Lester (2011), encourages revenue generation, marketing, branding, entrepreneurialism, and transforming academic work into marketable products. Many authors subsume these related concepts under the term *corporatization* (e.g., Chan & Fisher, 2008b; Giroux, 2014; Soley, 1995), which can be used to describe the many ways in which higher education is becoming more corporate-like. Corporatization contrasts with traditional academic values, because it rewards efficiency, promotes homogenization, and embraces a free-market ideology (Currie, 1998). And corporatization threatens traditional academic practices, because it is rooted in the idea that a corporate approach to public services is in the best interest of the public (Cohen & Kisker, 2010; Slaughter & Rhoades, 2004).

Implications of the Pressures on Higher Education

Despite the intensity of these external and internal pressures on higher education, scholars disagree in their predictions about the trajectory of change. Some, such as Ginsberg (2011), predict the demise of higher education as we know it. In the polemical work *The Fall of the Faculty: The Rise of the All-Administrative University and Why It Matters*, Ginsberg's (2011) forecast rests on the growing ranks of administrators—the "large numbers of deanlets and deanlings"—their power consolidation, and the increasing marginalization of faculty (p. 39). The author fears "it may be too late at most schools" to reverse these trends (Ginsberg, 2011, p. 39). In contrast, Christensen, Horn, Caldera, and Soares (2011) foresee a bright future for American higher education. These authors hold that the current crisis in American higher education calls for "managing innovations effectively" (p. 2) and that disruptive innovation can transform today's colleges and universities into institutions that provide superior quality to students (Christensen et al., 2011).

Although expectations of the future vary widely, it seems safe to conclude that major change is underway in American higher education. The external and internal pressures on higher education are already provoking adaptation, which is congruent with organizational theory about higher education. Organizational theory commonly describes higher education as an open system, a dynamic system constantly seeking equilibrium by importing from and exporting to its environment (Hanson, 2003). When equilibrium eludes the open system organization, "organizational change sets in and a new equilibrium is formed" (Hanson, 2003, p. 125). Schuster and Finkelstein (2006a) echo this conception in their description: "When the number and intensity of external social/economic/political pressures impinging on the higher education system reach a 'critical mass,' the system is forced to reequilibrate itself to accommodate the pressures, not only responding quantitatively, but adapting qualitatively as well" (p. 19). In the view of Schuster and Finkelstein (2006a), higher education has already experienced two historical shifts of this magnitude: professionalization of the faculty role in the 19th century and expansion with diversification in the 20th century. They assert that "current environmental turbulence suggests that we are on the cusp, as it were, of a third tectonic shift" (Schuster & Finkelstein, 2006a, p. 20).

A related way to understand the current challenges in higher education is through the lens of adaptive leadership theory (Heifetz, 1994; Heifetz, Grashow, & Linsky, 2009; Heifetz & Laurie, 1997; Heifetz & Linsky, 2002; Heifetz & Sinder, 1991). In this theory, the challenges of the modern world are of two types: technical and adaptive. Technical challenges are those with clear-cut problems and with solutions that are in the repertoire of those responding to the challenge; technical challenges require expertise, but they do not require leadership (Heifetz, 1994). In contrast, adaptive challenges lack clearly defined problems and available solutions; adaptive challenges require the system to generate an original adaptation that meets the challenge (Heifetz, 1994). Adaptive work, according to these authors, is difficult. It may challenge people's deeply held beliefs, require them to tackle internal contradictions in their values, demand that they reduce gaps between their espoused values and their behavior, or require the inclusion of competing values (Heifetz, 1994). People doing adaptive work may need "to take on new roles, new relationships, new values, new behaviors, and new approaches to work" (Heifetz & Laurie, 1997, p. 124). Because the disequilibrium of adaptive work is distressing, the social system usually attempts to resist change, restore stability, and call upon previous adaptations, but a non-adapting system risks disintegration (Heifetz & Sinder, 1991). Leadership is needed to face the adaptive challenge. In fact, the essence of leadership, according to Heifetz and Laurie (1997), is "mobilizing people . . . to do adaptive work" (p. 124). At the same time, this theory holds that the solutions to adaptive problems lie not with leaders but "in the collective intelligence of employees at all levels, who need to use one another as resources, often across boundaries, and learn their way to solutions" (Heifetz & Laurie, 1997, p. 124).

Through the lens of adaptive leadership theory, the disturbance in higher education is a large-scale adaptive challenge, one that spans the entire sector of American higher education. The problems are not clear-cut; instead, they are a complex web of interdependent challenges. Solutions are also not clear-cut; traditional approaches appear inadequate, while new remedies seem scarce. Meanwhile, traditional values and time-honored approaches to work are eroding quickly. Clearly, higher education is experiencing the profound disequilibrium characteristic of adaptive challenge. A crucial implication, from the perspective of adaptive leadership theory, is that higher education needs effective leadership in order to arrive at a new and more effective adaptation. That leadership must come from within colleges and universities if higher education is to influence the outcome of this adaptive challenge. In addition, that leadership must have a far different character than traditional notions of hierarchical leadership if it is to foster the deep, collective learning required to adapt. In times of great challenge, calls for more and better leadership are common, but this instinctive response is given heft and contemporary meaning by adaptive leadership theory.

The State of Leadership in Higher Education

If, as adaptive leadership theory claims, effective leadership is vital to successful adaptation, then the state of leadership in higher education will affect the outcome of present challenges. Taking stock of higher education leadership, though, gives cause for concern. Older models of leadership still characterize the academy, while a transformation of leadership theory has occurred in the last thirty years. For the most part, higher education has not embraced new approaches to leadership but instead has allowed a corporate approach to make dramatic inroads into its organizations.

Two models of leadership, one of administration and the other of faculty, predominate in higher education, and both reflect older ideas about leadership. Astin and Astin (2000), for example, characterize the leadership approach of administration as a hierarchical chain of command with power and authority in proportion to one's level within the hierarchy. In contrast, they describe faculty leadership as autonomous, individualistic, and competitive, an approach based on power and status earned through scholarship (Astin & Astin, 2000). Collegiality, though deemed by some a third approach to leadership, is more hypothetical than demonstrable, according to these authors; examples such as faculty committees, they argue, are typically advisory and lack decision-making authority (Astin & Astin, 2000). Finally, Astin and Astin claim the two leadership approaches make collaboration difficult in higher education, while “practically all of the modern authorities on leadership . . . now advocate a collaborative approach to leadership, as opposed to one based on power and authority” (p. 3). In their analysis of higher education cultures, Bergquist and Pawlak (2008) echo the conceptions of Astin and Astin in their depictions of administrative culture and faculty culture. They also describe an advocacy culture of confrontation and bargaining; the advocacy culture, in the view of the authors, has resulted from the dominance of administration and its “violation of the ‘psychological contract’ between faculty members and their institutions” (Bergquist & Pawlak, 2008, p. 120). In a largely congruent voice, Kezar (2001) describes administrative leadership as one that “values bureaucratic norms and structure, power and influence, rationality, and control and coordination of activities” and faculty leadership as based on knowledge and professional authority (p. 72). Differing somewhat from Astin and Astin, the author maintains that faculty leadership “values collegiality, dialogue, shared power, autonomy, and peer review” (2001, p. 72). Citing the divergent values of administration and faculty, though, Kezar concurs that the approaches are conflicting rather than collaborative (2001) and that collaboration is a hallmark of more modern theories of leadership (Kezar et al., 2006).

Not only has leadership theory evolved in recent times, some scholars claim it has undergone a revolution. For example, Lakomski (2005), expounding a postmodern view, contends that traditional conceptions of leadership are so narrow as to be devoid of explanatory power. Another scholar, Rost (1991), argues that leadership theory has undergone a paradigm shift from industrial era theory to postindustrial theory. According to this author, theories from the industrial paradigm are profoundly similar; oriented to management, to the leader, to the individual, to goal achievement, and to males, they are utilitarian in outlook and methodology (Rost, 1991). Describing the industrial paradigm of leadership as bankrupt, Rost (1991, 1997) asserts that postindustrial conceptions of leadership are of wholly different cloth; necessarily relational, they characterize leadership as a process of influence, collaboration, and shared purpose. Similarly, Kezar et al. (2006) report a revolutionary shift in leadership research over the last thirty years. They describe earlier research as leader-centered, individualistic, and hierarchical, with an emphasis on power over followers, and they describe newer research as process-oriented, collaborative, nonhierarchical, and focused on mutual power and influence (Kezar et al., 2006). Like Rost, Kezar et al. (2006) hold that new leadership theories foreground relational issues. "Interdependence, cross-cultural understanding, collaboration, and social responsibility for others" reflect the influence of the social constructivist, critical theory, and postmodern paradigms on new leadership theories (Kezar et al., 2006, p. 2).

The revolution in leadership theory has affected leadership in higher education but not transformed it. As evidence of progress, Kezar et al. (2006) note that both research in and practice of higher education leadership use new conceptions of leadership. The focus on the college president as leader, for example, has shifted somewhat to leaders throughout the organization, and the conception of leaders as heroes has shifted somewhat to leaders as individuals who collaborate and share power to achieve common benefit (Kezar et al., 2006). In addition, increasing numbers of studies of higher education leadership reflect new leadership ideas. Bensimon and Neumann's *Redesigning Collegiate Leadership* (1993), for example, reflects the relational focus of many new leadership ideas. These authors' findings suggest that high-functioning teams are better problem solvers, because they are more cognitively complex than individuals and that teams serve an expressive function that promotes individual satisfaction in work (Bensimon & Neumann, 1993). Similarly, Tierney (1993) argues for teams, shared decision-making, and reduced hierarchy in higher education. Based on data from five ethnographic studies of higher education cultures, the author claims these approaches promote communities of difference that foster inclusiveness, cultural citizenship, and even institutional agape (Tierney, 1993). Also affirming the importance of diversity, Kezar (2000) reports that campus members hold differing views of leadership that tend to coincide with their relationships to power conditions on campus (Kezar, 2000). Based on these findings, the author recommends that campus leaders adopt a pluralistic approach to leadership (Kezar, 2000).

In spite of this progress, numerous scholars contend that the most prominent development in higher education leadership is corporatization (Currie, 1998; Deem & Brehony, 2005; Kezar & Lester, 2011; Slaughter & Rhoades, 2004), a phenomenon that "runs counter to the forms of leadership that are part of the leadership revolution" (Kezar et al., 2006, p. 150). Visible effects of the corporatization of leadership include growth in the ranks of administration and centralized power (Clarke, Gewirtz, & McLaughlin, 2000); top-down decision-making by trustees, presidents, and administrators (Kezar & Leslie, 2011); increased workloads and performance management (Deem & Brehony, 2005); faculty entrepreneurship (Slaughter & Rhoades, 2004); and administrative remaking of the faculty role into one modeled on the contingent corporate workforce (Schuster & Finkelstein, 2006a).

The Nature of the Problem

The problem then is that higher education faces an adaptive challenge of grand proportion while simultaneously facing a leadership crisis. The combination is difficult, because, according to adaptive leadership theory, serious adaptive challenges require effective leadership on par with the challenge (Heifetz, 1994; Heifetz et al., 2009; Heifetz & Linsky, 2002). Presently, higher education has allowed corporatization to dominate its response to both the adaptive challenge it faces and the turmoil within its own leadership.

Corporatization is occurring across all American institutions of higher education (Kezar & Leslie, 2011), with vast consequences for traditional academia. The corporate approach devalues the cornerstone of the academy: the triumvirate of disciplinary expertise, academic freedom, and tenure (Cohen & Kisker, 2010). The dramatic shift toward a low-paid, contingent, and often part-time faculty force de-professionalizes the faculty role, reversing historic gains of the 19th century that have anchored the professoriate since that time (Schuster & Finkelstein, 2006a). In its movement away from shared governance, corporatization divests faculty of their leadership role (Schuster & Finkelstein, 2006a) and discounts their expertise (MacFarlane, 2011). In contemporary higher education, managers are assuming control over areas that were "previously the domain of trusted autonomous professionals using considerable discretion" (Deem & Brehony, 2005, p. 220). The consequences of corporatization extend beyond the faculty, though. Under managerialism, all relationships tend "to shift towards the contractual, competitive, and calculative" (Clarke et al., 2000, p. 9). And many wonder what the ultimate effect will be on students and society:

> An extreme view is that privatization tempts colleges and universities to serve corporations and donors ahead of the public, restricts access for low-income students who are scared away by higher tuition prices, forces colleges to scale back course offerings in non-market-affiliated fields, and encourages public institutions to abandon their core public purposes, thereby leading higher education to be viewed less as a part of social policy and more as a part of economic policy. (Cohen & Kisker, 2010, p. 532)

The question is whether corporatization represents the best or only possible adaptation to the current environment or whether better adaptations—including hybrids that include aspects of the corporate approach—are possible. The question is urgent, because powerful and pressing forces flow around higher education, carving it like winds carve a canyon. If American higher education is to influence its own reshaping, it urgently needs internal leadership that is open to new ideas about leadership, wise to the complexities of this modern era, and discerning about the purpose of higher education in society. And if American higher education is to adapt well, internal leadership must mobilize members to do the deep, complex, and collective learning that adaptation requires; a top-down solution would be wholly inadequate to the challenge. In this environment, great benefit could come from internal leaders collectively examining the value of corporatization as an adaptation for American higher education.

The Nature of This Study

The aim of this study was to take small steps to further such a collective conversation. Specifically, the purpose of the study was to explore the views held by higher education leaders about corporatization in American higher education. The study examined leaders' views about the causes and effects of corporatization as well as their suggestions for how the higher education system might best respond to corporatization.

In the course of this exploration, the study may increase understanding of the internal dynamics of corporatization in higher education: how business practices unfold in the much different world of higher education and how they affect higher education leaders. In addition, the study may identify seed ideas for approaches to the adaptive challenge that higher education faces. Primarily, though, the aim of the study was to shed light on how higher education leaders think about corporatization, casting their differences in high relief in order to provoke the type of dialogue that is a prerequisite for adaptation.

The audience for this study includes scholars of higher education as well as faculty, administrators, and staff in American colleges and universities. Through this study, scholars may extend their understanding of corporatization and its effects on colleges, universities, and their internal constituents. Likewise, faculty, administrators, and staff may gain insight into the internal dynamics of corporatization and the divergent views of their colleagues. Those among them who seek to alter the course of corporatization may use these insights to spark dialogue that furthers the adaptive process. If multiplied across the enterprise, these engaged conversations might begin to amplify collective learning and strengthen the conditions that enable innovative adaptation. If rich, frank, and generative dialogue were eventually to permeate all of higher education, perhaps a brilliant new adaptation for American higher education might be possible.

CHAPTER 2:

LITERATURE REVIEW

This study uses adaptive leadership theory (Heifetz, 1994; Heifetz et al., 2009; Heifetz & Laurie, 1997; Heifetz & Linsky, 2002; Heifetz & Sinder, 1991) as a conceptual framework for thinking about the challenges facing higher education and the process by which leaders in higher education might generate solutions to those challenges. In this framework, effective leadership is critical to the discovery of solutions. In addition, adaptive leadership theory draws from multiple theories from across the history of modern leadership theory (Heifetz, 1994; Heifetz & Sinder, 1991). For these reasons, I begin this chapter with a review of the leadership literature and the ways in which it has evolved over time. After the review, I again use the lens of adaptive leadership theory to explore three leadership concepts with particular relevance for this study: leadership and non-positional action, leadership and learning, and leadership and enabling conditions. For each of these concepts, I explore the concept using the literature from adaptive leadership theory and discuss the implications for this study. After the three leadership concepts, I summarize the literature on corporatization in American higher education including the views of higher education leaders regarding that phenomenon.

Review of the Literature on Leadership Theory

Some words combine two powerful traits: They represent very positive objects of human desire, and they represent very complex constructs. Love and beauty make good examples. So does leadership. In usage, the word leadership often signifies a type of unalloyed good; it seems there can never be enough leadership. At the same time, the meaning of leadership is elusive. As with love and beauty, we seem to agree on leadership's importance but not at all on its essential nature. Because the concept of leadership is unclear, important related questions about leadership can be confounding: Where does leadership come from? Who has leadership? How does leadership work? The answers to these questions and more depend heavily on the definition of leadership.

Yet, the scholarly definition of leadership is essentially contested (Grint, 2005). Over time, scholars have proposed widely divergent definitions of leadership, causing Stogdill, in a classic review of the literature (1974), to conclude that there are "almost as many definitions of leadership as there are persons who have attempted to define the concept" (p. 7). Regarding the field of leadership research, Meindl, Ehrlich, and Dukerich (1985) describe the dilemma in more detail: "It has become apparent that, after years of trying, we have been unable to generate an understanding of leadership that is both intellectually compelling and emotionally satisfying. The concept of leadership remains largely elusive and enigmatic" (p. 78). In a 1991 review of leadership literature, Rost opines that "leadership is a word that has come to mean all things to all people" (p. 7).

In the face of this dissensus, scholars have staked out a variety of positions. A few have contemplated the demise of the term. Gemmill and Oakley (1992), for example, characterize leadership as "an alienating social myth" (p. 113) with damaging consequences for the populace, and Alvesson and Sveningsson (2003) suggest that scholars “take seriously the possibility of the nonexistence of leadership as a distinct phenomenon” (p. 359). Some, though, suggest that a loose conception of leadership still yields a meaningful signifier. Yukl (2006), for example, identifies the influence process as the essence shared by most conceptions of leadership, and Northouse (2015) sketches the concept as a process involving influence, groups, and common goals. Taking a different tack, Grint (2005) argues for embracing the complexity of the construct. “The quest for a consensus [on the definition of leadership] is both forlorn and unnecessary,” the author maintains (Grint, 2005, p. 1). Instead, Grint (2005) suggests that the scholarly community adopt a heuristic model of leadership that promotes exploration of leadership as person, as result, as position, and as process. In general, most scholars view the construct of leadership, however contested, as important and necessary to the discourse (Bass, 2008; Day & Antonakis, 2012; Grint, 2005; Kezar et al., 2006; Northouse, 2015; Yukl, 2006), a view I adopt in this review.

Despite the lack of consensus about its meaning, the construct of leadership has engendered an enormous literature base, and many authors have proffered taxonomies for the body of work. In this review, I combine ideas from several writers. For premodern ideas about leadership, I rely on the writings of Bass (1995, 2008) and Grint (2011). For modern leadership theory, I adopt the three top-level groupings of Bolden, Hawkins, Gosling, and Taylor (2011): leadership as a property of the leader, leadership as a relationship between leaders and followers, and leadership as a social process. Given the scope and diversity of the literature, these groupings are necessarily broad and pliable. They represent general approaches to leadership theory, while much diversity exists within each grouping, and commonalities extend across groupings. In addition, although these groupings describe an evolution of theory over time, many of the older theories remain relevant, some enjoying contemporary reinterpretation and a second wave of research interest (Day & Antonakis, 2012; Dinh et al., 2014). Within the three groupings of modern leadership theory, I blend the taxonomies of Bolden et al. (2011), Chemers (1997), Kezar et al. (2006), Northouse (2015), and Yukl (2006), citing additional authors where appropriate. Finally, a review such as this necessarily excludes important work about leadership; the limitation, though, allows a summary accounting of a very wide-ranging literature base.

Premodern ideas about leadership. The idea that leadership is a property of leaders has an ancient history. With roots in the myths and legends of early civilizations, this conception of leadership has prevailed throughout most of human history (Bass, 2008). "Leaders as prophets, priests, chiefs, and kings served as symbols, representatives, and models for their people in the Old and New Testaments, in the Upanishads, in the Greek and Latin classics, and in the Icelandic sagas" (Bass, 1995, p. 49). Principles of leadership also took hold early on. For example, Bass (2008) relates that Egyptian hieroglyphics for leadership, leader, and follower existed 5,000 years ago; that Chinese writings from the 6th century BCE exhorted leaders about their responsibility to citizens; and that, in 4th century BCE Greece, Plato emphasized the need for state leaders to rule with reason. In addition, Grint (2011) holds that military activity influenced early conceptions of leadership and strengthened the idea of the individual leader. In Sun Tzu's 4th century BCE work *The Art of War*, for example, Grint (2011) finds the book's primary concept of leadership in the following quotation: "The responsibility for a martial host of a million lies in one man. He is the trigger of its spirit" (Sun Tzu, trans. 1963, Manoeuvre, 20). Over the centuries, the principles of leadership varied depending on their social, cultural, political, and economic context (Grint, 2011), yet the idea that leadership is an attribute of an individual has persisted into the contemporary era.

Modern theories: Leadership as a property of the individual. The first grouping of modern leadership theories contains those that conceive of leadership as a property of individual leaders. Following naturally from historical ideas of the heroic leader, these theories began to emerge in the late 19th or early 20th century against the backdrop of newly industrialized Western societies (Bolden et al., 2011; Chemers, 1997; Grint, 2011).

Described as "the first 'modern' writer on leadership," the Scottish philosopher Thomas Carlyle exemplifies the starting point of modern leadership theory with his ideas about the "'Great Men' of history" (Grint, 2011, p. 8). Believing that some special characteristic propelled these men to heights of achievement, Carlyle (1840) attributes all of human progress to them:

> For, as I take it, Universal History, the history of what man has accomplished in this world, is at bottom the History of the Great Men... all things that we see standing accomplished in the world are properly the outer material result, the practical realisation and embodiment, of Thoughts that dwelt in the Great Men sent into the world. (p. 3)

From a contemporary perspective, the inadequacies of this view seem obvious. Grint (2011) describes Carlyle's (1840) model as "irredeemably masculine, heroic, individualist, and normative in orientation and nature" (p. 8), and Chemers (1997) maintains it "represents an apology for social privilege in that it implies anyone in a leadership position deserves to be there by virtue of a special capability" (p. 19). Yet, this conception of leadership prevailed for over fifty years (Grint, 2011), and today we are still "drawn to explanations of human behavior that lay the focus of causality in the individual" (Chemers, 1997, p. 19).

Following the Great Man model, the scholarly search for an understanding of individual leaders began with investigations into their skills, behaviors, and situational responses (Bolden et al., 2011; Chemers, 1997; Northouse, 2015). Dominated by positivism, this early scholarship rested on the fundamental assumptions of that paradigm (Kezar et al., 2006; Rost, 1991, 1997). Ontologically, researchers assumed the existence of a singular, objective reality, and, epistemologically, they assumed the existence of universal, objective truths (Kezar et. al, 2006). They conceived of leadership as something with an essence they could discover, and their aim was to generate knowledge that could predict and control human situations (Kezar et. al, 2006). Rost (1991, 1997) concurs. Labeling all pre-1990 work as industrial leadership theory, the author argues that the strength of the era's positivism makes theories from this time almost indistinguishable from each other (Rost, 1991, 1997).

Although research into leadership as a property of individual leaders dominated the field in the first half of the 20th century, it has continued to the present day even as new lines of leadership research have emerged. Below, I review the most prominent leadership theories from this grouping: the trait, behavior, and contingency approaches. Each experienced a peak period of research followed by dormancy, but the trait approach experienced a second wave of research interest in the 1980s that has persisted to the present day (Day & Antonakis, 2012).

The trait approach. Invigorated by success measuring individual differences such as intelligence (Chemers, 1997), researchers in the early years of the 20th century set off to identify those traits that distinguish great leaders. Studies proliferated, as did the possible traits associated with leadership (Bolden et al., 2011). In a classic review of 124 trait studies, Stogdill (1948) concluded that, while many of the traits were correlated with leadership, none were sufficiently universal to explain leadership or to predict who might become a future leader. Although the 1948 critique subdued some of the early enthusiasm for the trait approach, this line of research continued. In a 1974 survey of 163 new trait studies, Stogdill found modest empirical support for the role of traits in leadership in spite of the moderating influence of situational factors. The researcher identified 10 traits associated with leadership (Stogdill, 1974), and Northouse (2015) distilled the description of those traits into this short list: achievement, persistence, insight, initiative, self-confidence, responsibility, cooperativeness, tolerance, influence, and sociability. The late 20th and early 21st centuries saw renewed interest in the trait approach with research into social intelligence (e.g., Marlowe, 1986) and charismatic leadership (e.g., Jung & Sosik, 2006).

The trait approach to leadership theory has strengths and weaknesses. In terms of strengths, the approach has an attractive simplicity as well as a century of research findings (Northouse, 2015). It also has a number of weaknesses. Despite the massive collection of empirical data, no definitive list of leadership traits has emerged, and situational variables are not integrated (Northouse, 2015). In addition, the difficult task of operationalizing the leadership construct confounds studies and undermines conclusions (Chemers, 1997). Both Bolden et al. (2011) and Northouse (2015) conclude that trait studies suggest possible attributes that increase the likelihood that a person is perceived as a leader.

The behavioral approach. After early trait research produced only modest results, researchers of the mid-20th century turned to the investigation of leader behavior. Lewin, Lippitt, and White (1939) examined the effects on small groups of three leadership styles—democratic, autocratic, and laissez-faire—and found more positive interactions and greater individual satisfaction among democratically-led groups. In the 1950s and 1960s, research on leader behavior reached its zenith with the highly productive research programs at Ohio State University and the University of Michigan (Chemers, 1997; Northouse, 2015). At Ohio State, researchers catalogued leader behaviors by surveying the subordinates of leaders, identifying a list of 1,800 behaviors, and culling the list to 150; this work became the Leader Behavior Description Questionnaire (LBDQ, Hemphill & Coons, 1957). Subsequently, Halpin and Winer (1957) analyzed the LBDQ data and identified two behavioral clusters: consideration and initiation of structure. At the University of Michigan, researchers interviewed the employees of supervisors and identified two leadership patterns: employee-oriented and production-oriented (Kahn, 1951; Katz & Kahn, 1951). Combined with several other contemporaneous studies, the findings of Ohio State and Michigan brought researchers to consensus that people behaviors and task behaviors are two distinct patterns of leader behavior (Chemers, 1997). Since the 1980s, though, this line of research has been largely inactive (Day & Antonakis, 2012).

The behavioral approach to leadership theory has strengths and weaknesses. In terms of strengths, it contributed to leadership theory by broadening the scope of research beyond leader traits, and it identified two behavioral clusters that appear to be central to many forms of leadership (Chemers, 1997). Yet, although research suggests effective leaders have high concern for both people and tasks, empirical studies of the relationship between those two behaviors and organizational outcomes have been largely inconclusive (Yukl, 2006). In addition, the approach has focused too much on individual behaviors to the neglect of overall patterns of leader behavior and has suffered “from a tendency to look for simple answers to complex questions” (Yukl, 2006, p. 75).

The contingency approach. In the early 1960s, the contingency approach extended the concept of leadership beyond the traits and behaviors of leaders to include situational variables (Chemers, 1997). Fiedler’s (1964) contingency theory proposed that environmental factors moderated the effect of leadership behavior, and it identified three such factors: the quality of the relationship between the leader and followers, the degree of clarity and structure of the task, and the leader’s amount of formal authority. Based on variations in these factors, the model predicted whether a relationship-oriented or task-oriented leadership style would produce the best follower performance (Fiedler, 1964). In 1971, House developed the path-goal theory of supervision, which incorporated theories of motivation. This model predicted higher follower motivation when leaders matched a relationship-oriented style with a high-structure task and a task-oriented leadership style with a low-structure task (House, 1971). In their normative decision theory, Vroom and Yetton (1973) prescribed one of five decision-making strategies based on three situational variables: the quality of available information, the likelihood of support from followers, and the degree of conflict among followers. Contingency research largely declined after the 1980s (Day & Antonakis, 2012).

The contingency approach to leadership theory has strengths and weaknesses. In terms of strengths, the approach advanced leadership theory by identifying the importance of fit between leader behavior and situational demands (Chemers, 1997). Importantly, it also brought credibility to leadership development by rejecting the idea that leadership effectiveness depended on immutable, inborn, leader attributes (Bolden et al., 2011). In terms of weaknesses, contingency theories have produced only partial empirical support (Yukl, 2006), and attempts to operationalize situational variables have produced conceptual ambiguity and limited generalizability (Bolden et al., 2011). In addition, the many situational variables make contingency theories complex and difficult to implement in real life situations (Yukl, 2006).

Modern theories: Leadership as a leader-follower relationship. In the leadership theories discussed so far, followers have a very limited role. Trait and behavioral approaches, for example, do not consider the role of followers, their characteristics, behaviors, or motivations. In contingency approaches, the concept of followers begins to emerge but only in a limited sense; these theories use the performance of followers on organizational goals as the measure of effectiveness of leadership styles, and some contemplate the effect on performance of follower motivation and compliance. As represented by these theories, followers largely lack agency; they seem to be passive recipients of leader behavior (Bolden et al., 2011). In addition, seen through the lens of these theories, followers are not unique persons with individual identities, values, and preferences. Instead, these approaches assume leaders treat “followers in a collective way, as a group, using an average leadership style” (Northouse, 2015, p. 137).

In the 1970s, though, researchers began examining the role of the follower in leadership situations, beginning with an investigation of the dyadic relationship between leader and follower (Northouse, 2015). Other researchers explored the role of cognition in leader-follower relationships: how leaders and followers attribute traits and motivations to each other and how people’s mental prototypes influence their perceptions of others (Chemers, 1997). In reaction to these systematic and rational approaches, some theorists in the late 1970s and early 1980s turned attention to the role of values and ethics in the leader-follower relationship and their transformational potential (Bolden et al., 2011). This shift stimulated research on heretofore-untouched topics in the leadership literature such as emotions, morality, and spirituality (Hannah, Sumanth, Lester, & Cavarretta, 2014).

With this grouping of theories, then, leadership research shifted from a focus on the individual leader to a focus on the relationship aspects of leadership. Yet, the early research still viewed these relationships as instrumental; only with the transformational approaches did the shift begin that Rost (1991, 1997) uses to demarcate industrial and postindustrial leadership theory. Kezar et al. (2006) agree that the transformational theories begin to move away from the strict positivist paradigm of previous leadership research. Yet, instead of seeing the emergence of a postindustrial “metaparadigm,” Kezar et al. (2006) see the emergence of three new paradigms: critical theory, social constructionism, and postmodernism (p. 26). Although theories in this grouping show early signs of these influences, it is only with the next grouping of theories that the three paradigms reach full bloom (Kezar et al., 2006). For that reason, I describe the three paradigms more fully in that section.

Also, a note about terminology may be helpful here. Kezar et al. (2006) use the term *social constructivism*, while others, such as Chemers (1997), use the term *social constructionism*. Although the distinction between the two is important to the discourse on sociological theories of knowledge, the terms have sufficiently similar meanings to be interchangeable for the purposes of this study. Therefore, I use the term *social constructionism* throughout this document.

The most prominent theories in this grouping are LMX theory, cognitive approaches, and new genre theories. LMX and cognitive approaches eventually took on new forms due to the influence of new paradigms; this section discusses their earlier manifestation, and the next section discusses their later manifestation. New genre theories have remained very active research areas since their advent in the late 1970s (Day & Antonakis, 2012).

LMX theory. An abbreviation for leader-member-exchange theory, LMX theory developed in stages over a 25-year period (Graen & Uhl-Bien, 1995). The first stage of research discovered that managerial activities frequently occur within leader-follower dyads; that these dyads involve reciprocal role-defining exchanges; and that the dyads are highly differentiated within a work unit (Dansereau, Graen, & Haga, 1975). This early research identified two types of leader-follower dyads: high-quality with high levels of mutual trust, respect, and obligation and low-quality with low levels of trust, respect, and obligation (Graen & Uhl-Bien, 1995). According to this theory, leaders form high-quality relationships with a small subset of subordinates who then act as informal assistants to the leader (Yukl, 2006). In exchange for time, attention, and the granting of special privileges, the leader receives from them greater loyalty and assistance with critical job functions; in exchange for working harder and taking on more responsibility, these subordinates receive greater status, influence, and benefits (Yukl, 2006). In contrast, formal job descriptions and less compatibility between leader and follower typify the low-quality relationships (Northouse, 2015). A second stage of research revealed that high-quality relationships correlate positively "with a number of individual and organizational outcomes, such as employee retention, performance ratings, job satisfaction, and career progression" (Bolden et al., 2011, p. 30). In its third stage, LMX research became prescriptive; LMX theorists now recommend that leaders offer high-quality relationships to every subordinate, and researchers study the effectiveness of leadership training as measured against that goal (Graen & Uhl-Bien, 1991).

The LMX theory of leadership has strengths and weaknesses. In terms of strengths, it contributes to leadership theory "by illuminating the broad effects of social exchanges" (Chemers, 1997, p. 69). The theory also enjoys strong empirical support for the relationship between high-quality LMX relationships and individual and organizational benefits (Day & Antonakis, 2012, Northouse, 2015). LMX theory also has weaknesses. One is that studies show only a weak relationship between leader and follower perceptions of their relationships (Liden, Wayne, & Stilwell, 1993), a finding that casts doubt on the behavioral assumptions of the theory. In addition, Yukl (2006) argues that significant ambiguity surrounds the high-quality relationship construct as represented in the many different LMX scales and that the theory does little to integrate contextual factors that may influence LMX relationships.

Cognitive approaches. Beginning in the 1960s, leadership researchers became aware of the subjective nature of interpersonal perceptions with the emergence of attribution theory, which attempts to understand how people explain the causes of interpersonal events (Chemers, 1997). Emerging from the field of social psychology, attribution theory began with the work of Heider (1944), who described the ways in which people tend to attribute causality to others when changes occur in the social environment. Jones and Davis (1965) theorized conditions under which people infer the intention or disposition of another person based on the behavior of that person. Kelley (1967, 1973) specified the perceptual factors that result in a person attributing cause either to the observed person (internal attribution) or to factors external to that person (external attribution). Across many studies, researchers discovered consistent biases in the attribution process, and Ross (1977) identified the strongest one: “the tendency for attributers to underestimate the impact of situational factors and to overestimate the role of disposition factors in controlling behavior” (p. 183).

The attribution process and its inherent biases have important implications for leadership situations. For example, Green and Mitchell (1979) used attribution theory to examine leaders’ perceptions of followers’ poor performances. The researchers identified a number of considerations that influenced leaders’ attributions to internal or external causes—the performance history of the follower, the performance of the follower compared to that of other followers, and the consequences of the poor performance among many others—and discovered that internal attributions resulted in more punitive responses. In an experimental study, Mitchell and Kalb (1982) found that experienced leaders were more likely to attribute poor follower performance to environmental factors than inexperienced leaders. Just as leaders make attributions about followers, followers make attributions about leaders. One of the influences on followers' attributions about leaders is followers' implicit ideas about leadership. Implicit leadership theory (Eden & Leviatan, 1975; Rush, Thomas & Lord, 1977) contends that followers hold assumptions about traits and behaviors that distinguish leaders from non-leaders and that these implicit theories influence followers' judgments about leaders.

Synthesizing the findings from implicit leadership theory, Lord and Maher (1991) proposed the information-processing model of leadership. In this model, people process information in one of two modes: a controlled mode that uses thorough reasoning and places significant demands on the cognitive system and an automatic mode that is "highly dependent on preexisting programs (those held in long-term memory) and places little demand on short-term memory" (p. 13). One type of preexisting program is a prototype, which stores the characteristics and behaviors of a category of person (Lord & Maher, 1991). As demonstrated by Cantor and Mischel (1977), when an observer believes an individual belongs to a particular prototype, the observer attributes related characteristics from the prototype to the observed individual. When the behavior of that observed individual diverges from the prototype, the observer seeks to explain the divergence with external causes until accumulated discrepancies force a cognitive reorganization (Lord & Maher, 1991). Several studies have demonstrated that people use prototypes for leaders in similar ways (Lord, Foti, & Phillips, 1982; Lord, Foti, & De Vader, 1984). In addition, van Knippenberg and Hogg (2003) showed that the degree to which leaders are perceived as prototypical group members correlates to the degree they are accepted by a group.

Cognitive approaches to leadership have strengths and weaknesses. In terms of strengths, these approaches identify “an important and unstudied area of leadership,” one that paved the way for later studies grounded in the social constructionist paradigm (Kezar et al., 2006, p. 46). By exploring how people explain interpersonal events through attribution, implicit theories, and cognitive schema, these theories shed light on leader-follower dynamics and some potential pitfalls, such as misattribution and reliance on prototypes (Chemers, 1997). In terms of weaknesses, Bolden et al. (2011) note that cognitive approaches overlook the affective dimension of leader-follower relationships, and Yukl (2006) sees cognitive approaches as relevant to leadership processes but incomplete in their scope.

New genre theories. As a political scientist and historian, James McGregor Burns studied historic leaders with social influence such as Franklin Delano Roosevelt (1956) and John F. Kennedy (1960). In 1978, Burns wrote a seminal book on leadership that made a critical distinction between transactional and transforming leadership. Transactional leadership, according to the author, is an “exchange of valued things” between two individuals who have no shared purpose (p. 19). In contrast, Burns (1978) maintained that transforming leadership occurs “when one or more persons engage with others in such a way that leaders and followers raise one another to higher levels of motivation and morality” (p. 20). Responding to Burn’s (1978) ideas about leadership, researchers set out to find empirical evidence of transforming leadership. In Bass’s (1985) transformational leadership theory, the researcher identified four transformational leadership factors common to descriptions of transforming leaders: charisma, inspirational motivation, intellectual stimulation, and individualized attention. In 1993, Howell and Avolio compared transactional behaviors to transformational behaviors and found transformational behaviors correlate positively with leader effectiveness. Kroeck (1994) suggested that transformational behaviors are particularly effective in times of uncertainty, and a 1999 study by Den Hartog et al. identified leadership traits that multiple cultures consider transformational.

So compelling was the distinction between transactional and transformational leadership that researchers dubbed the new ideas the *new leadership* (Bryman, 1992) or *new genre leadership* (Avolio, Walumbwa, & Weber, 2009). In contrast to traditional leadership models that emphasized managerial tasks and organizational outcomes, new genre theories focus on “symbolic leader behavior; visionary, inspirational messages; emotional feelings; ideological and moral values; individualized attention; and intellectual stimulation” (Avolio et al., 2009, p. 428). The movement that began with transformational leadership expanded to include a number of kindred theories. Charismatic leadership theory, for example, examines the role of charisma in leadership and the extent to which it reflects leader traits, behavior, or situational variables (House, 1977), attributions by followers (Conger & Kanungo, 1987), or leaders linking their vision to follower self-concepts (House & Shamir, 1993). Drawing from theories of positive organizational behavior, transformational leadership, and ethical leadership, authentic leadership theory proposes that leaders are those who are “transparent with their intentions” and have “a seamless link between their espoused values, actions, and behavior” (Luthans & Avolio, 2003, p. 242). Building on Greenleaf’s (1977/2002) concept of servant leadership, scholars identified key characteristics of servant leaders (Spears, 2002) and created a framework that identifies antecedent conditions, behaviors, and outcomes of servant leadership (Liden, Panaccio, Meuser, Hu, & Wayne, 2014). Some scholars have explored the spiritual dimension of leadership (Reave, 2005) and proposed approaches to its scholarly study (Fry, 2003).

New genre leadership theories have strengths and weaknesses. In terms of strengths, Kezar et al. (2006) note that these approaches make ethics central to the concept of leadership; make moral aims like social justice appropriate objectives of leadership; and anticipate the future direction of leadership theory by conceptualizing leadership as a process unfolding between leaders and followers. In terms of weaknesses, Yukl (2006) lists numerous conceptual weaknesses including "ambiguous constructs, insufficient description of explanatory processes, and a narrow focus on dyadic processes..." (p. 272). In a scholarly debate sponsored by *The Journal of Organizational Behavior*, Mumford and Fried (2014) itemize their criticisms of new genre leadership. They decry an overly normative and overly humanistic approach detached from the real life demands of leadership; an unnecessary infusion of morality into the leadership construct; an overemphasis on follower needs and feelings; and conflation of leadership ratings with simple liking of the leader. Hannah et al. (2014) respond to these criticisms. They hold that the theories describe effective leader behaviors, not an idealized "super leader" (p. 600); that leadership and management are a false dichotomy; that morality is a necessary but insufficient condition for leadership; that followers are active in and vital to leadership processes; and that empirical research supports the claim that these theories reflect more than affective responses. Given the level of scholarly activity generated by new genre leadership theories, the debate is likely to continue; Day and Antonakis (2012) describe these theories as "the single most dominant leadership paradigm" in the first decade of the 21st century (p. 11).

Modern theories: Leadership as a social process. The previous grouping of leadership theories moved beyond the individual leader to consider the relationships between leaders and followers. Both LMX theory and the cognitive approaches retained a pragmatic view of leadership, while the new genre theories embraced the emotional, moral, and inspirational dimensions of leader-follower relationships. Across these different approaches to leadership, though, leaders and followers were distinct entities interacting in leadership situations. What makes the next grouping of theories different is that they conceive of leadership as a process. The focus shifts "from leaders to leadership—from something done by leaders (either on their own or in relation to followers) to a shared social process to which many people contribute" (Bolden et al., 2011, p. 34). The distinction between leaders and followers largely falls away. Within this grouping of theories, cognitive constructionist approaches see leadership as collective understandings rather than something with an objective, external reality (Chemers, 1997). Shared leadership theories view leadership as dispersed among participants in an environment of mutual influence (Pearce & Conger, 2003). And complexity leadership theory sees leadership as "a complex, dynamic process" that is a property of the social system, not individual leaders (Lichtenstein et al., 2006, p. 2).

According to multiple scholars, these theories of leadership are emerging because theories that are more traditional have become inadequate (Avolio et al., 2009; Kezar et al., 2006; Lichtenstein et al., 2006; Uhl-Bien, Marion, & McKelvey, 2007; Wheatley, 1992). Lichtenstein et al. (2006) contend that "traditional, hierarchical views of leadership are less and less useful given the complexities of our modern world" (p. 2), and Avolio et al. (2009) attribute a "growing sense of tension in the leadership literature" to "models of leadership that were designed for the past century" (p. 430). Similarly, it is with this grouping of leadership theories that the paradigms of social constructionism, critical theory, and postmodernism finally eclipse the positivist paradigm (Chemers, 1997; Kezar et al., 2006; Uhl-Bien, Maslyn, & Ospina, 2012). Social constructionism, which holds that people develop knowledge and meaning through interactions with others and their world, views leadership as a social construction, an ever-changing concept influenced by culture and context (Chemers, 1997; Kezar et al., 2006). Critical theory, which sees reality as dominated by economic forces that have created an unjust class-based society, views leadership with suspicion; it seeks leadership that empowers the marginalized and moves society toward justice (Kezar et al., 2006; Tierney, 1993). Postmodernism, which contests "modernist notions of rationality, norms, and identity" (Tierney, 1993, p. 4), questions and interrogates the concept of leadership itself (Kezar et al., 2006).

The most prominent theories in this grouping are cognitive constructionist approaches, shared leadership theory, and complexity leadership theory. In general, cognitive constructionist ideas emerged out of the cognitive tradition in the late 20th century, and Dinh et al. (2014) report that research interest remains strong. In contrast, Dinh et al. (2014) describe shared leadership and complexity approaches as "emerging theories" with strong research interest that has yet to fill identified gaps in the literature (p. 40); research in these areas is relatively new and incomplete (Avolio et al., 2009; Kezar et al., 2006).

Cognitive constructionist approaches. Earlier cognitive approaches to leadership examined the ways that mental processes introduce subjectivity and bias into leadership situations. The cognitive constructionist approaches go further. In various ways, they hold that the concept of leadership is socially constructed and lacks "any inherent essence" (Bolden et al., 2011, p. 36).

An early example is Calder (1977), who maintains that leadership theory is nothing more than a reflection of socially constructed prototypes held by everyday people. Similarly, in their *romance of leadership* concept, Meindl et al. (1985) contend that leadership is merely an explanatory concept that helps people make sense of organizational occurrences. Leadership exists, these authors maintain, because people need it to exist: "The significance placed on leadership is a response to the ill-structured problem of comprehending the causal structure of complex, organized systems" (Meindl et al., 1985, p. 79). Dachler (1984) argues that the positivist approach of traditional leadership theory overlooks the true site of leadership: the social and political processes that groups use to co-construct meaning and purpose. Transforming the ideas of LMX theory, Uhl-Bien and colleagues propose a relational approach to the study of leadership relationships (Uhl-Bien, 2006; Uhl-Bien et al., 2012). Rather than focusing on individuals as they interact, the relational approach "focuses on the rich interconnections among people acting in contexts that allow leadership to be 'co-produced' in 'the space between'" (Uhl-Bien et al., 2012, p. 304). Taking a discursive view of leadership, Fairhurst (2009) explores the question of how leadership is accomplished through language. In this view, "language does not mirror reality; rather it constitutes it";

therefore, language becomes the medium by which leadership is negotiated and constructed (Fairhurst & Grant, 2010, p. 174).

Although the cognitive constructionist approaches do not cohere as one theory, they instruct about the growing influence on leadership theory of non-positivist paradigms. In each of these cases, theorists see leadership through the lens of social constructionism; leadership emerges through multiple, subjective realities, is influenced by culture and context, and becomes manifest in language (Chemers, 1997; Kezar et al., 2006; Uhl-Bien et al., 2012). In addition, these approaches reflect the postmodern paradigm in their rejection of universal truths, their deconstruction of positivist conceptions of leadership, and their embrace of complexity and ambiguity (Kezar et al., 2006; Tierney, 1993).

Shared leadership theory. In the literature, shared leadership theory is a broad category, encompassing a number of related conceptions including distributed leadership, collective leadership, collaborative leadership, emergent leadership, and co-leadership (Avolio et al., 2009; Bolden, 2011). "Common across all these accounts is the idea that leadership is not the monopoly or responsibility of just one person, with each [account] suggesting a similar need for a more collective and systemic understanding of leadership as a social process" (Bolden, 2011, p. 252). More specifically, Pearce and Conger (2003) provide this definition of shared leadership: "a dynamic, interactive influence process among individuals in groups for which the objective is to lead one another to the achievement of group or organizational goals or both" (p. 1). Wassenaar and Pearce (2012) offer that "with shared leadership, the role of leadership does not reside in one person's hands, but rather in the group's arms as they move together toward common objectives" (p. 364).

According to Pearce and Conger (2003), shared leadership has a long history in human relations as well as theoretical roots that span the twentieth century. Even so, the scholarly conception of shared leadership did not take shape until the late 1990s, resulting in a limited amount of empirical work to date (Avolio et al., 2009; Pearce & Conger, 2003; Wassenaar & Pearce, 2012). Although the theory of shared leadership is emergent, empirical support for the framework is growing, and this review reports selected findings from three areas: settings in which researchers have observed shared leadership, antecedents (causes or enablers) of shared leadership, and outcomes of shared leadership.

Empirical studies have identified shared leadership operating in a diverse set of contexts. Settings include business start-ups (Ensley, Hmieleski, & Pearce, 2006), emergency care teams (Klein, Ziegert, Knight, & Xiao, 2006), web design teams (Brown & Gioia, 2002), and jazz music and rowing groups (Pescosolido, 2002). In addition, empirical studies have identified some of the antecedents of shared leadership (see Wassenaar & Pearce, 2012, for a complete review). Antecedents include trust in the hierarchical leader (George et al., 2002), six workplace conditions including a climate that values excellence and allows freedom (Hooker & Csikszentmihalyi, 2003), and team training and facilitated team communication (Elloy, 2008). Empirical studies have also identified some of the outcomes associated with shared leadership (see Wassenaar & Pearce, 2012, for a complete review). Outcomes include positive correlations with individual self-efficacy (George et al., 2002), group motivation and cognitive advantage (Solansky, 2008), and group cohesion and organizational citizenship behavior

(Balthazard, Waldman, Howell, & Atwater, 2004). At the organizational level, where empirical studies are few, Ensley et al. (2006) report positive correlations between shared leadership and the financial performance of entrepreneurial companies.

In terms of new paradigms, shared leadership approaches are at least compatible with critical theory. In their rejection of hierarchical power, these leadership approaches reflect the rejection of traditional power structures typical of critical theory, and, with their inclusiveness and collaborative processes, they embody the empowerment goals of the critical paradigm (Kezar et al., 2006). To a modest extent, shared leadership reflects the social constructionist paradigm in its sense of leadership as fluid and social, but it does not emphasize the cognitive construction of leadership that typifies that paradigm (Chemers, 1997; Kezar et al., 2006). Finally, although shared leadership rejects traditional notions of leadership, it remains grounded in a rationality that excludes it from postmodernism (Uhl-Bien et al., 2012).

The shared leadership approach has strengths and weaknesses. In terms of strengths, it expands the conception of leadership beyond the traditional notion of individual leaders who hold positions of authority within hierarchical structures (Bolden, 2011). Described in the literature as post-heroic (Fletcher & Kaufer, 2003), shared leadership is leadership for the many not the few, and it may offer leadership alternatives that are better suited to contemporary life (Avolio et al., 2009; Bolden, 2011). Because it explores neglected dimensions of leadership, research into shared leadership may yield a more holistic view of leadership (Fletcher & Kaufer, 2003) or spur much-needed study of hybrid forms of leadership (Bolden, 2011; Gronn, 2011). The shared leadership approach also has weaknesses. One is that the nascent theory lacks sufficient empirical support

(Avolio et al., 2009), and another is the lack of a clear definition of shared leadership (Carson, Tesluk, & Marrone, 2007). In addition, shared leadership takes insufficient account of power dynamics within existing organizations (Gordon, 2010), tends "to confine studies within organizational boundaries" (Bolden, 2011, p. 261), and may represent a new hegemonic philosophy that privileges collective rather than individual effort (Grint, 2010; Sinclair, 1992).

Complexity leadership theory. A striking departure from traditional leadership ideas, complexity leadership theory is the result of applying concepts from complexity science to the study of leadership (Uhl-Bien & Marion, 2011). Active in multiple disciplines as diverse as mathematics, biology, and economics, complexity science uses computation and nonlinear methodologies to study the properties of complex systems in the natural and social world (Lichtenstein, 2014). Complex systems are "highly composite ones, built up from very large numbers of mutually interacting subunits (that are often composites themselves) whose repeated interactions result in rich, collective behavior that feeds back into the behavior of individual parts" (Rickles, Hawe, & Shiell, 2007, p. 933). Importantly, complex systems have emergent properties: properties of the overall system that are generated by the interactions of the subunits "but cannot be reduced to the subunits and cannot be readily deduced from the subunits and their interactions" (Rickles et al., 2007, p. 934). As an example of a complex system with emergent properties, Lichtenstein (2014) offers the V-formation of Canadian geese. The overall system is comprised of many interacting geese; each bird follows simple rules to avoid contact with other birds and to follow the general direction of the group; and out of the collective behavior of the birds appears the V-shape, which is emergent (Lichtenstein, 2014). The V-shape is emergent because "it is not caused by any one bird but by all of the birds interacting together; the V is composed by the birds but 'transcends' them as well," because it produces aerodynamic capacity that exceeds the sum of the capacities of individual birds (Lichtenstein, 2014, p. 2).

The application of complexity concepts to leadership began in the 1990s, when a number of works coalesced into a new perspective on organizational dynamics. It began with Wheatley's (1992) book *Leadership and the New Science*, which held that traditional assumptions of organizational life, including hierarchy, authority, and control, were ill-suited for contemporary organizations. Instead, Wheatley (1992) explored the conceptual possibilities of taking a complexity view of organizations: decentralization, interdependence, collaboration, bottom-up influence, and local action yielding emergent new order. In 1995, Stacey concluded that complexity concepts better explained strategic change in organizations than the established perspectives of the time. Challenging the traditional idea of organizational equilibrium, the author argued that "for a system to be innovative, creative, and changeable, it must be driven far from equilibrium where it can make use of disorder, irregularity, and difference as essential elements in the process of change" (Stacey, 1995, p. 490). Also in 1995, Browning, Beyer, and Shetler used grounded theory to study a consortium of 16 fast-moving companies and found that complexity theory best fit their data; the theory described how "order can arise out of apparent chaos," how self-reinforcing dynamics can lead to a "more richly ordered complexity," and how interacting elements can result in qualitatively different behavior for the whole system (p. 139). In 1997, Brown and Eisenhardt conducted a qualitative study of six organizations. Their findings suggested that the most innovative companies were like complex adaptive systems: continuously changing, semi-structured organizations that remained poised “on the edge of order and chaos” (Brown & Eisenhardt, 1997, p. 32). In 2001, Marion and Uhl-Bien called for a new leadership approach grounded in complexity theory.

Since then, research interest in a complexity approach to leadership theory has only grown, and at the heart of such an approach is the concept of emergence, the organizational equivalent of the V-shape of Canadian geese (Lichtenstein, 2014). Emergence, according to Lichtenstein (2014), is “the creation of order, the formation of new properties and structures in complex systems” (p. 1). Marion and Uhl-Bien (2001) describe it as the manifestation of organizational innovation. And Chiles, Meyer, and Hench (2004) claim it occurs when “system-level order spontaneously arises from the action and repeated interaction of lower level system components without intervention by a central component” (p. 502). In complexity leadership theory, then, emergence is not the result of planning and direction from leaders; it arises “unbidden” from the interaction of many individuals in a complex system (Marion & Uhl-Bien, 2001, p. 396).

Adding specificity, Marion and Uhl-Bien (2001) contend that a combination of microdynamic and macrodynamic forces produces organizational emergence. According to the authors, microdynamics are the bottom-up forces arising from the interactions of agents (individuals) and ensembles (sets of individuals or work groups), and they are of three types: Correlation is “the emergence of common understanding in interacting systems” (p. 395); interaction is “the magnifying effect that interactions among ensembles exert on minor differences in the initial conditions of the different ensembles” (p. 393); and irreducible randomness is an inherent feature of complex, interacting systems (Marion & Uhl-Bien, 2001). Macrodynamics, in the view of Marion and Uhl-Bien, "represent the emergence of the larger systems from the interactions at the microlevel" and "are characterized by 'bottom-up' coordination and by nonlinear behavior" (2001, p. 392). In complexity leadership theory, the aim of leadership is not command and control but the furtherance of dynamics that lead to emergence (Lichtenstein, 2014; Marion & Uhl-Bien, 2001; Uhl-Bien & Marion, 2009).

In spite of the potential benefits of emergence, some researchers have identified obstacles to the realization of its promise. Goldstein (2007), for example, rejects the idea of bottom-up self-organization, maintaining that emergence requires significant managerial intervention. Organizational emergence holds promise, the author maintains, but is "freighted with heavy conceptual baggage" (Goldstein, 2007, p. 65). Based on their four-year ethnographic study of a public-sector organization, Houchin and MacLean (2005) found that individuals attempting to reduce anxiety worked against the disequilibrium necessary for emergent order. Complexity theory, these authors argue, is "inadequately sensitive to the dynamics of individual and group behavior" (Houchin & MacLean, 2005, p. 164). Identifying another challenge, Heifetz and colleagues (Heifetz, 1994; Heifetz et al., 2009; Heifetz & Linsky, 2002) describe a perpetual tension between position-based authority, which seeks to stabilize the organization, and adaptive leadership, which seeks to enable complexity and expand the capacity of the system.

For these reasons, Uhl-Bien et al. (2007) propose a framework for complexity leadership theory that blends complexity leadership with the realities of bureaucratic organizations. The framework includes three leadership roles: (a) administrative leadership, which is associated with the bureaucratic paradigm and includes formal structures, roles, and behaviors; (b) adaptive leadership, which is associated with the complexity paradigm and involves dynamic, informal networks of interacting individuals; and (c) enabling leadership, which facilitates the natural tension between the administrative and adaptive functions (Uhl-Bien & Marion, 2009; Uhl-Bien et al., 2007). In their conception of adaptive leadership, these authors incorporate the ideas of Heifetz and Linsky (2002), describing adaptive leadership as “an informal leadership process that occurs in intentional acts of interactive, interdependent human agents (individuals or collectives) as they work to generate and advance novel solutions addressing adaptive needs of the system” (Uhl-Bien & Marion, 2009, p. 638).

In terms of new paradigms, Kezar et al. (2006) hold that complexity leadership theory “addresses postmodernism’s questioning of predictable and generalized leadership phenomenon” (p. 31); complexity, by its nature, is consonant with postmodernism’s distrust of monolithic structures. Yet, complexity leadership theory does not reject the role of reason in the pursuit of truth, a rejection that Tierney (1993) holds is characteristic of postmodernism. Similarly, complexity leadership theory, with its distributed power and inclusive view of leadership, is consonant with critical theory but not born of it. Likewise, in its conception of leadership as an outcome of social processes, complexity leadership theory is consistent with social constructionism, but it takes a different approach; instead of studying social and emotional processes—such as “meaning-making, trust, [or] power”—it investigates the dynamic, nonlinear, social processes that arise under conditions of complexity (Uhl-Bien & Marion, 2011, p. 476). While compatible with these new paradigms, complexity leadership theory may belong to an entirely different paradigm. Uhl-Bien and Marion (2011) maintain that complexity leadership theory is part of an “emerging paradigm of ‘dynamic equilibrium’ in organizational studies” (p. 468).

Complexity leadership theory has strengths and weaknesses. In terms of strengths, it provides a striking alternative to leadership theories born of an industrial age and the positivist paradigm, an alternative that Uhl-Bien and Marion (2011) argue is better suited to the dynamics of modern organizations. By conceiving of leadership as an “emergent event, an outcome of relational interactions,” it rejects the idea that leadership is “in” a leader or is “done by” a leader (Lichtenstein et al., 2006, p. 2). According to proponents of the theory, this radical departure from traditional views allows organizations to go beyond the limitations of aligning workers with a leader’s vision (Stacey, 1995; Uhl-Bien et al., 2007) and to avoid “the folly of trying to solve organizational problems through feats of personal heroism” (Goldstein, Hazy, & Lichtenstein, 2010, p. 16). According to Lichtenstein et al. (2006), the theory expands leadership to include all members of an organization, enlarges the creative potential of organizations, and offers new organizational strategies (p. 2). In addition, the centrality of relationships in the theory foregrounds important issues such as ethics and diversity (Kezar et al., 2006; Lichtenstein et al., 2006).

Complexity leadership theory also has weaknesses. Although empirical studies are accumulating, the theory is nascent and lacks a robust empirical foundation (Avolio et al., 2009; Kezar et al., 2006; Yukl, 2006). Furthermore, Houchin and MacLean (2005) contend that complexity theorists have issued normative statements that exceed what the knowledge base warrants. In addition, these authors question the validity of applying physical science concepts to the social sciences, and they characterize existing studies as lacking diversity and focusing on short-term analysis (Houchin & MacLean, 2005). Kezar et al. (2006) assert that, with its emphasis on nonlinear, unpredictable dynamics, complexity leadership theory is difficult to study and challenging for people to put into practice. Finally, because the theory represents a dramatic departure from commonly held views of leadership, practitioners—particularly those in traditional leadership roles—may meet it with resistance.

Selected Leadership Concepts

Against the backdrop of the history of leadership theory, Heifetz and Sinder (1991) first began to shape adaptive leadership theory in the early 1980s as they designed leadership courses for the John F. Kennedy School of Government at Harvard University. In this process, they drew upon a number of existing leadership theories, resulting in a relationship between adaptive leadership theory and each of the three groupings of modern theory used in the review. From the trait approach, they took the position that some talents are inborn, while others can be developed (Heifetz, 1994; Heifetz & Sinder, 1991). From the situational approach (akin to the contingency approach), they took the importance of context, maintaining that leaders can adapt their behaviors and call on approaches that are more or less autocratic or participatory depending on the circumstances (Heifetz, 1994; Heifetz & Sinder, 1991). Also from the contingency approach, they took the view that leaders can achieve better outcomes by choosing situations that best fit their personal characteristics (Heifetz, 1994; Heifetz & Sinder, 1991). From the transactional (or LMX) approach, they took the idea that social exchanges between leaders and followers undergird leadership; leaders influence "constituents" and "constituents" influence leaders (Heifetz & Sinder, 1991, para. 19).

Finally, as discussed in the review, complexity leadership theory came to incorporate many of the ideas of adaptive leadership theory (Lichtenstein & Plowman, 2009; Uhl-Bien et al., 2007), and scholars continue to articulate and expand both theoretical streams. Adaptive leadership theory and complexity leadership theory, then, are overlapping, kindred approaches to leadership and provide similar lenses through which to view leadership concepts. In this section, I explore three leadership concepts that are particularly germane to this study: leadership and non-positional action, leadership and learning, and leadership and enabling conditions. For each of these concepts, I use the literature from adaptive and complexity leadership theories to examine the ideas and then draw implications for this study.

Leadership and non-positional action. Modern leadership ideas first emerged at the end of the 19th century as industrialization fostered the growth of larger and larger enterprises (Grint, 2011). Enormous organizations—like "the army, civil service, post office, and railroads"—conceived of leadership as "administrative positions within formal hierarchies," and businesses increasingly adopted similar models (Grint, 2011, p. 8). From the beginning, therefore, modern ideas of leadership conflated leadership and positional authority. As the scholarship of leadership emerged, it took the same approach. Researchers who investigated the traits of leaders, for example, selected managers and supervisors as their research subjects (Chemers, 1997). The trait, behavioral, and contingency approaches and the cognitive, LMX, and new genre approaches, all tended to associate leadership with formal positions of authority, adopting the term follower to refer to the subordinates of managers. Not until theorists began to view leadership as a social process did the conceptual link between leadership and position begin to dissolve.

With the cognitive constructionist approaches, shared leadership theory, and complexity leadership theory, scholars largely disentangled leadership from positional authority, expanding the concept of leadership to include many more forms and many more people.

The perspective of adaptive leadership theory. Adaptive leadership theory (Heifetz, 1994; Heifetz et al., 2009; Heifetz & Laurie, 1997; Heifetz & Linsky, 2002; Heifetz & Sinder, 1991) holds a particular conception of leadership that distinguishes it from authority. Leadership, according to this theory, is the process of "generating problem-defining and problem-solving work" (Heifetz & Sinder, 1991, para. 23). It is mobilizing people to do the difficult work of adapting to changing circumstances (Heifetz, 1994). It is engaging team, community, or organization members "in confronting the challenge, adjusting their values, changing perspectives, and learning new habits" that will allow them to thrive in a new environment (Heifetz & Laurie, 1997, p. 124). The essential work of adaptive leadership is change, and leaders are those who engage in this work.

Authority, according to this theory, is quite different. Authority is a social contract in which a person or entity entrusts power to another in exchange for some type of service (Heifetz et al., 2009). Formal authority occurs when the contract is explicit. For example, jobs typically confer formal authority through a detailed job description; the jobholder retains the authority of the position in exchange for performing the duties of the job (Heifetz et al., 2009). Informal authority occurs when the contract is implicit. For example, subordinates may grant informal authority to a superior; although the terms are unspoken, the subordinates confer limited authority in exchange for having their needs met (Heifetz et al., 2009). Heifetz et al. (2009) describe formal authority as a type of power and informal authority as a type of influence. Whether formal or informal, though, authority helps maintain equilibrium in social systems through five functions: providing direction, providing protection, orienting people to their roles, controlling conflict, and maintaining norms (Heifetz, 1994). The essential work of authority is stabilization.

Because leadership involves change and authority involves stabilization, the two are in dynamic tension (Heifetz & Sinder, 1991). Because leadership engages people in adaptive work, it disturbs the status quo, and the process can be disturbing and painful (Heifetz, 1994). Authority, on the other hand, grants power and influence but does so "on the assumption that you will then do what [your authorizers] want you to do" (Heifetz et al., 2009, p. 24). While leadership and authority may coincide in one person, these authors maintain that they often do not; leadership is "rarely exercised from high office, and the constraints that come with authority go far to explain why" (Heifetz, 1994, p. 183). Because adaptive leadership theory separates leadership from authority, every member of an organization is a potential leader, regardless of whether that individual has authority or not. Furthermore, these authors assert, organizations need leadership from people throughout the organization to meet their adaptive challenges effectively (Heifetz, 1994).

The perspective of complexity leadership theory. Complexity leadership theory takes a similar yet slightly different stance. This theory emphasizes that no individual leader or group of leaders own, enact, or direct leadership; instead, leadership is "an emergent, interactive dynamic that is productive of adaptive outcomes" such as learning, innovation, and adaptability (Uhl-Bien et al., 2007, p. 299). Lichtenstein et al. (2006) offer a similar description, defining leadership as a system event in which "knowledge, action preferences, and behaviors change, thereby provoking an organization to become more adaptive" (p. 4). Both definitions equate leadership with emergence, the sometimes-sudden manifestation of new order that arises unpredictably from many organizational members interacting, exchanging information, and "acting without coordination from a central decider" (Lichtenstein & Plowman, 2009, p. 617). In complexity leadership theory, then, leaders are those who influence the leadership process; in other words, they act to enable emergence (Lichtenstein & Plowman, 2009; Marion & Uhl-Bien, 2001; Uhl-Bien et al., 2007). Leaders "catalyze emergent processes to facilitate the development of complexity, which in turn will allow organizations to better adapt to challenging environments" (Lord & Dinh, 2012, p. 54).

Furthermore, complexity leadership theory emphasizes that leaders exist at all levels of the organization. Lichtenstein et al. (2006) point out that leaders "need not be authority or position based" (p. 4), and Uhl-Bien et al. (2007) concur, noting that leaders are distinct from "managerial position[s]...which is a bureaucratic notion" (p. 300). At the macro level of the organization, according to Marion and Uhl-Bien (2001), leaders should focus on how to foster the emergence of "networked intellectual capabilities" across the organization; at lower levels, leaders should "influence networks...in ways that permit innovation and dissemination of innovations" (p. 391). In the view of complexity leadership theory, leaders at all levels of the organization can contribute to the conditions that lead to emergence within the system.

An empirical study by Plowman et al. (2007) provides one example of the role of leaders in complexity leadership theory. Using a qualitative, grounded theory approach, these researchers conducted a 10-year longitudinal study of an urban church. Although

Mission Church once had been a well-endowed house of worship for wealthy citizens, it had been in decline for 50 years, suffering a continuous loss of membership and a revolving door of pastoral leadership (Plowman et al., 2007). Yet, in the first decade of the 21st century, the church experienced an unexpected radical change that began with a small act in 1999; successive small acts amplified each other in a process of "continuous radical change" that resulted in a dramatic rebirth of the church, its mission, and its role in the community (Plowman et al., 2007, p. 516). Because theories of organizational change at the time could not explain this type of change, the researchers explored the phenomenon using the framework of complexity leadership theory (Plowman et al., 2007). They determined that four factors moved the church into a disequilibrium state, which is a precondition for emergence: "imminence of organizational decline, change in leadership, struggles with identity, and ongoing major organizational conflict" (Plowman et al., 2007, p. 527).

Within this fertile ground, the first small act occurred: A group of young people, some of whom were not even members of the church, "suggested offering hot breakfast to the homeless people who walked by the church on Sunday mornings" (Plowman et al., 2007, p. 515). Then the amplification process began that led to emergence:

> The group served its first breakfast five weeks later and, within a short time, church volunteers were feeding over 200 homeless people on Sunday mornings. A few months after the first breakfast, a physician volunteer opted out of the food serving line and began seeing anyone who wanted to discuss a medical problem. Within a short time, full-scale medical, dental, and eye clinics emerged as part of the Sunday morning program and, within a few years, a 501(c)(3) spin-off (a tax-

exempt organization) of the church was receiving city grants, providing a "day center" for several thousand homeless people and serving over 20,000 meals a year. Legal assistance, job training, laundry services, and shower facilities are a few of the programs, in addition to the clinics, that emerged from the initial idea of a hot breakfast. (Plowman et al., 2007, pp. 515-516)

From the perspective of complexity leadership theory, multiple leaders contributed to the conditions that led to emergence of new order at Mission Church. The young people who suggested meals for the homeless acted as leaders by interacting with others and with the church network and by responding creatively to local conditions as they understood them (Lichtenstein & Plowman, 2009; Plowman et al., 2007). Similarly, the doctor acted as a leader by interacting with the unfolding dynamics and responding uniquely to local conditions (Lichtenstein & Plowman, 2009; Plowman et al., 2007). Likewise, members of the growing volunteer corps acted as leaders, participating in ways that fostered the emerging innovation (Lichtenstein & Plowman, 2009; Plowman et al., 2007). All of these leaders took non-positional action, but formal leaders in the church contributed as well. The co-pastors furthered emergence by remaining "open to an emerging pattern of adaptations" and by "labeling and interpreting the pattern in ways that made it more attractive, thereby drawing in others"; they served as "sensegivers" rather than directing change based on a predetermined agenda (Plowman et al., 2007, pp. 538-539).

Implications for this study. Higher education faces an adaptive challenge, and effective adaptation will require engaged leaders of all types: those with and without formal authority and those from every level of organizational hierarchy within the higher education system.

For this reason, I adopted for this study the definition of leader used in adaptive and complexity leadership theories: A leader is one who acts in ways that increase the likelihood of emergence and that further the adaptation of the organization. Leaders may hold positions of authority within the organization or they may not. The work of adaptive leadership is not tied to position or authority, and all members of an organization are potential leaders.

Therefore, I selected participants from throughout the organization. I included those with positional authority at various hierarchical levels and those without positional authority. When choosing participants, I looked for interest in or involvement with corporatization as a signifier of engagement with the adaptive challenge. And I considered—for the purposes of this study—two participant traits to be sufficient evidence of leadership: Interest in or engagement with the issue of corporatization and willingness to donate uncompensated time and effort to a study related to corporatization.

Leadership and learning. As leadership theory evolved through the 20th century and into the 21st, the concept of learning played an increasingly prominent role; as the world grew more complex, so did the need for learning to be integrated into leadership. In the late 20th century, learning—at the individual and organizational level—became one of the major foci of leadership research and influenced a variety of theoretical views (Kezar et al., 2006). The concept of learning has a central role in adaptive and complexity leadership theories.

The perspective of adaptive leadership theory. Learning plays an important role in adaptive leadership theory, because of the critical distinction between technical challenges and adaptive challenges. As explained in chapter one, technical challenges are those in which the problem, though it may be complex, is clear, and an appropriate solution, though it may require expertise, is on hand (Heifetz, 1994). Adaptive challenges are the opposite: Neither the problem nor the solution is clear-cut (Heifetz, 1994). By their nature, adaptive challenges are more difficult than technical problems, and traditional conceptions of leadership can add to that difficulty. For example, leaders in senior positions often misdiagnose adaptive challenges as technical problems, because they expect themselves to have answers; "they have been rewarded for being able to solve problems and take decisive action" (Heifetz et al., 2009, p. 105). Likewise, many employees avoid the painful work of adaptation, because it involves change and sacrifice; "they look to senior executives to take problems off their shoulders" (Heifetz & Laurie, 1997, p. 124). Both tendencies, these authors maintain, need to be "unlearned" in order for organizations to adapt (Heifetz & Laurie, 1997, p. 125).

What adaptive challenges call for is learning (Heifetz, 1994; Heifetz et al., 2009; Heifetz & Laurie, 1997). For individuals, this learning may entail experimentation, mistakes, and discovery; it may include changes "in values, beliefs, or behavior"; and it may necessitate emotional work (Heifetz, 1994, p. 22). For the organization, the learning process should involve people at all levels; embrace differences in values and ideas; and bring together disparate groups, putting people "face-to-face with 'the other'" (Heifetz et al., 2009, p. 107). To further collective learning, an adaptive organization faces conflicts and taboos and institutionalizes the reflection process (Heifetz et al., 2009).

The perspective of complexity leadership theory. Learning is also at the heart of complexity leadership theory, but its role is more precise. In this theory, the aim of leadership is emergence, the unpredictable manifestation of innovative new order across a system. Although leaders cannot produce emergence, they can make it more likely by fostering high levels of interaction among individuals and groups, promoting unconstrained flows of information, and encouraging divergent ideas (Uhl-Bien & Marion, 2011). Out of these dynamics, learning arises. “The interaction of ideas, tasks, information, resources, beliefs, worldviews, visions, and adaptive agents” produces learning; learning arises as “ideas collide, merge, diverge, elaborate in sets, or are extinguished” (Uhl-Bien & Marion, 2011, p. 476). In addition, individuals challenge each other’s ideas, which may result in one or more of them adjusting their conceptions to better align with current knowledge (Lichtenstein et al., 2006; Uhl-Bien & Marion, 2011). These adjustments often produce fresh material; “completely new...ideas, innovations, and frameworks emerge that are unanticipated” (Lichtenstein et al., 2006, p. 5).

An empirical study by Hargadon and Bechky (2006) illustrates how learning can emerge out of the interactions of a highly interactive collective. Using ethnographic methods, the researchers conducted intensive case studies of six companies whose work involved “generating novel solutions to novel problems”: two management consulting firms, two engineering design firms, and two internal consulting groups within multidivisional firms (Hargadon & Bechky, 2006, p. 487). According to the authors, moments of collective creativity tended to occur when individuals with new problems to solve interacted with individuals who had useful past experiences (Hargadon & Bechky, 2006). One study participant described this dynamic:

> You pick two people, with different experiences and maybe even different training and put them together and you've got that kind of a synergy, an exchange of ideas. Because whatever this person says will provoke a hundred different ideas in this other one and a hundred different memories. (Hargadon & Bechky, 2006, p. 489)

Based on the field studies, the researchers determined that four types of activities precipitated moments of collective creativity: help seeking, help giving, reflective reframing (the mindful attention and responsiveness of all participants), and reinforcing (behaviors that strengthen an organizational culture that supports the first three activities) (Hargadon & Bechky, 2006, p. 490).

Implications for this study. Higher education faces an adaptive challenge, and answers lie in the collective learning of higher education members. To heighten this learning, higher education leaders can encourage the free flow of information as well as high levels of interaction among organizational members with disparate views. The resulting friction and exchange has the potential to generate insight, fresh ideas, and innovative adaptations.

The aim of this study was to capture the potentially contrasting views that higher education leaders have about corporatization and offer them as grist for the mill of adaptive learning; rich, multi-faceted, and heterogenous perspectives are an asset for this process. To best fulfill this aim, I designed the study to explore the most diverse perspectives possible, capture the detail and complexity of each perspective, and offer clear observations about each unique viewpoint.

To enact these goals, I used the literature to design a maximum diversity strategy for the selection of study participants. In addition, I employed data collection methods capable of capturing the intricacy and uniqueness of participant thinking. To explore how participants conceptualize the causes and effects of corporatization, I used causal mapping, which allowed participants to depict complex cause-and-effect dynamics. To explore the ideas participants have for responding to corporatization, I used semi-structured interview questions that allowed participants to richly describe their individual recommendations. I employed data analysis methods that preserved the idiographic nature of the data. Finally, I presented findings that focus on the unique perspective of each of the 20 participants. Unlike many qualitative studies, the study does not establish commonality across perspectives; it highlights dissimilarity instead.

Leadership and enabling conditions. Leadership theories that view leadership as distributed among multiple people necessarily view the leader's role differently than theories that are more traditional. In adaptive and complexity leadership theories, leaders do not dictate strategy nor do they mandate the activities of others. Instead, leaders work to foster the conditions that make adaptation and emergence more likely; they create enabling conditions.

The perspective of adaptive leadership theory. Heifetz and colleagues (Heifetz, 1994; Heifetz et al., 2009; Heifetz & Laurie, 1997; Heifetz & Linsky, 2002; Heifetz & Sinder, 1991) view a leader's work as creating conditions that foster adaptation, and they describe this work using six strategic principles. The first principle is *Get on the balcony*, which emphasizes the need for leaders to see the overall context and patterns emerging within that context (Heifetz & Laurie, 1997; Heifetz & Linsky, 2002). The second principle is *Identify the adaptive challenge*, which entails observing behaviors, viewing conflicts as symptoms, and diagnosing the adaptive work needed (Heifetz, 1994; Heifetz & Laurie, 1997; Heifetz & Linsky, 2002). The third principle, *Regulate distress*, is necessary, because "adaptive work generates distress"; leaders must foster enough tension to motivate people to change but not so much that they feel overwhelmed (Heifetz & Laurie, 1997, p. 127). Heifetz and colleagues describe the fourth principle, *Maintain disciplined attention*, as countering avoidance techniques that are understandable—because adaptive work is hard—yet distract from the work at hand (Heifetz & Laurie, 1997). The fifth principle is *Give the work back to the people*; it means that leaders need to "support rather than control" (Heifetz & Laurie, 1997, p 129). The final principle, *Protect voices of leadership from below*, refers to the idea that leadership can come from anywhere in the organization; organizations often silence the voices of "whistle-blowers, creative deviants, and other such original voices," but these divergent views are important to the adaptive process (Heifetz & Laurie, 1997, p. 129). By applying these principles, leaders create conditions that enable adaptation.

The perspective of complexity leadership theory. Because of the promise of emergence in complexity leadership theory, research into the conditions that might enable it is ongoing. Uhl-Bien and Marion (2009) contend that four conditions enable emergence: dynamic interaction within informal networks, interdependence of agents, heterogeneity of human and physical agents, and adaptive tension. Lichtenstein and Plowman (2009) maintain that four sequential conditions are necessary but insufficient conditions for emergence: the presence of a disequilibrium state, which occurs when activities outside the norm disrupt existing patterns; amplifying actions, which are small fluctuations that "can bring unanticipated and substantive changes" to a system in disequilibrium; recombination / self-organization, which occurs "when the agents/resources in a system recombine into new patterns of interaction that tend to improve system functioning"; and stabilizing feedback, which is "damping feedback that slows the amplification and keeps the emergent change from spinning the system out of control" (Lichtenstein & Plowman, 2009, p. 620).

According to Lichtenstein and Plowman (2009), these four conditions emerged from their analysis of three empirical studies: Plowman et al. (2007) studied radical change in a declining church, an example of emergence within an existing organization; Lichtenstein (2000) studied the unpredictable transformations that occurred in three high-tech startups, an example of the emergence of new organizations; and Chiles et al. (2004) studied the transformation of Branson, Missouri into a musical entertainment center, an example of emergence across organizations. Based on these empirical studies, Lichtenstein and Plowman (2009) identified nine behaviors that help create the four conditions necessary for emergence. Noting that individuals at all levels of the organization can enact these behaviors, the authors describe them in terms of their influence on the four conditions:

Disrupt existing patterns by:

1. Embracing uncertainty
2. Surfacing conflict and creating controversy

Amplify actions by:

3. Allowing experiments and fluctuations
4. Encouraging rich interactions
5. Supporting collective action

Encourage recombination and self-organization by:

6. Creating correlation through language and symbols
7. Recombining resources
8. Allowing leaders to accept "tags" [become "identifiers for a valued set of behaviors," p. 625]

Stabilize the system by:

9. Integrating local constraints

(Lichtenstein & Plowman, 2009, pp. 621-625)

Implications for this study. Higher education faces an adaptive challenge, and higher education leaders can employ specific behaviors to foster the conditions that lead to adaptation and emergence.

For this reason, I designed the study to produce findings that higher education leaders might use to enact these behaviors. This study explored the diverse perspectives that a small group of higher education leaders hold about corporatization in American colleges and universities. In the findings, I attempted to preserve and present the unique viewpoint of each of the 20 participants and to highlight rather than reduce the naturally occurring differences among them.

With these kinds of findings, higher education leaders might, for example, be better able to surface conflicts in the views that higher education members hold about corporatization. Coinciding with Lichtenstein and Plowman's (2009) second behavior, this activity might help to unsettle fixed patterns of thought and behavior, one of the prerequisites for emergence. Leaders might also use the findings to stimulate the engagement of colleagues with the adaptive challenge and foster rich dialogue among colleagues with disparate views. Coinciding with Lichtenstein and Plowman's (2009) fourth behavior, this action might amplify novel ideas and unconventional movements within the organization, another prerequisite for emergence. Reflecting the principles of Heifetz and Laurie (1997), leaders might use the findings to encourage unorthodox thinking and original voices that challenge the status quo. They might use the findings to discern areas of conflict, view these as symptoms of the adaptive challenge, and deepen their understanding of the work to be done. They may also use the awareness of conflict areas to help themselves and their colleagues regulate the stress inherent to adaptive work.

Review of the Literature on Corporatization in Higher Education

The purpose of the present study was to explore how higher education leaders think about corporatization in American higher education, not to understand the multifaceted phenomenon of corporatization itself. In corporatization, global, political, economic, and social forces interact with countries, cultures, governments, institutions of higher education, and people in a dynamic interplay that is constantly unfolding. Exploring the full complexity of the topic is beyond the scope of this study. Therefore, I review here only those intellectual streams within the corporatization literature that provide context for the views of study participants.

I begin with a review of the literature about the possible causes and effects of corporatization in higher education. Because of the complexity of the subject, many of the scholarly works describe multiple factors intertwined by complex relationships. A factor that is the cause of one dynamic is often the effect of another. Two factors may be mutually influential, rendering each other both a cause and an effect. Nonetheless, I organize the works into two broad groupings: possible causes of corporatization and possible effects of corporatization. Some works may belong to both categories, but the groupings allow for a coherent accounting of the literature. I also highlight both cause and effect dimensions of certain works when necessary for the integrity of the overview. Because the present study focused on the views of higher education leaders about corporatization, I return to the literature in a third section to summarize what the knowledge base currently contains about those views.

Possible causes of corporatization in higher education. According to scholars, the possible causes of corporatization in higher education are multiple and highly interrelated. In this section, I divide the discussion into two broad areas: sociopolitical dynamics and higher education dynamics.

Sociopolitical dynamics as causes. Across the literature, authors highlight important sociopolitical factors that contribute to corporatization in higher education: globalization, neoliberalism, and new public management. For each of these dynamics, I describe important themes from the literature.

Globalization. The concept of globalization is central to the discussion of corporatization in higher education, yet the word has many meanings. A review of the globalization literature is beyond the scope of this study, but an introduction lays a foundation for the higher education literature. Therefore, I begin with an overview of the concept as presented by Steger (2009). In the broadest view, the essence of globalization is “shifting forms of human contact” (Steger, 2009, p. 10). More specifically, globalization refers to “a set of social processes that appear to transform our present social condition of conventional nationality into one of globality,” where globality is a “social condition characterized by tight global economic, political, cultural, and environmental interconnects and flows that make most of the currently existing borders and boundaries irrelevant” (Steger, 2009, p. 9). Many scholars, Steger claims, see globalization as part of a much larger human trajectory. In this view, the expansion of relationships began with the earliest humans, moves today toward globality, and later might move toward a planetary social consciousness. In its present state, globalization entails the “thickening of the global consciousness [that] destabilizes and unsettles the conventional nation-state within which people imagine their communal existence” (Steger, 2009, p. 10). It involves “the expansion and intensification of social relations and consciousness across world-time and world-space,” all of which occur at the economic, political, cultural, and ecological levels (Steger, 2009, p. 15).

In addition, globalization has spawned several ideologies, which Steger (2009) defines as “systems of widely shared ideas and patterned beliefs that are accepted as truth by significant groups in society” (p. 103). Advocates of specific ideologies, according to Steger, codify and disseminate them to the public as if they were self-evident truths. Currently, in the view of Steger (2009), the most dominant ideology is market globalism, which global elites have been propagating since the 1980s. Market globalists seek to imbue globalization with the norms of the free market, and they make the following claims: “Globalization is about global integration of markets; it is inevitable and irreversible; it is a process not overseen by anyone; it benefits everyone; and it spreads democracy around the world" (Steger, 2009, p. 106). Arising from the political Left, justice globalism is another ideology. Its proponents advance the agenda of the social justice movement, and they make the following claims: "Neoliberalism produces global crises; market-driven globalization has increased worldwide disparities in wealth and wellbeing; democratic participation is essential in solving global problems; another world is possible and urgently needed; and people power, not corporate power!" (Steger, 2009, p. 122). Arising from the political Right, religious globalism is a third ideology. With this ideology, certain groups (such as the Muslim group Al Qaeda or the Christian Army of God) strive to see their religious community gain worldwide dominion (Steger, 2009).

The higher education literature contains several intellectual streams related to globalization: types of globalization, globalization as a cause of corporatization, and the global scope of corporatization. Regarding types of globalization, Torres and Rhoads (2006) offer a taxonomy similar to Steger (2009). Their *globalization from above* is the counterpart to Steger's (2009) market globalism, and their *globalization from below* is the counterpart to Steger's justice globalism (Torres & Rhoads, 2006). In addition, Torres and Rhoads propose the *globalization of culture*, the *globalization of human rights*, and the *globalization of the war on terror*.

Many scholars of higher education point to globalization as one of the causes of corporatization in postsecondary education (Apple, 2000; Currie, 1998; Currie & Newson, 1998; Miyoshi, 2000; Rhoades & Slaughter, 2006; Rhoads & Torres, 2006; Schugurensky, 2006, 2007; Torres & Rhoads, 2006). With the exception of Torres and Rhoads (2006), these authors do not reference a particular type of globalization. Yet, their writing typically implies the market globalist ideology described by Steger (2009), a conception that is very similar to neoliberalism. Because I present literature related to neoliberalism in the next section, I subsume the perspectives of the authors listed here under that discussion.

In addition to the discourse about globalization, the literature offers ample evidence that corporatization in higher education is a global phenomenon. Slaughter and Leslie (1997), for example, found significant market behavior in colleges and universities in three of the four countries they studied: Australia, the United Kingdom, and the United States developed research partnerships with corporations; targeted programs that aligned with the global marketplace; and implemented reforms focused on efficiency and cost reduction. Canada, the fourth country, did not (Slaughter & Leslie, 1997). Yet, Metcalfe (2010), in an examination of Canada a decade later, found significant corporatization in its institutions of higher education. Canada, the author reports, is "no longer the exception" (Metcalfe, 2010, p. 503). In the Netherlands, Engelen, Fernandez, and Hendrikse (2014) studied the University of Amsterdam. Despite it being a publicly funded European university "controlled by vested, well established professional guilds," the researchers found dramatic marketization and managerialism (Engelen et al., 2014, p. 1074). Yokoyama (2006) found growing entrepreneurialism and market-oriented policies in a study of two Japanese universities, and Maistry (2012) relates that "western performance-driven models grounded in economic rationalism" have permeated publicly funded higher education in South Africa (p. 515).

Neoliberalism. Like globalization, neoliberalism is central to the corporatization literature, but a thorough review of neoliberalism is beyond the scope of this study. An introduction to the concept, though, lays groundwork for the higher education literature.

Therefore, I first offer an overview of neoliberalism as presented by Steger and Roy (2010). According to these authors, neoliberalism has roots in classical liberalism (Steger & Roy, 2010). Arising with the Enlightenment, classical liberalism held that "all men were free and equal, therefore possessing inalienable rights independent of the laws of any government or authority... [and were] naturally endowed with the right to life, liberty, and property" (Steger & Roy, 2010, Location 427). In economics, classical liberalism advocated for free markets, which allowed individuals to act with reason based on their self-interest (Steger & Roy, 2010). In government, classical liberalism promoted a restrained state that acted to protect the rights and economic freedoms of individuals (Steger & Roy, 2010). In the United States, classical liberalism prevailed until the Great Depression, when economists like John Maynard Keynes argued that "modern capitalism had to be subjected to certain regulations and controls by a strong secular state" (Steger & Roy, 2010, Location 441). Characterized by large government, social programs, and industry regulation, the Keynesian era in the United States lasted until the financial crisis of the 1970s, when neoliberals revived classical liberalism to correct those economic woes (Steger & Roy, 2010). Established in the 1980s and ascendant in the 1990s, the neoliberal agenda included global free markets, neoliberal control of powerful non-governmental organizations like the International Monetary Fund (IMF) and the World Bank, and the use of the IMF and World Bank to incentivize neoliberal restructuring of the Global South (Steger & Roy, 2010).

In the contemporary world, neoliberalism takes multiple forms; it is simultaneously an ideology, a mode of governance, and a policy framework (Larner, 2000; Steger & Roy, 2010). As an ideology, neoliberalism is equivalent to the market globalism described by Steger (2009); it is an economistic perspective that “puts the production and exchange of material goods at the heart of the human experience” (Steger & Roy, 2010, Location 521). As a mode of governance, neoliberalism “adopts the self-regulating free market as the model for proper government”; embraces entrepreneurial values such as competitiveness, self-interest, decentralization, and individual empowerment; and embraces business practices such as strategic planning, cost-benefit analyses, quantitative targets, and performance management (Steger & Roy, 2010, Location 525). As a policy framework, neoliberalism adheres to five values: “the individual; freedom of choice; market security; laissez faire; and minimal government" (Larner, 2000, p. 7). These values serve as the foundation for its policies of deregulation, liberalization, and privatization (Steger & Roy, 2010). Neoliberal policies also include tax cuts for corporations and high earners, reduced social services, government downsizing, and tax incentives for domestic and international corporations (Steger & Roy, 2010). In the following passage, Larner (2000) describes neoliberal states:

> Rather than formulating policies to ensure full employment and an inclusive social welfare system, governments are now focused on enhancing economic efficiency and international competitiveness. One consequence is the "rolling back" of welfare state activities, and a new emphasis on market provisioning of formerly "public" goods and services. (pp. 6-7)

In the higher education literature, nearly all authors point to neoliberalism as the most powerful cause of corporatization (Apple, 2000; Chan & Fisher, 2008b; Currie, 1998; Currie & Newson, 1998; Deem, Hillyard, & Reed, 2007; Giroux, 2014; Miyoshi, 2000; Peters, 2013; Rhoads, 2011; Rhoades & Slaughter, 2006; Rhoads & Torres, 2006;

Santos, 2006; Schugurensky 2006, 2007; Slaughter & Leslie, 1997; Slaughter & Rhoades, 2004; Sumner, 2008; Torres & Rhoads, 2006; Ward, 2012). For example, Chan and Fisher (2008b) maintain that neoliberal resistance to funding public services forces public higher education into the market to support its operations. Similarly, Schugurensky (2006) claims that neoliberalism impels universities to shift from their social missions to "market-oriented values, urgencies, and practices" (p. 317). Rhoads and Torres (2006) cite their concern about "the degree to which access to a sound postsecondary education will be available if the neoliberal privatization movement fully succeeds" (p. 338). In *Neoliberalism's War on Higher Education*, Giroux (2014) concurs and goes further, charging that neoliberalism "attempts to undermine all forms of solidarity capable of challenging market-driven values and social relations, promoting the virtues of an unbridled individualism almost pathological in its disdain for community, social responsibility, public values, and the public good" (p. 2).

In the corporatization literature, some scholars posit theories about the dynamics that produced neoliberalism. Newfield (2008), for example, argues that the decline in public funding for American higher education results from a forty-year effort by conservatives to retain power by discrediting the college-educated middle class. Taking a different view, St. John and Parsons (2004) contend that privatization in American higher education resulted from a breakdown in political consensus. In the old consensus, conservatives believed that public investment in higher education produced economic development, and liberals believed it provided social development; for contrasting reasons, the camps united in their support of public funding (St. John & Parsons, 2004). In the 1980s, though, conservatives held that higher education was wasteful and that public funding slowed the economy. In response, liberals shifted from their traditional position; they accepted the importance of both economic and social development and refocused their social development agenda on student preparation for college (St. John & Parsons, 2004).

New public management. As with globalization and neoliberalism, a full review of the literature about new public management is beyond the scope of this study. Because the concept is important to the topic of corporatization, though, I first offer a clarification of terms and then a brief introduction. Regarding terms, scholars refer to the closely related concepts of new public management, new managerialism, and managerialism, but they disagree about the differences between them (Bevir, 2012; Clarke et al., 2000; Peters, 2013). Although the dissimilarities are important to the discourse of public administration, they are not salient for this discussion. Therefore, I treat the terms as synonymous. When referring to the work of an author, I use the term used by that author. Otherwise, I use the term new public management and its acronym NPM.

Providing background for the NPM concept, Gruening (2001) relates that Progressives developed classical public administration in the late 19th and early 20th centuries. It resulted in public bureaucracies that used techniques of scientific management such as hierarchy, unity of command, and division of work (Gruening, 2001). In the 1960s and 1970s, though, the public increasingly viewed bureaucracies as ineffective and unresponsive, and a new approach to governance called NPM began to take hold in the 1980s (Bevir, 2012). Dominant in Anglophone countries (Bevir, 2012) but present across the world (Steger & Roy, 2010), NPM was a market-based reform of the public sector (Bevir, 2012; Clarke et al., 2000; Gruening, 2001; Steger & Roy, 2010).

Emphasizing efficiency and the effective use of resources, NPM employed business tactics such as budget cuts, downsizing, performance monitoring, performance-based incentives, outsourcing, privatization, public-private partnerships, and improved financial management (Bevir, 2012; Clarke et al., 2000; Gruening 2001). Steger and Roy (2010) characterize NPM as the "operationalizing of the neoliberal mode of governance for public servants" (Location 535).

In the higher education literature, multiple scholars name the closely related ideas of new public management, new managerialism, or managerialism as sociopolitical contributors to corporatization in higher education (Clarke et al., 2000; Deem & Brehony, 2005; Deem et al., 2007; Ferlie, Musselin, & Andresani, 2008; Kezar & Lester, 2011; Marginson, 2013; Nickson, 2014; Peters, 2013; Ward, 2012). Based on interviews at 16 universities in the United Kingdom, Deem and Brehony (2005) concluded that new managerialism was pervasive and cited participant reports of increased academic workload, greater surveillance of academics' performance, growth in the proportion of managers to academics, and growth in the number of manager-academics (Deem & Brehony, 2005). In the view of these scholars, new managerialism helps "cement relations of power and dominance, even in contexts like universities which were not traditionally associated with the dominance of management" (Deem & Brehony, 2005, p. 217). Writing in the context of European higher education, Ferlie et al. (2008) express concern that governments seek to steer higher education systems as they steer other public services. For these authors, the shift towards public management of higher education entails a shift in power from academics to managers and a relegation of academics to a peripheral role executing the strategies of management (Ferlie et al., 2008). Because of their concern that new managerialism is shifting faculty out of leadership, Kezar and Lester (2011) studied 165 grassroots leaders in five American colleges and universities. Asserting that "grassroots leadership might represent a counterforce," the researchers encourage faculty and staff to resist "being managed professionals" and offer their findings as successful strategies for others to adopt (Kezar & Lester, 2011, pp. 14-15).

Higher education dynamics as causes. In the view of some scholars, the causes of corporatization in higher education are not limited to sociopolitical forces; they contend that the internal dynamics of colleges and universities either cause or further the corporatization process. In this section, I organize the literature into broad categories based on the attribution of cause to internal entities or dynamics: faculty, administration, the higher education system, or academic capitalism.

Faculty. In the corporatization literature, a few writers contend that faculty members contribute to the phenomenon. Burgan (2006), for example, places partial blame on the passivity of faculty who have allowed the corporate approach to dominate. In their defense of academic autonomy, Newson and Polster (2008) list many reasons for the decline of faculty autonomy including faculty members themselves. In the view of these authors, three faculty behaviors exacerbate the problem of declining autonomy: retreating from participation in governance, adjusting to increases in the private control of knowledge, and accepting performance indicators as measures of worth (Newson & Polster, 2008). From a completely different perspective, Garland (2009) argues that states can no longer afford public higher education, that colleges and universities must adjust, and that a change-resistant academic culture is a barrier to effective adaptation.

Administration. In the corporatization literature, a number of authors view administrators as causing or contributing to the commercialization of higher education. Ginsberg (2011), for example, places the blame for the diminished role of faculty at the feet of administrators, describing faculty as "crushed under" an "administrative superstructure" (p. 24). Regarding corporatization, Bousquet (2008) contends that one explanation for the phenomenon is the culture of administration. While vital student and faculty cultures no longer exist, the author argues, administrative culture has become stronger, more consistent, and more aligned with the process of commercialization (Bousquet, 2008). Schrecker (2010) also points to administrators. While acknowledging the external challenges that face higher education, this author states:

> Not until the men and women who lead the nation's colleges and universities jettison their business orientation and come to recognize how much their institutions depend on having a stable and independent faculty will the American academy recover its soul. (Schrecker, 2010, p. 224)

The higher education system. Various scholars of corporatization attribute a degree of cause to one of the national systems of higher education or to the global system of higher education.

From the perspective of the Canadian scholars Côté and Allahar (2011), for example, the drift toward corporatization reflects the fact that the Canadian educational system has lost the distinction between training students and developing critical thinking through the liberal arts. Speaking of American higher education, Smelser (2013) contends that its tendency to accumulate functions through accretion leads to massive size, escalating costs, complex constituencies, and an inflexible infrastructure. These conditions leave the system vulnerable to environmental changes such as reduced state funding and globalization (Smelser, 2013). Analyzing how American higher education came to be commercialized, Rhoads (2011) argues that major fault lines exist in the American model of the university. From its Germanic influence, the author claims, American higher education adopted a positivist view of science that precluded more expansive and more critical views; from the WWI and WWII era, it developed close ties to militarism and violent methods of conflict resolution; from the multiversity and neoliberal periods, it developed into a profit-seeking institution aligned with American commercialism (Rhoads, 2011). These faults reflect what the author holds is the deepest shortcoming of the American university: "a serious inability for self-reflection and self-criticism" (Rhoads, 2011, p. 19).

Other scholars find cause for corporatization in a quality of the higher education system across all nations. For example, Desai (2007) holds that the contemporary university rests on a medieval model that claims the role of gatekeeper and producer of knowledge. Yet, the university, the author argues, disseminates knowledge in such inefficient, labor-intensive ways that it cannot meet the needs of society. Consequently, corporate competitors encroach (Desai, 2007). Another example is Marginson (2011), who argues that the status-seeking market behavior of colleges and universities worldwide—not the market itself—is the real enemy of the public mission of higher education. "Despite neoliberalism," the author claims, "the economic market has not taken over the sector, but status competition, which conditions partial commodification, restricts the flow of public benefits, and splinters the common interest, has moved in everywhere" (Marginson, 2011, p. 429).

Academic capitalism. Defined by Slaughter and Leslie (1997) as the market-oriented, revenue-seeking behaviors of colleges and universities, their faculties, and their staffs, academic capitalism is a complex phenomenon. In their 1997 study, Slaughter and Leslie found significant academic capitalism in American, British, and Australian higher education: faculty pursuing corporate funding of research, faculty engaging in technology transfer (moving products and services to market), and institutions creating science centers as public-private partnerships. Based on data from a 20-year period, the researchers concluded that reductions in government funding "promote academic capitalism because they push faculty and institutions into market and market-like behaviors to compensate for loss of share from block grants" (Slaughter & Leslie, 1997, p. 111).

Yet, in a follow-up study focused on American colleges and universities, Slaughter and Rhoades (2004) discovered profound changes since the earlier study. Instead of higher education "being 'corporatized'" by external forces, the researchers found faculty, staff, administrators, and board members aggressively initiating and pursuing revenue-generating opportunities and restructuring their organizations to support those endeavors (Slaughter & Rhoades, 2004, p. 12). Based on multiple case studies of American colleges and universities, Slaughter and Rhoades (2004) proposed a theory of academic capitalism that "explains the processes by which universities integrate with the new economy" (p. 14). Comprehensive in scope, the theory details factors that collectively create academic capitalism. Among them are the new economy, which sees advanced knowledge as raw material; the neoliberal state, which promotes individual actors in the market; new circuits of knowledge, which bring education closer to the market; extended managerial capacity within institutions of higher education; and extensive market behaviors by every group within higher education (Slaughter & Rhoades, 2004).

As part of their analysis, Slaughter and Rhoades (2004) illuminate some rarely discussed dynamics of college and university market behavior. For example, the authors point out that institutions of higher education want the benefits that accrue to private enterprise such as enhanced revenue and commercial labs that subsidize product development (Slaughter & Rhoades, 2004). Yet, they do not want the downside of private enterprise such as lack of government subsidies, taxes, corporate accounting standards, accountability for risks taken with donor money, or liability for mistakes and malpractice (Slaughter & Rhoades, 2004). In addition, Slaughter and Rhoades (2004) claim that academic capitalist activities depend on subsidies from state and federal funds and/or state and federal student financial aid; for this reason, the authors argue that "academic capitalism in the new economy involves a shift, not a reduction in public subsidy" (p. 308). Furthermore, the researchers contend that "higher education institutions are often not very successful capitalists, and students and the public have to pick up the tab for their failures" (p. 33).

In conclusion, Slaughter and Rhoades (2004) assert that American higher education is "shifting from a public good knowledge/learning regime to an academic capitalist knowledge/learning regime" (p. 28) in which "knowledge is construed as a private good, valued for creating streams of high-technology products that generate profit as they flow through global markets" (p. 29). Academic capitalism is complex, not easily summarized, and not easily categorized within the present discussion of corporatization.

It encompasses both causes and effects of corporatization and their complex interrelationships. Because of the increasingly proactive market behavior of colleges and universities, though, I have chosen to place the topic in the discussion of causes.

Possible effects of corporatization in higher education. In this section, I turn to the possible effects of corporatization, and the literature abounds with both conceptual and empirical works. I group these works into three categories: large-scale effects on society, large-scale effects on higher education, and effects on specific populations.

Large-scale effects on society. According to scholars, the corporatization of postsecondary education is a worldwide phenomenon with profound effects on society. In this section, I discuss two themes from the literature: restructuring of the knowledge function in society and the threat to the public mission of higher education.

Restructuring of the knowledge function. According to many scholars, the corporatizing forces of globalization and neoliberalism have restructured the knowledge function in society (Alderman, 2001; Cohen & Kisker, 2010; Chan & Fisher, 2008a; Lechuga, 2006; Miyoshi, 2000; Noble, 2001; Rhoads, 2011; Savage, 2007; Slaughter & Leslie, 1997; Slaughter & Rhoades, 2004; Sumner, 2008; Ward, 2012). Traditionally, nonprofit higher education was the social institution most responsible for the production and distribution of knowledge (Desai, 2007; Ward, 2012), but neoliberal reforms have dramatically reshaped these processes (Slaughter & Rhoades, 2004; Ward, 2012). Three themes emerge from the literature: changes in the conception of knowledge, changes in production of knowledge, and changes in the dissemination of knowledge.

A number of scholars argue that corporatization is altering society's conception of knowledge. For example, Ward (2012) contends that neoliberal forces have "sought to transform knowledge into an engine of economic development" (p. 9), and Miyoshi (2000) characterizes the process as a "conversion of learning into intellectual property" (p. 8). Slaughter and Rhoades (2004) agree; in their words, "the new economy treats advanced knowledge as raw material that can be claimed through legal devices, owned, and marketed as products or services" (2004, p. 15). Like Ward and Miyoshi, Slaughter and Rhoades hold that sociopolitical forces are reconstructing knowledge as a private rather than a public good, one with profit-making potential on the open market.

In addition, multiple authors hold that neoliberal forces are reworking society's knowledge production processes. Savage (2007), for example, highlights the growing influence of political earmarks on the national research agenda. When powerful members of Congress win funding for universities in their districts, they undermine peer review, which uses scientific merit to determine which research efforts warrant funding (Savage, 2007). From a different perspective, Chan and Fisher (2008a) cite the increasing dominance of research funding for the hard sciences. The growing imbalance means that society's pursuit of new knowledge increasingly focuses on science, not the humanities or social sciences (Chan & Fisher, 2008a). Similarly, in their study of Anglophone colleges and universities, Slaughter and Leslie (1997) found that numerous academics had shifted their focus from basic research to applied research in order to win external funding from commercial sources.

Finally, a number of scholars describe changes in society's process of knowledge dissemination. Some note that higher education has turned away from the traditional ethos of a knowledge commons (Sumner, 2008) or shared public knowledge (Ward, 2012). Now, according to Slaughter and Rhoades (2004), patent and copyright policies allow colleges, universities, and faculties to profit while they limit the distribution of knowledge—"perhaps constraining discovery and innovation" in the process (p. 29). Similarly, the strong ties between universities and industry facilitate technology transfer, the process in which higher education transfers scientific discoveries to commercial sponsors or buyers (Chan & Fisher, 2008a). Also influencing the social distribution of knowledge is the practice, reported by Slaughter and Leslie (1997), in which colleges and universities "channel students and resources into well-funded curricula that meet the needs of a global marketplace" (p. 63). And claiming that knowledge no longer flows only through academic, scientific, and professional networks, Slaughter and Rhoades (2004) identified new circuits of knowledge in which actors inside and outside higher education create networks and flows of knowledge that connect higher education to the market.

Threat to the public mission of higher education. Many scholars discuss the threat that corporatization presents to the public mission of higher education (Apple, 2000; Chan & Fisher, 2008b; Cohen & Kisker, 2010; Giroux, 2014; Miyoshi, 2007; Rhoads & Rhoades, 2005; Santos, 2006; Schugurensky, 2006; Slaughter & Leslie, 1997; Slaughter & Rhoades, 2004; Ward, 2012). Ward (2012) argues that the neoliberal state transforms higher education from an institution that invests in citizens' collective wellbeing to one that seeks market efficiencies and excellence in product production. Giroux (2014) decries "the near-death of the university as a democratic public sphere" (p. 172), and Miyoshi (2007) declares that "higher education as a whole is currently experiencing a nearly complete loss of its historic purpose" (p. 219). Because higher education is "increasingly conditioned by market demands and state imperatives," Schugurensky

(2006) argues, it "lacks the wherewithal to pursue ends that serve the broader common good" (p. 36).

Large-scale effects on higher education. Many scholars describe sweeping changes within higher education that stem from corporatization. In this section, I review the literature related to five large-scale effects on higher education: new opportunities or options for survival, shifts in revenue sources, vocationalization of the curriculum, ethical challenges, and new organizational culture and practices.

New opportunities or options for survival. In the literature, a few rare authors see in corporatization the potential for new higher education opportunities, and a small number see the need for higher education to adapt to market forces. Because opposition to corporatization dominates the literature, these voices represent countervailing views and thus deserve a place in this overview.

Clark (1998), for example, studied five European universities that had integrated academic capitalist initiatives and had become, in the author's view, successful entrepreneurial universities. Identifying five factors that led to their success, Clark (1998) maintained that this entrepreneurial response might be a way for universities to recover lost autonomy. Good (2004) stands in favor of the opportunities provided by the Bayh-Dole Act of 1980, which allowed researchers and universities to patent or license discoveries funded by federal dollars. The author argues that the legislation jumpstarted universities' pursuit of patents, fostered more university-corporation partnerships, and greatly benefitted the economy (Good, 2004). Similarly, Holbrook and Dahl (2004) contend that the Bayh-Dole Act engendered technology transfers that brought revenue to universities, innovative products to consumers, and economic development to the country. While cautioning that universities must protect their academic values, Hall (2004) maintains that academic-industry partnerships in biomedical research have provided enormous benefit to the economy and to society.

Less sanguine are the views of authors who contend that higher education may need to adapt to corporatizing forces in order to survive. Combining this view with criticisms of traditional higher education, Garland (2009) and Vedder (2004) recommend moving public higher education away from public subsidy and toward the free market. To some extent, Duderstadt and Womack (2003), Zemsky, Wegner, and Massy (2005), and Newman, Couturier, and Scurry (2004) agree; they argue that higher education must integrate some market principles but must not lose sight of student learning or their public mission. Offering a circumspect view, Bok (2003) contends that the corporatization of higher education is neither good nor bad; the author identifies potential benefits but cautions about pitfalls.

Shifts in revenue sources. Many writers discuss the shift in revenue sources for both public and private higher education as an important effect of corporatization (Cohen & Kisker, 2010; Marginson, 2013; Rhoads, 2011; Schuster & Finkelstein, 2006a; Slaughter & Leslie, 1997; Slaughter & Rhoades, 2004; St. John & Parsons, 2004; Ward, 2012; Williams, 2006; Zumeta, 2004). Speaking of American higher education, Zumeta (2004) confirms that "state support for higher education...has fallen steadily as a percentage of personal income across all fifty states for more than twenty years" (p. 83). These "downturns in state appropriations led to sharp tuition hikes and intensified fundraising across all sectors of higher education" (Cohen & Kisker, 2010, p. 528), and

American colleges and universities have grown more dependent on students and donors as revenue sources (Cohen & Kisker, 2010; Rhoads, 2011; Zumeta, 2004).

Higher education has also expanded its portfolio of revenue sources. Major funding from philanthropic organizations like the Bill & Melinda Gates and Lumina foundations have incentivized the embrace by colleges of various college completion programs (Hall, 2011). Corporate financing of university research has increased. For example, the National Science Foundation (2014) reports that federal funding for university research grew 1.9% between 2010 and 2014, while corporate funding grew 31.93% in the same period. And, across all types of institutions, academic capitalist activities have created new revenue streams from sources like patents, licensing of copyrighted material, consulting, and sports-related marketing (Rhoads, 2011; Slaughter & Rhoades, 2004; Ward, 2012). Although every country is unique, scholars report similar revenue shifts in various countries around the world (Chan & Fisher, 2008b; Marginson, 2013; Slaughter & Leslie, 1997).

Vocationalization of the curriculum. Numerous scholars address the ongoing transformation of the college curriculum into one that emphasizes vocational preparation for the global marketplace (Brint, 2002; Côté & Allahar, 2011; Delucchi, 1997; Giroux, 2014; Grubb & Lazerson, 2005; Miyoshi, 2000; Rhoads & Rhoades, 2005; Slaughter & Leslie, 1997; Torres & Rhoads, 2006). Côté and Allahar (2011), for example, decry the combined forces of massification, vocationalism, corporatization, and social engineering that they believe threaten the survival of liberal arts education (p. 16), and Miyoshi (2000) contends that "culture—arts and literature—is being driven out of academia" and repackaged for consumption as media and entertainment (p. 18). Substantiating these claims, Brint (2002) compared program enrollments in American colleges and universities between 1970 and 1995 and reported that “during a period in which the [higher education] system grew by 50 percent, almost every field which constituted the old arts and sciences core of the undergraduate college was in absolute decline” (p. 235). From a different perspective, Delucchi (1997) also highlights the ascendancy of occupational education: The author found that the number of professional degrees awarded outnumbered nonprofessional degrees at 68% of American colleges that characterized themselves as primarily liberal arts colleges.

Ethical challenges. Multiple scholars point out ethical challenges that colleges and universities face as they engage in academic capitalist behavior (Bok, 2003, 2004; Cohen & Kisker, 2010; Hansen, 2007; McKenna, 2009; Muzzin, 2008; Savage, 2007; Slaughter & Leslie, 1997; Slaughter & Rhoades, 2004; Soley, 1995; Washburn, 2005). Hansen (2007), for example, reports widespread conflicts of interest among university researchers since the enactment of two laws: the Bayh-Dole Act of 1980 and the Federal Technology Transfer Act of 1986, which allowed federally funded researchers to enter into research and development agreements—and share profits—with corporations. In Hansen’s (2007) view, these laws incentivized researchers to use public money for research goals that were in their own interest and that of corporations. Bok (2003) agrees, adding that corporations sometimes influence research results or require secrecy to protect their competitive advantage, activities at odds with university research ethics. Soley (1995) goes further, accusing individuals and universities by name with corruption in scientific research, and McKenna (2009) charges that Michigan universities ignored Dow Chemical’s dioxin pollution because of Dow’s large university endowments.

Outside of university research, Muzzin (2008) compared the situation of contingent faculty to migrant labor theory and concluded that their inequitable positions reflect organizational injustice. Giroux (2014) and Bok (2003) hold that the intense pursuit of sports-related revenues warps the culture and values of the academy.

Changing organizational culture. Scholars report striking change in the organizational culture within institutions of higher education. For most, the emerging culture reflects a shift from academic to corporate values, emphasizing efficiency and financial considerations over teaching and learning (Cohen & Kisker, 2010; Deem & Brehony, 2005; Engelen et al., 2014; Giroux, 2014; Slaughter & Leslie, 1997). Deem and Brehony (2005) describe a culture of efficiency with a focus on "doing more with less" (p. 224). Slaughter and Leslie (1997) portray a culture permeated with an unrelenting drive for "revenue maximization" that manifests as academic capitalism and incentives-based budgeting (p. 249). Decrying the loss of discourse about the common good, Giroux (2014) contends that universities are "increasingly defined in the language of corporate culture" (p. 138). In addition, a number of scholars report conflict between administration and faculty as characteristic of this culture (Bousquet, 2008; Deem et al., 2007; Schuster & Finkelstein, 2006a). Most appear to side with Bousquet (2008), who argues that "management culture is pitched toward continuous struggle with faculty culture" (p. 11), while only a few might agree with Garland (2009), who contends that faculty culture is overly defensive and resistant to necessary change. Meanwhile, the culture continues to shift. Bousquet (2008) reports that acceptance of corporate values is spreading among tenured and tenure-track faculty, and Chan and Fisher (2008a) note a generational change in which new researchers consider the pressure to obtain funding a "given...in their reality" (p. 64).

Effects on specific populations. In addition to literature on the large-scale effects of corporatization, a substantial amount of literature pertains to the effects of corporatization on specific populations, particularly faculty. In this section, I review literature about the effects of corporatization on faculty, students, and marginalized populations. No literature emerged that addressed the effects of corporatization on higher education staff or administrators.

Faculty. Scholars have produced extensive literature about the effect on faculty of corporatization in higher education, and several themes have emerged: restructuring of academic work, stratification of faculty, faculty as managed professionals, faculty as academic capitalists, and work dissatisfaction among faculty.

After analyzing 28 surveys administered to American faculty between 1955 and 2004, Schuster and Finkelstein (2006a) concluded that the surveys demonstrated an unprecedented restructuring of academic work. The restructuring, the researchers claim, is occurring at three levels: academic appointments, academic work, and academic careers (Schuster & Finkelstein, 2006a). Academic appointments have shifted dramatically toward contingent positions focused on teaching, while all types of academic appointments are now more specialized in teaching, research, or service (Schuster & Finkelstein, 2006a). In terms of academic work, Schuster and Finkelstein (2006a) report that academics have allocated more time to teaching and research (when research is part of the job); this is "offset by a progressive diminution of administrative responsibilities...and a contraction in the arena within which faculty operate as academic citizens" (p. 123). In terms of academic careers, Schuster and Finkelstein (2006a) report that entry to an academic career is much more competitive despite the fact that starting salaries are declining. In addition, certain fields like English are becoming women's careers, "although women's ranks are swelling across all fields" (Schuster & Finkelstein, 2006a, p. 51).

Stratification of faculty is another development related to corporatization, and several types of stratification are underway. One is between contingent and traditional faculty. Schuster and Finkelstein (2006a) found that contingent and traditional faculty positions were becoming distinct career tracks with limited movement between them. Berry (2005) and Cohen and Kisker (2010) add that, despite being the majority group, contingent faculty positions are low-prestige positions with low pay, few benefits, no job security, and little role in governance. Another emerging stratification is between faculty in fields that attract corporate funding and faculty in fields that do not. Scholars report a growing divide (Miyoshi, 2007), tension (Slaughter & Rhoades, 2008), and concern about the imbalance (Chan & Fisher, 2008a) between the hard sciences, which often align with corporate goals, and the humanities and social sciences, which do not. A third stratification is between the growing ranks of manager-academics (faculty who have agreed to blend academic activities with managerial responsibilities) and traditional faculty. In a study of United Kingdom universities, manager-academics reported new tensions related to their managerial duties: long hours on campus, considerable paperwork, numerous meetings, lack of resources, target-setting, and little time for reflection (Deem et al., 2007).

According to numerous scholars, one of the outcomes of corporatization is that faculty have become managed professionals, a much different role than that of traditional tenured faculty (Chan & Fisher, 2008a, 2008b; Cohen & Kisker, 2010; Deem & Brehony, 2005; Fitzgerald, 2014; Kezar & Lester, 2011; Rhoads, 2011). Abundant literature documents the experience of faculty as managed professionals: significant loss of professional autonomy (Cohen & Kisker, 2010; Fitzgerald, 2014); greater emphasis on teamwork (Chan & Fisher, 2008a; Deem & Brehony, 2005); less input in governance to the point of marginalization (Chan & Fisher, 2008b; Cummings & Finkelstein, 2012; Currie, 1998; Gerber, 2014); increased workloads in the form of larger class sizes, longer work hours, and pressure to teach and research to a high standard (Deem & Brehony, 2005; Deem et al., 2007; Fitzgerald, 2014); emphasis on accountability and performance surveillance of academics (Currie, 1998; Deem & Brehony, 2005; Deem et al., 2007); and weakening ties between faculty and their institutions (Cummings & Finkelstein, 2012).

Another outcome of corporatization is faculty in the role of academic capitalists, another function vastly different from the traditional faculty role (Chan & Fisher, 2008a; Slaughter & Leslie, 1997; Slaughter & Rhoades, 2004). Although Slaughter and Rhoades (2004) characterize academic capitalists as faculty, staff, and administrators who voluntarily seek profit from the knowledge economy, others describe faculty under pressure from their institutions to win grants and awards (Chan & Fisher, 2008a; Slaughter & Leslie, 1997). Regardless of faculty motivation, the literature reports the following experiences of faculty acting as academic capitalists: proliferation of opportunities and income sources if the faculty member is entrepreneurial and in a field attractive to the market (Slaughter & Leslie, 1997; Slaughter & Rhoades, 2004); higher salary to the degree that the academic field aligns with market priorities (Cohen & Kisker, 2010; Slaughter & Leslie, 1997); increased risks related to business failures, product liabilities, and the expectations of corporate sponsors; and ever-present conflicts of interests (Slaughter & Leslie, 1997; Slaughter & Rhoades, 2004); faculty concern about the impact on teaching; and a more solitary and complicated work life (Chan & Fisher, 2008a).

Some scholars report that, in the era of corporatization, faculty experience general dissatisfaction in their work lives. For example, in a study of Australian academics, Fredman and Doughney (2012) reported that satisfaction among faculty is low and worsening compared to a similar survey conducted three years earlier. “In the open-ended responses,” the researchers related, “the more dissatisfied academics tended to contrast a marketised present to a collegial past” (Fredman & Doughney, 2012, p. 41). From a different perspective, Bousquet (2008) contends that a vital and sustaining faculty culture no longer exists in contemporary academia. And Giroux (2014) describes the process that, in the view of the author, has demoralized faculties in neoliberal institutions: They lose rights and power, experience moral outrage, attempt to accommodate, and eventually retreat.

Students. Some scholars have examined ways that corporatization impacts students. Several empirical studies, for example, found a significant negative correlation between the use of adjunct faculty and student graduation rates (Ehrenberg & Zhang, 2005; Jacoby, 2006) and the use of adjunct faculty and favored practices such as learner-centered teaching (Baldwin & Wawrzynski, 2011). Expressing a related concern, Slaughter and Leslie (1997) maintain that a decline in the quality of undergraduate education is almost inevitable given the shift away from public funding for higher education. Slaughter and Rhoades (2004) voice a concern about student access, asserting that academic capitalism leads to “an expanded range of educational services geared toward a reduced range of traditional-aged students” (p. 329). Concerning the rising cost of tuition, which impacts students and their families, Williams (2008) argues that escalating student debt is similar to indentured servitude and that “we must begin the debate about how to restore the democratic promise of education” (Williams, 2006, p. 59). Finally, Rhoads and Rhoades (2005) studied the growing ranks of unionized graduate students and determined that unionization directly reflected the negative views those students held about their working conditions, managerialism, and corporatization. In addition, the researchers found these unions concentrated in the humanities and social sciences, disciplines hardest hit by the forces of corporatization (Rhoads & Rhoades, 2005).

Marginalized populations. A few scholars address the effect of corporatization on marginalized populations in higher education. In a study of contingent faculty in Canada, Muzzin (2008) found that many were highly trained faculty members from excluded groups. Describing these contingent faculty as “gender and ethnoracial minoritized” (p. 120), the author maintains that their exploitation reflects the “inequitable nature of the university in an era of academic capitalism” (p. 105). Similarly, in their studies of education faculties, Dillabough and Acker (2008) found that the forces of globalization further the “entrenched practice of gendered or domestic servicing in the ‘social work’ professions” (p. 165). And Martínez Alemán (2014) describes managerialism as “the new discursive masculinity in the university," one that "concentrates women in lower academic administration positions, creating a new form of 'pink-collar ghettoization' in academic women's careers" (p. 122).

The views that higher education leaders hold about corporatization. Because the present study focuses on the views of higher education leaders about corporatization, I return to the literature in this section to summarize what the knowledge base currently contains about those views. Consonant with the theoretical framework of adaptive / complexity leadership theory, the study treats all organizational members as potential leaders. Therefore, I looked for views about corporatization from all types of higher education members. Nearly all of the literature, though, pertained to the views of faculty, while only a small portion pertained to the views of administrators. I found no literature about the views of staff or board members.

The views of faculty. Scholarly literature about any dimension of higher education has a distinctive quality: The authors are members of the community they study. As such, they serve a reflexive function for their faculty role in that environment. That special circumstance might explain, in part, the abundance of literature representing faculty views about corporatization in higher education. It might also explain, in part, the plenitude of conceptual works and the relative scarcity of empirical works regarding faculty views. This phenomenon coincides with Marginson and Considine's (2000) observation that "a large part of the literature on the university has little or no empirical character and is concerned to argue a case for or against one or another body of reforms" (p. 12). In this section, I summarize the literature on faculty views of corporatization, which I organize into conceptual works and empirical studies.

Conceptual works that convey faculty views. Many individual faculty members have written books and articles about their views of corporatization in higher education, and I loosely group them into three categories. One contains faculty who are not scholars of higher education or corporatization but apply knowledge from their discipline to examine the phenomenon. Taking positions on a continuum from scholarly to polemic, these faculty—seemingly without exception—condemn corporatization and its effects on higher education. Examples include the following: Burgan (2006), Côté and Allahar (2011), Gerber (2014), Ginsberg (2011), McKenna (2009), Newson and Polster, (2008), Schrecker (2010), and White and Hauck (2000).

A second group includes those faculty who, in the view of Williams (2012), belong to the emerging field of critical university studies. According to Williams, this field is part of a "new wave of criticism of higher education"; it often draws scholars who are literary or cultural critics; and it tends to condemn corporatization, academic capitalism, and the working conditions of academics (p. B7). Williams cites the following examples of this genre: Bousquet (2008), Massé and Hogan (2000), Newfield (2008), Noble (2001), Readings (1996), Soley (1995), Washburn (2005), and Williams (2006, 2008).

The third group is sizeable, containing those faculty who are scholars of higher education or another field related to corporatization. These scholars use their expertise to analyze aspects of corporatization, draw conclusions, and make recommendations. Taking positions that range from mild concern to condemnation, nearly all of these authors express a negative view of corporatization. Examples include the following: Apple (2000), Berry (2005), Chan and Fisher (2008a, 2008b), Clarke et al. (2000), Cohen and Kisker (2010), Desai (2007), Ferlie et al. (2008), Fitzgerald (2014), Giroux (2014), Marginson (2011, 2013), Martínez Alemán (2014), Miyoshi (2007), Peters (2013), Rhoades and Slaughter (2006), Rhoads (2011), Rhoads and Torres (2006), Santos (2006), Savage (2007), Schugurensky (2006), Schuster and Finkelstein (2006b), Slaughter and Rhoades (2008), St. John and Parsons (2004), Sumner (2008), Torres and Rhoads (2006), and Ward (2012). Two rare exceptions are education scholars who see promise in market opportunities for higher education: Clark (1998) and Zemsky et al. (2005).

Empirical studies of faculty views. In the literature, conceptual works about faculty views of corporatization far outnumber empirical studies of those views. Nonetheless, some empirical studies exist. Seven studies stand out as important contributions to the literature because of the nature of their discoveries, their scope, their influence on peer scholars, or some combination of those factors.

Conducting interviews with over 250 faculty, Currie (1998), for example, found that Australian and American academics experienced numerous negative effects from globalization including marginalization, less collegiality, and greater organizational tension. In 2005, Deem and Brehony conducted a multi-phase, qualitative study of United Kingdom faculty, staff, and administrators and found that new managerialism had permeated the management of those universities; faculty reported greater workloads, demands for improved performance, and surveillance of academic performance as well as increased tension between academics who had accepted managerial responsibilities and academics who had not taken on this work. Extending that study, Deem et al. (2007) interviewed academics at 16 universities in the United Kingdom and found that higher education in the United Kingdom had become highly managerial; all academic employees reported declining trust, reduced autonomy, more work, longer hours, and the remoteness of senior managers making finance-driven decisions. In addition, academics who had agreed to take on managerial functions reported additional negative consequences: the pressure to adjust to reduced funding, the stress of locating resources, increased paperwork, meetings, and target-setting, the scrutiny of peers, and loss of time to reflect.

In the last two decades, Slaughter and colleagues conducted two extensive studies of academic capitalism that have shaped the scholarly conception of that phenomenon. In 1997, Slaughter and Leslie used mostly publicly available data to understand the phenomenon of academic capitalism in Australia, Canada, the United Kingdom, and the United States. In all countries but Canada, they found and enumerated multiple negative consequences for faculty including pressure to obtain research funding, pressure to create lucrative academic products, lower salaries for faculty in disciplines not aligned with corporate interests, and new risks such as product (Slaughter & Leslie, 1997). In 2004, Slaughter and Rhoades extended that study by conducting an extensive analysis of academic capitalism in the United States. From publicly available data, document analyses, and interviews, the researchers derived a theory of academic capitalism, one that characterizes members of higher education as proactive academic capitalists along with their corporate partners (Slaughter & Rhoades, 2004). The researchers found faculty to be "uncertain about the boundaries between public and private spheres, enticed by market opportunities, and plagued by conflict of interest issues" (Slaughter & Rhoades, 2004, p. 31). Although neither of the Slaughter studies focused directly on faculty views of corporatization, the findings effectively describe the various ways faculty experience academic capitalism.

Two other major studies reflect the experiences of faculty in an era of corporatization. In their comparative analysis of quantitative surveys administered to American faculty between 1955 and 2004, Schuster and Finkelstein (2006a) found revolutionary changes are dismantling traditional academic work and careers. They found fewer full-time faculty shoulder increasingly greater amounts of work; full-time faculty have less control over their intellectual property; more faculty specialize in teaching or research instead of the traditional triumvirate of teaching, research, and service; and faculty of all types experience diminished influence within higher education organizations (Schuster & Finkelstein, 2006a). In 2012, Cummings and Finkelstein extended this study by analyzing the American data collected by the Changing Academic Profession (CAP) study, a global study conducted by cooperating scholars in 12 countries. Based on the CAP data from 1,146 faculty at 80 four-year colleges and universities in the United States, the researchers detailed the changing conditions of American academics and the influence of corporatization and managerialism. They found increased emphasis on teaching, reduced publication productivity, weakened loyalty between scholars and their institutions, and "'creeping' managerialism" (Cummings & Finkelstein, 2012, p. 146). As with the Slaughter studies, these studies did not directly elicit faculty views of corporatization, but they describe the nature of faculty work conditions as reshaped by the forces of corporatization.

In addition to the major studies, other investigations contribute to an understanding of faculty views of corporatization. Chan and Fisher (2008a), for example, interviewed faculty and administrators at the University of Ottawa to understand how the academic culture of Canadian research universities had changed in the last 15 years. Although the researchers did not separate faculty and administrator views, they discovered a major shift towards academic capitalism and detailed factors that affect the working conditions of faculty including pressure to obtain funding, commodification of academic work, emphasis on networking and teams, and increasingly complex faculty roles (Chan & Fisher, 2008a). Fredman and Doughney (2012) administered surveys about work satisfaction to Australian faculty; the participating faculty reported low and declining work satisfaction due primarily to an increasingly managerial culture. In a survey of United Kingdom faculty, MacFarlane (2011) found that faculty experienced managerialism as a dynamic that left their expertise unused and undervalued. Dillabough and Acker (2008) found globalization contributed to the regulation of female work in Canadian higher education, and Muzzin (2008), in a study of Canadian adjuncts, concluded that the use of contingent faculty undermined efforts to achieve gender and racial equity.

The views of administrators. Scant literature exists about the views of administrators regarding corporatization in higher education. Very few conceptual works express the views of administrators, and empirical studies of administrator views are nearly nonexistent.

Conceptual works that convey administrator views. A small number of higher education administrators and former administrators have written about their views of corporatization in postsecondary education.

Some hold very positive opinions of the adoption of business practices in higher education. For example, Garland (2009), former president of Miami University, maintains that academia is wasteful and change-resistant; the administrator recommends exposing higher education to the demands of the marketplace and phasing out state appropriations. Discussing technology transfer, Holbrook and Dahl (2004), the former a past president of Ohio State University and the latter a former vice president at the University of Georgia, claim these activities "are seen as a vital component of the research enterprise and are endorsed at the highest levels of university administration" (p. 90). Good (2004), dean of engineering at the University of Arkansas in Little Rock and former chief executive officer of Allied Signal Corporation, and Hall (2004), senior associate dean at the University of Southern California and former chief executive officer of EnVivo Pharmaceuticals, both characterize university-corporation partnerships as a boon for higher education and society.

Some administrators are less optimistic about corporatization. Bok (2003, 2004), former president of Harvard University, acknowledges benefits from commercial ventures in higher education but argues that the disadvantages often outweigh the advantages. Similarly, Duderstadt (2004), former president of the University of Michigan, claims that "for every positive gain from the commercialization of intellectual property, there are negative aspects of this balancing act" (p. 56). Expressing a view unique in its disparagement is Maistry (2012), the head of an institution of higher education in South Africa; this administrator characterizes the neoliberal emphasis on economics and performance outcomes as a misguided and reckless endeavor in higher education.

Empirical studies of administrator views. While there is sparse conceptual literature about the views of administrators regarding corporatization, there is even less empirical material. From my search of the literature, I found only three empirical studies that touched in any way on the views of administrators. In their 2005 study of university managerialism in the United Kingdom, Deem and Brehony conducted focus groups and interviews with faculty, staff, and administrators; in their analysis, though, the researchers did not separate the views of those different groups. Similarly, Chan and Fisher (2008b) studied market behavior at the University of Ottawa; they interviewed both faculty and administrators but did not separate the views of those groups in their analysis. The study by Marginson and Considine (2000) comes closest to an empirical study of administrator views of corporatization in higher education. Observing the dramatic shift in higher education governance toward executive control and corporate practices, Marginson and Considine set out to understand the views of those making these changes: the upper level administrators at 17 Australian universities. In extensive interviews with these administrators, the researchers asked them what they were trying to build, what they hoped to achieve, and what tools they preferred to use (Marginson & Considine, 2000). In their findings, the researchers noted the leaders' preferences for executive leadership, sidelining of traditional academic structures, use of auxiliary groups to counsel administrators on decisions, and exploitation of income opportunities. They also noted a lack of academic-managerial synergy.

Implications for this study. In this section, I compare the nature of the data I collected in this study to the existing knowledge base, and I examine the appropriate role of this study in light of what is known about the research topic.

Study data compared to knowledge base. In terms of the literature about faculty conceptions of corporatization, the knowledge base is rich from one perspective and limited from another. In the conceptual literature, many individual faculty authors have written about their views of, theories for, and recommendations regarding corporatization. Although these works abound, the form of these data is idiosyncratic and difficult to compare. In addition, the literature represents only the subset of faculty motivated to write a book about their views; other faculty views are absent, including those that might be dissimilar. In the empirical literature, some studies reflect faculty conceptions of corporatization, but these data tend to be limited and piecemeal. Exploring particular aspects of corporatization, these studies have a different purpose than a study that directly asks faculty how they think about corporatization: how they conceptualize its causes and effects and how they suggest higher education respond. It appears that no study has investigated faculty thinking about higher education corporatization in a systematic and holistic manner.

Because the literature base contains so little about administrator views of corporatization, these observations apply even more strongly to this population. In the scant conceptual literature, some individual administrators have written about their understandings of corporatization. Like the faculty works, though, the form of these data varies by author and is difficult to compare. In addition, this literature only represents the views of those few administrators motivated to author books; other potentially diverse views of administrators are absent. Using rare empirical studies like Marginson and Considine (2000), one might infer administrator conceptions of corporatization from their preferred practices. That would be somewhat different, though, than using the findings of a study that directly asks administrators how they think about corporatization: how they conceptualize its causes and effects and how they suggest higher education respond. It appears that no study has investigated administrator thinking about higher education corporatization in a systematic and holistic manner.

The views of other potential leaders in higher education, such as staff and board members, appear to be absent from the knowledge base. This study included the views of both staff members and a former board member in its investigation.

Appropriate role for this study. Because empirical studies of how members of higher education think about corporatization are scarce, the range and diversity of those perspectives is essentially unknown. This study, therefore, belongs to the earliest phase of a larger potential research cycle that might study those views. If this research cycle were to unfold, future studies would be armed with more data and the foundational findings of previous studies. Under those circumstances, it might be appropriate for studies to establish commonalities across perspectives or identify patterns of thought characteristic of various groups.

For this study, though, I believed the most responsible purpose was to open up the field of inquiry by seeking and representing the widest possible range of viewpoints, and I designed a study to achieve that aim. In site selection, sample selection, data collection, and data analysis, I made decisions that—to the best of my knowledge—would capture, preserve, and illuminate the diversity of perspectives that faculty, staff, administrators, and trustees hold about corporatization in American higher education.

I carried this effort forward through the study and into the final representation of its findings, in which I focused on the unique perspective of each of the 20 participants.

For each, I aimed to provide clear observations about, identify salient themes for, and convey a sense of the holistic view of each individual. Instead of seeking commonality across perspectives, I attempted to render the differences between them and elucidate the uniqueness of each one. By these efforts, I sought to avoid implying that any kind of consensus has been reached about the issue of corporatization; resist reaching premature conclusions that could hinder the process of adaptation in higher education; and provide a glimpse of the diversity of viewpoints that might exist while honoring the fact that the outer limit of those viewpoints was not determined by this study. An opening rather than closing approach, I believe, was appropriate for this early phase of research—as it may be for this stage of adaptation in American higher education.

CHAPTER 3:

METHODS

Research Purpose

The primary purpose of this study was to explore the views of higher education leaders regarding corporatization in order to provide information that higher education leaders might use to enable conditions for adaptation and emergence.

A secondary purpose of the study was to add to the knowledge base in an area underrepresented in the literature: how higher education leaders think about corporatization in American higher education.

Research Question

The study had one research question: How do higher education leaders think about corporatization in American higher education?

Research Approach

Epistemologically, qualitative studies rest on the assumption that reality is individual, personal, and socially constructed; from this perspective, there are myriad realities (Creswell, 2013; Jones, Torres, & Arminio, 2006; Merriam, 2002). Therefore, a qualitative approach is appropriate when the overarching purpose is to understand the meanings that individuals construct as they interact with their worlds (Merriam, 2002). To achieve this end, the specific goals of qualitative research may include description of meanings, understanding of meanings, discovery of meanings, or hypothesis building (Krathwohl, 2009). A qualitative approach is also appropriate when the subject of inquiry is relatively unknown; it helps to map uncharted territory (Marshall & Rossman, 2016). In addition, the role of the qualitative researcher is to understand the realities of participants through evidence—including words, sounds, drawings, body language, and more—provided to the researcher by those participants (Creswell, 2013). The qualitative researcher is the instrument of data collection and must interpret the received data in order to represent the natural world as the participants variously experience it (Ridenour & Newman, 2008). Finally, a qualitative study of integrity must use methods that align with the assumptions of qualitative research and with the purpose of the study (Creswell, 2013).

Because of the study's research purpose and research question, I took a qualitative approach to this investigation. Aligned with a qualitative approach, the overarching aim of this study was to explore the meanings that higher education leaders have created about the corporatization processes underway in their work worlds. The specific goals of this study were to discover, understand, and describe these subjective meanings in order to relay them back to the higher education field for potential use in the adaptive process. A qualitative approach was also appropriate because the literature on these matters is limited. As a qualitative researcher, I entered the study with awareness of my role as the instrument of data collection and my responsibility to interpret the data in ways that honored and reflected the unique experience of each participant. (See Appendices A and B for information on researcher positionality.) I also employed methods that aligned with the purpose of the study, with a qualitative approach, and with my role. The following sections detail the choices I made in order to accomplish the qualitative purpose of the study.

Setting and Context

At the time of this study, the literature concerning higher education leaders' views of corporatization was limited in some areas; this study may have been the first to use a systematic and holistic approach to exploring those views and one of the few to query staff and administrators about these matters. Because the territory was relatively unexplored, I sought a university site that was highly involved with corporatization to ensure I could find participants with rich and varied experiences with corporatization; I wanted to find a large vein, so to speak. Therefore, I used the literature to identify traits likely to describe universities highly engaged with corporatization, and Table 1 lists these characteristics. Using the criteria from Table 1, I narrowed potential sites to five final candidates, and Table 2 describes those candidates in terms of that criteria.

Table 1

Likely Characteristics of Universities Highly Engaged with Corporatization

Characteristic	Explanation
Publicly funded	Reduced funding intensifies drivers of corporatization[a]
Doctoral programs in sciences	Frequently the site of academic capitalist activities[b]
Large science/engineering R&D budget	Associated with academic capitalist activities[b]
Research institutes, centers	Often pull faculty from traditional roles for academic capitalist activities[b]
Structures for corporate partnerships	Structures such as corporate liaison and technology transfer offices reflect academic capitalism[b]
Unionized faculty	Unionized faculty correlate with corporatization[c]

[a]Source: Chan and Fisher (2008b). [b]Source: Slaughter and Rhoades (2004). [c]Source: Rhoads and Rhoades (2005).

Table 2

Comparison of Five Final Candidates for University Site

Characteristic	Univ 1	Univ 2	Univ 3	Univ 4	Univ 5
Publicly funded[a]	Yes	Yes	Yes	Yes	Yes
STEM doctoral degrees as % of total[a]	Low	Medium	Medium	Medium	Medium-High
R&D budget for science / engineering as % of total[a]	Very High	Medium-High	Very High	Very High	Extremely High
Number (and size) of research institutes, centers[b]	Low	High	Medium	Very High	High
Number (and extent) of structures for corporate partnerships[b]	Low-Medium	Low-Medium	Very High	Extremely High	High
Unionized faculty[c]	Yes	Advocacy chapter only	Advocacy chapter only	Yes	Yes

Note. To mask the identities of the universities, I converted the numeric data in this table to broad categories. My doctoral committee confidentially reviewed both the original data and my subsequent categorization.
[a]Source: Indiana University Center for Postsecondary Research (IUCPR, 2016). [b]Source: University web sites.
[c]Source: American Association of University Professors (n.d.)

Once I had identified the five final candidates, any one of them may have served well as the site for the study. My final selection, though, was University 5. In order to mask its identity, I use the pseudonym Evans State University and provide only a brief profile. Located in the Midwestern United States, Evans State University is a large, publicly funded, four-year, doctoral university offering a mix of arts and sciences as well as professional degrees to both undergraduates and graduates (IUCPR, 2016).

Institutional Review Board Approvals

After selecting the university site, I obtained approval for the study from the Institutional Review Boards (IRBs) of both the University of Dayton (UD) and Evans State University (ESU). UD granted provisional approval of the study as an Exempt

Human Subjects Research project using an unsigned invitation to participate and no compensation to participants other than access to the final dissertation and an executive summary I would write. UD's approval was contingent on receiving approval from ESU's IRB. I received approval from ESU's IRB after I accommodated its request for the use of a signed consent form. UD then granted final approval of the study and the signed Consent to Participate in Research form, which is shown in Appendix C.

Participants and Sampling

Sampling method. Qualitative studies do not seek to establish statistical significance or to generalize findings from a sample to a population; instead, they seek to generate rich descriptions of the particular phenomenon under investigation (Miles & Huberman, 1994). For that reason, qualitative studies usually "work with small samples of people, nested in their context and studied in-depth" (Miles & Huberman, 1994, p. 27). To obtain these samples, qualitative researchers commonly employ purposeful sampling in which the researcher deliberately selects participants who can "inform an understanding of the research problem" (Creswell, 2013, p. 156) or from whom the researcher can learn the most (Merriam, 2002).

In this study, I employed purposeful sampling, and I addressed the three considerations that Creswell (2013) cites as important to that method: whom to select, the type of sampling strategy, and the size of the sample.

Whom to select. The universe for this study was higher education leaders at Evans State University, using the definition of leader from adaptive / complexity leadership theory: Leaders are those who further the adaptation of the organization; they may come from anywhere in the organizational hierarchy; and they may or may not hold positions of authority. Therefore, I chose not to eliminate potential participants based on their level within the hierarchy or their degree of positional authority. Instead, I considered two traits—for the purposes of this study—to be sufficient evidence of leadership: Interest in or engagement with corporatization and willingness to contribute uncompensated time and effort to a study related to corporatization.

Sampling strategy. To enact the goal of capturing heterogenous views about corporatization, I employed a maximum variation sampling strategy (Miles & Huberman, 1994). First, to obtain the broadest mix of leaders, I created a simple matrix to represent the generic organizational structure of a university, and each cell represented a category of participant I intended to include in the study. Horizontally, I divided the organization into two categories: instructional and non-instructional. The instructional category represented the traditional hierarchy of senior academic officers, deans, chairs, and faculty. The non-instructional category represented all other positions, such as the board of trustees, senior administrators, and student affairs, advancement, financial management, and information technology positions. In the non-instructional category, I also included academics working outside the university's faculty system, typically in centers or institutes and often in a research capacity. Vertically, I divided the organization into the board of trustees, upper, middle, and lower administration, and those without formal administrative or management responsibilities. Within each cell, I included all related job titles; for example, I included deans, assistant deans, and associate deans in the category of instructional middle administration. Table 3 shows the resulting matrix with example job titles for each cell.

Table 3

Sampling Matrix with Example Job Titles

Level	Instructional	Non-Instructional
Board of Trustees	N/A	Chairperson, Trustee
Upper administration	Provost, Associate Provost, Assistant Provost	President, Associate Vice President, Assistant Vice President
Middle administration	Dean, Associate Dean, Assistant Dean	Director, Associate Director, Assistant Director
Lower administration	Chair, Associate Chair, Assistant Chair	Manager, Associate Manager, Assistant Manager
Faculty / Staff	Professor, Associate Professor, Assistant Professor, Clinical Professor, Senior Lecturer, Lecturer, Senior Instructor, Instructor, Adjunct Faculty	Senior Research Engineer, Senior Research Scientist/Scholar, Research Scientist, Research Associate, various staff titles across the university

Next, I used the literature to refine the sampling strategy further. To maximize the diversity of viewpoints about corporatization, I identified participant characteristics most likely to correlate with disparate perspectives. The literature suggested that significant variation might exist between faculty and administrators (Garland, 2009; Marginson & Considine, 2000), between faculty and administrators who are involved with academic capitalist activities and those who are not (Slaughter & Rhoades, 2004); among faculty from the liberal arts, the natural sciences, and the professions (Schuster & Finkelstein, 2006a); and between contingent faculty and tenured / tenure-track faculty (Berry, 2005). I found no literature that pertained to staff or board members. In addition, I decided to include elected leaders, such as faculty and staff senators, to increase the variety of leaders included in the study. As I recruited participants based on the sampling matrix, I also sought diversity in the four areas not already represented in the matrix: (a) extent of experience with academic capitalism, (b) academic disciplines of faculty, (c) type of faculty positions, and (d) whether or not participants were faculty or staff senators.

Sample size. Qualitative researchers often work with small samples, because they seek to "elucidate the particular" rather than to generalize to larger groups (Creswell, 2013, p. 157). That principle applied to this study, in which I aimed to capture in-depth data about the views of individuals. In addition, the study was exploratory in nature; it appears to have collected participant views not collected before and to have employed a causal mapping method not applied before to this subject matter. For all of these reasons, a small sample size was appropriate. Therefore, I sought to balance the need for maximum variation with the additional needs to collect extensive, nuanced data from each participant and to complete the study in a reasonable timeframe. I chose 20 as the target number of participants.

In addition, I allocated the 20 across the sampling matrix based on the priorities of my sampling strategy. For example, I chose a larger target number for faculty participants in order to include tenured, tenure-track, full-time non-tenure-track, and part-time non-tenure-track faculty and to include faculty from a variety of academic disciplines. I allotted a similar number to instructional administrators. On the non-instructional side, where fewer diversity categories had emerged from the literature, I targeted fewer participants. Table 4 shows the sampling matrix with the initial target number of participants for each cell.

Table 4

Sampling Matrix with Target Numbers of Participants

Level	Instructional	Non-Instructional	Total
Board of Trustees	N/A	1	1
Upper administration	2	1	3
Middle administration	2	2	4
Lower administration	2	2	4
Faculty / Staff	7	1	8
Total	13	7	20

Recruitment. As discussed above, I employed three sets of criteria when recruiting and selecting participants: the definition of leadership based on two participant characteristics, the sampling matrix based on organizational position, and the four targeted areas of diversity not represented in the matrix. I employed a variety of strategies to obtain the diverse set of participants I sought. I used the Evans State University website extensively to familiarize myself with its particular organizational structure and job titles and to identify potential participants. I received some unsolicited referrals from participants or potential participants in the study and from members of my professional network. And, as needed, I queried participants and members of my professional network for referrals to people who had strong interest in the topic of corporatization, a method known as snowball sampling (Miles & Huberman, 1994).

Trustees, upper and middle administrators. I took the following approach to qualifying these participants. First, I used the university website to identify those with position titles I needed to fill the sampling matrix. Next, I assumed they were engaged with corporatization because of their organizational responsibilities and degree of formal authority. Through their positions, therefore, they met the first criterion for leadership, and, if they agreed to participate, they met the second criterion. Finally, of the four targeted areas of diversity, only two were applicable to this group. In terms of experience with academic capitalism, I chose positions likely to have a wide range of involvement in those activities. In terms of academic discipline, I took the view that this primarily applied to deans, and I sought deans from schools with the most contrasting curricula.

I took the following approach to recruiting these participants. First, because this pool of potential participants was much smaller than at lower organizational levels and because capturing administrator views was central to my purpose, I took multiple steps when needed to recruit these individuals. Typically, I began by using my professional network to find people who could introduce me and my research to them, a helpful technique for gaining access to organizational elites (Marshall & Rossman, 2016). These introducers emailed an introduction that included my recruitment email, in which I had explained the purpose of the study, its scholarly context, what their participation would entail, my commitment to them as participants, potential benefits to them from participating, and instructions for contacting me to volunteer. Figure 1 contains an example of the recruitment email. When I received no response, I sometimes sent a follow-up email to encourage participation, and Figure 2 contains an example. At other times, I enlisted help from their assistants to reach them. In the case of trustees, an assistant to the board forwarded my recruitment email to all current trustees and relayed their responses to me, but none volunteered. Through a referral, though, I was able to recruit a former trustee who had served within the last ten years. Given the difficulty in gaining access to current trustees, I decided that the perspective of the former trustee would add richness to the study.

Subject: Kindly consider participating in my study about corporatization in higher education!

Dear Dr./Ms./Mr. _______________,

I ask that you kindly consider participating in my University of Dayton doctoral dissertation study about corporatization—defined as the importing of business ideas and practices into the day-to-day operations of non-profit colleges and universities. Your contribution would inform and enrich the emerging dialogue about this important issue in higher education!

Purposes of the study

- Explore the diverse views that higher education members (faculty, staff, administrators, and trustees) have about the causes and effects of corporatization in American higher education
- Explore the diverse ideas higher education members (faculty, staff, administrators, and trustees) have for responding to corporatization in American higher education

NOT purposes of the study

- Gather data to support one view or another about corporatization in higher education
- Evaluate the relative merits of various perspectives about corporatization in higher education

Scholarly context

In the discourse about American higher education, the issue of corporatization is increasingly prominent. From corporate funding of research to revenue-generating patents, from top-down management approaches to an emphasis on the bottom line, scholars report that corporate practices in higher education are growing.

Yet scholars disagree about the advantages and disadvantages of corporatization. They debate the causes of corporatization and the effects of corporatization on students, faculty, staff, and administrators as well as the effects on colleges, universities, the entirety of higher education, and society itself.

In spite of the plurality of opinion, surprisingly few studies have asked the denizens of higher education—the faculty, staff, administrators, and trustees who run these institutions—what they think.

What your participation would entail

- Participate in a confidential, one-on-one, audio-recorded interview with me, held in a convenient location for you, conducted between June and September 2016, and lasting approximately 1 ½ to 2 hours—although you may choose to take longer if you wish. The interview would consist of:

    1) Using simple instructions that I provide in the interview, draw a cognitive map that reflects your view of the causes and effects of corporatization in American higher education. Many participants describe the experience of creating a cognitive map as satisfying, fulfilling, and sometimes even fun! In addition, although cognitive mapping has been used widely in other fields, I have not found evidence that it has been used to study corporatization in higher education. By joining this study, then, you may be helping to map new territory for higher education.

    2) Responding to open-ended questions, share your ideas for how higher education might respond effectively to the phenomenon of corporatization. In the corporatization literature, I have found no study that has sought these insights from those who strive every day to fulfill the mission of higher education.

- Review the early stages of my analysis of your data, and provide feedback and clarification to ensure that I accurately represent your views. Your time spent reviewing my analysis and providing feedback would be in addition to the time you spend in the interview. Once you have reviewed my analysis, we can discuss your feedback by email, phone, or in person; I am happy to accommodate whichever is your preference.

My commitment to you as a participant

- I will securely store your data and hold it in strict confidence
- I will mask the identities of all participants and the identity of the institution in all publications that emerge from this study, including my dissertation
- I will share with you a link to my complete dissertation once it has been approved
- I will write an executive summary of my findings specifically for you and other study participants

How you might benefit from participation

In addition to making a valuable contribution to the emerging dialogue about corporatization, you may:

- Enjoy the opportunity to reflect on your work life as it pertains to the issue of corporatization
- Welcome the opportunity to clarify your own thoughts and ideas about corporatization
- By reading the study findings (from my dissertation or executive summary), learn about the diverse views held by other study participants from your institution – although all individual identities will be masked
- By reading the study findings (from my dissertation or executive summary), gain insight about your organization relative to corporatization

Your views are vital to this study

In the corporatization literature, empirical studies of the views of higher education members are scarce, leaving the views of various groups underrepresented.

Your participation, then, is vital to achieving the study's goal of capturing the **strong** and **diverse** views that higher education members hold about corporatization.

How to participate in this study

I enthusiastically invite you to join this study by forwarding this email to me at mcandrews1@udayton.edu and including days and that would be convenient for you to meet with me. In two days or less, I will respond to your email, confirm your participation, and schedule our meeting.

If you have any questions, please do not hesitate to contact me by email (mcandrews1@udayton.edu) or phone (999-999-9999).

I am grateful for your consideration of this request and excited about the possibility of working with you on this study.

Sherry McAndrew

Figure 1. Recruitment email to potential participants in the study. For all potential participants, I used this email as my first recruitment effort. In the case of trustees, upper administrators, and middle administrators, members of my professional network forwarded this email to potential participants as part of their introduction to the study. In the case of lower administrators, faculty, and staff, I sent this email directly to potential participants.

Subject: RE: Kindly consider participating in my study about corporatization in higher education!

Dear Dr./Ms./Mr. _______________,

I want to ask for a moment of your time to express my continued high hopes that you will be able to participate in my University of Dayton dissertation study about corporatization – defined as the importing of business ideas and practices into the day-to-day operations of non-profit colleges and universities.

The insights of trustees and administrators are nearly absent from the corporatization literature.

As you know, corporatization increasingly dominates the discourse about higher education, yet the insights of trustees and administrators are nearly absent from the corporatization literature. Such absence, in my view, hobbles the ability of higher education to respond effectively to the challenges it faces.

Your insights about this matter are matchless.

As Job Title, your understanding of corporatization – its causes, effects, pitfalls, and promise – is vital to the study's aim of capturing the depth and diversity of views that higher education denizens hold of corporatization.

Expanding the corporatization dialogue will support the effective adaptation of higher education.

I am convinced – and the literature on complexity leadership theory supports my position – that enriching and expanding the dialogue about corporatization will help enable the conditions that favor the effective adaptation of higher education to changing circumstances.

Would you add your valuable insight to this study?

I understand your time is a scarce resource for you and the university you serve. I will do everything in my power to streamline your time investment. And I have cleared my entire August calendar to better accommodate your busy schedule.

For further information about the study, please see the introduction Dr. ______________ generously provided in the email below.

In addition, I am available – almost at the drop of a hat! – by phone (999-999-9999), email (mcandrews1@udayton.edu), or in person to answer any questions or concerns you may have before committing to the study.

Thank you, Dr./Mr./Ms. ____________, for your consideration.

Sincerely,
Sherry McAndrew

Figure 2. Follow-up recruitment email to trustees, upper and middle administrators. I sometimes sent this email directly to potential participants who were trustees, upper administrators, or middle administrators in order to encourage their participation in the study.

Finally, I wanted to be flexible enough to allow participants' levels of interest in the study to influence the final distribution across the sampling matrix. Interest from the non-instructional upper administration was stronger than expected, so that number is one more than the target.

Lower administration, faculty, and staff. I took the following approach to qualifying these participants. First, I used the university web site to match their position titles to categories I needed from the sampling matrix. Next, I used the website to identify those who would increase diversity in the four targeted areas of diversity. For both chairs and faculty, I sought a wide variety of academic disciplines. For faculty, I sought participants who represented all of the primary types of non-chair faculty positions: tenured, tenure-track, full-time non-tenure-track, and part-time non-tenure-track. I also identified and recruited faculty senators and staff senators. And to include a wide range of experience with academic capitalism, I recruited academics working in research centers outside of the university's faculty system. In terms of leadership criteria, I selected participants who responded quickly to my first invitation, which I considered evidence of the first criterion: interest in or engagement with the topic of corporatization.

When those participants participated in the study, they met the second criterion: willingness to donate their time and effort freely to a study about corporatization.

I took the following approach to recruiting these participants. I sent individual emails to each potential participant, the text of which was the same as the recruitment email the trustees, upper administrators, and middle administrators received from the introducers. It invited their participation and explained the purpose of the study, its scholarly context, what their participation would entail, my commitment to them as participants, potential benefits to them from participating, and instructions for contacting me to volunteer. (See Figure 1 for the recruitment email.) If I received no response, I did not follow up, because I sought participants with high levels of interest in the topic.

As with the trustees, upper administrators, and middle administrators, I wanted to be flexible enough to allow participants' levels of interest to influence the final number of participants in each category. In this case, interest from the instructional lower administration was stronger than expected, so that number is one more than the target. In contrast, interest from the non-instructional lower administration was weaker than expected, so that number is one less than the target. Interest from faculty was strong except for tenure-track faculty, so that number was one less than the target.

Table 5 shows the total number of study participants by their source: participant referral, network referral, or university web site, and Table 6 shows the sampling matrix with the final numbers for all participants in the study.

Table 5

Sampling Matrix with Numbers of Participants by Source

Level	Instructional			Non-Instruct			Total		
	PR	NR	WS	PR	NR	WS	PR	NR	WS
Board of Trustees				1			1		
Upper administration			2		1	1		1	3
Middle administration		1	1		1	1		2	2
Lower administration	2		1		1		2	1	1
Faculty / Staff	1	1	4			1	1	1	5
Subtotals	3	2	8	1	3	3	4	5	11
Total		13			7			20	

Note. PR = participant referral, NR = network referral, WS = university website.

Table 6

Sampling Matrix with Final Numbers of Participants

Level	Instructional	Non-Instructional	Total
Board of Trustees	N/A	1	1
Upper administration	2	2	4
Middle administration	2	2	4
Lower administration	3	1	4
Faculty / Staff	6	1	7
Total	13	7	20

Characteristics of participants. Based on the diversity criteria I used for sampling, I enlisted the participation of 20 individuals to form a highly diverse group of higher education leaders from Evans State University. At the beginning of the individual interview sessions, I asked participants to qualitatively describe the level of their experience with academic capitalism, and I categorized their answers into one of five levels: Very Low, Low, Medium, High, or Very High. I also asked them for the number of years they had worked in higher education. Table 7 summarizes these various participant characteristics for the subset of participants to which they pertain. Although other characteristics—such as age, race, gender, and other traits—might be relevant to views of corporatization, they were outside the scope of this study, and I did not collect that information from participants.

Table 7

Summary of Characteristics for Subsets of Participants

Characteristic	Subset *(n)*	Summary	
Self-described level of experience with academic capitalism	All (20)	Level	*n*
		Very Low	4
		Low	5
		Medium	3
		High	4
		Very High	4
Type of academic discipline	Instructional (13)	Type	*n*
		Business	2
		Education	2
		Liberal Arts	4
		Math / Nat. Sci.	3
		Professional	2
Type of faculty position	Non-chair faculty (6)	Faculty Position	*n*
		Tenured	2
		Tenure-track	1
		FT Non-tenure	1
		PT Non-tenure	2
Whether an elected faculty senator	Chairs, faculty (10)	Faculty Senator	*n*
		Yes	2
		No	8
Whether an elected staff senator	Non-instructional, non-trustee (6)	Staff Senator	*n*
		Yes	2
		No	4
Number of years working in higher education	All (20)	Measure	Result
		Mean	18.18
		Median	20.00
		Mode	20.00
		Minimum	3.00
		Maximum	39.00
		Standard Dev.	9.57

Data Collection and Analysis

The purpose of this study was to explore how individual higher education leaders think about corporatization in American higher education. To gain a multifaceted view, I chose to focus on two interrelated dimensions of that thinking: how leaders conceptualize the causes and effects of corporatization and how leaders think the higher education system might best respond to corporatization. The two dimensions called for different data collection and analysis methods: causal mapping to capture and understand participant thinking about causes and effects and semi-structured questions to capture and understand participant thinking about responses to corporatization. In addition, in order to produce findings most likely to stimulate dialogue, I sought to collect and preserve data that were idiographic, holistic, and complex, and this had implications for all of my data-related decisions.

Below, I discuss the two data-related methods I used in the study: causal mapping and semi-structured questions. For each, I provide background from the literature, explain my rationale for selecting them, and describe the key decisions I made to implement them in this study.

Audit trail strategy. For several reasons, the decisions required for causal mapping were significantly more complex than those for semi-structured questions. One reason was that the causal mapping method itself can be complicated, and the literature contains myriad variations on both the collection and analysis phases (Hodgkinson & Clarkson, 2005; Huff, 1990; Mohammed, Klimoski, & Rentsch, 2000; Narayanan, 2005). There is no one best way to implement causal mapping; it must be shaped to fit the research purpose (Eden, Ackermann, & Cropper, 1992; Hodgkinson & Clarkson, 2005). The second reason was that, to my knowledge, causal mapping had not been applied before to the field of higher education leadership or to the topic of corporatization. I found literature from the fields of natural resource management (e.g., Özesmi & Özesmi,

2004) and strategic management (e.g., Eden & Ackermann, 1998a) particularly helpful, yet I needed to adapt those practices to this subject matter. A final reason was that the intricacy of the method requires significant researcher skills (Ackermann & Alexander, 2016; Bryson, Ackermann, Eden, & Finn, 2004; Eden & Ackermann, 1998a; Jetter & Kok, 2014), and this was my first use of causal mapping.

For these reasons, I concluded that consumers of this research would need extensive information in order to evaluate the study, and I decided to offer an audit trail (Merriam, 2002; Ridenour & Newman, 2008). Characterizing it as a strategy to promote trustworthiness, Merriam (2002) defines an audit trail as "a detailed account of the methods, procedures, and decision points in carrying out the study" (p. 31). With particular emphasis on causal mapping, I provide audit information in five areas. In this chapter, I present the first three: an introduction to the method with a discussion of methodological issues; an overview of the numerous data collection options and my rationale for choosing certain ones; and an overview of data analysis strategies and my rationale for choosing specific ones. In the next chapter, I provide the fourth area: a detailed, chronological account of the specific steps I took during data collection and data analysis. Finally, in chapter five, I present the fifth area: documentation of the results of my analysis with detail about the link between the evidence and my interpretations.

Causal mapping method. Corporatization is a complex, dynamic phenomenon with interdependent forces potentially operating at the global, national, institutional, group, and individual levels. I needed a data collection method capable of capturing and representing the potentially elaborate conceptions that participants had about the causes and effects of corporatization, and I chose causal mapping.

Background.

Context for causal mapping. Inarguably, the field of human cognition is vast, and uncountable methods exist to measure and describe human thinking. Within the field of managerial and organizational cognition alone, Walsh (1995), for example, offers a complex taxonomy of research approaches to understanding the representation, development, and use of cognitive structures at four different levels: individuals, groups, organizations, and industries. Hoffman, Shadbolt, Burton, and Klein (1995) discuss the use of interviews, think aloud problem-solving, and decision analysis as among the many methods used to elicit the knowledge structures of experts. And Mohammed et al. (2000) cite the use of hierarchical clustering, tree diagrams, and word association as methods for representing the knowledge and beliefs of individuals. Yet another option is mapping.

As defined by Merriam Webster, a map is "a diagram or other visual representation that shows the relative position of the parts of something" (Map, n.d.). The creation of a map, according to cognitive mapping scholars Bryson et al. (2004), requires "naming, placing, and classifying entities [that exist in] in real or conceptual space" and showing how they interrelate (p. 338). Therefore, a cognitive map includes both the content (concepts, entities, or ideas) and the structure (relationships between those concepts, entities, or ideas) of human thought (Bryson et al., 2004; Mohammed et al., 2000). Frequently, cognitive maps depict the thought of one individual, but some researchers have explored the use of maps for representing group cognition (e.g., Ackermann & Eden, 2010; Mohammed et al., 2000). Cognitive mapping can also depict different types of relationships including contiguity, proximity, continuity, resemblance, implication, and causality (Mohammed et al., 2000). Therefore, causal mapping, a depiction of the cause and effect relationships between concepts, is a subset of the category of cognitive mapping.

A note on terminology may be helpful here. Cognitive mapping is an evolving method, and the terminology that surrounds it is evolving as well; terms are not consistently used across the literature. Some researchers use the term *cognitive mapping* as a synonym for *causal mapping* (e.g., Axelrod, 1976; Jetter & Kok, 2014). Some hold that the term *cognitive map* connotes a model inside the mind and therefore use the term *causal mapping* to denote causal assertions (e.g., Narayanan, 2005). Others maintain, as I do for the purposes of this study, that *cognitive mapping* is a category of mapping methods that may depict causal or non-causal relationships, while *causal mapping* is a method that focuses only on causal relationships (e.g., Hodgkinson & Clarkson, 2005).

Description and example of a causal map. Causal maps are "graphic representations of both the content and structure of individuals' idiosyncratic belief systems in a particular domain" (Mohammed et al., 2000, p. 132). Typically, causal maps contain concepts connected by directional arrows that show cause and effect relationships; the directional arrows may be marked with positive or negative signs to indicate whether the relationship causes an increase or decrease in the effected concept; and the relationships are sometimes marked with a relative strength described in either words or numbers (Hodgkinson & Clarkson, 2005; Jetter & Kok; 2014; Özesmi & Özesmi, 2004). Figure 3 shows a simplified causal map that depicts the dynamics of highway driving.

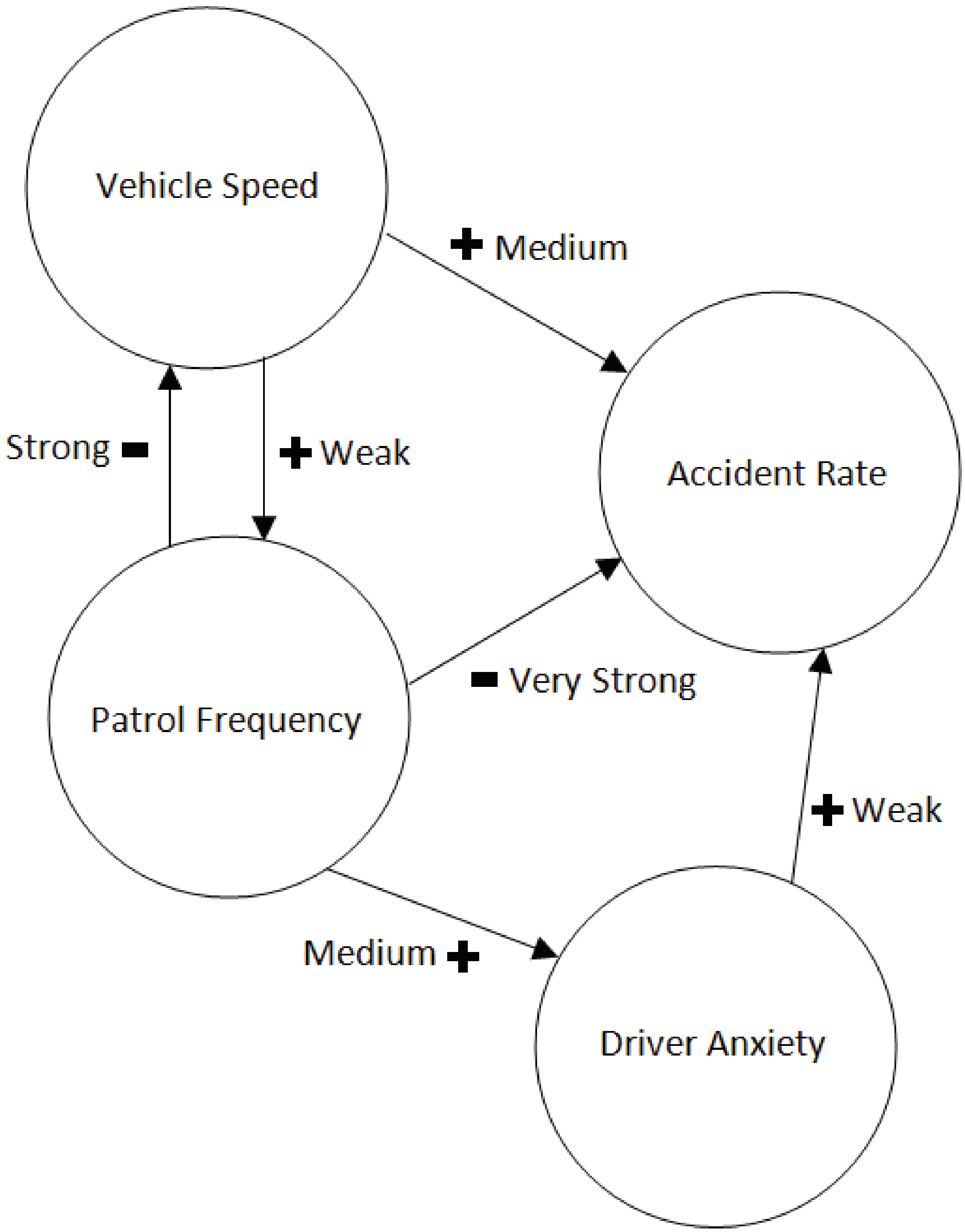

Figure 3. Simplified causal map depicting dynamics of highway driving. The four concepts are contained in circles. Links between concepts are represented by directional arrows with a strength rating and a positive sign when the causal concept increases the effect concept or a minus sign when the causal concept decreases the effect concept. Adapted from "Knowledge processing with Fuzzy Cognitive Maps," by R. Taber, 1991, *Expert Systems with Applications*, *2*(1), p. 84 with permission from Elsevier.

Research purposes for causal mapping. Jetter and Kok (2014) identify two intellectual traditions behind causal mapping research. One is the technical tradition of artificial intelligence, which combines the maps of multiple domain experts, resolves disagreements among them, and produces an inference engine for that domain (Jetter & Kok, 2014). Aligned with this tradition, causal mapping is used in such fields as engineering, robotics, expert systems, and information technology (Papagerogio & Salmeron, 2013). The second, to which this study belongs, is the tradition of the social sciences, which uses causal maps "to facilitate 'sensemaking'" by highlighting areas of consensus and dissensus among people and promoting dialogue about values and assumptions (Jetter & Kok, 2014, p. 48). Within this tradition, causal mapping is used in fields like political science, natural resource management (Papagerogio & Salmeron, 2013), and the organizational sciences including strategic management, human resource management (Hodgkinson & Clarkson, 2005), management and organizational cognition, and operations research (Narayanan, 2005). To my knowledge, causal mapping has not been applied before to the field of higher education leadership or to the topic of corporatization.

Across many fields, researchers report the primary attribute of causal mapping: its ability to capture and represent rich conceptions of complex cause-and-effect relationships. Examples of this consensus include researchers from the artificial intelligence field (e.g., Papagerogio & Salmeron, 2013), from the futures studies field (e.g., Jetter & Kok, 2014), from the natural resources management field (e.g., Özesmi & Özesmi, 2004), and from the organizational sciences field (e.g., Ackermann & Alexander, 2016; Eden, 1988; Mohammed et al., 2000).

Methodological issues.

Mental models and sensemaking views. Although they acknowledge that a wide range of perspectives exist, Hodgkinson and Clark (2005) identify two primary views concerning the ontology of causal maps: Some mapping scholars maintain that causal mapping depicts cognitive structures that exist inside the mind, while others see it simply as a tool for exploring the causal assertions an individual makes during the mapping process. In the second view, causal mapping is seen as an act of sensemaking akin to the sensemaking described by Weick (1995); the mapmaker both discovers and creates thoughts and beliefs by engaging in the act of mapmaking.

Mapping scholars from the first group often base their work on the theory of mental models, which proposes that people hold within their minds various representations of the world. The theory began with Craik (1943), who first articulated the idea that people translate observed phenomena into mental models of the world and then use those models to anticipate events and form new conclusions. The work continued with scholars like Gentner and Gentner (1983) who studied people's naive theories of physical and mechanical processes and suggested that people build mental models by using analogies to extrapolate from familiar to unfamiliar concepts. Using evidence from experimental studies, Johnson-Laird (1983) argued that people develop multiple mental models, store them in working memory, and use them to reason about the world around them.

Mapping scholars who accept these premises contend that causal mapping can elicit these mental representations. Huff (1990), for example, believes that, with causal mapping, "we can hope to capture something that has the same essential characteristics as thought itself" (p. 14). Jetter and Kok (2014) claim that causal mapping can "elicit, capture and communicate causal knowledge and help respondents to become better aware of their own mental models" (p. 46). Citing "advances in artificial intelligence, cognitive psychology, and network analysis," Carley and Palmquist (1992) assert that the elicitation of mental models is now possible (p. 602). These scholars propose a four-step mapping process for "extracting, representing, and analyzing mental models" that "use[s] language as a window through which to view the individual's mind" (Carley & Palmquist, 1992, p. 603). Laukkanen and Wang (2015) reach a similar conclusion. Defining mental models as "internal representations and knowledge structures" (p. 13), these authors contend that mental models "can be usefully operationalized as causal maps" (Laukkanen & Wang, 2015, p. 18). Because these scholars seek fidelity in representing internal mental models, some avoid methods that present "the danger that the very process of eliciting the map...may change the cognitions of the participant" (Nadkarni & Narayanan, 2005, p. 10).

Other mapping scholars take a different view. For example, Axelrod (1976), the scholar credited with developing the first causal mapping method, views the causal assertions of the individual as the object of study regardless of their relationship to theorized mental structures. Similarly, Cossette and Audet (1992) define a causal map as a "graphic representation of a set of discursive representations made by a subject with regards to an object in the context of a particular interaction" (p. 327); these scholars state their "refusal to equate the map drawn...to one that the subject might have in his head..." (p. 327). Bryson et al. (2004) concur and take the conception further. Citing Weick's (1995) definition of meaning—that meaning can be created with as little as two entities and a relationship between them—these authors contend that causal mapping itself is a meaning-making activity and that the thinking of interest occurs while mapmaking is underway (Bryson et al., 2004). Eden (1988, 2004) and Cossette and Audet (1992) agree, describing causal mapping as a tool for reflective thinking. And Eden and Ackermann (1998a) hold that the individual's thinking "is likely to change as ideas are explored and understood better," a phenomenon they consider an advantage of the method (p. 193).

The aim of this study was not to understand the inner workings of the mind nor to elicit maps that accurately reflected hypothesized structures that might exist there. Instead, the aim of the study was to explore higher education leaders' thinking about corporatization, and I defined thinking as the meaning those leaders actively constructed in the mapmaking process. I viewed the created maps as a snapshot in time of participant thinking, knowing that their thinking was both influenced by the mapping process and would change over time.

Nomothetic and idiographic approaches. Scholars of causal mapping, particularly those from the organizational sciences, discuss nomothetic and idiographic approaches as "a particularly salient categorization" because of the methodological implications (Ackermann & Alexander, 2016, p. 892). In many disciplines, though, the terminology of nomothetic and idiographic has been associated with confusion and controversy. The terms, therefore, merit explanation.

The German philosopher Windelband (1904/1998) first proposed the terms nomothetic and idiographic to distinguish between the epistemological purposes of the natural sciences and the humanities, both of which the philosopher considered empirical sciences. According to Windelband, natural sciences seek knowledge that establishes *what always is*; it seeks the truth of general laws that are common to all entities within the domain of study, and this is nomotheticism. In contrast, according to Windelband, the humanities seek knowledge that establishes *what once was*; they seek the truth of particular instances that have occurred or existed at a point in time, and this is idiography. In Windelband's view, the key difference is the type of knowledge sought, and the level of analysis—whether an individual or a group is studied—is irrelevant.

With his neologisms, Windelband (1904/1998) seeded what became a long-running debate—particularly acute in the field of psychology—about the nature of science, the relationship between the general and the particular, and the limits and attainments of various research methods (Lamiell, 1998). During the 20th century, the concept of nomotheticism took on a number of meanings not originally intended by Windelband as many scholars made the following claims: Nomothetic approaches are scientific, while idiographic approaches are non-scientific; nomothetic investigations study groups, while idiographic ones study individuals; and nomothetic research uses statistical techniques to identify what is "true on average," treating this as a general law even though it is not "common to all" (Lamiell, 1998, p. 32). In the view of Lamiell (1998), these epistemological positions led to the "eventual hegemony of aggregate statistical thinking within scientific psychology" and to the misplaced aggrandizement of nomotheticism (p. 23). The positivistic interpretation of nomotheticism, though, was not limited to psychology. Across the disciplines, many academics viewed nomothetic research as the pinnacle of objective science and believed that the natural sciences were exemplars. Then "the Popper-Kuhn 'revolution' of the early 1960s" disrupted that assumption, and most scholars were persuaded that "subjectivity must enter the natural sciences through moral positioning, theory choice, and observation" (Williams, 2004, p. 729).

Since that time, the meanings of nomothetic and idiographic have continued to evolve. In the latter half of the 20th century, increasing numbers of scholars began to assert that nomothetic and idiographic approaches do not pertain to separate disciplines but are two valid modes of inquiry used in all scientific fields (Williams, 2004). And many contemporary scholars (e.g., Salvatore & Valsiner, 2010) now object to the "epistemological and methodological divide" inherent to the debate, seeing continuities instead of differences between nomothetic and idiographic approaches (Williams, 2004, p. 729). The combination of different thinkers holding different views, the evolving philosophy of science, and time has produced an array of interpretations of the terms nomothetic and idiographic, and the debate about their meaning continues to this day (Salvatore & Valsiner, 2010).

In the organizational sciences literature, though, scholars appear to share a common conception of these terms as they apply to the causal mapping method. Ackermann and Alexander (2016), for example, maintain that nomothetic causal mapping "aim[s] to reveal themes or patterns that can be statistically generalised" (p. 892). To achieve that goal, these authors claim, the nomothetic approach tends to use large sample sizes, highly structured data elicitation, and data coding that reduces variation; it also results in data that is less rich and less abundant but potentially generalizable (Ackermann & Alexander, 2016). On the other hand, these authors assert that idiographic causal mapping aims to develop "nuanced comprehension" and "detailed understanding of phenomena" (p. 892). To meet that goal, the idiographic approach tends to use small sample sizes, semi-structured data elicitation, and analysis of raw map data rather than standardizing data across multiple maps; this approach results in rich and subtle data that cannot be easily summarized, analyzed statistically, or generalized to other groups or domains (Ackermann & Alexander, 2016). Similarly, Laukkanen and Wang (2015) characterize as nomothetic those causal mapping studies that use large sample sizes, preselected concepts, and quantitative analysis in order to generalize findings; they contrast these with small-scale idiographic studies. In their discussion of the advantages and disadvantages of various causal mapping methods, Hodgkinson and Clarkson (2005) employ the terms nomothetic and idiographic in ways that echo the usage of Ackermann and Alexander (2016) and Laukkanen and Wang (2015).

For the purposes of this study, I use the terms nomothetic causal mapping and idiographic causal mapping in the sense conveyed by these scholars of mapping: Ackermann & Alexander, 2016; Hodgkinson & Clarkson, 2005; and Laukkanen & Wang, 2015.

Advantages and disadvantages. Researchers report advantages and disadvantages of the causal mapping method, but these depend in part on the research purpose. For example, causal mapping's inability to represent nonlinear relationships, IF/THEN conditions, and AND/OR/NOT logical operations (Papagerogio & Salmeron, 2013) is more important to artificial intelligence research than it is to social science research. Because this study belongs to the social science tradition, I summarize here the method's most important advantages and disadvantages as reported by researchers from those disciplines.

Social science scholars report significant advantages to the causal mapping method. One is that it incorporates both objective and subjective data; it allows the mapmaker to depict fact-based knowledge as well as emotions, beliefs, and potentially sensitive issues regarding power and relationships (Ackermann & Alexander, 2016; Mohammed et al., 2000; Özesmi & Özesmi, 2004). A second advantage is that it creates a holistic and systemic representation by revealing the interconnectedness of concepts and by visually presenting the map as a whole (Ackermann & Alexander, 2016; Ackermann & Eden, 2010; Eden & Ackermann, 1998a). Third, causal mapping enables reflection and sensemaking. It "encourages participants to reflect upon...'why' and 'how' events are brought about," and it "surface[s] their deep, tacit knowledge" (Ackermann & Alexander, 2016, p. 896). Furthermore, the visual display of the map prompts participants to examine and refine their ideas, often resulting in new insights (Ackermann & Alexander, 2016; Ackermann & Eden, 2010; Bryson et al., 2004). Finally, some researchers report that participants easily learn the process of creating a causal map (Jetter & Kok, 2014; Özesmi & Özesmi, 2004) and that non-experts easily learn to understand them (Jetter & Kok, 2014).

Social science researchers also report disadvantages to causal mapping, and these mostly pertain to specific applications of the method. For example, some scholars maintain that the process of creating causal maps is time-consuming (Jetter & Kok, 2014; Mohammed et al., 2000), yet Ackermann and Alexander (2016) contend that this applies only to maps derived from text analysis, not those created in an interview. On the other hand, although interview-based causal mapping may be quicker, it involves another disadvantage: Multiple scholars claim that researcher proficiency in causal mapping and interviewing is critical to this approach (Ackermann & Alexander, 2016; Bryson et al., 2004; Eden & Ackermann, 1998a; Jetter & Kok, 2014).

Similarly, some researchers describe the analysis of causal maps as labor-intensive when the maps are idiographic in nature (e.g., Hodgkinson & Clarkson, 2005). Ackermann and Alexander (2016), though, argue that the analysis of idiographic maps is no more intensive than other methods of qualitative research and can be mitigated by the use of appropriate software. A related issue is the challenge of comparing idiographic causal maps to each other. Mohammed et al. (2000) describe this process as "problematic" (p. 148), and Hodgkinson & Clarkson (2005) claim it is "infinitely more complex" than comparing nomothetic maps (p. 59). Eden and Ackermann (1998a), scholars of idiographic causal mapping, seem to acknowledge the challenge when they state, "Often the most appropriate way to compare [idiographic] maps is dependent upon the researchers immersing themselves in the data, in their detail, and in the data which result from alternative analytical perspectives on the maps" (p. 199).

Many of these issues reflect the difference between idiographic and nomothetic approaches to causal mapping. Because these approaches reflect different epistemological stances, they suit different research purposes and employ different techniques that have contrasting advantages and disadvantages. The different approaches require researchers to make trade-offs: Bryson et al. (2004) describe these as "important trade-offs...between simplicity, generality, and accuracy" (p. 306), and Hodgkinson and Clarkson (2005) depict them as "trade-off[s] between depth and richness of insight on one hand and comparability and generalizability on the other hand" (p. 66).

Rationale for selection. I chose idiographic causal mapping as the method for studying individual participants' conceptions of the causes and effects of corporatization. My primary reason was that it was the best fit for the purpose. Across the literature, I found no scholar arguing for a method better suited to capturing and understanding the rich and complex views individuals hold about cause-and-effect dynamics. Instead, I found scholars from many fields reflecting the robustness of the method, its fitness for that purpose, and the rich, full, and unique data it produced (Ackermann & Alexander, 2016, Ackermann & Eden, 2010; Bryson et al., 2004; Cossette & Audet, 1992; Eden, 1988; Eden & Ackermann, 1998a; Eden et al., 1992; Hodgkinson & Clarkson, 2005, Jenkins & Johnson 1995; Jetter & Kok, 2014, Laukkanen & Wang, 2015, Mohammed et al., 2000; Özesmi & Özesmi, 2004, Papagerogio & Salmeron, 2013). In addition to supporting the purpose of the study, the method also aligned naturally with the goal of gathering and examining idiographic, holistic, and complex data.

I also considered the four most salient disadvantages to the method. The first was the potentially time-consuming nature of map creation. Yet, scholars reported average interview times between 45 minutes and 2 hours (Mohammed et al. 2000) and between 40 and 90 minutes (Özesmi & Özesmi, 2004), and multiple scholars consider a two-hour interview reasonable for qualitative research (e.g., Ackermann & Alexander, 2016; Weiss, 1994). I attempted to mitigate the second disadvantage—the need for the researcher to employ causal mapping skills during the interview—by extensively reading the mapping literature, informally practicing causal mapping with peers prior to the start of the study, and using observation, reflection, and participant feedback to improve my skills along the way. The third disadvantage was the potentially time-consuming nature of data analysis. On this issue, I took the position of Ackermann and Alexander (2016), who argue that this characteristic is inherent to qualitative research and the pursuit of rich, idiographic findings. I also took those authors' recommendation to use software to support the analysis process, a topic I discuss more fully in the next section. The fourth disadvantage was the challenge of comparing idiographic maps. On this issue, I took the view that the central purpose of the study was to understand and richly convey the meanings represented in each individual map; I believed this was the most fitting contribution for the study because it produced preliminary findings about a relatively unexplored domain.

"The overriding necessity," according to causal mapping scholars Hodgkinson and Clarkson (2005), is that researchers choose methods that are "...commensurate with the requirements of the research question under investigation" (p. 66); "clearly there are times," these authors claim, "when small-scale, complex idiographic studies, exploratory and inductive in nature, conducted in the context of under-explored knowledge domains, are invaluable" (2005, p. 75). Hodgkinson and Clarkson's (2005) entire description of these "small-scale, complex idiographic studies" effectively portrays the nature of this study and explains why idiographic causal mapping was an excellent fit (p. 75).

Semi-structured questions method. To enact the study's purpose of exploring how higher education leaders think about corporatization, I also investigated a second aspect of participant thinking: their ideas about how the higher education system might best respond to corporatization. For this, I needed a qualitative method that allowed participants to freely share their ideas and to spontaneously explore the implications of those ideas as they expressed them to me. I chose semi-structured questions.

Rationale for selection. I chose this method because it was a good fit for my purpose. Semi-structured questions use pre-written questions as well as spontaneous questions from the interviewer that confirm, clarify, or supplement the emerging qualitative data (Merriam, 2002; Wengraf, 2001). Because the method uses preselected questions, I was able to focus the discussion on the topic: participant ideas about responding to corporatization. Because the method is also flexible, though, I was able to respond in the moment with additional questions to clarify my understanding or to explore emergent aspects of participant ideas. The flexibility of the process also allowed participants the freedom to express their ideas in a rich, descriptive, and impromptu way, which supported my goal of gathering idiographic, holistic, and complex data.

Data triangulation. Because causal mapping produced the most complex and revealing data for this investigation and because it called for an intensive and iterative analysis process, it became the heart of the study. I chose to use data from the semi-structured questions as a secondary data source and the extensive notes I took during both causal mapping and semi-structured questions as a tertiary data source. The use of multiple data collection methods in one study is a form of triangulation, a strategy that promotes trustworthiness in qualitative studies (Creswell, 2013; Merriam, 2002; Ridenour & Newman, 2008). With triangulation, the researcher can examine the subject—in this case how the participant thought about corporatization—from multiple angles, using the various forms of data to corroborate emerging themes (Creswell, 2013). In addition, Weick and Bougon (1986) specifically recommend the use of triangulation to confirm inferences made from causal maps.

During data analysis, I examined all three data sources for one participant before moving on to the next participant. In this way, I focused on within-case analysis rather than across-case analysis (Miles & Huberman, 1994), an approach that both strengthened my ability to use triangulation and aligned with the goal of understanding the unique perspective of each participant.

Strategies selected for this study. To achieve the purpose of the study, I made key decisions about the implementation of the two methods I selected: causal mapping and semi-structured questions. In the following section, I explain the overall strategies I used for data collection and data analysis, but I leave the details of those procedures for the next chapter.

Data collection. My means of data collection was a private, one-on-one interview with each participant that lasted, on average, approximately two hours. During these interviews, I used both of my data collection methods and carried out other tasks as well. Briefly, the interviews unfolded as follows: I introduced the study, obtained the participant's signed consent, asked brief background questions, facilitated the causal mapping process, asked semi-structured questions, and took extensive notes. I audio-recorded only the semi-structured questions portion of the interview.

In these interviews, I implemented design decisions I made in two important areas: the causal mapping data collection strategy and the semi-structured questions. I review these decisions below. Due to the complexity of the causal mapping method, though, I first provide an overview of the options before I explain the choices I made.

Options for causal mapping data collection. To create order out of a multitude of variations, Hodgkinson and Clarkson (2005) offer a taxonomy of data collection approaches to causal mapping, and Figure 4 presents a visual summary. The organization first distinguishes between the use of indirect and direct sources for the cause-and-effect data that comprise a causal map. When an indirect source is used, the study does not involve the participant in the process of producing the cause-and-effect data. Instead, according to Hodgkinson and Clarkson, the study uses either a primary or secondary source in an indirect manner. A study that uses a primary indirect source gathers data from the participant but does not engage him or her in thinking about causes and effects. Cossette and Audet (1992), for example, interviewed small business owners about what they thought was most important to their success, but the researchers "conducted [the interviews] in such a way as to avoid suggesting anything to the individual that might become part of an eventual [causal] map" (p. 332); they avoided influencing the participant's natural flow of thought and later distilled cause-and-effect reasoning from the interview transcript. A study that uses a secondary indirect source gathers the cause-and-effect data from documents created for another purpose. Axelrod (1976), for example, extracted cause-and-effect relationships from historical documents. In one study, Axelrod, a political scientist, analyzed the 1918 meeting transcripts from the Eastern Committee of the British Imperial War Cabinet to understand the causal reasoning behind its postwar policy toward Persia. When researchers use indirect sources, whether primary or secondary, they extract the cause-and-effect data and then create a causal map that represents that data.

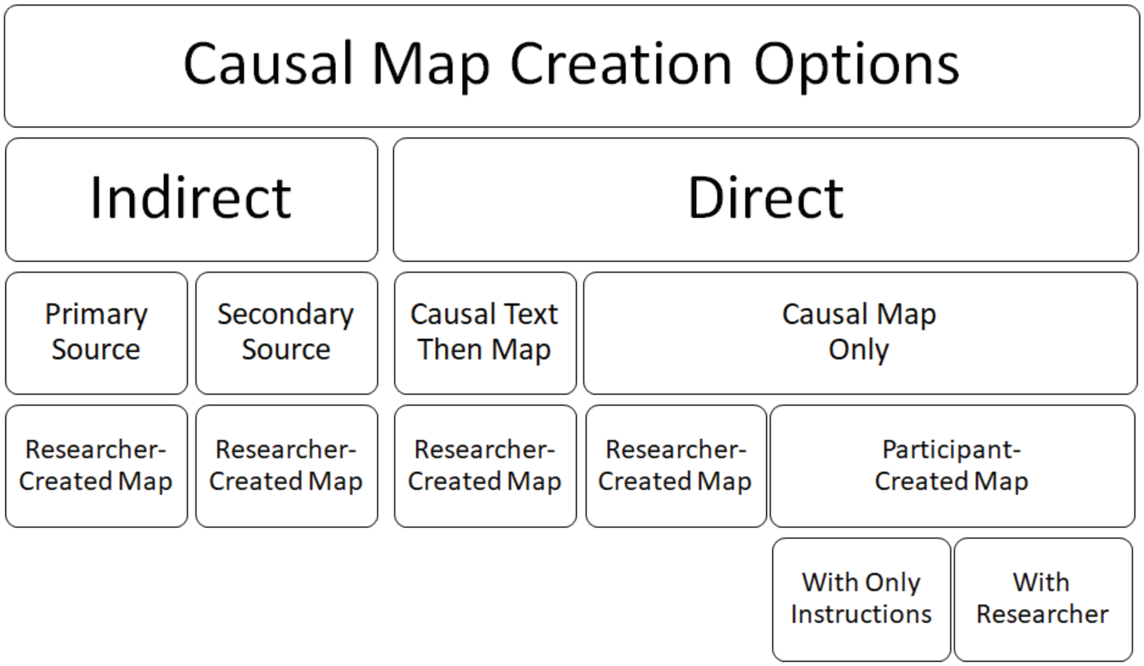

Figure 4. Taxonomy of methodological options for causal map creation derived from “What have we learned from 30 years of research on causal mapping?”, by G. P. Hodgkinson, and G. P. Clarkson, 2005, in V. K. Narayanan and D. J. Armstrong (Eds.), *Causal Mapping for Research in Information Technology* (pp. 46-79*,* Hershey, PA: Idea Group.

In contrast, a study that uses a direct source engages the participant in the production of the cause-and-effect data. This type of study, according to Hodgkinson and Clarkson (2005), uses one of two approaches. In the first, the researcher engages the participant in producing text that contains the causal data and then the researcher creates a causal map that represents that data. The literature describes multiple techniques for producing such a text. Some scholars use a pair-wise comparison approach; they preselect concepts for mapping and ask the participant to identify any cause-and-effect relationships between each possible pair of concepts. Hodgkinson, Maule, and Bown (2004), for example, employed this technique as an interview process, and Markoczy and Goldberg (1995) implemented it as a structured questionnaire. Another approach to directly acquiring causal text is prompted writing. Nadkarni and Narayanan (2005), for example, took this approach with college students studying business management; the researchers asked the participants to analyze a prewritten business scenario and write a two-page causal analysis. Adopting a third technique, Laukkanen and Wang (2015) recommend obtaining causal texts through semi-structured interview questions; they ask for the participant's thoughts about the causes and effects of an anchor topic and then produce a written transcript of the interview. In all of these cases, once the researchers have obtained the causal text, they analyze it and derive from it a representative causal map. Some scholars, for example Carley and Palmquist (1992), claim that software can accelerate the text analysis and map creation, because the important structural and semantic relationships are contained within the text.

The second approach to using a direct source bypasses the creation of causal text and moves directly to causal mapping; the creation of the map is the activity that elicits the causal reasoning (Hodgkinson & Clarkson, 2005). In some studies, the researcher draws the map during an interview with the participant. Eden and Ackermann (1998a, 1998b) employ this approach and describe it as an interactive process in which the researcher and participant explore the participant's perspective, and the researcher diagrams the causal reasoning, requesting feedback from the participant and making adjustments to the map along the way. In other studies, the participant creates his or her own causal map. Sometimes the participant works alone to draw a map based on instructions from the researcher, a technique used by Hodgkinson et al. (2004), or by entering the map directly into mapping software (Hodgkinson & Clarkson, 2005). At other times, the participant creates the causal map as part of an interview process with the researcher, an approach used by Özesmi and Özesmi (2004).

Within the category of studies that use direct sources, Hodgkinson and Clarkson (2005) make one more important distinction: the difference between nomothetic and idiographic elicitation. Although named as two categories, this contrast actually refers to a continuum that describes the degree to which participants identify the “variables to be causally mapped, using their own natural language...” (Hodgkinson & Clarkson, 2005, p. 53). Nomothetic elicitation aligns with the purposes of nomothetic causal mapping and tends to use techniques that structure the causal data. For example, researchers who take this approach often preselect a pool of mapping concepts based on theory or “an *a priori* conceptual analysis of the domain to be mapped” (Hodgkinson & Clarkson, 2005, p. 53). Or they may allow participants to choose a particular number of concepts from a preselected pool (Hodgkinson & Maule, 2002). These procedures standardize concepts across individual maps, laying the groundwork for statistical comparisons yet diminishing the richness of the data. At the other end of the spectrum, idiographic elicitation aligns with the purposes of idiographic causal mapping; it allows participants to choose their own concepts and express them in their own language. This approach captures the depth and uniqueness of each participant’s perspective but usually precludes statistical analysis or efficient map comparisons (Hodgkinson & Clarkson, 2005).

Rationale for causal mapping data collection strategy. For this study, I chose the data collection strategy of participant-created maps produced during an interview using primarily idiographic elicitation. My reasons were plural. First, I decided that engaging the participants as direct sources of their cause-and-effect data was critical to the purpose of understanding their unique perspectives; an indirect approach, I believed, would distance me from those understandings and add unnecessary layers of researcher-derived interpretation. Second, I chose to bypass the creation of causal texts for similar reasons; it would, I believed, interfere with my direct engagement with participants while adding an interpretive step not guided by that engagement. Third, I chose to embed the causal mapping process within interviews for a number of reasons: the rich meaning that qualitative interviews elicit (Creswell, 2013; Merriam, 2002), the opportunity it afforded me to interact, question, and confirm my developing understanding of participant views (Eden & Ackermann, 1998b; Laukkanen & Wang, 2015), and the potential insight that might come from a multi-sensory experience of the participants (Wengraf, 2001). Perhaps for similar reasons, the idiographic mapping scholars Eden and Ackermann (1998a) assert that "well-run, one-on-one interviews are likely to be the best method for eliciting [causal] maps" (p. 194).

An important design decision was my choice to facilitate the participants through the process of creating their own maps, and I had several reasons: Researchers had reported the ease with which participants learn how to map (Jetter & Kok, 2014; Özesmi & Özesmi, 2004); researchers had also found that participants experienced freehand mapping as "easier to complete...more engaging...and more representative of how they thought about the problem" than more structured elicitation methods (Hodgkinson et al., 2004, p. 20); and researchers had claimed that the freehand approach provided the flexibility needed to elicit all relevant ideas (Papageorgiou & Salmeron, 2013). I also thought that allowing participants to speak for themselves by creating their maps might build trust between them and me, a beneficial quality for qualitative research (Marshall &

Rossman, 2016; Weiss, 1994). Finally, I chose to place no constraints on the elicitation process; I allowed participants complete control over the concepts they included in their maps and the language they used to express them. Because the study examined relatively unexplored territory, I did not want to limit or presuppose which concepts participants would deem important. During mapping, I did use one technique normally associated with nomothetic elicitation. I asked participants to rate the strength of each link using a 5-point scale of Very Weak, Weak, Medium, Strong, or Very Strong, because I thought this would add richness to the data. Overall, I chose techniques that were most likely to yield unique, holistic, and complex data.

Semi-structured questions. In the interviews, I first facilitated participants through the process of creating a causal map that depicted their views of the causes and effects of corporatization. Then, I used semi-structured questions to explore their ideas for how higher education might best respond to corporatization. I used one pre-written question: Given its mission and current environment, how do you think American higher education should respond to corporatization? Based on the ideas they expressed, I asked follow-up questions to better understand their thinking, but I often asked variations of these two: Looking to the future of American higher education, what changes that are internal to higher education would you like to see? Looking to the future of American higher education, what changes that are external to higher education would you like to see?

Data analysis. At the end of the data collection phase, I had obtained three forms of data for each participant: a participant-created causal map, audio-recorded semi-structured questions, and extensive written notes that I took during both the mapping and question phases of the interview. In the data analysis phase, I implemented design decisions I made in two important areas: the causal mapping data analysis strategy and the overall analysis process in which I triangulated the data. Below, I review these decisions.

Options for causal mapping data analysis. Myriad techniques exist for the analysis of causal maps (Hodgkinson & Clarkson, 2005; Jetter & Kok, 2014; Mohammed et al., 2000). Arguing that no generic approach is possible, Eden et al. (1992) suggest that "the interpretation and meaning of the analysis can only be undertaken in relation to both the purpose of the research and the theoretical basis of the form of representation..." (p. 309). Although the two approaches overlap, nomothetic and idiographic approaches offer a helpful way to organize the strategies for analyzing causal maps.

Because a nomothetic approach aims to produce generalizable findings, it tends to deemphasize the exploration of individual maps and emphasize the comparison of individual maps or groups of maps (Hodgkinson & Clarkson, 2005; Laukkanen & Wang, 2015). In order to compare maps, a nomothetic approach requires structured data; the concepts and links that comprise causal maps must be comparable across participants (Hodgkinson & Clarkson, 2005; Laukkanen & Wang, 2015). Mapping researchers obtain this structured data either prior to map creation by preselecting concept pools (e.g., Hodgkinson et al., 2004; Markoczy & Goldberg, 1995) or after map creation by standardizing participant-generated concepts (Laukkanen, 1994, 1998; Laukkanen & Wang, 2015; Özesmi & Özesmi, 2004). In what they call the Comparative Causal Mapping (CCM) method, for example, Laukkanen and Wang (2015) use an "iterative top-down process" to transform raw map concepts into a set of standard terms (p. 125). These scholars argue that this interpretive transformation is necessary for finding the “shared core elements” of the maps (Laukkanen & Wang, 2015, p. 62), while Eden and Ackermann (1998a) charge that “even allowing the researcher to identify synonymous elements is methodologically problematic” (p. 196).

Once structured data has been achieved, a nomothetic approach usually entails the creation of an adjacency matrix for each individual map. First used by Axelod (1976), refined by Kosko (1986), and employed by nearly all causal map researchers since then, an adjacency matrix is an alternative way of representing the meaning of a causal map without altering that meaning. An adjacency matrix lists all of the concepts in a map down the left side to represent them when they act as causes. It lists the identical set of concepts along the top to represent them when they serve as effects. This arrangement creates two cells for each pair of concepts; one cell represents the relationship when the first concept causes an effect on the second concept, and the other represents the relationship when the second causes an effect on the first. When a concept pair is linked in the causal map, information about that link is entered into the appropriate cell in the matrix. Some researchers (e.g., Axelrod, 1976) capture only the existence or nonexistence of a link and enter either a 1 or a 0 in the cell. Others, starting with Kosko (1986), enter a decimal number between 0 and 1 that represents the relative strength of the relationship as encoded by the participant. Figure 5 shows the adjacency matrix for the simplified causal map from Figure 3. In it, decimal numbers are used in place of language-based strength descriptions, and negative relationships (those that cause a decrease instead of an increase) are shown with a minus sign. In this map, Vehicle Speed and Patrol Frequency have a two-way relationship; each causes an effect on the other. Therefore, both cells for the pair contain relationship information.

		Effects			
		Vehicle speed	Patrol frequency	Accident rate	Driver anxiety
Causes	Vehicle speed		0.4	0.6	
	Patrol frequency	-0.8		-1.0	0.4
	Accident rate				
	Driver anxiety			0.4	

Figure 5. Adjacency matrix for the simplified causal map shown in Figure 3. All four map concepts are listed along the left to represent them when they act as causes, and the same map concepts are listed along the top to represent them when they serve as effects. When a cell inside the matrix contains data, it means that a link exists between the causal concept on that row and the effect concept in that column; the data in that cell describes the link. Negative (decreasing) links are shown with negative signs, and strengths have been converted to decimal numbers where Very Weak = 0.2, Weak = 0.4, Medium = 0.6, Strong = 0.8, and Very Strong = 1.0.

Once adjacency matrices have been created for each individual map, a nomothetic approach may use a variety of mathematical ways to identify similarities and differences across maps. A common technique is to calculate and compare metrics that describe the structure of the map. Over the years, mapping researchers have devised a “great many” of these indices (Hodgkinson & Clarkson, 2005, p. 56), and Table 8 lists some common ones. Laukkanen and Wang (2015) also suggest comparing maps by tallying the number and percentage of concepts and links shared by two matrices. A related technique is to calculate a distance score, which provides an overall indication of the difference between two adjacency matrices. Langfield-Smith and Wirth (1992), for example, suggest a distance calculation that compares the existence or non-existence of concepts and links as well as the strengths of links. Markoczy and Goldberg (1995) refined that formula and also suggested statistical tests "to identify which characteristics account for similarities in thinking" (p. 309).

In addition to comparative metrics, some mapping researchers create an average adjacency matrix for the group and then compare individual matrices to it (e.g., Özesmi & Özesmi, 2004). To create the group matrix, each cell is filled with the arithmetic mean of all of the signed links for that concept pair (Jetter & Kok, 2014, Özesmi & Özesmi, 2004). The validity of this approach—which began with the seminal 1977 Bougon, Weick, and Binkhorst study of the Utrecht Jazz Orchestra—continues to be debated by mapping scholars (Eden & Ackermann, 1998a; Hodgkinson & Clark, 2005; Jetter & Kok, 2014; Laukkanen & Wang, 2015; Mohammed et al., 2000; Papagerogio & Salmeron, 2013). Some mapping researchers go further with this analysis. They use the group average map, sometimes derived from the individual maps of domain experts, to model mathematically the outcomes of various possible scenarios (Jetter & Kok, 2014; Özesmi & Özesmi, 2004; Papagerogio & Salmeron, 2013).

Several software options are available to help researchers with nomothetic analysis. Designed for studies with very large sample sizes, Cognizer supports the pair-wise elicitation of causal links, calculates common metrics, and creates aggregated group maps based on sums, means, or standard deviations (Clarkson & Hodgkinson, 2005). CMAP3 supports the comparative causal mapping technique designed by Laukkanen and

Wang (2015); it supports the process of standardizing map concepts, calculates common metrics, and offers tabular review of various map dimensions. Finally, Mental Modeler (Gray, Gray, Cox & Henly-Shepard, 2013) allows users to construct a map model, "develop scenarios and evaluate system change under plausible conditions, and revise their model based on the model output" (p. 967).

Table 8

Examples of Common Metrics Describing Causal Maps

Level	Metric	Description	Early Reference[a]
Map	Ratio of links to concepts	Number of links divided by total number of concepts	Eden et al. (1992)
	Ratio of heads to concepts	Number of concepts with 0 outdegrees divided by total number of concepts	Eden et al. (1992)
	Ratio of tails to concepts	Number of concepts with 0 indegrees divided by total number of concepts	Eden et al. (1992)
Concept	Indegrees	Number of links into a concept	Axelrod (1976)
	Outdegrees	Number of links out of a concept	Axelrod (1976)
	Domain	Sum of the numeric strengths of links into or out of a concept	Kosko (1986)
	Centrality	Sum of number of direct and indirect links into or out of a concept with distance-decay function that reduces weight based on distance from concept	Eden et al. (1992)

[a]Because the original source of an index can be difficult to determine, the reference serves as an early example from the literature.

The idiographic approach to analysis differs from the nomothetic approach in fundamental ways, although there are some techniques shared by both. Generally, because an idiographic approach aims to understand unique perspectives, it tends to deemphasize the comparison of maps and emphasize the deep exploration of individual maps (Hodgkinson & Clarkson, 2005). Most often, an individual map represents the thinking of an individual person, but sometimes it reflects the thinking of an individual group that negotiates map creation in a facilitated process (e.g., Eden et al., 1992). Typically, an idiographic approach works with the rich, unstructured data produced by idiographic elicitation and uses a discovery process rather than statistics to mine the meaning encoded in each map (Ackermann & Alexander, 2016; Ackermann & Eden, 2010; Cossette & Audet, 1992; Eden, 2004; Eden & Ackermann, 1998a, Eden et al., 1992).

The main area of overlap between idiographic and nomothetic analyses is the use of adjacency matrices and metrics. While these techniques are foundational to nomothetic analysis, they may or may not be used in idiographic analysis. For example, three of the four empirical studies in Axelrod's (1976) edited volume about idiographic maps focused on the political reasoning of one person and used adjacency matrices and metrics to explore that individual's thinking. Cosette and Audet (1992), on the other hand, used idiographic analysis to understand the reasoning of individual small business owners and employed metrics but not adjacency matrices. When researchers include these techniques in idiographic analysis, they generally use the idiosyncratic concepts produced by each participant; they focus on the matrix and metrics for each separate map; and they use these indicators as clues for understanding the larger meaning of the map (Ackermann & Alexander, 2016; Cossette & Audet, 1992; Eden, 2004; Eden & Ackermann, 1998a; Eden et al., 1992).

Because it seeks to discover meaning through exploration, idiographic analysis cannot be formulaic or standardized (Eden & Ackermann, 1998a). Yet, researchers have suggested potentially fruitful strategies. For example, Cossette and Audet (1992) organized their analysis into three initiatives: the exploration of general map characteristics including the identification of important concepts and clusters of concepts; the exploration of influence by examining the links into and out of central concepts; and the exploration of concepts that interact with each other in loops. Eden (2004) suggested two phases of analysis: exploring the general characteristics of the map, including its structural properties and level of complexity, then investigating the emergent properties of the map including its central concepts, clusters, and loops. Although the focus of idiographic analysis is the richness and uniqueness of individual perspectives, Eden and Ackermann (1998a) suggest tentative comparisons—with "attention...paid to retaining the richness and idiographic nature" of participant thinking—can be made between the value systems, central issues, and emergent themes of causal maps (p. 206).

In my review of the literature, I found only one software option that supports the idiographic analysis of causal maps. Decision Explorer (Decision Explorer, n.d.) provides graphic depiction of the causal map and metrics that describe the structural properties, complexity, important concepts, clusters, and loops of the map. The software supports map exploration through visual inspection, rearrangement of the map while retaining the structure of its concepts and links, and drill-down focus on individual concepts or clusters and their associated links. In addition, it allows the qualitative coding of concepts into emergent themes and subsequent analysis of and comparisons between coded themes. Offered by Banxia Software, Decision Explorer was developed in collaboration with the idiographic mapping researchers Eden and Ackermann (e.g., Ackermann & Eden, 2010; Eden, 2004; Eden & Ackermann, 1998a, 1998b).

Rationale for causal mapping data analysis strategy. Because the purpose of the study was to explore how individual participants thought about corporatization, I ultimately chose to use an idiographic strategy for the analysis of causal maps. Yet, I came to this decision only after a period of experimentation and learning in which I conducted various analyses, revisited the data, returned to the causal mapping literature, and reflected on my research purpose again and again; my data analysis evolved as my understanding of causal mapping evolved.

In the end, a combination of techniques best served my purpose. Using the rich, idiographic data I had obtained during map creation, I blended four primary means of exploring their meaning: I used visual inspection and impressionistic sketches to identify tentative themes and patterns, a qualitative approach aligned with Creswell's (2013) overarching framework for qualitative analysis. I used adjacency matrices with numeric strength ratings and metrics to describe general characteristics of the maps and identify important concepts. And I adapted the analytical framework of Eden and Ackermann (Ackermann & Alexander, 2016; Ackermann & Eden, 2010; Eden, 2004; Eden & Ackermann, 1998a, Eden et al., 1992) to explore emergent themes and develop a sense of the overall maps. Finally, I used the Decision Explorer software to support portions of my analyses. With these methods, I was able to investigate multiple, complex dimensions of each map while I also sought a holistic sense of each map. The combination of techniques was like holding a multifaceted jewel up to the light and rotating it to see every angle.

In retrospect, my experience echoes Creswell's (2013) approach to qualitative analysis. Describing qualitative analysis as "custom-built" and "not off-the-shelf," Creswell maintains that it often requires researchers to learn by doing and to allow the analysis to evolve out of the unique circumstances of the research (p. 182). At the same time, the author contends that the many variations of qualitative analysis can be described as a spiral in which the researcher "mov[es] in analytic circles rather than using a fixed linear approach" and undertakes certain endeavors common to all qualitative research (Creswell, 2013, p. 182). These endeavors include: organizing the data; reading and memoing; describing, classifying, and interpreting themes; abstracting out to larger meanings; and representing the data (Creswell, 2013). I used Creswell's ideas to frame my analytical efforts, and I returned to them whenever I needed to get my bearings.

Summary of analysis process. Ultimately, the work of analysis fell into four stages: transcription and first, second, and third analyses. In the transcription phase, I transcribed the causal maps into adjacency matrices in Excel, the audio-recorded, semi-structured questions into Word documents, and my researcher notes into Word documents as well. In the first analysis, I calculated and analyzed map metrics and standardized all map concepts with the intention of creating an average group map. I realized, though, that the approach diminished the richness and uniqueness of the data and thus ran counter to my purpose. I turned instead to a second analysis. In it, I used an overall qualitative exploration that blended the use of adjacency matrices, metrics, and impressionistic sketches of the original maps with triangulation of the semi-structured questions and my researcher notes. This approach brought me closer to my goal. In the third analysis, I concentrated on an in-depth, idiographic analysis of causal maps based primarily on the work of Eden and Ackermann (e.g., Eden & Ackermann, 1998a) and the use of Decision Explorer software, and I combined this with data triangulation. In each of the three stages, I emphasized within-case analysis (Miles & Huberman, 1994), examining all three sources of data for one participant before moving to the next participant. Once I had completed the third phase of analysis, I decided I had reached my research goal.

Strategies used to promote trustworthiness. Over time, researchers have developed multiple strategies for promoting the trustworthiness of a qualitative study, and Creswell (2013) recommends that researchers use at least two in any given study. In this study, I used several.

The first was reflexivity (Creswell, 2013; Merriam, 2002; Ridenour & Newman, 2008), which Merriam (2002) describes as the practice of "critical self-reflection by the researcher regarding assumptions, worldview, biases, theoretical orientation, and relationship to the study that may affect the investigation" (p. 31). Because I sought highly diverse views of corporatization, I needed to listen, understand, and represent each of those views with fidelity to the experience of each participant. Therefore, I needed to keep awareness of my own views high and present and separate from the research. Prior to the start of the study, I wrote a reflective essay to clarify for myself my past experiences with and views about leadership, higher education, and corporatization. (See Appendix A.) As suggested by Özesmi and Özesmi (2004), I also created my own causal map for corporatization using the procedures I later would ask participants to use. (See Appendix B.) Throughout data collection and analysis, I kept a reflective journal (Ridenour & Newman, 2008) in which I examined my evolving thoughts about corporatization and my emerging understandings of participant perspectives. I also used the journal to repeatedly turn back to the purpose of the study and assess how well my decisions were aligning with that purpose, making adjustments as needed.

In addition to reflexivity, I also employed several strategies related to data. One was the use of a maximum variation sampling strategy. This aligned with the purpose of the study but, according to Merriam (2002), it also strengthens trustworthiness because it “allow[s] for a greater range of application of the findings by the consumers of the research” (p. 31). A second strategy was data triangulation (Creswell, 2013; Merriam, 2002; Ridenour & Newman, 2008). Comparing data from three sources for each participant helped me produce what Creswell (2013) describes as “corroborating evidence from different sources to shed light on a theme or perspective” (p. 251). A third strategy was member-checking (Creswell, 2013; Jones et al., 2006; Lincoln & Guba, 1985; Marshall & Rossman, 2016; Merriam, 2002; Ridenour & Newman, 2008) , which Merriam (2002) defines as “taking data and tentative interpretations back to the people from whom they were derived and asking if they were plausible” (p. 31), and Lincoln and Guba (1985) characterize as “the most crucial technique for establishing credibility” (p. 314). After transcribing the map and the semi-structured questions, I sent the transcriptions to participants and requested their review, corrections, and clarifications. After data analysis, I sent the written findings for each individual participant to the participants and requested their review, feedback, and confirmation. I present more detail about the member-checking process in the next chapter.

As previously discussed, the final strategy I used to promote trustworthiness was an audit trail (Merriam, 2002; Ridenour & Newman, 2008). For three reasons, I had concluded that readers might require extensive information in order to form their own judgments about the study: the complexity of the causal mapping method, the fact that it had not been applied before to this subject matter, and the fact that this was my first experience using causal mapping, a method that some claim requires a particularly complex set of researcher skills (Ackermann & Alexander, 2016; Bryson et al., 2004; Eden & Ackermann, 1998a; Jetter & Kok, 2014). For those reasons, I provide audit information in five areas: a discussion of methodological issues related to the method; an overview of data collection options and the rationale for my choices; an overview of data analysis strategies and the rationale for my selections; a chronological account of the steps I used to collect and analyze data; and, finally, documentation of the links between the results of my analysis and my interpretations.

CHAPTER 4:

DATA COLLECTION AND ANALYSIS PROTOCOLS

Causal mapping is highly complex; it had not, to my knowledge, been applied before to the field of higher education leadership or to the topic of corporatization; and it was the first time I had used the method. I concluded, therefore, that I owed readers an audit trail so they would have sufficient information to judge the value of the study. As part of the audit trail, I provide in this chapter a step-wise, chronological account of the data collection and analysis protocols I used.

Throughout the study, I adopted the view that I was working in partnership with the participants, that we would work together to discover and illuminate their individual views about corporatization. Therefore, as reflected in these protocols, I took steps to ensure confidentiality, build trust, and encourage participant self-expression. The literature about qualitative research recommends this approach (e.g., Marshall & Rossman, 2016; Weiss, 1994), but it also reflected my instinctive position as a qualitative researcher.

Data Collection Protocol

Pre-interview. As participants volunteered for the study, I used email to schedule 1 ½-to-2-hour individual, private interviews with them and asked them to choose a location with enough table space to work comfortably on poster boards. Letting the participants choose the site also allowed them to choose a location that was comfortable for them and offered the level of privacy they wanted.

Before the interviews, I sent participants a pre-interview email which confirmed the appointment, included a copy of the consent form they would sign, and offered a way to streamline the interview by gathering their thoughts in advance. (My first interview had been with a time-constrained upper administrator, and I had realized that providing the questions in advance would have streamlined the process. From that point forward, I sent the pre-interview prompts to all participants.) The email provided the definition of corporatization used in the study, brief examples of corporatization from the literature, a reminder about the purpose of the study, and four questions to consider: what they thought were examples of corporatization; what they thought were the causes of those examples; what they thought were the effects of those examples; and how they thought American higher education should respond to corporatization. Figure 6 contains an example of the pre-interview email, and Appendix C contains a copy of the consent form.

Subject: Confirming Your Interview, Streamlining Your Time

Dear Dr./Ms./Mr. ________________,

Perfect! I will meet you at ________________, on ______________ at _________.

In addition, there are two ways to streamline your time in the interview: informally gathering your thoughts and reviewing the consent form in advance of our meeting. Below my signature are some simple prompts for gathering your thoughts, and attached is the consent form.

I am thankful for your participation, and I look forward to our discussion!

With gratitude,
Sherry McAndrew

Streamlining Your Time: Gather Your Thoughts

For these interviews, I have found it helpful to participants to gather their thoughts—in an informal way—in advance of the interview. And it seems to save them time in the interview. If you wish to do this, please find below some prompts for your thinking.

Definition of corporatization used in this study:	The importing of business ideas and practices into the day-to-day operations of non-profit colleges and universities
Examples of corporatization from the literature:	• Top-down management approaches • Remaking of the traditional faculty role • Emphasis on efficiency and financial goals • Market-like efforts to pursue external revenue
Reminder about the purpose of this study:	The purpose of the study is to explore the diverse views that faculty, staff, and administrators have about corporatization. The purpose of the study is NOT to gather data to support any one view and NOT to evaluate the merits of various views. Your view may or may not align with others in your institution or with the existing literature, which is far from complete.
Questions to consider:	• What do you think are **signs** or **examples** of corporatization in American higher education? • What do you think are the **causes** of these signs or examples of corporatization? • What do you think are the **effects** of these signs or examples of corporatization? • Given its mission and current environment, how do you think American higher education should **respond** to corporatization?

Figure 6. Pre-interview email. I sent this email to individuals after they had volunteered to participate in the study and had scheduled their interview session with me. The email served two purposes. The first was to confirm the time and place for the interview, and the second was to suggest ways they could streamline their interview time by taking action in advance of the interview; they could a) review the consent form attached to the email and b) gather their thoughts about the interview questions.

Interview: Preliminaries. Interviews were the first and—with the exception of one member-checking meeting—only face-to-face meetings I had with participants. In this and the following sections, I present a chronological account of the interview process, breaking down the interview into four sequential phases and discussing each phase in order: preliminaries, causal mapping, semi-structured questions, and conclusion.

In the first phase of the interview, the preliminaries, I had two main goals. First, I aimed to build on the sense of partnership I had established in my emails. To achieve this, I sought to put participants at ease, convey the value of their contributions, and reassure them about confidentiality. Second, I used this interview phase to collect signed consent forms and basic demographic data.

This first phase of the interview unfolded as follows. I met privately with each participant in the location they had chosen. Nearly all had chosen their university office, but three had chosen otherwise: the office of their private business, their home, or a public library. When I arrived, I began with a warm greeting and casual conversation to establish a friendly, informal tone and help put the participants at ease. When we sat down, I continued with some casual conversation to establish rapport and get a sense, from verbal and non-verbal cues, of the participants' interest in social interaction and their desired pace. I tried to use these cues to gauge the amount of talking and the interview pace that might be the most comfortable for them. Next, I introduced myself by providing some brief background about my decade of professional work at a community college, which had led to my interest in the Ph.D. program in educational leadership in higher education. Then, I highlighted key points about the study: the goal of capturing highly diverse views; the scarcity of empirical studies about views of corporatization held by those who worked in higher education, particularly administrators; my hope that the study might help to enlarge or enrich dialogue about corporatization in higher education; and the value of their contribution towards these goals.

I then reviewed the consent form with particular emphasis on my commitment to confidentiality. In the form, I had made a strong written commitment, promising to share identifiable data only with my committee chair and otherwise to mask the identity of participants and the university. I reiterated my commitment to enacting these promises fastidiously, I had the participant sign the consent form, and I witnessed it. I briefly described our agenda for the interview and then asked a few questions about the participant's background in higher education, making note of their answers. I chose these questions in advance, did not vary them across interviews, and the form I used to ask these questions is shown in Figure 7.

Question	Answer
Approximately how many years have you worked in higher education?	
Broadly speaking, what general roles have you had in higher education?	
[If the position is in instructional category]: What is your academic discipline?	
How would you describe your experience with "market-like activities to secure external revenue"? Let me read you a description of what I mean by this phrase: *Examples of market-like activities to secure external revenue include marketing, branding, entrepreneurialism, corporate partnerships, corporate-funded research, and transforming academic work into marketable products using technology transfer, patents, licensing, or other strategy* With which types of these activities do you have experience?	

Figure 7. Interview form for background questions. In the preliminaries phase of the face-to-face interview, I used this form to ask participants questions about their background in higher education and to make note of their answers.

Interview: Causal mapping. The causal mapping portion of the interview was next, and it unfolded in several stages. First, I explained that causal mapping is a method for describing causes and effects; that the participants' goal was to create a map that reflected their thinking; and that my goal was to understand that thinking.

Brief training. I then provided brief training on how to create a causal map, using a nine-page handout to walk participants through the basic steps. Following the advice of Özesmi & Özesmi (2004), I used a training example unrelated to the topic of the study and derived the handout from a simple map from Taber (1991) that described the dynamics of highway driving. Each page illustrated a key point about the process. The first page showed how participants would write concepts on circles and arrange them anywhere on a piece of paper; the second and third pages showed how participants would draw an arrow from one concept to a second concept and mark it with a + sign to show that the first caused the second; the fourth and fifth pages showed how participants would mark an arrow with a negative sign when a concept caused a decrease rather than an increase in the other concept and could mark two concepts as influencing each other in different directions; the sixth page showed how participants would mark the strength of each arrow by labeling it Very Weak, Weak, Medium, Strong, or Very Strong; the seventh page showed how participants would add, subtract, and change concepts and links as they went along, that this fluidity was natural to the process; it also showed how concepts could be anything, including facts, ideas, and emotions; and the eighth and ninth pages showed how participants would continue adding concepts and links to the map until they felt the map was complete. Figures 8 through 16 show each of these training pages.

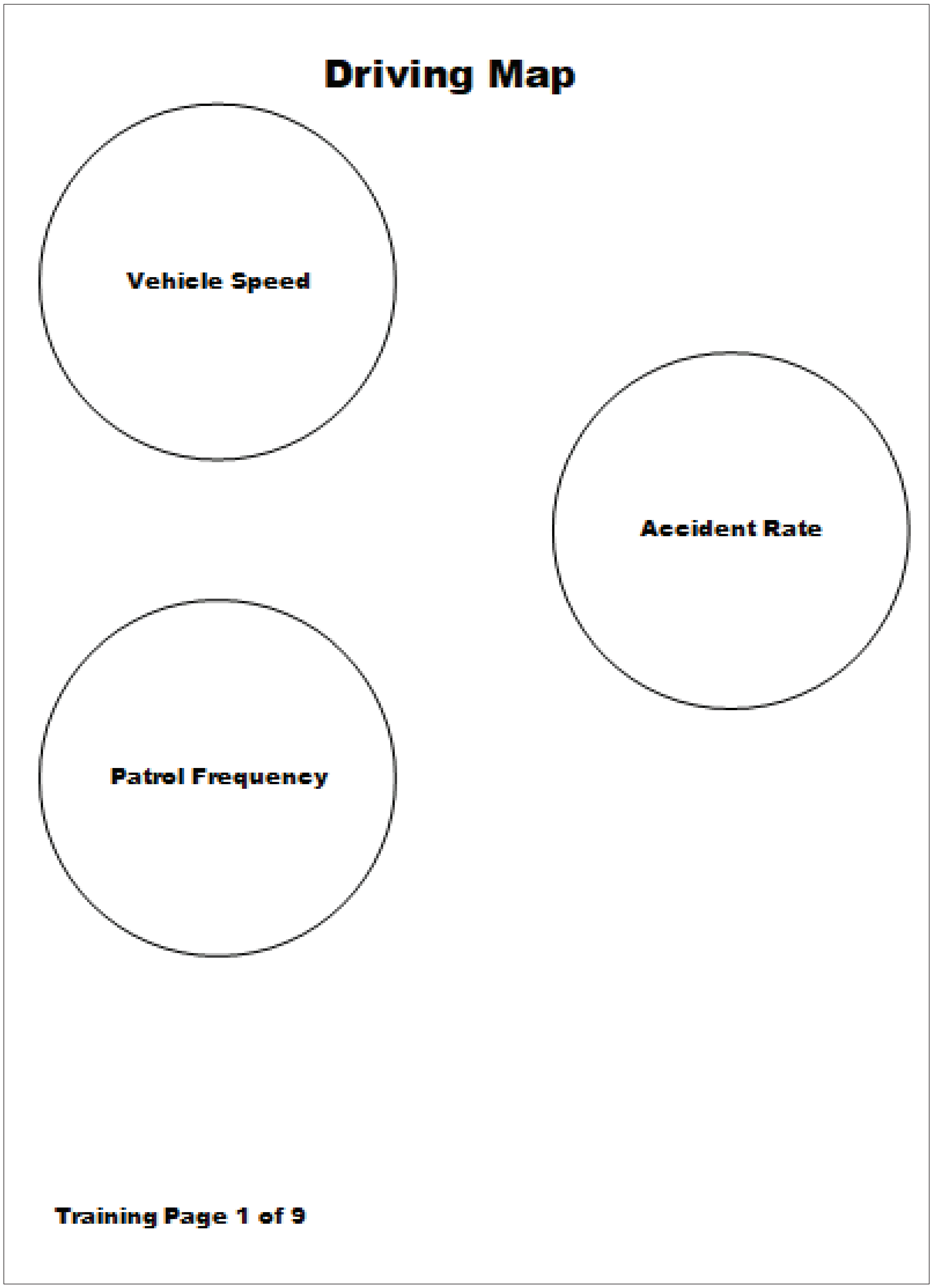

Figure 8. Page 1 of the causal mapping training handout. In the face-to-face interview, I used this 9-page handout to prepare participants for creating their own causal maps by showing them the basic steps for creating one. This page illustrates how participants would write concepts on circles and arrange them anywhere on a piece of paper. In this example, I said to participants, the person thought vehicle speed, patrol frequency, and accident rate were important factors in highway driving.

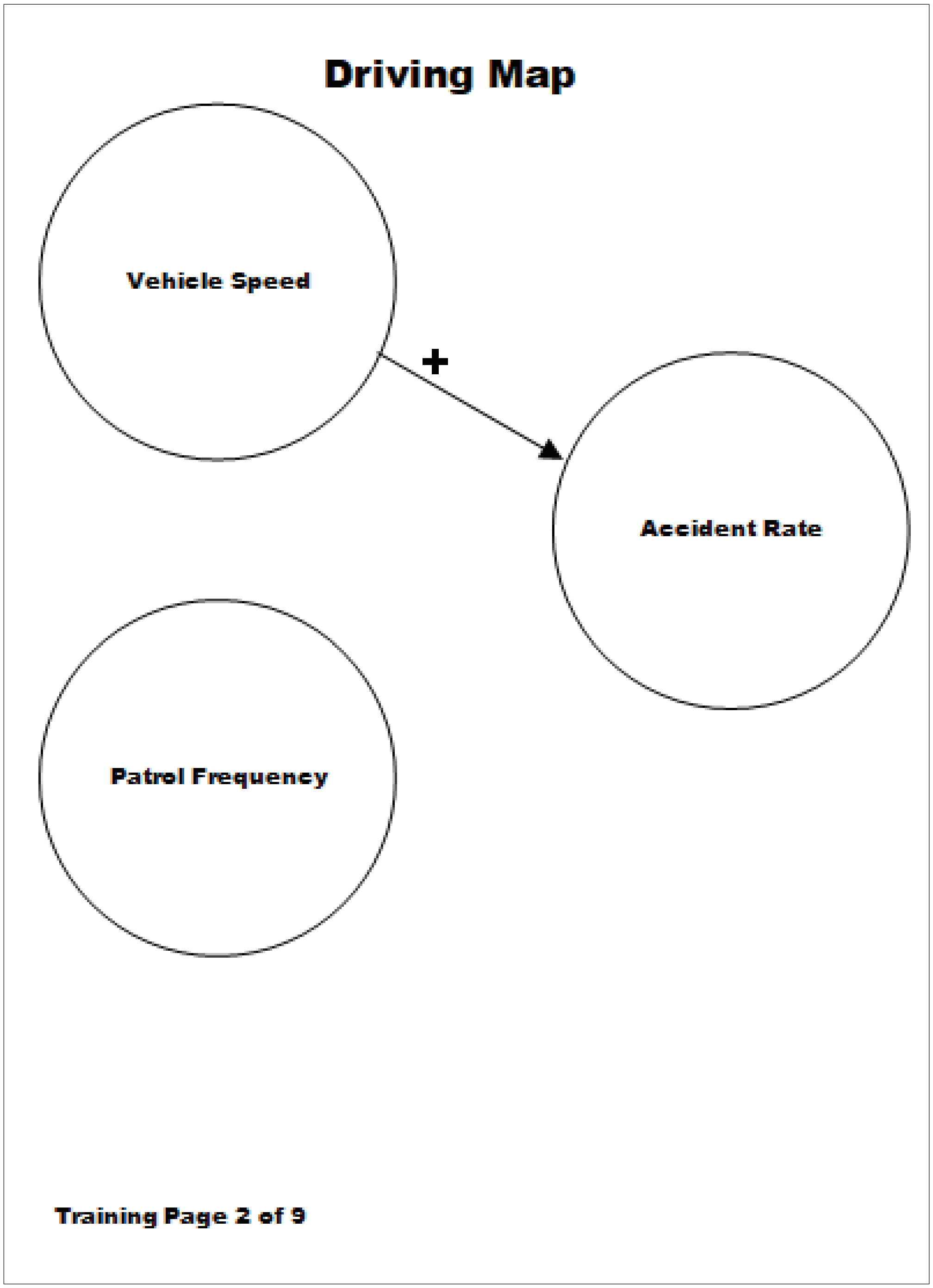

Figure 9. Page 2 of the causal mapping training handout. In the face-to-face interview, I used this 9-page handout to prepare participants for creating their own causal maps by showing them the basic steps for creating one. This page illustrates how participants would draw an arrow from one concept to a second concept and mark it with a + sign to show that more of the first caused more of the second. In this example, I said to participants, the person thought more vehicle speed causes more accidents.

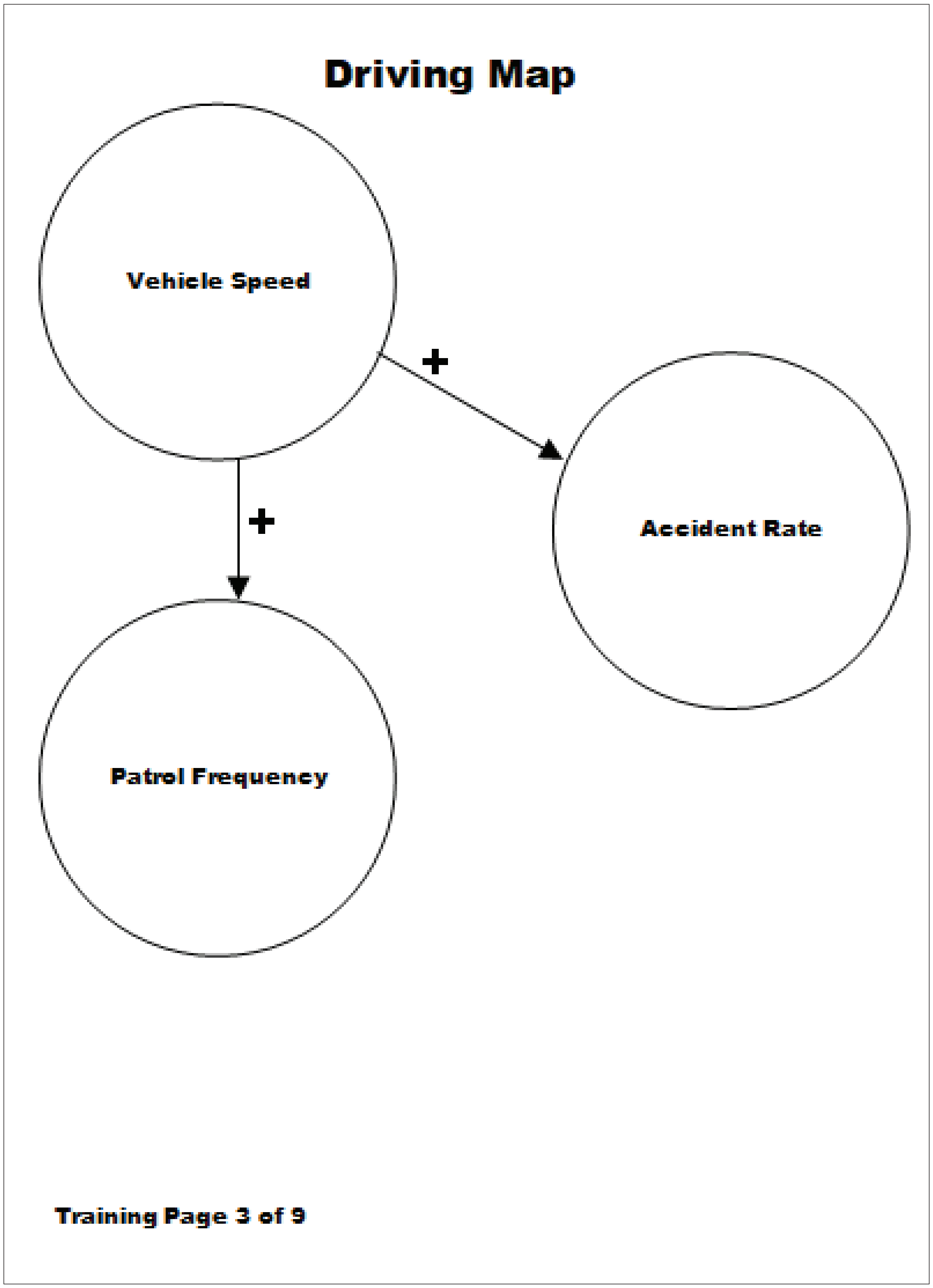

Figure 10. Page 3 of the causal mapping training handout. In the face-to-face interview, I used this 9-page handout to prepare participants for creating their own causal maps by showing them the basic steps for creating one. This page illustrates how participants would draw an arrow from one concept to a second concept and mark it with a + sign to show that more of the first caused more of the second. In this example, I said to participants, the person thought more vehicle speed causes more patrols.

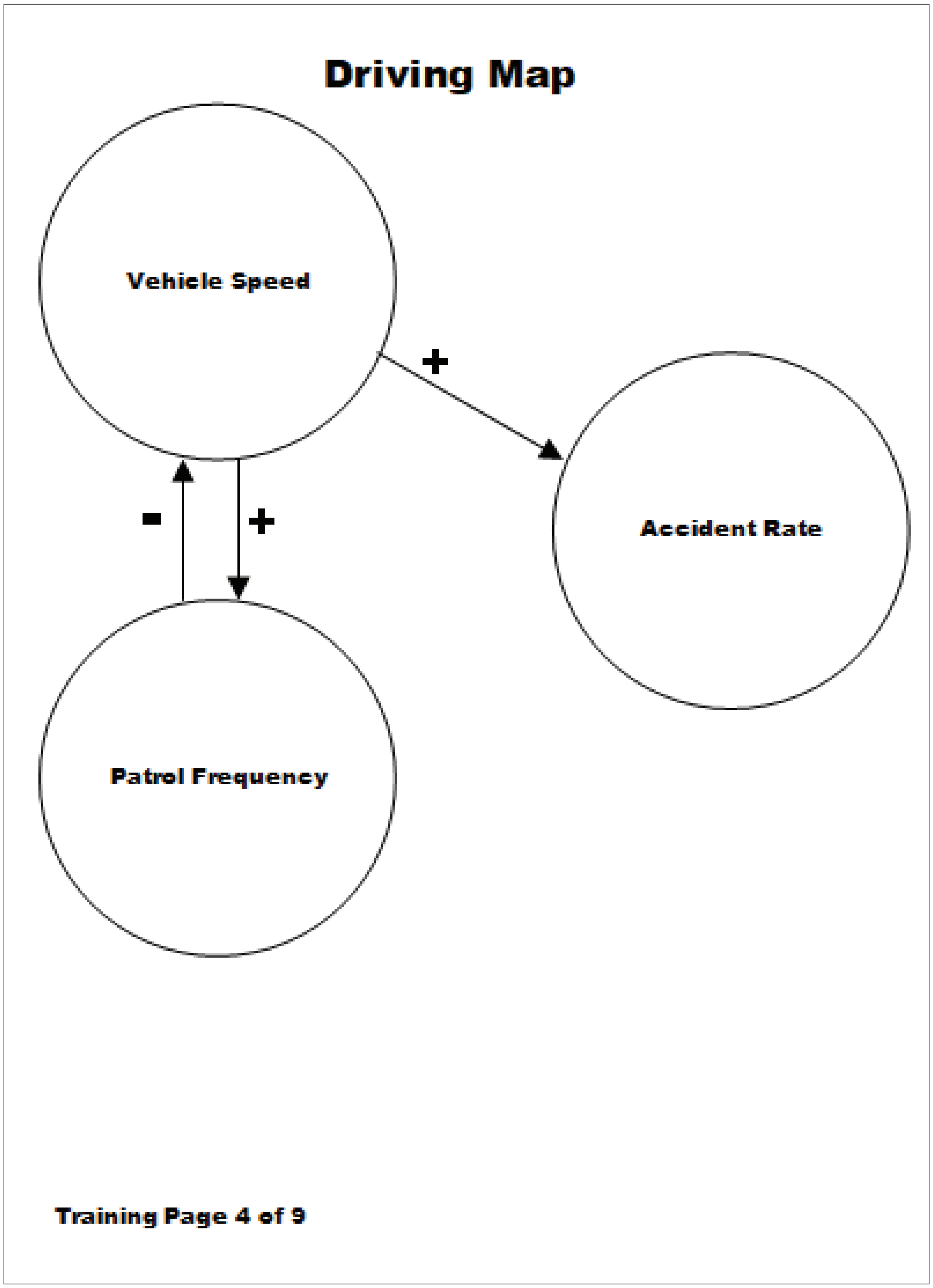

Figure 11. Page 4 of the causal mapping training handout. In the face-to-face interview, I used this 9-page handout to prepare participants for creating their own causal maps by showing them the basic steps for creating one. This page illustrates how participants would mark an arrow with a negative sign when a concept caused a decrease rather than an increase in the other concept and could mark two concepts as influencing each other in different directions. In this example, I said to participants, the person thought more patrols cause a decrease in vehicle speed, even though vehicle speed causes an increase in patrols.

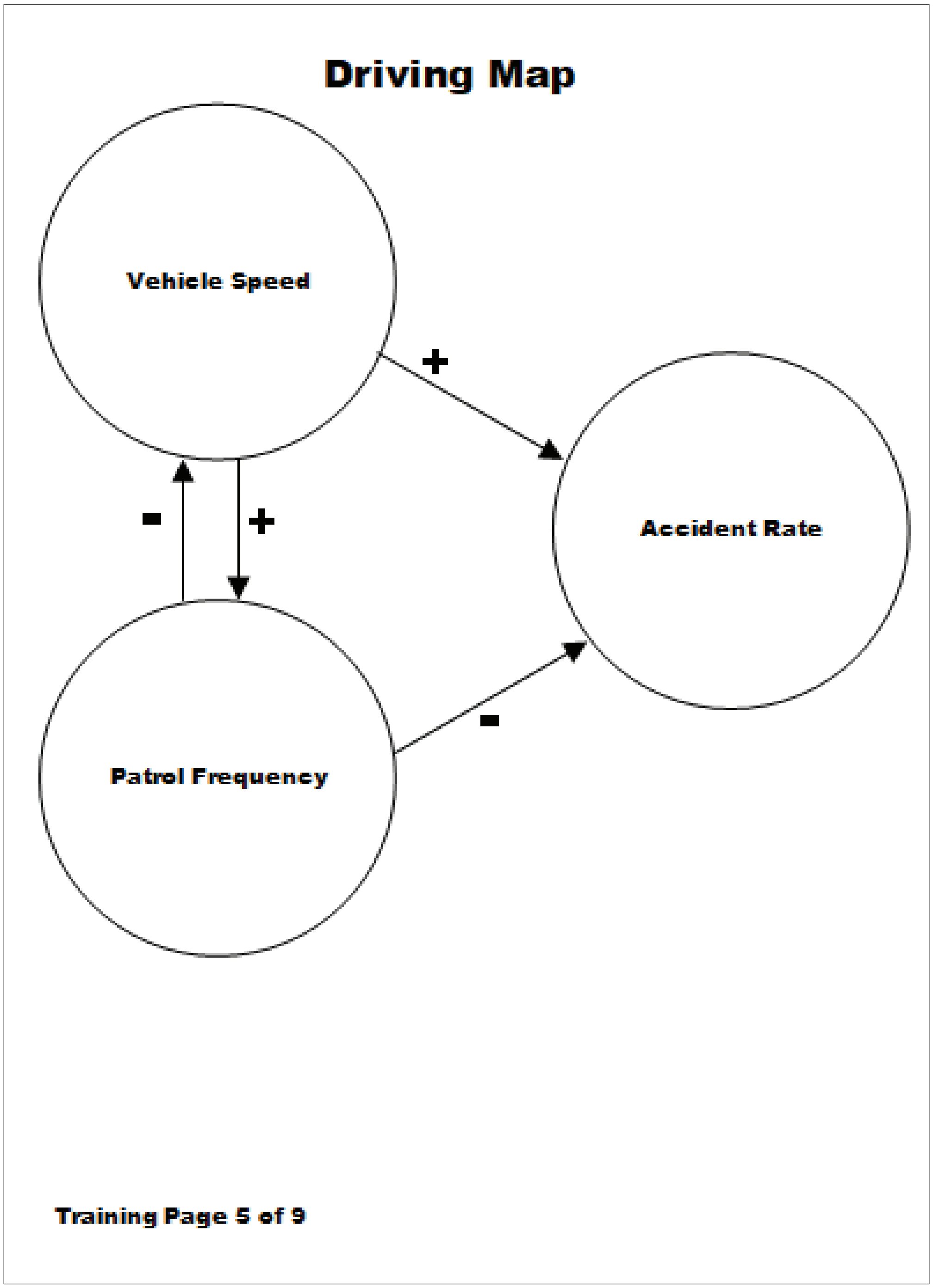

Figure 12. Page 5 of the causal mapping training handout. In the face-to-face interview, I used this 9-page handout to prepare participants for creating their own causal maps by showing them the basic steps for creating one. This page illustrates how participants would mark an arrow with a negative sign when a concept caused a decrease rather than an increase in the other concept. In this example, I said to participants, the person thought more patrols cause a decrease in the accident rate.

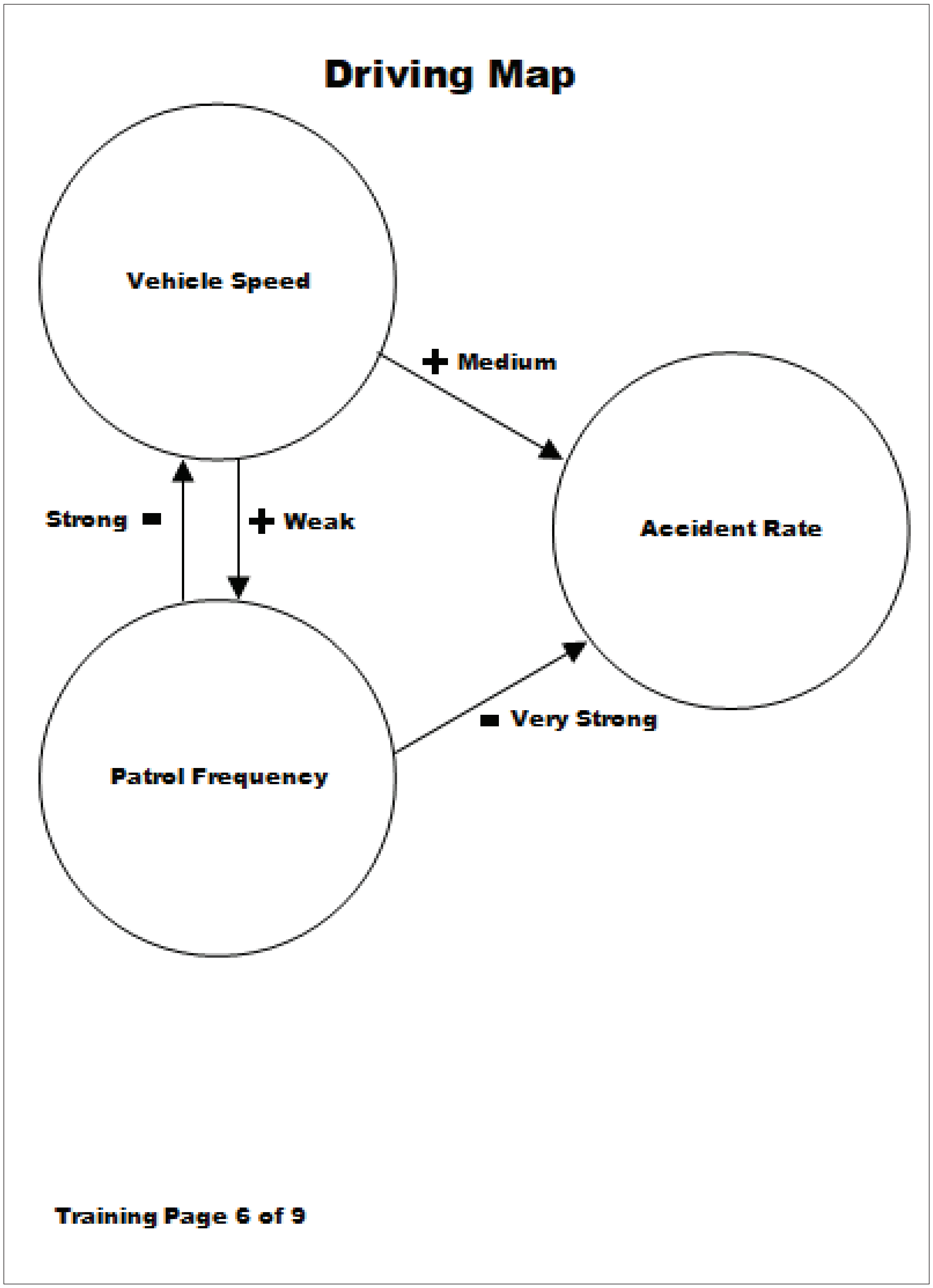

Figure 13. Page 6 of the causal mapping training handout. In the face-to-face interview, I used this 9-page handout to prepare participants for creating their own causal maps by showing them the basic steps for creating one. This page illustrates how participants would mark the strength of each arrow by labeling it Very Weak, Weak, Medium, Strong, or Very Strong. In this example, I said to participants, the person thought more patrols very strongly decrease the accident rate; more patrols strongly decrease vehicle speed; more vehicle speed causes a medium increase in the accident rate; and more vehicle speed weakly increases patrols.

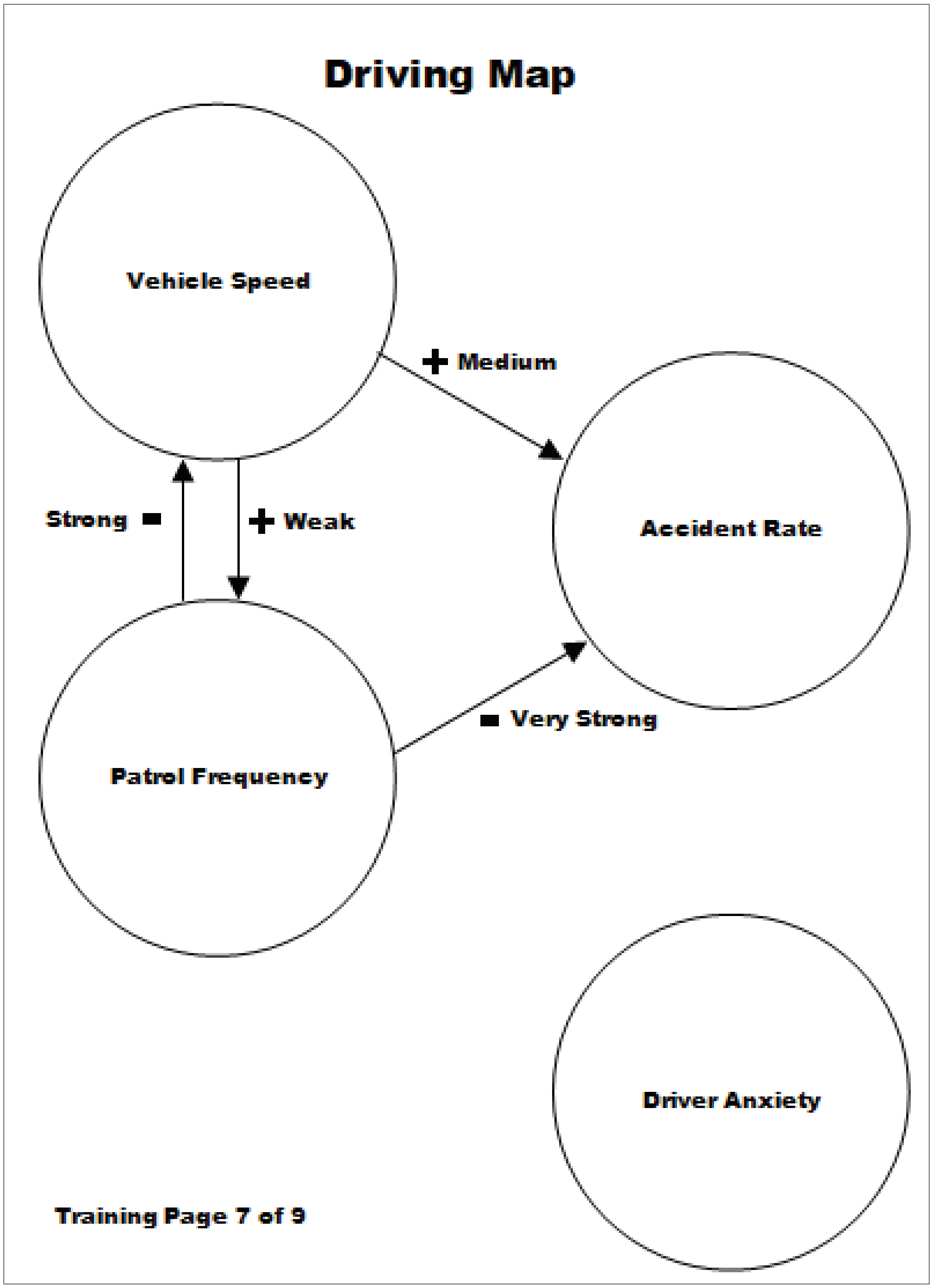

Figure 14. Page 7 of the causal mapping training handout. In the face-to-face interview, I used this 9-page handout to prepare participants for creating their own causal maps by showing them the basic steps for creating one. This page illustrates how participants would add, subtract, and change concepts and links as they went along, that this fluidity was natural to the process. It also showed how concepts could be anything, including facts, ideas, and emotions. In this example, I said to participants, the person realized while mapping that driver anxiety is another important factor and added it as an additional circle.

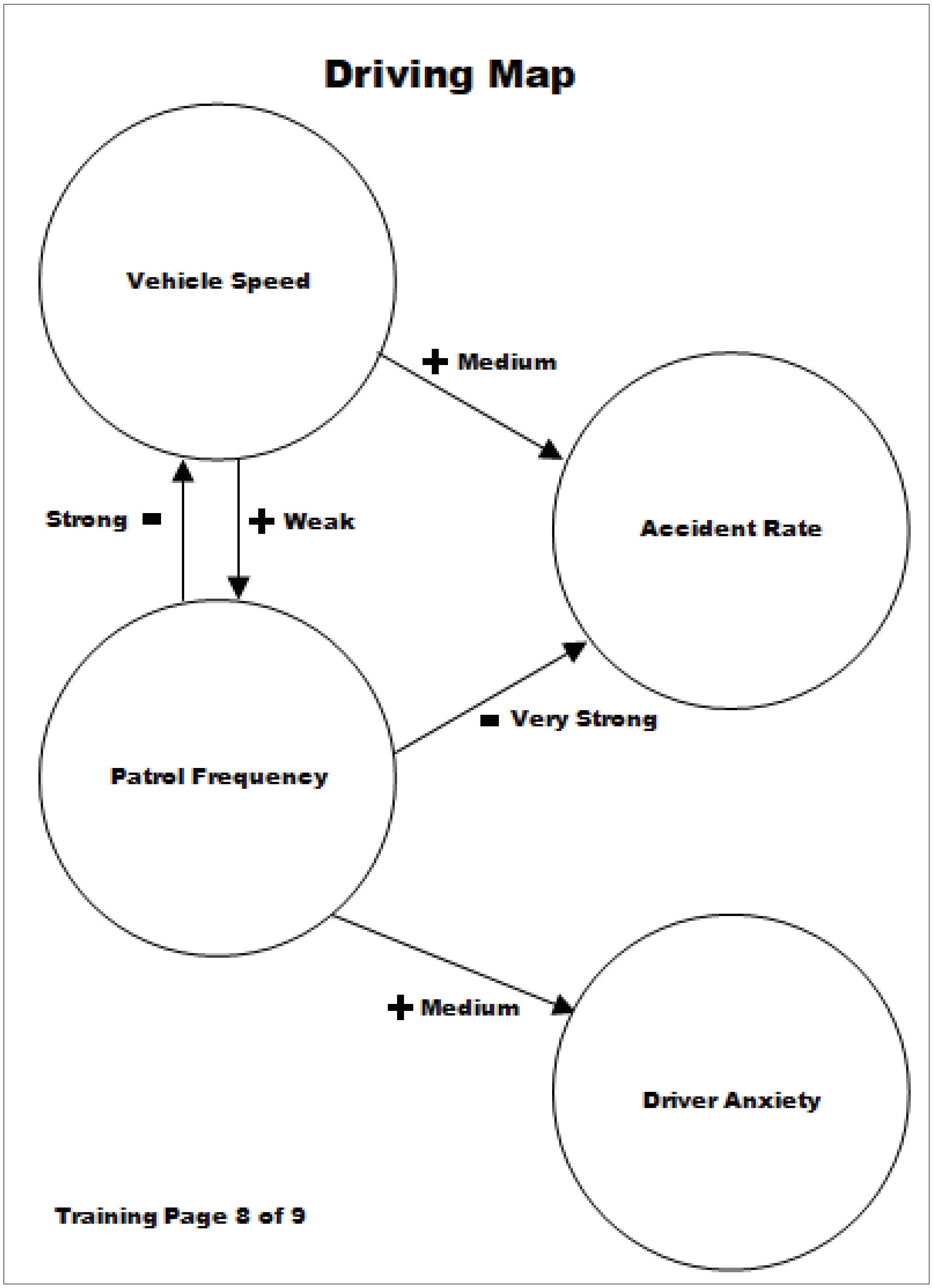

Figure 15. Page 8 of the causal mapping training handout. In the face-to-face interview, I used this 9-page handout to prepare participants for creating their own causal maps by showing them the basic steps for creating one. This page illustrates how participants would continue adding concepts and links to the map until they felt the map was complete. In this example, I said to participants, the person thought that more patrols cause a medium increase in driver anxiety.

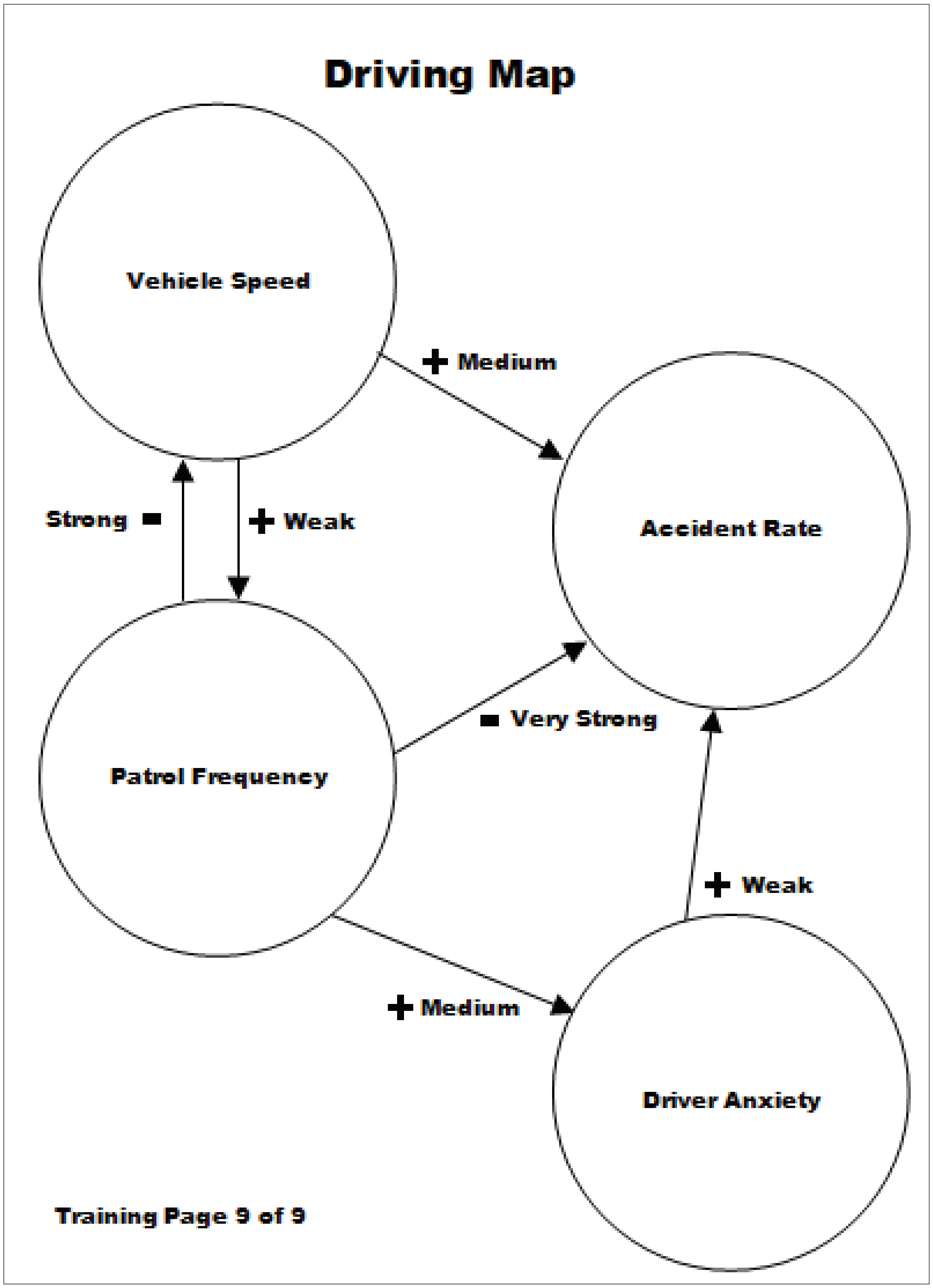

Figure 16. Page 9 of the causal mapping training handout. In the face-to-face interview, I used this 9-page handout to prepare participants for creating their own causal maps by showing them the basic steps for creating one. This page illustrates how participants would continue adding concepts and links to the map until they felt the map was complete. In this example, I said to participants, the person wanted to add one more relationship to complete the map and added an arrow to show that more driver anxiety causes a weak increase in the accident rate.

Mapping materials. Next I laid out the materials participants would use to create their causal maps. These included a standard-sized (22” x 28”) white poster board, with additional ones available if participants wanted more space, because Özesmi & Özesmi (2004) recommended the use of large paper. Other materials included a choice of writing tools (a box of No. 2 sharpened pencils, rubber erasers, pencil sharpeners, black pens, and black Sharpies) and several hundred stiff paper circles made of premium 14 pt. uncoated paper, white on one side, pale gray on the other, and measuring 3” in diameter. I provided many more circles than would be needed, so participants would feel comfortable using as many as they wished and throw out used ones when they changed their minds about including a concept in their maps; I told them that “circles are cheap.” In addition, I chose this type of paper for the circles so participants could easily slide the circles around on the poster board, changing the arrangement as they wished.

I also gave participants two index cards. One had printed on it the definition of corporatization that I asked participants to use in the study: *Corporatization: Importing business ideas and practices into the day-to-day operations of non-profit higher education*, a definition meant to be neutral in tone and broad enough to encompass all views. The second card had printed on it the five-point scale of causal strengths: *Very Weak, Weak, Medium, Strong, and Very Strong*, which I chose based on Jetter and Kok’s (2014) recommendation to use a 5-point, word-based strength scale. I provided these index cards to establish shared definitions and to ease the cognitive load on participants, a technique recommended by Jetter and Kok (2014); participants could set the cards near their poster board and remind themselves of the information with just a glance.

Free-writing. After laying out the materials, I guided participants through a brief free-writing process. I explained that it was a warm-up exercise to bring their thoughts to mind and that I would not collect their writing as data for the study. I provided blank paper and asked the participants to jot down their thoughts in response to the following questions: What do you think are some examples of corporatization? What do you think are the causes of those examples? What do you think are the effects of those examples? I asked the questions one at a time and allowed the participants to take as much time as they wished to write down their thoughts. I used this free-writing exercise, because Jetter and Kok (2014) contend that participants can readily express only those ideas stored in short-term memory and that activating participant knowledge prior to causal mapping is important.

Map creation. If possible, I sat side-by-side or at a 90^{o} angle from participants during the mapping process, an approach that mapping scholars Eden and Ackermann, (1998b) say reinforces the sense of cooperation and partnership; it also kept me physically and figuratively close to the mapping process. As participants worked with their maps, I followed along carefully and asked clarifying questions to ensure I understood their intended meanings, a technique that Jetter and Kok (2014) maintain is critical to effective causal mapping. Although I did not audio-record this portion of the interview, I took extensive notes of the comments participants made, including impromptu definitions they offered for concepts and explanations they offered for their reasoning. And I facilitated participants through the process using interview skills to elicit their ideas, while I tried to avoid influencing their thinking.

I began by suggesting they choose three to five examples of corporatization, write each on a circle, and place them anywhere in the middle of the poster board. I reminded them that this was just a place to start and that they could add, change, or remove examples of corporatization at any time. I then suggested they identify some of the important causes of those examples, write those on circles, and place them somewhere above the examples and then identify some of the important effects of those examples, write them on circles, and place them somewhere below the examples. I reminded participants that the process was meant to be fluid and that they could add, change, or delete circles at any time as their ideas unfolded. I also mentioned that they might wish to work with the concepts for a while before drawing arrows but that, ultimately, they could proceed in whatever way made the most sense to them. I also reiterated that they would develop the causal map until they were satisfied that it represented the most important aspects of their thinking, an approach suggested by Özesmi & Özesmi (2004); I asked participants to tell me when they reached that point.

Often, these steps were enough to engage participants in the sensemaking process of causal mapping. From there, many participants began on their own to move the circles around on the poster board, think aloud, add circles as new ideas occurred to them, change the wording of existing circles, and remove circles that no longer fit. Some participants seemed to benefit from laddering, a causal mapping interview technique recommended by Ackermann and Alexander (2016), Bryson et al. (2004), and Eden and Ackermann (1998b). During laddering, the researcher elicits participant thinking up and down the causal chain using questions like: What do you think are the causes of that? And what might be the causes of those causes? What do you think are the effects of that?

And what might be the effects of those effects? In the interviews, whenever participants expressed confusion or doubt about what to do next with their maps, I first made time for silence and rumination, and then I used laddering. For one participant, I ended up using laddering throughout the mapping session, which resulted in few researcher notes but a participant who concluded that the map truly reflected her ideas. Another participant asked to gather his thoughts before mapping by talking aloud in response to the laddering questions, which I asked while taking notes on his responses. The participant moved to mapping when he was ready. Because I had deliberately selected a diverse group of participants, I wanted to encourage them to use whatever approach to mapping made them comfortable yet still produced a map they felt represented their views.

Participants seemed to arrive naturally at a point when they were ready to draw the arrows that showed causal relationships, and I allowed them to proceed unfettered. Occasionally, participants had questions about how to represent a particularly complex relationship. In response, I queried them about the meaning they wanted to express. If the meaning seemed clear, I suggested a way they might arrange the circles and arrows to depict that meaning and asked follow-up questions about whether the approach reflected their thinking. If the meaning was unclear, I said I was not sure but reassured them that ideas usually became clearer by just working with the map. If necessary, I prompted participants to mark each arrow with a + or – sign and a strength from the 5-point scale before they finished their maps. I sometimes helped them scan their maps for any missing signs or strengths. One participant declined to differentiate between the strengths of relationships, instead describing them all as strong. Finally, in most cases, participants seemed to arrive naturally at a point of satisfaction with their maps, although two busy administrators seemed to wrap up their maps based on their available time. Whenever participants told me they were satisfied with their maps, I used double-sided tape to fix their circles in place and told them I would send them a digital photo of their maps.

Judgment calls during mapping. Throughout the process, I had to exercise judgment about responding to participants as they created their maps. I tried to respond in ways that best supported my goal of understanding the unique perspective of each individual without influencing their thinking. In general, I used judgment calls in four different areas: the degree of completeness depicted in the physical maps, the inclusion of irrelevant concepts, the exclusion of relevant concepts, and expressing the inexpressible.

Degree of completeness of physical map. In some cases, I had to balance the need for a fully accurate physical map with the goal of helping participants to feel comfortable with their own approach to mapping; I believed that if participants felt relaxed, they would more freely express their views, which was essential to my purpose. For example, some participants appeared quick to document their thoughts on the physical map as those thoughts changed and evolved during mapping; if they changed the meaning of a concept as they thought aloud, they quickly changed the wording on the map; or, if they verbalized a decision to expand the meaning of a concept, they acted without prompting to remove the original circle and add new, additional circles. Others appeared less oriented to the details of the physical map. For example, one participant, who was running out of space on the poster board, added some phrases to a few circles that meant those circles held two meanings. Because she was also short on time, I did not prompt her to create separate circles. Instead, I made a note and silently decided I would separate those meanings into separate circles later during transcription.

Inclusion of irrelevant concepts. In other cases, participants included a cluster of circles that turned out to be unrelated to their views of the causes and effects of corporatization. For example, one participant used circles and arrows to describe the theoretical organization of non-profit hierarchies. When I explored the meaning of the cluster, though, he clarified that it was prescriptive in nature, not a description of how he thought higher education was currently organized. I did not ask him to remove the circles. Instead, with his agreement, I marked them on the physical map as additional information so that I could remove those circles during map transcription. Similarly, one participant used circles to tell an anecdote about how the relationship between state government and higher education had evolved over time; when I queried him about the meaning, he clarified that it was a background story related to the one circle that represented reduced state funding. Again, I did not ask him to remove the circles but marked them on the map as additional information that I would remove during transcription.

Exclusion of relevant concepts. In two cases, participants appeared to exclude important and relevant concepts from their maps. In the first case, the participant said he wanted to share with me what he called "his personal bias" before he began mapping. I listened and took notes as he described a perspective in which the traditional faculty role, tenure, and unions were major impediments in higher education and in which most faculty were effective but some were obstructionist. The participant stated these views very clearly. Yet, even though the ideas played a central role in his thinking about the causes and effects of corporatization, he expressed regret about his criticism and excluded the concepts from his map. This exchange occurred in my first interview for the study, and, because of my inexperience, I did not encourage him to integrate those ideas into his map. Later, after reflection, I realized that my skills had fallen short; I should have helped him see that all aspects of his thinking belonged on the map and encouraged him to include them. When I transcribed his map, therefore, I used my extensive notes to create a draft of the map that included the missing ideas. When I sent the map transcription for member-checking, I explained my reasoning and asked the participant if the map accurately reflected his views. Because he did not respond to the member-checking request but later responded to other email correspondence, I concluded that he did not disagree, and I used the amended map for analysis. A second situation was similar. In this case, the participant completed his map, and we began the interview portion of the session. As he explained his ideas for responding to corporatization, he returned again and again to his view that administration in higher education lacked the financial and management skills needed to run colleges and universities well. Because of the strength and clarity with which he expressed this idea and the number of times he repeated it, I commented that it seemed like an important idea he had not included in his map. Echoing the other participant, he said he had felt uncomfortable being critical. After reflection, though, he affirmed that the concept was foundational to his thinking about corporatization and decided to add the concept to his map. I believe I made better use of interview skills in the second situation; I encouraged the participant not to include *specific* ideas on his map but to include *all* of his ideas, and I was able to do that before the session was over.

Expressing the inexpressible. One final area in which I made judgment calls was expressing the inexpressible. My overarching purpose for the study was to understand how participants thought about corporatization, and the mapping method helped me understand participant ideas about the causes and effects of corporatization. Although the mapping data was rich and important, I understood that participant views of corporatization included other, potentially important, aspects that were not causal in nature. In general, I kept my focus on the scope of the study, which was to understand participant thinking about the causes and effects of corporatization as well ideas for responding to corporatization. But in a few cases, I had to balance this focus against the reality that some ideas—perhaps even causal ideas—are hard to express within the confines of a causal map.

One example was a participant who used her map to describe what she called "the tornado of forces" swirling around higher education. As she depicted the way these forces interact with each other and with higher education, she kept repeating that the overall outcome was "chaos in the system." She placed a circle for chaos on the map but was not sure how to connect it to the other circles. In the moment, I could not think of a suggestion, and she said she just wanted to leave it there, because it was the outcome of everything. Later, during transcription, I thought of a way that might represent her views, and, using my notes from the mapping session, I drafted a revised map that connected her chaos concept to the other forces. When I sent the map for member-checking, I explained my reasoning and asked the participant if she thought this reflected her thinking. She did not respond to the member-checking request or to later correspondence, and I found out she had taken a new position at another university. In the absence of her feedback, I chose to use the amended map, because it seemed to represent her views, as I understood them, with more fidelity.

The inexpressible became an issue with another participant. In this case, the participant spent over an hour of intense concentration to create a map with very few but highly abstracted concepts. For example, the map included concepts for militarization, money, consumerism, and fear/anxiety. Both in the interview and afterwards, I struggled to pin down the exact meaning of some concepts, particularly the money concept. In some relationships in the map, the concept seemed to mean amount of money. In other relationships, though, it seemed to mean the pursuit of money or the aggrandizement of money or the benefits money can buy. Because his meaning was not clear to me, I did not in transcription make suggested changes but instead asked in the member-checking process for further clarification. The participant did not respond to this request. But, because of his focus and concentration during mapping, his working and reworking of the map until he was satisfied, and the multiple meanings he expressed when I asked him about the concepts during mapping, I concluded that the participant intended the concepts to be ambiguous. I decided the response that best fit my purpose was to leave the concepts unchanged and to interpret them like symbols: rich in meaning with multiple, possible interpretations.

Participant reactions. In general, my observations were that participants found the causal mapping process highly engaging. Although some seemed immediately at ease while others took time to warm up, almost all participants eventually expressed their engagement with the method via the time they devoted to mapping, their comments, or their body language.

Because I did not want to constrain the meaning that participants conveyed in their maps, I had stated in the pre-interview email that participants could take more time, if they wished, than the 1 ½ to 2 hours I had requested for the interview. On average, interviews took about 2 hours, and only one interview took less than 1 ½ hours; a busy administrator could only allocate one hour and took 1 ¼ hours in all. A few interviews lasted between 2 ½ and 3 hours, and two interviews took two separate meetings at the request of the participants. Verbally, many participants said they found the mapping process interesting, fascinating, or rewarding, and multiple participants said it helped them clarify their thinking. A few participants commented that it would be interesting to see others' maps, and one participant imagined the benefits of a group discussion with everyone sharing their maps. In terms of body language, multiple participants started in a seated position at a table but ended up standing, using sweeping movements to draw relationships across the map, and stepping back to get wide-angle views of what they were creating. Three participants used a second poster board to extend their maps and include all of the concepts they felt were important. One excited participant wanted to post a photo of the completed map to Twitter, and another moved the table aside, spread two poster boards on the floor, and created the map by moving around it on hands and knees. Almost all participants ended the mapping session with facial expressions that conveyed alertness, stimulation, and various degrees of enthusiasm.

Interview: Semi-structured questions. After the mapping, I used semi-structured questions to explore participant ideas for how the higher education system might best respond to corporatization, and I audio-recorded this portion of the interview. I chose to conduct the mapping first, because I thought its sensemaking process would stimulate participant thinking and enrich the responses to the last semi-structured questions. Typically, when the semi-structured question portion began, participants had their causal maps in front of them, and I observed many of them refer to their maps as they expressed their views. I allowed participants to take as much or as little time as they wished, and this portion of the interviews lasted between 8 and 60 minutes, with an average of 24 minutes.

I used one open-ended, pre-written question: Given its mission and current environment, how do you think American higher education should respond to corporatization? As participants spoke, I listened carefully, took extensive notes, and thought about the relationship between their maps and their responses to the question. Based on their comments, I asked follow-up questions to elicit elaboration, frequently using variations of these two questions: Looking to the future of American higher education, what changes that are internal to higher education would you like to see? Looking to the future of American higher education, what changes that are external to higher education would you like to see? I also asked questions to clarify their intended meanings and to understand differences between their maps and their comments. I ended this portion of the interview with a question I had spontaneously asked in my first interview: What gives you hope for the future of American higher education? Typically, participants responded with rich feeling, and this provided me with another opportunity to understand their perspective.

Interview: Conclusion. After the semi-structured questions, I concluded the interview by thanking the participants and reminding them of their valuable contributions. I explained that my next steps would be to finish all interviews, conduct a preliminary analysis, and ask for their review and feedback on that analysis. I reminded them that I would write an executive summary of the study for participants and provide them with a link to my full dissertation once it had been approved. Finally, I encouraged them to contact me at any time with questions or comments and showed them where to find my contact information on the consent form.

Figure 17 contains the checklist I used to guide me through each interview, a practice recommended by Creswell (2013) and Marshall and Rossman (2016).

Step	**Detail**
Introduction	Thank you! Brief introductions Key points about the study • Capture strong and diverse views • Lack of empirical studies of higher ed members' views • Administrator views almost absent • Enlarge, enrich dialogue • Your valuable contribution!
Consent Form	Review the consent form • Confidentiality: • Critically important; I am committed • Identifiable data only shared w/chair or just me • Otherwise, your identity masked • Contact Info: Please call or email me at any time! Sign and witness the consent form
Agenda	Agenda: 1 ½ to 2 hours (or more if you wish) • Brief background questions • Explore your views of corporatization causes / effects • Explore your ideas for responding to corporatization
Background	Ask background questions; take notes on answers
Training	Causal mapping • A method for describing causes and effects • Your goal: Map reflects your thinking • My goal: Understand your thinking Brief example • Identify causes / effects related to the concept • Draw +/- lines • Assign a strength • Add concepts as you think of them; meant to be fluid!

Materials	Scratch paper 22" x 28" poster board, one or more Pencils, erasers, sharpeners, pens, Sharpies Paper circles for concepts Index card with definition of *corporatization* Index card with 5 degrees of *strength*
Free write	As warm-up, briefly write on scratch paper: • Signs or examples of corporatization • Causes of these examples of corporatization • Effects of these examples of corporatization
Draw map	Phase I: Get started • Write 3-5 examples on circles; arrange in middle • Write causes of these examples; arrange above • Write effects of these examples; arrange below Phase II: Refine as you go • Add, change, or delete causes / effects • Break down further or consolidate causes / effects • Rearrange causes / effects Phase III: Complete the map • Draw arrows between concepts • Mark each arrow with a + or - • Mark each arrow with a strength • Ask if it reflects your main points • Revise the map until you are satisfied!
Finalize map	Tape down the concept circles
Recording	Set up two recorders Begin recording
Semi-structured questions	Ask the pre-written, main question • Given its mission and current environment, how do you think American higher education should respond to corporatization? Ask supplemental questions if helpful • Looking to the future of American higher education, what changes that are internal to higher education would you like to see? • Looking to the future of American higher education, what changes that are external to higher education would you like to see? Ask closing question • What gives you hope for the future of American higher

	education?
Closing	Thank you! Next steps • Finish all interviews • Preliminary analysis of data • Contact you to review my preliminary analysis When I complete my dissertation, I will: • Provide participants with a link to the full study • Write one executive summary for all participants Please feel free to contact me at any time!
Recruitment	If needed, ask for help recruiting participants

Figure 17. Researcher's checklist for face-to-face participant interviews. I used this list of steps to guide me through all four phases of the interviews. The Introduction, Consent Form, Agenda, and Background steps comprised the first interview phase, the preliminaries. The Training, Materials, Free-Write, Create Map, and Finalize Map steps comprised the second interview phase, causal mapping. The Recording and Semi-Structured Questions comprised the third phase, semi-structured questions. And the Closing and Recruitment steps comprised the fourth phase, conclusion.

Post-interview.

Within three days of the interview but often the same day, I sent a follow-up email that thanked participants, conveyed the value of their contributions to the study, and described the next steps for the study. Figure 18 contains an example of this email. To the email, I attached a digital snapshot of their causal map. Through these steps, I hoped to strengthen the partnership I was developing with participants and encourage their continued engagement in the study.

Subject: Thank you, Dr./Ms./Mr. ________________! Next steps. Your cognitive map attached.

Dear Dr./Ms./Mr. ________________,

Thank you so much for your interview yesterday. I appreciate your time and your insights into the dynamics of corporatization.

As you know, I am striving to capture diverse perspectives on corporatization, and your participation helps me reach that goal. I am convinced—and the literature on complexity leadership theory supports my position—that enriching and expanding the corporatization dialogue among faculty, staff, and administrators will help higher education find its best adaptation from the inside out. Your participation furthers this important conversation.

In the next two to three months, I will contact you to review my preliminary analysis of your interview data. At that time, you may provide feedback and clarification by email, by phone, or in person; I am happy to accommodate whichever is your preference. In the meantime, I have attached a copy of your cognitive map.

Please do not hesitate to contact me if you have any questions.

With gratitude,
Sherry McAndrew

Figure 18. Post-interview email. I sent this email to individuals after I had completed their interview, and I attached to the email a digital photo of the physical map they had created in the interview. My goals for the email were to reiterate the value of their contribution to the study and foster their continued engagement with me and the study.

Data Analysis Protocol

Transcription. In this phase, I transcribed the three data sources: the audio-recorded semi-structured questions, the causal maps, and the notes I took during the interviews. I also sent the audio and map transcripts to participants for member-checking.

Audio transcription.

Methodological issues. The transcription of audio-recorded discussions is a longstanding practice in qualitative research, and many scholars have proposed standards for quality transcriptions (see overviews in Lapadat & Lindsay, 1999; Poland, 2003). Despite the pursuit of quality, many scholars question the assumption that an objective transcript of human conversation is possible (Kvale & Brinkman, 2015; Lapadat, 2000;

Lapadat & Lindsay, 1999; Marshall & Rossman, 2016; Mishler, 1986, 1991; Poland, 2003; Wengraf, 2001). Poland (2003), for example, cites the difficulty of representing punctuation, sentence structure, quotations, and irony in transcriptions, and Mishler (1986) contends that:

> ...each transcript includes some and excludes other features of speech and rearranges the flow of speech into lines of text within the limits of a page. Some features of speech, such as rapid changes in pitch, stress, volume, and rate, seem almost impossible to represent adequately while at the same time retaining the legibility of the text. Adding another complexity are the nonlinguistic features of any speech situation, such as gestures, facial expressions, body movements, that are not captured on audiotape recordings and are difficult to describe and record from observations or videotapes. (p. 48).

Lapadat and Lindsay (1999) add that "social, temporal, and spatial contextual information available to the participants in the interview are largely absent from the transcripts" (p. 74). Kvale and Brinkman (2015) concur, contending that "there is no true, objective transformation from the oral to the written mode" (p. 213). Because transcription requires sampling from the myriad dimensions of human exchange, these authors say, transcripts are "impoverished, decontextualized renderings of live interview conversations" (Kvale & Brinkman, 2015, p. 204). Although differing in the style of their expressions, multiple scholars agree that transcription is fundamentally an act of interpretation (e.g., Kvale & Brinkman, 2015; Lapadat, 2000; Lapadat & Lindsay, 1999; Marshall & Rossman, 2016; Mishler, 1986, 1991; Poland, 2003; Wengraf, 2001).

Yet, these scholars do not reject the pursuit of quality transcription; instead, they suggest reframing it. Poland (2003), for example, suggests a blending of conventional concerns (such as quality recordings, standardized syntax, and transcriber training) with "a reflexive skepticism regarding the multiple interpretive acts that constitute the transcription process" (p. 274). Lapadat and Lindsay (1999) recommend that researchers "move from formulaic application of a transcription process with origins in positivistic assumptions about language, reality, and the researcher's role, to a process that is sensitive to context, reflexive, and constructivist" (p. 209). Overall, scholars emphasize that the research purpose should guide how the researcher conducts transcription (Kvale & Brinkman, 2015; Lapadat, 2000; Lapadat & Lindsay, 1999; Mishler, 1986; Poland, 2003). Illustrating this point, Kvale and Brinkman (2015) maintain that linguistic, psychological, and narrative studies would call for different transcription approaches, and Lapadat (2000) contrasts the transcription needs of a conversation analyst with a classroom ethnographer.

Contending that the recording "is itself only a partial representation of what 'actually' occurred" (Mishler, 1986, p. 48), these scholars raise concerns about the impact of transcriptions that strictly replicate that recording. Poland (2003), for example, claims that transcriptions of this type can startle participants, raise ethical issues by presenting participants as inarticulate, and diminish the power of their quotations. Lapadat (2000) agrees, pointing out that "spoken language is structured and accomplished differently than written text," yet readers use standards for written language when they evaluate transcripts (p. 206). Kvale and Brinkman (2015) claim that "verbatim transcribed oral language may appear as incoherent and confused speech, even as indicating a lower level of intellectual functioning" (p. 213). Citing their own research experiences, these authors report that verbatim transcripts sometimes offend participants and provoke them to request the removal of their data (Kvale & Brinkman, 2015). Furthermore, the authors warn that "publication of incoherent and repetitive verbatim interview transcripts may involve an unethical stigmatization of specific persons or groups of people" (Kvale & Brinkman, 2015, p. 214). When appropriate to the research purpose, multiple scholars (Kvale & Brinkman, 2015; Lapadat, 2000; Poland, 2003) support sensitive editing of transcripts "without substantially altering the gist of what was said" (Poland, 2003, p. 272).

Given the problematic nature of transcription, scholars encourage the adoption of strategies that increase trustworthiness in qualitative research. In particular, they emphasize corroborating transcripts through data triangulation, member-checking, audit trails, and an explicit description of the transcription process in the final write-up (Kvale & Brinkman, 2015; Lapadat, 2000; Marshall & Rossman, 2016; Poland, 2003; Wengraf, 2001).

Editing transcripts. For two reasons, I chose not to create strictly verbatim transcripts of the audio-recorded semi-structured questions. First, the purpose of the study was to explore participants' ideas about corporatization, including their suggestions for responding to it. The study was not linguistic in its focus and did not employ any of the various techniques of discourse analysis; either trait would have called for the meticulous capture of language use by participants. Second, I believed that establishing a trusting partnership with participants was essential to my efforts, and I did not want to risk offending them with a transcription of their expressions that might seem clumsy to them.

I was persuaded by scholars who argue that transcription cannot be other than a transformation, that the transformation should be undertaken thoughtfully, and that social standards for oral and written language are inherently different. In addition, I considered the fact that my participants, as members of a university culture that highly values intellect and eloquence, might be particularly sensitive about the presentation of their ideas. For this study, I chose to edit the audio transcripts for clarity before sending them to the participants for member-checking.

In the editing process, I had three goals. The first and most important was to preserve the original meaning expressed by the participants. The second was to remove or revise those elements of speech—hesitations, repetitions, fragments, and nonverbal sounds— that seem natural when spoken but inarticulate when captured in writing. The third goal was to preserve the informal, conversational tone of the discussion. In general, I used these goals as guidelines, and I used my judgment: sometimes, I removed mid-word or mid-sentence hesitations; often, I removed repeated words, phrases, or ideas; frequently, I edited sentence fragments or convoluted phrasing to bring clarity to sentences or paragraphs; occasionally, I reordered sentences in a confusing paragraph or section; and, almost always, I removed nonverbal sounds such as *um*, *hmm*, and *uh*. Importantly, my strategy included member-checking, so that participants could review, clarify, and correct anything that did not properly convey their intended meanings.

Masking identities. As part of transcription, I also enacted strategies to mask the identity of the participants and the university. I had made this commitment in the consent form, but the literature (e.g., Guenther, 2009; Lahman, et al., 2015; Nespor, 2000; Seidman, 2013) helped me realize the importance of thoughtful decision-making in this practice. Guenther (2009), for example, questions the ubiquity of pseudonyms in qualitative research, expresses concern about the lack of published discussion of the issue, and maintains that the decision to use real names or pseudonyms "involves consideration of the ethics of confidentiality, the power of naming, and strategies for fieldwork and presentation of findings" (p. 411). Lahman et al. (2015) agree. Claiming that "the process of naming is embedded with power" (p. 449), these authors express concern about researchers assigning pseudonyms "with little thought or deep reflection," citing historical examples of pseudonyms that dehumanized, caricaturized, or Anglicized participants (Lahman et al., 2015, p. 445). These authors also discuss the challenge of participants choosing their own pseudonyms; they note the importance of both respecting those requests and addressing problematic name choices that either bring new or eliminate existing cultural connotations (Lahman et al., 2015). Regarding the practice of pseudonyms for research settings, Nespor (2000) argues that obscuring the site of research is not only difficult to achieve in qualitative studies but also problematic; it promotes, the author claims, the use of abstract exemplars of larger categories, detachment from context, and "corporate constructions of the public sphere" (p. 546).

Because I had promised to mask identities in the consent form, I was committed to using pseudonyms for both participants and the university site. After reflecting on the literature, though, I decided not to offer participants the choice of their own pseudonyms lest those names carry unintended connotations. Because none had asked to choose their own pseudonyms, I was able to proceed without ethical dilemmas. Next, I sought to avoid my own bias about names while abiding by Seidman's (2013) recommendations to consider ethnicity, age, and context of the participant's life; err on the side of understatement; and always respect the participant's dignity. Of the twenty first names of participants, nineteen had no ethnic connotation, while one had a possible ethnic connotation. Based on these considerations, I used the following method for assigning pseudonyms to participants:

- Assign a randomly generated but commonly used letter to each participant using https://www.random.org/strings/
- Estimate the decade of birth for each participant
- Find the relative popularity of the participant's actual first name in their birth decade using http://www.babynamewizard.com/voyager
- Choose a name that a) starts with the randomly assigned letter, b) mirrors the ethnic connotation of the participant's actual first name, and c) has similar popularity as the participant's actual first name in their birth decade using http://www.babynamewizard.com/voyager

For the university pseudonym, I chose not to use a category name like Midwest University, because it implied an exemplar and sounded artificial in prose. Recognizing that no pseudonym could be neutral or devoid of connotation, I decided to use a common name instead. With the help of Wikipedia ("List of most common surnames in North America", n.d.), I identified common American surnames not already used by a college or university. I chose Evans State University for the research site, and I chose Hughes, Sanders, and Wilkins as names for local colleges and universities. I realized these names connoted whiteness, but I felt this reflected the reality of America's dominant white culture. The fact that I had difficulty finding names from the common surnames list that were not already the names of colleges and universities underscored this reality, and I concluded that the pseudonyms appropriately reflected the cultural context of the study.

In addition to assigning pseudonyms to participants and colleges, I also modified or excluded from the transcript the names of university employees, famous local people, members of Congress representing the region, the names of local cities, and the name of the state.

Transcription process. To transcribe the audio-recorded, semi-structured questions, I used Express Scribe transcription software (Express Scribe, n.d.) to create written transcriptions in Word documents. As shown in Table 9, I adapted the transcription syntax suggested by Poland (2003) to mark pauses, speech breaks, overlapping speech, unclear speech, emphasized speech, and non-verbal actions. As discussed, I edited the transcriptions for clarity and masked the identity of participants and institutions of higher education.

Table 9

Syntax for Audio Transcriptions

Feature	Explanation	Examples
Pause	Marks pauses (1-3 seconds) and long pauses (4+ seconds)	[pause] [long pause]
Break	Marks speech stopped in the middle of a word	What ab—
Overlapping	Marks speaker's continuous speech interrupted by another speaker	A: He said that... B: [overlapping] I see. A: ...he did not go.
Unclear	Marks unclear speech and may offer a guess	She [unclear] up. She [unclear; jumped?] up.
Emphasized	Marks emphasized speech	He did WHAT?
Action	Marks non-verbal actions	[laughs] [points to paper]

Note: Adapted from "Transcription quality," by B. D. Poland, 2003, in J. A. Holstein, & J. F. Gubrium (Eds.), *Inside interviewing: New lenses, new concerns* (pp. 267-287). Thousand Oaks, CA: Sage.

Member-checking. Using the email shown in Figure 19, I sent the transcripts to participants and requested their review for accuracy and for the appropriateness of my efforts to mask their identities. To the email, I attached documents that explained the transcription syntax and the methods I used for choosing pseudonyms and masking identities. Of the twenty participants, eight emailed their acceptance of the transcript, one emailed a few minor suggestions along with acceptance, and eleven did not respond.

Subject: Greetings! I invite you to review my transcript of your interview!

Greetings! Dr./Ms./Mr. __________________, I hope this email finds you well! It has been a while since we spoke, but I remain ever grateful for your participation in my dissertation study about higher education leaders' views of corporatization. Because of the generosity of multiple Evans State members, I have been able to gather rich, diverse, and insightful views about the subject.

Our Partnership

I see my relationship with you, my study participants, as a partnership. Only with your involvement and insight am I able to shed light on the area we are examining together.

Your Review of My Transcript

For that reason, I am attaching the transcript I created for the audio portion of your interview. And I invite you to review it to ensure I have accurately captured your interview comments.

At your earliest convenience, please send any corrections or clarifications you deem important to a clear representation of your comments. ***Of course, I realize how busy your schedule must be. Therefore, if I do not hear from you <u>within a month</u>, I will assume no changes are needed.***

Further Detail Related to Your Review

In your review, please consider two questions:

1) Have I have accurately captured your interview comments?
    - You may add your feedback in the Word document or in a separate email
    - You may wish to search for "Note from Sherry," which I occasionally

added to the transcripts
- You may wish to search for "unclear," which I added when I couldn't hear a portion of the recording -- although this turned out to be rare
- You may wish to review the attached TransciptionSyntax document, which explains the conventions I used when I transcribed the interviews

2) Have I made appropriate choices to mask your identity and that of the institution?
    - You will see your pseudonym in the name of the transcription document
    - You may wish to read the attached ***MaskingIdentities*** document, which explains the strategies I used to choose pseudonyms and mask identities
    - You may add your thoughts about identity masking in the Word document or in a separate email

Thank you and next steps!

Please accept my gratitude for your participation in this study. The world is a busy place, and I deeply appreciate your time, your feedback, and your insights, all of which make this study possible.

With gratitude,
Sherry McAndrew

Figure 19. Member-checking email for audio transcriptions. I sent this email to participants to invite their review of my transcription of the semi-structured questions portion of their interviews. To this email, I attached three Word documents; the first contained the transcript, the second explained the transcription syntax I used, and the third summarized the identity-masking strategies I used. My goals for this email were to encourage their review and feedback, provide helpful background about the transcription process, and set a deadline for their response that provided a generous amount of time for their review.

Causal map transcription

Correcting and editing physical maps. During the causal mapping portion of the interviews, I used several techniques to help participants produce a clear depiction of their ideas. When concepts seemed extraneous to the topic, I queried participants; if they confirmed the information was irrelevant, I marked those concepts as additional information to be removed before analysis. When two concepts duplicated each other—a common occurrence in more complex maps—I pointed this out, and participants consolidated the two into one circle. When one circle contained more than one concept, I suggested the participant use one circle per concept or, in some cases, I made a note to split the concepts myself before analysis. When participants seemed to overlook a concept or relationship—perhaps they had spoken about it but had not included it in their map—I brought this to their attention and allowed them to decide how to address it.

All of these techniques are suggested by experienced researchers of idiographic causal mapping (e.g., Eden & Ackermann, 1998b; Jetter & Kok, 2014), and they illustrate some of the interview skills that are important to the method. Although my skills improved with experience, a few of these occurrences escaped my notice during the interviews, and I had to address them during transcription. In these cases, I referred to my extensive interview notes to confirm my interpretations and then made corrections to the physical map. In one map, I removed three extraneous concepts; in four maps, I combined nine instances of duplicate nodes and corrected the associated arrows to use the consolidated concept; in two maps, I split five instances of circles containing two distinct concepts and corrected the associated arrows. All of these changes were both minor and clearly indicated.

In contrast, I made adjustments to two maps that were not minor, although I believed they were clearly indicated. In one case, the participant had struggled to express her view that the overall outcome of corporatization was chaos in higher education, and I added five links to her transcribed map in an attempt to represent this important aspect of her thinking. The second case was the only situation in which I made a significant addition of meaning to a map. In this case, the participant had excluded from his map the highly relevant and negative views he verbally expressed about the traditional faculty role, and I added them as four additional concepts with three links each for a total of twelve links. In the *Judgment calls during mapping* section, I discuss both of these situations, the choices I made, and my rationale, so I do not repeat those details here. Considering that there were approximately 404 concepts and 701 links across 20 maps, I made relatively few adjustments to the physical maps.

For several reasons, I also used the extensive notes I had taken during the mapping sessions to edit the wording of map concepts. One reason was that I had chosen to value participants' comfort level while mapping over the strict completeness of their physical maps. While some participants were quick to update the wording on their maps as their ideas evolved, others were less inclined to do so. I used my judgment about when to interrupt participants and suggest they update the wording of their circles to reflect their most recent verbal expression and when simply to make a note for myself of their evolving meaning. A second reason was that minor edits helped to improve the clarity of some concepts. And the third was to improve the readability of the maps when they were presented as circle-and-arrow diagrams. In the third analysis phase, I worked extensively with an electronic representation of the maps as circle-and-arrow diagrams, and I include copies of these diagrams in the next chapter. Especially when maps contained many concepts, I needed to shorten lengthy phrasing in order to make them legible.

Transcription process. After I made adjustments to the physical maps, I created an adjacency matrix in an Excel workbook for each map. As discussed in Chapter 3 and illustrated in Figure 5, an adjacency matrix represents the concepts and relationships contained in a causal map without altering the meaning of that map. Because Özesmi and

Özesmi (2004) suggest that adjacency matrices use strength values between 0 and 1, I converted the language-based, 5-point scale of strengths to decimal values as follows: Very Weak = 0.2, Weak = 0.4, Medium = 0.6, Strong = 0.8, and Very Strong = 1.0 and entered negative links as negative values. Finally, when I had questions for participants about specific concepts or links, I entered those as comments in the spreadsheet.

Member-checking. As I completed the adjacency matrices, I emailed them to participants and requested their review and corrections. Because I knew not everyone would be comfortable with an Excel matrix, I included instructions for how to review the matrix as well as my offer to meet them in person to do a quick review if the matrix was not "their cup of tea." Figure 20 contains the member-checking email for the causal map transcriptions to adjacency matrices.

Subject: I know you're busy! Still I invite you to review my transcript of your cognitive map!

Hello, Dr./Ms./Mr. ________________,!

Thank you again for your vital contributions to my dissertation study about higher education leaders' views of corporatization.

I know how busy you must be. Still, I invite you to review my transcription of your cognitive map to check that I have accurately captured your views. If you have any corrections, please send them at your earliest convenience. ***If I do not hear from you <u>within a month</u>, I will assume no changes are needed.***

How to Review the Transcript File

- Open the attached spreadsheet and click on the first concept in the column on the left (cell C10).
- Reading across that row, find any cells with numbers in them. Interpret each one as, "The concept named on this ROW causes a (Very Weak=.02, Weak=.04, Medium=.06, Strong=.08, Very Strong=1.0) (Increase=+ / Decrease=-) in the concept named in this COLUMN.
- Move down to the next concept in the column on the left and review the numbers on that row. Repeat for each of the concepts in that left-hand column.
- Also, please move to any cell in the matrix that is colored GREEN and read the comment I attached to that cell. When I had questions, I colored the cell GREEN and explained my question in a comment.

If This is Not Your Cup of Tea (Smile)...

- I understand that spreadsheets and matrices may not be everyone's cup of tea. (Smile.)
- If this applies to you, or you don't have time, or you simply would prefer doing it in person, I would be happy to come to your office to do this quick review with you. Please just let me know!

I deeply appreciate your time, your feedback, and your insights, all of which make this study possible.

With gratitude,
Sherry McAndrew

Figure 20. Member-checking email for causal map transcription to adjacency matrix. I sent this email to participants to invite their review of my transcription of their causal maps to adjacency matrices, and I attached to the email an Excel file that contained the adjacency matrix. My goals for this email were to encourage their review and feedback, provide helpful instructions for reviewing the matrix, offer my help with reviewing the matrix, and set a deadline for their response that provided a generous amount of time for their review.

After I sent the member-checking emails, I discovered I could convert an adjacency matrix into a simple list of causal statements by using Excel string functions and search-and-replace. Figure 21 provides an example by showing the same adjacency matrix from Figure 5 with the six causal statements that comprise it. Although the presentations differ, the adjacency matrix and the list of statements represent equivalent causal mapping data. Because the statements are easier to review, I sent the statement lists to participants along with an explanation. For those who had already member-checked the matrix, I sent an email with the subject “ONLY if you’re interested: A language version of your cognitive map data!” For those who had not yet responded to the member-checking request, I used an email subject of “In case this helps: A language version of your cognitive map data!”

In one case, I requested to meet with the participant to review the causal map transcription and clarify my understanding of a few points that would have been difficult to discuss by email or phone; he agreed, and we met. Of the twenty participants, nine emailed their acceptance of the causal map transcript, one confirmed the transcript in person, two emailed that they were reviewing it but did not send corrections or a final confirmation, and eight did not respond.

		Effects			
		Vehicle speed	Patrol frequency	Accident rate	Driver anxiety
Causes	Vehicle speed		0.4	0.6	
	Patrol frequency	-0.8		-1.0	0.4
	Accident rate				
	Driver anxiety			0.4	

Causal statements that comprise the adjacency matrix above:

'Vehicle speed' causes a WEAK INCREASE in 'Patrol frequency'
'Vehicle speed' causes a MEDIUM INCREASE in 'Accident rate'
'Patrol frequency' causes a STRONG DECREASE in 'Vehicle speed'
'Patrol frequency' causes a VERY STRONG DECREASE in 'Accident rate'
'Patrol frequency' causes a WEAK INCREASE in 'Driver anxiety'
'Driver anxiety' causes a WEAK INCREASE in 'Accident rate'

Figure 21. Adjacency matrix for the simplified causal map shown in Figure 3 with the six causal statements that comprise it. Although the presentations differ, the adjacency matrix and the list of statements are equivalent, because they both represent the three data elements that comprise causal maps: a) concepts that act as causes, b) concepts that serve as effects, and c) the nature of the relationships between concepts in terms of their strength and positive or negative effect. Strengths are represented either as decimal numbers or words where Very Weak = 0.2, Weak = 0.4, Medium = 0.6, Strong = 0.8, and Very Strong = 1.0.

First analysis. In the first analysis phase, I implemented the causal map analysis techniques recommended by Özesmi and Özesmi (2004), which entailed the use of adjacency matrices, metrics, and the creation of an average map for all participants. At this early stage, I intended to analyze all of the maps, then all of the semi-structured questions before I attempted to synthesize the data sources. If I had stayed with that plan, it would have been more of an across-case approach than a within-case approach (Miles & Huberman, 1994). I later modified this approach as my understanding of the analysis process deepened.

For each causal map, I used its adjacency matrix to categorize each concept as a transmitter, ordinary, or receiver concept. According to Özesmi and Özesmi (2004), a transmitter concept has only outgoing links, an ordinary concept has both incoming and outgoing links, and a receiver concept has only incoming links. I then used basic Excel formulas to calculate the metrics recommended by Özesmi and Özesmi (2004): nine metrics that describe overall map characteristics and three metrics that describe each concept in the map. To compare the metrics of individual maps to the overall group, I combined the 20 adjacency matrices into one Excel workbook—maintaining their separateness by storing each as a sheet within the workbook—and calculated the group average for each of the metrics. Table 10 lists the metrics, explains how they were calculated, and shows the group average.

Table 10

Metrics Calculated From Adjacency Matrices with Group Averages

Level	Metric	Description	Avg
Map	# of Concepts	# of concepts in map	20.00
	# of Transmitters	# of concepts with only outgoing links	3.05
	# of Receivers	# of concepts with only incoming links	5.00
	# of Ordinary	# of concepts w/incoming & outgoing links	11.95
	# of Links	# of links in the map	35.55
	Link-Concept Ratio	# of links divided by # of concepts	1.73
	Receiver-Transmitter Ratio[a]	# of receivers divided by # of transmitters	2.50
	Density	# of links divided by # of links possible, which is equal to (# of concepts)^2	0.10
	Hierarchy Index	(12 * variance of outdegrees) divided by ((# of concepts)^2 – 1)	0.05
Concept	Indegrees	Sum of numeric strengths of all incoming links to a concept	1.30
	Outdegrees	Sum of numeric strengths of all outgoing links from a concept	1.30
	Centrality	Sum of numeric strengths of all incoming and outgoing links from a concept	2.59

[a]Özesmi and Özesmi (2004) use the term *Complexity* for this metric. Because various causal mapping researchers (e.g., Ackermann & Alexander, 2016; Ackermann & Eden, 2010; Eden, 2004; Eden & Ackermann, 1998a) use multiple conceptions of map complexity, though, I chose to use the term *Receiver-Transmitter Ratio* instead, because this term describes the calculation without implying there is one measure of map complexity.

For each causal map, I examined the metrics and compared them to the group average. I discovered some interesting variations—which I discuss more fully in the following sections—except for two of the map-level metrics; the density metric and hierarchy index were uniformly and extremely low for all participants. Although they might be informative with other groups, they provided no basis for discriminating among the participants of the study, so I decided not to use them. After reviewing the metrics, I began the process recommended by Özesmi and Özesmi (2004) to produce an average map for the group; essentially, I used my subjective judgment to code participant concepts into one set of standard concepts. Although I intended to use these data to create an average adjacency matrix across all participants, I did not complete the process. I had realized that this analytical approach had diminished the rich, complex, and idiosyncratic data that was essential to my purpose. Therefore, I retained the adjacency matrices and most of the metrics for use in subsequent analyses, but I discarded the standardized coding of map concepts.

Second analysis. I was new to causal mapping, and I had to conduct the first analysis to comprehend fully the misfit between my essential research purpose and the strategies of concept standardization and average causal maps. To determine my next steps, I revisited the qualitative purpose of the study, which was to explore and understand how individual participants think about corporatization in higher education, and I returned to Creswell's (2013) framework for qualitative analysis to get my bearings. I situated myself again in what the author describes as the spiraling process of qualitative analysis, a process in which the researcher circles again and again through the data using discovery to navigate towards understanding (Creswell, 2013). I reflected on the major endeavors that Creswell (2013) describes as inherent to qualitative analysis and identified the need to do much more describing, classifying, and interpreting of themes in the data. Based on these insights, I designed a second analysis in which I blended an overall qualitative exploration with the use of adjacency matrices and metrics.

Overall steps. I began by reviewing the background questions for participants and picturing them in my mind's eye. Next, I conducted a preliminary analysis of the maps in three main steps: I sought a gestalt sense of their meaning by visually inspecting them and making informal sketches of their shape and patterns; I analyzed the overall structure of the maps using the adjacency matrices and map-level metrics; and I analyzed the content of the maps by using concept-level metrics to identify important concepts and by comparing the map content to the causes and effects of corporatization reported in the literature. Then, I read and reflected on the semi-structured questions transcripts and took notes on preliminary ideas and emerging themes. Next, I examined the relationship between the maps and the semi-structured questions, using my researcher notes to check and clarify my understanding of the participants' intended meanings. In particular, I explored how the participant recommendations for how higher education might best respond to corporatization related to their conceptions of the causes of corporatization. Finally, I reflected on the cases as a whole, seeking a fresh view of the overall perspectives of participants. Using this process, I analyzed the data from each of the 20 participants, one at a time, thereby emphasizing within-case analysis over across-case analysis (Miles & Huberman, 1994). Figure 22 shows the checklist I used for the second analysis.

Phase	Steps	Done
Review Participant Background	• Review answers to background questions	
	• Write notes on background	
Do Preliminary Analysis of Map	• Seek Gestalt sense of map	
	o Examine hand-drawn map	
	o Sketch overall patterns on Overall Pattern page	
	o Sketch shape on Depth-Breadth page	
	o Sketch concepts on Inside-Outside page	
	o Write notes on gestalt sense of map	
	• Analyze structure of map	
	o Examine map-level metrics	
	o Write notes on prominent traits of map structure	
	• Analyze content of map	
	o Examine concept-level metrics	
	o Compare w/causes, effects from literature	
	o Write notes on prominent traits of map content	
Do Preliminary Analysis of Interview	• Review interview transcript	
	• Write notes on prominent themes from interview	
Do Preliminary Synthesis	• Examine relationship between map and interview	
	o Look for consistencies, inconsistencies in themes	
	o Ask if recommendations make sense w/ map	
	• Write notes on preliminary synthesis	
Reflect on the Case	• Get fresh sense of participant's whole perspective	
	• Write reflective notes	

Figure 22. Researcher's checklist for the second data analysis. I carried out these steps using the three sources of data for one participant—the causal map, the semi-structured questions, and my interview notes—before proceeding to the next participant. For the most part, I carried out the steps in the order presented, but I reiterated steps as necessary to gain understanding of participant perspectives.

Map-related steps. Because they are not self-explanatory, the steps I took to analyze the maps bear further explanation. In this second analysis, I first returned to the physical maps and engaged in extensive visual inspection; I sought to immerse myself in their richness and to develop a gestalt sense of their overall meaning. I made three freehand, impressionistic sketches of the maps. The first was a free-form sketch of any overall patterns I observed, and Figures 23 and 24 show examples. The second was a free-form sketch of the depth and breadth of the maps, and Figures 25 and 26 show examples. For this sketch, my goal was to describe where, within a conceptual field of vision, the participants focused their maps. The vertical axis, I decided, would represent a continuum from an up-close focus on nearby details at the bottom to a big-sky focus on big ideas at the top, a sort of micro-to-macro continuum. The horizontal axis, I decided, would represent how much information was included in the map at points along this continuum; the more information, the more breadth. I sketched a shape that depicted my sense of what and how much was included in the maps. The third sketch was a free-form depiction of the conceptual location of map concepts relative to higher education, and Figures 27 and 28 show examples. In these drawings, I sketched concepts that were inside higher education—either within an institution or within the higher education system—in the center circle, and I sketched concepts that were partially or totally outside higher education at increasing distance from the center circle; I sought a sense of the forces working inside and outside higher education.

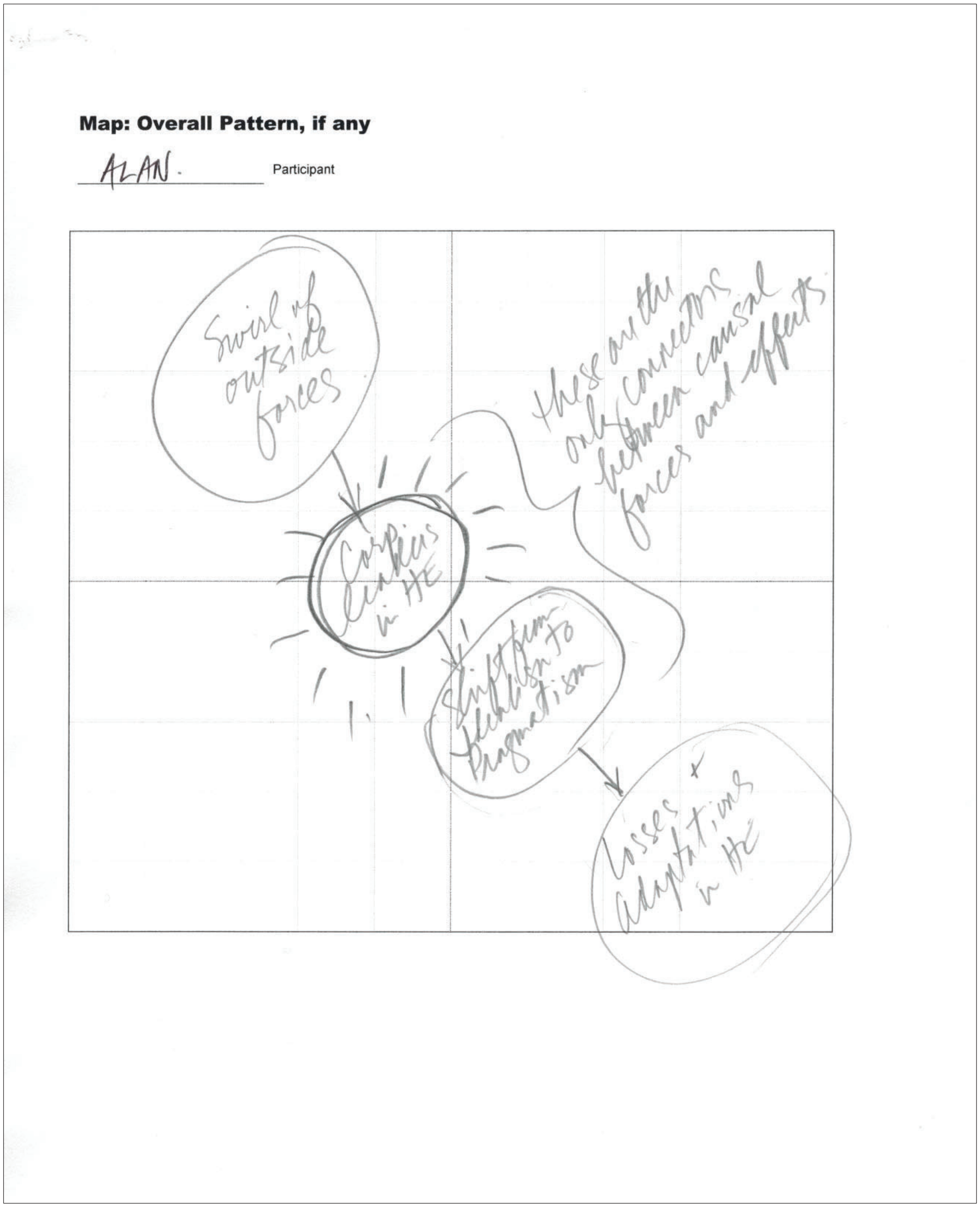

Figure 23. Sketch of overall patterns in Alan's causal map. This was the first of three free-form sketches I made after careful observation of the physical maps. In this sketch, I sought to capture my impressions of overall patterns and structures in the map.

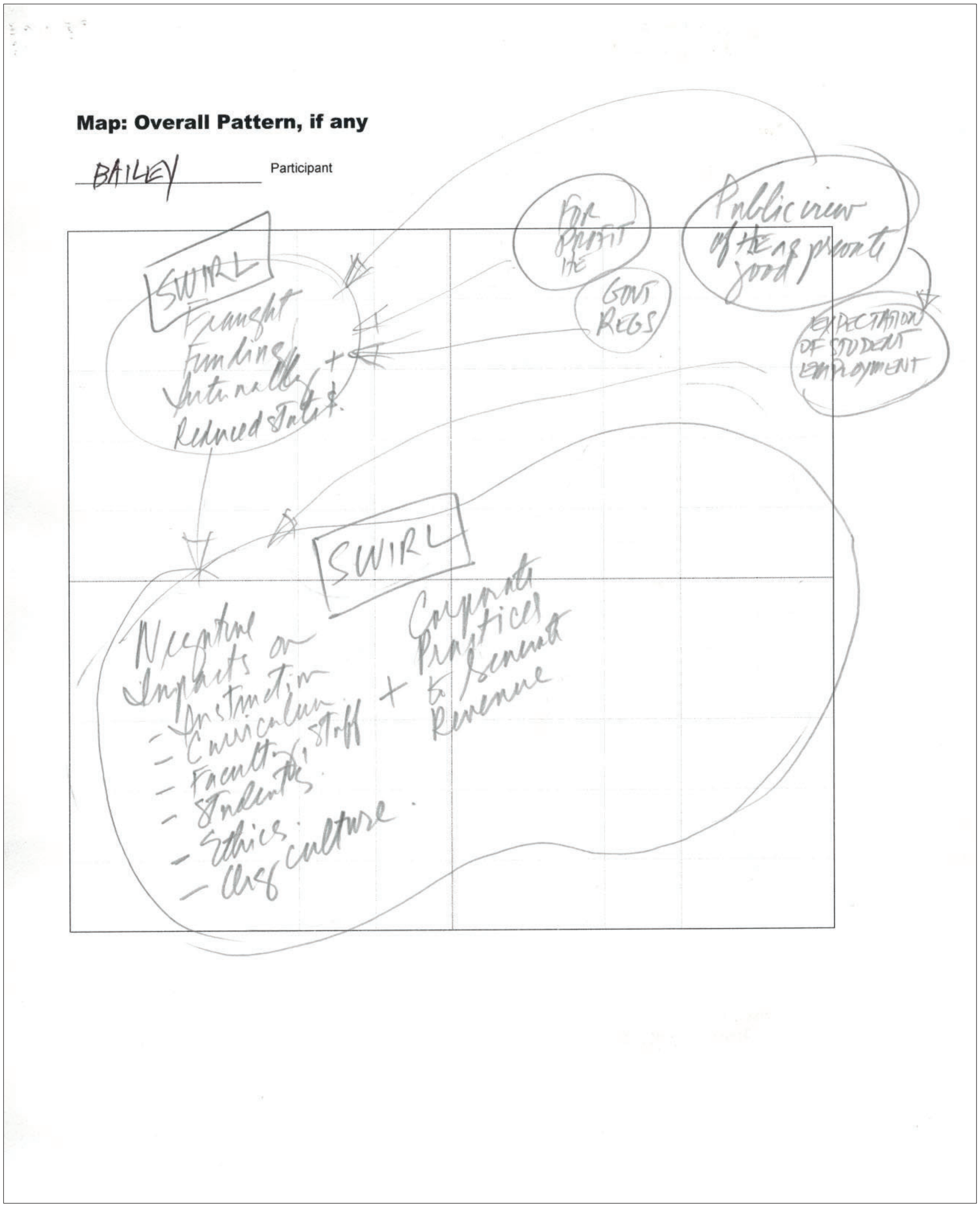

Figure 24. Sketch of overall patterns in Bailey's causal map. This was the first of three free-form sketches I made after careful observation of the physical maps. In this sketch, I sought to capture my impressions of overall patterns and structures in the map.

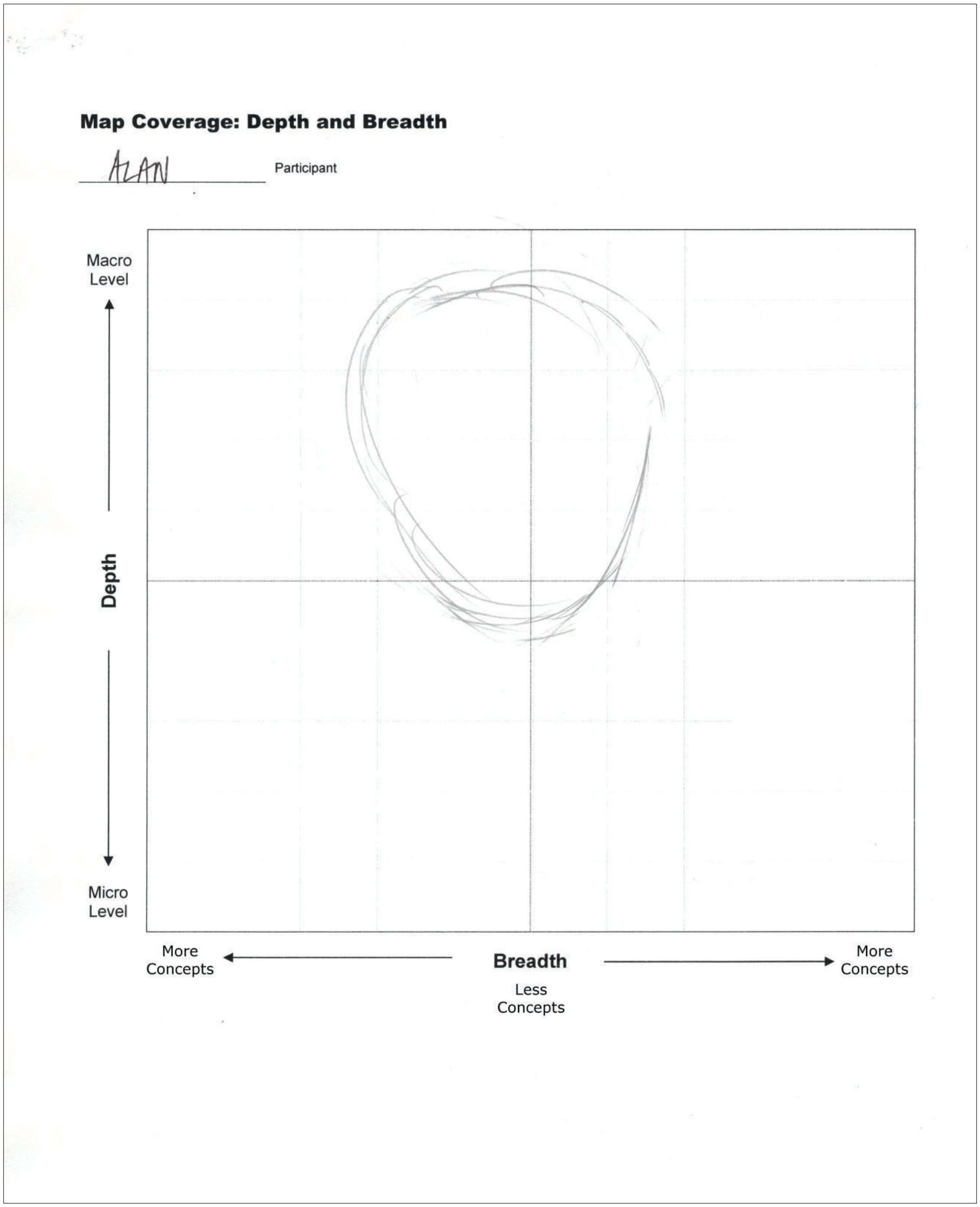

Figure 25. Sketch of depth and breadth in Alan's map. This was the second of three free-form sketches I made after careful observation of the physical maps. In this sketch, I sought to capture my impressions of where, within a conceptual field of vision, the participants had focused their maps. The vertical depth axis represented the type of content included across a micro-macro continuum with broad concepts and big ideas at the macro end and detailed observations at the micro end. The horizontal breadth axis represented the amount of content, based on number of concepts, included in the map at points along the micro-macro continuum.

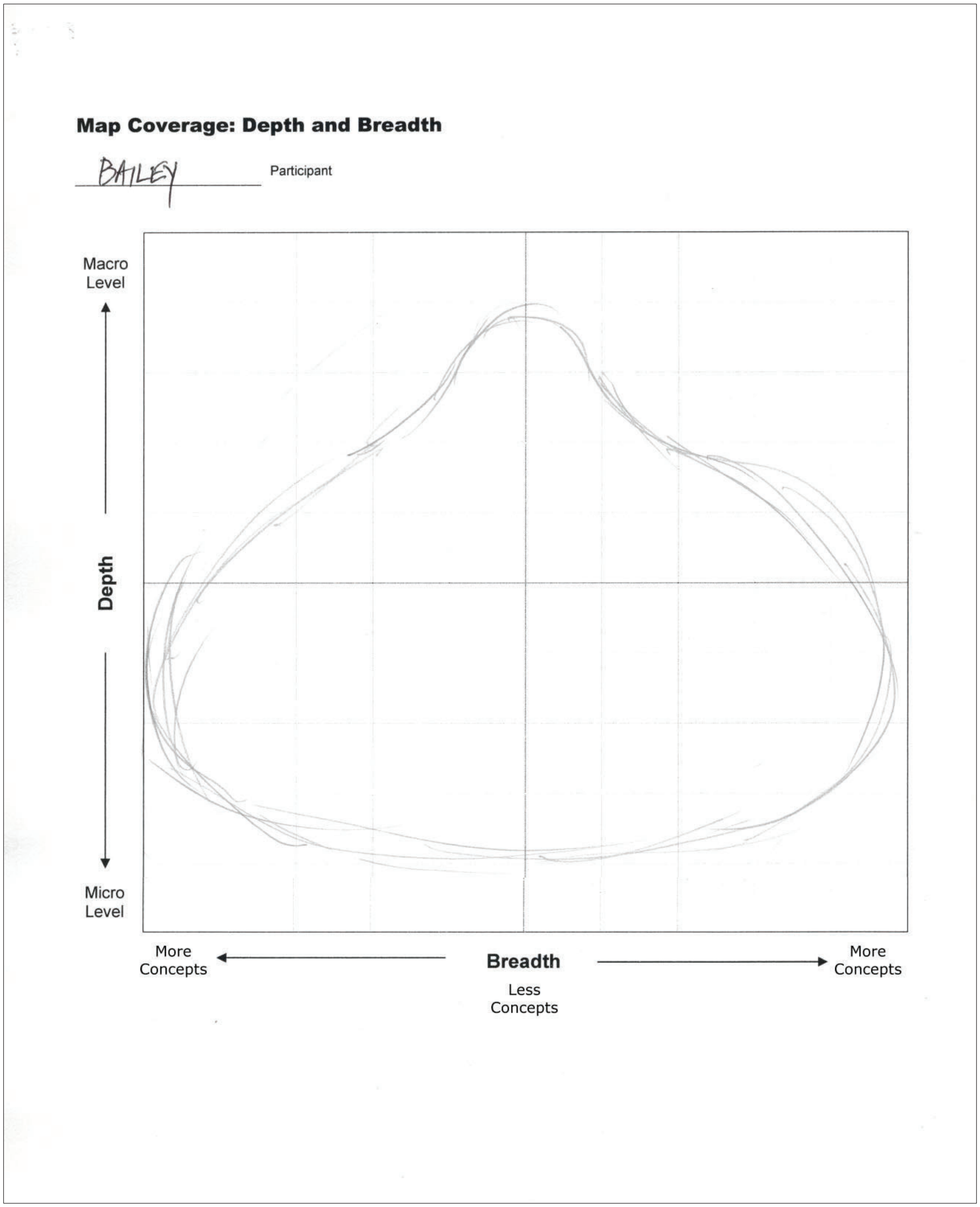

Figure 26. Sketch of depth and breadth in Bailey's map. This was the second of three free-form sketches I made after careful observation of the physical maps. In this sketch, I sought to capture my impressions of where, within a conceptual field of vision, the participants had focused their maps. The vertical depth axis represented the type of content included across a micro-macro continuum with broad concepts and big ideas at the macro end and detailed observations at the micro end. The horizontal breadth axis represented the amount of content, based on number of concepts, included in the map at points along the micro-macro continuum.

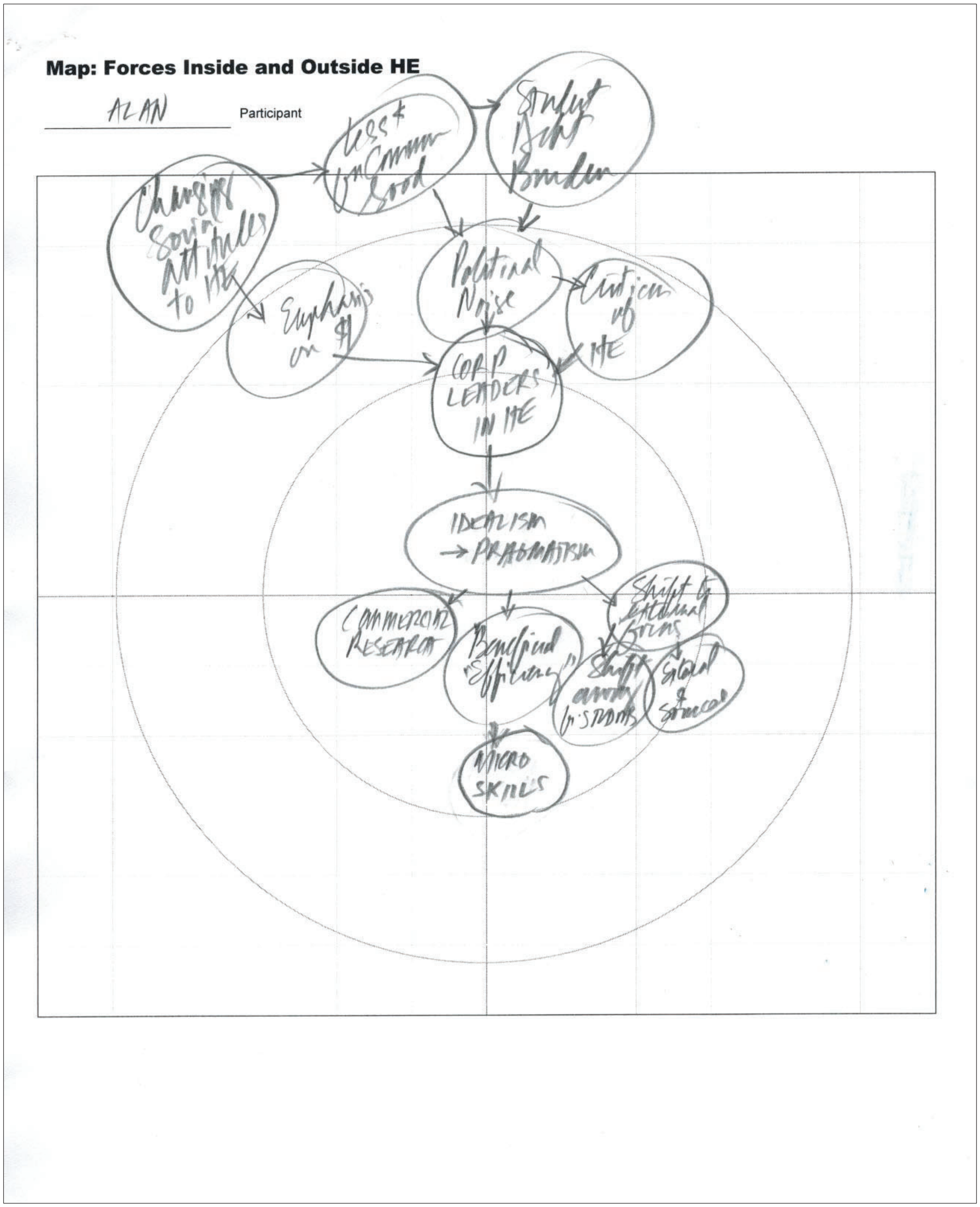

Figure 27. Sketch of concept location relative to higher education in Alan's causal map. This was the third of three free-form sketches I made after careful observation of the physical maps. In this sketch, I sought to capture my impressions of the location of map concepts in terms of whether they were inside higher education (either within an institution or within the higher education system), outside higher education, or somewhere in between.

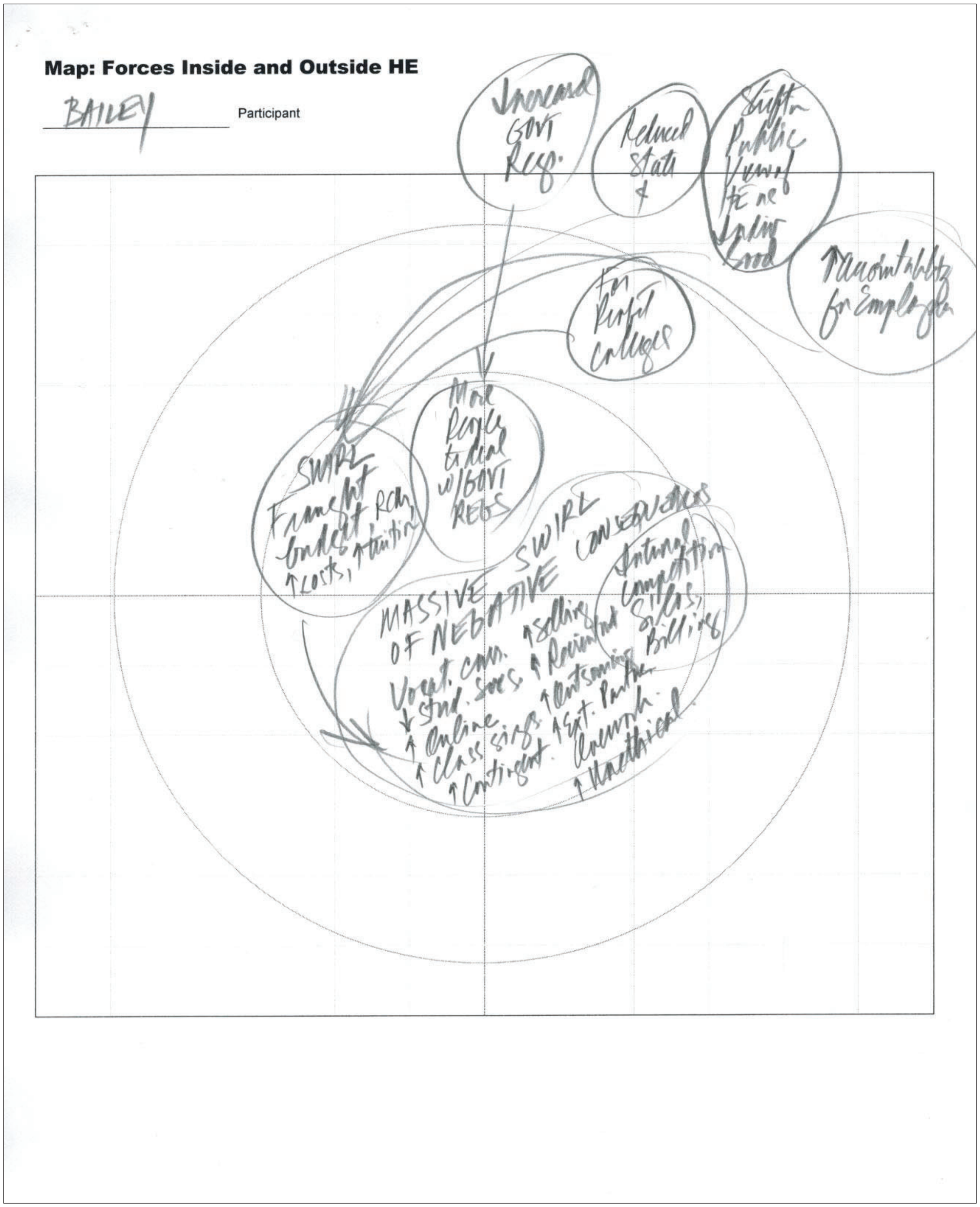

Figure 28. Sketch of concept location relative to higher education in Bailey's causal map. This was the third of three free-form sketches I made after careful observation of the physical maps. In this sketch, I sought to capture my impressions of the location of map concepts in terms of whether they were inside higher education (either within an institution or within the higher education system), outside higher education, or somewhere in between.

After the sketches, I examined the maps using the seven map-level metrics I had retained from the first analysis: numbers of concepts, transmitter concepts, ordinary concepts, receiver concepts, and effects elaboration as well as the number of links and the link-concept ratio. To interpret these metrics, I used the suggestions of Özesmi and Özesmi (2004). In terms of number of concepts, these authors do not offer an interpretation, but the metric might indicate the degree of detail in or complexity of the maps. Transmitter concepts, according to Özesmi and Özesmi (2004), may be seen by participants as "forcing functions" or "givens" in the situation, and more of them (when compared to receiver and ordinary concepts) may indicate that participants view top-down forces as dominant in the situation (p. 51). Ordinary concepts may be seen by participants as the means that produce the situational outcomes, and more of them (when compared to transmitter and receiver concepts) may indicate that participants perceive more options for action (Özesmi & Özesmi, 2004). Receiver concepts may be seen by participants as outcomes of the situation, and more of them (when compared to transmitter and ordinary concepts) may indicate that participants see many implications that result from the situation (Özesmi & Özesmi, 2004, p. 51). The effects elaboration metric is the ratio of receiver concepts to transmitter concepts. Lower ratios may mean participants see a more inflexible situation, with fewer variables and outcomes, while higher ratios may indicate participants see more options for action than fixed constraints (Özesmi & Özesmi, 2004). In terms of the number of links, Özesmi and Özesmi (2004) do not offer an interpretation, but the metric might indicate the degree of detail in or complexity of the maps. The link-concept ratio is a mathematical variation of the density metric. Higher ratios indicate more pathways to the situational outcomes, and Özesmi and

Özesmi (2004) suggest this may mean participants see "more options available to change things" (p. 50).

The last step in my analysis of the maps was to examine the map concepts, and I used Özesmi and Özesmi's (2004) suggested interpretations. First, I looked at the concepts by type: Transmitter concepts might describe the forces participants see as fixed and immutable; ordinary concepts might describe the situational variables participants see as potentially modifiable; receiver concepts might describe the consequences—desirable or undesirable—participants see created by the current situation (Özesmi & Özesmi, 2004). Next, I assessed the three concept-level metrics for each concept: indegrees, outdegrees, and centrality. Concepts with higher indegrees might be those the participants see as having forceful and/or complex causes, while concepts with higher outdegrees might be those participants see as strong, driving forces in the situation (Özesmi & Özesmi, 2004). The centrality metric is the sum of the indegrees and outdegrees, and concepts with higher centrality may indicate issues that participants see as particularly important to the current situation (Özesmi & Özesmi, 2004). Finally, I compared the causes and effects from the maps to the causes and effects reported in the literature and made note of any prominent ideas participants added or omitted from their maps.

Third analysis. The second analysis brought me closer to my goal of understanding the unique perspective of each participant, but I still sought deeper insight into the individual causal maps. I returned to the literature and discovered a trove of literature from the organizational sciences that helped me understand the difference between nomothetic and idiographic approaches and offered excellent guidance in the analysis of idiographic causal maps. Particularly helpful was the work of Eden, Ackermann, and their peers (e.g., Ackermann & Alexander, 2016; Ackermann & Eden, 2010; Ackermann, Howick, Quigley, Walls, & Houghton, 2014; Byron et al., 2004; Eden, 1988, 2004; Eden & Ackermann, 1998a, 1998b; Eden et al., 1992), researchers from the field of strategy management who had worked with idiographic causal mapping for several decades. I designed a third analysis that combined an in-depth analysis of the causal maps based on the work of Eden and Ackermann, the use of Decision Explorer software recommended by Eden and Ackermann, and Creswell's (2013) overarching framework for qualitative analysis.

Overall steps. I began by converting the maps from Excel adjacency matrices to individual Decision Explorer maps. Then I assessed the overall maps: I reviewed the three sketches and map-level metrics from the second analysis; investigated the number of complex links in the maps; and used Decision Explorer's map displays to identify visually prominent areas. After looking at the overall maps, I focused on identifying important concepts. I used the comparisons to the literature and concept-level metrics from the second analysis, the existence of complex links, four analytical tools from Decision Explorer, and visual inspection of Decision Explorer's map displays. I explored each key concept in depth using three analytical tools from Decision Explorer. Next, I worked with clusters. Using Decision Explorer tools, I identified existing clusters and loops; coded concepts into emergent themes; explored the clusters and compared them. To complete the third analysis, I captured the most salient meanings of the maps in notes; reviewed the semi-structured questions and researcher notes; reviewed relevant findings from the three analyses, and attempted to synthesize my understanding by "abstracting out beyond the codes and themes to the larger meaning of the data" (Creswell, 2013, p.

187). Using this process, I analyzed the data from each of the 20 participants, one at a time, again emphasizing within-case analysis over across-case analysis (Miles & Huberman, 1994). Figure 29 shows the checklist I used for the third analysis.

Phase	Steps	Done
Assess OVERALL MAP	From 2nd Analysis: 3 sketches: overall patterns, depth/breadth, in/outside	
	From 2nd Analysis: Metrics for # of concepts, links, links per concept	
	From Adj. Matrix: # of links: 2-Way EQUAL, 2-Way UNEQUAL, Negative	
	From DE: Visual patterns in addition to those noted above	
Identify KEY CONCEPTS	From 2nd Analysis: Focus compared to the literature	
	From 2nd Analysis: Highest outdegrees, indegrees, centrality	
	From Adj. Matrix: Obviously conflicted or complex links	
	From DE: HEADS, TAILS, DOMAIN, CENTRAL	
	From DE: Concepts that visually stand out in addition to those above	
Explore KEY CONCEPTS	From DE: Explore direct EXPLANATIONS	
	From De: Explore direct CONSEQUENCES	
Assess EXISTING CLUSTERS	From DE: CLUSTER, LOOP	
	From DE: Legitimate, self-sustaining/controlling, vicious/virtuous LOOPs	
Code EMERGENT CLUSTERS	From DE: Create sets for HEOUTSIDE, HEBOUNDARY, HEINSIDE	
	From DE: Create sets for other emergent themes	
Explore each CLUSTER	From DE: Use FOCUS: Meaning, shape, islands, clusters as macro-concepts	
	From DE: If cluster is large, COLLAPSE, CSET, HIESET, POTENT, COTAIL	
Compare CLUSTERS	From DE: For emergent sets, CSET to compare consequences	
	From DE: For non-exclusive sets, CSET, LSD, LSS, LSE	
Triangulate, synthesize	Make summary notes about map	
	Review interview transcript, researcher notes	
	Review relevant findings from 1st, 2nd, and 3rd analysis	
	Reflect on overall perspective of participant and write notes	

Figure 29. Researcher's checklist for the third data analysis. I carried out these steps using the three sources of data for one participant—the causal map, the semi-structured questions, and my interview notes—before proceeding to the next participant. For the most part, I carried out the steps in the order presented, but I reiterated steps as necessary to gain understanding of participant perspectives. DE is used as an abbreviation for the Decision Explorer software.

Member-checking. Using the email shown in Figure 30, I sent my observations of each individual interview to each of the twenty participants and requested their feedback about my observations and my identity masking. Five emailed their agreement without suggesting changes, four emailed their agreement with very minor suggested changes, and eleven did not respond.

Subject: Warm greetings! And I invite you to review my observations about your interview!

Dear Dr./Ms./Mr. _________________,

When I chose to use cognitive mapping for my dissertation, I did not foresee the adventure that was about to unfold. The method has been fascinating, challenging, rewarding, time-intensive, and a perfect fit for my research purpose. The significant amount of time I have had to invest is now yielding the rich and diverse findings I originally sought. I have finished a deep analysis of each individual interview, and I am currently writing about my observations across the interviews.

Our Partnership

From the beginning, I have seen my relationship with you, my study participants, as a partnership. Only with your insight and engagement can I hope to illuminate your ideas about corporatization in American higher education. Although I am moving towards completion of the dissertation, the work would not be complete without your feedback about the observations I have made.

Your Review of My Interview Observations

Therefore, I am attaching a Word document that contains the observations I made about your interview and a very brief profile I wrote about you. I invite you to review it for two main things:

1) Do you consider my observations about your interview to be plausible?
2) Have I made appropriate choices to mask your identity?

At your earliest convenience, please send me your thoughts. Although I understand how busy your schedule must be, ***I will need to receive your feedback within three weeks*** in order to reflect it in my dissertation. Please know I would welcome your feedback after that point, but I would be unable to include it in my final report.

Further Detail, Should You Be Interested

Should you be interested, I have attached a second Word file that includes your map data and my detailed analysis of your map. The analysis steps are not self-explanatory, but you may find them interesting nonetheless. The steps are fully explained in my dissertation, to which you will have access once it is complete.

Thank you!

The world is a busy place, and the fact that you made time to participate in this study without compensation makes me deeply grateful; you, of course, made the study possible.

But there is something else. Frankly, the way you communicated with me by email, met with me in person, and freely shared your ideas about an important issue—all of it has made my spirit soar and filled me with hope for the future of higher education.

With gratitude,
Sherry McAndrew

Figure 30. Member-checking email for my observations about participant interviews. I sent this email to participants to invite their review of my observations about their interviews and my brief profile of them, both of which I attached in a Word document. I also attached a Word document containing their entire section from Chapter 5 including their map data and map analysis. My goals for this email were to encourage their review and feedback, include them in the concluding phases of the study, allow them the most time possible for their feedback given the constraints of the project, and express my gratitude.

Map-related steps. Because they are not self-explanatory, the steps I took to analyze the maps in the third analysis bear further explanation. (Also, see Appendix D for a brief introduction to the Decision Explorer software including screenshots and tool descriptions.)

Converting maps to Decision Explorer. First, I converted the maps from adjacency matrices in Excel to Decision Explorer maps: For each map, I exported simple text files from Excel that contained the concepts and links. In Decision Explorer, I used its import function to import the text files to create a complete map for each participant. Because Decision Explorer does not support the use of numerically-weighted strengths, I used its Link Styles feature to visually convey the strength of the links; I assigned increasingly larger lines and darker shades of brown for increasingly stronger strengths. For negative links, I used the same approach but changed the color to blue and added the label *N-* near the arrowhead to indicate negative links when color displays or printouts might not be available.

Assessing overall map. To assess the overall maps, I reviewed relevant material from previous analyses, but I also used new techniques. Because Eden and Ackermann consider complex links important to analysis (Ackermann & Alexander, 2016; Ackermann et al., 2014; Bryson et al., 2004; Eden, 2004; Eden & Ackermann, 1998a), I used Excel functions on the original adjacency matrices to assess the degree to which the maps contained complex links; I counted two-way equal links in which two concepts influenced each other at the same strength level; two-way unequal links in which two concepts influenced each other at different strength levels or in different positive/negative directions, and negative links. At this stage of analysis, I used these numbers as well as the map-level metrics as indications of map complexity. I also used Decision Explorer's graphic depiction of the maps to make note of their overall shape, using Ackermann et al.'s (2014) assertion that wider, more horizontal maps suggest a greater breadth of knowledge represented in the map and taller, more vertical maps suggest a greater depth of knowledge represented in the map, and I compared these interpretations to my depth/breadth sketches. Finally, I used Decision Explorer's visual display to note potentially important issues by looking for congested areas of the map, a technique suggested by Eden (2004), and compared these interpretations to my sketches of overall patterns. According to Eden, Ackermann, and peers (Ackermann & Alexander, 2016;

Ackermann & Eden, 2010; Ackermann et al., 2014; Byron et al., 2004; Eden, 1988, 2004; Eden & Ackermann, 1998a, 1998b; Eden et al., 1992), getting a sense of the overall map provides clues to its meaning as well as context for themes that emerge in the following steps.

Exploring key concepts. To identify and explore important concepts, I used helpful findings from previous analyses and added new techniques. To determine the most important concepts in the map, I used concept-level metrics to identify concepts with higher outdegrees, indegrees, and centrality metrics, and I noted concepts involved in complex links. I also used the Decision Explorer tool LIST HEADS to identify heads (the same as receiver concepts) and LIST TAILS to identify tails (the same as transmitter concepts); the tool DOMAIN to identify concepts with higher total numbers of direct links into or out of the concept and the tool CENTRAL to identify concepts with higher totals from adding direct and indirect links into or out of a concept with a distance-decay function that reduces weight based on the distance of the link from concept (Ackermann & Alexander, 2016; Ackermann & Eden, 2010; Ackermann et al., 2014; Eden, 1988, 2004; Eden et al., 1992). I also used Decision Explorer's visual display to note potentially important issues by looking for concepts with many links, a technique suggested by Ackermann and Eden (2010) and Eden (2004). Once I had identified the key concepts, I examined each one individually using three Decision Explorer tools: MAP to see a visual depiction of the concept and its direct links; EXPLANATIONS to explore causal pathways that lead to the concepts; and CONSEQUENCES to explore causal pathways that result from the concept (Eden, 1988; 2004). According to Eden, Ackermann, and peers (Ackermann & Alexander, 2016; Ackermann & Eden, 2010; Ackermann et al., 2014; Byron et al., 2004; Eden, 1988, 2004; Eden & Ackermann, 1998a; Eden et al., 1992), working with key concepts sheds light on the central issues conveyed by a map and may even suggest “the nub of the issue” (Eden, 2004, p. 682).

Working with clusters. Working with clusters involved new techniques. Clusters, according to Eden (2004), are sets of concepts that belong together for one of four reasons. Some clusters appear as “islands,” sets of closely linked concepts with few “bridge” links to other parts of the map; these may suggest areas that are “relatively insensitive to small changes” elsewhere in the map (Eden, 2004, p. 679). Some clusters appear as “trees,” sets of concepts characterized by a main concept with a tree-shaped hierarchy of concepts that lead to it; these clusters may be investigated to understand the multiple pathways that create particular outcomes (Eden, 2004, p. 679). A third type of cluster is a “feedback loop,” a set of concepts connected with links that create a repeating cycle (Eden, 2004, p. 681). Islands, trees, and loops represent three types of structural clusters. A fourth type of cluster is a set of concepts that belong together not because of their structural relationships but because their content is related, and these may suggest important emergent themes (Eden & Ackermann, 1998a). According to Eden, Ackermann, and peers (Ackermann & Alexander, 2016; Ackermann & Eden, 2010; Ackermann et al., 2014; Eden, 2004; Eden & Ackermann, 1998a), working with clusters helps the researcher identify emergent themes and forces of change or stabilization within the map.

To identify structural clusters in the maps, I first used the CLUSTER tool in Decision Explorer, which attempts to identify island and tree clusters by analyzing the network of links within a map (Eden, 2004). The Decision Explorer help screens, though, caution that the results of CLUSTER are simply possibilities and that the researcher should assess the validity of each proposed cluster (Decision Explorer, n.d.). Of the 20 maps in the study, only one map, a particularly complex one, yielded meaningful results from the CLUSTER analysis, while the others produced clusters that contained nearly all of the concepts. The lack of results from the CLUSTER analysis may be due to the relative simplicity of the maps in this study; they had an average of 20 concepts and 35 links, while some of the maps produced by groups working with Eden and Ackermann contain over 500 concepts and 700 links (Eden, 1988).

To identify structural clusters, I also used the Decision Explorer tool LOOP, which locates clusters with repeating, circular pathways. Dating from the time of Axelrod (1976), loops have been given significant attention in causal maps because they imply one of three dynamics: growth, decline, or feedback control (Eden, 2004). According to causal mapping researchers, growth occurs when a loop contains links that are all positive; each concept increases the next in a never-ending loop; decline occurs when a loop contains links that are all negative or an even number of negative links; the net result is a never-ending decline in the associated activity; feedback control occurs when a loop contains an odd number of negative links; the net result is that the associated activity neither increases nor decreases but is brought under control or stabilized (Eden, 2004). In the case of destabilizing loops—those that cause a net increase or decrease—causal map researchers examine whether the loop cycle is "vicious or virtuous" (Eden, 2004, p. 682); in other words, they consider whether it is desirable or undesirable. An important caveat applies to these interpretations of loops: They apply when causal maps use links that have not been assigned strengths, which is the practice of Eden and Ackermann (e.g., Eden, 2004); the interpretations are complicated by links that have been assigned numeric strengths, which is the practice I used in this study and is more frequently used by nomothetic researchers. Because I found no clear guidance in the literature for interpreting weighted loops, I drew very tentative conclusions about them.

Unlike the three types of structural clusters, a content cluster is not described by its linkages. Instead, it is a theme that emerges as the researcher explores the map, just as a theme might emerge as a qualitative researcher explores a text (Eden, 2004). In Decision Explorer, the researcher can create any number of ad-hoc codes and can apply zero, one, or more than one code to each concept. In Decision Explorer, concepts that share a code are called a cluster (or a set; the two are synonymous), and the software provides a number of tools for cluster analysis (Ackermann & Alexander, 2016; Decision Explorer, n.d.; Eden, 2004; Eden & Ackermann, 1998a).

I used Decision Explorer to create and analyze emergent content clusters. Across all maps, I was interested in how participants viewed the relationship between forces inside and outside higher education. Therefore, I created codes to represent concepts inside the higher education system or its institutions (HEINSIDE); concepts outside of higher education (HEOUTSIDE); and concepts spanning the boundary of higher education and its environment (HEBOUNDARY). I coded each concept with one of the three codes and used Decision Explorer tools to explore the three resulting clusters. I used FOCUS to temporarily display one cluster at a time and examined the size, shape, and contents of the clusters. I tried using COLLAPSE, HIESET, POTENT, and COTAIL but found that the clusters, with rare exception, were too small to benefit from these intricate analyses. (See Appendix D for an explanation of these Decision Explorer tools.)

To great benefit, I used CSET to compare the consequences of each cluster on the other clusters. For example, I ran CSET to see which HEINSIDE concepts were affected by HEOUTSIDE concepts and which HEOUTSIDE concepts were affected by HEINSIDE concepts. Because HEINSIDE, HEOUTSIDE, and HEBOUNDARY were mutually exclusive clusters, the LSD, LSS, and LSE tools were not relevant to the analysis. (See Appendix D for an explanation of these Decision Explorer tools.) In addition to the inside/outside theme, I occasionally used Decision Explorer tools to code and analyze an emergent theme that was specific to an individual map. According to Eden and Ackermann (Ackermann & Alexander, 2016; Ackermann & Eden, 2010; Eden, 2004; Eden & Ackermann, 1998a), exploring emergent themes using the cluster features of Decision Explorer is one of the most powerful approaches to understanding complex causal maps. In my analysis, the approach yielded insights, but it would likely be even more valuable with more complex maps.

Additional issues. A few additional issues merit mention. One is the fact that the Eden and Ackermann literature and the Decision Explorer software both reflect ideas from the field of strategy management. For example, Eden and Ackermann interpret heads (what Özesmi and Özesmi (2004) call receiver concepts) as strategic goals for the organization; middle concepts (what Özesmi and Özesmi (2004) call ordinary concepts) as strategies for reaching those goals or issues that impede those goals; and tails (what Özesmi and Özesmi (2004) call transmitter concepts) as options for action or assumptions, facts, or assertions (Ackermann & Alexander, 2016; Ackermann & Eden, 2010; Eden, 1988, 2004; Eden et al., 1992). Reflecting these assumptions, Eden and Ackermann organize causal maps with the heads (what they consider goals) at the top of the map and the tails (what they consider supporting actions or assumptions) at the bottom (Ackermann & Alexander, 2016; Ackermann & Eden, 2010; Eden, 1988, 2004; Eden et al., 1992). In general, Eden and Ackermann's approach has more of a means/end than a cause/effect orientation, and I had to be careful, throughout my analysis, to avoid interpretations that did not apply to this study.

A second issue relates to the arrangement of concepts in a causal map. Özesmi and Özesmi (2004), for example, provide no direction to participants on where to place concepts on their maps other than to start somewhere in the middle of the page. Because I incorporated many of the practices of Özesmi and Özesmi (2004) in my data collection method, I took the same approach. In the work of Axelrod (1976), the researcher analyzed existing texts and then drew causal maps "whenever possible...so that the arrows flow from left to right" (p. 62). Eden and Ackermann, who create causal maps as they interview participants, draw them so the arrows flow from bottom to top, and the Decision Explorer software defaults to this organization. I found no literature that examines the advantages and disadvantages of these approaches. On a related note, I discovered that causal mapping researchers do not treat the physical arrangement of concepts—whether on paper, poster board, or screen—as data; causal map data consists only of the concepts and the links that connect them, however they are arranged. Not surprisingly, then, the physical arrangement is lost when maps are converted to adjacency matrices or to any of the various mapping software packages. In fact, Decision Explorer allows the researcher to freely rearrange map concepts on screen, while it retains and redraws the connecting links. I found that, when given a choice, I gravitated toward arranging the flow of arrows from top to bottom, an approach I used when I prepared the

20 map images presented in the next chapter. Currently, I have no information about the meaning of the physical arrangement of a causal map, the meaning of a preference for the direction of the flow of arrows, or the influence of those choices on viewers of the maps.

One final issue is the relative fit of the Decision Explorer software (Decision Explorer, n.d.) for this study. A slight disadvantage is that the software reflects some ideas from the field of strategic management; the name of the software implies this, as does its arrangement of maps using the bottom-to-top flow that Eden and Ackermann use. Beyond that, though, the ideas of strategic management do not appear in the software. At the same time, the software has several advantages. The first is that it ably facilitates a qualitative approach to map analysis. Because it allowed me to rearrange concepts without breaking their links and to zero in on map areas for close inspection, I was able to immerse myself in the maps and use free-flowing, discovery-based exploration. Also appropriate to a qualitative approach, the software offers no interpretations of the maps; it leaves the interpretation to the researcher. A second advantage of the software is the transparency of its calculations. Almost without exception, the tools produce results that are clearly explained in the documentation and are clear corollaries to steps I could duplicate myself using visual inspection of the physical maps, high levels of concentration, and significant amounts of time. The only exception seems to be the CLUSTER analysis, which suggests possible island and tree clusters using an algorithm that is not explained in the documentation. The third advantage is that it saves time. Because it supports highly interactive exploration and because it automates the early steps of map analysis—counting various map traits and pinpointing occurrences of various map formations—it accelerates what otherwise would be a laborious, manual process. Decision Explorer was a great fit for the study and a powerful, time-saving tool.

CHAPTER 5:

FINDINGS FOR TWENTY INDIVIDUAL PARTICIPANTS

This chapter contains the findings I generated in my exploration of the views of corporatization held by twenty individual leaders from Evans State University. Because adaptation requires the engagement of leaders from throughout the organization, I chose leaders from all levels of the hierarchy. Because adaptive learning calls for interaction among people with divergent perspectives, I used a sampling strategy that maximized the potential for contrasting views. Because higher education leaders may use these findings to foster emergence, I produced findings that highlighted differences rather than commonalities, data which I believe are more useful to leaders as they act to loosen stagnant patterns of thought and encourage unorthodox voices. Finally, because the study belongs to the earliest phase of research into this topic, I sought to avoid premature conclusions and instead to elucidate the uniqueness of each viewpoint. The findings of this study, therefore, are my interpretations of the individual perspectives of each of the twenty participants. The findings offer answers to the research question: How do higher education leaders think about corporatization in American higher education?

Consonant with the goal of capturing diverse views, I allowed naturally occurring differences to arise in the data collection process. Participants varied in terms of the amount of time they had available for creating their causal maps, the degree to which they were comfortable with the mapping process, the amount of data they shared, and the amount of time they had spent thinking about corporatization in advance of the study. These differences created variation in the depth and breadth of the data provided by participants, and the findings reflect those variations.

In addition, I deemphasized the identity of the participants in the findings. One reason is that I had promised to mask the identities of participants and the university. Achieving that goal required that I make trade-offs between providing personal detail about participants and preserving their anonymity, and I chose to err on the side of anonymity. But I also had a second reason. I sought to offer readers a fresh encounter with twenty unique perspectives before they associated those perspectives with particular roles, levels of formal authority, leader categories, or academic disciplines; I sought to present distinct voices that readers would consider before knowing the sources of those ideas. For these reasons, I include only brief descriptions of the participants, and I place them at the end of their respective sections.

For each participant, I present the findings in three sections. The first is the causal map data. Although the data for the study also included interview transcripts and researcher notes, I present only the map data because they played a central role in the investigation; they are relatively compact; and they are part of the audit trail strategy compelled by my use of the causal mapping method. I offer this data for readers who wish to delve into, follow, and evaluate my reasoning from data to interpretation. I present the raw map data in two forms: a screenshot of the entire map as displayed in the Decision Explorer software and the equivalent map data converted to a list of causal statements. The screenshot provides a graphic depiction of the map fitted to one page, and more detailed maps are more condensed. To see an enlarged view of the map, readers may view the .pdf version of this document and use the zoom feature. In addition, the screenshots depict positive links in brown and negative links in blue, a distinction preserved in the .pdf version. To assist readers viewing a black-and-white printout of this document, negative links are also marked with *N-* near the arrowhead.

The second section of findings for each participant contains the most salient results from my causal map analysis, and I present these in three tables. The first table shows the map-level metrics calculated for the map alongside the average for all twenty participants. The second table shows the most prominent concepts in the map and my rationale for characterizing each of them as prominent. Although more detailed maps tend to have more concepts with prominence, the number of prominent concepts also depends on the level of differentiation in the map; maps that strongly distinguish between concepts tend to foreground fewer concepts. The third table shows the results of the cluster analyses and summarizes significant clusters by type. It lists structural clusters, which are commonly loops, and the related counts of two-way and negative links, and it lists content clusters, which include emergent themes in the map as well as the HEINSIDE / HEOUTSIDE cluster analysis I conducted in every map. As part of the audit trail strategy, I provide these results for readers who wish to follow the trail of my reasoning from analysis to interpretation.

In the third section of findings for each participant, I offer my interpretations of their thinking about corporatization based on their one-time, face-to-face, one-to-three-hour interviews, each of which produced three data sources: the causal maps, the transcribed interview questions, and my researcher notes. In the first portion, I offer my interpretation of how participants structure the problem of corporatization based primarily on their causal map depiction of the causes and effects of corporatization but supplemented by my researcher notes and the transcribed interview questions. In the second portion, I offer my interpretation of how participants think about issues related to corporatization based primarily on their interview questions but supplemented by their causal maps and my researcher notes. Here, I attempt to convey how participants talked about their ideas for how higher education might best respond to corporatization and how they expressed emergent themes about corporatization in their maps and in their conversations. Although I did not ask participants to explain their view of the mission of higher education, this theme arose in many interviews, and I attempt to capture those perspectives here as well. In addition, I sometimes interpreted participants' expressions of hope for the future of higher education as particularly meaningful to them; in those cases, I sought to capture those meanings and report them here. Finally, I close the section for each participant with a very brief participant profile.

Alan

Causal map data. Alan's causal map data are represented in two forms below. Figure 31 shows the map data after conversion to the Decision Explorer software; it is a screenshot of the entire map as displayed in Decision Explorer. Table 11 shows the equivalent map data in the form of causal statements.

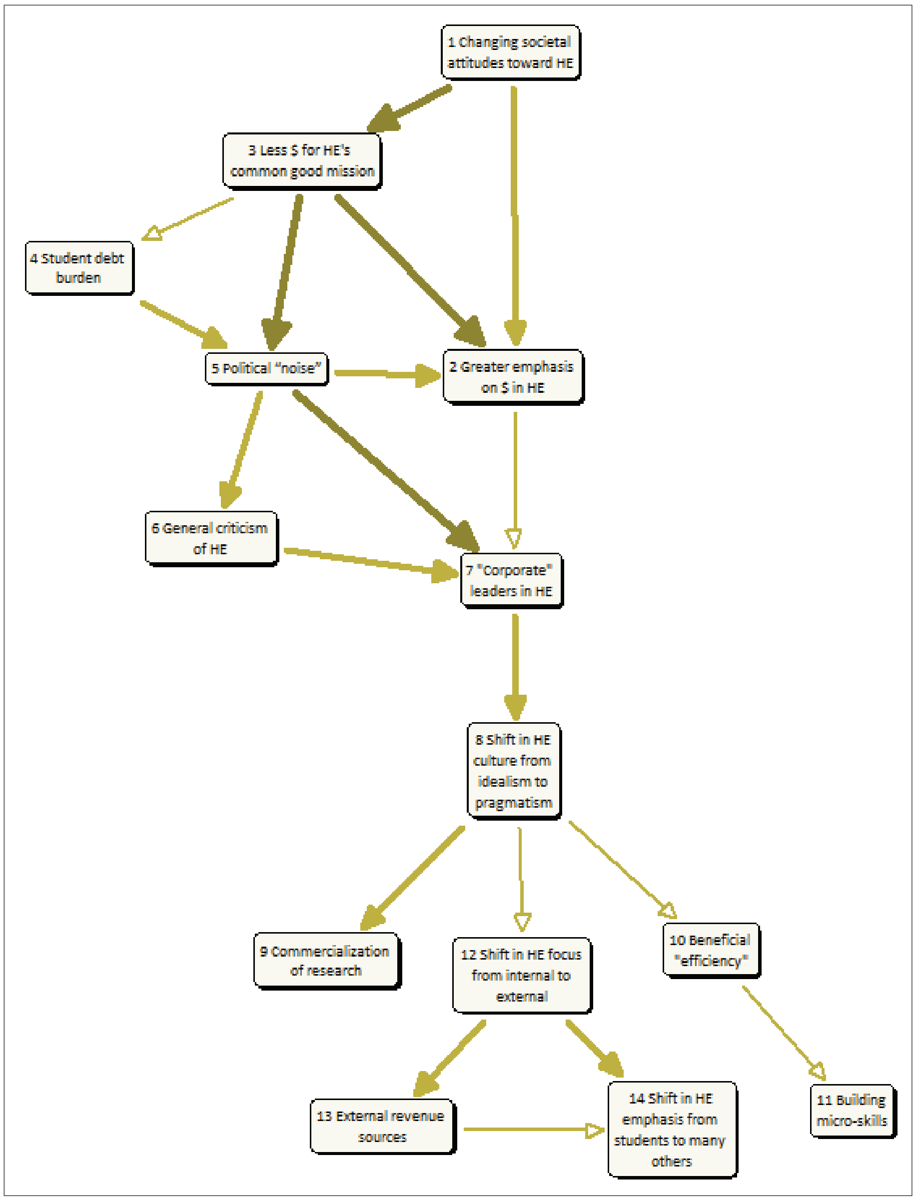

Figure 31. Screenshot of Alan's causal map after conversion to Decision Explorer. Increasingly thicker and darker lines depict increasingly stronger links. Any negative links are shown in blue and also have the label *N-* near the arrowhead.

Table 11

Alan's Causal Map Data Converted to Causal Statements

'"Corporate" leaders in HE' causes a STRONG INCREASE in 'Shift in HE culture from idealism to pragmatism'
'Beneficial "efficiency"' causes a MEDIUM INCREASE in 'Building micro-skills'
'Changing societal attitudes toward HE' causes a STRONG INCREASE in 'Greater emphasis on $ in HE'
'Changing societal attitudes toward HE' causes a VERY STRONG INCREASE in 'Less $ for HE's common good mission'
'External revenue sources' causes a MEDIUM INCREASE in 'Shift in HE emphasis from students to many others'
'General criticism of HE' causes a STRONG INCREASE in '"Corporate" leaders in HE'
'Greater emphasis on $ in HE' causes a MEDIUM INCREASE in '"Corporate" leaders in HE'
'Less $ for HE's common good mission' causes a MEDIUM INCREASE in 'Student debt burden'
'Less $ for HE's common good mission' causes a VERY STRONG INCREASE in 'Greater emphasis on $ in HE'
'Less $ for HE's common good mission' causes a VERY STRONG INCREASE in 'Political “noise”'
'Political “noise”' causes a STRONG INCREASE in 'General criticism of HE'
'Political “noise”' causes a STRONG INCREASE in 'Greater emphasis on $ in HE'
'Political “noise”' causes a VERY STRONG INCREASE in '"Corporate" leaders in HE'
'Shift in HE culture from idealism to pragmatism' causes a MEDIUM INCREASE in 'Beneficial "efficiency"'
'Shift in HE culture from idealism to pragmatism' causes a MEDIUM INCREASE in 'Shift in HE focus from internal to external'
'Shift in HE culture from idealism to pragmatism' causes a STRONG INCREASE in 'Commercialization of research'
'Shift in HE focus from internal to external' causes a STRONG INCREASE in 'External revenue sources'
'Shift in HE focus from internal to external' causes a STRONG INCREASE in 'Shift in HE emphasis from students to many others'
'Student debt burden' causes a STRONG INCREASE in 'Political “noise”'

Causal map analysis. The following three tables present the most salient results from the analysis of Alan's causal map. Table 12 shows the map-level metrics calculated for the map alongside the average for all 20 participants. Table 13 shows the most prominent concepts in the map with the rationale for characterizing them as prominent. Table 14 shows prominent clusters in the map and includes all prominent occurrences of structural clusters (loops, islands, or trees) and content clusters (*a priori*—a content theme selected by the researcher—or emergent).

Table 12

Alan's Map-Level Metrics with Averages for All Participants

Metric	Description	Alan's Map	Group Avg
# of Concepts	# of concepts in map	14	20.00
# of Tails	# of concepts with only outgoing links	1	3.05
# of Heads	# of concepts with only incoming links	3	5.00
# of Ordinary	# of concepts w/incoming+outgoing links	10	11.95
# of Links	# of links in the map	19	35.55
Link-Concept Ratio	# of links divided by # of concepts	1.36	1.73
Head-Tail Ratio[a]	# of heads divided by # of tails	3.00	2.50

[a]In Table 10, I had used the term *Receiver-Transmitter Ratio* to reflect the terminology of Özesmi and Özesmi (2004), whose work I used in my early analyses. In this and following tables, I use the synonymous term *Head-Tail Ratio* to reflect the terminology of Eden and Ackermann, whose work I used in the later stages of my analyses.

Table 13

Alan's Prominent Map Concepts and Rationale for the Characterization

Concept	Rationale
Changing societal attitudes toward HE	• The only TAIL, so the driver or given of the map • Has 32 unique paths of CONSEQUENCE
Less $ for HE's common good mission	• Tied with 1 other for highest Outdegree • 2nd highest Centrality • Has 28 unique paths of CONSEQUENCE
Political "noise"	• Tied with 1 other for highest Outdegree • Highest Centrality • Highest DOMAIN links • 3rd highest CENTRAL score • Has 12 unique paths of CONSEQUENCE
Greater emphasis on $ in HE	• 1st link to HEINSIDE from sociopolitical cluster • Highest Indegree
"Corporate" leaders in HE	• 2nd link to HEINSIDE from sociopolitical cluster • 2nd highest Indegree • 4th highest Centrality • Tied with 1 other for highest CENTRAL score
Shift in HE culture from idealism to pragmatism	• Tied with 1 other for highest CENTRAL score

Note: If words in a concept are in quotes, the participant had placed quotes around them in the original map. HE = Higher Education. HEI = Higher Education Institution. Other words in capital letters denote tools or named clusters in Decision Explorer. See the *Working with clusters* section of Chapter 4 for more information about the named clusters HEINSIDE, HEBOUNDARY, and HEOUTSIDE.

Table 14

Alan's Map Clusters with Descriptions

Category / Type	Description
Structural / Loop	0 Total loops 0 Two-way links 0 Negative links
Content / *a priori*[a]	Concepts in each cluster HEINSIDE = 9, nearly all undesirable HEBOUNDARY = 0 HEOUTSIDE = 5, all undesirable Prominent results of CSET analyses • HEOUTSIDE concepts only moderately influence each other but almost every HEOUTSIDE concept affects almost every HEINSIDE concept • HEINSIDE concepts have uneven influence on each other and zero effect on HEOUTSIDE concepts
Content / Emergent	Sociopolitical forces outside higher education Largely undesirable changes within higher education

[a]*a priori* = A content theme the researcher selected for analysis in every map. For more information about the HEINSIDE, HEBOUNDARY, HEOUTSIDE analysis, see the *Working with clusters* section of Chapter 4.

How Alan thinks about corporatization.

How he structures the problem of corporatization. Alan's map is concise and uncomplicated. Compared to the average for this group of participants, the map has fewer concepts, fewer links, and a lower link-concept ratio, making it less complex than other maps. And the fact that the map does not have two-way links, negative links, or loops suggests that map relationships are more straightforward than they are elaborate.

The focus of the map is on sociopolitical forces and their largely undesirable consequences for higher education. As the only TAIL, changing societal attitudes toward higher education is the main driver of change, with vast influence on the rest of the map. It spawns a cluster of sociopolitical dynamics that include criticism of higher education, less money for the common good mission of higher education, and political "noise."

The influence of these dynamics enters the higher education system through two sequential links: greater emphasis on money in higher education and “corporate” leaders in higher education, with “corporate” leaders appearing as the key point of insertion. “Corporate” leaders are the single direct cause of the shift in higher education culture from idealism to pragmatism, which then leads to a cluster of changes inside higher education. Of the six changes within higher education, four appear undesirable, because they describe a shift toward revenue and external concerns and a shift away from students and internal concerns. Two of the changes appear desirable, because they refer to organizational benefits. Yet, Alan seems to deprecate them; he uses the word *micro* when describing the benefits of building micro-skills and places the word efficiency in quotes when describing beneficial “efficiency.” The only other concepts with words in quotes are “corporate” leaders in higher education and political “noise”; based on Alan’s verbal comments as well, the quotes may indicate skepticism about the value of those manifestations.

The analysis of internal and external forces shows that forces outside of higher education thoroughly and completely influence the forces inside higher education, while the reverse is not true. Forces inside higher education have no influence on the outside; they are on the receiving end only. Like a waterfall, the dynamic of the overall map is a one-way, causal flow; the external sociopolitical forces flow down into higher education and cause commotion and change. Also like a waterfall, the flow never reverses.

How he thinks about issues related to corporatization. Alan describes the mission of higher education as “transforming lives.” Although it can encompass helping students obtain jobs and be successful, this mission, he says, is more than that: It is about developing “a sense of identity; it is about developing “autonomy”; it about the type of personal growth that rewards one, later in life, with a “sense of well-being, purpose, and happiness.” Although, Alan says, “the heart of the academic enterprise is the professor and the students in the classroom,” he also contends “there is much more to the collegiate experience” than the classroom. And he offers an anecdote about his conversation with a Gallup researcher who was presenting data about the intangible benefits that accrue to college graduates:

> And I went up to the guy afterwards, and I said to him, “That really resonates with me.” And he says, “What do you do here?” And I say, “Student Affairs.” And he goes, “Ah! Student Affairs! Salvation of higher education.”

Alan also conveys a sense that corporate influence is a threat to the more exalted mission of higher education. He acknowledges modest benefit to all organizations from business “micro-skills” but describes these as operating at “a lower level” than the “bigger picture perspective” that encompasses the higher education mission. He dismisses the idea that corporations could be an appropriate model for American higher education, which has been a global model of excellence and to which “the world has flocked historically.” Echoing his causal map, in which corporate leaders in higher education open the door to corporate values, Alan describes the “hazard” to the “intrinsically valuable aspects of higher education” that is “corporate involvement.” He warns against the consequences of treating “bottom-line spreadsheet dollars as the most important thing about higher education.” This type of shift towards pragmatism, as conveyed in his causal map, eventually leads to turning away from the student.

In addition, Alan portrays an unfortunate and consequential loss of sovereignty in higher education. He contends there was a time when society took the approach, “Leave higher education alone. They know what they’re doing. And they’re going to take care of things.” Now, Alan says, not only can “students sue the university,” but corporations and politicians have breached higher education’s domain, a view he conveys in his causal map as the infiltration of “corporate” leaders and political “noise.” Unfortunately, Alan argues, “someone who comes from the business world—who has a different motivation and a different sense of mission and a different sense of how things should be done—I don’t think that person necessarily does [know]” how to fulfill the mission of higher education. And, he continues, politicians “change their mind about this regulation or that regulation and impose upon people in higher education unrealistic expectations of what they ought to do and how they manage it.” According to Alan, people in higher education, because they are trained to fulfill the mission of higher education, “know best.”

Alan suggests that society itself must resolve the issues that corporatization has propagated, an idea that is consonant with his causal map, which depicts changing societal attitudes toward higher education as the root cause of corporatization. Perhaps the answer is funding free higher education by taxing the 1%, Alan offers, or perhaps there are other answers. “Somehow,” he says, “we have to reconcile in this country the value of higher education and what it brings to our society. And, if it is valuable, we’ve got to somehow mitigate the impact of revenue and money.” When I ask how higher education itself might best respond, Alan replies, “I don’t know.” The answer is compatible with his causal map depiction of a higher education system that lacks any influence on the sociopolitical forces behind corporatization. “You can get depressed thinking about the big picture,” he says, suggesting instead that people who work in higher education “find happiness in [the] day-to-day little things.”

Brief profile of Alan. Alan’s position at Evans State University is within the upper administration of student affairs, and he holds a Ph.D. in a field related to student affairs. He has worked in higher education since the late 1970s and has not had significant work experience outside higher education. In addition to his primary position, he has served over the years as an adjunct faculty member. Alan has a medium level of experience with academic capitalism. Although activities related to academic capitalism are not very important to his current position, he says he has had “significant” experience with marketing and branding in the past.

Amy

Causal map data. Amy's causal map data are represented in two forms below. Figure 32 shows the map data after conversion to the Decision Explorer software; it is a screenshot of the entire map as displayed in Decision Explorer. Table 15 shows the equivalent map data in the form of causal statements.

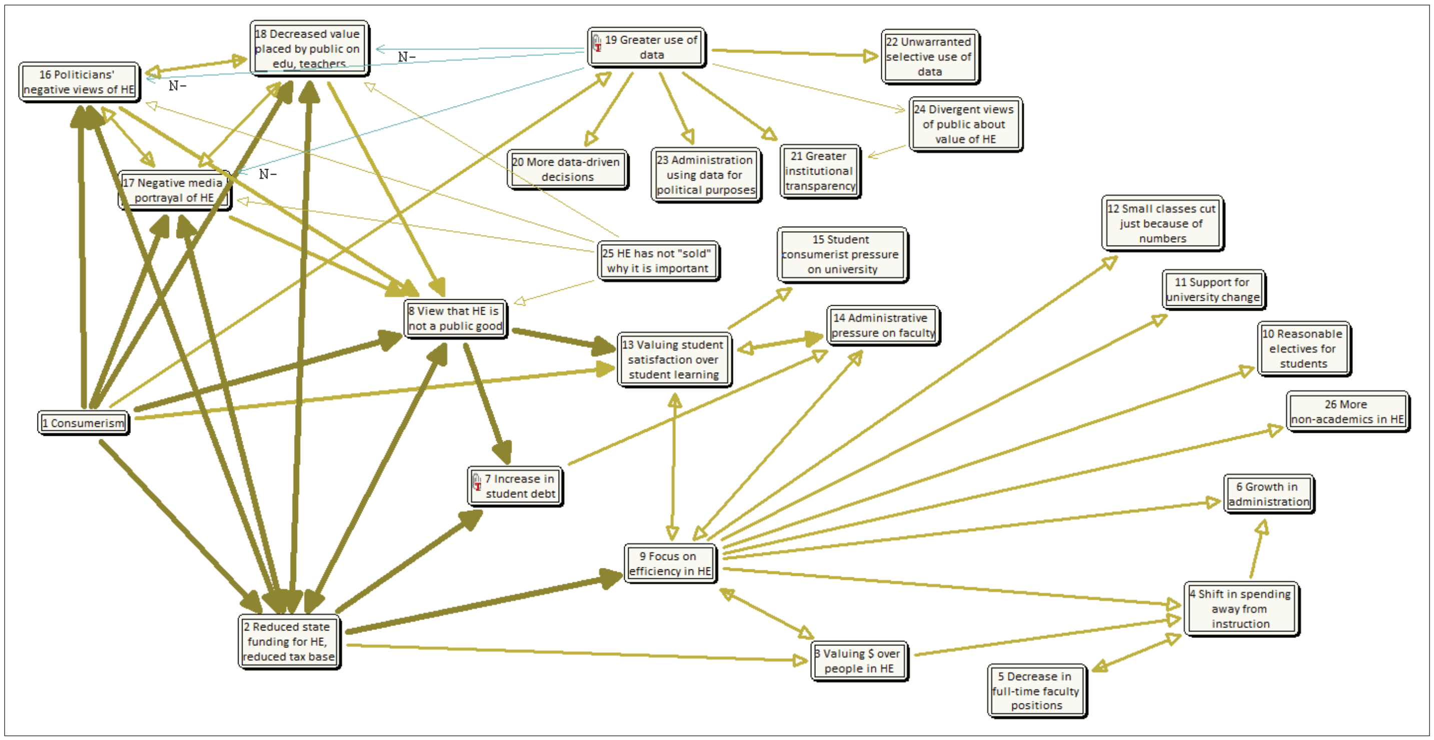

Figure 32. Screenshot of Amy's causal map after conversion to Decision Explorer. Increasingly thicker and darker lines depict increasingly stronger links. Any negative links are shown in blue and also have the label *N-* near the arrowhead.

Table 15

Amy's Causal Map Data Converted to Causal Statements

'Administrative pressure on faculty' causes a MEDIUM INCREASE in 'Focus on efficiency in HE'
'Administrative pressure on faculty' causes a MEDIUM INCREASE in 'Valuing student satisfaction over student learning'
'Consumerism' causes a MEDIUM INCREASE in 'Greater use of data'
'Consumerism' causes a STRONG INCREASE in 'Valuing student satisfaction over student learning'
'Consumerism' causes a VERY STRONG INCREASE in 'Decreased value placed by public on edu, teachers'
'Consumerism' causes a VERY STRONG INCREASE in 'Negative media portrayal of HE'
'Consumerism' causes a VERY STRONG INCREASE in 'Politicians' negative views of HE'
'Consumerism' causes a VERY STRONG INCREASE in 'Reduced state funding for HE, reduced tax base'
'Consumerism' causes a VERY STRONG INCREASE in 'View that HE is not a public good'
'Decrease in full-time faculty positions' causes a MEDIUM INCREASE in 'Shift in spending away from instruction'
'Decreased value placed by public on edu, teachers' causes a MEDIUM INCREASE in 'Politicians' negative views of HE'
'Decreased value placed by public on edu, teachers' causes a MEDIUM INCREASE in 'Negative media portrayal of HE'
'Decreased value placed by public on edu, teachers' causes a STRONG INCREASE in 'View that HE is not a public good'
'Decreased value placed by public on edu, teachers' causes a VERY STRONG INCREASE in 'Reduced state funding for HE, reduced tax base'
'Focus on efficiency in HE' causes a MEDIUM INCREASE in 'Administrative pressure on faculty'
'Focus on efficiency in HE' causes a MEDIUM INCREASE in 'Growth in administration'
'Focus on efficiency in HE' causes a MEDIUM INCREASE in 'More non-academics in HE'
'Focus on efficiency in HE' causes a MEDIUM INCREASE in 'Reasonable electives for students'
'Focus on efficiency in HE' causes a MEDIUM INCREASE in 'Shift in spending away from instruction'
'Focus on efficiency in HE' causes a MEDIUM INCREASE in 'Small classes cut just because of numbers'
'Focus on efficiency in HE' causes a MEDIUM INCREASE in 'Support for university change'
'Focus on efficiency in HE' causes a MEDIUM INCREASE in 'Valuing $ over people in HE'
'Focus on efficiency in HE' causes a MEDIUM INCREASE in 'Valuing student satisfaction over student learning'
'Greater use of data' causes a MEDIUM INCREASE in 'Administration using data for political purposes'
'Greater use of data' causes a MEDIUM INCREASE in 'Greater institutional transparency'
'Greater use of data' causes a MEDIUM INCREASE in 'More data-driven decisions'
'Greater use of data' causes a MEDIUM INCREASE in 'Unwarranted selective use of data'
'Greater use of data' causes a VERY WEAK DECREASE in 'Decreased value placed by public on edu, teachers'
'Greater use of data' causes a VERY WEAK DECREASE in 'Negative media portrayal of HE'
'Greater use of data' causes a VERY WEAK DECREASE in 'Politicians' negative views of HE'
'Greater use of data' causes a VERY WEAK INCREASE in 'Divergent views of public about value of HE'
'HE has not "sold" why it is important' causes a WEAK INCREASE in 'View that HE is not a public good'
'HE has not "sold" why it is important' causes a WEAK INCREASE in 'Politicians' negative views of HE'
'HE has not "sold" why it is important' causes a WEAK INCREASE in 'Negative media portrayal of HE'
'HE has not "sold" why it is important' causes a WEAK INCREASE in 'Decreased value placed by public on edu, teachers'
'Negative media portrayal of HE' causes a MEDIUM INCREASE in 'Decreased value placed by public on edu, teachers'
'Negative media portrayal of HE' causes a MEDIUM INCREASE in 'Politicians' negative views of HE'
'Negative media portrayal of HE' causes a STRONG INCREASE in 'View that HE is not a public good'
'Negative media portrayal of HE' causes a VERY STRONG INCREASE in 'Reduced state funding for HE, reduced tax base'
'Politicians' negative views of HE' causes a MEDIUM INCREASE in 'Negative media portrayal of HE'
'Politicians' negative views of HE' causes a MEDIUM INCREASE in 'Decreased value placed by public on edu, teachers'
'Politicians' negative views of HE' causes a STRONG INCREASE in 'View that HE is not a public good'
'Politicians' negative views of HE' causes a VERY STRONG INCREASE in 'Reduced state funding for HE, reduced tax base'
'Reduced state funding for HE, reduced tax base' causes a MEDIUM INCREASE in 'Valuing $ over people in HE'
'Reduced state funding for HE, reduced tax base' causes a VERY STRONG INCREASE in 'Increase in student debt'
'Reduced state funding for HE, reduced tax base' causes a VERY STRONG INCREASE in 'View that HE is not a public good'
'Reduced state funding for HE, reduced tax base' causes a VERY STRONG INCREASE in 'Focus on efficiency in HE'
'Reduced state funding for HE, reduced tax base' causes a VERY STRONG INCREASE in 'Politicians' negative views of HE'
'Reduced state funding for HE, reduced tax base' causes a VERY STRONG INCREASE in 'Negative media portrayal of HE'
'Reduced state funding for HE, reduced tax base' causes a VERY STRONG INCREASE in 'Decreased value placed by public on edu, teachers'
'Shift in spending away from instruction' causes a MEDIUM INCREASE in 'Decrease in full-time faculty positions'
'Shift in spending away from instruction' causes a MEDIUM INCREASE in 'Growth in administration'
'Valuing $ over people in HE' causes a MEDIUM INCREASE in 'Focus on efficiency in HE'
'Valuing $ over people in HE' causes a MEDIUM INCREASE in 'Shift in spending away from instruction'
'Valuing student satisfaction over student learning' causes a MEDIUM INCREASE in 'Focus on efficiency in HE'
'Valuing student satisfaction over student learning' causes a MEDIUM INCREASE in 'Student consumerist pressure on university'
'Valuing student satisfaction over student learning' causes a STRONG INCREASE in 'Administrative pressure on faculty'
'View that HE is not a public good' causes a VERY STRONG INCREASE in 'Reduced state funding for HE, reduced tax base'
'View that HE is not a public good' causes a VERY STRONG INCREASE in 'Increase in student debt'
'View that HE is not a public good' causes a VERY STRONG INCREASE in 'Valuing student satisfaction over student learning'

Causal map analysis. The following three tables present the most salient results from the analysis of Amy's causal map. Table 16 shows the map-level metrics calculated for the map alongside the average for all 20 participants. Table 17 shows the most prominent concepts in the map with the rationale for characterizing them as prominent. Table 18 shows prominent clusters in the map and includes all prominent occurrences of structural clusters (loops, islands, or trees) and content clusters (*a priori*—a content theme selected by the researcher—or emergent).

Table 16

Amy's Map-Level Metrics with Averages for All Participants

Metric	Description	Amy's Map	Group Avg
# of Concepts	# of concepts in map	26	20.00
# of Tails	# of concepts with only outgoing links	2	3.05
# of Heads	# of concepts with only incoming links	12	5.00
# of Ordinary	# of concepts w/incoming+outgoing links	12	11.95
# of Links	# of links in the map	60	35.55
Link-Concept Ratio	# of links divided by # of concepts	2.31	1.73
Head-Tail Ratio[a]	# of heads divided by # of tails	6.00	2.50

[a]In Table 10, I had used the term *Receiver-Transmitter Ratio* to reflect the terminology of Özesmi and Özesmi (2004), whose work I used in my early analyses. In this and following tables, I use the synonymous term *Head-Tail Ratio* to reflect the terminology of Eden and Ackermann, whose work I used in the later stages of my analyses.

Table 17

Amy's Prominent Map Concepts and Rationale for the Characterization

Concept	Rationale for Characterizing as Prominent
Consumerism	• The only true TAIL; (the other was an afterthought) • 2nd highest Outdegree • 4th highest CENTRAL score • 4,391+ paths of CONSEQUENCES

Reduced state funding for HE, reduced tax base	• Highest Outdegree • Highest Centrality • 2nd highest DOMAIN links • Highest CENTRAL score
Politicians' negative views of HE	• Part of 3-way vicious cycle with *Negative media portrayal of HE* and *Decreased value placed by public on edu, teachers* • Tied with the other 2 concepts in vicious cycle for 3rd highest DOMAIN links • Tied with the other 2 concepts in vicious cycle for 5th highest CENTRAL score
Negative media portrayal of HE	• Part of 3-way vicious cycle with *Politicians' negative views of HE* and *Decreased value placed by public on edu, teachers* • Tied with the other 2 concepts in vicious cycle for 3rd highest DOMAIN links • Tied with the other 2 concepts in vicious cycle for 5th highest CENTRAL score
Decreased value placed by public on edu, teachers	• Part of 3-way vicious cycle with *Negative media portrayal of HE* and *Politicians' negative views of HE* Tied with the other 2 concepts in vicious cycle for 3rd highest DOMAIN links • Tied with the other 2 concepts in vicious cycle for 5th highest CENTRAL score
View that HE is not a public good	• 2nd highest Indegree • 4th highest DOMAIN links • Tied with 3 others for 5th highest CENTRAL score
Focus on efficiency in HE	• 3rd highest Outdegree • Highest DOMAIN links • 3rd highest CENTRAL score • Part of self-reinforcing vicious cycle with 2 other HEINSIDE concepts that have 2-Way links all around: *Valuing student satisfaction over student learning* and *Administrative pressure on faculty*
Valuing student satisfaction over student learning	• 2nd highest CENTRAL score • Part of self-reinforcing vicious cycle with 2 other HEINSIDE concepts that have 2-Way links all around: *Administrative pressure on faculty* and *Focus on efficiency in HE*
Greater use of data	• Tied with 1 other for 4th highest DOMAIN links • Stands out due to many Out links (8) • Only concept with negative links

Note: If words in a concept are in quotes, the participant had placed quotes around them in the original map. HE = Higher Education. HEI = Higher Education Institution. Other words in capital letters denote tools or named clusters in Decision Explorer. See the *Working with clusters* section of Chapter 4 for more information about the named clusters HEINSIDE, HEBOUNDARY, and HEOUTSIDE.

Table 18

Amy's Map Clusters with Descriptions

Category / Type	Description
Structural / Loop	432 Total loops, most due to the numerous two-way links 24 Two-way links 3 Negative links 3 Prominent loops with 3+ concepts • Vicious cycle self-reinforcing at Medium strength *Politicians' negative views of HE* *Negative media portrayal of HE* *Decreased value placed by public on edu, teachers* • Above vicious cycle part of larger, stronger, vicious cycle with addition of concept that reinforces at Very Strong strength *Reduced state funding for HE*, *reduced tax base* • Vicious cycle self-reinforcing at Medium strength *Focus on efficiency in HE* *Valuing student satisfaction over student learning* *Administrative pressure on faculty*
Content / *a priori*[a]	Concepts in each cluster HEINSIDE = 16, 12 of them undesirable HEBOUNDARY = 3 HEOUTSIDE = 7, 6 of them undesirable Prominent results of CSET analyses • HEOUTSIDE concepts complexly interrelate to each other and complexly influence many HEINSIDE concepts • 1/3 of HEINSIDE concepts affect other HEINSIDE concepts and nearly all HEINSIDE concepts have zero effect on HEOUTSIDE concepts; the exception is *Greater use of data* in higher education
Content / Emergent	Sociopolitical forces undesirable for higher education (6) Consequences for higher education of sociopolitical forces (16)

[a]*a priori* = A content theme the researcher selected for analysis in every map. For more information about the HEINSIDE, HEBOUNDARY, HEOUTSIDE analysis, see the *Working with clusters* section of Chapter 4.

How Amy thinks about corporatization.

How she structures the problem of corporatization. Amy's map is complex and highly dynamic with interdependent concepts and complicated relationships. Based on the number of concepts, the number of links, and the link-concept ratio, the map is much more complex than average for this group. While the number of concepts is somewhat large, the number of links and the link-concept ratio are extremely large, indicating high levels of interplay between concepts. The unusually large numbers of loops and two-way links makes these relationships not only numerous but intricate as well.

Dominating the map are six powerful, interactive, and mutually reinforcing sociopolitical forces, almost all of which are distinctly undesirable for higher education. As the only true TAIL in the map, the first of these, consumerism, is the root cause of corporatization, and its influence spreads throughout the map via its highly networked relationships. Consumerism strongly increases the view that higher education is not a public good, and it feeds a powerful, self-reinforcing, vicious cycle among four more social forces: politician's negative views of higher education, negative media portrayal of higher education, decreased value placed by the public on education and teachers, and reduced state funding for higher education. Of the six sociopolitical forces, two are the most consequential: reduced state funding and the view that higher education is not a public good. The two very strongly increase each other, resulting in a never-ending amplification. They are also the main points of entry into the higher education concepts; they link the external forces to consequences inside higher education.

Compared to the sociopolitical forces, forces inside higher education are both more numerous and considerably weaker. In addition, almost all are consequences of the external forces; they are reactions. Three internal forces are particularly prominent, because they give rise to many of the other internal dynamics: focus on efficiency, valuing student satisfaction over student learning, and valuing money over people. Two of these, focus on efficiency and valuing student satisfaction over student learning, are in a self-reinforcing, vicious cycle with administrative pressure on faculty. Of the three prominent internal forces, focus on efficiency is by far the most influential. It causes numerous undesirable effects as well as a few desirable ones—an interesting phenomenon, since the causal sociopolitical forces are uniformly undesirable. Focus on efficiency causes the undesirable effects of valuing money over people, shift in spending away from instruction, decrease in full-time faculty positions, growth in administration, and administrative pressure on faculty. Yet, focus on efficiency also causes the desirable effects of reasonable electives for students (because, according to Amy, efficiency leads to cutting "esoteric, low enrollment courses") and support for university change (because, according to Amy, greater efficiency is "needed and helpful when the university changes").

The map also depicts an interesting relationship between higher education and negative public perception of higher education. Greater use of data by higher education reduces the negative portrayal of higher education by politicians, the media, and the public—but only very weakly. Reflecting the other side of the same coin, the fact that higher education has not "sold" why it is important increases the same three negative portrayals—but only weakly. Together, these two concepts seem to suggest that higher education has not deescalated these negative portrayals by using data to educate the public about its value.

Like a person who has lost his balance in an aggressive crowd, higher education is depicted here as struggling to regain its footing after being pushed by domineering social forces. The efforts of higher education to recover its balance teeter between desirable and undesirable outcomes, and the ultimate result is yet to be seen. Meanwhile, higher education has not fully explored pushing back. Through the use of data, it might have the opportunity to influence public opinion, but the current efforts are frail.

How she thinks about issues related to corporatization. Amy vividly conveys her view of higher education's mission as a service not a product, a perspective that echoes her causal map depiction of consumerism as a potent counterforce to higher education. Higher education, Amy explains, "is not like buying a hamburger or a car." Even though students pay tuition, she says, they are not buying a degree; they are buying "the privilege to learn." In exchange for their tuition dollars, she contends, they receive instruction from "the people in the room with the Ph.D.s," who are "experts" and who "know a WHOLE lot about higher education." Then, "the onus of learning is on the student." Amy draws an analogy:

> It's the same as me paying for my gym membership. It doesn't mean I get skinny. It means I have the opportunity to go there and work on myself. And failure to get my hiney on the treadmill does not result in weight loss.

In her depiction of corporatization, Amy portrays potent social forces constricting higher education's ability to fulfill its purpose, while she also conveys that nothing is all good or all bad. While creating her map, she often paused to itemize desirable as well as undesirable outcomes for problematic areas; the concepts *Focus on efficiency* and *Greater use of data* both reflect this effort. Reflecting her measured approach, she simply states in the interview that corporatization is here and that she thinks it is "short-sighted and not very pragmatic" for people to throw up their hands and say they reject it. Instead, she suggests that higher education sift the wheat from the chaff: "figure out what's good about [corporatization], what is helpful, what helps us be a better system...and what doesn't fit...our philosophy and mission." Another way that Amy conveys that nothing is all good or all bad is by not assigning blame to higher education groups, claiming instead that, "People are waking up in the morning and trying to do their best, whether it's a faculty member with an increased class size or an administrator who has to only hire adjuncts."

At the same time, Amy suggests action. She describes the pressures of corporatization as flowing "from the state to the administrators to the faculty" and recommends pushing back: "I think it's the role of faculty and faculty senate and faculty unions to push against [administrators cutting instructional funding]. And I think it's the role of university presidents to effectively communicate to legislatures the costs of these decisions." She also advocates for faculty explicitly educating students about the nature of education as a service not a product and for higher education as a whole to educate the public about quality in education: "It's like saying you can have a really, really bad beef product from Taco Bell. And that's what you get. Or you can have something that's a little bit more expensive, but this is what you get." Also reflecting action on the part of higher education, Amy's map—one of the few depicting higher education with any influence on external forces—shows that greater use of data by higher education might decrease the public's negative views of colleges and universities and educate them about their value. Finally, Amy says, higher education may need to take another form of action; eventually, it may need "to draw the line on cheap," because student learning is at stake.

Amy's source of hope for the future of higher education is that she "thinks it's going to get better." She expresses the belief that public policy extremes often self-correct over time once the consequences become clear:

So I think we're rushing toward cheap, and I think the pendulum has to swing on that. And I think it will. I think eventually employers are going to be like, "You're just turning out high school kids who are four years older."

Brief profile of Amy. Amy's position at Evans State University is within the lower administration of instruction; she is the chair of a department for professional programs and a tenured faculty member with a Ph.D. in her discipline. Amy has worked in higher education for approximately 15 years and, prior to that, she had approximately ten years of experience in her profession. She has had almost no experience with academic capitalism and says that, "so far," activities related to academic capitalism have not been important to her position.

Bailey

Causal map data. Bailey's causal map data are represented in two forms below. Figure 33 shows the map data after conversion to the Decision Explorer software; it is a screenshot of the entire map as displayed in Decision Explorer. Table 19 shows the equivalent map data in the form of causal statements.

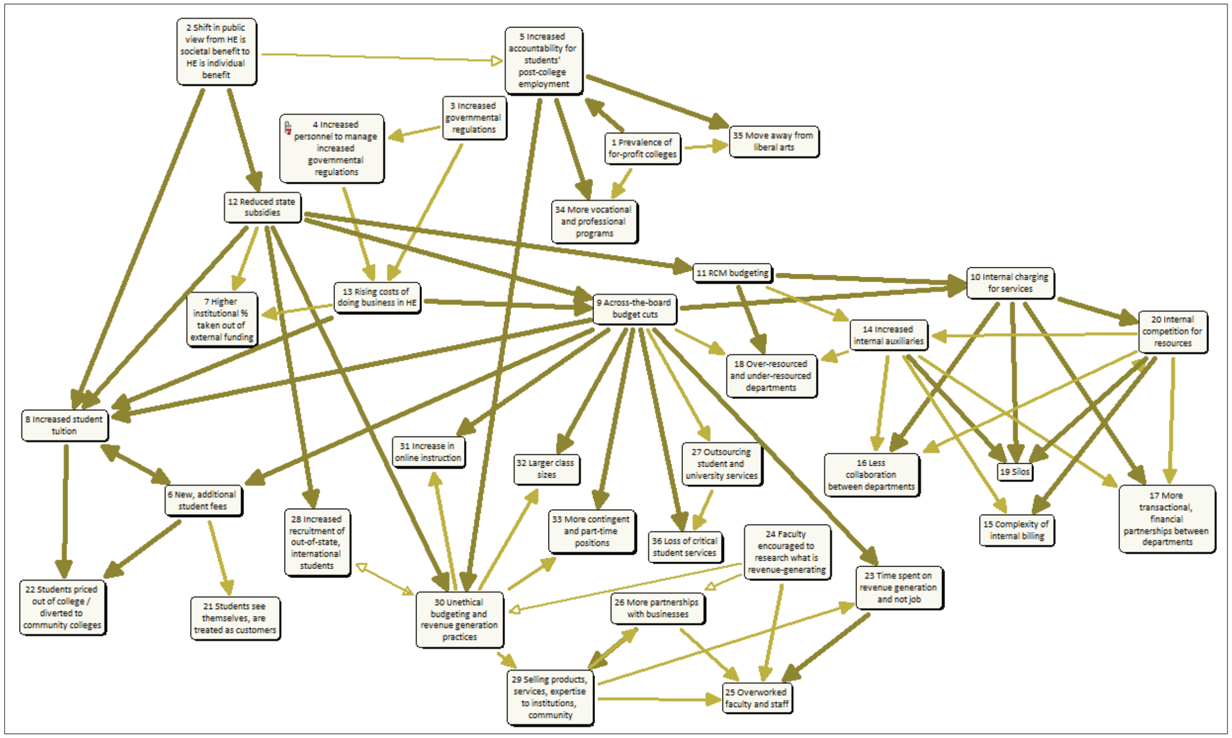

Figure 33. Screenshot of Bailey's causal map after conversion to Decision Explorer. Increasingly thicker and darker lines depict increasingly stronger links. Any negative links are shown in blue and also have the label *N-* near the arrowhead.

Table 19

Bailey's Causal Map Data Converted to Causal Statements

'Across-the-board budget cuts' causes a STRONG INCREASE in 'Outsourcing student and university services'
'Across-the-board budget cuts' causes a STRONG INCREASE in 'Over-resourced and under-resourced departments'
'Across-the-board budget cuts' causes a VERY STRONG INCREASE in 'New, additional student fees'
'Across-the-board budget cuts' causes a VERY STRONG INCREASE in 'Increased student tuition'
'Across-the-board budget cuts' causes a VERY STRONG INCREASE in 'Internal charging for services'
'Across-the-board budget cuts' causes a VERY STRONG INCREASE in 'Time spent on revenue generation and not job'
'Across-the-board budget cuts' causes a VERY STRONG INCREASE in 'Increase in online instruction'
'Across-the-board budget cuts' causes a VERY STRONG INCREASE in 'Larger class sizes'
'Across-the-board budget cuts' causes a VERY STRONG INCREASE in 'More contingent and part-time positions'
'Across-the-board budget cuts' causes a VERY STRONG INCREASE in 'Loss of critical student services'
'Faculty encouraged to research what is revenue-generating' causes a STRONG INCREASE in 'Overworked faculty and staff'
'Faculty encouraged to research what is revenue-generating' causes a MEDIUM INCREASE in 'More partnerships with businesses'
'Faculty encouraged to research what is revenue-generating' causes a MEDIUM INCREASE in 'Unethical budgeting and revenue generation practices'
'Increased accountability for students' post-college employment' causes a VERY STRONG INCREASE in 'Unethical budgeting and revenue generation practices'
'Increased accountability for students' post-college employment' causes a VERY STRONG INCREASE in 'More vocational and professional programs'
'Increased accountability for students' post-college employment' causes a VERY STRONG INCREASE in 'Move away from liberal arts'
'Increased governmental regulations' causes a STRONG INCREASE in 'Increased personnel to manage increased governmental regulations'
'Increased governmental regulations' causes a STRONG INCREASE in 'Rising costs of doing business in HE'
'Increased internal auxiliaries' causes a STRONG INCREASE in 'Complexity of internal billing'
'Increased internal auxiliaries' causes a STRONG INCREASE in 'Less collaboration between departments'
'Increased internal auxiliaries' causes a STRONG INCREASE in 'More transactional, financial partnerships between departments'
'Increased internal auxiliaries' causes a STRONG INCREASE in 'Over-resourced and under-resourced departments'
'Increased internal auxiliaries' causes a VERY STRONG INCREASE in 'Silos'
'Increased personnel to manage increased governmental regulations' causes a STRONG INCREASE in 'Rising costs of doing business in HE'
'Increased recruitment of out-of-state, international students' causes a MEDIUM INCREASE in 'Unethical budgeting and revenue generation practices'
'Increased student tuition' causes a VERY STRONG INCREASE in 'New, additional student fees'
'Increased student tuition' causes a VERY STRONG INCREASE in 'Students priced out of college / diverted to community colleges'
'Internal charging for services' causes a VERY STRONG INCREASE in 'Less collaboration between departments'
'Internal charging for services' causes a VERY STRONG INCREASE in 'More transactional, financial partnerships between departments'
'Internal charging for services' causes a VERY STRONG INCREASE in 'Silos'
'Internal charging for services' causes a VERY STRONG INCREASE in 'Internal competition for resources'
'Internal competition for resources' causes a STRONG INCREASE in 'Increased internal auxiliaries'
'Internal competition for resources' causes a STRONG INCREASE in 'Less collaboration between departments'
'Internal competition for resources' causes a STRONG INCREASE in 'More transactional, financial partnerships between departments'
'Internal competition for resources' causes a VERY STRONG INCREASE in 'Complexity of internal billing'
'Internal competition for resources' causes a VERY STRONG INCREASE in 'Silos'
'More partnerships with businesses' causes a STRONG INCREASE in 'Overworked faculty and staff'
'More partnerships with businesses' causes a VERY STRONG INCREASE in 'Selling products, services, expertise to institutions, community'
'New, additional student fees' causes a STRONG INCREASE in 'Students see themselves, are treated as customers'
'New, additional student fees' causes a VERY STRONG INCREASE in 'Increased student tuition'
'New, additional student fees' causes a VERY STRONG INCREASE in 'Students priced out of college / diverted to community colleges'
'Outsourcing student and university services' causes a STRONG INCREASE in 'Loss of critical student services'
'Prevalence of for-profit colleges' causes a STRONG INCREASE in 'More vocational and professional programs'
'Prevalence of for-profit colleges' causes a STRONG INCREASE in 'Move away from liberal arts'
'Prevalence of for-profit colleges' causes a VERY STRONG INCREASE in 'Increased accountability for students' post-college employment'
'RCM budgeting' causes a STRONG INCREASE in 'Increased internal auxiliaries'
'RCM budgeting' causes a VERY STRONG INCREASE in 'Internal charging for services'
'RCM budgeting' causes a VERY STRONG INCREASE in 'Over-resourced and under-resourced departments'
'Reduced state subsidies' causes a STRONG INCREASE in 'Higher institutional % taken out of external funding'
'Reduced state subsidies' causes a VERY STRONG INCREASE in 'Across-the-board budget cuts'
'Reduced state subsidies' causes a VERY STRONG INCREASE in 'Increased student tuition'
'Reduced state subsidies' causes a VERY STRONG INCREASE in 'Increased recruitment of out-of-state, international students'
'Reduced state subsidies' causes a VERY STRONG INCREASE in 'RCM budgeting'
'Reduced state subsidies' causes a VERY STRONG INCREASE in 'Unethical budgeting and revenue generation practices'
'Rising costs of doing business in HE' causes a STRONG INCREASE in 'Higher institutional % taken out of external funding'
'Rising costs of doing business in HE' causes a VERY STRONG INCREASE in 'Increased student tuition'
'Rising costs of doing business in HE' causes a VERY STRONG INCREASE in 'Across-the-board budget cuts'
'Selling products, services, expertise to institutions, community' causes a STRONG INCREASE in 'Time spent on revenue generation and not job'
'Selling products, services, expertise to institutions, community' causes a STRONG INCREASE in 'Overworked faculty and staff'

'Selling products, services, expertise to institutions, community' causes a STRONG INCREASE in 'More partnerships with businesses'
'Shift in public view from HE is societal benefit to HE is individual benefit' causes a MEDIUM INCREASE in 'Increased accountability for students' post-college employment'
'Shift in public view from HE is societal benefit to HE is individual benefit' causes a VERY STRONG INCREASE in 'Increased student tuition'
'Shift in public view from HE is societal benefit to HE is individual benefit' causes a VERY STRONG INCREASE in 'Reduced state subsidies'
'Silos' causes a STRONG INCREASE in 'Internal competition for resources'
'Time spent on revenue generation and not job' causes a VERY STRONG INCREASE in 'Overworked faculty and staff'
'Unethical budgeting and revenue generation practices' causes a MEDIUM INCREASE in 'Increased recruitment of out-of-state, international students'
'Unethical budgeting and revenue generation practices' causes a STRONG INCREASE in 'Selling products, services, expertise to institutions, community'
'Unethical budgeting and revenue generation practices' causes a STRONG INCREASE in 'Increase in online instruction'
'Unethical budgeting and revenue generation practices' causes a STRONG INCREASE in 'Larger class sizes'
'Unethical budgeting and revenue generation practices' causes a STRONG INCREASE in 'More contingent and part-time positions'

Causal map analysis. The following three tables present the most salient results from the analysis of Bailey's causal map. Table 20 shows the map-level metrics calculated for the map alongside the average for all 20 participants. Table 21 shows the most prominent concepts in the map with the rationale for characterizing them as prominent. Table 22 shows prominent clusters in the map and includes all prominent occurrences of structural clusters (loops, islands, or trees) and content clusters (*a priori*—a content theme selected by the researcher—or emergent).

Table 20

Bailey's Map-Level Metrics with Averages for All Participants

Metric	Description	Bailey's Map	Group Avg
# of Concepts	# of concepts in map	36	20.00
# of Tails	# of concepts with only outgoing links	4	3.05
# of Heads	# of concepts with only incoming links	14	5.00
# of Ordinary	# of concepts w/incoming+outgoing links	18	11.95
# of Links	# of links in the map	70	35.55
Link-Concept Ratio	# of links divided by # of concepts	1.94	1.73
Head-Tail Ratio[a]	# of heads divided by # of tails	3.50	2.50

[a]In Table 10, I had used the term *Receiver-Transmitter Ratio* to reflect the terminology of Özesmi and Özesmi (2004), whose work I used in my early analyses. In this and following tables, I use the synonymous term *Head-Tail Ratio* to reflect the terminology of Eden and Ackermann, whose work I used in the later stages of my analyses.

Table 21

Bailey's Prominent Map Concepts and Rationale for the Characterization

Concept	Rationale for Characterizing as Prominent
Across-the-board budget cuts	• Highest Outdegree • Highest Centrality • Highest DOMAIN links • Highest CENTRAL score
Increased student tuition	• Highest Indegree • 3rd highest CENTRAL score
Unethical budgeting and revenue generation practices	• 2nd highest DOMAIN links • Part of 2-Way equal, self-reinforcing vicious cycle with *Increased recruitment of out-of-state, international students* • Strongly emphasized verbally during interview
Reduced state subsidies	• 2nd highest CENTRAL score • Visually has many VERY STRONG outgoing links

Note: If words in a concept are in quotes, the participant had placed quotes around them in the original map. HE = Higher Education. HEI = Higher Education Institution. Other words in capital letters denote tools or named clusters in Decision Explorer. See the *Working with clusters* section of Chapter 4 for more information about the named clusters HEINSIDE, HEBOUNDARY, and HEOUTSIDE.

Table 22

Bailey's Map Clusters with Descriptions

Category / Type	Description
Structural / Loop	6 Total loops 8 Two-way links 0 Negative links 1 Prominent loop with 3+ concepts • Vicious cycle self-reinforcing at Strong / Very Strong strength *Silos* *Increased internal auxiliaries* *Internal competition for resources*
Content / *a priori*[a]	Concepts in each cluster HEINSIDE = 26 HEBOUNDARY = 5 HEOUTSIDE = 5

	Prominent results of CSET analyses • HEOUTSIDE concepts have little influence on each other but many consequences for HEINSIDE concepts • HEINSIDE concepts have uneven influence on each other and zero effect on HEOUTSIDE concepts
Content / Emergent	Staff/Faculty/Teaching/Learning consequences of sociopolitical forces (15 concepts) • *Increased accountability for students' post-college employment, Shift in public view from HE is societal benefit to HE is individual benefit, Reduced state subsidies,* and *Prevalence of for-profit colleges* create 12 largely undesirable consequences for staff, faculty, curriculum, and teaching Interdepartmental consequences of budgeting processes (9 concepts) • *RCM budgeting, Internal charging for services,* and *Increased internal auxiliaries* are the primary causes of 6 undesirable organizational issues Effect on students of financial challenges in HE (8 concepts) • *Rising costs of doing business in HE* and *Across-the-board budget cuts* result in 6 largely undesirable consequences for students

[a]*a priori* = A content theme the researcher selected for analysis in every map. For more information about the HEINSIDE, HEBOUNDARY, HEOUTSIDE analysis, see the *Working with clusters* section of Chapter 4.

How Bailey thinks about corporatization.

How she structures the problem of corporatization. Bailey's map is detailed and has numerous but relatively clear-cut relationships. The map has 36 concepts, the largest number for this group of participants, indicating it presents significant detail. The map has 70 links, also the largest number for this group of participants. Because the link-concept ratio is only slightly higher than average, though, the large number of links is primarily due to the large number of concepts rather than to complex relationships. A handful of loops and two-way links add some complexity, but there are also no negative links. Most of the relationships are straightforward.

Bailey's map offers a comprehensive examination of the largely undesirable consequences of corporatization for the internal dynamics of higher education and for students, faculty, and staff. Three clusters convey these meanings. The first, staff/

faculty/teaching/learning consequences of sociopolitical forces, is the largest. In this cluster, four sociopolitical forces are powerful drivers of change: increased accountability for students' post-college employment, shift in public view from higher education is a societal benefit to higher education is an individual benefit, reduced state subsidies, and prevalence of for-profit colleges. By far, the most potent of these is the increased accountability for students' post-college employment. These external forces lead to 12 largely undesirable consequences for staff and faculty and for the teaching and learning environment:

Overworked faculty and staff

Time spent on revenue generation and not job

Faculty encouraged to research what is revenue-generating

More partnerships with businesses

Unethical budgeting and revenue generation practices

More vocational and professional programs

Move away from liberal arts

Increase in online instruction

Larger class sizes

More contingent and part-time positions

The second cluster, interdepartmental consequences of budgeting processes, with nine concepts, is also large. In this cluster, three budget processes—most strongly RCM (Responsibility Center Management) budgeting but also internal charging for services, and increased internal auxiliaries—create a highly undesirable set of organizational dynamics:

Over-resourced and under-resourced departments

Internal competition for resources

Less collaboration between departments

More transactional, financial partnerships between departments

Complexity of internal billing

Silos

These effects are amplified by the fact that the cluster contains the only self-reinforcing loop in the map. A strong, ever-increasing, vicious cycle exists between increased internal auxiliaries, internal competition for resources, and silos.

The third cluster, effect on students of financial challenges in higher education, is large as well. In this cluster, two financial challenges, the rising costs of doing business in higher education and across-the-board budget cuts, very strongly cause undesirable consequences for students:

Increased student tuition

New, additional student fees

Loss of critical student services

Outsourcing student and university services

Students priced out of college / diverted to community colleges

Students see themselves, are treated as customers

In the analysis of internal and external forces, the forces external to higher education total only five, but each has significant impact on the forces inside higher education. Three of the five are particularly potent, with sweeping influence across higher education: the shift in public view from higher education is a societal benefit to higher education is an individual benefit, reduced state subsidies, and increased government regulations. The forces inside higher education total 26, reflecting Bailey's detailed explanation of internal dynamics in higher education. The forces inside higher education have mixed levels of influence on each other, but three stand out as particularly consequential within higher education: the rising costs of doing business in higher education, across the board budget cuts, and increased personnel to manage increased government regulations. Forces within higher education have no influence on external forces. Overall, the map dynamics are like a pinball machine; a few potent forces from outside higher education are shot into higher education and endlessly ricochet there, causing turmoil and change. Unlike a pinball machine, though, the energy never returns to the external environment.

How she thinks about issues related to corporatization. Bailey explicitly demarcates what she sees as the true purpose of higher education and the false purpose it has adopted in an era of corporatization. Citing "those things that American higher education was founded upon," she characterizes the true mission of higher education as providing liberal education and developing critical thinking in order to benefit society. The purpose of a university education, she says, was to "make people smarter," "more able to solve their own problems," and more able to be "engaged community members." As a corollary to this purpose, Bailey contends that colleges used to be "a haven for gathering new ideas and new thoughts," for "coming up with discoveries," for "innovation and creativity." Now, she says, higher education is about job training, and she decries this loss of purpose.

Corporatization, Bailey says, is "the mentality that business puts out a product," and she sees this orientation in higher education's current focus on vocational preparation. She depicts vocationalism as a strong influence on higher education in her causal map as well. Contemporary higher education, she says, sees students who are trained for the workforce as the product. "Just like a business needs to sell so many widgets, higher education needs to put out so many employer-ready graduates," and colleges, Bailey contends, are doing everything they can to "pump [them] out" and "spit [them] out." Politicians, she argues, reinforce these production efforts, because they see state subsidies "not as an investment in the safety and health and well-being of their state but as physical investments in particular students." "Now," she claims, "you're looking at a business mentality even in the place where we get our money!"

Once a product mentality takes hold, Bailey asserts, the adoption of business practices "makes sense," because they allow better control over the production process. Corporate approaches put "accountability practices in place," provide "models of efficiency, effectiveness, [and] sustainability," and emphasize return on investment. "If people are investing in a job-training program," Bailey explains, students "are going out and getting jobs or else people are going to stop investing." Similarly, if colleges and universities are now production facilities, Bailey argues, it makes sense to "get ex-CEOs to be presidents," because they know how to run a business. And, if higher education abandons its true purpose in pursuit of students-as-products, then, Bailey says, "corporatization might actually work very well in higher education."

Yet, Bailey has three cautions for those engaged in a corporate approach to higher education. First, less costly job-training options exist for students. "Why would you pile yourself under $100,000 of student debt for job training you could get online, for free, through a certificate program?," she asks. Second, she cites for-profit higher education, an important influence in her causal map, as a "cautionary tale." Those institutions were based on an "efficiency model" and built for profits, but many are "coming crashing down." She hopes this "might show people that this model doesn't always work." Third, Bailey argues that vocational preparation is not what society really needs from higher education. Society is moving "from a service economy to an idea economy," she says, while colleges are moving in the opposite direction: "from ideas to service." Society, Bailey says, does not need more people trained to do "the general labor of the world," especially when jobs evolve and change so rapidly. Instead, she says, society needs to prepare students to work with ideas, to think, create, and innovate.

Echoing her detailed causal map depiction of higher education dynamics, Bailey delineates three unfortunate consequences of corporatization for those who work in higher education. First, the organizational transition from the traditional mission to new business purposes is painful. "What's happening," she says, "is that you have the old guard and new guard in the institutions themselves. And there are conflicting ideas about how things should happen, which creates either indecision or a constant back-and-forth, back-and-forth." Recalling experiences across multiple institutions, Bailey relates:

> There are schools that end up purchasing an entire new online registration, human management, or learning system; they train everybody, they pay whatever it is, and then they decide, "No, no, we're not going to use it." The next year, they switch it to something else, and everybody has to be retrained. It's like there's so much indecision and so much unnecessary change. And it is costing a fortune,

> because we just can't figure out who we're going to be and what we're going to do.

Second, she says that pressure to produce revenue fosters unethical practices. At prior institutions, Bailey reports, superiors pressured her to report misleading numbers and to inflate enrollment in student programs by waiving essential entrance requirements. "There can be some very slippery stuff that people do," she says, "in order to get funded or keep their jobs." She relates:

> I was asked a number of times—not at this institution but a prior institution—to compare the graduation rate of students in my program versus the graduation rate of students who weren't in the program. Well, of course, the program students were higher, because it's an input-output issue. Those students were high-achieving when they came into college. They were going to graduate without my program, and I said this a thousand times. And they said, "It doesn't matter. Those are the metrics we need to show your program is successful to get funding." So I had to basically lie. I wasn't really; I was misleading. How's that?

Third, Bailey denounces the culture of student affairs in corporatized institutions, describing it as "toxic." Based on two decades of experience at multiple institutions, she reports that student affairs professionals receive low pay; perform the work of three people; receive less respect than those in other areas of the college; get intense pressure to retain students and generate revenue; abide seemingly constant reorganizations, mission redefinitions, and changing metrics for success; and lose their positions first when budgets are cut. She relates:

> In one job, my department reported through the student union. So our budget was dependent upon how many potato chips they sold, because they were revenue-generating. They were an auxiliary. And all of a sudden, we got moved to a retention unit, and it didn't matter how many potato chips we sold. It mattered how many students we kept in school, which completely changed the nature of how we did our programs. And then it moved again, and now it's in career services, which means that now they're looking at job placement. And, as a person who is a practitioner in that environment, those organizational changes—because nobody can understand what the best structure is—end up creating havoc for people.

When I ask how higher education might best respond to corporatization, Bailey responds, "I think it's a lost cause." Based on "the political landscape of our electoral map for the next 16 years," she predicts no increase in higher education funding. Based on higher education's current funding, she predicts that colleges and universities will "do what it takes...to stay in existence," including more cuts to liberal arts programs and more emphasis on job training. This assessment coincides with her causal map, which describes higher education as having no influence on the sociopolitical forces driving corporatization and as adopting fiscal strategies that negatively impact students, faculty, and staff. "I don't want to be a naysayer," Bailey says, "I just want to be realistic about the direction we are going. And I think we need to deal with it. This is happening." After this study concluded, Bailey took another professional position, one outside the student affairs profession in higher education.

Brief profile of Bailey. Bailey's position at Evans State University is within the middle administration of student affairs. She has 20 years of experience working in higher education, much of it in leadership positions at large public universities. She does not have significant work experience outside higher education. In addition to her primary position, she has served as an adjunct faculty member throughout her career. Bailey has extensive and comprehensive experience with academic capitalism. When I read to her the examples of academic capitalism—marketing, branding, entrepreneurialism, corporate partnerships, corporate-funded research, and transforming academic work into marketable products using technology transfer, patents, and licensing—she responds by saying she has had experience "in every single one." Activities related to academic capitalism are central to her current position.

Brian

Causal map data. Brian's causal map data are represented in two forms below. Figure 34 shows the map data after conversion to the Decision Explorer software; it is a screenshot of the entire map as displayed in Decision Explorer. Table 23 shows the equivalent map data in the form of causal statements.

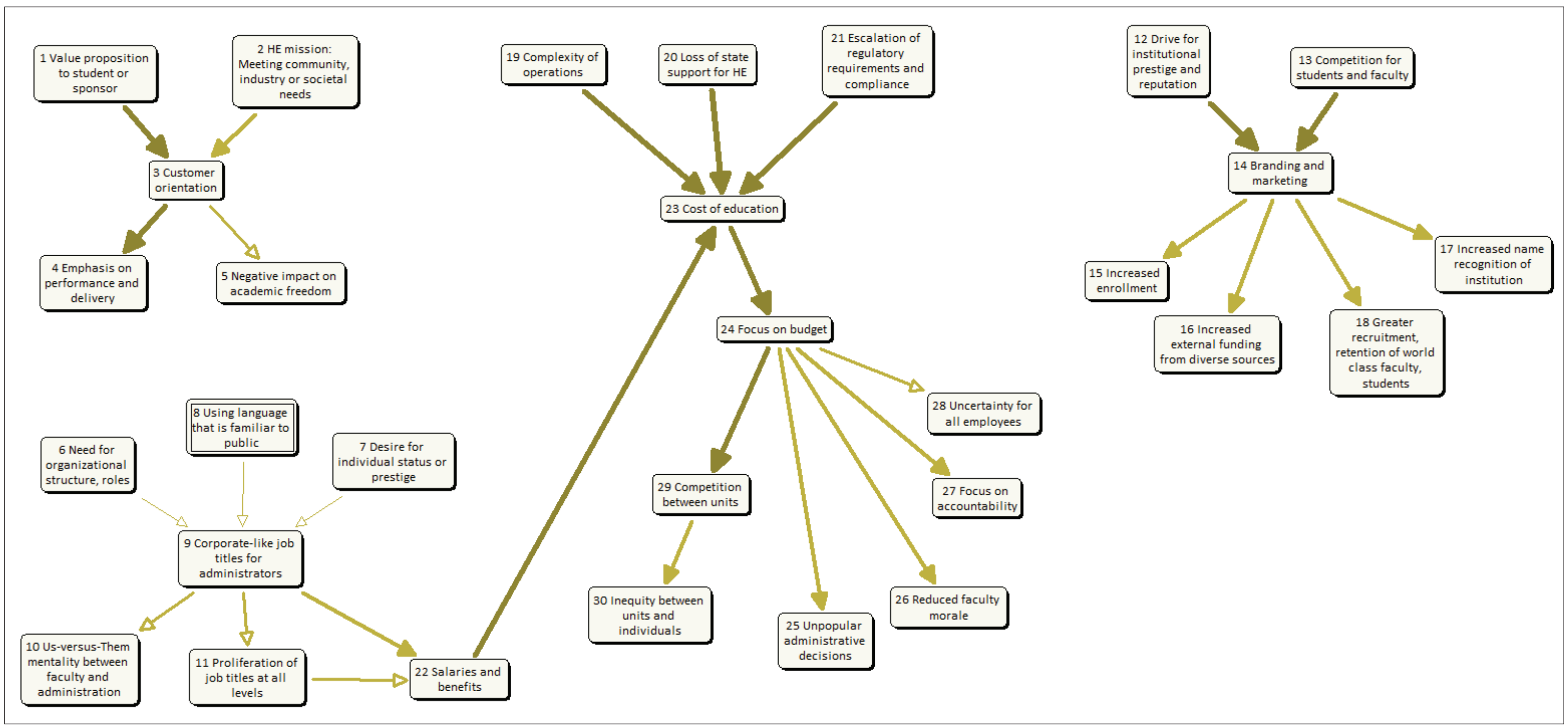

Figure 34. Screenshot of Brian's causal map after conversion to Decision Explorer. Increasingly thicker and darker lines depict increasingly stronger links. Any negative links are shown in blue and also have the label *N-* near the arrowhead.

Table 23

Brian's Causal Map Data Converted to Causal Statements

'Branding and marketing' causes a STRONG INCREASE in 'Greater recruitment, retention of world class faculty, students'
'Branding and marketing' causes a STRONG INCREASE in 'Increased enrollment'
'Branding and marketing' causes a STRONG INCREASE in 'Increased external funding from diverse sources'
'Branding and marketing' causes a STRONG INCREASE in 'Increased name recognition of institution'
'Competition between units' causes a STRONG INCREASE in 'Inequity between units and individuals'
'Competition for students and faculty' causes a VERY STRONG INCREASE in 'Branding and marketing'
'Complexity of operations' causes a VERY STRONG INCREASE in 'Cost of education'
'Corporate-like job titles for administrators' causes a MEDIUM INCREASE in 'Us-versus-Them mentality between faculty and administration'
'Corporate-like job titles for administrators' causes a MEDIUM INCREASE in 'Proliferation of job titles at all levels'
'Corporate-like job titles for administrators' causes a STRONG INCREASE in 'Salaries and benefits'
'Cost of education' causes a VERY STRONG INCREASE in 'Focus on budget'
'Customer orientation' causes a MEDIUM INCREASE in 'Negative impact on academic freedom'
'Customer orientation' causes a VERY STRONG INCREASE in 'Emphasis on performance and delivery'
'Desire for individual status or prestige' causes a WEAK INCREASE in 'Corporate-like job titles for administrators'
'Drive for institutional prestige and reputation' causes a VERY STRONG INCREASE in 'Branding and marketing'
'Escalation of regulatory requirements and compliance' causes a VERY STRONG INCREASE in 'Cost of education'
'Focus on budget' causes a MEDIUM INCREASE in 'Uncertainty for all employees'
'Focus on budget' causes a STRONG INCREASE in 'Focus on accountability'
'Focus on budget' causes a STRONG INCREASE in 'Reduced faculty morale'
'Focus on budget' causes a STRONG INCREASE in 'Unpopular administrative decisions'
'Focus on budget' causes a VERY STRONG INCREASE in 'Competition between units'
'HE mission: Meeting community, industry or societal needs' causes a STRONG INCREASE in 'Customer orientation'
'Loss of state support for HE' causes a VERY STRONG INCREASE in 'Cost of education'
'Need for organizational structure, roles' causes a WEAK INCREASE in 'Corporate-like job titles for administrators'
'Proliferation of job titles at all levels' causes a MEDIUM INCREASE in 'Salaries and benefits'
'Salaries and benefits' causes a VERY STRONG INCREASE in 'Cost of education'
'Using language that is familiar to public' causes a WEAK INCREASE in 'Corporate-like job titles for administrators'
'Value proposition to student or sponsor' causes a VERY STRONG INCREASE in 'Customer orientation'

Causal map analysis. The following three tables present the most salient results from the analysis of Brian's causal map. Table 24 shows the map-level metrics calculated for the map alongside the average for all 20 participants. Table 25 shows the most prominent concepts in the map with the rationale for characterizing them as prominent. Table 26 shows prominent clusters in the map and includes all prominent occurrences of structural clusters (loops, islands, or trees) and content clusters (*a priori*—a content theme selected by the researcher—or emergent).

Table 24

Brian's Map-Level Metrics with Averages for All Participants

Metric	Description	Brian's Map	Group Avg
# of Concepts	# of concepts in map	30	20.00
# of Tails	# of concepts with only outgoing links	10	3.05
# of Heads	# of concepts with only incoming links	12	5.00
# of Ordinary	# of concepts w/incoming+outgoing links	8	11.95
# of Links	# of links in the map	28	35.55
Link-Concept Ratio	# of links divided by # of concepts	0.93	1.73
Head-Tail Ratio[a]	# of heads divided by # of tails	1.20	2.50

[a]In Table 10, I had used the term *Receiver-Transmitter Ratio* to reflect the terminology of Özesmi and Özesmi (2004), whose work I used in my early analyses. In this and following tables, I use the synonymous term *Head-Tail Ratio* to reflect the terminology of Eden and Ackermann, whose work I used in the later stages of my analyses.

Table 25

Brian's Prominent Map Concepts and Rationale for the Characterization

Concept	Rationale for Characterizing as Prominent
Focus on budget	• 1 of 4 core examples of corporatization • Strongest of the 4 examples with Very Strong EXPLANATIONS and CONSEQUENCES • Most elaborated CONSEQUENCES of any concept • Highest Outdegree • Tied with 2 others for highest DOMAIN links • Tied with 1 other for 2nd highest CENTRAL score
Branding, marketing	• 1 of 4 core examples of corporatization • 2nd strongest of the 4 examples with Very Strong EXPLANATIONS and Strong CONSEQUENCES (all desirable) • Highest Centrality • Tied with 2 others for highest DOMAIN links
Customer orientation	• 1 of 4 core examples of corporatization • 3rd strongest of the 4 examples with Strong / Very Strong EXPLANATIONS and mixed strength CONSEQUENCES • Only 1 of 4 examples driven by *HE mission: Meeting community, industry, or societal needs;* key to delivering on mission but sets up conflict with faculty
Corporate-like job titles for administrators	• 1 of 4 core examples of corporatization • Weakest of the 4 examples with Weak EXPLANATIONS and Medium / Strong CONSEQUENCES (all undesirable) • Tied with 2 others for highest DOMAIN links
Cost of Education	• Tied with 1 other for 2nd Highest CENTRAL score • Only concept in any of the 4 clusters that had a HIESET with more than one concept; it had 6
Salaries and Benefits	• Only concept linked to more than 1 of the 4 clusters; otherwise the clusters are independent: • CONSEQUENCE of *Corporate-like job titles for administrators* and EXPLANATION of *Cost of education* cluster

Note: If words in a concept are in quotes, the participant had placed quotes around them in the original map. HE = Higher Education. HEI = Higher Education Institution. Other words in capital letters denote tools or named clusters in Decision Explorer. See the *Working with clusters* section of Chapter 4 for more information about the named clusters HEINSIDE, HEBOUNDARY, and HEOUTSIDE.

Table 26

Brian's Map Clusters with Descriptions

Category / Type	Description
Structural / Loop	0 Total loops 0 Two-way links 0 Negative links
Structural / Islands	Causes and effects of *Customer orientation* Causes and effects of *Focus on budget* Causes and effects of *Branding / marketing* Causes and effects of *Corporate-like job titles for administrators*
Content / *a priori*[a]	Concepts in each cluster HEINSIDE = 24 HEBOUNDARY = 4 HEOUTSIDE = 2 Prominent results of CSET analyses • Only 2 HEOUTSIDE concepts, which influence less than 1/3 of HEINSIDE concepts; very different from other maps • HEINSIDE concepts very unevenly influence each other—which reflects compartmentalized quality of map—and have zero effect on HEOUTSIDE concepts

[a]*a priori* = A content theme the researcher selected for analysis in every map. For more information about the HEINSIDE, HEBOUNDARY, HEOUTSIDE analysis, see the *Working with clusters* section of Chapter 4.

How Brian thinks about corporatization.

How he structures the problem of corporatization. Brian's map is organized into four clusters that are separate from each other, and each has the same structural pattern: a central concept representing an example of corporatization; one level of concepts above it to represent its causes; and one level of concepts below to represent its effects. The only significant variation occurs within the focus on budget cluster, which has two levels of causes and two levels of effects.

This characteristic is unusual for this group of maps. Most maps have a network of relationships that crisscross the map, and many have a loose elaboration of causes and effects that complicates or dissolves the formal structure of CAUSE—> CORPORATIZATION EXAMPLE—>EFFECT, a prompt I had used to help participants begin their mapping sessions. Most participants used that prompt to start but then entered a phase of elaboration during which they added, changed, and removed concepts and extensively rearranged the elements of the map. In contrast, Brian identified three examples and worked one by one to map their causes and effects without verbalizing thoughts about how the clusters might interrelate. When he decided to add a fourth example, he used the same approach. The fact that he was time-constrained may have contributed to Brian's approach. He said he had to carefully manage his time in order to attend another meeting, and I observed him hesitate before he decided to expand his map with a fourth cluster. During the mapping process, his facial expressions showed interest and engagement. He also said that he found the mapping process "fascinating" and that he "could go on and on" if he had more time. It is possible there is more that Brian would like to say.

Overall, the map is characterized by a larger number of concepts than average, indicating a degree of detail, and fewer links than average, due in part to the lack of links between clusters. The map has no loops, two-way links, or negative links, a trait that underscores the straightforward nature of the relationships.

Organized around the four clusters, the main focus of the map is on the organizational dynamics that stem from corporatization in higher education. The focus on budget cluster is the most prominent. Caused by the rising cost of education, the focus on budget in higher education leads to largely undesirable consequences including internal competition, unpopular administrative decisions, low faculty morale, and uncertainty for employees. Caused by the service mission of universities and its partnerships, the customer orientation cluster leads to an emphasis on performance but negatively impacts academic freedom. The branding / marketing cluster, caused by competition and the pursuit of prestige in higher education, has largely desirable effects including increased enrollment, funding, and name recognition. The cluster around corporate-like job titles for administrators has several weak causes, and its effects include higher salaries and an *us-versus-them* relationship between faculty and administration.

The analysis of internal and external forces reinforces the map's focus on organizational dynamics: Forces inside higher education total 24, while forces outside higher education total only two. Although the two external forces are particularly strong, their influence does not ripple throughout the map as external forces do in some of the other maps; they only influence a third of the forces inside higher education. The forces inside higher education have highly uneven influence on each other and no influence on the two external forces. In part, these results reflect the compartmentalized organization of the clusters. Like fires burning on a hill, the overall dynamic of the map is of four separate, hot spots arranged across the higher education landscape.

How he thinks about issues related to corporatization. In his causal map and in his comments, Brian portrays the mission of higher education as one of broad service in which the university "meets community, industry, or societal needs." This purpose, he says, is enacted through "value propositions" in which the university offers benefits to customers with "a level of performance and delivery that, if anything, exceeds the customer's expectation of quality." Customers, in his view, may include students, businesses, governmental entities, or community organizations. Under this overarching mission, Brian includes the traditional mission of the university "to educate students and to create and disseminate new knowledge" as well as other activities like "corporate-sponsored research," "workforce development, service and community outreach, commercialization, and technology transfer."

In Brian's view, "corporatization is not a bad thing." There are "ideas and practices from business that are potentially beneficial for higher education," and, he says without complaint, "jobs in academia are already morphing...to be more aligned with what a business might look like." In his causal map, marketing and branding produce only desirable results. And Brian's vocabulary, peppered with business terms like *value proposition, customer, requirements, win-win,* and *cost-benefit,* is another indication he is comfortable with corporate approaches.

In terms of responding to corporatization, Brian suggests continuing to develop partnerships with external entities while seeking better ways to work together. Whether the endeavor is joint research or workforce development, Brian says, "enormous tension," culture clashes, and mismatched expectations still characterize these endeavors. In particular, he suggests a better understanding between higher education and industry regarding workforce development; colleges, he says, should graduate students "who have proven their ability to absorb knowledge, solve problems, and learn new things, " and companies should then provide the industry specifics. Brian also suggests resetting the view that increasingly advanced degrees, including Masters and Ph.D.s, are needed to succeed in the workforce. Finally, Brian contends that universities have the responsibility to "grapple with" the issue of cost. "Cost," he says, "will ultimately be the acid test. And

I don't know if there's a breaking point or whether people just decide it's just an ugly pill they have to swallow and keep going with it."

Although Brian emphasizes higher education's engagement with the outside world, he has concerns about the organizational dynamics within universities. Many of his concerns surround faculty and the "unwanted tensions" that arise in response to corporate-like activities at the university. "If the faculty think we are becoming too much like a business," Brian says, "that's not going to go down well." He recognizes that faculty are trained for and passionate about "teach[ing] students and discover[ing] new knowledge," but he also acknowledges that his perspective has changed significantly since he was a faculty member; conflict arises because practices that Brian now favors are unfavorable to faculty. For example, in his causal map, Brian depicts a customer orientation as central to fulfilling the university mission and yet concedes that the performance emphasis reduces academic freedom. He reports other faculty-related issues in his causal map such as reduced faculty morale, an us-versus-them mentality between faculty and administration, and unpopular administrative decisions, all arising from the dynamics of corporatization. In addition to faculty, Brian has concerns about the organizational consequences of the increased focus on budgets. In his causal map, he cites the undesirable effects of competition between units, inequitable resources allocated to units and to individuals, and uncertainty for all employees. Interestingly, despite his conversational emphasis on external partnerships, his concerns about the organizational dynamics of corporatization dominate his causal map.

Brian portrays contemporary higher education as operating in a highly complex environment characterized by greater tension, increased competition, fewer public resources, heavier governmental regulations, and many unknowns. The activities of corporatization, he maintains, are "part of the big puzzle" of defining the role of higher education in the 21st century, and no one "has the full answer." Brian believes that higher education, as it has in the past, will continue to make "enormous" contributions to society in terms of technology, innovation, and teaching "really, really bright people."

Brief profile of Brian. Brian's position at Evans State University is within the upper administration of instruction. He holds a Ph.D. in a field from the mathematics and natural sciences domain, and he has been a tenured faculty member. He has worked in higher education for approximately 30 years and has not had significant work experience outside higher education. Brian has extensive experience with academic capitalism: 30 years in grant funding and 10 years in marketing, developing external partnerships, and securing external funding. He describes activities related to academic capitalism as "very important" to his current position.

Daniel

Causal map data. Daniel's causal map data are represented in two forms below. Figure 35 shows the map data after conversion to the Decision Explorer software; it is a screenshot of the entire map as displayed in Decision Explorer. Table 27 shows the equivalent map data in the form of causal statements.

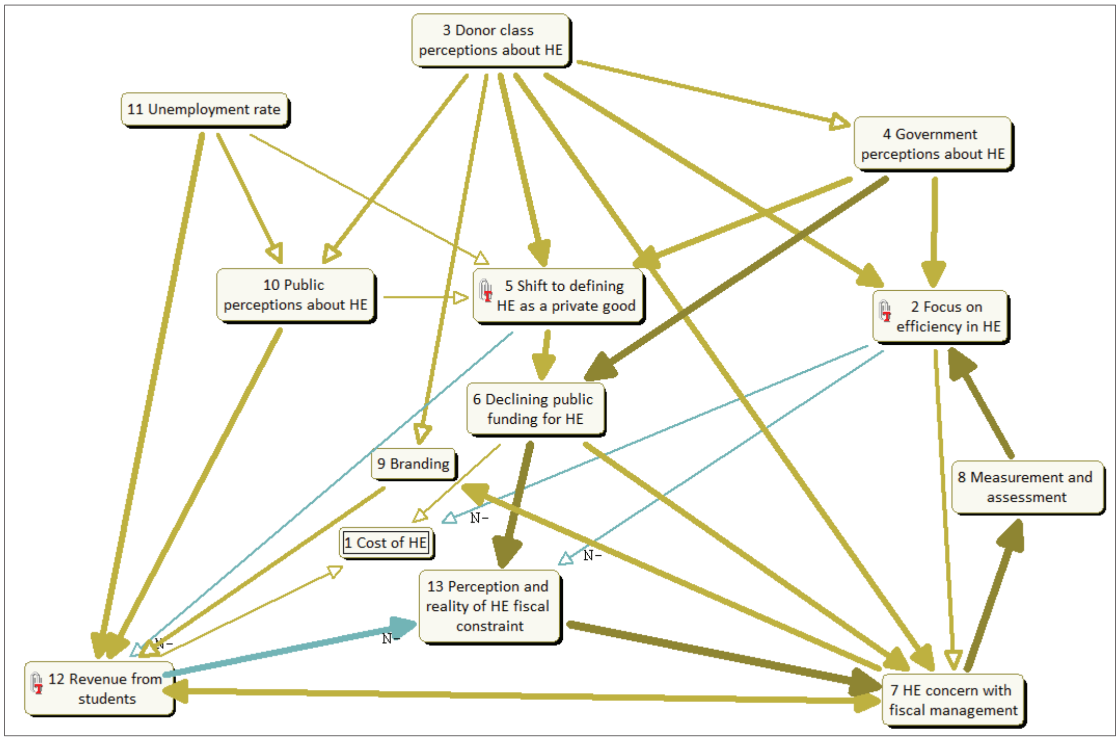

Figure 35. Screenshot of Daniel's causal map after conversion to Decision Explorer. Increasingly thicker and darker lines depict increasingly stronger links. Any negative links are shown in blue and also have the label *N-* near the arrowhead.

Table 27

Daniel's Causal Map Data Converted to Causal Statements

'Branding' causes a MEDIUM INCREASE in 'Revenue from students'
'Declining public funding for HE' causes a STRONG INCREASE in 'HE concern with fiscal management'
'Declining public funding for HE' causes a VERY STRONG INCREASE in 'Perception and reality of HE fiscal constraint'
'Declining public funding for HE' causes a WEAK INCREASE in 'Cost of HE'
'Donor class perceptions about HE' causes a MEDIUM INCREASE in 'Branding'
'Donor class perceptions about HE' causes a MEDIUM INCREASE in 'Government perceptions about HE'
'Donor class perceptions about HE' causes a MEDIUM INCREASE in 'Public perceptions about HE'
'Donor class perceptions about HE' causes a STRONG INCREASE in 'Focus on efficiency in HE'
'Donor class perceptions about HE' causes a STRONG INCREASE in 'HE concern with fiscal management'
'Donor class perceptions about HE' causes a STRONG INCREASE in 'Shift to defining HE as a private good'
'Focus on efficiency in HE' causes a MEDIUM INCREASE in 'HE concern with fiscal management'
'Focus on efficiency in HE' causes a WEAK DECREASE in 'Cost of HE'
'Focus on efficiency in HE' causes a WEAK DECREASE in 'Perception and reality of HE fiscal constraint'
'Government perceptions about HE' causes a STRONG INCREASE in 'Focus on efficiency in HE'
'Government perceptions about HE' causes a STRONG INCREASE in 'Shift to defining HE as a private good'
'Government perceptions about HE' causes a VERY STRONG INCREASE in 'Declining public funding for HE'
'HE concern with fiscal management' causes a STRONG INCREASE in 'Branding'
'HE concern with fiscal management' causes a STRONG INCREASE in 'Revenue from students'
'HE concern with fiscal management' causes a VERY STRONG INCREASE in 'Measurement and assessment'
'Measurement and assessment' causes a VERY STRONG INCREASE in 'Focus on efficiency in HE'
'Perception and reality of HE fiscal constraint' causes a VERY STRONG INCREASE in 'HE concern with fiscal management'
'Public perceptions about HE' causes a STRONG INCREASE in 'Revenue from students'
'Public perceptions about HE' causes a WEAK INCREASE in 'Shift to defining HE as a private good'
'Revenue from students' causes a STRONG DECREASE in 'Perception and reality of HE fiscal constraint'
'Revenue from students' causes a STRONG INCREASE in 'HE concern with fiscal management'
'Revenue from students' causes a WEAK INCREASE in 'Cost of HE'
'Shift to defining HE as a private good' causes a STRONG INCREASE in 'Declining public funding for HE'
'Shift to defining HE as a private good' causes a WEAK DECREASE in 'Revenue from students'
'Unemployment rate' causes a MEDIUM INCREASE in 'Public perceptions about HE'
'Unemployment rate' causes a STRONG INCREASE in 'Revenue from students'
'Unemployment rate' causes a WEAK INCREASE in 'Shift to defining HE as a private good'

Causal map analysis. The following three tables present the most salient results from the analysis of Daniel's causal map. Table 28 shows the map-level metrics calculated for the map alongside the average for all 20 participants. Table 29 shows the most prominent concepts in the map with the rationale for characterizing them as prominent. Table 30 shows prominent clusters in the map and includes all prominent occurrences of structural clusters (loops, islands, or trees) and content clusters (*a priori*—a content theme selected by the researcher—or emergent).

Table 28

Daniel's Map-Level Metrics with Averages for All Participants

Metric	Description	Daniel's Map	Group Avg
# of Concepts	# of concepts in map	13	20.00
# of Tails	# of concepts with only outgoing links	2	3.05
# of Heads	# of concepts with only incoming links	1	5.00
# of Ordinary	# of concepts w/incoming+outgoing links	10	11.95
# of Links	# of links in the map	31	35.55
Link-Concept Ratio	# of links divided by # of concepts	2.38	1.73
Head-Tail Ratio[a]	# of heads divided by # of tails	0.50	2.50

[a]In Table 10, I had used the term *Receiver-Transmitter Ratio* to reflect the terminology of Özesmi and Özesmi (2004), whose work I used in my early analyses. In this and following tables, I use the synonymous term *Head-Tail Ratio* to reflect the terminology of Eden and Ackermann, whose work I used in the later stages of my analyses.

Table 29

Daniel's Prominent Map Concepts and Rationale for the Characterization

Concept	Rationale for Characterizing as Prominent
Donor class perceptions about HE	• 1 of only 2 TAILS • Highest Outdegree by far • Tied with 2 others for 2nd highest DOMAIN links • Tied with 2 others for highest CENTRAL score • Verbally emphasized during interview
HE concern with fiscal management	• Highest Indegree by far • Highest Centrality • With *Revenue from students*, part of the only 2-Way link in the map (both Strongly increase each other) • Tied with 1 other for highest DOMAIN links • Tied with 2 others for highest CENTRAL score
Revenue from students	• 2nd highest Centrality • With *HE concern with fiscal management*, part of the only 2-Way link in the map (both Strongly increase each other) • Tied with 1 other for highest DOMAIN links • Tied with 2 others for highest CENTRAL score
Cost of HE	• The only HEAD in the map • Verbally emphasized during the interview; stressed his view that cost curve in HE can't be changed very much

Note: If words in a concept are in quotes, the participant had placed quotes around them in the original map. HE = Higher Education. HEI = Higher Education Institution. Other words in capital letters denote tools or named clusters in Decision Explorer. See the *Working with clusters* section of Chapter 4 for more information about the named clusters HEINSIDE, HEBOUNDARY, and HEOUTSIDE.

Table 30

Daniel's Map Clusters with Descriptions

Category / Type	Description
Structural / Loop	10 Total loops, highly complex in nature 2 Two-way links 4 Negative links 9 Prominent loops with 3+ concepts • 5 combine mixed strengths and positive/negative links; I found no literature to guide my interpretation of this type of complex loop • 4 variations on self-reinforcing, not undesirable, cycle at Strong strength involving: *Focus on efficiency in HE* *HE concern with fiscal management* *Measurement and assessment* *Branding* *Revenue from students*
Content / *a priori*[a]	Concepts in each cluster HEINSIDE = 7 HEBOUNDARY = 0 HEOUTSIDE = 6 Prominent results of CSET analyses • HEOUTSIDE concepts modestly influence each other and every HEOUTSIDE concept effects every HEINSIDE concept • HEINSIDE concepts complexly affect each other—with the exception of *Cost of HE*—and have zero effect on HEOUTSIDE concepts

[a]*a priori* = A content theme the researcher selected for analysis in every map. For more information about the HEINSIDE, HEBOUNDARY, HEOUTSIDE analysis, see the *Working with clusters* section of Chapter 4.

How Daniel thinks about corporatization.

How he structures the problem of corporatization. Daniel's map is concise yet highly dynamic. The quality of conciseness comes from having fewer than average concepts that are more abstract than they are detailed. The quality of dynamism comes from having a much higher than average link-concept ratio; the concepts complexly influence each other. Nine intricate loops, some of which combine negative links and two-way interactions, underscore the complexity of these relationships.

The map depicts a strong set of sociopolitical forces that triggers a complex of higher education responses. Among the sociopolitical forces, donor class perceptions of higher education is the most powerful, with one-way influence on government perceptions of higher education, public perceptions of higher education, and the shift to defining higher education as a private good. As one of only two TAILS in the map, it is a major driver of map dynamics and receives no influence from other concepts. Depicted as an outcome of donor class perceptions, government perceptions of higher education is a strong force as well. It directly increases the shift to defining higher education as a private good and results in declining public funding for higher education.

These powerful external forces result in a complex set of reactions within higher education, primarily centered around higher education's concern with fiscal management. Complicated relationships and self-reinforcing loops tie this concern to four other internal forces: focus on efficiency, revenue from students, measurement and assessment, and branding, but these dynamics are not necessarily depicted as undesirable. Interestingly, revenue from students and concern with fiscal management directly and strongly increase each other; more revenue from students results in more concern with fiscal management and vice versa, creating an ever-growing area of intense focus. Also interesting is the depiction of the cost of higher education. As the only HEAD, it is increased and decreased by other forces, but it has no influence. And, surprisingly, revenue from students increases it, which Daniel explained in this way: "More revenue leads to higher cost, because the culture of higher education just spends."

The analysis of internal and external forces reinforces the sense that contemporary higher education is contending with numerous, strong, and complicated pressures from both the outside and the inside. Every single external force influences every single force inside higher education. In addition, all but one force inside higher education influences all but one of the other forces inside higher education. In other words, almost every force inside higher education is influenced by almost all other forces in the map. At the same time, forces inside higher education have no influence on external forces. Like a pot being stirred, forces from the outside in are causing disruption, change, and adaptation within higher education.

How he thinks about issues related to corporatization. According to Daniel, the purpose of higher education is the betterment of society. Citing examples including better public health and less violence, he claims "the correlation between education and a host of good things is strong and well-documented." Therefore, he reasons, higher education should be expanded. More higher education should be provided to more people, and the "abysmal" attainment rate of a Bachelor's degree should be dramatically improved. Essentially, he says, "the more educated the population is, the better society we have."

Daniel considers the most commonly discussed aspects of corporatization—"fiscal management, efficiency, branding, things along those lines"—to be tools. And he considers those tools to be helpful for higher education, perhaps even commonsensical; he finds no dissonance between a mission-driven organization and tools that could help it achieve that mission. He also recognizes that his view is "countercultural relative to faculty." Faculty, he says, often believe business practices oppose the goals of higher education, and faculty are particularly afraid of hierarchical management. When they think of management, they think of "chain-saw Jack Welch", Daniel imagines; they think, "it's just going to be taking orders, and we're all going to be cogs in a machine."

Yet, Daniel contends, these stereotypes are "bad corporate" not "corporate"; they are not the ways of modern business organizations, particularly the successful ones.

In light of these views, Daniel has a number of suggestions for how higher education might best respond to corporatization. All of them are internally focused, which is compatible with his causal map's depiction of higher education having no influence on external forces. First, he strongly recommends adapting corporate tools to the mission of higher education. The essence of a higher education organization is its mission, he says, and "you can't just take the [corporate] tool, pull it off the shelf, and apply it." Second, he strongly recommends adapting these tools to the culture of higher education—particularly when it comes to faculty. Cultural differences exist in higher education, he says, but they can be bridged with sensitivity to language, appreciation of what each group cares about, and the appropriate translation of ideas. Higher education, according to Daniel, could stand to improve its internal cross-cultural competence. Third, he suggests that mission be the starting point of every conversation about change. Not only does this create the appropriate focus, he says, but it brings people together, because, "inside the university, we still think [higher education] is good for everybody."

A final suggestion from Daniel is to use corporate tools to "wring every ounce of efficiency we can out of the resources we have." Because education is a "human-to-human transfer," he argues, the marginal cost of higher education cannot be reduced significantly—in spite of the emergence of online education and MOOCs, which "just don't work!" In the modest role it gives to the cost of higher education, Daniel's causal map echoes this idea. At the same time, Daniel says, higher education does poorly at efficiency, spending whatever revenue comes in and sustaining a constant experience of fiscal constraint. This is consonant with his causal map, in which he describes fiscal constraint as both "perception and reality" and in which concern with fiscal management manifests as a growing fixation on revenue from students. Efforts toward efficiency, he maintains, would free up resources for the mission as well as remove "lawmakers' excuse" for reduced funding.

Daniel draws hope for higher education from the fact that "there is no other way" to improve an open, democratic society. Citing Turkey and Russia as examples, he asserts that "the only time you really see education threatened is when you have people trying to run a very different kind of society." When those in power do not value democracy, he warns, "then you're in trouble."

Brief profile of Daniel. Daniel's position at Evans State University is within the middle administration of instruction. He holds a Ph.D. in a discipline from the liberal arts, and he has been a tenured faculty member. He has worked in higher education for approximately 20 years. Daniel has significant experience with academic capitalism including marketing, branding, direct recruitment of students, and occasional advancement efforts. Activities related to academic capitalism are important to his current position.

David

Causal map data. David's causal map data are represented in two forms below. Figure 36 shows the map data after conversion to the Decision Explorer software; it is a screenshot of the entire map as displayed in Decision Explorer. Table 31 shows the equivalent map data in the form of causal statements.

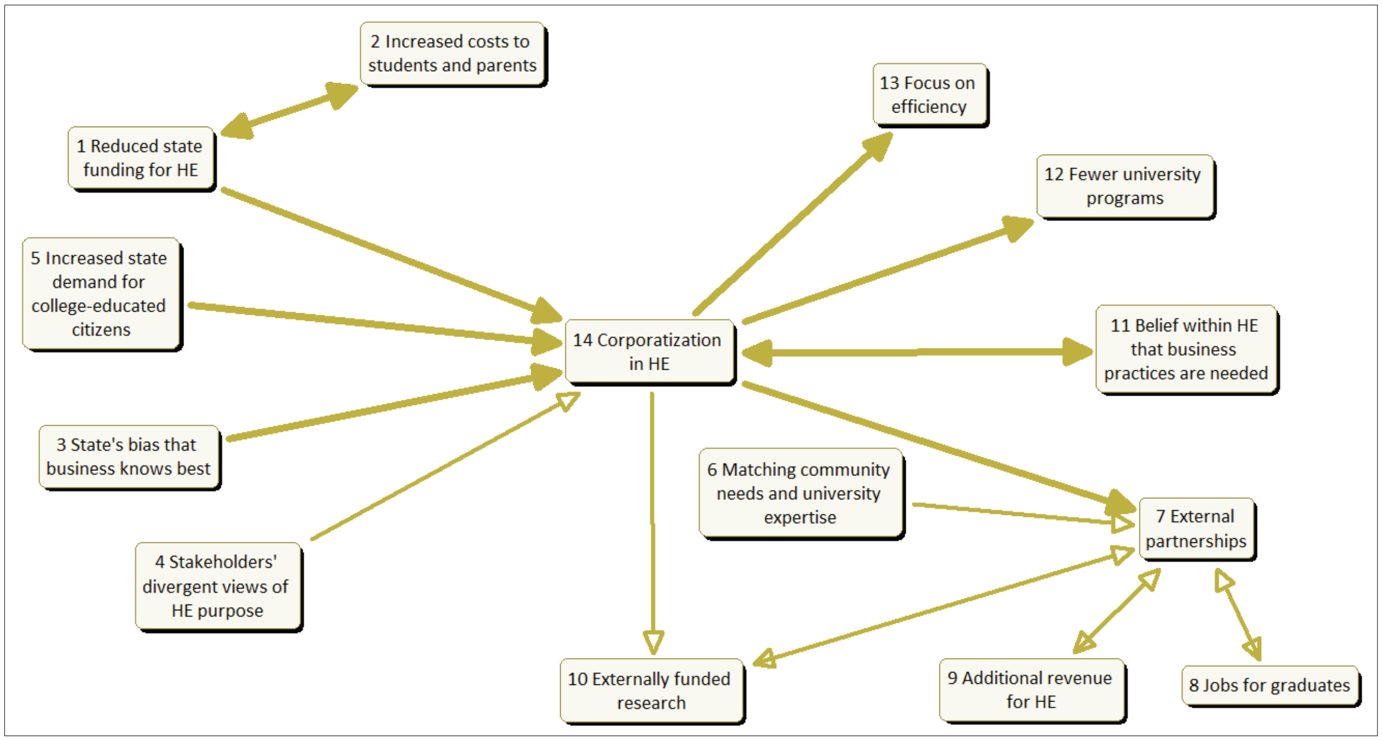

Figure 36. Screenshot of David's causal map after conversion to Decision Explorer. Increasingly thicker and darker lines depict increasingly stronger links. Any negative links are shown in blue and also have the label *N-* near the arrowhead.

Table 31

David's Causal Map Data Converted to Causal Statements

'Additional revenue for HE' causes a MEDIUM INCREASE in 'External partnerships'
'Belief within HE that business practices are needed' causes a STRONG INCREASE in 'Corporatization in HE'
'Corporatization in HE' causes a MEDIUM INCREASE in 'Externally funded research'
'Corporatization in HE' causes a STRONG INCREASE in 'Belief within HE that business practices are needed'
'Corporatization in HE' causes a STRONG INCREASE in 'External partnerships'
'Corporatization in HE' causes a STRONG INCREASE in 'Fewer university programs'
'Corporatization in HE' causes a STRONG INCREASE in 'Focus on efficiency'
'External partnerships' causes a MEDIUM INCREASE in 'Additional revenue for HE'
'External partnerships' causes a MEDIUM INCREASE in 'Externally funded research'
'External partnerships' causes a MEDIUM INCREASE in 'Jobs for graduates'
'Externally funded research' causes a MEDIUM INCREASE in 'External partnerships'
'Increased costs to students and parents' causes a STRONG INCREASE in 'Reduced state funding for HE'
'Increased state demand for college-educated citizens' causes a STRONG INCREASE in 'Corporatization in HE'
'Jobs for graduates' causes a MEDIUM INCREASE in 'External partnerships'
'Matching community needs and university expertise' causes a MEDIUM INCREASE in 'External partnerships'
'Reduced state funding for HE' causes a STRONG INCREASE in 'Corporatization in HE'
'Reduced state funding for HE' causes a STRONG INCREASE in 'Increased costs to students and parents'
'Stakeholders' divergent views of HE purpose' causes a MEDIUM INCREASE in 'Corporatization in HE'
'State's bias that business knows best' causes a STRONG INCREASE in 'Corporatization in HE'

Causal map analysis. The following three tables present the most salient results from the analysis of David's causal map. Table 32 shows the map-level metrics calculated for the map alongside the average for all 20 participants. Table 33 shows the most prominent concepts in the map with the rationale for characterizing them as prominent. Table 34 shows prominent clusters in the map and includes all prominent occurrences of structural clusters (loops, islands, or trees) and content clusters (*a priori*—a content theme selected by the researcher—or emergent).

Table 32

David's Map-Level Metrics with Averages for All Participants

Metric	Description	David's Map	Group Avg
# of Concepts	# of concepts in map	14	20.00
# of Tails	# of concepts with only outgoing links	4	3.05
# of Heads	# of concepts with only incoming links	2	5.00
# of Ordinary	# of concepts w/incoming+outgoing links	8	11.95
# of Links	# of links in the map	19	35.55
Link-Concept Ratio	# of links divided by # of concepts	1.36	1.73
Head-Tail Ratio[a]	# of heads divided by # of tails	0.50	2.50

[a]In Table 10, I had used the term *Receiver-Transmitter Ratio* to reflect the terminology of Özesmi and Özesmi (2004), whose work I used in my early analyses. In this and following tables, I use the synonymous term *Head-Tail Ratio* to reflect the terminology of Eden and Ackermann, whose work I used in the later stages of my analyses.

Table 33

David's Prominent Map Concepts and Rationale for the Characterization

Concept	Rationale for Characterizing as Prominent
Corporatization in HE	• Highest Outdegree • Highest Indegree • Highest Centrality • Highest DOMAIN links • Highest CENTRAL score • Conceptually at the center, between causes and effects
External partnerships	• 2nd highest DOMAIN links • 2nd highest CENTRAL score • Other than *Corporatization in HE*, which is the central concept of the map, the concept with the most elaborated EXPLANATIONS and CONSEQUENCES

Note: If words in a concept are in quotes, the participant had placed quotes around them in the original map. HE = Higher Education. HEI = Higher Education Institution. Other words in capital letters denote tools or named clusters in Decision Explorer. See the *Working with clusters* section of Chapter 4 for more information about the named clusters HEINSIDE, HEBOUNDARY, and HEOUTSIDE.

Table 34

David's Map Clusters with Descriptions

Category / Type	Description
Structural / Loop	19 Total loops, due solely to two-way links, so none prominent 10 Two-way links 0 Negative links
Content / *a priori*[a]	Concepts in each cluster HEINSIDE = 7 HEBOUNDARY = 3 HEOUTSIDE = 4 Prominent results of CSET analyses • HEOUTSIDE concepts have no effect on each other and each HEOUTSIDE concept influences 6 of the 7 HEINSIDE concepts • HEINSIDE concepts have uneven influence on each other and zero effect on HEOUTSIDE concepts

[a]*a priori* = A content theme the researcher selected for analysis in every map. For more information about the HEINSIDE, HEBOUNDARY, HEOUTSIDE analysis, see the *Working with clusters* section of Chapter 4.

How David thinks about corporatization.

How he structures the problem of corporatization. David organized his map by placing the topic, corporatization in higher education, in the center, its causes on the left, and its effects on the right. With a lower than average number of concepts and a much lower than average link-to-concept ratio, the map is spare; it has minimal elaboration of causes and effects. With no prominent loops and no negative links, map relationships are clear-cut with one exception: Five pairs of mutually reinforcing concepts add some complexity and describe corporatization as having a self-reinforcing quality.

David's map portrays corporatization as primarily caused by activities at the state level: Reduced state funding for higher education, increased state demand for college-educated citizens, and the state's bias that business knows best are the strong, primary causes of corporatization. But corporatization has one more strong cause: the belief within higher education that business practices are needed, which acts as both a cause and an effect; the more that corporatization takes place, the more the belief in business practices is reinforced, which leads to more corporatization in an ever-increasing interplay.

Besides the belief within higher education that business practices are needed, the map cites other effects of corporatization that are mostly internal to higher education: focus on efficiency, fewer university programs, and external partnerships, none of which are portrayed as necessarily undesirable. In fact, external partnerships, which may include externally funded research, have only desirable effects: additional revenue for higher education and jobs for graduates. These two benefits are each in a two-way relationship with external partnerships; they reinforce each other resulting in ever-increasing levels of all three. Another outcome of map dynamics is the increased costs to students and parents, but, interestingly, higher education is not portrayed as having any influence on that development. Instead, reduced state funding for higher education is depicted in a two-way, mutually reinforcing relationship with increased costs to students and parents. David explains it this way:

> "State government freezes tuition but limits higher education's subsidy as well. So, this leads to higher costs for students and families, who complain to legislators, which leads to further reductions for higher education."

The analysis of internal and external forces reinforces the dominant role of the state legislature in corporatization. The three state actions are the strongest of the external forces, and each affects almost all of the forces inside higher education. The reverse, though, is not true; forces inside higher education have no effect on external forces. Like a one-way mirror, the state observes higher education and takes action to influence it; in response, higher education becomes corporatized but, when it turns to look in the mirror, it sees only the continued need for business practices reflected back.

How he thinks about issues related to corporatization. According to David, the primary function of a university is “teaching and working with students,” which helps them become “more well-rounded, better educated, and better citizens.” At the same time, David says, getting a job may be part of being a well-rounded, good citizen, so he suggests that higher education give students whichever they want. If they want a job-oriented degree, provide that, he says. At the same time, if they want “to get a degree in classic studies or a romance language like French,” provide that, he says, because “that’s up to them.” David contends, though, that higher education has a responsibility to inform students about the potential job market for degrees; that way, he says, students can make an informed choice.

In terms of corporatization, David says that universities need business practices in order to manage the “multiple hundreds of millions of dollars coming in and going out.” Universities, he states, are “not-for-profit, but they are also not-for-loss.” Universities, he says, need CFOs, accountants, and others to oversee business functions appropriately—and he suggests that those people not be faculty, because “that’s not what faculty are good at!” At the same time, David asserts, “it’s a problem if we see [those business practices] as the end game.” “We need resources to do something,” he says, “but the SOMETHING is what we’re about.” Yet, in David’s view, reduced resources are a reality in higher education; they are central to corporatization, and they are caused by state legislatures. Elected state officials, in his portrayal, “get elected...because they keep lowering taxes. They win by slashing budgets. And higher ed and K12 are pretty big parts of the state budget, so they can get a win there." David's causal map echoes this perspective by depicting the state as the only source of funding problems for higher education.

In terms of responding to corporatization, David suggests that higher education stay "connected to the entities that are important in [the] community." It's good, he says, "that we're on their radar map and they're on ours and we're looking for ways to answer the question: Are there needs we have that they can help with and the other way around?" "Formal and mutually beneficial partnerships" may result, he says, echoing his causal map's portrayal of external partnerships as sources of benefit. At the same time, David suggests that higher education be cautious "not to chase every initiative."

Regarding the future of higher education, David draws hope from the fact that higher education is in high demand; it means "universities will be around." At the same time, David expresses skepticism about the current "push for everyone to go to college." He questions the idea that people "need 16 years of education before they can be productive" and believes K12 could do a better job of preparing students for multiple futures, "not just attending college." At the same time, he admits, "it seems radical to suggest reducing college attendance."

Brief profile of David. David's position at Evans State University is as a tenured faculty member in an education-related field, and he holds a Ph.D. in his discipline. He has worked in higher education for approximately 10 years and has had some professional experience in K12 public schools. David has little experience with academic capitalism, and activities related to academic capitalism are not important to his current position.

Douglas

Causal map data. Douglas's causal map data are represented in two forms below. Figure 37 shows the map data after conversion to the Decision Explorer software; it is a screenshot of the entire map as displayed in Decision Explorer. Table 35 shows the equivalent map data in the form of causal statements.

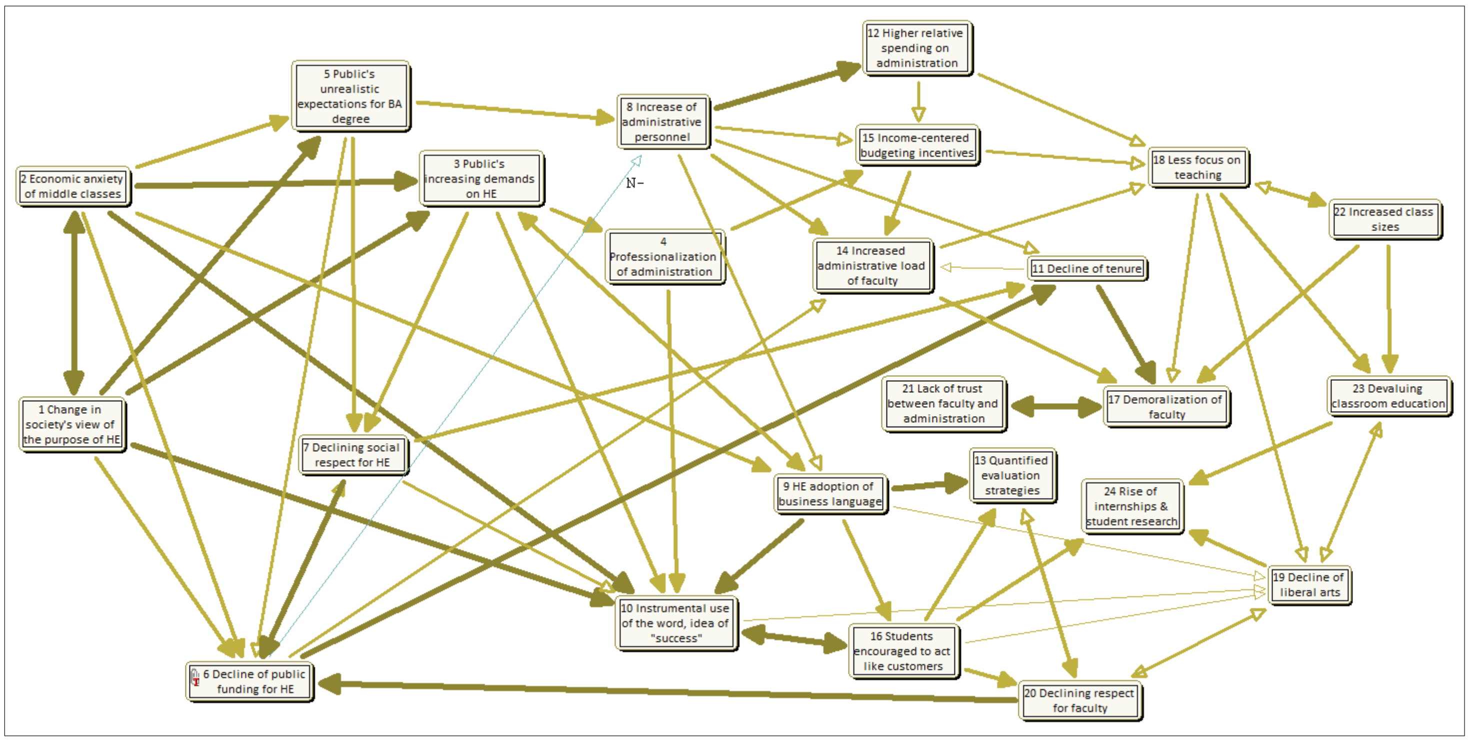

Figure 37. Screenshot of Douglas's causal map after conversion to Decision Explorer. Increasingly thicker and darker lines depict increasingly stronger links. Any negative links are shown in blue and also have the label *N-* near the arrowhead.

Table 35

Douglas's Causal Map Data Converted to Causal Statements

'Change in society's view of the purpose of HE' causes a STRONG INCREASE in 'Decline of public funding for HE'
'Change in society's view of the purpose of HE' causes a VERY STRONG INCREASE in 'Economic anxiety of middle classes'
'Change in society's view of the purpose of HE' causes a VERY STRONG INCREASE in 'Public's increasing demands on HE'
'Change in society's view of the purpose of HE' causes a VERY STRONG INCREASE in 'Public's unrealistic expectations for BA degree'
'Change in society's view of the purpose of HE' causes a VERY STRONG INCREASE in 'Instrumental use of the word, idea of "success"'
'Decline of liberal arts' causes a MEDIUM INCREASE in 'Declining respect for faculty'
'Decline of liberal arts' causes a MEDIUM INCREASE in 'Devaluing classroom education'
'Decline of liberal arts' causes a STRONG INCREASE in 'Rise of internships & student research'
'Decline of public funding for HE' causes a MEDIUM INCREASE in 'Declining social respect for HE'
'Decline of public funding for HE' causes a MEDIUM INCREASE in 'Increased administrative load of faculty'
'Decline of public funding for HE' causes a VERY STRONG INCREASE in 'Decline of tenure'
'Decline of public funding for HE' causes a WEAK DECREASE in 'Increase of administrative personnel'
'Decline of tenure' causes a VERY STRONG INCREASE in 'Demoralization of faculty'
'Decline of tenure' causes a WEAK INCREASE in 'Increased administrative load of faculty'
'Declining respect for faculty' causes a MEDIUM INCREASE in 'Decline of liberal arts'
'Declining respect for faculty' causes a MEDIUM INCREASE in 'Quantified evaluation strategies'
'Declining respect for faculty' causes a VERY STRONG INCREASE in 'Decline of public funding for HE'
'Declining social respect for HE' causes a MEDIUM INCREASE in 'Instrumental use of the word, idea of "success"'
'Declining social respect for HE' causes a STRONG INCREASE in 'Decline of tenure'
'Declining social respect for HE' causes a VERY STRONG INCREASE in 'Decline of public funding for HE'
'Demoralization of faculty' causes a VERY STRONG INCREASE in 'Lack of trust between faculty and administration'
'Devaluing classroom education' causes a MEDIUM INCREASE in 'Decline of liberal arts'
'Devaluing classroom education' causes a STRONG INCREASE in 'Rise of internships & student research'
'Economic anxiety of middle classes' causes a STRONG INCREASE in 'Public's unrealistic expectations for BA degree'
'Economic anxiety of middle classes' causes a STRONG INCREASE in 'Decline of public funding for HE'
'Economic anxiety of middle classes' causes a STRONG INCREASE in 'HE adoption of business language'
'Economic anxiety of middle classes' causes a VERY STRONG INCREASE in 'Change in society's view of the purpose of HE'
'Economic anxiety of middle classes' causes a VERY STRONG INCREASE in 'Public's increasing demands on HE'
'Economic anxiety of middle classes' causes a VERY STRONG INCREASE in 'Instrumental use of the word, idea of "success"'
'HE adoption of business language' causes a STRONG INCREASE in 'Public's increasing demands on HE'
'HE adoption of business language' causes a STRONG INCREASE in 'Students encouraged to act like customers'
'HE adoption of business language' causes a VERY STRONG INCREASE in 'Instrumental use of the word, idea of "success"'
'HE adoption of business language' causes a VERY STRONG INCREASE in 'Quantified evaluation strategies'
'HE adoption of business language' causes a WEAK INCREASE in 'Decline of liberal arts'
'Higher relative spending on administration' causes a MEDIUM INCREASE in 'Income-centered budgeting incentives'
'Higher relative spending on administration' causes a MEDIUM INCREASE in 'Less focus on teaching'
'Income-centered budgeting incentives' causes a MEDIUM INCREASE in 'Less focus on teaching'
'Income-centered budgeting incentives' causes a STRONG INCREASE in 'Increased administrative load of faculty'
'Increase of administrative personnel' causes a MEDIUM INCREASE in 'HE adoption of business language'
'Increase of administrative personnel' causes a MEDIUM INCREASE in 'Decline of tenure'
'Increase of administrative personnel' causes a MEDIUM INCREASE in 'Income-centered budgeting incentives'
'Increase of administrative personnel' causes a STRONG INCREASE in 'Increased administrative load of faculty'
'Increase of administrative personnel' causes a VERY STRONG INCREASE in 'Higher relative spending on administration'
'Increased administrative load of faculty' causes a MEDIUM INCREASE in 'Less focus on teaching'
'Increased administrative load of faculty' causes a STRONG INCREASE in 'Demoralization of faculty'
'Increased class sizes' causes a MEDIUM INCREASE in 'Less focus on teaching'
'Increased class sizes' causes a STRONG INCREASE in 'Demoralization of faculty'
'Increased class sizes' causes a STRONG INCREASE in 'Devaluing classroom education'
'Instrumental use of the word, idea of "success"' causes a VERY STRONG INCREASE in 'Students encouraged to act like customers'
'Instrumental use of the word, idea of "success"' causes a WEAK INCREASE in 'Decline of liberal arts'
'Lack of trust between faculty and administration' causes a VERY STRONG INCREASE in 'Demoralization of faculty'
'Less focus on teaching' causes a MEDIUM INCREASE in 'Decline of liberal arts'
'Less focus on teaching' causes a MEDIUM INCREASE in 'Demoralization of faculty'
'Less focus on teaching' causes a STRONG INCREASE in 'Devaluing classroom education'
'Less focus on teaching' causes a STRONG INCREASE in 'Increased class sizes'
'Professionalization of administration' causes a STRONG INCREASE in 'Instrumental use of the word, idea of "success"'
'Professionalization of administration' causes a STRONG INCREASE in 'Income-centered budgeting incentives'
'Public's increasing demands on HE' causes a STRONG INCREASE in 'Professionalization of administration'
'Public's increasing demands on HE' causes a STRONG INCREASE in 'Declining social respect for HE'
'Public's increasing demands on HE' causes a STRONG INCREASE in 'HE adoption of business language'
'Public's increasing demands on HE' causes a STRONG INCREASE in 'Instrumental use of the word, idea of "success"'
'Public's unrealistic expectations for BA degree' causes a MEDIUM INCREASE in 'Decline of public funding for HE'
'Public's unrealistic expectations for BA degree' causes a STRONG INCREASE in 'Declining social respect for HE'
'Public's unrealistic expectations for BA degree' causes a STRONG INCREASE in 'Increase of administrative personnel'

'Quantified evaluation strategies' causes a STRONG INCREASE in 'Declining respect for faculty'
'Students encouraged to act like customers' causes a STRONG INCREASE in 'Quantified evaluation strategies'
'Students encouraged to act like customers' causes a STRONG INCREASE in 'Declining respect for faculty'
'Students encouraged to act like customers' causes a STRONG INCREASE in 'Rise of internships & student research'
'Students encouraged to act like customers' causes a VERY STRONG INCREASE in 'Instrumental use of the word, idea of "success"'
'Students encouraged to act like customers' causes a WEAK INCREASE in 'Decline of liberal arts'

Causal map analysis. The following three tables present the most salient results from the analysis of Douglas's causal map. Table 36 shows the map-level metrics calculated for the map alongside the average for all 20 participants. Table 37 shows the most prominent concepts in the map with the rationale for characterizing them as prominent. Table 38 shows prominent clusters in the map and includes all prominent occurrences of structural clusters (loops, islands, or trees) and content clusters (*a priori*—a content theme selected by the researcher—or emergent).

Table 36

Douglas's Map-Level Metrics with Averages for All Participants

Metric	Description	Douglas's Map	Group Avg
# of Concepts	# of concepts in map	24	20.00
# of Tails	# of concepts with only outgoing links	0	3.05
# of Heads	# of concepts with only incoming links	1	5.00
# of Ordinary	# of concepts w/incoming+outgoing links	23	11.95
# of Links	# of links in the map	70	35.55
Link-Concept Ratio	# of links divided by # of concepts	2.92	1.73
Head-Tail Ratio[a]	# of heads divided by # of tails	N/A[b]	2.50

[a]In Table 10, I had used the term *Receiver-Transmitter Ratio* to reflect the terminology of Özesmi and Özesmi (2004), whose work I used in my early analyses. In this and following tables, I use the synonymous term *Head-Tail Ratio* to reflect the terminology of Eden and Ackermann, whose work I used in the later stages of my analyses. [b]N/A because the denominator for this metric calculation, number of tails, is zero in this map.

Table 37

Douglas's Prominent Map Concepts and Rationale for the Characterization

Concept	Rationale for Characterizing as Prominent
Economic anxiety of middle classes	• Part of 2-Way equal, Very Strong link with *Change in society's view of the purpose of HE*, making the two act as a powerful duo-TAIL, especially since the map has no true TAILS • Highest Outdegree • 3rd highest Centrality • Tied with 2 others for most POTENT contributor to outcomes of HEINSIDE concepts • Tied with 1 other for most CONSEQUENCES for other HEOUTSIDE concepts
Change in society's view of the purpose of HE	• Part of 2-Way equal, Very Strong link with *Economic anxiety of middle classes*, making the two act as a powerful duo-TAIL, especially since the map has no true TAILS • 2nd highest Outdegree • Tied with 2 others for most POTENT contributor to outcomes of HEINSIDE concepts • Tied with 1 other for most CONSEQUENCES for other HEOUTSIDE concepts
Public's increasing demands on HE	• Part of 2-Way equal, Strong link with *HE adoption of business language* • Tied with 2 others for most POTENT contributor to outcomes of HEINSIDE concepts • 1 of the 3 HEOUTSIDE concepts affected by all but 3 HEINSIDE concepts due to key influence of *HE adoption of business language*
Decline of public funding for HE	• 3rd highest Indegree • 2nd highest Centrality • By far the largest HIESET of HEOUTSIDE concepts • 1 of the 3 HEOUTSIDE concepts affected by all but 3 HEINSIDE concepts due to key influence of *HE adoption of business language* • Tied with 2 others for highest DOMAIN links
Instrumental use of word, idea of "success"	• Part of 2-Way equal, Very Strong link with *Students encouraged to act as customers* • Highest Indegree • Highest Centrality • Tied with 4 others for largest HIESET within HEINSIDE cluster • Tied with 2 others for highest DOMAIN links • Visually very busy on map with many EXPLANATIONS
HE adoption of business language	• Only direct link from HEINSIDE cluster back to HEOUTSIDE cluster with a Strong, undesirable influence because a) it is highly interconnected with other HEINSIDE concepts; ultimately 15 of 18 HEINSIDE concepts contribute to this influence and b) reinforces

	the 3 sociopolitical dynamics that have direct, negative effects on HE • Part of 2-Way equal, Strong link with *Increasing demands on HE* • 4th highest Centrality
Demoralization of faculty	• Part of 2-Way equal, Very Strong link with *Lack of trust between faculty and administration*, making a powerful duo-HEAD while map has only 1 true HEAD • 2nd highest Indegree
Lack of trust between faculty and administration	• Part of 2-Way equal, Very Strong link with *Demoralization of faculty* making a powerful duo-HEAD while map has only 1 true HEAD

Note: If words in a concept are in quotes, the participant had placed quotes around them in the original map. HE = Higher Education. HEI = Higher Education Institution. Other words in capital letters denote tools or named clusters in Decision Explorer. See the *Working with clusters* section of Chapter 4 for more information about the named clusters HEINSIDE, HEBOUNDARY, and HEOUTSIDE.

Table 38

Douglas's Map Clusters with Descriptions

Category / Type	Description
Structural / Loop	3,500+ Total loops, before I stopped the processing 18 Two-way links 1 Negative link Enormous complexity of relationships is prominent trait of map Indicates extremely interdependent dynamics Far exceeds number of loops in other maps Far exceeds my ability to analyze or determine prominence
Content / *a priori*[a]	Concepts in each cluster HEINSIDE = 18 HEBOUNDARY = 0 HEOUTSIDE = 6 Prominent results of CSET analyses • HEOUTSIDE concepts significantly influence each other and each HEOUTSIDE concept affects every HEINSIDE concept • Almost every HEINSIDE concept influences every other HEINSIDE concept, underscoring their interdependence • HEINSIDE concepts have strong, undesirable effect on HEOUTSIDE concepts largely due to the prominence of the *HE adoption of business language* concept; rare among these maps for HEINSIDE to have a significant effect on HEOUTSIDE

[a]*a priori* = A content theme the researcher selected for analysis in every map. For more information about the HEINSIDE, HEBOUNDARY, HEOUTSIDE analysis, see the *Working with clusters* section of Chapter 4.

How Douglas thinks about corporatization.

How he structures the problem of corporatization. A hallmark of Douglas's map is dynamism, which is due to the exceptional complexity of the relationships between concepts. The number of concepts is somewhat larger than average, which indicates that the map presents somewhat more detail than average. Yet, the number of links and the link-concept ratio is extremely high, which indicates the concepts are intricately intertwined and highly interdependent. In addition, the map has a significant number of two-way links and an extraordinarily high number of loops—I stopped the Decision Explorer software from locating additional loops after it reached a total of 3,500. (For comparison purposes, only three other maps in the group have more than 100 loops; their total loops number 726, 432, and 151.) All of these forces and counter forces produce a tensely energetic map.

Two sociopolitical forces working together serve as the main driver of the map, creating what I have dubbed a DUO-TAIL. The two forces are the economic anxiety of the middle classes and the change in society's view of the purpose of higher education. The two create a DUO-TAIL, because they have no other influences other than each other; they are in a very strong, two-way relationship in which they endlessly increase each other; and together they have vast influence over the rest of the map. The DUO-TAIL is the only cause for the public's unrealistic expectations for the Bachelor of Arts degree, making the unrealistic expectations a significant driving force as well. Although a single TAIL often serves as the driver of a map, this map has no true TAILS; it has no concepts that do not receive any influence from other concepts. This unusual lack of

TAILS is another reflection of the map's intricate relationships; no concept is free from influence.

As a combined and potent force, the economic anxiety of the middle classes and the change in society's view of the purpose of higher education lead to other sociopolitical forces, the most powerful of which are the public's increasing demands on higher education, the public's unrealistic expectations for the Bachelor of Arts degree, the decline in public funding for higher education, and the instrumental use of the word and the idea of "success." ("In the public's mind," Douglas explains, "the word and idea of 'success' mean making money.") These pressures lead to corporate approaches within higher education and, in Douglas's view, to a host of unfortunate losses and unwelcome gains:

Professionalization of administration

Increase of administrative personnel

Higher relative spending on administration

Increased administrative load of faculty

Income-centered budgeting initiatives

Quantified evaluation strategies

Decline of liberal arts

Less focus on teaching

Increased class sizes

Devaluing classroom instruction

Decline of tenure

Declining respect for faculty

Demoralization of faculty

Students encouraged to act like customers

Rise of internships and student research

Lack of trust between faculty and administration

At the same time, though, higher education is not a passive victim of outside forces. As depicted in Douglas's map, higher education very strongly exacerbates the problems of corporatization by its adoption of business language. This language use plays a critical role. It is the only force from inside higher education that directly influences any external force; it very strongly increases the public's instrumental use of the word "success," and it strongly reinforces the public's increasing demands on higher education. Through causal chains, it ultimately reinforces two more sociopolitical forces that have detrimental effects on higher education: declining social respect for higher education and decline of public funding for higher education. In all, the only concepts not affected by higher education's adoption of business language are the three main drivers of the map: middle-class economic anxiety, change in society's view of the purpose of higher education, and the public's unrealistic expectations of a Bachelor of Arts degree.

Similarly, higher education worsens the situation with activities related to administration. An increase in administrative personnel, the professionalization of administration, and higher relative spending on administration each contribute to all of the unwelcome consequences of corporatization for higher education as well as to three of the external forces that produce corporatization: the public's increasing demands on higher education, declining social respect for higher education and decline of public funding for higher education. In all, the only concepts not affected by administrative activities are the three main drivers of the map: middle-class economic anxiety, change in society's view of the purpose of higher education, and the public's unrealistic expectations of a Bachelor of Arts degree.

One more map trait merits mention: the unusually low number of HEADS. This trait is another reflection of the complexity of map relationships, because it means almost all concepts have influence. The one true HEAD in the map, the rise of internships and student research—which Douglas views as reflective of the "instrumental aims of corporatization"—does not have a prominent role. The map, though, has two other higher education forces that work together as what I have dubbed a DUO-HEAD. The two concepts are demoralization of faculty and lack of trust between administration and faculty. These two forces create a DUO-HEAD, because they have no influence except on each other, and they are in a very strong, two-way relationship in which they endlessly increase each other. Because HEADS sometimes represent unavoidable outcomes of the current situation, this self-reinforcing pair might describe what Douglas sees as an inevitable result of corporatization.

The analysis of internal and external forces echoes the complexity of the map relationships. First, the influence of external forces: These significantly influence each other, and they thoroughly and completely impact forces inside higher education; each external force influences every single inside force. Second, the influence of internal forces: These significantly influence each other, with 15 of the 18 concepts each influencing the other 14 concepts in that group; in other words, almost all forces inside higher education influence almost all other forces inside higher education. In addition, the map portrays the forces inside higher education as having strong influence on external forces. This is a rare depiction among this group of maps, most of which portray higher education with no influence on the sociopolitical forces that surround it. In Douglas's map, 15 of the 18 forces inside higher education have powerful and widespread—as well as undesirable—influence on external forces; they strengthen both the causes of corporatization and its injurious effects. Like a tightly wound clock, the overall dynamic of the map is one in which entities are bound in tension, intricately interlocked, and moving synchronously to produce corporatization.

How he thinks about issues related to corporatization. Douglas makes an incisive distinction between the traditional mission of the university and the university mission that has evolved in an era of corporatization. The traditional mission, he says, is "personal formation," the development of students into "good and capable people" who are "well-rounded" and "disciplined in mind and habits." He describes this mission as "a classic, middle-class, Anglo-American value," one that "led to the expansion of higher education in the 18th and 19th centuries and was originally "connected to Christianity." He also describes it as "the old liberal arts idea." Douglas argues it should remain the mission of the university, because it produces students who are "better positioned to take on a fluctuating, changing world for their lifetime, not just the next ten years in a particular profession."

In contrast, Douglas claims, the purpose of contemporary universities surrounds "student success," but this definition of success does not entail character development. Instead, he says, this conception uses "the instrumental language of the business world," employs a materialistic conception of achievement, and focuses on developing students' ability to work and make money. Douglas decries the loss of the personal formation mission and warns of the consequences:

> The irony is that [students] are now more demanding but also less confident and more fragile. In part it's because society now pressures them to succeed on their own, to define themselves, to find happiness, to figure it all out. Earlier generations were given basic guidelines, basic actions to work with. Now, it's even "create your own gender"! And you have an infinite variety of genders to choose from! Students are having to create it all, because none of it is being given to them.

According to Douglas, corporatization is the result of three groups pressuring each other: the public, the administration, and faculty. The public, he contends, suffers from economic anxiety and converts its angst into "unrealistic and growing demands" of higher education; students and parents now insist that a Bachelor of Arts degree result in a high-paying job, a goal that contradicts the aim of a liberal arts education. For their part, the administration, Douglas claims, tries to fulfill public expectations by adopting corporate values; it focuses on efficiency, post-college student employment, and the unceasing growth of the university—all at the cost of funding faculty and the educational mission. Faculty, he says, stand in opposition; they resist administration, state legislatures, students and families, because they see themselves as "the sole preservers of the university ideal." Interestingly, Douglas's causal map mirrors the dynamics he describes for the public and the administration, but it largely omits the role of faculty resistance; instead, the map focuses on the unhappy consequences of corporatization for faculty.

At the same time, the negative effects of corporatization are prominent in Douglas' comments as well as in his causal map. In addition to threatening the mission of the university and endangering the personal formation of students, corporatization imperils the meaning, purpose, and reward of faculty work, he says. Based on his description, the peril springs primarily from the "very strong and wide gulf" between faculty and administration. Administration, he says, has declining respect for faculty; seeks to tell them how and what to teach; replaces tenure-track positions with contingent ones; uses budget techniques like RCM (Responsibility Center Management) —a "nonsensical model for non-profits," Douglas maintains—to incentivize larger classroom sizes and involve faculty in branding, marketing, and recruitment; believes it "can run the university without faculty," and offers faculty "pabulum—plus hiding and lying." Faculty, Douglas concedes, compound the problem by being resistant, divided, poor at governing themselves, and "selfish personally and collectively." Yet, he says, much of this comes from their defensiveness, demoralized state, and loss of power. In addition, he says, faculty and administration have a cultural divide. He relates:

> At the administration building? They have glass rooms and mahogany tables and plush chairs and they all wear three-piece—no, not three-piece, but they all wear business suits. They are corporate. Absolutely corporate. And when I go into that building, it's like walking into another world. It's not my world. It has nothing to do with what I do. And I realize...it's the same in the other direction. They have [lowers voice, speaks slowly] absolutely no idea, none at all, what we do.

In spite of the challenges, Douglas draws hope from the fact that the university "is still alive! We're still here!" In addition, he says, with the appropriate adjustments, "we could salvage it quite nicely." With that in mind, he offers a multi-point plan for how higher education should respond to corporatization. First, he says higher education must drop the corporate vocabulary and invent better language to describe its purpose, a recommendation consonant with the powerful role he assigned to language in his causal map. Second, he proposes that higher education distinguish between the purpose of a Bachelor of Arts degree and other, more profession-oriented forms of higher education. A corollary, he says, is that higher education should do a better job of funneling students who are interested in short-term success into those other options. "So many of our problems at the university" Douglas says, "are due to students who shouldn't be here." Third, he says higher education should preserve the tenure system; despite its shortcomings, "it's the best system we have" for preserving "accumulated wisdom."

Finally, Douglas says, all three parties to corporatization—the public, the administration, and faculty—must change: The public, with the aid of higher education, needs to understand the purpose of a liberal arts education and develop realistic expectations of a Bachelor of Arts degree; the administration needs to recognize it needs faculty to have a university, extend respect to faculty, and communicate better; faculty need to prove their relevance to the public—possibly through books for public consumption, "get better at managing [their] own affairs," and prove to the administration that they can be creative problem-solvers. Douglas's recommendations address the important drivers of corporatization represented in his causal map, with the possible exception of one of the root causes: economic anxiety of the middle classes. Perhaps he is saying that other educational entities, not the university, should assuage the fears of those classes.

Brief profile of Douglas. Douglas's position at Evans State University is as a full-time, non-tenure-track faculty member in the liberal arts, and he holds a Ph.D. in his discipline. He has worked in higher education for approximately 20 years. Douglas has no experience with academic capitalism, and he says that activities related to academic capitalism are "not at all" important to his current position.

Edward

Causal map data. Edward's causal map data are represented in two forms below. Figure 38 shows the map data after conversion to the Decision Explorer software; it is a screenshot of the entire map as displayed in Decision Explorer. Table 39 shows the equivalent map data in the form of causal statements.

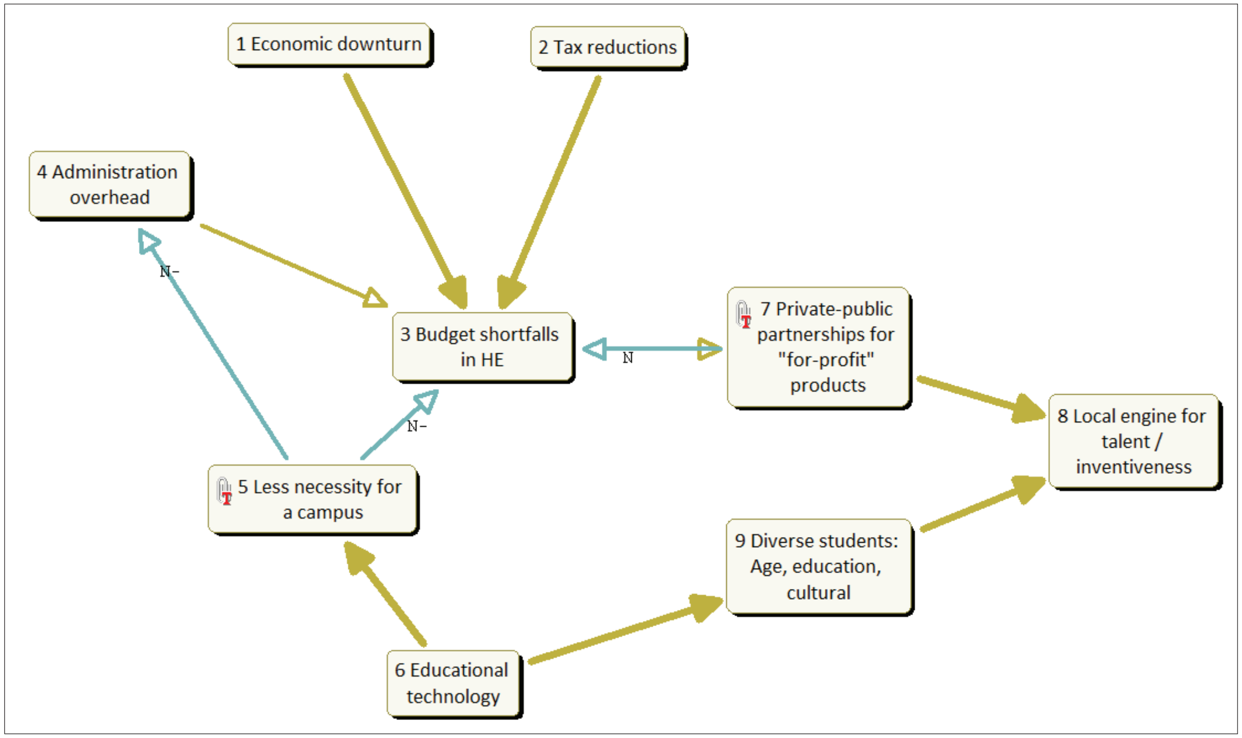

Figure 38. Screenshot of Edward's causal map after conversion to Decision Explorer. Increasingly thicker and darker lines depict increasingly stronger links. Any negative links are shown in blue and also have the label *N-* near the arrowhead.

Table 39

Edward's Causal Map Data Converted to Causal Statements

'Administration overhead' causes a MEDIUM INCREASE in 'Budget shortfalls in HE'
'Budget shortfalls in HE' causes a MEDIUM INCREASE in 'Private-public partnerships for "for-profit" products'
'Diverse students: Age, education, cultural' causes a STRONG INCREASE in 'Local engine for talent / inventiveness'
'Economic downturn' causes a STRONG INCREASE in 'Budget shortfalls in HE'
'Educational technology' causes a STRONG INCREASE in 'Diverse students: Age, education, cultural'
'Educational technology' causes a STRONG INCREASE in 'Less necessity for a campus'
'Less necessity for a campus' causes a MEDIUM DECREASE in 'Administration overhead'
'Less necessity for a campus' causes a MEDIUM DECREASE in 'Budget shortfalls in HE'
'Private-public partnerships for "for-profit" products' causes a MEDIUM DECREASE in 'Budget shortfalls in HE'
'Private-public partnerships for "for-profit" products' causes a STRONG INCREASE in 'Local engine for talent / inventiveness'
'Tax reductions' causes a STRONG INCREASE in 'Budget shortfalls in HE'

Causal map analysis. The following three tables present the most salient results from the analysis of Edward's causal map. Table 40 shows the map-level metrics calculated for the map alongside the average for all 20 participants. Table 41 shows the most prominent concepts in the map with the rationale for characterizing them as prominent. Table 42 shows prominent clusters in the map and includes all prominent occurrences of structural clusters (loops, islands, or trees) and content clusters (*a priori*—a content theme selected by the researcher—or emergent).

Table 40

Edward's Map-Level Metrics with Averages for All Participants

Metric	Description	Edward's Map	Group Avg
# of Concepts	# of concepts in map	9	20.00
# of Tails	# of concepts with only outgoing links	3	3.05
# of Heads	# of concepts with only incoming links	1	5.00
# of Ordinary	# of concepts w/incoming+outgoing links	5	11.95
# of Links	# of links in the map	11	35.55
Link-Concept Ratio	# of links divided by # of concepts	1.22	1.73
Head-Tail Ratio[a]	# of heads divided by # of tails	0.33	2.50

[a]In Table 10, I had used the term *Receiver-Transmitter Ratio* to reflect the terminology of Özesmi and Özesmi (2004), whose work I used in my early analyses. In this and following tables, I use the synonymous term *Head-Tail Ratio* to reflect the terminology of Eden and Ackermann, whose work I used in the later stages of my analyses.

Table 41

Edward's Prominent Map Concepts and Rationale for the Characterization

Concept	Rationale for Characterizing as Prominent
Budget shortfalls in HE	• Represents the central problem for HE • Highest Indegree • Highest Centrality • Highest DOMAIN links • Highest CENTRAL score • Part of 2-Way unequal (Positive/Negative) relationship with *Private-public partnerships for "for-profit" products*
Private-public partnerships for "for-profit" products	• 1 of 2 solutions presented for HE's central problem of *Budget shortfalls in HE* • Part of 2- Way unequal (Positive/Negative) relationship with *Budget shortfalls in HE* • 2nd highest Outdegree
Less necessity for a campus	• 1 of 2 solutions presented for HE's central problem of *Budget shortfalls in HE* • The only solution presented to HE's secondary but exacerbating problem of *Administrative overhead* • 2nd highest CENTRAL score
Educational technology	• Highest Outdegree • Of 3 TAILS, the only desirable one • Sole enabler of 1 of the 2 solutions: *Less need for campus*

Note: If words in a concept are in quotes, the participant had placed quotes around them in the original map. HE = Higher Education. HEI = Higher Education Institution. Other words in capital letters denote tools or named clusters in Decision Explorer. See the *Working with clusters* section of Chapter 4 for more information about the named clusters HEINSIDE, HEBOUNDARY, and HEOUTSIDE.

Table 42

Edward's Map Clusters with Descriptions

Category / Type	Description
Structural / Loop	1 Total loops, due solely to two-way links, so not prominent 2 Two-way links 3 Negative links
Content / *a priori*[a]	Concepts in each cluster HEINSIDE = 4 HEBOUNDARY = 3 HEOUTSIDE = 2 Prominent results of CSET analyses • Not enough concepts in the clusters for meaningful analyses

[a]*a priori* = A content theme the researcher selected for analysis in every map. For more information about the HEINSIDE, HEBOUNDARY, HEOUTSIDE analysis, see the *Working with clusters* section of Chapter 4.

How Edward thinks about corporatization.

How he structures the problem of corporatization. Edward's causal map is simple and focused. With only 9 concepts, it presents much less detail than most other maps in this group. With only 11 links and a much lower than average link-concept ratio, map relationships are few. These relationships are also primarily straightforward; although a handful of two-way and negative links adds a bit of complexity, the map has no prominent loops. Overall, the map makes it points without elaboration.

Edward's map focuses on the one problem at the center of corporatization and two opportunities to overcome that challenge. As depicted in his map, the problem is budget shortfalls in higher education, which are caused primarily by the economic downturn and tax reductions. Also contributing to budget shortfalls is administrative overhead in higher education. The map portrays, though, two factors that mitigate these budgetary challenges. One is the fact that, thanks to educational technology, there is less need for a physical campus. Technology "like webinars and online education" can reduce the costs of education, Edward explains, and the map shows that less need for a campus reduces both administrative overhead and budget shortfalls. The second factor that alleviates budget constraints is private-public partnerships for producing "for-profit" products. According to the map, these partnerships result from budget shortfalls, but, in return, they lessen those shortfalls by increasing revenue for the college or university. In addition, the combination of external partnerships and an increasingly diverse student population create the benefit of local engines for talent and inventiveness.

Like a lucky penny, the map seems to suggest, higher education has the unique capabilities needed to flip its financial challenges into newly minted benefits.

How he thinks about issues related to corporatization. Edward holds an optimistic view of higher education's role in society. Although he does not explicate his view of higher education's mission, he asserts that higher education advances society through technological innovation. "Many of the technological advances have come out of educational institutions," he says, and, in this way, higher education "delivers value to business and the general public." Edward sees this continuing into the future. From technological advances contributed by universities, he anticipates "fundamental changes in how we live" involving "less reliance on cars, greater ability to have information at our fingertips, [and] ability to advance our own lifestyle through educational opportunities that are basically free." In Edward's view, technological innovation improves society, and this type of innovation "is fundamental to higher education."

Edward brings the same optimism about technology to the issue of corporatization. Budget shortfalls, according to his causal map, are the central problem, but they can be solved through technology: Educational technology can reduce the cost of educational delivery, and the pursuit of technical innovation can lead to profitable endeavors with business partners.

Edward expresses no criticism of corporatization in higher education. In fact, if corporatization is the adoption of business practices, Edward recommends more of it. In particular, he suggests that higher education “embrace the understanding of organizations that has evolved in the business world.” This approach, he says, involves a top-down, hierarchical organization. The board holds “ultimate authority” to set goals for the institution—although they are subject to the control of the public or alumni just as corporate boards answer to shareholders. Below the board, officers—“principally the president”—carry out the established goals, and each level below that has clearly defined functions. Edward does not offer his view of how higher education is currently structured, but he contends this approach helps large organizations with decision-making and executing objectives. Claiming that the modern business environment combines structure with flexibility, Edward also suggests that higher education seek to adopt the speed and flexibility of large, technology start-ups. He does, though, acknowledge that those companies operate without the hindrance that governing statutes place on colleges and universities.

Brief profile of Edward. Edwards’s position at Evans State University is as an adjunct faculty member in the school of business. He does not have a Ph.D., but he holds a doctoral level professional degree in a field unrelated to business. Although Edward has been an adjunct faculty member at a variety of local colleges and universities for 20 years, this is not his primary work. For multiple decades, he has run his own professional consulting firm, which is unaffiliated with Evans State University. He has no experience with academic capitalism, and activities related to academic capitalism are not important to his position.

Emily

Causal map data. Emily's causal map data are represented in two forms below. Figure 39 shows the map data after conversion to the Decision Explorer software; it is a screenshot of the entire map as displayed in Decision Explorer. Table 43 shows the equivalent map data in the form of causal statements.

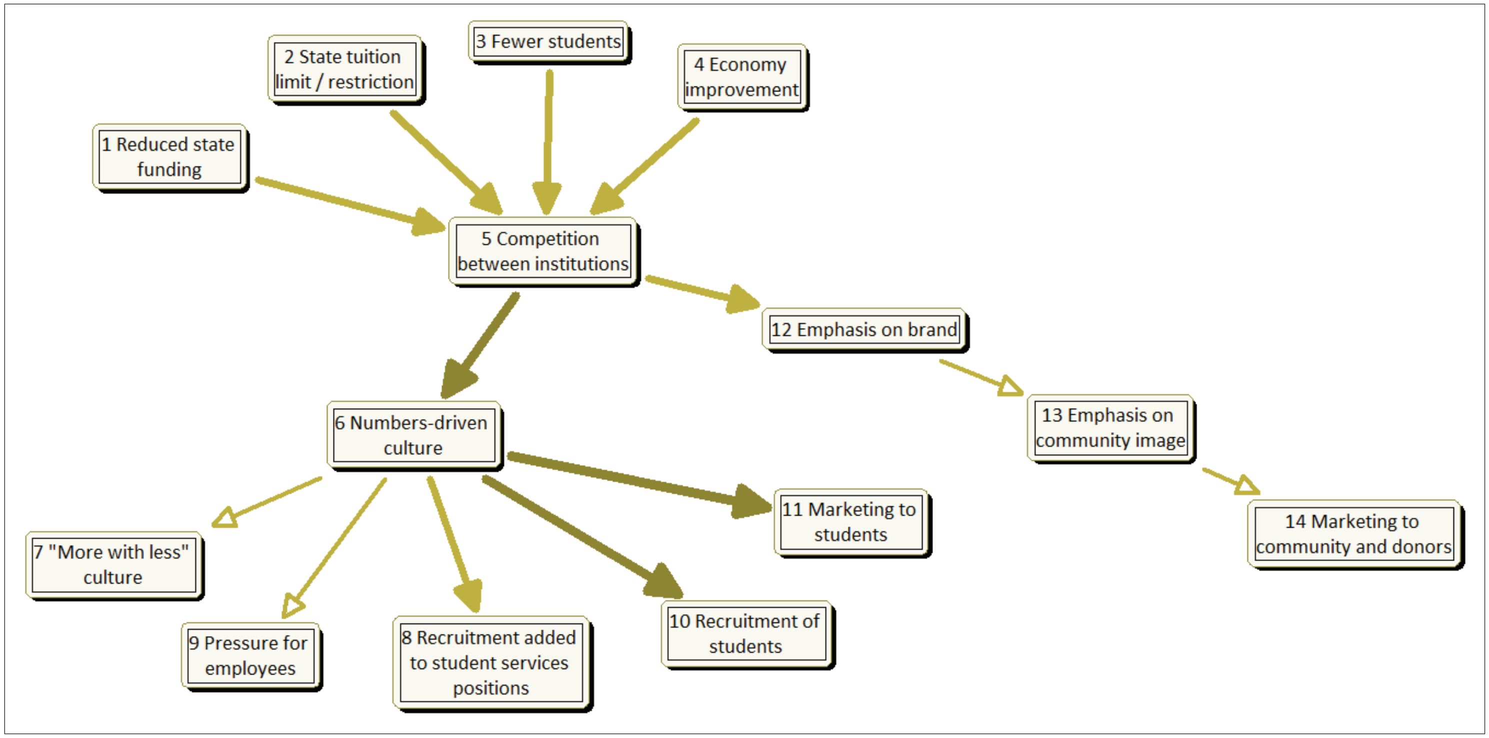

Figure 39. Screenshot of Emily's causal map after conversion to Decision Explorer. Increasingly thicker and darker lines depict increasingly stronger links. Any negative links are shown in blue and also have the label *N-* near the arrowhead.

Table 43

Emily's Causal Map Data Converted to Causal Statements

'Competition between institutions' causes a STRONG INCREASE in 'Emphasis on brand'
'Competition between institutions' causes a VERY STRONG INCREASE in 'Numbers-driven culture'
'Economy improvement' causes a STRONG INCREASE in 'Competition between institutions'
'Emphasis on brand' causes a MEDIUM INCREASE in 'Emphasis on community image'
'Emphasis on community image' causes a MEDIUM INCREASE in 'Marketing to community and donors'
'Fewer students' causes a STRONG INCREASE in 'Competition between institutions'
'Numbers-driven culture' causes a MEDIUM INCREASE in '"More with less" culture'
'Numbers-driven culture' causes a MEDIUM INCREASE in 'Pressure for employees'
'Numbers-driven culture' causes a STRONG INCREASE in 'Recruitment added to student services positions'
'Numbers-driven culture' causes a VERY STRONG INCREASE in 'Marketing to students'
'Numbers-driven culture' causes a VERY STRONG INCREASE in 'Recruitment of students'
'Reduced state funding' causes a STRONG INCREASE in 'Competition between institutions'
'State tuition limit / restriction' causes a STRONG INCREASE in 'Competition between institutions'

Causal map analysis. The following three tables present the most salient results from the analysis of Emily's causal map. Table 44 shows the map-level metrics calculated for the map alongside the average for all 20 participants. Table 45 shows the most prominent concepts in the map with the rationale for characterizing them as prominent. Table 46 shows prominent clusters in the map and includes all prominent occurrences of structural clusters (loops, islands, or trees) and content clusters (*a priori*—a content theme selected by the researcher—or emergent).

Table 44

Emily's Map-Level Metrics with Averages for All Participants

Metric	Description	Emily's Map	Group Avg
# of Concepts	# of concepts in map	14	20.00
# of Tails	# of concepts with only outgoing links	4	3.05
# of Heads	# of concepts with only incoming links	6	5.00
# of Ordinary	# of concepts w/incoming+outgoing links	4	11.95
# of Links	# of links in the map	13	35.55
Link-Concept Ratio	# of links divided by # of concepts	0.93	1.73
Head-Tail Ratio[a]	# of heads divided by # of tails	1.50	2.50

[a]In Table 10, I had used the term *Receiver-Transmitter Ratio* to reflect the terminology of Özesmi and Özesmi (2004), whose work I used in my early analyses. In this and following tables, I use the synonymous term *Head-Tail Ratio* to reflect the terminology of Eden and Ackermann, whose work I used in the later stages of my analyses.

Table 45

Emily's Prominent Map Concepts and Rationale for the Characterization

Concept	Rationale for Characterizing as Prominent
Competition between HEIs	• Highest Indegree by far • Tied with 1 other for highest Centrality • Tied with 1 other for highest DOMAIN links • Highest CENTRAL score
Numbers-driven culture	• Highest Outdegree by far • Tied with 1 other for highest Centrality • Tied with 1 other for highest DOMAIN links • 2nd highest CENTRAL score

Note: If words in a concept are in quotes, the participant had placed quotes around them in the original map. HE = Higher Education. HEI = Higher Education Institution. Other words in capital letters denote tools or named clusters in Decision Explorer. See the *Working with clusters* section of Chapter 4 for more information about the named clusters HEINSIDE, HEBOUNDARY, and HEOUTSIDE.

Table 46

Emily's Map Clusters with Descriptions

Category / Type	Description
Structural / Loop	0 Total loops 0 Two-way links 0 Negative links
Content / *a priori*[a]	Concepts in each cluster HEINSIDE = 7 HEBOUNDARY = 3 HEOUTSIDE = 4 Prominent results of CSET analyses • HEOUTSIDE concepts have no effect on each other and each HEOUTSIDE concept influences every HEINSIDE concept • HEINSIDE concepts have no effect on each other and no effect on HEOUTSIDE concepts

[a]*a priori* = A content theme the researcher selected for analysis in every map. For more information about the HEINSIDE, HEBOUNDARY, HEOUTSIDE analysis, see the *Working with clusters* section of Chapter 4.

How Emily thinks about corporatization.

How she structures the problem of corporatization. Emily's causal map is uncomplicated and focused. It has somewhat fewer concepts than average, indicating it presents somewhat less detail than other maps in this group. It also has many fewer links than average, due in part to the fewer concepts and in part to a lower than average link-concept ratio. In addition, the map has no negative links, two-way links, or loops, a trait that highlights the straightforward nature of the relationships. Overall, the map emphasizes specific issues without significant elaboration.

The map shows that four strong sociopolitical forces cause two critical changes within the higher education system; these changes eventually result in numerous, mostly unwelcome changes for those who work in student services—and possibly for others as well. The sociopolitical forces, all equally strong, are reduced state funding, state limits and restrictions on tuition, fewer students, and an improved economy. Together, they trigger competition between institutions of higher education, and the competition very strongly produces a numbers-driven culture. This cultural shift has consequences: It creates enormous emphasis on the marketing and recruitment of students; it causes recruitment functions to be added to student services positions; it creates a "more-with-less" culture; and it increases pressure on employees. In addition, the competition between institutions results in greater emphases on branding, community image, and marketing to the community and to donors.

The analysis of internal and external forces underscores the map's depiction of external forces as having powerful, one-way influence on higher education. Each of the external forces influences every force inside higher education, but higher education forces have no effect in return; colleges and universities, in the map's portrayal, have no influence on the sociopolitical dynamics that surround them. In addition, forces inside higher education have little influence on each other. Like a snapshot of fireworks, the overall dynamic of the map is somewhat static; it seems to capture a moment when powerful external forces set off a burst of change within higher education.

How she thinks about issues related to corporatization. In conversation about corporatization, Emily refers to the mission of higher education as educating and serving students. "Educating students," she says, "is the "core mission, but "we're also here to serve [them]." "We want," she says, to retain them, help them, graduate them, and provide them with "a good, positive experience."

When expressing her views about corporatization, Emily acknowledges the importance of business practices but conveys her concern that they could overwhelm the higher education mission. Meeting budgets, establishing targets, conducting market research, managing investments, developing donor relationships—all of these, she says, are necessary. Yet, she advises, "Let's not lose sight of the core mission in the process!" Let's not, she warns, invest so heavily in recruitment that recruited students "are STUNNED when they get here, because employees are off trying to get more people in!" These comments echo her causal map, in which the marketing and recruiting of students are the dominant outcomes of a numbers-oriented culture.

Emily also reports that corporatization is having undesirable effects on student services staff. Consonant with her causal map, she reports that job duties have metamorphosed into hybrids of service and recruitment. In her own job, for example, she now spends half of her time on student recruitment despite the fact that she considers student services to be her profession. She also says that student services staff experience increasing pressure to meet recruitment goals and that they operate in a culture that tries to do "more with less." As she relates, these staff members also feel powerless:

> But, in a way, our hands are tied. We can talk it out, but we're not in a position to change anything. The facts are the facts in terms of, "This is what we need to make budget. And we need this many more students to come in." I can't change any of those things.

All of Emily's recommendations for responding to corporatization target the internal dynamics of higher education, which is consistent with a causal map that portrays higher education with no influence on external forces. Emily recommends—first and foremost—that higher education never forget that its primary mission is to educate students. Next, she suggests that higher education recall that student retention efforts lessen the need for student recruitment; "let's keep everyone we get," she says. Finally, she proposes that higher education recognize that student retention is its own form of marketing and branding; people notice, word travels, and "it speaks for itself," she maintains.

Thinking about the future of higher education, Emily finds inspiration in the possibility that higher education will provide students with such a "great experience," that students will "want to give back to higher education." This is the story of her own career, and she recalls the past:

> I wanted to get into higher education, because I had such a positive experience. When I discovered that I could get a graduate degree and do this, I thought, "Of course! This is what I want to do! Why wouldn't I want to do that?" My experience was so great that I thought, "Of course, this is the culture that I want to spend my working career in."

Brief profile of Emily. Emily's position at Evans State University is within the middle administration of student affairs. She has worked in higher education for approximately 15 years and does not have professional experience outside of higher education. Emily has significant experience with academic capitalism including marketing, branding, business plans, managing marketing lists and databases, and marketing-related data analysis. Activities related to academic capitalism have become increasingly important to her current position.

Erica

Causal map data. Erica's causal map data are represented in two forms below. Figure 40 shows the map data after conversion to the Decision Explorer software; it is a screenshot of the entire map as displayed in Decision Explorer. Table 47 shows the equivalent map data in the form of causal statements.

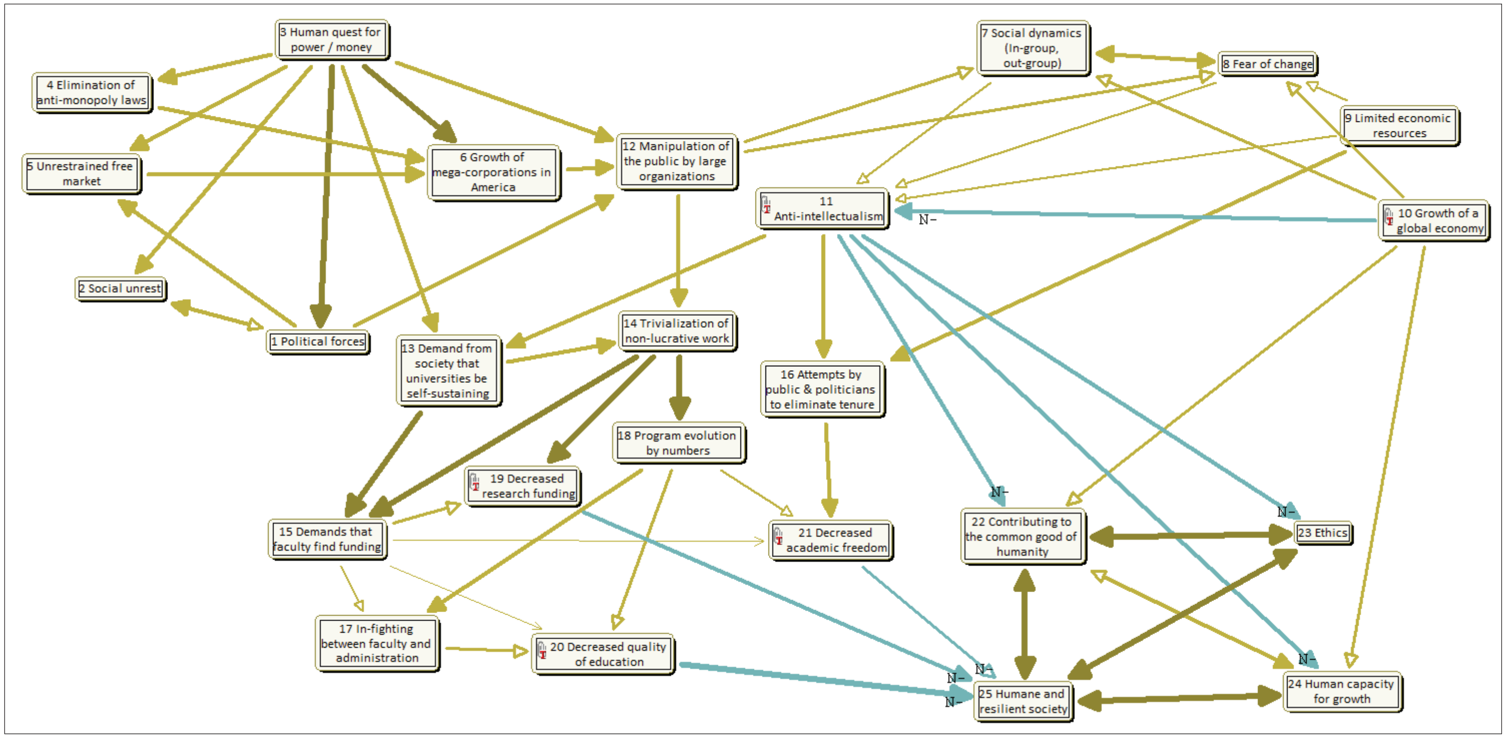

Figure 40. Screenshot of Erica's causal map after conversion to Decision Explorer. Increasingly thicker and darker lines depict increasingly stronger links. Any negative links are shown in blue and also have the label *N-* near the arrowhead.

Table 47

Erica's Causal Map Data Converted to Causal Statements

'Anti-intellectualism' causes a STRONG DECREASE in 'Contributing to the common good of humanity'
'Anti-intellectualism' causes a STRONG DECREASE in 'Ethics'
'Anti-intellectualism' causes a STRONG DECREASE in 'Human capacity for growth'
'Anti-intellectualism' causes a STRONG INCREASE in 'Attempts by public & politicians to eliminate tenure'
'Anti-intellectualism' causes a STRONG INCREASE in 'Demand from society that universities be self-sustaining'
'Attempts by public & politicians to eliminate tenure' causes a STRONG INCREASE in 'Decreased academic freedom'
'Contributing to the common good of humanity' causes a STRONG INCREASE in 'Human capacity for growth'
'Contributing to the common good of humanity' causes a VERY STRONG INCREASE in 'Ethics'
'Contributing to the common good of humanity' causes a VERY STRONG INCREASE in 'Humane and resilient society'
'Decreased academic freedom' causes a MEDIUM DECREASE in 'Humane and resilient society'
'Decreased quality of education' causes a VERY STRONG DECREASE in 'Humane and resilient society'
'Decreased research funding' causes a STRONG DECREASE in 'Humane and resilient society'
'Demand from society that universities be self-sustaining' causes a STRONG INCREASE in 'Trivialization of non-lucrative work'
'Demand from society that universities be self-sustaining' causes a VERY STRONG INCREASE in 'Demands that faculty find funding'
'Demands that faculty find funding' causes a MEDIUM INCREASE in 'Decreased research funding'
'Demands that faculty find funding' causes a VERY WEAK INCREASE in 'Decreased quality of education'
'Demands that faculty find funding' causes a VERY WEAK INCREASE in 'Decreased academic freedom'
'Demands that faculty find funding' causes a WEAK INCREASE in 'In-fighting between faculty and administration'
'Elimination of anti-monopoly laws' causes a STRONG INCREASE in 'Growth of mega-corporations in America'
'Ethics' causes a VERY STRONG INCREASE in 'Contributing to the common good of humanity'
'Ethics' causes a VERY STRONG INCREASE in 'Humane and resilient society'
'Fear of change' causes a STRONG INCREASE in 'Social dynamics (In-group, out-group)'
'Fear of change' causes a WEAK INCREASE in 'Anti-intellectualism'
'Growth of a global economy' causes a MEDIUM INCREASE in 'Contributing to the common good of humanity'
'Growth of a global economy' causes a MEDIUM INCREASE in 'Fear of change'
'Growth of a global economy' causes a MEDIUM INCREASE in 'Human capacity for growth'
'Growth of a global economy' causes a MEDIUM INCREASE in 'Social dynamics (In-group, out-group)'
'Growth of a global economy' causes a STRONG DECREASE in 'Anti-intellectualism'
'Growth of mega-corporations in America' causes a STRONG INCREASE in 'Manipulation of the public by large organizations'
'Human capacity for growth' causes a MEDIUM INCREASE in 'Contributing to the common good of humanity'
'Human capacity for growth' causes a VERY STRONG INCREASE in 'Humane and resilient society'
'Human quest for power / money' causes a STRONG INCREASE in 'Demand from society that universities be self-sustaining'
'Human quest for power / money' causes a STRONG INCREASE in 'Elimination of anti-monopoly laws'
'Human quest for power / money' causes a STRONG INCREASE in 'Manipulation of the public by large organizations'
'Human quest for power / money' causes a STRONG INCREASE in 'Social unrest'
'Human quest for power / money' causes a STRONG INCREASE in 'Unrestrained free market'
'Human quest for power / money' causes a VERY STRONG INCREASE in 'Political forces'
'Human quest for power / money' causes a VERY STRONG INCREASE in 'Growth of mega-corporations in America'
'Humane and resilient society' causes a VERY STRONG INCREASE in 'Contributing to the common good of humanity'
'Humane and resilient society' causes a VERY STRONG INCREASE in 'Ethics'
'Humane and resilient society' causes a VERY STRONG INCREASE in 'Human capacity for growth'
'In-fighting between faculty and administration' causes a MEDIUM INCREASE in 'Decreased quality of education'
'Limited economic resources' causes a STRONG INCREASE in 'Attempts by public & politicians to eliminate tenure'
'Limited economic resources' causes a WEAK INCREASE in 'Anti-intellectualism'
'Limited economic resources' causes a WEAK INCREASE in 'Fear of change'
'Manipulation of the public by large organizations' causes a MEDIUM INCREASE in 'Social dynamics (In-group, out-group)'
'Manipulation of the public by large organizations' causes a MEDIUM INCREASE in 'Fear of change'
'Manipulation of the public by large organizations' causes a STRONG INCREASE in 'Trivialization of non-lucrative work'
'Political forces' causes a STRONG INCREASE in 'Manipulation of the public by large organizations'
'Political forces' causes a STRONG INCREASE in 'Social unrest'
'Political forces' causes a STRONG INCREASE in 'Unrestrained free market'
'Program evolution by numbers' causes a MEDIUM INCREASE in 'Decreased quality of education'
'Program evolution by numbers' causes a STRONG INCREASE in 'In-fighting between faculty and administration'
'Program evolution by numbers' causes a WEAK INCREASE in 'Decreased academic freedom'
'Social dynamics (In-group, out-group)' causes a STRONG INCREASE in 'Fear of change'
'Social dynamics (In-group, out-group)' causes a WEAK INCREASE in 'Anti-intellectualism'
'Social unrest' causes a MEDIUM INCREASE in 'Political forces'
'Trivialization of non-lucrative work' causes a VERY STRONG INCREASE in 'Demands that faculty find funding'
'Trivialization of non-lucrative work' causes a VERY STRONG INCREASE in 'Program evolution by numbers'
'Trivialization of non-lucrative work' causes a VERY STRONG INCREASE in 'Decreased research funding'
'Unrestrained free market' causes a STRONG INCREASE in 'Growth of mega-corporations in America'

Causal map analysis. The following three tables present the most salient results from the analysis of Erica's causal map. Table 48 shows the map-level metrics calculated for the map alongside the average for all 20 participants. Table 49 shows the most prominent concepts in the map with the rationale for characterizing them as prominent. Table 50 shows prominent clusters in the map and includes all prominent occurrences of structural clusters (loops, islands, or trees) and content clusters (*a priori*—a content theme selected by the researcher—or emergent).

Table 48

Erica's Map-Level Metrics with Averages for All Participants

Metric	Description	Erica's Map	Group Avg
# of Concepts	# of concepts in map	25	20.00
# of Tails	# of concepts with only outgoing links	3	3.05
# of Heads	# of concepts with only incoming links	0	5.00
# of Ordinary	# of concepts w/incoming+outgoing links	22	11.95
# of Links	# of links in the map	61	35.55
Link-Concept Ratio	# of links divided by # of concepts	2.44	1.73
Head-Tail Ratio[a]	# of heads divided by # of tails	N/A[b]	2.50

[a]In Table 10, I had used the term *Receiver-Transmitter Ratio* to reflect the terminology of Özesmi and Özesmi (2004), whose work I used in my early analyses. In this and following tables, I use the synonymous term *Head-Tail Ratio* to reflect the terminology of Eden and Ackermann, whose work I used in the later stages of my analyses. [b]N/A because the numerator, number of heads, is zero.

Table 49

Erica's Prominent Map Concepts and Rationale for the Characterization

Concept	Rationale for Characterizing as Prominent
Humane and resilient society	• Verbally expressed as ultimate goal of higher ed • 1 of the 2 stronger beneficent human capacities • Part of all 3 self-reinforcing loops of virtue formed by links of 4 beneficent human capacities • Highest Indegree • Highest Centrality • Tied with 1 other for highest DOMAIN links

Contributing to the common good of humanity	• 1 of the 2 strongest beneficent human capacities • Part of all 3 self-reinforcing loops of virtue formed by links of 4 beneficent human capacities • 2nd highest Indegree • 2nd highest Centrality • 2nd highest DOMAIN links
Human capacity for growth	• 1 of the 2 less strong beneficent human capacities • Part of 2 of 3 self-reinforcing loops of virtue formed by links of 4 beneficent human capacities • 3rd highest Indegree
Ethics	• 1 of the 2 less strong beneficent human capacities • Part of 2 of 3 self-reinforcing loops of virtue formed by links of 4 beneficent human capacities • 4th highest Indegree
Anti-intellectualism	• Strongest opposing force to ultimate goal of *Humane and resilient society*, based on cluster analyses • Tied with 1 other for 3rd highest Centrality • Tied with 1 other for highest DOMAIN links
Manipulation of the public by large organizations	• Tied with 3 others for 2nd highest CENTRAL score • Only concept that links political forces cluster with social forces cluster
Trivialization of non-lucrative work	• Tied with 3 others for 2nd highest CENTRAL score • 1 of 3 concepts that bridge sociopolitical forces and HE dynamics
Demand from society that universities be self-sustaining	• Tied with 3 others for 2nd highest CENTRAL score • 1 of 3 concepts that bridge sociopolitical forces and HE dynamics
Demands that faculty find funding	• Tied with 3 others for 2nd highest CENTRAL
Human quest for power/money	• 1 of only 3 TAILS • Highest Outdegree • Tied with 1 other for 3rd highest centrality • 4th highest DOMAIN links
Growth of a global economy	• 1 of only 3 TAILS • Plays important but conflicting role in creating a *Humane, resilient society*, based on cluster analysis

Note: If words in a concept are in quotes, the participant had placed quotes around them in the original map. HE = Higher Education. HEI = Higher Education Institution. Other words in capital letters denote tools or named clusters in Decision Explorer. See the *Working with clusters* section of Chapter 4 for more information about the named clusters HEINSIDE, HEBOUNDARY, and HEOUTSIDE.

Table 50

Erica's Map Clusters with Descriptions

Category / Type	Description
Structural / Loop	726 Total loops 14 Two-way links 7 Negative links Sheer complexity of relationships is prominent trait of map Indicates highly interdependent dynamics Exceeds loops in other maps except outlier Daniel's 3,500+ loops Exceeds my ability to analyze or determine prominence Noticed 3 virtuous, self-reinforcing, Very Strong loops involving: *Humane and resilient society* *Contributing to the common good of humanity* *Human capacity for growth* *Ethics*
Content / *a priori*[a]	Concepts in each cluster HEINSIDE = 6 HEBOUNDARY = 3 HEOUTSIDE = 12 HESHARED = 4 (Beneficent human capacities) Prominent results of CSET analyses • HEOUTSIDE concepts have uneven influence on each other and each HEOUTSIDE concept influences every concept in every other set: HEINSIDE, HEBOUNDARY, and HESHARED • HEINSIDE concepts have uneven influence on each other; each HEINSIDE concept effects every HESHARED; and HEINSIDE concepts have zero effect on HEOUTSIDE concepts • HESHARED concepts have no effect on concepts in other sets but are affected by every concept in every other set
Content / Emergent	Negative political dynamics (7) Negative social dynamics (5) Negative effects of sociopolitical dynamics for higher education (9) Beneficial human capacities (4)

[a]*a priori* = A content theme the researcher selected for analysis in every map. For more information about the HEINSIDE, HEBOUNDARY, HEOUTSIDE analysis, see the *Working with clusters* section of Chapter 4.

How Erica thinks about corporatization. Both in her causal map and in conversation, Erica first places the issue of corporatization within a larger theoretical framework and then seeks to delineate its role in that context.

A foundational idea of her framework is that human beings have innate and often unconscious drives that underlie their behavior. Referring to the existential psychiatrist Irvin Yalom, she says "he identified four of what he called 'existential givens' that drive human behavior...death, isolation, meaninglessness, and powerlessness." How aware people are of these issues and how well they cope with them, she explains, determines whether their behavior has positive or negative consequences for themselves and others. On the negative side, she says, "violent crime and rape" are extreme behaviors that "stem from innate urges we don't manage well." Human drives and the gamut of human behavior play out in the larger society, Erica says, creating the aggregate social and political dynamics of that society.

A second foundational idea of her framework is that the ultimate goal is to create "a humane and resilient society" and that the purpose of higher education is to help achieve that goal. Although higher education is not the only route, she contends, "high quality education positively impacts the potential for society to get there." In fact, she says, "I don't think higher ed has a purpose if it's not to contribute positively to society. Humanity. The earth. Whatever you want to call it."

How she structures the problem of corporatization. In its overall organization, Erica's causal map reflects her theoretical framework. Although she does not include human drives on the map, she depicts a cluster of political dynamics and a cluster of social dynamics that—she explains verbally—result from those drives. She includes a concept on the map for the goal of a humane and resilient society and identifies three beneficial human capacities that support that goal. Then she details the forces—including those related to higher education—that stem from the sociopolitical dynamics and either help or hinder the attainment of that desired society. The map consists of 25 concepts, which is somewhat more than the average and indicates a somewhat more detailed map, and 61 links, which is much higher than average and indicates highly complex relationships. In addition, the map has significant numbers of two-way and negative links and an enormous number of loops (726); together, these traits accentuate the highly intricate and interdependent nature of the map's relationships.

With one exception, all concepts contained in the political and social clusters are uniformly undesirable; apparently, they reflect dysfunctional responses to human drives. The political cluster, as defined by Erica, includes the human quest for power and money, an unrestrained free market, elimination of anti-monopoly laws, growth of mega-corporations, manipulation of the public by large organizations, and social unrest. The social cluster, as defined by Erica, includes in-group/out-group dynamics, fear of change, limited economic resources, and—the most potent of the group—anti-intellectualism; anti-intellectualism is portrayed as the strongest opposing force to a humane and resilient society. The social cluster also contains the one concept with desirable effects, though its influence is mixed; growth of a global economy is desirable because it decreases anti-intellectualism and increases human capacity for growth and contributing to the common good and undesirable because it increases in-group/out-group dynamics and the fear of change.

Together, these sociopolitical forces lead to a number of highly undesirable consequences for higher education, consequences that ultimately undermine its purpose. The most potent are the trivialization of non-lucrative work and the demand from society that universities be self-sustaining, but another, attempts by the public and politicians to eliminate tenure, also contributes. The result is a cascade of undesirable dynamics operating inside higher education: program management based on numbers rather than quality, decreased research funding, demand that faculty find funding, decreased academic freedom, in-fighting between faculty and administration, and decreased quality of education. In the end, through these internal dynamics, higher education decreases—not increases—the likelihood of attaining a humane and resilient society.

Although corporatization overturns higher education's ability to improve society, the map depicts three beneficial human capacities that can contribute. The human capacity for growth, contributing to the common good, and ethics each support the goal of a humane and resilient society. All four interact with each other in very strong, self-reinforcing loops that have the potential for an ever-increasing growth in human virtue. At the same time, the four have no influence outside of themselves, which suggests their strength or weakness depends on forces elsewhere in the map. Because they are influenced by all other map concepts and because they are poised to self-amplify, though, the potential exists for small improvements anywhere in the map to result in reverberations that magnify the increased virtue. Like a treasure map, Erica's causal map locates the treasure and diagrams both clearings and obstacles on the way to get there.

The analysis of internal and external forces echoes the map's depiction of powerful sociopolitical forces driving unfortunate change in society and in higher education. Each external force in the map influences every non-external concept in the map. In contrast, undesirable forces inside higher education undermine the goal of an improved society, yet have no influence on the sociopolitical dynamics that produce them.

How she thinks about issues related to corporatization. Consistent with her causal map, Erica expresses the view that a humane and resilient society is the ultimate goal of humanity, and that higher education exists to further that goal. She acknowledges that some view higher education as "a mechanism for jobs in society," and she thinks higher education can contribute to both goals. Yet, she contends, the betterment of society is "the goal that matters," and job-focused education is "a means to that end."

As she conveyed in her causal map, Erica views corporatization as the outcome of negative sociopolitical dynamics that originate in innate, unconscious, and unsuccessfully resolved human drives. She describes corporatization both as "a manifestation of those drives and instincts that have been allowed to run full force without checks on them" and as a manipulator of those drives and instincts. For example, she says, "the growth of mega-corporations in America" reflects the unbridled quest for money and power, and the rise of PACs (Political Action Committees)—"created for the purpose of social engineering"—demonstrates the way "large organizations manipulate the drives and instincts of the public." Corporatization, she asserts, is occurring throughout society, not just higher education. Yet, its appearance in higher education, she says, is particularly consequential, because it interferes with higher education's ability to contribute to a humane and resilient society.

In terms of responding to corporatization, Erica thinks in terms of the larger society; she first contemplates what the barriers are to a humane, resilient society, then asks what can be done to remove those barriers, and finally considers what higher education can do. The barriers, she says, are the negative social dynamics and negative political dynamics that she articulates in her causal map; they arise from human drives and interfere with the improvement of society. To remove those barriers, she says, society needs education: education before college, during college, and after college; education that teaches people how to think, how to critique, and how to form opinions; education that fosters curiosity, encourages questioning, and discourages conformity; education that "combats anti-intellectualism," communicates the purpose of research, and opens eyes to the value of knowledge; and, most critically, education that helps people at all ages learn to deal positively with their own human drives. "We have GOT to do a better job," she insists, and she prescribes this agenda for all levels of education.

Quality education, Erica maintains, is vital at all levels, but higher education has a particular set of responsibilities. First, she says, higher education should teach college students using her recommended agenda, because that agenda may be an answer to corporatization and an antidote for social ills. Second, she asserts, higher education has the critical responsibility to educate the educators of children. In so doing, she says, it should inculcate in those new teachers the same educational approach, thereby seeding generational progress in society. Third, Erica says, higher education should prioritize research that can be used to improve the educational system in America—a system, she claims, that is "basically, the Prussian system of education, a kind of indoctrination very much modeled on factory workers." Fourth, Erica recommends that faculty engage in service to their communities instead of always "chairing a committee" in "the ivory tower." Faculty, she says, have the potential to connect community members with the institution and to share with them "what we know." Finally, in order to enact this agenda, faculty need to "fight for education quality." Although Erica thinks administrators are being "forced to focus on the bottom line out of necessity," she also holds that "faculty

[have] an important responsibility to push back." And she believes faculty need strong unions and a strong tenure system in order to do so.

In her recommendations, Erica addresses the causes of corporatization she portrays in her causal map: the negative sociopolitical forces that impede higher education's ability to contribute to society. She designs her educational prescriptions to mitigate the problem of poorly resolved human drives, the root cause, as well as anti-intellectualism and the public's vulnerability to manipulation, some of the most harmful consequences. In addition, she prescribes a course of action for turning back the effects of corporatization within higher education. The only disjunction between her causal map and her suggestions is that her map portrays higher education as having no influence on the public or on the sociopolitical forces that shape it, while her recommendations require that agency within higher education. Yet, the map depicts the present state, and the suggestions depict a desired future state; they may be compatible in the sense that Erica seeks unprecedented action from higher education.

Brief profile of Erica. Erica's position at Evans State University is as a tenure-track faculty member in a professional field, and she holds a Ph.D. in her discipline. She has worked in higher education for approximately 5 years and characterizes it as her "second career." Before taking her current position, Erica had significant work experience in a professional role in the non-profit sector and served as an adjunct faculty member during that time. She has had no experience with academic capitalism and says that these activities are "not at all" important to her current position.

Frank

Causal map data. Frank's causal map data are represented in two forms below. Figure 41 shows the map data after conversion to the Decision Explorer software; it is a screenshot of the entire map as displayed in Decision Explorer. Table 51 shows the equivalent map data in the form of causal statements.

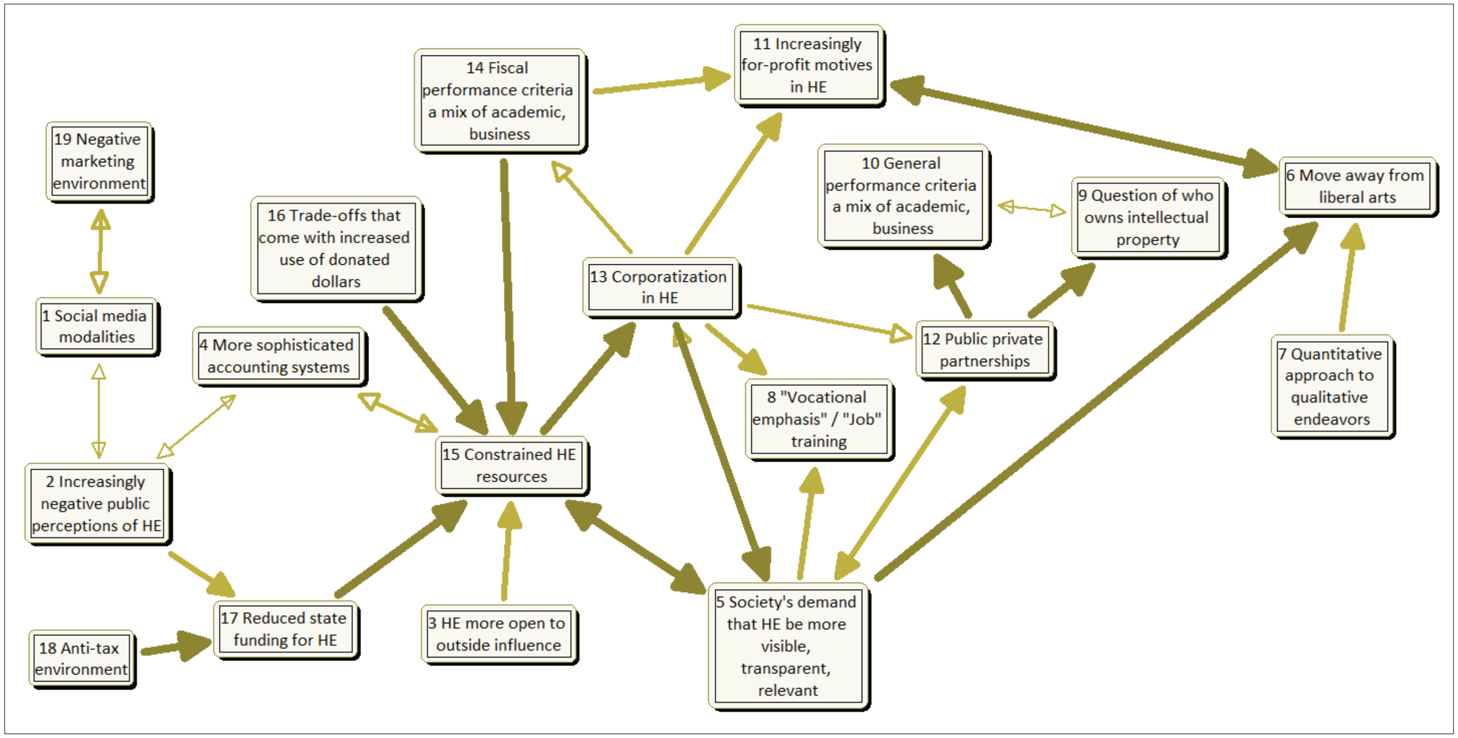

Figure 41. Screenshot of Frank's causal map after conversion to Decision Explorer. Increasingly thicker and darker lines depict increasingly stronger links. Any negative links are shown in blue and also have the label *N-* near the arrowhead.

Table 51

Frank's Causal Map Data Converted to Causal Statements

'Anti-tax environment' causes a VERY STRONG INCREASE in 'Reduced state funding for HE'
'Constrained HE resources' causes a MEDIUM INCREASE in 'More sophisticated accounting systems'
'Constrained HE resources' causes a VERY STRONG INCREASE in 'Corporatization in HE'
'Constrained HE resources' causes a VERY STRONG INCREASE in 'Society's demand that HE be more visible, transparent, relevant'
'Corporatization in HE' causes a MEDIUM INCREASE in 'Fiscal performance criteria a mix of academic, business'
'Corporatization in HE' causes a MEDIUM INCREASE in 'Public private partnerships'
'Corporatization in HE' causes a STRONG INCREASE in '"Vocational emphasis" / "Job" training'
'Corporatization in HE' causes a STRONG INCREASE in 'Increasingly for-profit motives in HE'
'Corporatization in HE' causes a VERY STRONG INCREASE in 'Society's demand that HE be more visible, transparent, relevant'
'Fiscal performance criteria a mix of academic, business' causes a STRONG INCREASE in 'Increasingly for-profit motives in HE'
'Fiscal performance criteria a mix of academic, business' causes a VERY STRONG INCREASE in 'Constrained HE resources'
'General performance criteria a mix of academic, business' causes a WEAK INCREASE in 'Question of who owns intellectual property'
'HE more open to outside influence' causes a STRONG INCREASE in 'Constrained HE resources'
'Increasingly for-profit motives in HE' causes a VERY STRONG INCREASE in 'Move away from liberal arts'
'Increasingly negative public perceptions of HE' causes a STRONG INCREASE in 'Reduced state funding for HE'
'Increasingly negative public perceptions of HE' causes a WEAK INCREASE in 'Social media modalities'
'Increasingly negative public perceptions of HE' causes a WEAK INCREASE in 'More sophisticated accounting systems'
'More sophisticated accounting systems' causes a MEDIUM INCREASE in 'Constrained HE resources'
'More sophisticated accounting systems' causes a WEAK INCREASE in 'Increasingly negative public perceptions of HE'
'Move away from liberal arts' causes a VERY STRONG INCREASE in 'Increasingly for-profit motives in HE'
'Negative marketing environment' causes a MEDIUM INCREASE in 'Social media modalities'
'Public private partnerships' causes a STRONG INCREASE in 'Society's demand that HE be more visible, transparent, relevant'
'Public private partnerships' causes a VERY STRONG INCREASE in 'General performance criteria a mix of academic, business'
'Public private partnerships' causes a VERY STRONG INCREASE in 'Question of who owns intellectual property'
'Quantitative approach to qualitative endeavors' causes a STRONG INCREASE in 'Move away from liberal arts'
'Question of who owns intellectual property' causes a WEAK INCREASE in 'General performance criteria a mix of academic, business'
'Reduced state funding for HE' causes a VERY STRONG INCREASE in 'Constrained HE resources'
'Social media modalities' causes a MEDIUM INCREASE in 'Negative marketing environment'
'Social media modalities' causes a WEAK INCREASE in 'Increasingly negative public perceptions of HE'
'Society's demand that HE be more visible, transparent, relevant' causes a VERY STRONG INCREASE in 'Move away from liberal arts'
'Society's demand that HE be more visible, transparent, relevant' causes a STRONG INCREASE in '"Vocational emphasis" / "Job" training'
'Society's demand that HE be more visible, transparent, relevant' causes a STRONG INCREASE in 'Public private partnerships'
'Society's demand that HE be more visible, transparent, relevant' causes a MEDIUM INCREASE in 'Corporatization in HE'
'Society's demand that HE be more visible, transparent, relevant' causes a VERY STRONG INCREASE in 'Constrained HE resources'
'Trade-offs that come with increased use of donated dollars' causes a VERY STRONG INCREASE in 'Constrained HE resources'

Causal map analysis. The following three tables present the most salient results from the analysis of Frank's causal map. Table 52 shows the map-level metrics calculated for the map alongside the average for all 20 participants. Table 53 shows the most prominent concepts in the map with the rationale for characterizing them as prominent. Table 54 shows prominent clusters in the map and includes all prominent occurrences of structural clusters (loops, islands, or trees) and content clusters (*a priori*—a content theme selected by the researcher—or emergent).

Table 52

Frank's Map-Level Metrics with Averages for All Participants

Metric	Description	Frank's Map	Group Avg
# of Concepts	# of concepts in map	19	20.00
# of Tails	# of concepts with only outgoing links	4	3.05
# of Heads	# of concepts with only incoming links	1	5.00
# of Ordinary	# of concepts w/incoming+outgoing links	14	11.95
# of Links	# of links in the map	35	35.55
Link-Concept Ratio	# of links divided by # of concepts	1.84	1.73
Head-Tail Ratio[a]	# of heads divided by # of tails	0.25	2.50

[a]In Table 10, I had used the term *Receiver-Transmitter Ratio* to reflect the terminology of Özesmi and Özesmi (2004), whose work I used in my early analyses. In this and following tables, I use the synonymous term *Head-Tail Ratio* to reflect the terminology of Eden and Ackermann, whose work I used in the later stages of my analyses.

Table 53

Frank's Prominent Map Concepts and Rationale for the Characterization

Concept	Rationale for Characterizing as Prominent
Constrained HE resources	• Visually stands out as a busy, central factor • Part of a 3-Way, Very Strong, self-sustaining, undesirable loop with *Society's demand that HE be more visible, transparent, relevant* and *Corporatization* • Highest Indegree by far • Highest Centrality • Highest DOMAIN links • Highest CENTRAL score
Society's demand that HE be more visible, transparent, relevant	• Visually stands out as busy, central factor • Part of a 3-Way, Very Strong, self-reinforcing, undesirable loop with *Constrained HE resources* and *Corporatization* • Highest Outdegree • 2nd highest Centrality • 2nd highest DOMAIN links
Corporatization	• Visually stands out as busy factor • Part of a 3-Way, Very Strong, self-reinforcing, undesirable loop with *Society's demand that HE be more visible, transparent, relevant* and *Constrained HE resources* • 2nd highest Outdegree • 3rd highest Centrality • 3rd highest DOMAIN links • 2nd highest CENTRAL (10)

Note: If words in a concept are in quotes, the participant had placed quotes around them in the original map. HE = Higher Education. HEI = Higher Education Institution. Other words in capital letters denote tools or named clusters in Decision Explorer. See the *Working with clusters* section of Chapter 4 for more information about the named clusters HEINSIDE, HEBOUNDARY, and HEOUTSIDE.

Table 54

Frank's Map Clusters with Descriptions

Category / Type	Description
Structural / Loop	151 Total loops 18 Two-way links 0 Negative links Complexity of relationships is prominent trait of map Indicates very interdependent dynamics Exceeds my ability to analyze or determine prominence Used visual inspection to detect 1 particularly prominent loop • Vicious cycle self-reinforcing at Very Strong strength *Society's demand that HE be more visible, transparent, relevant* *Constrained HE resources* *Corporatization in HE*
Content / *a priori*[a]	Concepts in each cluster HEINSIDE = 10 HEBOUNDARY = 3 HEOUTSIDE = 6 Prominent results of CSET analyses • Almost every HEOUTSIDE concept affects almost every other concept in the map • Half of the HEINSIDE concepts affect almost all of the HEOUTSIDE concepts; an unusually high level of influence

[a]*a priori* = A content theme the researcher selected for analysis in every map. For more information about the HEINSIDE, HEBOUNDARY, HEOUTSIDE analysis, see the *Working with clusters* section of Chapter 4.

How Frank thinks about corporatization.

How he structures the problem of corporatization. Frank's causal map contains a diverse set of concepts interacting in complex ways. The number of concepts is about average for the group, suggesting an average amount of detail, and the number of links is about average as well, suggesting moderately complex relationships. At the same time, though, the high number of two-way links and loops adds significant complexity; ultimately, the relationships are complicated and interdependent.

Central to the map is its depiction of corporatization. Represented as its own concept, corporatization in higher education has two direct causes. Constrained resources in higher education are the strongest cause, but society's demand that higher education be more visible, transparent, and relevant is an important contributor as well. Together, the three are involved in an intricate set of mutually-reinforcing relationships that endlessly amplify each other.

Within this triangle are two particularly intriguing relationships that are also very strong. The first is the mutually increasing relationship between society's demands and constrained resources. The more society demands, the more higher education resources become constrained, yet the reverse is true as well: The more higher education resources become constrained, the more society demands that higher education be visible, transparent, and relevant, an interesting dynamic with multiple possible interpretations. The second dynamic is similar to the first: a mutually increasing relationship between society's demands and corporatization. The more society demands, the more higher education becomes corporatized, yet the reverse is also true: The more higher education becomes corporatized, the more society demands that higher education be visible, transparent, and relevant, another compelling assertion that could have various meanings.

Besides the important corporatization triangle, another theme is the importance of financial factors. For example, constrained resources in higher education, the most dominant concept in the map, is not only caused by society's demands; it has a number of financial causes as well. These include an anti-tax environment, and, fueled by negative public perceptions of higher education, reduced state funding for higher education. Another factor is trade-offs that come with the increased use of donated dollars, and

Frank cites contractual restrictions on corporate-funded student housing as an example. Another cause of constrained resources is "fiscal performance criteria" that mixes academic and business practices; for this factor, Frank explains that "the old measure in higher education was FTE [Full Time Equivalency in student enrollment], and now we also use measures like bond ratings." One last financial cause of constrained resources is more sophisticated accounting systems in higher education, because, Frank says, higher education has "both fiscal accounting and management accounting now." Regarding the last two causes, the map does not explain the mechanisms by which mixed "fiscal performance criteria" and "more sophisticated accounting systems" further constrain resources in higher education. On a related note, the map depicts more sophisticated accounting systems as increasing the public's negative perceptions of higher education but does not explicate the process that underlies that effect.

In an additional theme, the map identifies a number of effects that stem from corporatization in higher education. Frank comments that a few might offer opportunities for higher education, but he also expresses concern about each one: the move away from liberal arts, the emphasis on vocational training, public/private partnerships, questions about who owns intellectual property, quantitative approaches to qualitative endeavors, and increasingly for-profit motives in higher education.

In Frank's map, the relationship between forces external to higher education and forces internal to higher education is mixed. Almost all of the external forces influence almost all of the internal forces, while half of the internal forces affect almost all of the external forces. Though limited to specific concepts, the influence of internal forces on external forces is higher than usual for this group of maps and is largely due to the intriguing two-way relationships within the corporatization triangle. It also reflects the complex nature of relationships in the overall map. As depicted in the map, corporatization is like a puzzle piece; it takes its place amidst a collection of unusual puzzle pieces that are fitted together in perplexing ways.

How he thinks about issues related to corporatization. In conversation, Frank does not explicate his view of the university mission, but he communicates that he considers it to be broad. Defining a university as a "comprehensive, educational institution," he says its accomplishments might include, "successful graduates," "programs that are meeting the needs of the community," "inventions and innovations that are transferring," as well as "pure research." In addition, he contends, there is "a traditional definition of a university. That's why Peldon College becomes Peldon University. That's why Whittaker College becomes Whittaker University. They're trying to send a different message about what they do there. A college is different than a university."

Consonant with his causal map, Frank describes corporatization in higher education as the result of constrained resources and increasing societal demands, both of which are exacerbated by "increasingly negative public perceptions of higher education." Public disapproval of higher education, for example, feeds reduced state funding, which contributes to constrained resources, he says. Negative views of higher education also result in calls for greater relevance in higher education, he claims, which relates to the "demand from corporate America that universities come closer to them in helping them meet their mission and vision." Public opinion, Franks says, also generates demand for increased "visibility and transparency" in higher education, but he questions the underlying meaning of that message:

> When people ask for an increase in visibility and transparency for an institution, can they be educated as to what their expectations can be for that? Is transparency just digging up the latest piece of dirt? Or is transparency being willing to listen to a university's overall message?

Frank recommends that higher education respond to these pressures by "protecting the university model," and he advises several actions. First, he suggests that higher education employ "a marketing campaign...to let the general public and their elected leaders form an impression of what universities do well and what their role could be in a changing society." The marketing, he says, should use qualitative data, not just quantitative data, to tell stories of university achievement. "Universities," Frank asserts, "need to meet the old definition of public relations, which is 'doing good and getting caught at it'." Second, he suggests that higher education "respond to opportunities created by corporatization" but also "protect the interests of the institution." Universities, he says, may provide more vocational education, but they should also "be a little more diligent" about "the implications" of "moving away from the liberal arts." Universities may work with external partners, he asserts, but they should "get more sophisticated" about contracts, intellectual property issues, controls, and measures and not be "taken advantage of." Universities should not "fall victim to the profit motive," he says, explaining that "we could do a lot of things a lot more efficiently, but they wouldn't be very effective." Finally, Frank urges higher education to remain committed to "collegial leadership" and he offers Mike Barnes, the president of Evans State University, as an exemplar:

> And I think someone like Mike Barnes has been—well, when it came time to appoint him president, the incumbent president called me and said, "Do you think we need to do a national search? Do you think we need to run this guy around the faculty and have everybody agree?" And I said, "No." Michael has already established a collegial relationship with people. That was the key criteria, I think: collegial leadership. Collegial with corporations, collegial inside, outside, and with the community. That's why we were able to do a fund drive. And now we've done three, since that first meeting where the guy said, "No, don't go out to the public. They won't give you a dollar." All of that has to do with collegiality.

Frank conveys a sense that some things are more difficult for higher education than they were in the past, yet some things are better. The new challenges are the pressures associated with corporatization: limited resources, changing societal demands, and negative public opinion. In addition, he says, marketing has become problematic: "Corporate advertising strategies," he claims, "have degraded the market to the point that it's harder for the university to access channels and be heard, because it's become so NOISY!" and social media "has been prostituted way beyond what it needs to be." At the same time, Frank contends, some things are improving. Corporations, he says, are beginning to recognize that "some of their better employees down the road are liberal arts graduates"; corporate appreciation for the liberal arts is "coming back," he maintains. A related development, Frank says, is that all types of organizations—including universities—are recognizing the value of "collaboration and cooperative decision-making." As evidence, he cites the fluid, collaborative, work spaces—like "living rooms"—that are replacing cubicles, and he mentions the Reed-Bennett Student Success Center at Evans State University as an example of these designs. These spaces, he says, are great for millenials, because they "expect to interact" and "be associated with things that are important" rather than be tucked away "in their little cubicles."

As a source of hope for the future of higher education, Frank points to alumni. They are the ones, he says, who are going to represent the institution and "protect the validity" of the institution. "And, hopefully," he says, "they're going to be the people who inveigle their way into corporations and get us some money!" Laughing as he brings the interview to a close, Franks says, "Yeah, I think the alumni are what's going to have to save our phony-baloney jobs, in the words of Mel Brooks. Now, turn that tape off, and I'll tell you what I really think!"

Brief profile of Frank. Within the last 10 years, Frank served as a member of the Board of Trustees for Evans State University, and he has approximately 10 years of experience working with institutions of higher education. For multiple decades, he has been in executive positions within the non-profit sector. Frank describes his experience with academic capitalism as "only at an arm's distance," because, as trustee, he "worked with ideas that were executed by others." Now that his term as trustee has expired, activities related to academic capitalism are not relevant to his professional role.

Gina

Causal map data. Gina's causal map data are represented in two forms below. Figure 42 shows the map data after conversion to the Decision Explorer software; it is a screenshot of the entire map as displayed in Decision Explorer. Table 55 shows the equivalent map data in the form of causal statements.

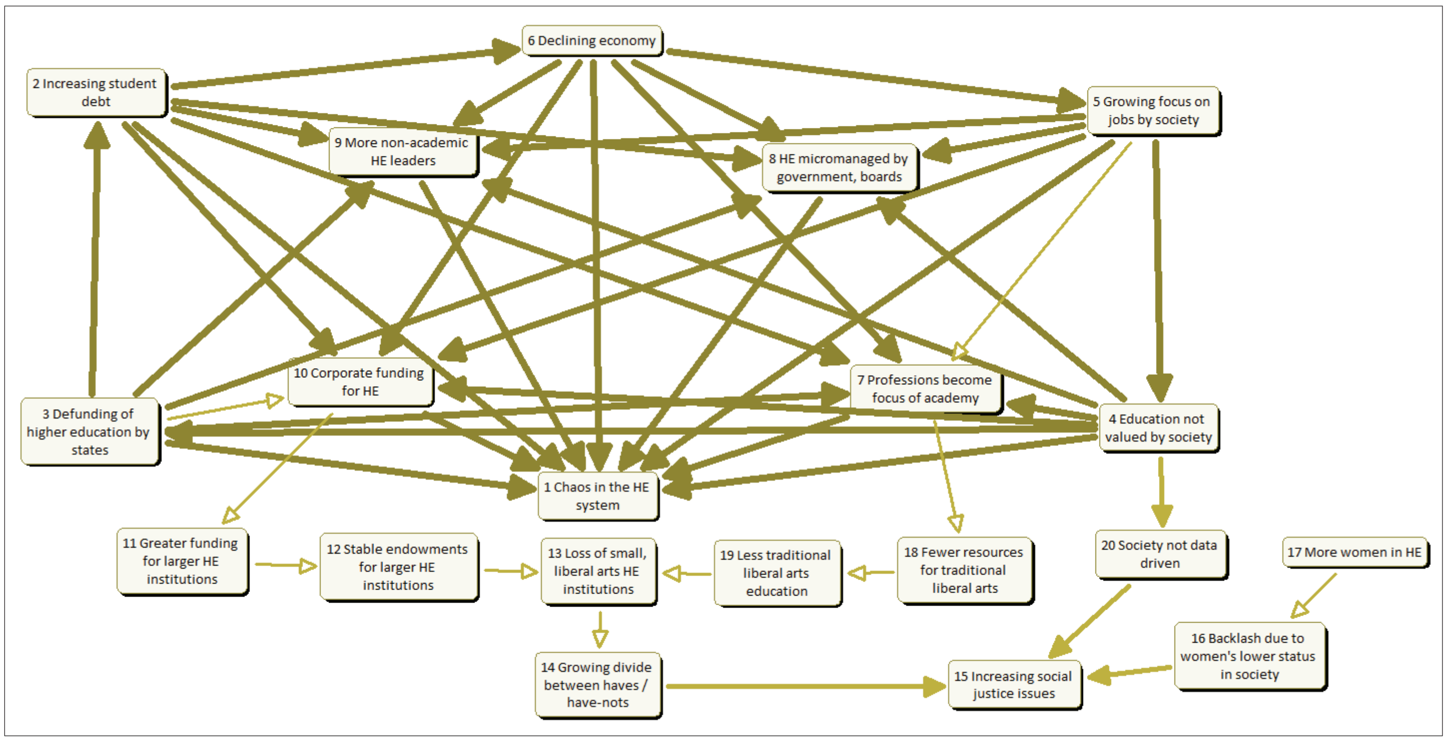

Figure 42. Screenshot of Gina's causal map after conversion to Decision Explorer. Increasingly thicker and darker lines depict increasingly stronger links. Any negative links are shown in blue and also have the label *N-* near the arrowhead.

Table 55

Gina's Causal Map Data Converted to Causal Statements

'Backlash due to women's lower status in society' causes a STRONG INCREASE in 'Increasing social justice issues'
'Corporate funding for HE' causes a MEDIUM INCREASE in 'Greater funding for larger HE institutions'
'Corporate funding for HE' causes a VERY STRONG INCREASE in 'Chaos in the HE system'
'Declining economy' causes a VERY STRONG INCREASE in 'Chaos in the HE system'
'Declining economy' causes a VERY STRONG INCREASE in 'Corporate funding for HE'
'Declining economy' causes a VERY STRONG INCREASE in 'Growing focus on jobs by society'
'Declining economy' causes a VERY STRONG INCREASE in 'HE micromanaged by government, boards'
'Declining economy' causes a VERY STRONG INCREASE in 'More non-academic HE leaders'
'Declining economy' causes a VERY STRONG INCREASE in 'Professions become focus of academy'
'Defunding of higher education by states' causes a MEDIUM INCREASE in 'Corporate funding for HE'
'Defunding of higher education by states' causes a VERY STRONG INCREASE in 'Chaos in the HE system'
'Defunding of higher education by states' causes a VERY STRONG INCREASE in 'Increasing student debt'
'Defunding of higher education by states' causes a VERY STRONG INCREASE in 'Professions become focus of academy'
'Defunding of higher education by states' causes a VERY STRONG INCREASE in 'HE micromanaged by government, boards'
'Defunding of higher education by states' causes a VERY STRONG INCREASE in 'More non-academic HE leaders'
'Education not valued by society' causes a STRONG INCREASE in 'Society not data driven'
'Education not valued by society' causes a VERY STRONG INCREASE in 'Chaos in the HE system'
'Education not valued by society' causes a VERY STRONG INCREASE in 'Defunding of higher education by states'
'Education not valued by society' causes a VERY STRONG INCREASE in 'Professions become focus of academy'
'Education not valued by society' causes a VERY STRONG INCREASE in 'HE micromanaged by government, boards'
'Education not valued by society' causes a VERY STRONG INCREASE in 'More non-academic HE leaders'
'Education not valued by society' causes a VERY STRONG INCREASE in 'Corporate funding for HE'
'Fewer resources for traditional liberal arts' causes a MEDIUM INCREASE in 'Less traditional liberal arts education'
'Greater funding for larger HE institutions' causes a MEDIUM INCREASE in 'Stable endowments for larger HE institutions'
'Growing divide between haves / have-nots' causes a STRONG INCREASE in 'Increasing social justice issues'
'Growing focus on jobs by society' causes a MEDIUM INCREASE in 'Professions become focus of academy'
'Growing focus on jobs by society' causes a VERY STRONG INCREASE in 'Chaos in the HE system'
'Growing focus on jobs by society' causes a VERY STRONG INCREASE in 'Education not valued by society'
'Growing focus on jobs by society' causes a VERY STRONG INCREASE in 'HE micromanaged by government, boards'
'Growing focus on jobs by society' causes a VERY STRONG INCREASE in 'More non-academic HE leaders'
'Growing focus on jobs by society' causes a VERY STRONG INCREASE in 'Corporate funding for HE'
'HE micromanaged by government, boards' causes a VERY STRONG INCREASE in 'Chaos in the HE system'
'Increasing student debt' causes a VERY STRONG INCREASE in 'Chaos in the HE system'
'Increasing student debt' causes a VERY STRONG INCREASE in 'Corporate funding for HE'
'Increasing student debt' causes a VERY STRONG INCREASE in 'Declining economy'
'Increasing student debt' causes a VERY STRONG INCREASE in 'HE micromanaged by government, boards'
'Increasing student debt' causes a VERY STRONG INCREASE in 'More non-academic HE leaders'
'Increasing student debt' causes a VERY STRONG INCREASE in 'Professions become focus of academy'
'Less traditional liberal arts education' causes a MEDIUM INCREASE in 'Loss of small, liberal arts HE institutions'
'Loss of small, liberal arts HE institutions' causes a MEDIUM INCREASE in 'Growing divide between haves / have-nots'
'More non-academic HE leaders' causes a VERY STRONG INCREASE in 'Chaos in the HE system'
'More women in HE' causes a MEDIUM INCREASE in 'Backlash due to women's lower status in society'
'Professions become focus of academy' causes a MEDIUM INCREASE in 'Fewer resources for traditional liberal arts'
'Professions become focus of academy' causes a VERY STRONG INCREASE in 'Chaos in the HE system'
'Society not data driven' causes a STRONG INCREASE in 'Increasing social justice issues'
'Stable endowments for larger HE institutions' causes a MEDIUM INCREASE in 'Loss of small, liberal arts HE institutions'

Causal map analysis. The following three tables present the most salient results from the analysis of Gina's causal map. Table 56 shows the map-level metrics calculated for the map alongside the average for all 20 participants. Table 57 shows the most prominent concepts in the map with the rationale for characterizing them as prominent. Table 58 shows prominent clusters in the map and includes all prominent occurrences of structural clusters (loops, islands, or trees) and content clusters (*a priori*—a content theme selected by the researcher—or emergent).

Table 56

Gina's Map-Level Metrics with Averages for All Participants

Metric	Description	Gina's Map	Group Avg
# of Concepts	# of concepts in map	20	20.00
# of Tails	# of concepts with only outgoing links	1	3.05
# of Heads	# of concepts with only incoming links	2	5.00
# of Ordinary	# of concepts w/incoming+outgoing links	17	11.95
# of Links	# of links in the map	46	35.55
Link-Concept Ratio	# of links divided by # of concepts	2.30	1.73
Head-Tail Ratio[a]	# of heads divided by # of tails	2.00	2.50

[a]In Table 10, I had used the term *Receiver-Transmitter Ratio* to reflect the terminology of Özesmi and Özesmi (2004), whose work I used in my early analyses. In this and following tables, I use the synonymous term *Head-Tail Ratio* to reflect the terminology of Eden and Ackermann, whose work I used in the later stages of my analyses.

Table 57

Gina's Prominent Map Concepts and Rationale for the Characterization

Concept	Rationale for Characterizing as Prominent
Chaos in the HE system	• Verbally emphasized as the current state of HE and the ultimate outcome of the current situation • Highest Indegree by far • Highest Centrality by far • Highest DOMAIN links • Tied with 1 other for highest CENTRAL score • 1 of only 2 HEADS
Education not valued by society	• Verbally emphasized as 1 of 5 factors that together create "tornado" effect on higher education • Of the 5 "tornados," the only one with CONSEQUENCES outside the "tornado" dynamic • Highest Outdegree • 2nd highest Centrality • 2nd highest DOMAIN score • Tied with 1 other for highest CENTRAL score
Increasing student debt	• Verbally emphasized as 1 of 5 factors that together create "tornado" effect on higher education • Tied with 1 other for 2nd highest Outdegree • Tied with 1 other for 3rd highest Centrality • Tied with 5 others for 3rd highest DOMAIN links • Tied with 5 others for 2nd highest CENTRAL score
Declining economy	• Verbally emphasized as 1 of 5 factors that together create "tornado" effect on higher education • Tied with 1 other for 2nd highest Outdegree • Tied with 1 other for 3rd highest Centrality • Tied with 5 others for 3rd highest DOMAIN links • Tied with 5 others for 2nd highest CENTRAL score
Defunding HE by the state	• Verbally emphasized as 1 of 5 factors that together create "tornado" effect on higher education • Tied with 1 other for 3rd highest Outdegree • Tied with 1 other for 3rd highest centrality • Tied with 5 others for 3rd highest DOMAIN links • Tied with 5 others for 2nd highest CENTRAL score
Growing focus on jobs by society	• Verbally emphasized as 1 of 5 factors that together create "tornado" effect on higher education • Tied with 1 other for 3rd highest Outdegree • Tied with 1 other for 3rd highest Centrality • Tied with 5 others for 3rd highest DOMAIN links • Tied with 5 others for 2nd highest CENTRAL score

Professions as focus of academy	• Verbally emphasized as 1 of 4 effects of "tornado" • Tied with 1 other for 4th highest Indegree • Tied with 1 other for 5th highest Centrality • Tied with 5 others for 3rd highest DOMAIN links • Tied with 5 others for 2nd highest CENTRAL score
Corporate funding for HE	• Verbally emphasized as 1 of 4 effects of "tornado" • Tied with 1 other for 4th highest Indegree • Tied with 1 other for 5th highest Centrality • Tied with 5 others for 3rd highest DOMAIN links • Tied with 5 others for 2nd highest CENTRAL score
HE micromanaged by Govt/Boards	• Verbally emphasized as 1 of 4 effects of "tornado" • Tied with 1 other for 2nd highest Indegree • Tied with 1 other for 6th highest Centrality • Tied with 1 other for 4th highest DOMAIN link • Tied with 1 other for 3rd highest CENTRAL score
More non-academic leaders in HE	• Verbally emphasized as 1 of 4 effects of "tornado" • Tied with 1 other for 2nd highest Indegree • Tied with 1 other for 6th highest Centrality • Tied with 1 other for 4th highest DOMAIN links • Tied with 1 other for 3rd highest CENTRAL score

Note: If words in a concept are in quotes, the participant had placed quotes around them in the original map. HE = Higher Education. HEI = Higher Education Institution. Other words in capital letters denote tools or named clusters in Decision Explorer. See the *Working with clusters* section of Chapter 4 for more information about the named clusters HEINSIDE, HEBOUNDARY, and HEOUTSIDE.

Table 58

Gina's Map Clusters with Descriptions

Category / Type	Description
Structural / Loop	1 Total loop 0 Two-way links 0 Negative links 1 Prominent loop with 3+ concepts, the highly consequential "tornado" • Vicious cycle self-reinforcing at Very Strong strength; moves in one direction, with each concept below increasing the one that follows and the last one increasing the first to create a loop *Declining economy* *Growing focus on jobs by society* *Education not valued by society* *Defunding higher education by states* *Increasing student debt*
Content / *a priori*[a]	Concepts in each cluster HEINSIDE = 12 HEBOUNDARY = 0 HEOUTSIDE = 8 Prominent results of CSET analyses • 5 of 8 HEOUTSIDE concepts (the "tornado") each affect 7 of 8 HEOUTSIDE concepts and 10 of 12 HEINSIDE concepts • 9 of 12 HEINSIDE concepts affect the 2 social-justice-related HEOUTSIDE concepts but have zero effect on the 5 "tornado" HEOUTSIDE concepts
Content / Emergent	Highly consequential sociopolitical forces, the "tornado" (5 concepts) Primary corporatization effects of the "tornado" (4 concepts)

[a]*a priori* = A content theme the researcher selected for analysis in every map. For more information about the HEINSIDE, HEBOUNDARY, HEOUTSIDE analysis, see the *Working with clusters* section of Chapter 4.

How Gina thinks about corporatization.

How she structures the problem of corporatization. Gina's causal map is macro-oriented and vigorous. The macro orientation comes from the fact that each of the concepts pertains to high-level dynamics within society or within the overall higher education system; none of them describe small-scale phenomena. The number of concepts is about average. The vigorous quality comes from the abundance, power, and interactivity of the map relationships. The map has a much higher than average number of links and link-concept ratio; many of the links have a very strong strength rating; and one very strong, self-reinforcing loop drives the map. The map has no two-way links, negative links, or additional loops, which suggests that the relationships, while numerous and potent, are more straightforward than they are complex.

The map depicts the cause of corporatization as a very strong, self-reinforcing, ever-increasing, vicious cycle of five socioeconomic forces that Gina dubs "the tornado." The tornado continually spins through the following cycle: a declining economy increases the growing focus on jobs by society, which increases society's devaluing of education, which increases state defunding of higher education, which increases student debt, which contributes to a declining economy, and the cycle continues.

The immediate effects of the tornado are four exemplars of corporatization in higher education: more non-academic leaders in higher education; higher education micro-managed by government and by boards; professions becoming the focus of the academy; and corporate funding for higher education. Coming from outside higher education, each of the five forces of the tornado very strongly increase each of the four exemplars of corporatization, which are inside higher education. The tornado dominates higher education.

The ultimate outcome of these dynamics is chaos in the higher education system. All five tornado concepts and all four corporatization concepts very strongly and directly contribute to this chaos. According to the map, chaos is the result of these interacting forces, and, according to Gina, chaos also describes "the current state of higher education."

These dynamics convey the essence of the map—a tornado of social forces creates corporatization and leads to chaos in higher education—but the map includes additional, less prominent outcomes as well. One is the loss of small, liberal arts institutions, which is an eventual outcome of corporate funding in higher education and the academy's focus on professions. Another is increasing social justice issues in society, which is an eventual outcome of three streams of influence: loss of small, liberal arts colleges, education not valued by society, and backlash due to women's lower status in society.

The analysis of external and internal forces underscores the potency of the tornado. These five external forces each influence almost every force inside higher education, but the reverse is not true; none of the forces internal to higher education have influence on any of the five tornado forces. At the same time, though, most of the internal forces in corporatized higher education contribute to the growing social justice issues in society, mainly because they contribute to the loss of small, liberal arts colleges. Overall, the map is like the weather map for a storm: Prevailing socioeconomic forces swirl around the higher education system, causing it to become corporatized and chaotic, and a destabilized higher education system damages the society it serves.

How she thinks about issues related to corporatization. While discussing corporatization, Gina refers to the traditional mission of higher education as developing an "educated citizenry," but she does not expound this view. Instead, she focuses on the predicament of corporatization in higher education and her recommendations for how higher education might best respond.

Consonant with her causal map depiction of chaos in higher education, Gina describes the current state of higher education as in “a free fall” and “heading toward the bottom.” Although she says “we’re not there yet,” she also maintains we’re getting close; “we’re starting to smell it.” Because of the defunding of higher education and the closing of small colleges, she contends, “institutions are scared, and people are scared.” When institutions and people are scared, she says, we have “a fight or flight reaction;” we “build walls, hunker down, and try to save ourselves—I mean our institutions.”

Reflecting a tornado force from her causal map, Gina attributes much cause for the current situation to “the defunding of higher education over the last twelve years,” which she labels “ludicrous.” In the same period, she claims, American higher education fell in the global rankings, “not because we’re not focused enough on jobs, but because we’re not focused enough on funding higher education.” She offers Germany as a contrast. Germany, she says, offers free higher education to their populace, which will “pay in spades—not only with an educated citizenry but also with jobs.” In addition, Gina contends, the defunding of higher education is dangerous. “If our education system in America falls, nothing else will save us,” she warns; “we’re going to sink or swim based on our educational value.”

Reflecting additional forces from her map, Gina attributes additional cause for higher education’s situation to “the corporatocracy.” The goals of the corporatocracy, she says, are “growing the economy, providing jobs, and providing the skills that corporations want.” The corporatocracy, she explains, consists of state government, federal government, boards of trustees of colleges and universities, and corporations as well as “anybody, really, who thinks that higher education’s sole mission is to produce students who can attain a job." Gina does not oppose the aim of jobs, but she opposes the narrow conception of higher education. Jobs, she says, "can be very important; they're just not the be-all-and-end-all of higher education."

Despite her portrayal of difficult circumstances, Gina insists that higher education must respond "positively and collaboratively," an approach that reflects her causal map, in which higher education has no generative impact on the forces of corporatization. Gina values higher education's traditional mission, but she contends that "we can't just come in trying to convince them of our way of thinking." She acknowledges that "globally educated citizens" are the foundation of education, but she argues that "we will go down on that" if we insist on that. "We're not going to die on that sword," she says, "or we will die on the sword." Adaptability is "the KEY to our survival," she insists, and we need "to work with corporatization and collaborate in as positive ways as we can."

In terms of specific recommendations, Gina has three. One, she says, the liberal arts need to adapt. They "need to learn how to become more job-focused, more collaborative with their peers, more central to what's going on in the world." They need to convey to employers the value of skills they teach like "critical thinking, communication, and working in groups." Second, Gina says, higher education needs to demonstrate its value using the criteria of its constituents. For example, she says, higher education is "an economic driver of the region" and should employ data to illustrate that fact. We should, she says, "play their game, use the metrics they use, and...illustrate our success in that realm." Third, she suggests that regional colleges and universities collaborate for mutual benefit. We could, she says, offer collective programming, share energy expenditures, and consolidate our purchasing power, yet still honor the strengths of each individual institution.

Describing herself as "an optimistic person," Gina says she has hope for the future of American higher education. The current crisis, she says, "may bring people together" to work to improve higher education. Claiming that America had the best educational system in the world, she believes "we can absolutely get that back." In addition, she says, higher education has an unexplored opportunity in the realm of social justice. Higher education, Gina claims, was "always for the elite," and "we're not really better now; it's still elite." Many colleges and universities "have not adapted well to the need for social justice," and the Black Lives Matter movement demonstrates that "things aren't as they should be." It's time, Gina contends, for higher education to change. Not only should higher education "model social justice" but also "TEACH social justice," she says; higher education should provide "an eye-opening experience about equality." Society gains, she says, "when we focus on social justice and equity for all."

Brief profile of Gina. Gina's position at Evans State University is within the middle administration of instruction, and she holds a Ph.D. in a liberal arts discipline. She has approximately 25 years of experience in higher education and has been a tenured faculty member. Gina says she has a medium level of experience with academic capitalism, primarily due to her involvement with a think tank for marketing and revenue opportunities in higher education. She reports that activities related to academic capitalism are increasingly important to her position and estimates that more than 50% of her job involves fundraising.

Gloria

Causal map data. Gloria's causal map data are represented in two forms below. Figure 43 shows the map data after conversion to the Decision Explorer software; it is a screenshot of the entire map as displayed in Decision Explorer. Table 59 shows the equivalent map data in the form of causal statements.

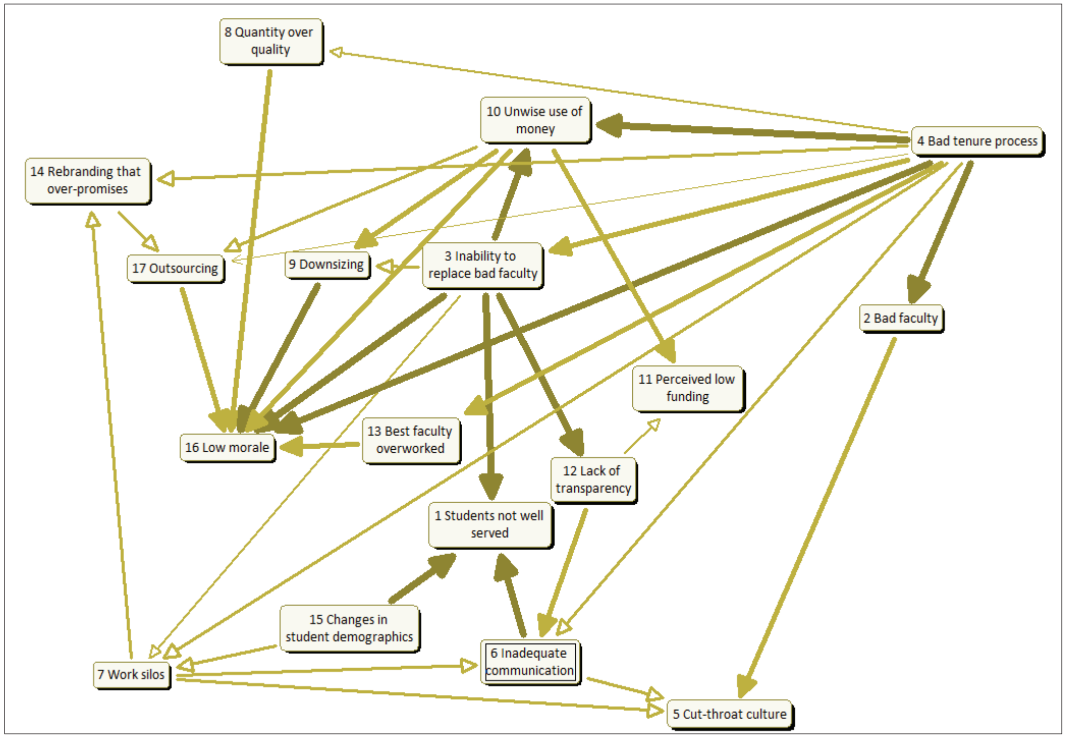

Figure 43. Screenshot of Gloria's causal map after conversion to Decision Explorer. Increasingly thicker and darker lines depict increasingly stronger links. Any negative links are shown in blue and also have the label *N-* near the arrowhead.

Table 59

Gloria's Causal Map Data Converted to Causal Statements

'Bad faculty' causes a STRONG INCREASE in 'Cut-throat culture'
'Bad tenure process' causes a MEDIUM INCREASE in 'Inadequate communication'
'Bad tenure process' causes a MEDIUM INCREASE in 'Rebranding that over-promises'
'Bad tenure process' causes a MEDIUM INCREASE in 'Work silos'
'Bad tenure process' causes a STRONG INCREASE in 'Best faculty overworked'
'Bad tenure process' causes a STRONG INCREASE in 'Inability to replace bad faculty'
'Bad tenure process' causes a VERY STRONG INCREASE in 'Bad faculty'
'Bad tenure process' causes a VERY STRONG INCREASE in 'Low morale'
'Bad tenure process' causes a VERY STRONG INCREASE in 'Unwise use of money'
'Bad tenure process' causes a VERY WEAK INCREASE in 'Outsourcing'
'Bad tenure process' causes a WEAK INCREASE in 'Quantity over quality'
'Best faculty overworked' causes a STRONG INCREASE in 'Low morale'
'Changes in student demographics' causes a MEDIUM INCREASE in 'Work silos'
'Changes in student demographics' causes a VERY STRONG INCREASE in 'Students not well served'
'Downsizing' causes a VERY STRONG INCREASE in 'Low morale'
'Inability to replace bad faculty' causes a MEDIUM INCREASE in 'Downsizing'
'Inability to replace bad faculty' causes a VERY STRONG INCREASE in 'Students not well served'
'Inability to replace bad faculty' causes a VERY STRONG INCREASE in 'Unwise use of money'
'Inability to replace bad faculty' causes a VERY STRONG INCREASE in 'Lack of transparency'
'Inability to replace bad faculty' causes a VERY STRONG INCREASE in 'Low morale'
'Inability to replace bad faculty' causes a WEAK INCREASE in 'Work silos'
'Inadequate communication' causes a MEDIUM INCREASE in 'Cut-throat culture'
'Inadequate communication' causes a VERY STRONG INCREASE in 'Students not well served'
'Lack of transparency' causes a STRONG INCREASE in 'Inadequate communication'
'Lack of transparency' causes a WEAK INCREASE in 'Perceived low funding'
'Outsourcing' causes a STRONG INCREASE in 'Low morale'
'Quantity over quality' causes a STRONG INCREASE in 'Low morale'
'Rebranding that over-promises' causes a MEDIUM INCREASE in 'Outsourcing'
'Unwise use of money' causes a MEDIUM INCREASE in 'Outsourcing'
'Unwise use of money' causes a STRONG INCREASE in 'Downsizing'
'Unwise use of money' causes a STRONG INCREASE in 'Low morale'
'Unwise use of money' causes a STRONG INCREASE in 'Perceived low funding'
'Work silos' causes a MEDIUM INCREASE in 'Cut-throat culture'
'Work silos' causes a MEDIUM INCREASE in 'Inadequate communication'
'Work silos' causes a MEDIUM INCREASE in 'Rebranding that over-promises'

Causal map analysis. The following three tables present the most salient results from the analysis of Gloria's causal map. Table 60 shows the map-level metrics calculated for the map alongside the average for all 20 participants. Table 61 shows the most prominent concepts in the map with the rationale for characterizing them as prominent. Table 62 shows prominent clusters in the map and includes all prominent occurrences of structural clusters (loops, islands, or trees) and content clusters (*a priori*—a content theme selected by the researcher—or emergent).

Table 60

Gloria's Map-Level Metrics with Averages for All Participants

Metric	Description	Gloria's Map	Group Avg
# of Concepts	# of concepts in map	17	20.00
# of Tails	# of concepts with only outgoing links	2	3.05
# of Heads	# of concepts with only incoming links	4	5.00
# of Ordinary	# of concepts w/incoming+outgoing links	11	11.95
# of Links	# of links in the map	35	35.55
Link-Concept Ratio	# of links divided by # of concepts	2.06	1.73
Head-Tail Ratio[a]	# of heads divided by # of tails	2.00	2.50

[a]In Table 10, I had used the term *Receiver-Transmitter Ratio* to reflect the terminology of Özesmi and Özesmi (2004), whose work I used in my early analyses. In this and following tables, I use the synonymous term *Head-Tail Ratio* to reflect the terminology of Eden and Ackermann, whose work I used in the later stages of my analyses.

Table 61

Gloria's Prominent Map Concepts and Rationale for the Characterization

Concept	Rationale for Characterizing as Prominent
Bad tenure process	• 1 of only 2 TAILS • Visually prominent with so many outgoing links • Highest Outdegree by far • Highest Centrality • Highest DOMAIN links by far • Highest CENTRAL score
Low morale	• 1 of only 4 HEADs • Visually prominent with so many incoming links • Highest Indegree by far • 2nd highest Centrality • Tied with 1 other for 2nd highest DOMAIN links • Tied with 3 others for 3rd highest CENTRAL score
Inability to replace bad faculty	• Visually prominent with the strength of its in/out links • 2nd highest Outdegree • 3rd highest Centrality • Tied with 1 other for 2nd highest DOMAIN links • 2nd highest CENTRAL score

Unwise use of money	• 3rd highest Outdegree • 4th highest Centrality • Tied with 1 other for 3rd highest DOMAIN links • Tied with 3 others for 3rd highest CENTRAL score
Students not well served	• 1 of only 4 HEADs • Visually prominent with the strength of its in/out links • 2nd highest Indegree • Verbally emphasized in the interview

Note: If words in a concept are in quotes, the participant had placed quotes around them in the original map. HE = Higher Education. HEI = Higher Education Institution. Other words in capital letters denote tools or named clusters in Decision Explorer. See the *Working with clusters* section of Chapter 4 for more information about the named clusters HEINSIDE, HEBOUNDARY, and HEOUTSIDE.

Table 62

Gloria's Map Clusters with Descriptions

Category / Type	Description
Structural / Loop	0 Total loops 0 Two-way links 0 Negative links
Content / *a priori*[a]	HEINSIDE, HEBOUNDARY, HEOUTSIDE analysis Not applicable to this map, because all concepts are HEINSIDE Possible exception of *Change in student demographics* Participant's view is focused completely on internal dynamics, which is unusual for this group of maps
Content / Emergent	Problems with causes that might include faculty (11 concepts) Problems with causes that might include administrators (12 concepts)

[a]*a priori* = A content theme the researcher selected for analysis in every map. For more information about the HEINSIDE, HEBOUNDARY, HEOUTSIDE analysis, see the *Working with clusters* section of Chapter 4.

How Gloria thinks about corporatization.

How she structures the problem of corporatization. Gloria's causal map is focused and dynamic. The quality of focus comes from the slightly lower than average number of concepts and from the fact that all concepts come from the same domain; they all describe organizational dynamics within higher education, an unusual trait within this group of maps. The quality of dynamism comes from the higher than average link-concept ratio; because each concept has more links than average, the map places somewhat more emphasis on relationships than concepts. In addition, the links have marked strength, which also underscores the influence of concepts on each other. The map has no two-way links, negative links, or loops, which suggests the relationships, though strong and plentiful, are more straightforward than they are complex.

The map portrays the internal dynamics within higher education as dysfunctional. With the exception of changes in student demographics—the only concept that might be considered an external influence—all of the concepts describe undesirable aspects of higher education organizations. From unwise use of money, quantity over quality, rebranding that overpromises, and downsizing to cut-throat culture, lack of transparency, inadequate communication, and low morale, not one concept depicts an effective, beneficial, or prudent aspect of organizational life. In addition, as depicted in the map, colleges and universities fail at their overarching aim, which is to serve students.

Against this backdrop, a situation that Gloria describes as "a mess," the primary source of trouble is a "bad tenure process," which cannot eliminate "bad faculty." These problems dominate the map. As one of only two TAILS—which often describe built-in constraints of the situation—the bad tenure process is the single most powerful driver of map dynamics. Its influence on other concepts far outweighs the influence of other concepts in terms of both the number and strength of its effects; its power reaches every corner of the map. And, because it is a TAIL, no concept modifies or mitigates its effect. Two related concepts, "bad faculty" and "inability to remove bad faculty," are depicted as outcomes of the bad tenure process; together, the three increase every other organizational factor in the map, all of which are undesirable.

Among the numerous unwelcome consequences of these dynamics, low morale is by far the most powerful. As one of the four HEADS—which often depict important outcomes of the situation—low morale receives more influence than any other concept both in terms of the number and strength of its incoming causes. And, because it is a HEAD, it does not influence any other concept in the map; it is a passive recipient of organizational forces and a natural outcome of the situation portrayed in the map.

As previously mentioned, the map catalogues many other undesirable outcomes besides low morale. Interestingly, many of them—for example, unwise use of money, downsizing, outsourcing, and rebranding that overpromises—imply poor decision-making on the part of administration, but administration is not named in the map. In addition, these poor decisions are depicted as outcomes of the bad tenure process. Although not explicit, the map implies that the response of administration to faculty problems is inadequate and consequential. This implication strengthens the overall quality of the map, which is something akin to an encounter with a bully. Like a bully, the bad tenure process dominates its environment and leaves a wake of damage and demoralization.

How she thinks about issues related to corporatization. While discussing corporatization, Gloria does not delineate her view of the mission of higher education, but she portrays her sense of it. She emphasizes that higher education is here to serve students who are "hoping for a better life, to fill their brains with everything that would make them a successful human being on the planet." She also emphasizes—in almost equal measure—that higher education must offer students “a good investment,” because students are paying. Referring to her own student loans and her professional position at Evans State, she says, “For me, I’m going to pay my $300 a month, because, Look at me now! I’m helping other students. I’m helping the community, my city. I’m helping the world.” Describing students at Evans State University, she says:

> They make a choice to spend their dollars at Evans State. They make a choice to say, “I could just go to heating and air. I could just live in my parents’ basement. I could go to Hughes Community College. I could do something else. But I’ve chosen to come here. I’ve chosen to spend my time with you.” We owe it to them to make it worthy. To make it a dollar well-spent. A place they don’t regret, like, “I wish I wouldn’t have bought that dress, because I wore it two times and it never really fit me.” But instead, “I spent money on this, and look what I learned, look who I met, look who I networked with, look, look at my mind! I’m not the same person! I’ve grown! I’ve developed!”

When I ask Gloria how higher education might best respond to corporatization, her answer is, “Embrace it.” As she explains her recommendation, she conveys that her conception of corporatization involves three important aspects. One is the idea of serving the customer. In student affairs, she says, “students are the customers,” and “we’re here to serve them.” Throughout higher education, “even if we don’t call them that, that’s what they are,” she says, and serving them is “our job.” A second dimension of corporatization central to her thinking is that business practices demand accountability. No more “mak[ing] excuses for poor performance,” she says; “if faculty aren’t performing, they go. If somebody’s not performing, they go. If an area isn’t working, it’s changed; it's modified." When using business practices, she asserts, "I expect the job is done." A third aspect of corporatization essential to her viewpoint is that business practices deliver on student investment. Warning that "we're going to run like a business or we're going to shut the whole thing down," Gloria explains the importance of delivering value to students:

> They're giving us money. They're going into debt. It's like going to get a washer and dryer on my Visa card. [Except] it's the one thing you're going to pay back over your lifetime. My car, I'm going to pay it in five years. A lot of these students will be paying for this for the rest of their lives.

Because she sees significant benefits to business practices, Gloria says, "we need to run [higher education] like any other business." And, consistent with her causal map depiction of higher education, she recommends an overhaul. "We're now in financial straits," she says, "and if we were a business, we'd be out of business." The current approach is not working, she claims, and we need to, "Shake it up! Shake it up!" As part of remaking higher education, Gloria specifically recommends changes that reflect her causal map: revise the tenure system, bring in "engaged faculty" who respect the uniqueness of each student, and address the "cut-throat" behavior of some faculty toward staff. She also suggests that higher education be accessible to everyone regardless of background. "Stop making us elitist," she says. "Open the doors."

Despite her criticisms of higher education, Gloria finds hope in the students who come to Evans State. She is moved by "their innocence, their hope for the future." And she likes the attitude they bring:

It's the young-at-heart. The young minds seeking what they hope will be knowledge in their craft or trade. It's the thirst they show. It's the smile. Even the parking outside. When it's summertime and, you know, every spot's open. And then it's fall, and you see all these cars out there. It's exciting!

Brief profile of Gloria. Gloria's position at Evans State University is within the lower administration of student affairs, and she has worked in higher education for approximately 10 years. In addition to her full-time role, she has periodically served as an adjunct faculty member. Gloria says she has significant experience with academic capitalism, citing her involvement in marketing, branding, the management of social media for academic programs, developing internships with businesses, and organizing events for alumni and local businesses. She says activities related to academic capitalism are "very important" to her current position.

Jessica

Causal map data. Jessica's causal map data are represented in two forms below. Figure 44 shows the map data after conversion to the Decision Explorer software; it is a screenshot of the entire map as displayed in Decision Explorer. Table 63 shows the equivalent map data in the form of causal statements.

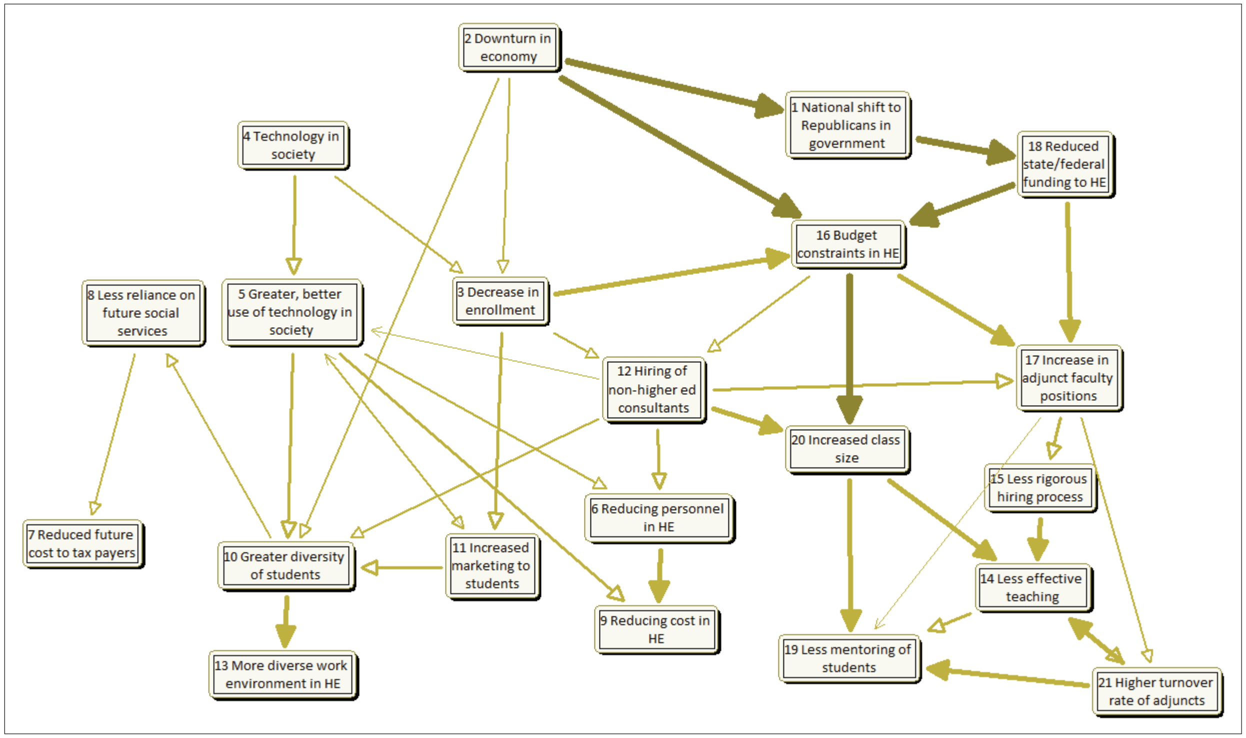

Figure 44. Screenshot of Jessica's causal map after conversion to Decision Explorer. Increasingly thicker and darker lines depict increasingly stronger links. Any negative links are shown in blue and also have the label *N-* near the arrowhead.

Table 63

Jessica's Causal Map Data Converted to Causal Statements

'Budget constraints in HE' causes a STRONG INCREASE in 'Increase in adjunct faculty positions'
'Budget constraints in HE' causes a VERY STRONG INCREASE in 'Increased class size'
'Budget constraints in HE' causes a WEAK INCREASE in 'Hiring of non-higher ed consultants'
'Decrease in enrollment' causes a MEDIUM INCREASE in 'Increased marketing to students'
'Decrease in enrollment' causes a STRONG INCREASE in 'Budget constraints in HE'
'Decrease in enrollment' causes a WEAK INCREASE in 'Hiring of non-higher ed consultants'
'Downturn in economy' causes a VERY STRONG INCREASE in 'Budget constraints in HE'
'Downturn in economy' causes a VERY STRONG INCREASE in 'National shift to Republicans in government'
'Downturn in economy' causes a WEAK INCREASE in 'Decrease in enrollment'
'Downturn in economy' causes a WEAK INCREASE in 'Greater diversity of students'
'Greater diversity of students' causes a STRONG INCREASE in 'More diverse work environment in HE'
'Greater diversity of students' causes a WEAK INCREASE in 'Less reliance on future social services'
'Greater, better use of technology in society' causes a MEDIUM INCREASE in 'Reducing cost in HE'
'Greater, better use of technology in society' causes a MEDIUM INCREASE in 'Greater diversity of students'
'Greater, better use of technology in society' causes a WEAK INCREASE in 'Reducing personnel in HE'
'Greater, better use of technology in society' causes a WEAK INCREASE in 'Increased marketing to students'
'Higher turnover rate of adjuncts' causes a STRONG INCREASE in 'Less effective teaching'
'Higher turnover rate of adjuncts' causes a STRONG INCREASE in 'Less mentoring of students'
'Hiring of non-higher ed consultants' causes a MEDIUM INCREASE in 'Reducing personnel in HE'
'Hiring of non-higher ed consultants' causes a MEDIUM INCREASE in 'Increase in adjunct faculty positions'
'Hiring of non-higher ed consultants' causes a STRONG INCREASE in 'Increased class size'
'Hiring of non-higher ed consultants' causes a VERY WEAK INCREASE in 'Greater, better use of technology in society'
'Hiring of non-higher ed consultants' causes a WEAK INCREASE in 'Greater diversity of students'
'Increase in adjunct faculty positions' causes a MEDIUM INCREASE in 'Less rigorous hiring process'
'Increase in adjunct faculty positions' causes a VERY WEAK INCREASE in 'Less mentoring of students'
'Increase in adjunct faculty positions' causes a WEAK INCREASE in 'Higher turnover rate of adjuncts'
'Increased class size' causes a STRONG INCREASE in 'Less effective teaching'
'Increased class size' causes a STRONG INCREASE in 'Less mentoring of students'
'Increased marketing to students' causes a MEDIUM INCREASE in 'Greater diversity of students'
'Increased marketing to students' causes a WEAK INCREASE in 'Greater, better use of technology in society'
'Less effective teaching' causes a MEDIUM INCREASE in 'Higher turnover rate of adjuncts'
'Less effective teaching' causes a MEDIUM INCREASE in 'Less mentoring of students'
'Less reliance on future social services' causes a WEAK INCREASE in 'Reduced future cost to tax payers'
'Less rigorous hiring process' causes a STRONG INCREASE in 'Less effective teaching'
'National shift to Republicans in government' causes a VERY STRONG INCREASE in 'Reduced state/federal funding to HE'
'Reduced state/federal funding to HE' causes a STRONG INCREASE in 'Increase in adjunct faculty positions'
'Reduced state/federal funding to HE' causes a VERY STRONG INCREASE in 'Budget constraints in HE'
'Reducing personnel in HE' causes a STRONG INCREASE in 'Reducing cost in HE'
'Technology in society' causes a MEDIUM INCREASE in 'Greater, better use of technology in society'
'Technology in society' causes a WEAK INCREASE in 'Decrease in enrollment'

Causal map analysis. The following three tables present the most salient results from the analysis of Jessica's causal map. Table 64 shows the map-level metrics calculated for the map alongside the average for all 20 participants. Table 65 shows the most prominent concepts in the map with the rationale for characterizing them as prominent. Table 66 shows prominent clusters in the map and includes all prominent occurrences of structural clusters (loops, islands, or trees) and content clusters (*a priori*—a content theme selected by the researcher—or emergent).

Table 64

Jessica's Map-Level Metrics with Averages for All Participants

Metric	Description	Jessica's Map	Group Avg
# of Concepts	# of concepts in map	21	20.00
# of Tails	# of concepts with only outgoing links	2	3.05
# of Heads	# of concepts with only incoming links	4	5.00
# of Ordinary	# of concepts w/incoming+outgoing links	15	11.95
# of Links	# of links in the map	40	35.55
Link-Concept Ratio	# of links divided by # of concepts	1.90	1.73
Head-Tail Ratio[a]	# of heads divided by # of tails	2.00	2.50

[a]In Table 10, I had used the term *Receiver-Transmitter Ratio* to reflect the terminology of Özesmi and Özesmi (2004), whose work I used in my early analyses. In this and following tables, I use the synonymous term *Head-Tail Ratio* to reflect the terminology of Eden and Ackermann, whose work I used in the later stages of my analyses.

Table 65

Jessica's Prominent Map Concepts and Rationale for the Characterization

Concept	Rationale for Characterizing as Prominent
Downturn in economy	• Visually a Strong driver of the map • 1 of only 2 TAILS • Highest Outdegree
Greater, better use of technology in society	• Tied with 1 other for 6th highest Centrality • Tied with 1 other for highest DOMAIN links • Tied with 2 others for 2nd highest CENTRAL score • Part of only 2-Way equal relationship in the map
Budget constraints in HE	• Visually prominent with many Ins/Outs of stronger weight than average for this map • Highest Indegree by far • Highest Centrality • 3rd highest Outdegree • Tied with 2 others for 2nd highest DOMAIN links • Tied with 1 other for highest CENTRAL score
Hiring of non-higher ed consultants	• 2nd highest Outdegree • 3rd highest Centrality • Tied with 1 other for highest DOMAIN links • Tied with 1 other for highest CENTRAL score

Greater diversity of students	• 5th highest Indegree • Tied with 1 other for 6th highest Centrality • Tied with 2 others for highest DOMAIN links • Tied with 2 others for 2nd highest CENTRAL score
Increase in adjunct faculty positions	• 4th highest Indegree • 4th highest Centrality • Tied with 2 others for 2nd highest DOMAIN links • Tied with 2 others for 2nd highest CENTRAL score
Less effective teaching	• Tied with 1 other for 2nd highest Indegree • 2nd highest Centrality • Part of only 2-Way unequal relationship in the map

Note: If words in a concept are in quotes, the participant had placed quotes around them in the original map. HE = Higher Education. HEI = Higher Education Institution. Other words in capital letters denote tools or named clusters in Decision Explorer. See the *Working with clusters* section of Chapter 4 for more information about the named clusters HEINSIDE, HEBOUNDARY, and HEOUTSIDE.

Table 66

Jessica's Map Clusters with Descriptions

Category / Type	Description
Structural / Loop	2 Total loops, due solely to two-way links, so none prominent 4 Two-way links 0 Negative links
Content / *a priori*[a]	Concepts in each cluster HEINSIDE = 13 HEBOUNDARY = 1 HEOUTSIDE = 7 Prominent results of CSET analyses • HEOUTSIDE concepts have uneven influence on each other and 4 of 7 HEOUTSIDE concepts each affect almost every HEINSIDE concept • HEINSIDE concepts have highly uneven influence on each other • Only 4 of 13 HEINSIDE concepts influence HEOUTSIDE concepts, but they increase 3 benefits to society
Content / Emergent	Impacts of corporatization on teaching (8 concepts)

[a]*a priori* = A content theme the researcher selected for analysis in every map. For more information about the HEINSIDE, HEBOUNDARY, HEOUTSIDE analysis, see the *Working with clusters* section of Chapter 4.

How Jessica thinks about corporatization.

How she structures the problem of corporatization. Jessica's causal map is wide-ranging and nuanced. The wide-ranging quality comes from its broad conceptual range; although the number of concepts is about average, the concepts touch upon issues both internal and external to higher education, both abstract and concrete, and both present and future. The quality of nuance comes from the wide range of strengths assigned to links and a somewhat higher than average number of links and link-concept ratio. Together, these traits bring emphasis to the subtly shaded degrees of influence that concepts have on each other. At the same time, the map has almost no two-way links, no negative links, and no prominent loops, suggesting that these relationships may be graduated in strength, but they are not complex.

The most prominent area of the map is that which explains the causes of corporatization in higher education. The very strong, root cause is the downturn in the economy, which directly creates budget constraints in higher education. The economic downturn also fosters a national shift towards Republicans in government, who implement both state and federal reductions in funding for higher education, and this further exacerbates higher education's budget constraints. Although less strong, another factor also contributes to constrained budgets: decreased enrollment. Decreased enrollment is due to technology in society, Jessica explains, because "people think they can learn on the Internet and don't need college." Without adding it to her map, Jessica comments that decreases in enrollment also occur because "blue-collar, middle-class people can't afford college anymore."

The most prominent consequence of higher education's financial challenges is the undesirable effect it has on teaching, and the map provides a detailed analysis. First, budget constraints in higher education—with added impetus from non-higher-education consultants—very strongly increase class sizes, which results in less effective teaching and less mentoring of students. In addition, budget constraints in higher education—with added impetus from non-higher-education consultants and reduced government funding—strongly increase the number of adjunct faculty, a phenomenon that has several consequences. Greater use of adjuncts results in a less vigorous hiring process, which results in less effective teaching and less mentoring of students. Greater use of adjuncts also results in higher turnover among faculty, which compounds the problems of less effective teaching and less mentoring.

In addition to causing less effective teaching, the dynamics of corporatization have other, more mixed effects, and the hiring of non-higher-education consultants provides an example. Although these consultants encourage decisions that decrease effective teaching, they also reduce personnel in higher education and reduce costs, both of which are not depicted as undesirable; "streamlining" is good, Jessica says. These consultants also promote "greater, better use of technology in society," although the map does not explain the mechanism by which they accomplish this. Finally, consultants encourage the pursuit of non-traditional students—because, Jessica says, "higher education can get more grant funding for them"—and this increases overall student diversity.

As depicted by the map, greater student diversity is the one unambiguously desirable consequence of corporatization. It has a complex set of causes. Not only is it increased by consultants but also by the downturn in the economy, better use of technology in society, and increased marketing by universities seeking to replace lost enrollments. And it results only in benefits. Greater student diversity creates a more diverse workplace for faculty, which Jessica says is “definitely a BENEFIT!” In addition, it results in less reliance on future social services, which reduces the future cost to taxpayers. Among this group of maps, this one is unique in its depiction of the future benefits of higher education.

The analysis of external and internal forces shows that forces external to higher education, with a few exceptions, have extensive influence on forces internal to higher education. In contrast, internal forces, with a few exceptions, have little influence on external forces, including the powerful economic and political dynamics that constrain higher education’s budget. At the same time, though, the internal forces of higher education contribute to three important external benefits: better use of technology in society, less reliance on future social services, and reduced future cost to taxpayers. Like a tent in a storm, higher education struggles with burdens imposed by outside forces yet still has only beneficial effects on those it serves.

How she thinks about issues related to corporatization. While discussing corporatization, Jessica refers to teaching as the mission of higher education, but she does not explicate her view. Instead, she discusses the advantages and disadvantages of corporatization and suggests that higher education take the good and leave the rest.

Echoing her causal map, Jessica says corporatization has drawbacks, but she provides more detail in conversation. First, she emphasizes the undesirable effect on teaching of increased class sizes and greater use of adjuncts. Administrators, she says, "might view those as cost savings," but they are "actually detrimental to our client, the student." Second, she says, corporatization shifts too many decisions to administrators. When administrators make decisions, she says, "they lose sight of what it was like to [teach]," "focus too much on money," and exclude the views of students. She recommends that higher education return teaching-related decisions to "deans, chairs, and faculty." Another downside to corporatization, Jessica contends, is too many administrators. They "make much, much, much more money" than professors, and they also "do a lot less work," she claims. She suggests that consultants—who themselves are a manifestation of corporatization—help streamline higher education and "cut the fat in administration."

Also reflecting her causal map, Jessica maintains that corporatization has advantages, but she offers more explanation. One of the benefits, she says, is the use of technology in teaching. Online classes, she contends, can support increased class sizes, maximize revenue, and remain effective; online classes "are just as effective with three students as they are with thirty," she claims. A second advantage of a corporate approach, Jessica says, is that business understands that "you have to spend money to make money." Contending that "hir[ing] the cheapest" is not always best, she offers the example of "an amazing professor," who might cost more to hire but will mentor students, improve retention, and increase enrollment in the long run. Jessica suggests that higher education gain a better understanding of this principle. Finally, she likes the idea of "mixing business models with traditional higher education." Business models, she says, can add "good checks and balances" and better align resources with the mission. Implying that higher education has not yet adopted effective models, Jessica says "a more appropriate business model" would "cut administrative costs," "decrease spending on athletics and extracurriculars," and "put that money into students." A better business model, she imagines, might even allow higher education to generate its own revenue, to reduce reliance on government funding, and to be freer to focus on teaching.

According to Jessica, the best outcome of corporatization is greater student diversity. Although budget constraints spur the pursuit of non-traditional students, she says, the quest provides great benefits. It enriches the environment for faculty. It expands the college-educated population. It leads to reduced dependence on tax-payer-supported social services. And it leads to new populations talking about the value of higher education. Now, she says, more "veterans, single parents, first-generation Americans, and first-generation students" go to college, and "that's what going to provide us with...the best future."

Brief profile of Jessica. Jessica's position at Evans State University is as an adjunct faculty member in one of the math and natural sciences disciplines, and she has a Ph.D. in a related field. Since earning her Ph.D., Jessica has spent three years teaching in higher education and has not held a tenured faculty position. Although she has been hired to work on corporate-funded research grants, she characterizes her experience with academic capitalism as limited. Activities related to academic capitalism have no role in her current position.

John

Causal map data. John's causal map data are represented in two forms below. Figure 45 shows the map data after conversion to the Decision Explorer software; it is a screenshot of the entire map as displayed in Decision Explorer. Table 67 shows the equivalent map data in the form of causal statements.

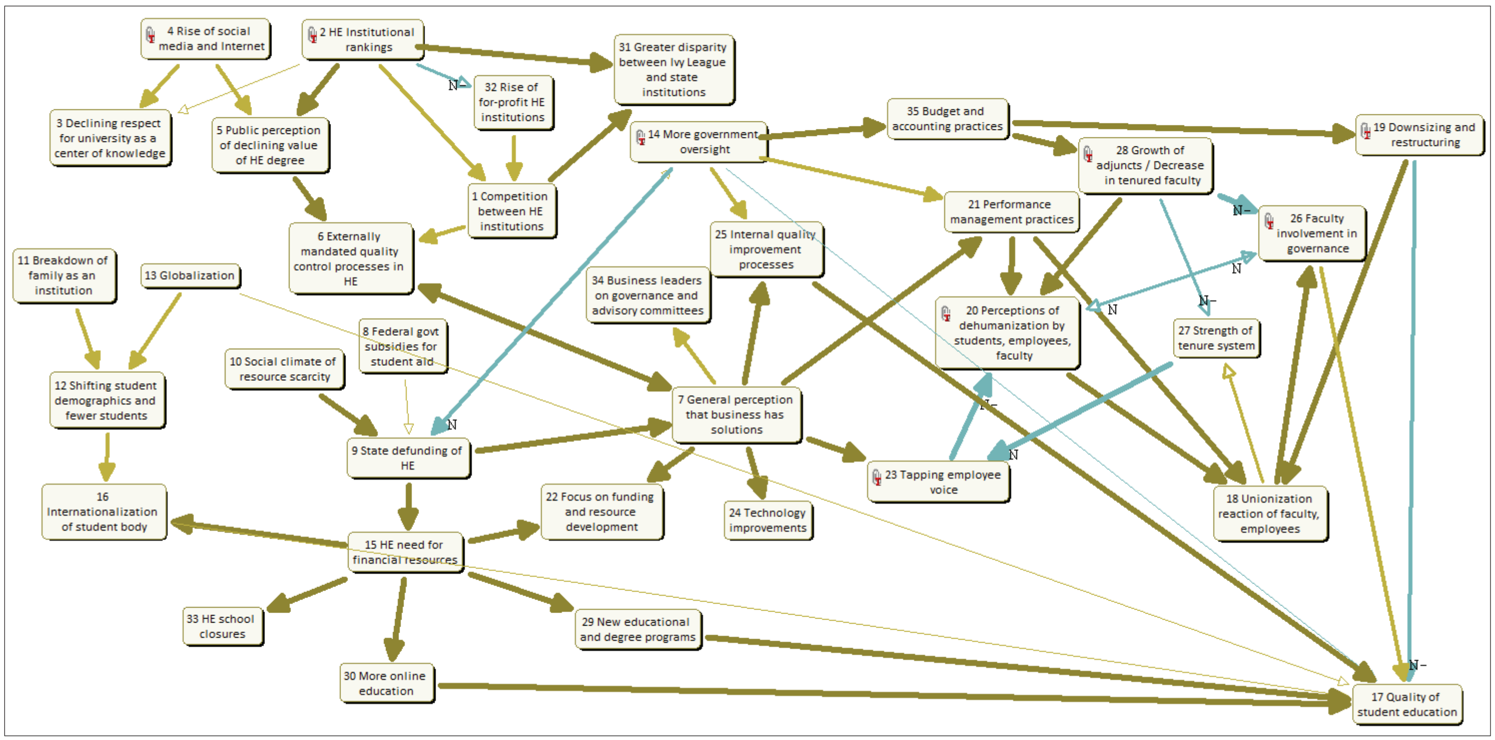

Figure 45. Screenshot of John's causal map after conversion to Decision Explorer. Increasingly thicker and darker lines depict increasingly stronger links. Any negative links are shown in blue and also have the label *N*- near the arrowhead.

Table 67

John's Causal Map Data Converted to Causal Statements

'Breakdown of family as an institution' causes a STRONG INCREASE in 'Shifting student demographics and fewer students'
'Budget and accounting practices' causes a VERY STRONG INCREASE in 'Downsizing and restructuring'
'Budget and accounting practices' causes a VERY STRONG INCREASE in 'Growth of adjuncts / Decrease in tenured faculty'
'Competition between HE institutions' causes a STRONG INCREASE in 'Externally mandated quality control processes in HE'
'Competition between HE institutions' causes a VERY STRONG INCREASE in 'Greater disparity between Ivy League and state institutions'
'Downsizing and restructuring' causes a STRONG DECREASE in 'Quality of student education'
'Downsizing and restructuring' causes a VERY STRONG INCREASE in 'Unionization reaction of faculty, employees'
'Externally mandated quality control processes in HE' causes a VERY STRONG INCREASE in 'General perception that business has solutions'
'Faculty involvement in governance' causes a MEDIUM DECREASE in 'Perceptions of dehumanization by students, employees, faculty'
'Faculty involvement in governance' causes a STRONG INCREASE in 'Quality of student education'
'Federal govt subsidies for student aid' causes a WEAK INCREASE in 'State defunding of HE'
'General perception that business has solutions' causes a STRONG INCREASE in 'Business leaders on governance and advisory committees'
'General perception that business has solutions' causes a VERY STRONG INCREASE in 'Externally mandated quality control processes in HE'
'General perception that business has solutions' causes a VERY STRONG INCREASE in 'Performance management practices'
'General perception that business has solutions' causes a VERY STRONG INCREASE in 'Focus on funding and resource development'
'General perception that business has solutions' causes a VERY STRONG INCREASE in 'Tapping employee voice'
'General perception that business has solutions' causes a VERY STRONG INCREASE in 'Technology improvements'
'General perception that business has solutions' causes a VERY STRONG INCREASE in 'Internal quality improvement processes'
'Globalization' causes a STRONG INCREASE in 'Shifting student demographics and fewer students'
'Globalization' causes a WEAK INCREASE in 'Quality of student education'
'Growth of adjuncts / Decrease in tenured faculty' causes a MEDIUM DECREASE in 'Strength of tenure system'
'Growth of adjuncts / Decrease in tenured faculty' causes a VERY STRONG INCREASE in 'Perceptions of dehumanization by students, employees, faculty'
'Growth of adjuncts / Decrease in tenured faculty' causes a VERY STRONG DECREASE in 'Faculty involvement in governance'
'HE Institutional rankings' causes a MEDIUM DECREASE in 'Rise of for-profit HE institutions'
'HE Institutional rankings' causes a STRONG INCREASE in 'Competition between HE institutions'
'HE Institutional rankings' causes a VERY STRONG INCREASE in 'Greater disparity between Ivy League and state institutions'
'HE Institutional rankings' causes a VERY STRONG INCREASE in 'Public perception of declining value of HE degree'
'HE Institutional rankings' causes a VERY WEAK DECREASE in 'Declining respect for university as a center of knowledge'
'HE need for financial resources' causes a VERY STRONG INCREASE in 'Internationalization of student body'
'HE need for financial resources' causes a VERY STRONG INCREASE in 'Focus on funding and resource development'
'HE need for financial resources' causes a VERY STRONG INCREASE in 'New educational and degree programs'
'HE need for financial resources' causes a VERY STRONG INCREASE in 'More online education'
'HE need for financial resources' causes a VERY STRONG INCREASE in 'HE school closures'
'Internal quality improvement processes' causes a VERY STRONG INCREASE in 'Quality of student education'
'Internationalization of student body' causes a WEAK INCREASE in 'Quality of student education'
'More government oversight' causes a STRONG DECREASE in 'State defunding of HE'
'More government oversight' causes a STRONG INCREASE in 'Internal quality improvement processes'
'More government oversight' causes a STRONG INCREASE in 'Performance management practices'
'More government oversight' causes a VERY STRONG INCREASE in 'Budget and accounting practices'
'More government oversight' causes a WEAK DECREASE in 'Quality of student education'
'More online education' causes a VERY STRONG INCREASE in 'Quality of student education'
'New educational and degree programs' causes a VERY STRONG INCREASE in 'Quality of student education'
'Perceptions of dehumanization by students, employees, faculty' causes a VERY STRONG INCREASE in 'Unionization reaction of faculty, employees'
'Perceptions of dehumanization by students, employees, faculty' causes a MEDIUM DECREASE in 'Faculty involvement in governance'
'Performance management practices' causes a VERY STRONG INCREASE in 'Unionization reaction of faculty, employees'
'Performance management practices' causes a VERY STRONG INCREASE in 'Perceptions of dehumanization by students, employees, faculty'
'Public perception of declining value of HE degree' causes a VERY STRONG INCREASE in 'Externally mandated quality control processes in HE'
'Rise of for-profit HE institutions' causes a STRONG INCREASE in 'Competition between HE institutions'
'Rise of social media and Internet' causes a STRONG INCREASE in 'Declining respect for university as a center of knowledge'
'Rise of social media and Internet' causes a STRONG INCREASE in 'Public perception of declining value of HE degree'
'Shifting student demographics and fewer students' causes a STRONG INCREASE in 'Internationalization of student body'
'Social climate of resource scarcity' causes a VERY STRONG INCREASE in 'State defunding of HE'
'State defunding of HE' causes a VERY STRONG INCREASE in 'General perception that business has solutions'
'State defunding of HE' causes a VERY STRONG INCREASE in 'HE need for financial resources'
'State defunding of HE' causes a VERY WEAK DECREASE in 'Federal govt subsidies for student aid'
'State defunding of HE' causes a WEAK INCREASE in 'More government oversight'
'Tapping employee voice' causes a VERY STRONG DECREASE in 'Perceptions of dehumanization by students, employees, faculty'
'Unionization reaction of faculty, employees' causes a MEDIUM INCREASE in 'Strength of tenure system'
'Unionization reaction of faculty, employees' causes a VERY STRONG INCREASE in 'Faculty involvement in governance'

Causal map analysis. The following three tables present the most salient results from the analysis of John's causal map. Table 68 shows the map-level metrics calculated for the map alongside the average for all 20 participants. Table 69 shows the most prominent concepts in the map with the rationale for characterizing them as prominent. Table 70 shows prominent clusters in the map and includes all prominent occurrences of structural clusters (loops, islands, or trees) and content clusters (*a priori*—a content theme selected by the researcher—or emergent).

Table 68

John's Map-Level Metrics with Averages for All Participants

Metric	Description	John's Map	Group Avg
# of Concepts	# of concepts in map	35	20.00
# of Tails	# of concepts with only outgoing links	5	3.05
# of Heads	# of concepts with only incoming links	8	5.00
# of Ordinary	# of concepts w/incoming+outgoing links	22	11.95
# of Links	# of links in the map	59	35.55
Link-Concept Ratio	# of links divided by # of concepts	1.69	1.73
Head-Tail Ratio[a]	# of heads divided by # of tails	1.60	2.50

[a]In Table 10, I had used the term *Receiver-Transmitter Ratio* to reflect the terminology of Özesmi and Özesmi (2004), whose work I used in my early analyses. In this and following tables, I use the synonymous term *Head-Tail Ratio* to reflect the terminology of Eden and Ackermann, whose work I used in the later stages of my analyses.

Table 69

John's Prominent Map Concepts and Rationale for the Characterization

Concept	Rationale for Characterizing as Prominent
General perception that business has solutions	• Visually prominent because very busy Ins/Outs • Highest Outdegree • Highest Centrality • Highest DOMAIN links • Highest CENTRAL score • Part of a Very Strong, 2-Way equal relationship with *Externally mandated quality control processes in HE*

Quality of student education	• Visually prominent because many strong Ins • Highest Indegree • 3rd highest Centrality • 2nd highest DOMAIN links • 2nd highest CENTRAL score • 1 of 8 HEADS
HE need for financial resources	• Visually prominent because busy Ins/Outs • 2nd highest Outdegree • 2nd highest Centrality • Tied with 3 others for 3rd highest DOMAIN links
Perceptions of dehumanization by students, employees, faculty	• 2nd highest Indegree • 4th highest Centrality • Tied with 3 others for 3rd highest DOMAIN links • Part of a 2-Way equal counteracting (both decrease each other at Medium strength) relationship with *Faculty involvement in governance*
More government oversight	• 3rd highest Outdegree • Tied with 3 others for 3rd highest DOMAIN links • Tied with 2 others for 4th highest CENTRAL score • Almost a TAIL; has 5 strong Outs, but only 1 weak In
State defunding of HE	• 5th highest Centrality • Tied with 3 others for 3rd highest DOMAIN links • 3rd highest CENTRAL score

Note: If words in a concept are in quotes, the participant had placed quotes around them in the original map. HE = Higher Education. HEI = Higher Education Institution. Other words in capital letters denote tools or named clusters in Decision Explorer. See the *Working with clusters* section of Chapter 4 for more information about the named clusters HEINSIDE, HEBOUNDARY, and HEOUTSIDE.

Table 70

John's Map Clusters with Descriptions

Category / Type	Description
Structural / Loop	33 Total loops, most due to two-way links 8 Two-way links 10 Negative links 2 Prominent loops with 3+ concepts • Both combine mixed strengths and positive/negative links; I found no literature to guide my interpretation of this type of complex loop • Both are variations involving: *Unionization reaction of faculty, employees* *Perceptions of dehumanization by students, employees, faculty* *Tapping employee voice* *Strength of tenure*

Content / *a priori*[a]	Concepts in each cluster HEINSIDE = 21 HEBOUNDARY = 7 HEOUTSIDE = 7 Prominent results of CSET analyses • HEOUTSIDE concepts have almost no influence on each other and highly uneven effects on HEBOUNDARY and HEINSIDE concepts; 2 HEOUTSIDE concepts each influence nearly all HEBOUNDARY and HEINSIDE concepts: *Social climate of resource scarcity* *State defunding of HE* • HEBOUNDARY concepts have uneven influence on concepts in all 3 clusters; 2 HEBOUNDARY concepts each influence nearly all HEINSIDES: *More government oversight* *Federal govt subsidies for student aid* • HEINSIDE concepts have highly uneven influence on each other, very limited influence on HEBOUNDARY, and zero effect on HEOUTSIDE concepts
Content / Emergent	Organizational issues related to faculty concerns (9 concepts)

[a]*a priori* = A content theme the researcher selected for analysis in every map. For more information about the HEINSIDE, HEBOUNDARY, HEOUTSIDE analysis, see the *Working with clusters* section of Chapter 4.

How John thinks about corporatization.

How he structures the problem of corporatization. John's causal map is detailed and complex. The number of concepts is much higher than average for this group of maps, suggesting the map includes a much higher than average amount of detail. The number of links in the map is higher than average as well, although this is due, in part, to the large number of concepts; the link-concept ratio is about average. In addition, though, the map has a significant number of intricate loops, negative links, and two-way links, which add considerable complexity to the map relationships.

One of the most powerful forces in the map is higher education's need for financial resources, and, interestingly, its consequences are not depicted as undesirable. The root cause of this need in higher education is the social climate of resource scarcity—for which John gives the example of the recent recession—which causes the state's defunding of higher education. In response to defunding, higher education takes a number of actions. Two of them, online education and new educational programs and degrees, very strongly improve the quality of student education without undesirable consequences elsewhere in the map; thus, they are highly desirable. Another action, the internationalization of the student body, slightly improves the quality of student education without undesirable consequences; it, therefore, is also desirable. Two more higher education actions taken in response to financial need are depicted neither as desirable nor undesirable. The first is an increased focus on funding and resource development, which John claims "encourages efficiency" and results in activities such as endowed chairs and the naming of buildings, centers, schools, and programs. The other is the closing of some higher education institutions. Depending on the perspective, closings might be desirable or undesirable, but the map does not point to a particular interpretation.

Another powerful force, perhaps the most dominant concept in the map, is the general perception that business has solutions, another factor that produces mostly desirable results. The positive perception of business solutions is caused by the state defunding of higher education and by externally mandated quality control processes, which include, John says, "accreditation and assurances of learning." Among the numerous effects of this perception are two with desirable influence only: internal quality improvement processes, which very strongly improve the quality of student education, and tapping the employee voice, which very strongly decreases perceptions of dehumanization by students, employees, and faculty—although John also contends it is "underutilized in higher education." A third effect, technology improvements, appears to be desirable as well. Two other outcomes of the positive view of business solutions are depicted as neutral: the focus on funding and resource development and business leaders serving in governance and advisory committees. In contrast, one effect of the positive perception of business solutions is largely undesirable: performance management practices. As portrayed in the map, these practices produce no beneficial results but very strongly increase perceptions of dehumanization. They also strengthen the unionization reaction of faculty and staff, which John says has both an upside and a downside.

Consisting of a cluster of nine interacting concepts, a particularly complicated portion of the map portrays faculty issues in higher education as complex and problematic. One sign of the complexity is that this cluster is the only area that involves an intricate interplay among increasing and decreasing influences; the concepts act as forces and counter forces to each other. At the center are three forces of corporatization: performance management practices; downsizing and restructuring; and the growth of adjuncts along with the decrease in tenured faculty. Faculty respond to these forces in two ways: they perceive dehumanization, and they unionize. Part of what is at stake in these dynamics is the tenure system, which is weakened by the growth of adjuncts but strengthened by unionization. Faculty involvement in governance is also at stake; it, too, is weakened by the growth of adjuncts but strengthened by unionization. In addition, tapping the employee voice plays an important role; it acts as a strong antidote to perceptions of dehumanization, yet it is weakened by a strong tenure system. In the end, these dynamics have a mixed effect on the quality of student education.

In several ways, the map conveys a largely favorable interpretation of corporatization in higher education. One, higher education’s need for financial resources results in welcome changes. Two, the general perception that business has solutions also produces welcome changes—although there is one important exception. Finally, the map implies a positive overall outcome in the following way. First, the map depicts the quality of student education as the most important outcome of the map. The concept is a HEAD, and HEADS often describe a significant result of the situation. Although there are seven other HEADS, the quality of student education is by far the most prominent; it has eight different concepts contributing direct influence and many more contributing indirectly through causal chains. Then, the map conveys that the net influence on the quality of student education is positive; the forces that increase quality outweigh those that decrease it.

In John's map, the effect of external forces on higher education is mixed, but two external factors have widespread influence; the social climate of resource scarcity and the state defunding of higher education affect nearly all concepts inside higher education. In contrast, forces inside higher education are depicted with no influence on external forces. At the same time, the map portrays higher education as engaged with powerful forces that are causing significant internal change. Within this terrain, two clearings and a bramble appear; the map points to welcome change through a focus on financial resources and through business solutions, the two clearings, and it points to challenging change in the complex realm of faculty-related issues, the bramble.

How he thinks about issues related to corporatization. While discussing the topic of corporatization, John broadly refers to his view of the mission of higher education but does not expound it. He identifies "educating [and] knowledge creation" as "the traditional missions of the university," and he says the "core values" of higher education might be expressed as "academic freedom, an orientation that puts students ahead of profit, a benefit to society that may or may not be tied to profitability" and, perhaps, sustainability: "being able to maintain the capability to provide an education for students."

When I ask John about how higher education might best respond to corporatization, his first response is, "To me, that question doesn't make sense." He explains that he thinks the question implies that corporatization is "this entity out there that you can...either accept or reject as a whole" and that his definition of corporatization is "essentially the practices that we see in the for-profit business world finding their way into the academic world." Providing context for these comments, he offers his view of "the natural evolution of any organizational system": There are myriad types of organizations; regardless of the type, every organization "scans the environment for solutions" that address its needs; and every organization "adopts the practices and routines most likely to address the needs emerging from within the institution." A successful organization, John says, chooses tools that align with its identity, and corporatization represents just "one set of available tools." In addition, he emphasizes the criticality of sequence: Clarifying the identity of the organization comes first, discerning the best tools and practices follows, and shaping those tools to the unique organization continues from there. Describing this as an ongoing process of reflection, design, and accomplishment of purpose, John maintains:

> The key for any institution—regardless of whether it's for-profit, non-profit, university, corporation, entrepreneurial, or whatever—is to be clear about what its

identity is and then to constantly work to enact that identity in a way that maintains the integrity of that identity.

While declining “to paint one broad brush stroke” for all of higher education, John makes specific recommendations for his own university. Primarily, he asserts, the university needs to “adopt more corporate practices,” a view consistent with his causal map’s favorable interpretation of corporatization. Citing resource allocation as an example, he explains that “a good accounting system would match the reality of resources with the reality of the need,” and he contrasts the “broken” process at Evans:

> So look at the budget line, say, for teaching—like the number of adjuncts I need to hire in a given year. I’ve got a budget that’s a couple of tens of thousands of dollars. This department?! Over half of our classes are taught by adjuncts! My adjunct budget should be a quarter of a million dollars... A complete mismatch. So, as a decision-maker, what do I have to manage to? Nothing!... So I actually have no foundation for making wise decisions or even determining whether my decisions are good decisions. And neither does anybody else!

In response to this situation, John says, most chairs ignore their budgets, approve expenses that make sense to them, and assume the shortage will be made up somewhere else within the university. Administrators remain disconnected from departmental needs, do things the way they “were done twenty, thirty years ago,” and dysfunction continues. An exacerbating factor, John suggests, is that administrators lack management training. “They’re academics,” he says, and “they haven’t been trained how to think about processes from a business management perspective.” In addition, administrators also ignore the suggestions of those who bring management expertise to the institution, he says, which demoralizes those who seek to improve these practices. Wrapping up his story, John says, “And that’s just one example. I could think of a half a dozen others off the top of my head. Sound management practices could make a tremendous difference in the effectiveness of higher education.” (After the conclusion of this study, John relates that the budgeting system problems have been addressed—“ironically using good business practices.”)

John finds hope for the future of higher education in the people who work there; there are, he says, “people of very good will who are really trying to make a difference for society.” In addition, he expresses optimism about the way “the whole industry of higher education is being reconfigured.” Although he sees an impending “financial crises”—when the unsustainable “bubble” of state subsidies “pops”—he also believes there is opportunity in “dramatic change.” Although he predicts that “institutions that can’t deliver will not survive,” he believes some will “find a path forward that’s sustainable and beneficial.” He concludes:

> But there will also be a lot of folks—particularly those who’ve been in the field of higher education for a long time, maybe fully tenured professors or others—who are going to be very uncomfortable. Or already are.

Brief profile of John. John’s position at Evans State University is as a tenured faculty member in the business college. He has a Ph.D. in his discipline and has twenty years of experience in higher education. John describes his experience with academic capitalism as “significant” and reports that activities related to academic capitalism are “highly important” to his current position.

Richard

Causal map data. Richard's causal map data are represented in two forms below. Figure 46 shows the map data after conversion to the Decision Explorer software; it is a screenshot of the entire map as displayed in Decision Explorer. Table 71 shows the equivalent map data in the form of causal statements.

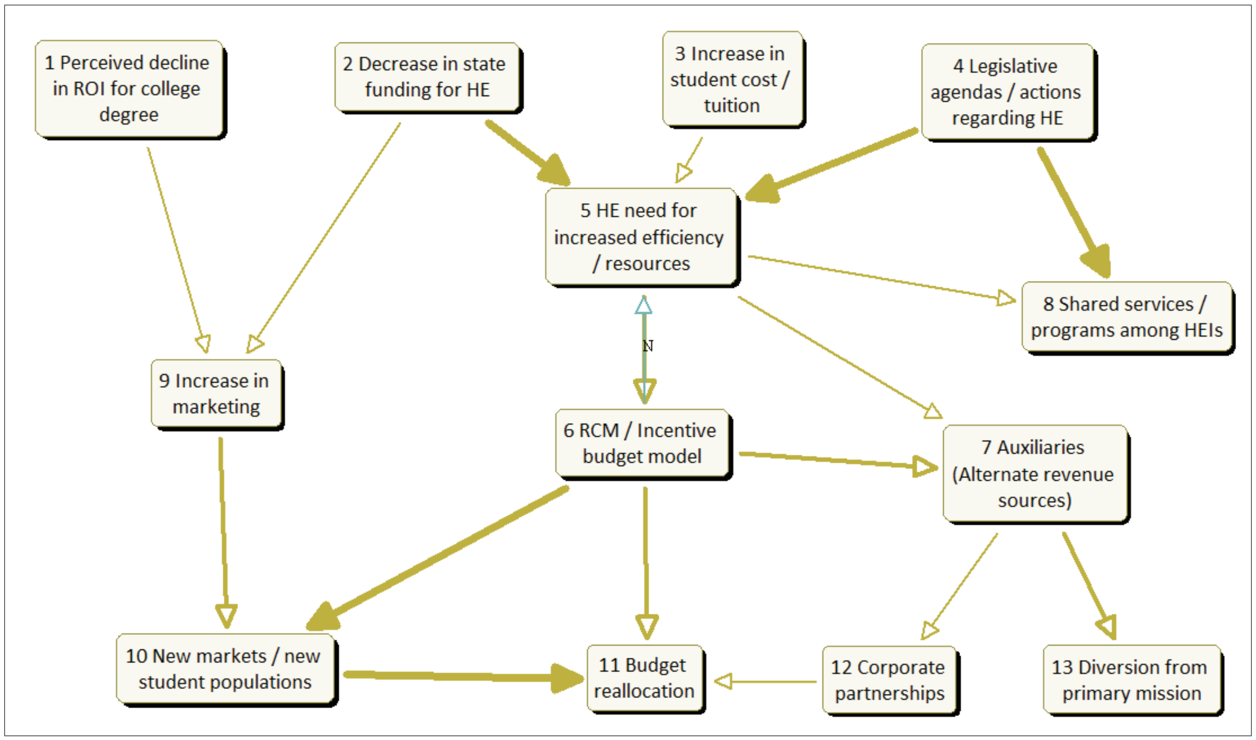

Figure 46. Screenshot of Richard's causal map after conversion to Decision Explorer. Increasingly thicker and darker lines depict increasingly stronger links. Any negative links are shown in blue and also have the label *N*- near the arrowhead.

Table 71

Richard's Causal Map Data Converted to Causal Statements

'Auxiliaries (Alternate revenue sources)' causes a MEDIUM INCREASE in 'Diversion from primary mission'
'Auxiliaries (Alternate revenue sources)' causes a WEAK INCREASE in 'Corporate partnerships'
'Corporate partnerships' causes a WEAK INCREASE in 'Budget reallocation'
'Decrease in state funding for HE' causes a STRONG INCREASE in 'HE need for increased efficiency / resources'
'Decrease in state funding for HE' causes a WEAK INCREASE in 'Increase in marketing'
'HE need for increased efficiency / resources' causes a MEDIUM INCREASE in 'RCM / Incentive budget model'
'HE need for increased efficiency / resources' causes a WEAK INCREASE in 'Auxiliaries (Alternate revenue sources)'
'HE need for increased efficiency / resources' causes a WEAK INCREASE in 'Shared services / programs among HEIs'
'Increase in marketing' causes a MEDIUM INCREASE in 'New markets / new student populations'
'Increase in student cost / tuition' causes a WEAK INCREASE in 'HE need for increased efficiency / resources'
'Legislative agendas / actions regarding HE' causes a STRONG INCREASE in 'HE need for increased efficiency / resources'
'Legislative agendas / actions regarding HE' causes a STRONG INCREASE in 'Shared services / programs among HEIs'
'New markets / new student populations' causes a STRONG INCREASE in 'Budget reallocation'
'Perceived decline in ROI for college degree' causes a WEAK INCREASE in 'Increase in marketing'
'RCM / Incentive budget model' causes a MEDIUM INCREASE in 'Auxiliaries (Alternate revenue sources)'
'RCM / Incentive budget model' causes a MEDIUM INCREASE in 'Budget reallocation'
'RCM / Incentive budget model' causes a STRONG INCREASE in 'New markets / new student populations'
'RCM / Incentive budget model' causes a WEAK DECREASE in 'HE need for increased efficiency / resources'

Causal map analysis. The following three tables present the most salient results from the analysis of Richard's causal map. Table 72 shows the map-level metrics calculated for the map alongside the average for all 20 participants. Table 73 shows the most prominent concepts in the map with the rationale for characterizing them as prominent. Table 74 shows prominent clusters in the map and includes all prominent occurrences of structural clusters (loops, islands, or trees) and content clusters (*a priori*—a content theme selected by the researcher—or emergent).

Table 72

Richard's Map-Level Metrics with Averages for All Participants

Metric	Description	Richard's Map	Group Avg
# of Concepts	# of concepts in map	13	20.00
# of Tails	# of concepts with only outgoing links	4	3.05
# of Heads	# of concepts with only incoming links	3	5.00
# of Ordinary	# of concepts w/incoming+outgoing links	6	11.95
# of Links	# of links in the map	18	35.55
Link-Concept Ratio	# of links divided by # of concepts	1.38	1.73
Head-Tail Ratio[a]	# of heads divided by # of tails	0.75	2.50

[a]In Table 10, I had used the term *Receiver-Transmitter Ratio* to reflect the terminology of Özesmi and Özesmi (2004), whose work I used in my early analyses. In this and following tables, I use the synonymous term *Head-Tail Ratio* to reflect the terminology of Eden and Ackermann, whose work I used in the later stages of my analyses.

Table 73

Richard's Prominent Map Concepts and Rationale for the Characterization

Concept	Rationale for Characterizing as Prominent
HE need for increased efficiency /resources	• Highest Indegree • 3rd highest Outdegree • Highest Centrality • Highest DOMAIN links • Highest CENTRAL score • Part of the only 2-Way relationship in the map: 2-Way unequal with *RCM / incentive budget model*
RCM / incentive budget model	• Highest Outdegree • 2nd highest Centrality • 2nd highest DOMAIN links • Tied with 1 other for 2nd highest CENTRAL score • Part of the only 2-Way relationship in the map: 2-Way unequal with *HE Need for increased efficiency / resources*
Auxiliaries (Alternative revenue sources)	• 4th highest Centrality • 3rd highest DOMAIN links • 2nd highest CENTRAL score
New markets, new student populations	• 3rd highest Indegree • 3rd highest Centrality

Note: If words in a concept are in quotes, the participant had placed quotes around them in the original map. HE = Higher Education. HEI = Higher Education Institution. Other words in capital letters denote tools or named clusters in Decision Explorer. See the *Working with clusters* section of Chapter 4 for more information about the named clusters HEINSIDE, HEBOUNDARY, and HEOUTSIDE.

Table 74

Richard's Map Clusters with Descriptions

Category / Type	Description
Structural / Loop	2 Total loops, due solely to two-way links, so none prominent 2 Two-way links 1 Negative links
Content / *a priori*[a]	Concepts in each cluster HEINSIDE = 8 HEBOUNDARY = 2 HEOUTSIDE = 3 Prominent results of CSET analyses • HEOUTSIDE concepts have no influence on each other and 2 of 3 HEOUTSIDE concepts affect both HEBOUNDARY and nearly all HEINSIDE concepts: *Legislative agendas / actions regarding HE* *Decrease in state funding for HE* • HEINSIDE concepts have uneven influence on each other and on HEBOUNDARY concepts and have zero effect on HEOUTSIDE concepts

[a]*a priori* = A content theme the researcher selected for analysis in every map. For more information about the HEINSIDE, HEBOUNDARY, HEOUTSIDE analysis, see the *Working with clusters* section of Chapter 4.

How Richard thinks about corporatization.

How he structures the problem of corporatization. Richard's causal map is spare, concentrated, and economical. The quality of spareness comes from the fewer than average number of concepts, the fewer than average number of links, and the lower than average link-concept ratio. Indicating that the relationships are straightforward, the map contains almost no loops, negative links, or two-way links, and this underscores the lack of excess in the map. The quality of concentration comes from the clarity of the concepts and their shared conceptual focus; the content is abstract but not far-reaching. The leanness of the map combined with its clear focus combine to convey an economical quality; the map's meaning is expressed with precision and without superfluity.

The map maintains a tight focus on the dynamics and mechanics of higher education funding. The most prominent concept in the map is higher education's need for increased efficiency and resources, and its causes and effects seem to crystallize the issue. As conveyed in the map, the primary cause of the need for increased efficiency and resources is state legislative action. The state decreases funding for higher education, while it increases its requirements, and Richard mentions examples such as state demands to reduce the budget by a particular percentage; the state pushing for dual enrollments among high school students; state tracking of low enrollment courses and programs, and state pressure to reduce program offerings. As conveyed in the map, the primary effect of higher education's need for increased efficiency and resources is the pursuit of new financial strategies by colleges and universities. These include the use of RCM (Resource Center Management) or incentive-based budget models, the growth of auxiliaries for alternative revenue, and shared services and programs among colleges and universities, an effort also encouraged by the state. Of these actions, the use of RCM budget models is the most prominent. Not only is it the strongest effect of higher education's need for increased efficiency and resources, but also the only concept in the map that mitigates that need; RCM budget models are depicted as weakly decreasing higher education's need for increased efficiency and resources. RCM budget models are also depicted as strongly increasing the pursuit of new student markets, budget reallocations, and the creation of auxiliaries including corporate partnerships. Although not nearly as prominent as the previous concepts, the map depicts a few other concerns related to higher education finance: a perceived decline in the ROI (Return on Investment) of a college degree; an increase in student cost and tuition; and diversion from the primary mission of the university.

In terms of the relationship between internal and external forces, the map provides more detail about the dynamics inside higher education than it does about external dynamics, but the reverse is true in terms of influence. Two of the three external forces—the decrease in state funding for higher education and state legislative actions regarding higher education—are very potent; they strongly influence nearly every other concept inside higher education. Yet, forces inside higher education are depicted as having no influence in return.

Spare and concentrated, Richard's map is circumscribed by its focus on the financial mechanics of corporatization; it does not depict other dimensions of corporatization inside or outside higher education. External factors such as sociocultural forces are not included. Internal factors such as organizational culture, employee views, or faculty views are not included. Like an architectural rendering of a building, the map delineates the frame, girders, and stresses of a structure before it is occupied by people. As Richard creates his map, though, he does occasionally turn to me and comment that a particular map concept—such as RCM budgeting or deviation from the mission—might not be favored by faculty, but he does not add faculty view as a concept in his map. His limited time for the interview might have contributed to his economical approach to mapping. A time-constrained administrator, he said early on that he could only allocate an hour, and then he stretched it to an hour and fifteen minutes before he had to end the interview. Based on these observations, Richard might have views not fully expressed in his causal map.

How he thinks about issues related to corporatization. In conversation, Richard discusses the mission of the university and the changing public view about higher education's role in society. The mission of the university, he says, has three components: "research, community engagement, and education." In addition, he asserts, one of the "driving factors of public higher education...was creating an educated citizenry to better serve the country." Acknowledging that this idea "seems to have been lost" in society, he suggests that two primary factors blended and changed the public's view of higher education's purpose. One factor, the rising cost of tuition, he says, caused people to ask, "Am I getting my money's worth?" and the second factor, economic downturns that made jobs scarcer, caused people to ask, "Am I walking out with a job in hand?" Complicating the issue, Richard maintains, is the fact that college degrees have often led to better job prospects and higher salaries. "That's what always gets dragged out," he says, referring to an oft-cited data point, "You know, a college-educated person earns almost a million dollars more in their lifetime than a high-school educated person." In addition, he says, universities themselves promoted these benefits to potential students, which only encouraged the view of higher education as a personal, not a public, good. "We ourselves are guilty," he says. Now, legislatures only fund career-oriented higher education, he claims, which is "not the right viewpoint for higher education." The idea that higher education prepares an educated citizenry, Richard suggests, is "something quite old that needs to be resurrected in public discourse."

Regarding corporatization, Richard maintains that the idea that higher education should be run like a corporate entity "doesn't align well with our mission." Corporations, he says, can focus on the bottom-line, but universities cannot. Because of their service mission, he says, universities must offer unprofitable programs needed by students or the community and carry costly research in order to increase general knowledge; universities need to “break even” and “pay their bills,” but they have purposes beyond profit. In the face of declining resources, though, universities increasingly take on “the functions of raising money,” which “have the potential for downfall,” Richard claims. These pursuits, he says, can “lure” the university outside its area of expertise; foster ventures that cause “mission creep”; divert the university from its primary mission; and remake the university into “a semi-corporate entity.”

When I ask Richard how higher education might best respond to corporatization, his first answer is one he characterizes as “very trite”: Higher education, he says, should “explore areas where we can benefit from lessons learned in corporations, such as efficient use of resources.” After making this suggestion, though, he explains the vital differences between corporations and universities. Eventually, he offers the recommendation that higher education use its budgeting model to encourage reasonable risk-taking and innovation. Echoing his causal map, he asserts that external forces have driven higher education to offer “low cost, very high quality education” and that new ideas, “experimentation, and innovation” are critical for meeting these demands. The RCM model, he says, may provide the appropriate incentives, but he “doesn’t know if it’s the answer”; he’s concerned, he says, that it might foster too much internal competition and duplicate services. In addition to new budget models, Richard also endorses the pursuit of new student markets and shared services across institutions of higher education.

Although Richard's causal map and discussion center on financial dynamics and strategies, he ends the interview on a different note by expressing his hope for the future of higher education. In the long run, he says, "higher education will get over some of the bumps we're facing." The public, he says, "will recognize that much of the quality of life we've been able to achieve has been because of our educational systems"—both K through 12 and higher education. Finally, agreeing to temporarily set aside known constraints, Richard describes his dream for education:

> ...greater opportunity doesn't start with colleges. It actually ends with colleges. Greater opportunity starts with broader, significant, high quality education in the K through 12 system, so students from all backgrounds—first generation students, minorities, the entire spectrum of our young people—come prepared to really take advantage of the university system. And I'm not throwing out our old people. Providing good access when people want to come back—people who didn't complete or who want advanced degrees or certificates to keep up in their fields—that's all really important. And, in the utopian world, so is having a system that doesn't bankrupt them when they get here.

Brief profile of Richard. Richard's position at Evans State University is within the upper administration of instruction. He holds a Ph.D. in a discipline from the mathematics and natural sciences domain, has been a tenured faculty member, and has worked in higher education for approximately 35 years. Richard describes his experience with academic capitalism as "very significant," noting his involvement with marketing, developing corporate partnerships, and securing corporate funding for research. When I ask him to describe the importance of academic capitalist activities to his current role, he says "somewhat."

Rob

Causal map data. Rob's causal map data are represented in two forms below. Figure 47 shows the map data after conversion to the Decision Explorer software; it is a screenshot of the entire map as displayed in Decision Explorer. Table 75 shows the equivalent map data in the form of causal statements.

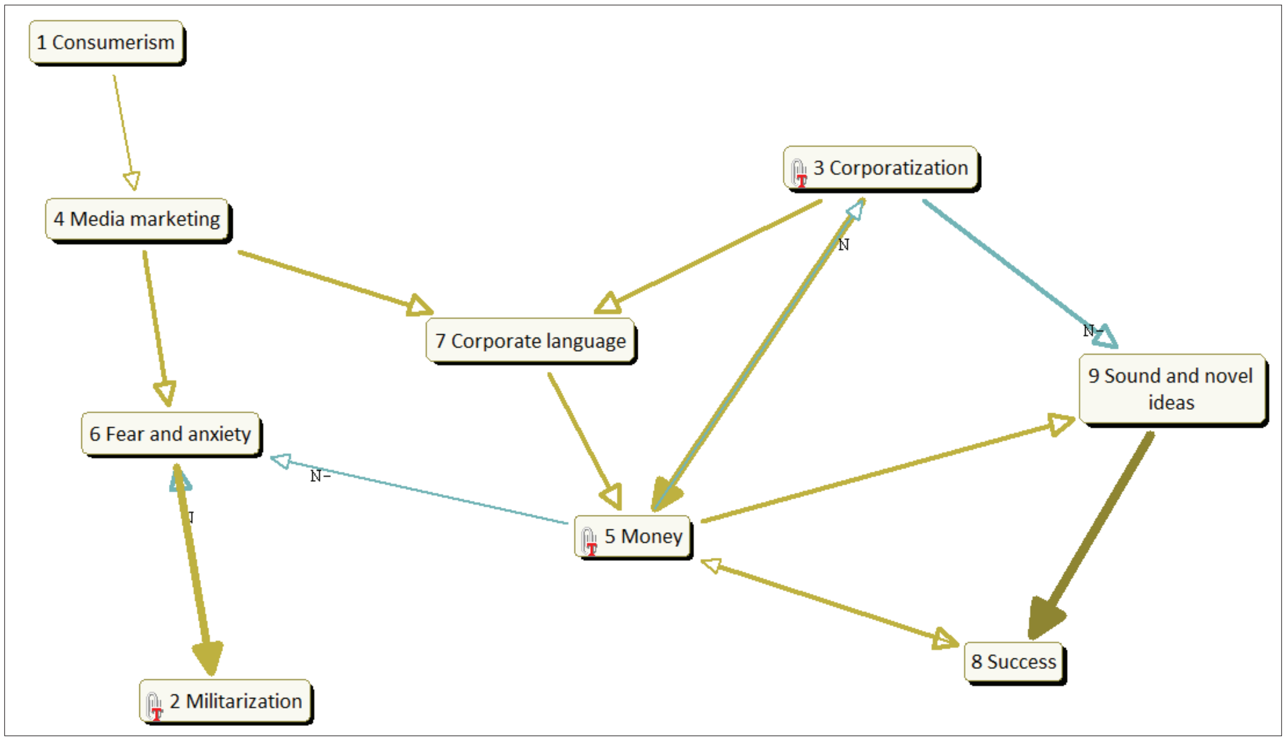

Figure 47. Screenshot of Rob's causal map after conversion to Decision Explorer. Increasingly thicker and darker lines depict increasingly stronger links. Any negative links are shown in blue and also have the label *N-* near the arrowhead.

Table 75

Rob's Causal Map Data Converted to Causal Statements

'Consumerism' causes a WEAK INCREASE in 'Media marketing'
'Corporate language' causes a MEDIUM INCREASE in 'Money'
'Corporatization' causes a MEDIUM DECREASE in 'Sound and novel ideas'
'Corporatization' causes a MEDIUM INCREASE in 'Corporate language'
'Corporatization' causes a STRONG INCREASE in 'Money'
'Fear and anxiety' causes a STRONG INCREASE in 'Militarization'
'Media marketing' causes a MEDIUM INCREASE in 'Corporate language'
'Media marketing' causes a MEDIUM INCREASE in 'Fear and anxiety'
'Militarization' causes a MEDIUM DECREASE in 'Fear and anxiety'
'Money' causes a MEDIUM INCREASE in 'Sound and novel ideas'
'Money' causes a MEDIUM INCREASE in 'Success'
'Money' causes a WEAK DECREASE in 'Corporatization'
'Money' causes a WEAK DECREASE in 'Fear and anxiety'
'Sound and novel ideas' causes a VERY STRONG INCREASE in 'Success'
'Success' causes a WEAK INCREASE in 'Money'

Causal map analysis. The following three tables present the most salient results from the analysis of Rob's causal map. Table 76 shows the map-level metrics calculated for the map alongside the average for all 20 participants. Table 77 shows the most prominent concepts in the map with the rationale for characterizing them as prominent. Table 78 shows prominent clusters in the map and includes all prominent occurrences of structural clusters (loops, islands, or trees) and content clusters (*a priori*—a content theme selected by the researcher—or emergent).

Table 76

Rob's Map-Level Metrics with Averages for All Participants

Metric	Description	Rob's Map	Group Avg
# of Concepts	# of concepts in map	9	20.00
# of Tails	# of concepts with only outgoing links	1	3.05
# of Heads	# of concepts with only incoming links	0	5.00
# of Ordinary	# of concepts w/incoming+outgoing links	8	11.95
# of Links	# of links in the map	15	35.55
Link-Concept Ratio	# of links divided by # of concepts	1.67	1.73
Head-Tail Ratio[a]	# of heads divided by # of tails	N/A[b]	2.50

[a]In Table 10, I had used the term *Receiver-Transmitter Ratio* to reflect the terminology of Özesmi and Özesmi (2004), whose work I used in my early analyses. In this and following tables, I use the synonymous term *Head-Tail Ratio* to reflect the terminology of Eden and Ackermann, whose work I used in the later stages of my analyses. [b]N/A because the numerator, number of heads, is zero in this map. The fact that all concepts influence at least one other concept does not mean that there is zero elaboration of effects in the map; rather, the metric is not applicable to this map.

Table 77

Rob's Prominent Map Concepts and Rationale for the Characterization

Concept	Rationale for Characterizing as Prominent
Money	• Tied with *Corporatization* for highest Outdegree • Highest Indegree • Highest Centrality by far • Highest DOMAIN links by far • Highest CENTRAL score • Part of a 2-Way unequal, counteracting relationship with *Corporatization* • Part of a 2-Way unequal, escalating relationship with *Success*
Corporatization	• Tied with *Money* for highest Outdegree • Tied with *Fear and anxiety* for 2nd highest Centrality • Part of a 2-Way unequal, counteracting relationship with *Money* • Is almost a TAIL, because only Indegree is *Money* as a weakly decreasing force
Fear and anxiety	• Tied with *Success* for 2nd highest Indegree • Tied with *Corporatization* for 2nd highest Centrality • Part of a 2-Way unequal, counteracting relationship with *Militarization*

Sound and novel ideas	• Verbally emphasized in interview • Verbally described in interview as having high value • The only desirable element in the map, with possible exception of *Money*, which has an ambiguous quality

Note: If words in a concept are in quotes, the participant had placed quotes around them in the original map. HE = Higher Education. HEI = Higher Education Institution. Other words in capital letters denote tools or named clusters in Decision Explorer. See the *Working with clusters* section of Chapter 4 for more information about the named clusters HEINSIDE, HEBOUNDARY, and HEOUTSIDE.

Table 78

Rob's Map Clusters with Descriptions

Category / Type	Description
Structural / Loop	14 Total loops, most due solely to two-way links 6 Two-way links 4 Negative links 3 Prominent loops with 3+ concepts • 2 combine mixed strengths and positive/negative links; I found no literature to guide my interpretation of this type of complex loop • 3rd is self-reinforcing cycle at mixed strength, assumed to be virtuous because increases *Sound and novel ideas,* involving: *Sound and novel ideas* *Money* *Success*
Content / *a priori*[a]	CSET analyses of HEINSIDE, HEBOUNDARY, HEOUTSIDE • Impossible to conceptualize this map in terms of these clusters

[a]*a priori* = A content theme the researcher selected for analysis in every map. For more information about the HEINSIDE, HEBOUNDARY, HEOUTSIDE analysis, see the *Working with clusters* section of Chapter 4.

How Rob thinks about corporatization.

How he structures the problem of corporatization. Rob's causal map is simultaneously pithy and complex. The quality of pithiness comes from a combination of traits. One, the map has only nine concepts, the lowest number among these groups of maps; the map is succinct. Two, the concepts carry substantial meaning, because they are highly abstract; for example, the map includes concepts for money, success, and fear/anxiety. Three, some of the concepts—in part due to their abstract nature—are richly ambiguous. Like symbols, they have multiple, possible meanings, which may vary in each relationship to another concept. The quality of complexity comes from these symbolic concepts and from the complicated nature of some of the relationships. In terms of links, the map has a low number due primarily to the low number of concepts. Although the number of links is small, many of them are two-way or negative links, and many participate in three prominent loops, two of which combine mixed strengths and positive and negative forces. Relationships in the map are complex.

Within this group of maps, the quality of ambiguous symbolism seems to be unique to Rob's map. Therefore, a description of Rob's mapping process may provide important background. First, Rob said he was familiar with various mapping techniques, and he was quickly comfortable with the causal mapping method I asked him to use. Second, he took a significant amount of time—at least an hour—to create his map. Using pencil and eraser, he began by sketching diagrams on paper, erasing and redrawing and occasionally beginning again on a new blank sheet. Sitting at his desk, he pulled the diagrams close, bending over them as he worked his pencil, and then leaning back with his head at an angle to assess what he had created. Third, although I attempted to minimize my interruptions, I used pauses in his process to ask questions about his emerging map, seeking most often to understand his concept meanings. I took notes of his answers, which often had a mercurial quality. Later, in the member-checking process, I asked for clarification but did not receive a response. Based on my observations during mapping and based on our discussion of corporatization, I concluded he intended the concepts to be richly meaningful and ambiguous, and I honor that approach in my interpretation. Working with Rob reminded me of advice from the early causal mapping researchers Cossette and Audet (1992), who suggest avoiding “questions of definition,” because “symbol[s] can conserve blurred contours” (p. 331).

Because of the highly abstract nature of the concepts, the map does not convey a sense of the overall container or structure that holds the map territory; the dynamics seem transportable to and meaningful in different domains. The map may depict dynamics within higher education, within higher education embedded in society, or simply within society; all three interpretations seem to fit. Similarly, the map does not convey a sense of structures within the map territory. The map does not depict, for example, structures for the higher education system, for organizational entities within higher education, for groups within higher education, or groups within society. The map has the quality, perhaps, of a small drone: a compact, tightly engineered machine that can operate in and move between many different terrains.

Regardless of the interpretive context, the map seems to describe the interplay between materialism and human proclivities. Consumerism is the root cause of the map dynamics, and it results in media marketing that increases fear and anxiety. “Media, marketing, TV, etc., “ Rob explains, “increase our fear, anxiety, insecurity, poor body image, and sense that we need to present ourselves and our institutions in certain ways; marketing increases our sense that presentation is important.” Fear and anxiety, as represented in the map, increase militarization, which Rob describes as “the 9/11 effect.” People react defensively, he says: “We have a larger military, more militarization throughout the culture; we even have more people wearing camouflage.”

Against this backdrop, the dynamics of corporatization play out, and by far the most prominent concept is money. Money is also one of the concepts with multiple, possible meanings; money might mean, for example, amount of money, focus on money, the aggrandizement of money, the power of money, or the benefits money can buy. One of the relationships involving money is that corporatization strongly increases money, while money weakly decreases corporatization; they counteract each other. Based on Rob's comments, this captures his view that corporatization increases the focus on money as well as the amount of money available, and he cites research funding as an example. It also conveys his view that more money decreases the need for corporatization, and he cites universities with large endowments as examples.

A second money-related relationship is that money increases success, and success increases money, an ever-increasing escalation of each other. Although success is a less prominent concept in the map than money, like money, it has multiple possible meanings; success might mean, for example, perceived success, success as defined by money, success as defined by society, success as defined by the university, or success as defined by oneself. Based on Rob's comments, the relationship between money and success conveys his view that the more money an entity has, "the more people tend to say it is a 'success'; it is perceived as a success" and that perceived success attracts more money. As an aside, Rob adds that "the more corporatization, the more this definition of success prevails!"

A third money-related relationship is that corporate language increases money, and Rob explains it this way:

> Corporate language is the language of money. The more corporate language we use, the more we use corporate language to talk about our mission, the more we tend to focus on money, and the more we tend to increase the money we have. Corporate language is not traditional academic language, which was aligned with an academic mission. Language shapes our focus, our mission, our actions, and corporate language monetizes.

In addition to these three relationships, money also increases sound and novel ideas. The concept of sound and novel ideas seems to reflect Rob's perspective as a research scientist—"an academic intellectual," he says—who is stimulated by ideas and driven to explore and generate them; sound and novel ideas, it seems, are the bright spot of the map. Money increases sound and novel ideas, he explains, because funding is needed to support these intellectual pursuits. And sound and novel ideas increase success, perhaps more than just perceived success in this case. As portrayed in the map, though, corporatization decreases sound and novel ideas, because, Rob explains, unprofitable ideas are not funded. Together, these relationships describe a conflict: Corporatization decreases sound and novel ideas by restricting the range of research, yet corporatization increases money, which increases sound and novel ideas by funding research. For Rob, corporatization is a double-edged sword.

How he thinks about issues related to corporatization. While discussing corporatization, Rob does not refer to the mission of higher education. Instead, he describes the effects of corporatization on higher education. While these effects are compatible with his causal map, he renders them in more concrete language.

Corporatization, Rob says, is "subtly changing the traditional mission and structures" of the university, and he offers several examples. One is that some academic disciplines are increasingly dominated by the pursuit of research funding: "Engineering, computer science, medical science, and the professions," he says, are "driven by the [research] budget." Another example, he says, is the increasing role that research funding plays in the promotion and tenure process. Another change, he asserts, is that, instead of the chair role "being a service that's rotated among faculty," more and more chairs are traditional managers who use an "us-and-them" management style. Rob also mentions the growing focus on "workforce development" and comments: "There's a corporate term for you. We want to train the students for jobs in corporations in the society so we're more productive. Good lord."

Another effect of corporatization, Rob claims, is a growing gap between "the way we talk about the traditional role and mission of the university" and "the way it actually works"; the extent to which money drives the institution is often "unstated or masked." For example, he says, chairs and deans insist that research funding is "irrelevant to promotion and tenure," but "I think it's becoming more of a direct factor." Similarly, he says, university presidents "talk about the centrality of teaching" but the university hires adjuncts to teach. "That doesn't sound like the priority that was voiced in the commencement address," he says.

Corporatization, Rob contends, largely conflicts with the values of academics. Academics, he says, value money less than a corporate culture does; "we're not academics to become rich; we'd go work for Google if we valued money." In addition, academics value independence more than a corporate culture allows, he says. We want intellectual independence; we want the financial independence that comes with tenure; and corporatization dismantles that autonomy, he says.

At the same time, though, Rob argues that corporatization offers some faculty an opportunity not available in traditional higher education: “the academic intellectual as entrepreneur.” In corporate cultures, he says, “novel ideas...can translate into excitement and more profit,” and corporatization provides funding to pursue those stimulating ideas. He finds all of this “very interesting.” Yet, echoing the dilemma in his causal map, Rob concedes that corporate funding comes only for profitable ideas; it “restricts the range of ideas or phenomena that we’ll examine.” In addition, he says, he has to put a lot of effort into securing funding, pay attention to the priorities of funding agencies, and use corporate language to “sell his ideas.” We should, Rob contends, “want to incentivize those people who value being independent and give them the means to pursue intellectual pursuits without having to embrace a corporate vocabulary. I think that would be much better.”

Brief profile of Rob. Rob’s position at Evans State University is a staff position as a research scientist working in a university center that operates outside of the university’s faculty system. Rob holds a Ph.D. in a discipline from the mathematics and natural sciences domain, and he was previously a tenure-track faculty member at a university. Rob has spent the last 20 years or so in higher education, after working a number of years in government and industry. He describes his experience with academic capitalism as “very significant,” focused primarily on entrepreneurialism and seeking external funding for research. Activities related to academic capitalism are very important to his current position.

Ryan

Causal map data. Ryan's causal map data are represented in two forms below. Figure 48 shows the map data after conversion to the Decision Explorer software; it is a screenshot of the entire map as displayed in Decision Explorer. Table 79 shows the equivalent map data in the form of causal statements.

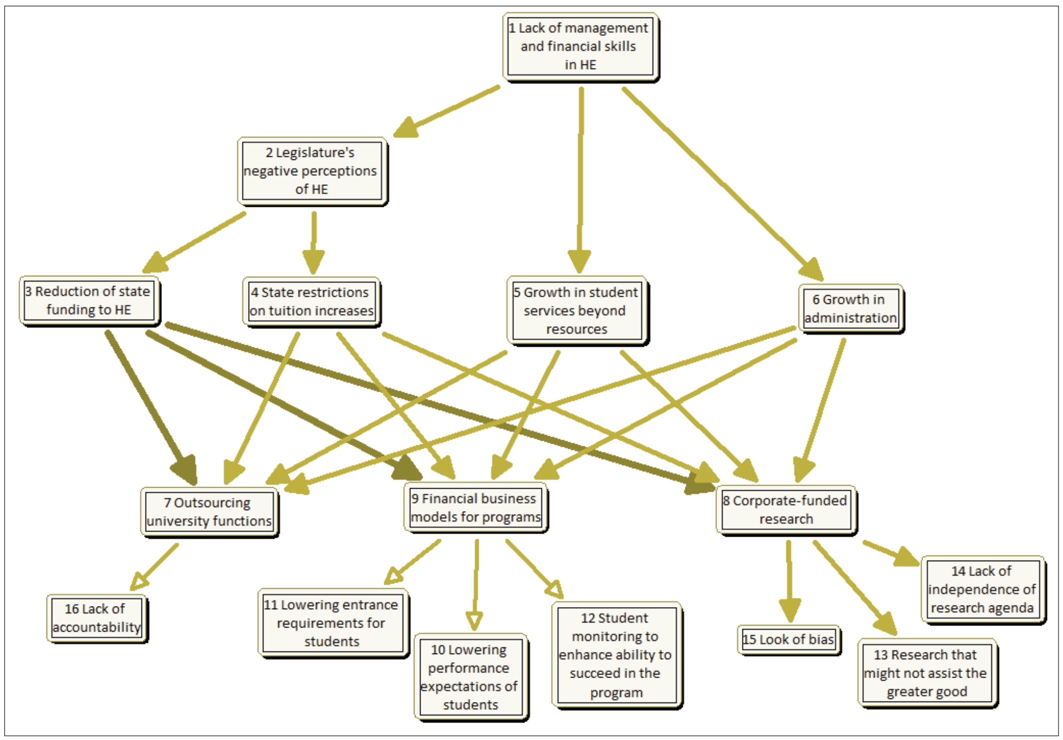

Figure 48. Screenshot of Ryan's causal map after conversion to Decision Explorer. Increasingly thicker and darker lines depict increasingly stronger links. Any negative links are shown in blue and also have the label *N-* near the arrowhead.

Table 79

Ryan's Causal Map Data Converted to Causal Statements

'Corporate-funded research' causes a STRONG INCREASE in 'Lack of independence of research agenda'
'Corporate-funded research' causes a STRONG INCREASE in 'Look of bias'
'Corporate-funded research' causes a STRONG INCREASE in 'Research that might not assist the greater good'
'Financial business models for programs' causes a MEDIUM INCREASE in 'Lowering performance expectations of students'
'Financial business models for programs' causes a MEDIUM INCREASE in 'Lowering entrance requirements for students'
'Financial business models for programs' causes a MEDIUM INCREASE in 'Student monitoring to enhance ability to succeed in the program'
'Growth in administration' causes a STRONG INCREASE in 'Corporate-funded research'
'Growth in administration' causes a STRONG INCREASE in 'Financial business models for programs'
'Growth in administration' causes a STRONG INCREASE in 'Outsourcing university functions'
'Growth in student services beyond resources' causes a STRONG INCREASE in 'Outsourcing university functions'
'Growth in student services beyond resources' causes a STRONG INCREASE in 'Corporate-funded research'
'Growth in student services beyond resources' causes a STRONG INCREASE in 'Financial business models for programs'
'Lack of management and financial skills in HE' causes a STRONG INCREASE in 'Legislature's negative perceptions of HE'
'Lack of management and financial skills in HE' causes a STRONG INCREASE in 'Growth in student services beyond resources'
'Lack of management and financial skills in HE' causes a STRONG INCREASE in 'Growth in administration'
'Legislature's negative perceptions of HE' causes a STRONG INCREASE in 'Reduction of state funding to HE'
'Legislature's negative perceptions of HE' causes a STRONG INCREASE in 'State restrictions on tuition increases'
'Outsourcing university functions' causes a MEDIUM INCREASE in 'Lack of accountability'
'Reduction of state funding to HE' causes a VERY STRONG INCREASE in 'Outsourcing university functions'
'Reduction of state funding to HE' causes a VERY STRONG INCREASE in 'Corporate-funded research'
'Reduction of state funding to HE' causes a VERY STRONG INCREASE in 'Financial business models for programs'
'State restrictions on tuition increases' causes a STRONG INCREASE in 'Outsourcing university functions'
'State restrictions on tuition increases' causes a STRONG INCREASE in 'Corporate-funded research'
'State restrictions on tuition increases' causes a STRONG INCREASE in 'Financial business models for programs'

Causal map analysis. The following three tables present the most salient results from the analysis of Ryan's causal map. Table 80 shows the map-level metrics calculated for the map alongside the average for all 20 participants. Table 81 shows the most prominent concepts in the map with the rationale for characterizing them as prominent. Table 82 shows prominent clusters in the map and includes all prominent occurrences of structural clusters (loops, islands, or trees) and content clusters (*a priori*—a content theme selected by the researcher—or emergent).

Table 80

Ryan's Map-Level Metrics with Averages for All Participants

Metric	Description	Ryan's Map	Group Avg
# of Concepts	# of concepts in map	16	20.00
# of Tails	# of concepts with only outgoing links	1	3.05
# of Heads	# of concepts with only incoming links	7	5.00
# of Ordinary	# of concepts w/incoming+outgoing links	8	11.95
# of Links	# of links in the map	24	35.55
Link-Concept Ratio	# of links divided by # of concepts	1.50	1.73
Head-Tail Ratio[a]	# of heads divided by # of tails	7.00	2.50

[a]In Table 10, I had used the term *Receiver-Transmitter Ratio* to reflect the terminology of Özesmi and Özesmi (2004), whose work I used in my early analyses. In this and following tables, I use the synonymous term *Head-Tail Ratio* to reflect the terminology of Eden and Ackermann, whose work I used in the later stages of my analyses.

Table 81

Ryan's Prominent Map Concepts and Rationale for the Characterization

Concept	Rationale for Characterizing as Prominent
Lack of management / financial skill in HE	• Verbally emphasized as driving factor in the situation • The only TAIL • Tied with 4 others for 2nd highest Outdegree
Reduction of state funding to HE	• Highest Outdegree • 4th highest Centrality, the only cause to rank this high • Tied with 4 others for 2nd highest CENTRAL score
State restrictions on tuition increases	• Tied with 4 others for 2nd highest Outdegree • Tied with 4 others for 2nd highest CENTRAL score
Growth in administration	• Tied with 4 others for 2nd highest Outdegree • Tied with 4 others for 2nd highest CENTRAL score
Growth in student services beyond resources	• Tied with 4 others for 2nd highest Outdegree • Tied with 4 others 2nd highest CENTRAL score
Corporate-funded research	• Tied with 4 causes for 2nd highest Outdegree • Tied with the other 2 effects for highest Indegree • Highest Centrality • Tied with another effect for highest DOMAIN links

	• Tied with another effect for highest CENTRAL score
Financial business models for programs	• Tied with the other 2 effects for highest Indegree • 2nd highest Centrality • Tied with another effect for highest DOMAIN links • Tied with another effect for highest CENTRAL score
Outsourcing university functions	• Tied with the other 2 effects for highest Indegree • 3rd highest Centrality • 2nd highest DOMAIN links • Tied with 4 causes for 2nd highest CENTRAL score

Note: If words in a concept are in quotes, the participant had placed quotes around them in the original map. HE = Higher Education. HEI = Higher Education Institution. Other words in capital letters denote tools or named clusters in Decision Explorer. See the *Working with clusters* section of Chapter 4 for more information about the named clusters HEINSIDE, HEBOUNDARY, and HEOUTSIDE.

Table 82

Ryan's Map Clusters with Descriptions

Category / Type	Description
Structural / Loop	0 Total loops 0 Two-way links 0 Negative links
Content / *a priori*[a]	Concepts in each cluster HEINSIDE = 13 HEBOUNDARY = 0 HEOUTSIDE = 3 Prominent results of CSET analyses • 1 HEOUTSIDE concept, *Legislature's negative perceptions of HE,* creates the other 2 HEOUTSIDE concepts • Each of the 3 HEOUTSIDE concepts influence 10 of 13 HEINSIDE concepts • 2 HEINSIDE concepts, *Growth in administration* and *Growth in student services beyond resources*, influence 10 of 13 other HEINSIDE concepts • HEINSIDE concepts have zero effect on HEOUTSIDE concepts except 1 HEINSIDE concept, *Lack of management and financial skills in HE*, influences the critical HEOUTSIDE concept *Legislature's negative perceptions of HE*
Content / Emergent	Primary causes of corporatization (4 concepts) Primary effects of corporatization (3 concepts)

[a]*a priori* = A content theme the researcher selected for analysis in every map. For more information about the HEINSIDE, HEBOUNDARY, HEOUTSIDE analysis, see the *Working with clusters* section of Chapter 4.

How Ryan thinks about corporatization.

How he structures the problem of corporatization. Ryan's causal map is compact and straightforward. The quality of compactness comes from its depiction of a relatively broad conceptual territory with a lower than average number of concepts; the map is succinct. The quality of directness comes from its fairly consistent, three-level organization, its lower than average number of links, and its uncomplicated relationships; the map contains no two-way links, negative links, or loops.

The focus of the map is on three examples of corporatization in higher education and the causes and effects of those examples. The first of the three examples is outsourcing university functions, for which Ryan offers the example of "spending too much on a presidential search firm." The second is financial business models for programs, which, Ryan says, emphasize profitability, prioritize job placement, and make colleges "pseudo-vocational." The third example is corporate-funded research, which, Ryan says, includes private funding from entities like the Koch brothers.

These three manifestations of corporatization share the same four causes. From the state level come reduction of state funding to higher education and state restrictions on tuition increases, and from within higher education come growth in student services beyond resources, and growth in administration—which Ryan describes as costly "bloat." Each of the four causes strongly increases each of the three corporatization examples, except reduction of state funding to higher education, which has an even stronger influence. "When we talk about corporatization [in higher education]," Ryan says, "I think the root cause, what we're dealing with—basically, it all boils down to funding."

As depicted in the map, the effects of the three corporatization examples are uniformly undesirable. The first, outsourcing, leads to lack of accountability. The second, business models for programs, results in lowering entrance requirements for students, lowering performance expectations for students, and monitoring students to enhance their ability to succeed in the program. All of these—including monitoring students—come from excessive state pressure to increase the number of graduates, Ryan says, and they result in degradation of standards and graduating students who "shouldn't graduate!" The third, corporate-funded research, causes a look of bias, research that might not serve the greater good, and lack of independence of the research agenda; corporations have different motives for research than academia, he explains.

In addition to this analysis of corporatization dynamics, the map also depicts a deeper, underlying cause. As the only TAIL, the lack of management and financial skills in higher education acts as a powerful driver of the map, and it ultimately increases every other concept in the map. It alone causes the growth in student services beyond resources, the unwelcome growth in administration, and the legislature's negative perception of higher education—a perception that results in reduced state funding and restricted tuition. The power of this concept is underscored by the analysis of internal and external forces. Although the forces external to higher education are few, two of them influence nearly all of the forces inside higher education. In contrast, the forces internal to higher education are many, but all but one have no influence on external forces. The exception is the lack of management and financial skills in higher education, the most potent concept in the map and the underlying cause of the problems related to corporatization. Like a hose watering weeds, the lack of management skills in higher education feeds all of the unwanted consequences of corporatization.

How he thinks about issues related to corporatization. While discussing the topic of corporatization, Ryan does not offer his view of the mission of higher education. Instead, he describes his perspective on corporatization in higher education and his recommendations for how higher education might best respond.

If corporatization is the adoption of business practices, Ryan has a mixed view of this phenomenon in higher education. On one hand, he maintains that the corporate approaches currently used in universities produce undesirable results. He delineates these unwelcome outcomes in his causal map, and, in conversation, he says that universities need "a better strategy for meeting their funding needs rather than some of the corporate approaches they've taken." On the other hand, he thinks universities lack essential skills in management and finance. "I know I've been talking about corporatization as negative," he says, "but at the same time, I think universities need to recognize...well, the importance of management."

Consistent with his causal map, Ryan contends that higher education's lack of management skills undermines its ability to function in and adapt to challenging financial circumstances. For example, Ryan says, universities might lobby state legislatures for more public funding, but they would first need to "show legislators that they've done business internally to tighten their belts." Most, he says, "haven't made the effort." In addition, Ryan says, most universities "haven't even recognized that they have financial constraints!" They are not aware, he says, that "Hey, we've gotten out of kilter. We need to scale back this growth of administration. And growth of what might be important services on campus, but we just can't afford to do them." Citing his experience with several higher education institutions, he asserts that "bloat is across the board at major universities."

Interestingly, Ryan says, his previous experience in state government allowed him "to see just how bloated universities are." During the Great Recession, he relates, state agencies were "cut back to bare bones"; there were "a lot of cutbacks," and "there wasn't a lot of waste in those agencies." At one point, he says, the governor decreed that no money would be spent on snacks or even water at state meetings. "Then I come here," he says, "and it's a whole different world!" In spite of its financial difficulties, the university "just seems to expand, expand, expand," Ryan says; student services grow, administration grows, and administrative salaries grow. He recalls that "the university was incentivizing early retirements and conducting layoffs," while it paid a sky-high salary and allowances to the university president. He compares that to "corporate culture, with its obscene executive pay even in failing organizations like Wells Fargo." Part of the problem, Ryan maintains, is that universities are "insulated," and many administrators have no experience outside universities. "They're not bad people," he insists, but "their experience limits what they recognize as alternatives." They "just don't get it. They just don't understand," he says.

In a way, Ryan suggests that higher education perform corporatization better than it does now. He recommends that leaders in higher education—"not just the president but deans, chairs, department heads for support services, and all of these other places"—have management experience outside the university system. When that is impractical, he says, colleges and universities should offer "short-term management training that deals with the financial aspects of management. And with supervising people. And with dealing with people throughout the organization." Whether through experience in other sectors or through training, he says, leaders would be able to identify options beyond the ones "they've seen other people do"; they could stop perpetuating the problem. Ultimately, Ryan argues, if universities were to improve their management ability:

> They actually might do a better job of selling to the state legislature that, "We've got our house in order. Here's how much we've cut back. We've streamlined. We've done all these things. And we're still struggling financially. So here's why it's important for you to increase our funding X% over the next five years."

Brief profile of Ryan. Ryan's position at Evans State University is as a tenured faculty member in a professional field , and he holds a Ph.D. in his academic discipline. Ryan has worked in higher education for approximately 10 years. Before that, his career was in public administration, and he taught as an adjunct faculty member at local colleges and universities during that time. Ryan says he "does not have a lot of experience" with academic capitalism but has been exposed to those ideas within the university. He also says that activities related to academic capitalism are "not at all important" to his current position.

Tim

Causal map data. Tim's causal map data are represented in two forms below. Figure 49 shows the map data after conversion to the Decision Explorer software; it is a screenshot of the entire map as displayed in Decision Explorer. Table 83 shows the equivalent map data in the form of causal statements.

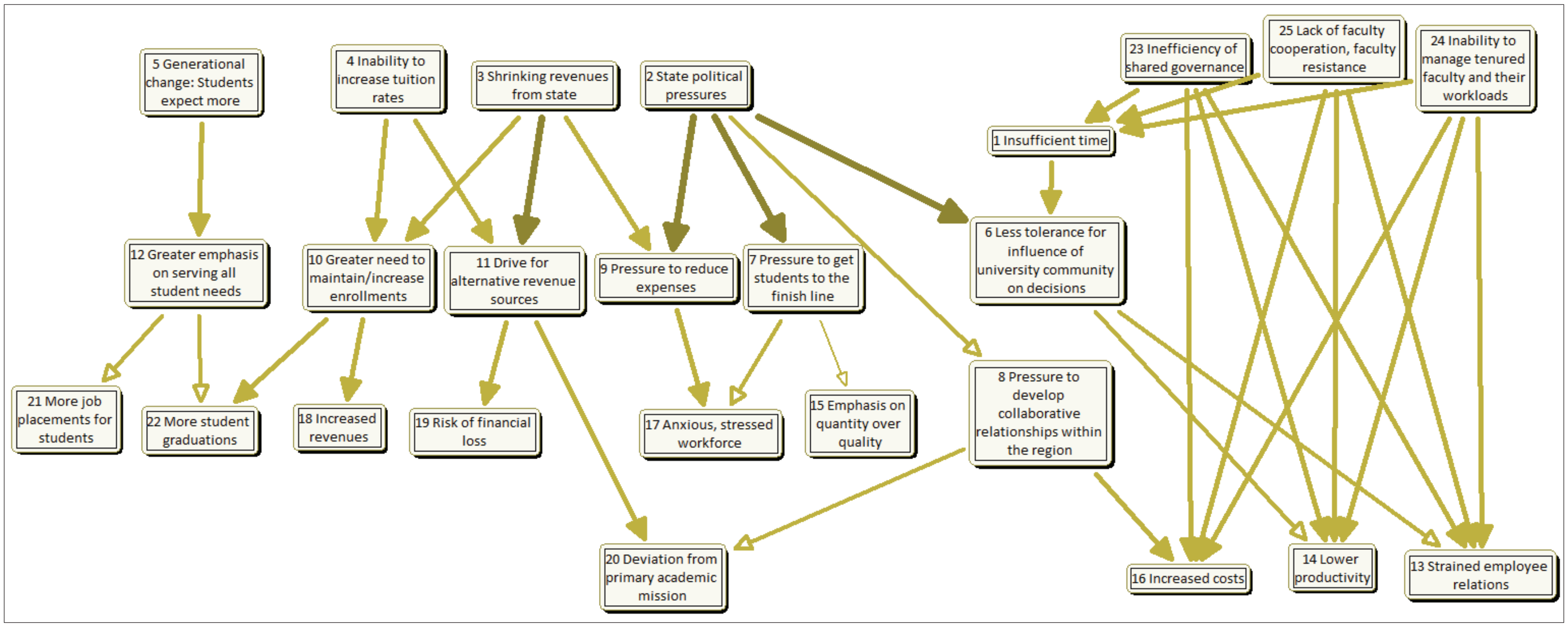

Figure 49. Screenshot of Tim's causal map after conversion to Decision Explorer. Increasingly thicker and darker lines depict increasingly stronger links. Any negative links are shown in blue and also have the label *N-* near the arrowhead.

Table 83

Tim's Causal Map Data Converted to Causal Statements

'Drive for alternative revenue sources' causes a STRONG INCREASE in 'Risk of financial loss'
'Drive for alternative revenue sources' causes a STRONG INCREASE in 'Deviation from primary academic mission'
'Generational change: Students expect more' causes a STRONG INCREASE in 'Greater emphasis on serving all student needs'
'Greater emphasis on serving all student needs' causes a MEDIUM INCREASE in 'More job placements for students'
'Greater emphasis on serving all student needs' causes a MEDIUM INCREASE in 'More student graduations'
'Greater need to maintain/increase enrollments' causes a STRONG INCREASE in 'Increased revenues'
'Greater need to maintain/increase enrollments' causes a STRONG INCREASE in 'More student graduations'
'Inability to increase tuition rates' causes a STRONG INCREASE in 'Greater need to maintain/increase enrollments'
'Inability to increase tuition rates' causes a STRONG INCREASE in 'Drive for alternative revenue sources'
'Inability to manage tenured faculty and their workloads' causes a STRONG INCREASE in 'Insufficient time'
'Inability to manage tenured faculty and their workloads' causes a STRONG INCREASE in 'Strained employee relations'
'Inability to manage tenured faculty and their workloads' causes a STRONG INCREASE in 'Lower productivity'
'Inability to manage tenured faculty and their workloads' causes a STRONG INCREASE in 'Increased costs'
'Inefficiency of shared governance' causes a STRONG INCREASE in 'Insufficient time'
'Inefficiency of shared governance' causes a STRONG INCREASE in 'Strained employee relations'
'Inefficiency of shared governance' causes a STRONG INCREASE in 'Lower productivity'
'Inefficiency of shared governance' causes a STRONG INCREASE in 'Increased costs'
'Insufficient time' causes a STRONG INCREASE in 'Less tolerance for influence of university community on decisions'
'Lack of faculty cooperation, faculty resistance' causes a STRONG INCREASE in 'Insufficient time'
'Lack of faculty cooperation, faculty resistance' causes a STRONG INCREASE in 'Strained employee relations'
'Lack of faculty cooperation, faculty resistance' causes a STRONG INCREASE in 'Lower productivity'
'Lack of faculty cooperation, faculty resistance' causes a STRONG INCREASE in 'Increased costs'
'Less tolerance for influence of university community on decisions' causes a MEDIUM INCREASE in 'Strained employee relations'
'Less tolerance for influence of university community on decisions' causes a MEDIUM INCREASE in 'Lower productivity'
'Pressure to develop collaborative relationships within the region' causes a STRONG INCREASE in 'Increased costs'
'Pressure to develop collaborative relationships within the region' causes a MEDIUM INCREASE in 'Deviation from primary academic mission'
'Pressure to get students to the finish line' causes a MEDIUM INCREASE in 'Anxious, stressed workforce'
'Pressure to get students to the finish line' causes a WEAK INCREASE in 'Emphasis on quantity over quality'
'Pressure to reduce expenses' causes a STRONG INCREASE in 'Anxious, stressed workforce'
'Shrinking revenues from state' causes a STRONG INCREASE in 'Greater need to maintain/increase enrollments'
'Shrinking revenues from state' causes a STRONG INCREASE in 'Pressure to reduce expenses'
'Shrinking revenues from state' causes a VERY STRONG INCREASE in 'Drive for alternative revenue sources'
'State political pressures' causes a MEDIUM INCREASE in 'Pressure to develop collaborative relationships within the region'
'State political pressures' causes a VERY STRONG INCREASE in 'Less tolerance for influence of university community on decisions'
'State political pressures' causes a VERY STRONG INCREASE in 'Pressure to get students to the finish line'
'State political pressures' causes a VERY STRONG INCREASE in 'Pressure to reduce expenses'

Causal map analysis. The following three tables present the most salient results from the analysis of Tim's causal map. Table 84 shows the map-level metrics calculated for the map alongside the average for all 20 participants. Table 85 shows the most prominent concepts in the map with the rationale for characterizing them as prominent. Table 86 shows prominent clusters in the map and includes all prominent occurrences of structural clusters (loops, islands, or trees) and content clusters (*a priori*—a content theme selected by the researcher—or emergent).

Table 84

Tim's Map-Level Metrics with Averages for All Participants

Metric	Description	Tim's Map	Group Avg
# of Concepts	# of concepts in map	25	20.00
# of Tails	# of concepts with only outgoing links	7	3.05
# of Heads	# of concepts with only incoming links	10	5.00
# of Ordinary	# of concepts w/incoming+outgoing links	8	11.95
# of Links	# of links in the map	36	35.55
Link-Concept Ratio	# of links divided by # of concepts	1.44	1.73
Head-Tail Ratio[a]	# of heads divided by # of tails	1.43	2.50

[a]In Table 10, I had used the term *Receiver-Transmitter Ratio* to reflect the terminology of Özesmi and Özesmi (2004), whose work I used in my early analyses. In this and following tables, I use the synonymous term *Head-Tail Ratio* to reflect the terminology of Eden and Ackermann, whose work I used in the later stages of my analyses.

Table 85

Tim's Prominent Map Concepts and Rationale for the Characterization

Concept	Rationale for Characterizing as Prominent
State political pressures	• Highest Outdegree • Highest Centrality • Highest CENTRAL score
Inefficiency of shared governance	• Verbally emphasized powerful effect of faculty issues • Tied with 2 other faculty issues for 2nd highest Outdegree • Tied with 5 others for 3rd highest Centrality
Inability to manage tenured faculty and their workloads	• Verbally emphasized powerful effect of faculty issues • Tied with 2 other faculty issues for 2nd highest Outdegree • Tied with 5 others for 3rd highest Centrality
Lack of faculty cooperation, faculty resistance	• Verbally emphasized powerful effect of faculty issues • Tied with 2 other faculty issues for 2nd highest Outdegree Tied with 5 others for 3rd highest Centrality
Increased costs	• Verbally emphasized powerful effect of faculty issues • 3 of 4 causes of *Increased costs* are faculty-related • Highest Indegree • Tied with 5 others for 3rd highest Centrality

Lower productivity	• Verbally emphasized powerful effect of faculty issues • 3 of 4 causes of *Lower productivity* are faculty-related • Tied with 1 other for 2nd highest Indegree
Strained employee relations	• Verbally emphasized powerful effect of faculty issues • 3 of 4 causes of *Strained employee relations* are faculty-related • Tied with 1 other for 2nd highest Indegree
Insufficient time	• Verbally emphasized powerful effect of faculty issues • All 3 causes of *Insufficient time* are faculty-related • Tied with 5 others for 3rd highest Centrality
Drive for alternative revenue sources	• 2nd highest Centrality
Greater need to maintain/increase enrollments	• Tied with 5 others for 3rd highest Centrality
Pressure to reduce expenses	• Tied with 2 others for 2nd highest CENTRAL score
Pressure to develop collaborations within the region	• Tied with 2 others for 2nd highest CENTRAL score

Note: If words in a concept are in quotes, the participant had placed quotes around them in the original map. HE = Higher Education. HEI = Higher Education Institution. Other words in capital letters denote tools or named clusters in Decision Explorer. See the *Working with clusters* section of Chapter 4 for more information about the named clusters HEINSIDE, HEBOUNDARY, and HEOUTSIDE.

Table 86

Tim's Map Clusters with Descriptions

Category / Type	Description
Structural / Loop	0 Total loops 0 Two-way links 0 Negative links
Content / *a priori*[a]	Concepts in each cluster HEINSIDE = 21 HEBOUNDARY = 0 HEOUTSIDE = 4 Prominent results of CSET analyses • HEOUTSIDE concepts have no influence on each other and have an uneven level of influence on HEINSIDE concepts, largely due to the compartmentalized organization of the map • HEINSIDE concepts have relatively low influence on each other and zero effect on HEOUTSIDE concepts
Content / Emergent	State-created difficulties (3 concepts) Financial pressures (4 concepts) Faculty-related difficulties (8 concepts)

[a]*a priori* = A content theme the researcher selected for analysis in every map. For more information about the HEINSIDE, HEBOUNDARY, HEOUTSIDE analysis, see the *Working with clusters* section of Chapter 4.

How Tim thinks about corporatization.

How he structures the problem of corporatization. Tim's causal map is broad and straightforward. Its breadth comes from a somewhat higher than average number of concepts that cover considerable conceptual terrain. Its directness comes from a largely three-level organization that explicates causes and effects for examples of corporatization and from a somewhat lower than average link-concept ratio. In addition, the map has no negative links, two-way links, or loops, a trait that suggests map relationships are more straightforward than they are complicated.

One of the notable traits of the map is its depiction of strong and undesirable driving forces, which arise from three sources: the actions of state government, faculty-related difficulties, and student expectations. These forces are depicted as TAILS, which often describe non-negotiable influences, and the map has seven of them, a significantly higher number than average. In addition, all of the TAILS have powerful effects on other areas of the map. From state government come the pressures of increasing requirements and mandates, shrinking subsidies, and caps on tuition increases. From the faculty domain come the pressures of the inefficiency of shared governance, the lack of faculty cooperation, and the inability to manage tenured faculty and their workloads. From students comes the pressure of their ever-increasing expectations of higher education.

Together, these potent forces produce pressures, tensions, and drives inside higher education. The actions of state government increase pressures to grow enrollment, reduce expenses, locate alternative revenue sources, and get students to graduation. Faculty-related issues create time constraints, increased costs, lower productivity, and strained employee relations. And student expectations result in greater emphasis on serving all of the various needs of an increasingly diverse student population.

Ultimately, the dynamics inside higher education produce many more undesirable outcomes than desirable outcomes. On the plus side, the efforts to increase enrollment and meet student expectations yield increased revenues, more student graduations, and more job placements for students. At the same time, though, the pressures to reduce expenses and “get students to the finish line” emphasize quantity over quality and create a stressed, anxious workforce, while the drive for alternative sources of revenue increases the risk of financial loss and causes the institution to deviate from its academic mission. State government compounds these problems. Its pressure on the university to develop external partnerships pushes the institution further from its academic purpose, and its growing demands increase tension with faculty due to the slowness and inefficiency of shared governance.

With 21 of 25 concepts depicting concepts inside higher education, the map focuses on the organizational dynamics within colleges and universities. These internal dynamics include driving forces, actions taken, as well as outcomes, and they are tension-filled. From outside higher education, the demands of the state and of students exacerbate these difficulties, yet are represented as beyond the influence of higher education. Like a workshop vise, the map describes ever-tightening pressures on higher education with little recourse.

How he thinks about issues related to corporatization. In conversation, Tim does not describe the mission of higher education; instead, he recommends that higher education “redefine it.” Every four-year institution, he says, “has teaching, research, and service at the heart of their mission... but we need to be more focused than that.” In addition, he contends, colleges and universities should not content themselves with missions that simply reflect tradition; they should retool them to reflect “what we believe—now, today—” should be accomplished in higher education. As they craft more meaningful and precise missions, Tim suggests, institutions should pose probing questions such as:

> Who do we want to cater to? What kinds of teaching do we want to do? What kinds of research? At what level? What should the volume be? What should workload policies be? And how do we deal with changes in enrollment levels and other cyclical environmental changes? How do we respond to those on a real-time basis so we’re able to be financially responsible as well?

Before discussing corporatization, Tim provides a preface. Referring to the fact that he has spent thirty years in university finance dealing with the financial challenges of higher education, he says his background might "jade" or "sway" his thinking; when it comes to finance, he says, "I may feel more strongly about this area than others." Having said that, Tim insists that colleges and universities must "temper the escalating costs of higher education." Higher education, he says, "can't be an altruistic body of knowledge" and not address cost. And the problem of cost, Tim says, is complicated; just as he depicted in his causal map, multiple issues intertwine. Some relate to "the infrastructure of the university," he says, citing underfunded research; the inefficiencies and costliness of shared governance; and the expenses that come from being a technology innovator and a "people-heavy" enterprise. Others relate to external funding sources, he says, citing the increasingly costly requirements and "unfunded mandates" emerging from state government; the inadequacy of state funding formulas for universities with lower tuition and at-risk students; and the funding limitations of "the alumni base" at non-elite institutions. "Costs are really getting out of hand," he says. And, because colleges and universities raise tuition in response, Tim claims, they are balancing their books "on the backs of students." A hazy and ever-expanding mission further aggravates the problem. He explains:

> Like right now, at our institution, we are trying to do so many different things that things get blurred sometimes. Now some people would say, "Tim, you just don't want to be progressive. You don't want to branch out and do all of these different things." And that's another viewpoint. I accept that. But, as a non-profit, we need to focus on what our mission is and stop trying to expand it just because we can.

Not only does Tim suggest that the university redefine its mission, he suggests that it recalibrate its activities to fit that more finely honed purpose; he recommends radically rethinking the functions of the enterprise. First, he proposes that universities reevaluate their role in research. Research, he says, is underfunded; external funding through grants and partnerships rarely covers costs, internal funding is constrained, and state funding does not reimburse research. In addition, Tim questions the practice of universities competing "against the private sector and government contractors" for research contracts. He also questions the practice of funding research through tuition, describing it as "taxing undergraduates...who don't benefit." Under these conditions, Tim says, perhaps the private sector should do more research, and higher education should do less. Interestingly, Tim's important concern about research is not represented in his causal map.

In addition to its research function, Tim contends, higher education should also reevaluate its commitments to tenure and shared governance, important concerns that are represented in his causal map. These practices should be reconsidered, he says, primarily because they cause inefficiency, low productivity, increased costs, and, eventually, higher costs for students. Tenure, he says, means "not being able to manage the work force." Tenure, he says, results in faculty "not being held accountable"; faculty having "reduced workloads"—"some tenured faculty don't even do research or service anymore," he claims; faculty sometimes being "uncooperative, non-collaborative, even belligerent"; and faculty holding "legal, life-long employment," which Tim considers inappropriate. Similarly, he says, shared governance is time-consuming, costly, and inefficient. "We spend a lot of time in meetings just to dialogue about things," he says, "and we take a long time to take final action.” Instead of shared governance, Tim recommends a model in which faculty participate but also understand “where the buck stops”; they provide input, but “it is NOT THEIR DECISION.” The “culture of catering to faculty,” Tim says, may have been around for “hundreds of years, but the world has changed.”

In addition to research, tenure, and shared governance, Tim suggests that higher education reevaluate the intention to meet all student needs and reevaluate the pursuit of community partnerships, two concerns that are echoed his causal map. In an era marked by increasingly diverse and under-prepared students, the university, he says, carries a greater “advising, tutoring, and counseling” burden. In addition, student expectations have undergone a “generational change,” he says; today’s students expect apartments, not just dorms; presume the university will accommodate “non-traditional relationships such as same-sex marriages, partners without marriage, and children”; and desire a diverse and international array of food choices. In terms of community partnerships, Tim says, the university has lost millions in some endeavors; perhaps hoping to make money “hand over foot,” offset costs, and stabilize tuition, the university has “plow[ed] money” into nonviable community programs and centers. Perhaps, he speculates, no one prepared business plans, because “so many of those things end up being not money-makers but money-losers.” Again, Tim emphasizes, the reason to reevaluate these activities is that their costs threaten the university’s ability to fulfill its purpose; to sustain the institution, he recommends a “streamlined mission.”

Finally, Tim recognizes that his suggestions represent dramatic change. To transform the university in these ways would take “intestinal fortitude” on the part of administration, he says, because the changes would “threaten the faculty’s way of life.” It would take “time,” “baby steps,” and “strong leadership at the top” to “start the dialogue.” The only other avenue to needed change, Tim contends, is through the state legislature; it could “pass laws to stop awarding tenure” and “could mandate minimum work load levels” for faculty. “Everyone’s afraid to be the first,” he says, but these changes “need to start somewhere.”

Brief profile of Tim. Tim’s position at Evans State University is within the non-instructional, upper administration of university finance. He has worked in higher education for approximately 30 years and has not had significant work experience outside higher education. Tim describes his experience with academic capitalism as “peripheral,” mostly involving funding approval. He also says that activities related to academic capitalism are becoming increasingly important to his current position.

Tony

Causal map data. Tony's causal map data are represented in two forms below. Figure 50 shows the map data after conversion to the Decision Explorer software; it is a screenshot of the entire map as displayed in Decision Explorer. Table 87 shows the equivalent map data in the form of causal statements.

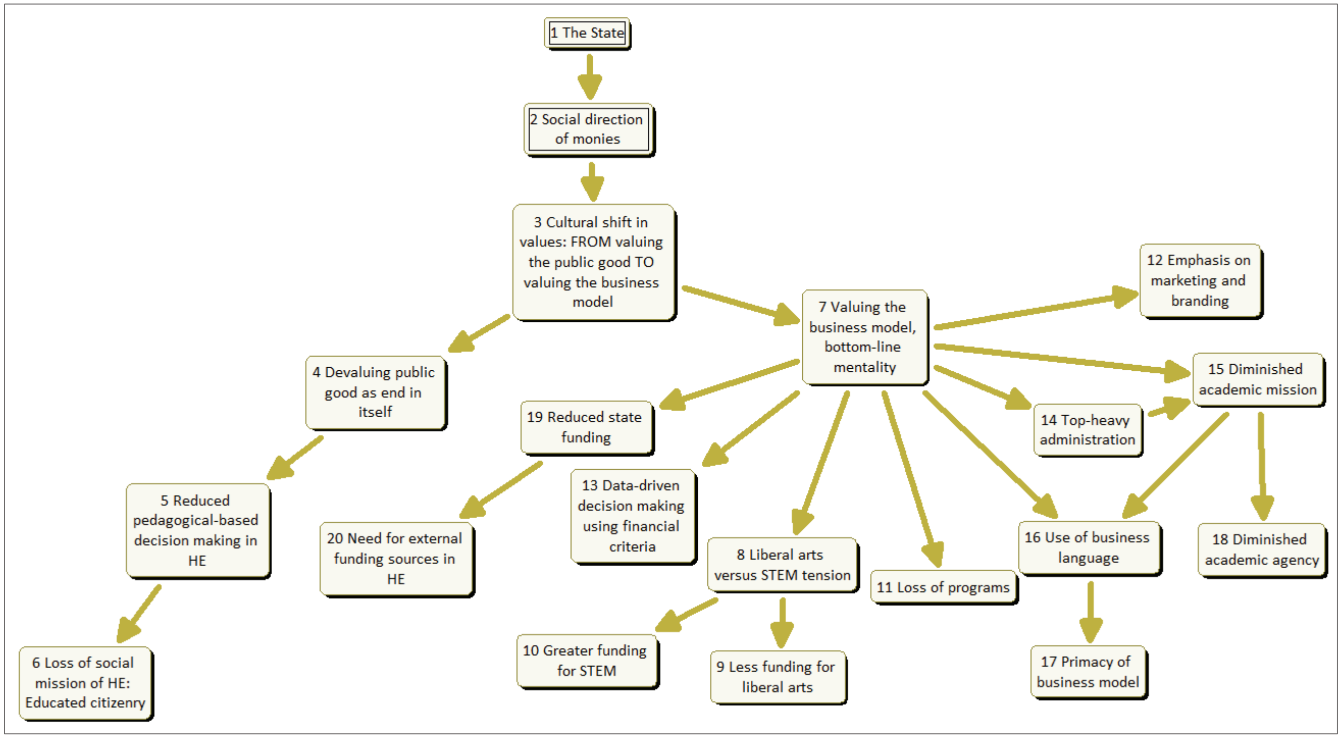

Figure 50. Screenshot of Tony's causal map after conversion to Decision Explorer. Increasingly thicker and darker lines depict increasingly stronger links. Any negative links are shown in blue and also have the label *N-* near the arrowhead.

Table 87

Tony's Causal Map Data Converted to Causal Statements

'Cultural shift in values: FROM valuing the public good TO valuing the business model' causes a STRONG INCREASE in 'Devaluing public good as end in itself'
'Cultural shift in values: FROM valuing the public good TO valuing the business model' causes a STRONG INCREASE in 'Valuing the business model, bottom-line mentality'
'Devaluing public good as end in itself' causes a STRONG INCREASE in 'Reduced pedagogical-based decision making in HE'
'Diminished academic mission' causes a STRONG INCREASE in 'Diminished academic agency'
'Diminished academic mission' causes a STRONG INCREASE in 'Use of business language'
'Liberal arts versus STEM tension' causes a STRONG INCREASE in 'Greater funding for STEM'
'Liberal arts versus STEM tension' causes a STRONG INCREASE in 'Less funding for liberal arts'
'Reduced pedagogical-based decision making in HE' causes a STRONG INCREASE in 'Loss of social mission of HE: Educated citizenry'
'Reduced state funding' causes a STRONG INCREASE in 'Need for external funding sources in HE'
'Social direction of monies' causes a STRONG INCREASE in 'Cultural shift in values: FROM valuing the public good TO valuing the business model'
'The State' causes a STRONG INCREASE in 'Social direction of monies'
'Top-heavy administration' causes a STRONG INCREASE in 'Diminished academic mission'
'Use of business language' causes a STRONG INCREASE in 'Primacy of business model'
'Valuing the business model, bottom-line mentality' causes a STRONG INCREASE in 'Liberal arts versus STEM tension'
'Valuing the business model, bottom-line mentality' causes a STRONG INCREASE in 'Loss of programs'
'Valuing the business model, bottom-line mentality' causes a STRONG INCREASE in 'Emphasis on marketing and branding'
'Valuing the business model, bottom-line mentality' causes a STRONG INCREASE in 'Data-driven decision making using financial criteria'
'Valuing the business model, bottom-line mentality' causes a STRONG INCREASE in 'Top-heavy administration'
'Valuing the business model, bottom-line mentality' causes a STRONG INCREASE in 'Diminished academic mission'
'Valuing the business model, bottom-line mentality' causes a STRONG INCREASE in 'Use of business language'
'Valuing the business model, bottom-line mentality' causes a STRONG INCREASE in 'Reduced state funding'

Causal map analysis. The following three tables present the most salient results from the analysis of Tony's causal map. Table 88 shows the map-level metrics calculated for the map alongside the average for all 20 participants. Table 89 shows the most prominent concepts in the map with the rationale for characterizing them as prominent. Table 90 shows prominent clusters in the map and includes all prominent occurrences of structural clusters (loops, islands, or trees) and content clusters (*a priori*—a content theme selected by the researcher—or emergent).

Table 88

Tony's Map-Level Metrics with Averages for All Participants

Metric	Description	Tony's Map	Group Avg
# of Concepts	# of concepts in map	20	20.00
# of Tails	# of concepts with only outgoing links	1	3.05
# of Heads	# of concepts with only incoming links	9	5.00
# of Ordinary	# of concepts w/incoming+outgoing links	10	11.95
# of Links	# of links in the map	21	35.55
Link-Concept Ratio	# of links divided by # of concepts	1.05	1.73
Head-Tail Ratio[a]	# of heads divided by # of tails	9.00	2.50

[a]In Table 10, I had used the term *Receiver-Transmitter Ratio* to reflect the terminology of Özesmi and Özesmi (2004), whose work I used in my early analyses. In this and following tables, I use the synonymous term *Head-Tail Ratio* to reflect the terminology of Eden and Ackermann, whose work I used in the later stages of my analyses.

Table 89

Tony's Prominent Map Concepts and Rationale for the Characterization

Concept	Rationale for Characterizing as Prominent
Valuing the business model	• Highest Outdegree by far • Highest Centrality • Highest DOMAIN links by far • Highest CENTRAL score
Cultural shift in values: FROM valuing the public good TO valuing the business model	• Seemingly the one true TAIL (because *The State* and *Social direction of monies* were afterthoughts) • As such, the DRIVER behind the map • Tied with 2 others for 3rd highest Centrality • 2nd highest CENTRAL score
Diminished academic mission	• Tied with 1 other for highest Indegree • 2nd highest Centrality • Tied with 1 other for 2nd highest DOMAIN links
Use of business language	• Tied with 1 other for highest Indegree • Tied with 2 others for highest Centrality • Tied with 1 other for 2nd highest DOMAIN links

Note: If words in a concept are in quotes, the participant had placed quotes around them in the original map. HE = Higher Education. HEI = Higher Education Institution. Other words in capital letters denote tools or named clusters in Decision Explorer. See the *Working with clusters* section of Chapter 4 for more information about the named clusters HEINSIDE, HEBOUNDARY, and HEOUTSIDE.

Table 90

Tony's Map Clusters with Descriptions

Category / Type	Description
Structural / Loop	0 Total loops 0 Two-way links 0 Negative links
Content / *a priori*[a]	Concepts in each cluster HEINSIDE = 15 HEBOUNDARY = 0 HEOUTSIDE = 5 Prominent results of CSET analyses • HEOUTSIDE concepts have uneven influence on each other and 1 HEOUTSIDE concept influences every HEINSIDE concept: *Cultural shift in values: FROM valuing the public good TO valuing the business model* • HEINSIDE concepts have little to no influence on each other and zero influence on HEOUTSIDE concepts with one exception; the HEINSIDE concept *Valuing the business model* influences almost all other HEINSIDE concepts and also increases the HEOUTSIDE concept *Reduced state funding*

[a]*a priori* = A content theme the researcher selected for analysis in every map. For more information about the HEINSIDE, HEBOUNDARY, HEOUTSIDE analysis, see the *Working with clusters* section of Chapter 4.

How Tony thinks about corporatization.

How he structures the problem of corporatization. Tony's causal map is focused and straightforward. It has an average number of concepts, which indicates it presents an average amount of detail. It also has a lower than average number of links and link-concept ratio, which suggests that relationships in the map are more straightforward than they are elaborate. The absence of two-way links, negative links, and loops underscore the uncomplicated quality of the map relationships. At the same time, with nine HEADS and one TAIL, the map has a much higher than average Head-Tail ratio. This trait suggests that the map emphasizes the consequences of the situation; it focuses on relatively fewer causes and expounds the relatively numerous effects of those causes. The map has one more unusual trait. Tony chose not to differentiate the strengths of various relationships; instead, he assigned all of them a strength rating of *strong*.

The overall shape of Tony's map reflects the high Head-Tail ratio; the map has two driving forces that fan out into a host of consequences, all of which are undesirable for higher education and, ultimately, for society. The first driving force is the cultural shift from valuing the public good to valuing the business model. Based on Tony's comments during mapping and my notes from the interview, I treat this concept as the map's one true TAIL. (For two reasons, I de-emphasize the two concepts depicted as leading to this cultural shift: the State and the social direction of monies. While creating his map, Tony added the cultural shift concept early in the process and repeatedly emphasized its central role in causing corporatization. In contrast, he added the State and social direction of monies concepts last and at a point when he was discussing how money flows in an open society. Although those concepts may be an important aspect of his thinking, he did not depict them as driving forces, which he did for the cultural shift concept.) Therefore, as the only TAIL in the map, the cultural shift from valuing the public good to valuing the business model is the root cause of the rest of the map. It causes a devaluation of the public good as an end in itself, reduces pedagogical-based decision-making in higher education, and, ultimately, causes the loss of higher education's social mission to develop an educated citizenry.

Stemming from this cultural shift, the second driving force in Tony's map is valuing the business model, and it causes a multitude of unwelcome changes inside higher education. The entire map has 20 concepts, and 13 of them are here; this is the area of the map in which Tony expounds the many deleterious effects of valuing the business model. Some of the effects are financial: reduced state funding, need for external funding, and greater funding for STEM than for liberal arts. Many of the effects represent academic losses: diminished academic mission and academic agency, tension in liberal arts due to STEM emphasis, loss of academic programs that are not cost-effective, and academic decisions based on financial criteria—determining what to offer, Tony explains, "based on asses in seats rather than agreed-upon principles." Other effects reflect a business-oriented culture: top-heavy administration, emphasis on marketing and branding, and, finally, the use of business language, which, Tony asserts, "reinforces the primacy of the business model."

The analysis of internal and external forces underscores the potency of the two driving forces of the map. From the outside, the cultural shift from valuing the public good to valuing the business model influences every concept inside higher education. From the inside, valuing the business model influences almost all other concepts inside higher education; with the exception of reduced state funding, though, its influence does not flow back to the outside. Like an invasive plant, the move to a business model is depicted as spreading—from the outside and the inside—across the terrain of traditional higher education.

How he thinks about issues related to corporatization. Tony contends that the mission of higher education is to develop an educated citizenry and that the means to achieve that end is a traditional liberal arts education. "It's important in a free society, " he says, "for the citizenry to have a baseline education in order to be able to make decisions and function as a check on government." Potential despotism, he continues, as well as governmental "corruption and propaganda and excessive... intrusiveness" are "best countered by an informed and educated citizenry." By developing citizens, he maintains, higher education provides a vital service on behalf of the public good.

In Tony's view, corporatization is anathema to this mission. One reason, he explains, is that the business model shifts higher education's purpose from liberal education to job training—two "very, very different things." Job training is a commodity, Tony says, while education "can't be given a market value"; job training is "easy to define," while education is "far too complicated to define in simple terms"; and job training is transactional, while education is an indescribable process of human unfolding. He explains:

> To some extent, this reflects my belief in the unpredictability of liberal higher education. All you can do is open the box, so to speak, and that opening affects people in different ways. There's no uniformity to it. It's not a product in the way that so many other things are in our culture. So there is an unpredictable nature to it, a mysterious nature. And I certainly value that. And, in fact, I try to instill that in my own students, that appreciation for complexity and mystery and the mystery of themselves in relationship to those things.

A second reason Tony opposes corporatization is that he associates it with the contemporary view that "everyone should get a college education," a view he does not share. "Once upon a time, a hundred years ago, seventy-five years ago," he relates, "most people didn't get the kind of education we're talking about, a liberal education." Although liberal education—in the form of college degrees—was associated with higher future income, the income was a subsidiary benefit, not the aim, Tony maintains. Meanwhile, he says, society did not develop other models of post-secondary education that would help people "rise up out of their circumstances into a better life, a stable life, I guess what we'd call a middle class existence." For a while, the manufacturing industry provided well-paying jobs, he says, to those "for whom a traditional four-year education [was] not appropriate for whatever reason." Then, he says, society "started to try to drive everybody into college." This agenda was strengthened by the decline of the manufacturing industry and the "abysmal state" of vocational training, and now, he claims, "we have more students entering college than at any time in our history." The problem, Tony argues, is that liberal education "is not right for everybody." He clarifies:

> Ultimately, I would like everybody in the world to want a higher education, to want to take English literature classes, write papers, critically analyze philosophical texts, look at paintings and study their history. To my mind, that is one of the things that leads to a meaningful existence. But I realize that's not the case for everybody. So I don't want to mistakenly think that it is, in fact, something for everyone.

A third reason Tony objects to corporatization is that it creates a bloated bureaucracy that distances higher education from its mission. Universities, he says, are "top-heavy" with administration, which is self-reinforcing, because "administration creates more administration." Administration also creates new staff positions, new services, new offices, and all of it must be funded, he says. The university is now a "big and unruly" mix of "faculty—whose mission, first and foremost, is to educate students—and administrators and staff and various other people, who are necessary for maintaining the institution." Because increasing amounts of money are spent outside the faculty realm and increasing numbers of decisions are made for financial, not pedagogical, reasons, Tony argues, the university "gets further and further away from our mission."

Tony has several recommendations for a utopian world, and, short of that, a few suggestions for how universities might best respond to corporatization. In an ideal world, he suggests that earlier levels of funding to higher education be reinstated by state and federal governments; that job training be removed from liberal education; that better post-secondary educational options be developed for job-oriented students; that community colleges focus on technical training and step back from the liberal arts—because, Tony says, "with all due respect to my colleagues in community colleges, I don't think it's the same thing"; and that a four-year university education—rather than two years at a community college and two years at a university—"come back into vogue."

In the present, non-utopian circumstances, Tony recommends that higher education start by doing what "liberally educated people are capable of doing, which is critically analyzing...the state of higher education." He suggests that higher education first determine if corporatization "even IS a problem." On one hand, he says, "corporatization, in the university system, in a free society, is [not] necessarily bad, if, in fact, it reflects the will of the people," but, on the other hand, he doubts that the state's allocation of funding reflects the will of the people. Moving on, he suggests that higher education articulate the problem in terms of why it has arisen, who benefits from it, and who loses. Then, he says, higher education should "do what it does best": educate. It should educate students and the public about the issue, he says, so that "to the extent possible, people know what they're talking about" and can "make informed decisions" at the ballot box. This discussion about what he describes as "the work of higher education at a societal level" provokes a memory: "You know," Tony says, "what leaps to my mind is a placard I saw at a Tea Party rally that said something like, 'Hey, big government, hands off my Medicare!'"

In both his causal map and in conversation, Tony articulates his view that corporatization threatens the core mission of higher education. In his map, he delineates the ways that corporatization manifests and its consequences, and, in conversation, he explicates his reasoning and his recommendations. All of the views he expresses are consistent with each other; they reflect his perspective that higher education is one of those "things we value as a society [that] simply cannot conform to a business model." He concludes:

> So I think the university HAS to push back against the business model rather than cozying up to it. [pause] I think business is a strange bedfellow for higher education. At this time in history, maybe higher education, for better or worse, may need to be in BED with business, but it should be wary. [laughs] It doesn't know where business has been sleeping.

Brief profile of Tony. Tony's position at Evans State University is within the lower administration of instruction; he chairs a department within the liberal arts, he has tenure as a faculty member, and he holds a Ph.D. in his discipline. He has worked in higher education for approximately 20 years. Tony says he has little experience with academic capitalism, although, as chair, he has been involved with marketing and branding. He describes the importance of academic capitalist activities to his current position as "somewhat important."

CHAPTER 6:

CONCLUSION

I once knew an abstract artist who always created drawings in pairs. Working on small rectangles of paper, he made each drawing by repeatedly swiping the paper with colored pencils, building up a thicket of variously colored strokes that intermingled in an organic yet ordered fashion, looking a bit like falling rain. By subtly varying the color mix across the page, he evoked shimmering rectangles that appeared like mirages from amidst the colored lines. What intrigued me the most, though, was that a pair of his drawings were always remarkably similar to each other. They had the same size; they often had the same rectangles; and they usually had similar colors. Yet, the two always had fine differences: a slight rearrangement of color mixes, a subtle difference in the vigor of the strokes, or an additional rectangle so ethereal it could be seen only with careful viewing. One time, I asked him what his drawings meant, and he said that he thought a lot of life had to do with looking for similarities and differences.

That simple idea stayed with me, and I have thought about it often. I bring no particular expertise—philosophical, psychological, or other—to the topic, yet I find it fascinating. It is interesting to me that no two things ever seem to be completely similar or completely dissimilar. It is interesting to me that identifying some things as similar simultaneously identifies others that are dissimilar. It is interesting to me that varying the criterion used to determine similarity and difference results in a potentially endless number of groupings. For example, bees can belong with bananas, behemoths, and braggarts, because they all start with B, but bees can also belong with nettles, rebukes, and slaps in the face, because they all sting. In this way, our beautiful, complex world is infinitely relational.

Yet, identifying similarities and differences is also a consequential operation. One reason is that some of our distinctions abide; we create, reuse, and update classification systems like taxonomies for plants, animals, and microorganisms and genres for literature, music, and painting, for example. Another reason is that we use classification systems to frame our thinking and form judgments about new phenomena; we may mistype a newly discovered fossil, for example, because of its strong similarities to an existing classification. A third reason is that human thinking is subject to bias; we may, for example, conceptualize categories of people based on prejudice or misattribution. Because comparisons are consequential, I suggest, confidence that a classification system is meaningful and appropriate should be proportional to the amount of collective knowledge we have; when knowledge is sparse, comparisons should elucidate differences and only tentatively suggest similarities.

I applied these basic principles to this study. The purpose of the study was to explore the views that higher education leaders have about corporatization in American higher education and to disseminate those views in order to further a collective conversation about the value of corporatization as an adaptation for higher education. At the time, investigations of these views were rare and knowledge about them slight. I concluded, therefore, that the study should focus on highly diverse viewpoints;

emphasize the uniqueness of each view; and avoid premature conclusions about similarities across views. Accordingly, my findings for the study are my interpretations of the individual perspectives of each of the twenty participants.

Keeping the same basic principles in mind, I also thought that an across-case analysis (Miles & Huberman, 1994) of participant views would align with my research purpose as long I took an extremely tentative approach. Therefore, I used the Chapter 5 findings for each participant to conduct a very preliminary investigation of similarities across participant views. As I conducted this exploration, I discovered that the similarities I found typically belonged to a subset of participants, not all participants, and that certain subsets of participants seemed to share more than one similarity. I describe these very tentative clusters of similarity as patterns of thinking. I offer them in this chapter as another dimension of the study that responds to the research question: How do leaders in higher education think about corporatization in American higher education?

In this chapter, I offer a number of closing thoughts. First, I summarize the approach I took to the across-case analysis and describe the tentative patterns of thinking I discovered. Following that, I explore the implications of the study for leadership practice in higher education and offer my suggestions. Also in this chapter, I make suggestions for future research and offer my thoughts about the causal mapping method. Finally, I close with a reflection on the adaptive challenge in American higher education.

Tentative Observations Across Participants

Across-case analysis approach. To explore similarities across cases, I first reorganized the findings from Chapter 5, and then I examined them across all participants.

It took several steps to reorganize the findings. Working from a copy of Chapter 5, I took the section on each participant and condensed the findings into key assertions I had made about how the participant thought about corporatization in higher education. After reviewing these assertions, I created broad categories to contain them, and I organized the categories into two large groupings: assertions related to participant views of corporatization and assertions related to participant views of higher education. Table 91 lists these groupings and categories. Next, I transferred these data to an Excel spreadsheet with one assertion per row and each assertion marked with the participant and the category. I sorted the spreadsheet by category and printed a list of the assertions I had made within each category. For example, I printed a list of the assertions I had made about the overall view of corporatization held by each participant.

Table 91

Groupings and Categories Used in Across-Case Analysis

Grouping	Category
Researcher assertions related to participant views of corporatization	Overall view of corporatization
	Root cause
	Prominent causes
	Overall effect
	Prominent effects
	Influence of forces external to higher education
	Influence of forces internal to higher education
	Other emergent themes concerning corporatization
Researcher assertions related to participant views of higher education	View of higher education mission
	Suggestions for higher education’s response to corporatization
	Degree of higher education agency depicted in causal map
	Degree of higher education agency conveyed in suggested actions
	Hope for the future of higher education
	Other emergent themes concerning higher education

Category by category, I examined each of the printed lists. I reviewed the assertions I had made in that category, circled words or themes that were either distinct or repeated in the findings, and made notes about my observations. In my notes, I kept track of each participant and where he or she fell within my observations. As I reviewed and pondered the findings by category, I began to see similarities and differences among the participants. Based on those similarities and differences, I began to group the participants on paper in this way and that. Like moving around pieces of a puzzle, I tried various arrangements. What eventually emerged from this process was an extremely tentative set of five patterns of thinking about corporatization in higher education.

Across-case analysis results. Although I identified five patterns of thinking about corporatization, I emphasize the uncertain nature of these inferences before I describe them. The participants in the study held highly diverse perspectives on corporatization. The findings for each participant were rich, nuanced, and not easily categorized. The degree of congruence between the thinking of individual participants and one of the five patterns varied. And the thinking of some participants seemed compatible with more than one of the patterns. At this stage, the five patterns of thinking are like light pencil sketches. Only additional research could erase errant lines, add definition, and, in the process, possibly transform the patterns into a far different understanding. As a starting point for further inquiry, though, I offer these five broad patterns of thinking about corporatization in higher education: the mourner, the critic, the pragmatist, the welcomer, and the enthusiast.

The mourner pattern of thinking. Based on my interpretation of how participants think about corporatization in higher education, I tentatively identified Alan and Emily as sharing a pattern of thinking that I call the mourner.

The mourners seem to view corporatization as a threat to the traditional mission of higher education. Alan, for example, describes the mission of the university as the development of the whole person, but, he says, the influx of corporate leaders and their fiscal priorities imperil higher education's ability to achieve that aim. Similarly, Emily refers to "serving students" as the purpose of higher education, yet she worries that business goals threaten to overtake the student-centered mission of the university.

The mourners also seem to view external forces as the very strong causes of corporatization and view higher education as the passive recipient. Alan, for example, depicts the root cause of corporatization as "changing societal attitudes toward higher education," which spawn the powerful sociopolitical forces that corporatize higher education. Yet, in his view, higher education has no influence on these forces. Likewise, Emily depicts the cause of corporatization as the combination of four strong, sociopolitical forces, but she portrays higher education as having no effect in return.

Perhaps because they view higher education as lacking agency in this context, the mourners do not suggest that higher education take action against the causes of corporatization. Instead, they seem to suggest that there is little that higher education can do or that higher education should recall the more meaningful practices of the past. Alan, for example, contends that society itself—not higher education—must solve the problem of corporatization by reconciling the value of public education with its cost. Although Emily offers suggestions, her ideas for responding to corporatization are limited to the internal dynamics of higher education; they do not address the causes of corporatization. Emily suggests that higher education remember its tradition of student service and recall that student success provides its own form of marketing, branding, and recruitment.

Finally, the mourners convey a sense of loss. Alan laments the loss of sovereignty in higher education. In the past, he says, society respected professionals in higher education for their training, their expertise, and their ability to meet student needs. Now, he says, politicians and corporate leaders encroach on higher education, and their actions "override the intrinsic mission of the university." Although less explicit, Emily too conveys a sense of loss. She describes the joy she felt when she discovered student services as a career and the continuing passion she feels for serving students. Yet, she reports, the university requires her to spend half her time on student recruitment. These days, she says, she can only do the work she loves part-time.

The two mourners in this study come from university offices that are staffed to support student growth and development outside the classroom. Alan works in upper administration, and Emily works in middle administration.

The critic pattern of thinking. Based on my interpretation of how participants think about corporatization in higher education, I tentatively identified Bailey, Douglas, Erica, and Tony as sharing a pattern of thinking that I call the critic.

The critics seem to share the view that corporatization is anathema to the true mission of higher education. Bailey contends that corporatization is the view of "putting out a product"; it would be suitable, she argues, only if higher education were to replace its true mission of liberal education with the false mission of turning out "employer-ready graduates." Similarly, Douglas holds that corporatization thwarts higher education's ability to fulfill its mission of personal formation through the liberal arts. Erica claims corporatization prevents higher education from fulfilling its purpose, which is to help develop a "humane and resilient society." Tony holds a similar view. Valuing the business model, he says, subverts the mission of developing an educated citizenry through the liberal arts.

More than other participants, the critics dichotomize business approaches and higher education, and the implicit idea is that that business practices and business values are inseparable. Bailey, for example, holds that corporatization is more than the application of business practices; it is a "mentality," she says, the mentality of producing a product. Holding similar views, Douglas and Tony highlight the impact of higher education's adoption of business language. Using the language of finance and efficiency, they contend, shapes how people think about higher education and infuses the higher education mission with business values. Rob—whom I include in the enthusiasts pattern—also argues that corporate language alters higher education, claiming its use shapes "our mission [and] our actions."

The critics see strong external forces driving corporatization, but, importantly, they seem to view higher education as complicit. Bailey, for example, describes the myriad ways that universities aggravate corporatization with inequitable budget models, revenue-seeking behavior, and unethical practices. Erica contends that the bottom-line focus of colleges and universities damages higher education; in pursuit of money, they reduce research funding, lower academic standards, and decrease the quality of education. Douglas holds a comparable perspective. Through its adoption of business language and its administrative actions, he says, higher education accelerates the harmful forces of corporatization. Similarly, Tony argues that higher education propagates academic decline through its embrace of business values.

For the most part, the critics suggest that higher education push back against the forces of corporatization. Erica, for example, recommends that higher education combat corporatization by engaging and educating the public about the value of research; by developing teacher education that implants the value of curiosity and critical thinking; and by faculty pushing back on administrative decisions that undercut academic quality. Douglas proposes a three-pronged strategy that educates the public about liberal education, promotes needed changes in administration, and marshals the forces of faculty. Tony advises resistance through critical analysis of the problem and education of the public. Bailey, though, disagrees; she says the fight is over and corporatization has won.

With one exception, the critics in this study come from the instructional side of the university. Erica is a tenure-track faculty member, Douglas and Tony are tenured faculty, and Bailey works in the middle administration of university offices staffed to support student growth and development outside the classroom.

The pragmatist pattern of thinking. Based on my interpretation of how participants think about corporatization in higher education, I tentatively identified Amy, David, Frank, Gina, and Richard as sharing a pattern of thinking that I call the pragmatist.

The pragmatists seem to see corporatization as a fact of life for higher education, at least in the current social climate. Asserting that corporatization has arrived, Amy maintains that faculty are "short-sighted and not very pragmatic" if they just "throw up their hands and say [they] reject it." David describes the problem as "part of the political climate" and a given for modern public education. In Richard's view, political and economic factors are forcing universities to cut costs while they maintain quality; this is simply higher education's present reality, he says. Gina expresses a more pointed view. Currently, she claims, higher education has no choice but to respond to the demands of "the corporatocracy."

The pragmatists may see corporatization as having advantages and disadvantages, or they may see it as thoroughly undesirable. Amy, for example, holds that corporatization includes helpful practices as well as practices ill-suited for higher education. Citing technology transfers as an example, Frank asserts that corporatization brings new opportunities along with new risks. Richard and Gina, though, see corporatization as an unavoidable challenge but one without any particular advantages. Gina also describes corporatization as unwelcome and chaos-producing.

The pragmatists tend to depict the causes of corporatization as external, very strong, and largely outside the influence of higher education. For example, Amy says the root cause of corporatization is consumerism, which begets negative views of higher education, reduced state funding, and materialistic conceptions of higher education's purpose; higher education, though, has only feeble influence in return. Both David and Richard see state government actions as strong, corporatizing forces over which higher education has no control. Using the term "tornado" to describe the swirling sociopolitical forces of corporatization, Gina portrays higher education as nearly powerless in the face of this storm.

Although the pragmatists seem to suggest that higher education should adapt to corporatization because it must, they differ in their conceptions of the adaptation required. David and Frank suggest taking advantage of corporate opportunities while mitigating risks and preserving the university mission. Richard highlights the need for higher education to innovate in order to reduce costs and conjectures that new budget models might provide appropriate incentives. In order to survive, Gina argues, higher education must respond "positively and collaboratively" to the demands of "the corporatocracy" and demonstrate value using the language and metrics of corporations. Taking a position that resembles the critics, Amy contends that higher education should push back with advocacy for quality in education.

With one exception, the pragmatists in this study come from the instructional side of the university. David is a tenured faculty member, while Amy, Gina and Richard work in the lower, middle, and upper administration of instruction respectively. Frank is a former trustee.

The welcomer pattern of thinking. Based on my interpretation of how participants think about corporatization in higher education, I tentatively identified Daniel, Gloria, Jessica, John, Ryan, and Tim as sharing a pattern of thinking that I call the welcomer.

The welcomers seem to share the view that the business practices associated with corporatization can help higher education achieve its mission, and the implicit idea is that business practices and business values are separable. Daniel, for example, contends that business practices are no more than "tools" that can be fitted to the needs, values, and mission of higher education. Similarly, Jessica maintains that an appropriate business model could help higher education align its resources with its values, and John agrees; he says corporate practices could help higher education stay true to its mission.

While the welcomers hold differing views of forces external to higher education, they seem to share the view that the lack of management skills in higher education exacerbates the problems higher education faces. Ryan, for example, contends that the lack of business skills—both managerial and financial—among higher education administrators is the root cause of corporatization. Not only does this lack result in poorly executed corporate practices, he says, but also in the negative perception of higher education among legislators, who enact these perceptions by further reducing funding. In a similar vein, Daniel asserts that higher education, by spending everything it takes in, gives legislators an excuse for underfunding. Gloria argues that poorly implemented business practices contribute to a dysfunctional culture, and Tim contends that the lack of cost control in academia threatens the viability of the enterprise.

Without exception, the welcomers suggest that higher education adopt better business practices in order to improve its ability to achieve its mission. To bring in needed expertise, Ryan recommends hiring administrators with management skills from outside higher education. Gloria suggests embracing effective business practices to help the university meets its obligations to students, and John contends that corporate practices would "solve problems endemic to universities." Tim agrees and also goes further. To move beyond fiscal crisis, he argues, higher education must consider radical change. It must, he says, circumscribe its mission; reconsider its commitment to research, tenure, and shared governance; and employ business practices that preserve value for students by controlling costs.

The welcomers in this study come from across the university. Gloria works in the lower administration of university offices staffed to support student growth and development outside the classroom, and Tim works in the upper administration of university finance. Daniel works in the middle administration of instruction, John and Ryan are tenured faculty, and Jessica is an adjunct faculty member.

The enthusiast pattern of thinking. Based on my interpretation of how participants think about corporatization in higher education, I tentatively identified Brian, Edward, and Bob as sharing a pattern of thinking that I call the enthusiast.

Although each has their own idiosyncratic perspective, the enthusiasts seem to share the view that corporatization brings new and desirable opportunities to higher education. Brian, for example, sees in corporatization opportunities for higher education to provide greater value to the community, to corporate partners, and to society. In addition, he seems to view corporatization as a generative process by which higher education can respond to the needs of a changing society and redefine itself for the 21st century. Edward shares Brian's optimism, but he sees in corporatization a slightly different type of promise. Edward views business practices as furthering higher education's abilities to contribute to society through technological innovation; expand educational offerings through the Internet and technological breakthroughs yet to come; and cultivate local engines of talent and inventiveness. Representing a third perspective, Rob maintains that corporatization offers academic intellectuals the intriguing opportunity to be entrepreneurial.

In other aspects of their thinking, the enthusiasts seem to differ. For example, they may or may not see corporatization as bringing new challenges or difficulties along with the opportunities. Brian sees external partnerships as both the future of higher education as well as the source of fraught complexity. In contrast, Edward sees no downside to corporatization or to the embrace of business practices in higher education. For his part, Rob concedes that corporatization conflicts with traditional academic values. As corporatization unfolds in higher education, he says, faculty in traditional roles lose agency and autonomy, while those who move to corporate-funded research reclaim a degree of intellectual independence. Despite their unique and contrasting perspectives, the enthusiasts share the view that higher education should press on in its pursuit of the opportunities made possible by corporatization.

The three enthusiasts in this study have different roles in the university. Brian works in the upper administration of instruction, Edward is an adjunct faculty member, and Rob is a research scientist working in a staff position.

Implications for Leadership Practice in Higher Education

The implications I draw for leadership practice in higher education rest upon two sets of assumptions: the framework of adaptive / complexity leadership theory and my own position regarding corporatization in higher education. Before I discuss implications, therefore, I first summarize these two assumption sets.

Summary of the adaptive / complexity leadership framework. In this study, I use adaptive / complexity leadership theory as a framework for conceptualizing the issues that confront contemporary higher education and possible means to resolve them.

I characterize the problems facing higher education as a large-scale adaptive challenge, which is a complex, consequential, and poorly structured problem with no established solutions (Heifetz, 1994; Heifetz et al., 2009). An adaptive challenge calls for the human system that encounters it to effect a wholly original adaptation to resolve the issue (Heifetz, 1994; Heifetz & Laurie, 1997). But adaptation is not easy. It requires people to learn new behaviors and values; engage those who hold divergent views; and tolerate tension, conflict, and the disequilibrium of dynamic change (Heifetz, 1994; Heifetz & Laurie, 1997; Lichtenstein et al., 2006; Uhl-Bien & Marion, 2011). At the same time, effective adaptation holds great promise. It can result in ingenious new order that spreads throughout the system; provide fresh and fertile ground for the work of the organization; and lay the foundation for people to thrive in a new environment (Heifetz, 1994; Heifetz & Laurie, 1997; Lichtenstein et al., 2006; Lichtenstein & Plowman, 2009; Uhl-Bien & Marion, 2011).

Because the work of adaptation is difficult, leadership is required. Yet, adaptive / complexity leadership theory conceives of leadership quite differently than traditional theories. One, leaders exist at all levels of an organization and may or may not have formal authority (Heifetz, 1994; Heifetz et al., 2009; Lichtenstein et al., 2006; Uhl-Bien et al., 2007). Two, leaders do not plan or direct the adaptive process. Instead, the emergence of beneficial new order arises from many individuals in a complex system repeatedly interacting, exchanging information, and "acting without coordination of a central decider"; innovation arises from and propagates through relational interaction (Lichtenstein & Plowman, 2009, p. 617). Three, the role of leaders is to create the conditions that enable adaptation and emergence (Heifetz & Laurie, 1997; Heifetz & Linsky, 2002; Heifetz et al., 2009; Lichtenstein, 2014; Marion & Uhl-Bien, 2001; Uhl-Bien & Marion, 2009). To foster these conditions, Heifetz and colleagues (e.g., Heifetz & Linsky, 2002) suggest six guiding principles for leadership behavior, and Lichtenstein and Plowman (2009) suggest nine specific leadership behaviors.

While higher education leaders may want to investigate the specific leadership recommendations of these theorists (see the *Leadership and enabling conditions* section of Chapter 2), this discussion focuses on the three most important leader behaviors that emerge from the literature on adaptive / complexity leadership theory; leaders, according to this theory, should (a) stimulate the engagement of colleagues with the adaptive challenge, (b) encourage divergent thinking among colleagues, and (c) foster high levels of interaction among colleagues, especially among those who hold differing views. The theory recommends these leader behaviors, because they foster three of the conditions essential to organizational adaptation and emergence: high levels of engagement with the adaptive challenge, high levels of divergent thinking, and high levels of interpersonal interaction. Beyond these three, other conditions may be necessary for adaptive change, and different theorists may conceptualize those conditions differently. Yet, the three conditions—engagement, divergent thinking, and interaction— are foundational to the theory. In the sections that follow, I use these three conditions to frame my discussion of the implications for leadership and my suggestions for further research.

Summary of my position regarding corporatization. Before I discuss the implications for leadership and research, I first describe the second set of assumptions I bring to these issues: my own perspective on corporatization in American higher education. My views on corporatization combine with the ideas of adaptive / complexity leadership theory to form the foundation of my thinking about the adaptive challenge in higher education. By explicating both sets of assumptions, I intend to make it easier for readers to form judgments about my suggestions.

In my view, higher education faces an adaptive challenge with vast potential consequences for itself and for society. In addition, I contend that higher education has allowed corporatization to dominate its response to that adaptive challenge. I am open to the possibility that some aspects of corporatization might benefit higher education. Yet, I question whether corporatization represents the best possible adaptation to the current environment, and I suggest that benefit might result from higher education leaders collectively appraising corporatization as an adaptation for American higher education. The purpose of this study was to help further such a discussion by exploring and disseminating how some higher education leaders think about corporatization.

Even if it were possible, I also question whether striving to return to the traditional ways of the academy represents the best possible adaptation to the current environment. I am amenable to the idea that many aspects of those traditions are noble, valuable, and important to preserve. At the same time, I hold that the traditional ways were also marked with shortcomings and constrained by an unhelpful bias against adaptive change. In this study, participant views about academic traditions arose naturally in their discussions of corporatization, which added richness to the findings and, I believe, enhanced their usefulness for stimulating dialogue about adaptation in American higher education.

It seems to me that higher education—especially when supported with public funds—has an enormous responsibility to engage the public in continual dialogue about the purpose of higher education and its contributions to society. Allowing uninformed thinking that may arise within the public or among legislators to dictate the purpose and process of higher education seems short-sighted and ill-advised. Yet, so too does allowing publicly funded higher education to operate without ongoing consultation with the public about its evolving needs, without offering the public meaningful methods of accountability for higher education services—methods that might also serve to educate about the true value of education—and without a deep-seated commitment to thoughtful and responsive change over time. Higher education, I believe, is a critical function in a democratic society, but it must have a robust relationship with that society.

Therefore, I hope for an adaptation in higher education that preserves what is valuable from the past and useful from the present but that transcends the shortcomings of both. I hope for a brilliant new synthesis that better serves an evolving society. Do I know what that synthesis might look like? No, not at all. Like most of my fellow citizens, I am quite incapable of designing a higher education system for the future. At the same time, though, I have an unshakeable belief in the unlimited creative potential of collectivities. The most important and vexing problems that face humankind, I contend, call for the kind of problem-solving that can only come from the intense and creative interactions of diversely gifted people. My perspective, then, is compatible with that of adaptive / complexity leadership theory, and I adopt its framework as I offer my thoughts about leadership practice in higher education.

Overall implications for leadership practice in higher education. In the process of conducting this study, I formed four impressions that have implications for leadership practice in American higher education. These are necessarily tentative for three reasons: Little similar research existed at the time of this study; this study, small in scope, was limited by its setting, sample size, and range of participant diversity; and some of the impressions, as indicated below, came from informal observations rather than formal investigation.

Spread of corporatization. Based on my observations at Evans State University, I formed the impression that corporatization appeared to be advancing rapidly there. This was not a new or surprising observation. Many scholars of corporatization suggest the same about higher education in general (e.g., Bousquet, 2008; Cohen & Kisker, 2010; Cummings & Finkelstein, 2012; Giroux, 2014; Rhoades & Slaughter, 2006; Ward, 2012). In addition, I chose Evans State University because of the likelihood it would have high levels of activities related to corporatization. Also, because this study did not attempt to assess the stage of corporatization at Evans State University, my observation was informal. Nonetheless, I include it here, because of its implications for leadership in higher education. To the extent that corporatization is advancing rapidly in higher education, adaptive / complexity leaders may want to initiate and accelerate their use of adaptive leadership behaviors.

Level of engagement. Based on my observations at Evans State University, I also formed the impression that engagement with the adaptive challenge seemed very high among those who worked there, and engagement is one of the necessary conditions for adaptation. Because the study did not attempt to measure engagement, this was another informal impression. Even so, I noticed that I received numerous swift replies to my recruiting email for participants, even though I was unknown to almost all recipients. I also received much more interest in participation from upper level administrators than I had expected. Because of the high level of interest, I had no trouble fulfilling my sampling strategy, which required a diverse set of participants that matched fairly specific profiles. In addition, as I described in Chapter 4, I observed in the interview process that almost all participants expressed in words and body language high levels of engagement with the causal mapping process. Many of them ended the interview by verbalizing their interest in the topic of corporatization and in the results of the study. From the perspective of adaptive / complexity leadership theory, a high level of engagement with the adaptive challenge is a vital organizational asset. To the extent that this is true in higher education, adaptive / complexity leaders may find that the energy to do adaptive work is plentiful within colleges and universities; the time for adaptive change may be nigh.

Degree of diversity. Based on the findings of this study, I also concluded that the views about corporatization held by the Evans State University participants were very diverse, and divergent thinking is one of the necessary conditions for adaptation. Across the twenty participants, each perspective was unique, and the range of perspectives was wide. Similarly, the five tentative thinking patterns depicted a wide range of viewpoints, from mourning the loss of traditional ways to embracing new opportunities. In addition, significant variation in thinking existed among the participants I loosely gathered under each thinking pattern. From the perspective of adaptive / complexity leadership theory, a high degree of divergence among views of the adaptive challenge is another potent organizational asset. To the extent that this is true across colleges and universities, adaptive / complexity leaders may discover that their organizations offer plentiful fuel for innovative organizational change. The timing may be right for adaptive change in higher education.

Prominence of dialogue. Based on my knowledge of the literature on corporatization and, to some extent, comments by Evans State participants, I formed the impression that high levels of interaction among people with divergent views of corporatization may not be characteristic of higher education, and interaction of this sort is one of the necessary conditions for adaptation. At the time of this study, the literature on corporatization in higher education was dominated by conceptual works from faculty members. Although these are important contributions to an understanding of corporatization, they represent only a subset of potential views. The conceptual views about corporatization held by administrators, for example, were rare in the literature, and those of trustees and staff appeared to be absent. Although much less common in the literature, empirical works about views of corporatization reflected similar proportions; studies of faculty views outnumbered those of administrator, trustee, or staff views. I concluded that the literature lacked any significant dialogue about corporatization among individuals with divergent viewpoints.

While conducting the study, I also noted that some participants commented on the lack of dialogue about corporatization within Evans State University. Because the study did not investigate the state of organizational dialogue about corporatization, this was an informal impression, but one that reinforced my conclusion based on the literature. From the perspective of adaptive / complexity leadership theory, an exchange of ideas across differences is essential to effective adaptation. To the extent that higher education lacks this type of exchange, adaptive / complexity leaders might face resistance to dialogue within the culture of higher education. On the other hand, an historical lack of dialogue about corporatization also means that the potential for innovative adaptation remains untapped.

Specific suggestions for leadership practice in higher education. Below, I describe four higher education initiatives that would provide leaders with opportunities to enact the three leader behaviors and to further the adaptive process in higher education. Although the initiatives would require time and energy, leaders might compare that time and energy to the amount currently spent on withdrawal and resistance within the organization; investment in engagement and dialogue may be more productive in the long run. Also, because every college and university is unique, only those who work within an institution are equipped to judge the appropriateness of the initiatives for their organizations or to modify them to fit their organizations. Together with that acknowledgement, I offer the following suggestions for consideration.

Open the conversation. I suggest that higher education leaders open the conversation about corporatization in higher education. By doing so, they could invite the dialogue that is essential to creative adaptation. Through their messaging, they could also provide helpful context to others in the organization and establish the open and expansive tone that befits an era of adaptive change. For example, leaders might acknowledge the challenges that higher education faces, the reality of corporatization, and the fact that people hold different views about these organizational issues. Leaders might express that the organization is entering an era of creative problem-solving, that this will involve high levels of interaction between people at all levels of the organization, and that this may entail everyone developing new skills. Leaders might also convey that no answers have been predetermined, that all ideas are welcome, and that the best answers will come from the collective learning of all members of the organization. Leaders might emphasize that everyone in the organization shares the adaptive challenge.

Cultivate supporting skills. I suggest that higher education leaders cultivate skills—at all levels of the organization—that support the three conditions essential to creative change: engagement with the adaptive challenge, divergent thinking, and high levels of interaction. Because every organization has its own unique blend of strengths and weaknesses, the needed skills are likely to vary by organization. Similarly, because every organization has its own unique culture, the needed skills are likely to be a reflection of that culture. Nonetheless, some possible skills might include: communicating one's ideas clearly, listening deeply to others' ideas, tolerating differences of opinion, self-regulating emotional reactivity, engaging and managing conflict, deferring judgment on new ideas, exploring novel combinations of ideas with others, and redirecting energy that was formerly spent on withdrawal or resistance into engagement and dialogue.

Foster the three conditions. I suggest that higher education leaders find new and effective ways—at all levels of the organization—to foster the three conditions essential to creative change: engagement with the adaptive challenge, divergent thinking, and high levels of interaction. Again, because every organization is unique, those who know the culture of the organization are best able to identify the most promising ideas. To seed those ideas, though, I offer the following possibilities.

Engagement with the adaptive challenge. To foster engagement with the adaptive challenge, higher education leaders might consider posing thought-provoking questions related to the adaptive challenge, sharing them through appropriate communication channels, and inviting responses. Appendix E offers an informal list of possible questions that were spurred by my discussions with Evans State participants. Through communication channels, leaders might also share how different people within the organization think about corporatization. To seed this process, they might begin by sharing the perspectives of the twenty participants and the five tentative patterns of thinking about corporatization from this study.

Divergent thinking. To encourage divergent thinking, higher education leaders might consider amplifying unique voices within the organization. Through communication channels, they might disseminate the ideas of those who question the status quo approach to, offer unusual perspectives on, or suggest novel responses to the adaptive challenge.

Leaders might also locate people whose thinking is somewhat compatible with one of the five tentative patterns of thinking described in this study and ask them to delve deeply into the core concerns of that pattern. For example, those aligned with the mourner pattern might articulate for the collective what is being lost as higher education deals with its adaptive challenge. Similarly, critics might articulate what higher education is doing that exacerbates the adaptive challenge; pragmatists, what aspects of the adaptive challenge are helpful or unhelpful to higher education; welcomers, what higher education can do better because of the adaptive challenge; and enthusiasts, what new opportunities are afforded by the adaptive challenge.

Finally, because the five patterns of thinking are highly tentative, leaders might identify and describe additional patterns of thinking and invite others do so. In addition, because adaptive change encourages new ways of thinking, people may leave one pattern of thinking for another pattern or adopt a pattern of thinking not revealed in the findings from this study. Leaders might continue to observe and disseminate divergent patterns of thinking about the adaptive challenge.

High levels of interaction. To encourage high levels of interaction, leaders might consider forming dialogue groups that respond to material developed by the organization or to the thought-provoking questions, the twenty participant perspectives, or the five patterns of thinking described in this study.

Some groups might invite people to participate in reflective thinking and discussion about the adaptive challenge. Others might invite people with contrasting views of the adaptive challenge to express their individual views and deepen their understanding of other perspectives. Small groups could be formed, for example, by bringing together a combination of mourners, critics, pragmatists, welcomers, and enthusiasts. Other groups might invite people to engage in expansive dialogue, exploring possible perspectives on the adaptive challenge or possible ideas for responding to the adaptive challenge. The various dialogue groups might consider using informal causal mapping as an aid for discussing complex issues. Individuals might use it to express their individual perspectives, and groups might use it to create group maps that describe how their individual perspectives are similar or different. Groups might also use causal mapping as an aid to problem-solving; they could diagram and discuss the potential results of various responses to the adaptive challenge.

Consider a blended leadership framework. Finally, some colleges and universities—perhaps larger organizations, culturally innovative organizations, or organizations in crisis—might consider adopting a blended leadership framework. Uhl-

Bien et al. (2007) propose a framework that blends complexity leadership with the operations of bureaucratic organizations. The framework, further elaborated by Uhl-Bien and Marion (2009), identifies three leadership functions within an organization: (a) administrative leadership, which involves the roles, structures, and processes common to organizational bureaucracies; (b) adaptive leadership, which uses the principles of adaptive / complexity leadership theory to create highly interactive networks of individuals; and (c) enabling leadership, which eases the natural tension between the two functions and provides coordination. This framework, of course, would need to be adapted to the higher education environment and integrate the academic leadership function as well.

Suggestions for Further Research and Understanding

From the perspective of adaptive / complexity leadership theory, the most valuable research would be that which directly or indirectly fosters the conditions required for adaptation and emergence in higher education. Helpful research would spur (a) engagement with the adaptive challenge, (b) divergent thinking, or (c) high levels of interaction, or it would enable others to do so. Many potential avenues of research exist. In the following section, I offer possibilities that follow from this study as well as possibilities that fall outside my area of expertise. For the latter group, I use my experience with the Evans State participants to speculate about potentially helpful knowledge from other domains, but I indicate when I am unsure if the knowledge already exists within the literature.

Research that might further engagement. To further engage members of higher education with the adaptive challenge, studies might continue to expand the knowledge base concerning how and why corporatization is unfolding in American higher education. Studies might investigate the spread of the phenomenon in terms of how widespread it is; how advanced it is; and how quickly it is advancing at different types of institutions. Studies might examine the deeper consequences of the phenomenon—for better or for worse—in terms of its impact on institutional missions; the ability of institutions to fulfill their missions; and the performance of students. Studies might probe the views about corporatization held by those not working in higher education, such as students, legislators, or members of the public. Studies might also probe the views held by those constituents about the purpose of higher education and the extent to which those constituents are familiar with traditional conceptions of higher education's role in society.

In addition, a clearer understanding in higher education of the financial dynamics of higher education might stimulate engagement—although, because this topic falls outside my expertise, I am not familiar with the extant literature. For example, many participants in this study identified financial constraint as an important cause of corporatization, while others were skeptical of that claim. Although the issues are inherently complex, elucidation along the following lines might be helpful: how and why cost in higher education (adjusted for inflation) has changed over time; how and why revenue in higher education (adjusted for inflation) has changed over time; and how the net of those two has changed over time.

Research that might further divergent thinking. To foster divergent thinking about the adaptive challenge in higher education, studies might expand the knowledge of individual views of corporatization held by members of higher education. For example, researchers might extend the current study by exploring views at a variety of sites;

different types, sizes, and locations of institutions might yield varying results. Researchers might also extend this study by expanding the types of diversity used to select participants; for example, this study did not select participants based on age, gender, race, or ethnicity. As another extension of this study, researchers might explore the views of corporatization held by members of higher education boards; in this study, I was unable to obtain participation from current trustees at Evans State University. In addition, some researchers might conduct causal mapping studies similar to this one that are more idiographic, focusing on fewer participants and eliciting deeper and more iterative participant feedback, or more nomothetic, focusing on more participants and using more structured data collection methods.

Furthermore, studies might expand the knowledge of patterns of thinking about corporatization held by members of higher education. Researchers might extend the current study by identifying additional patterns of thinking, exploring how patterns of thinking appear within various subgroups in higher education, or examining how patterns of thinking change over time. From the perspective of adaptive / complexity leadership theory, though, this type of research might expand rather than contract the number of patterns; further detail rather than generalize the patterns; or consider the patterns tentative, temporary, or ephemeral. The theory sees complex, fluid, and dynamic thinking as an asset, and reified patterns of thought might be dampening.

Finally, studies might explore the views of higher education's mission held by those who work in higher education. In this study, I did not ask participants to explain their view of higher education's purpose, yet the topic arose in almost every interview; for Evans State participants, their view of higher education's mission seemed closely related to their view of corporatization. In addition, I informally noted that their views of higher education's mission seemed wide-ranging and, in some cases, possibly indistinct. Illuminating the nature and diversity of views about higher education's purpose might encourage divergent thinking about the adaptive challenge.

Research that might further interaction. To promote dialogue and interaction about the adaptive challenge among members of higher education, studies might explore methods for sharing views of corporatization. Researchers might explore ways that individuals might use causal maps to share, explain, and discuss their views in a group setting. Researchers might also investigate group causal mapping methods. For example, they might explore the causal mapping methods that Eden and Ackermann (e.g., Ackermann & Eden, 2010) have used in the field of strategic management to map shared group concepts or to engage groups in problem-solving. Researchers might also examine the overall value of causal mapping in higher education as a problem-solving tool or as an aid to dialogue about complex issues.

Finally, a better understanding of effective approaches to dialogue in higher education might be extremely valuable—although, this topic falls outside my expertise, and I am not familiar with the knowledge base. The field of dialogue and deliberation, for example, might offer helpful practices that could be adapted to higher education, or that field may have studied dialogic processes within the culture of higher education.

Reflections on the Idiographic Causal Mapping Method

Although I did not foresee it, my choice to use idiographic causal mapping was a highly consequential design decision. The issues it raised dominated every phase of the study, shaped the learning I had to undertake, and permeated my experience of conducting the study. My experience of using causal mapping was complex.

In the data collection process, I experienced what I had read in the literature, which was that causal mapping requires significant interview skills. Although I carefully planned for the mapping sessions, I quickly observed that participants varied in their level of comfort with the task, and I had to respond spontaneously to my interpretation of their needs. Some, it seemed, needed time to reflect, while others needed prompting with cause-and-effect questions. Some, it seemed, needed reassurance, while others needed to work independently. Another challenge was that participants varied in their ability to translate their thinking into the structure of a causal map, and I had to make almost constant judgment calls about when to ask questions to clarify my understanding, when to ask participants to add clarity to their physical maps, and when to allow ambiguity to exist. In spite of the challenges, though, I found the causal mapping sessions exhilarating. One reason is unrelated to the method: I find talking with people exhilarating. But the method was central to that experience as well. It was fascinating to watch the ideas of participants manifest, multiply, coalesce, interconnect, and evolve as if out of thin air. It was exciting to observe the way that almost all participants—despite differences in their ease and skill with the method— become increasingly engaged and often excited during the mapping process. It was also gratifying to see most of them arrive naturally at a point when their self-created map satisfied them, an outcome I had read was common to the method. I left the interviews convinced that participants had conveyed to me important personal meanings, and this made my spirit soar.

In the data analysis process, I was often overwhelmed. One reason is that my design of the study produced extremely complex data. To align with my research purpose, I had maximized the likelihood of capturing diverse perspectives; placed no constraints on the concepts participants included in their maps; allowed them to use their natural language to express those concepts; and imposed no limit on the number of concepts, the size of their maps, or the time they took to create them. A second reason is that twenty participants is a large sample size for this type of study, a realization I came to long after the study was underway. A third reason is that the literature contains wide-ranging approaches to causal map analysis. After completing my first analysis, I realized my intended approach was unsuitable for my research purpose, and I had to return to the literature, redesign my approach, and conduct several rounds of analysis. All in all, the analysis phase was time-consuming and labor-intensive. A fourth reason is that the analysis of idiographic causal maps is inherently complex. Qualitative in nature, it combines visual inspection, basic computations, and deep exploration. In addition, it calls for repeated movement between breaking down the map into smaller components and synthesizing the small components into larger chunks of meaning. The process calls for skills unique to the analysis of causal maps, and I had to develop those skills as I went along.

Despite the difficulties, I found the results of the analysis deeply satisfying—but only eventually. During the analysis process, I had to buoy myself by remembering the energy and enthusiasm that participants exhibited during the mapping process. I felt they had entrusted me with their ideas, and I wanted to fulfill my promise to attempt to understand them. In the end, I was gratified by the level of understanding I gained about their individual perspectives. Although I recognize that their causal maps conveyed only a tiny slice of their experience of life, I felt that I had developed an intimacy with their thinking about an issue of importance and that I had experienced something of the uniqueness of their individual perspectives. By the end, I had almost a felt sense of each individual—or, rather, one small aspect of their thinking.

I believe idiographic causal mapping is a powerful method that repays the significant time it demands of researchers. It has an expansive quality; it allows people to express reasoning, feelings, opinions, and suppositions at any level of abstraction. It has a systems quality; it allows people to depict a dynamic network of relationships. It has a sensemaking quality; it stimulates people to develop new insights as they engage in the mapping process. In addition, it has important application; it allows people to convey their answers to the challenging question of why things happen. I am intrigued about the ways this method might be used in higher education to capture individual and group perspectives; discuss issues of complexity; and explore solutions to consequential problems.

Concluding Thoughts

Originating somewhere on the Indian subcontinent, the parable of The Blind Men and the Elephant has appeared in many religious traditions, including Hinduism, Jainism, and Buddhism, and endured for millennia (Ireland, 1997). An early written version appears in the Pali Canon (Ud 6.4), the oldest collection of Buddhist scriptures, and it tells the story of a group of blind men summoned by a Sāvatthī king and asked to examine an elephant. Each man is shown a different part of the elephant; one touches the head, another the tusk, another the tail and so on. When asked to describe the elephant, each man describes it differently; the one who touched a leg, for example, describes the elephant as like a pillar, while the one who touched the tail describes it as like a brush. In this version of the story, the men argue about their interpretations, and the text compares the men to religious sectarians who "see only one side" (Ud 6.4). The parable is often taken to mean something like: "Our individual views of the universe may be different from one another's because we each encounter only one small part of what is there" (Popple, 2010, p. 492).

As evidenced by its ancient roots and enduring appeal, the parable somehow resonates with the human experience. In its depiction of diverse perspectives, it also resonates with this study. Like the blind men, participants in the study described the phenomenon of corporatization in very different ways. And, like the blind men, their depictions were based on their empirical experience of the world. Also like the blind men, their representations seemed to contradict each other in some or many ways. Like the parable, the findings may indicate that participants perceive only a small slice of reality.

I would prefer, though, to modernize this parable and reshape it to illustrate a different view. First, the modernization. In contemporary times, we might reject the use of disability as a metaphor, holding that it diminishes the power and humanity of those with disabilities. Second, we might object to the fact that the story is about men, when the exclusion of women has no apparent justification. Third, the elephant is not a vibrant symbol, at least not in contemporary American society; we might prefer something more relevant. I suggest changes to *blind, men,* and *elephant.*

Next, the reshaping. I suggest that the symbol of the elephant does not represent corporatization, higher education, or even the adaptive challenge. Instead, I suggest it represents the shared and empty space of possibility. I suggest that the individuals are not people with bounded perceptions but instead are individual points of creativity. And I suggest that the meaning is not about our separateness but instead about the infinite number of lines that could connect us and the way we could come together like a new constellation in the sky.

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APPENDIX A

Statement of Researcher Positionality

According to Creswell (2013), reflexivity has two dimensions. First, the researcher discusses his or her experiences with the subject of the inquiry, relating “past experiences through work, schooling, family dynamics, and so forth” (Creswell, 2013, p. 216). In the second part, which Creswell (2013) characterizes as “the heart of being reflexive,” the researcher discusses “how these past experiences shape the researcher’s interpretation of the phenomenon” (p. 216). Below, I address both of Creswell’s (2013) dimensions in my statement of positionality.

I see the heart of this study as the conjunction of three subjects: corporatization, higher education, and leadership, and I have had experiences that shape my views of each.

Corporatization. I have had experiences that influence my perspective on corporatization. My first career was in business, and I spent over 15 years in the software development industry. During that time, the so-called “bottom line” of the business world never motivated me; instead, I found meaning and purpose in the development of consulting relationships. I was comfortable in an environment that sought profits and valued efficiency as long as my employer did not expect me to make profit the center of my work. Although financial management never captured my professional interest, I accepted the importance of responsible use of money and resources. At the same time, I also observed the way that the profit motive infused all levels of decision-making in the business world.

These experiences influence my view of corporatization in higher education. First, I accept the importance of profit in the business world; for me, it is not an ethical issue. Yet, I am concerned about the wholesale adoption of business practices in a non-profit sector like higher education. A purely corporate approach would undermine the public mission of higher education and some of its important functions. For example, a profit-centered approach might take costly academic programs that are important to society, such as engineering or fire science, and reduce them or price students out of them. Or it might eliminate academic programs that benefit society but lack a vocational corollary, such as the humanities. At the same time, some aspects of corporatization may be not only necessary but also helpful dimensions of an effective adaptation; the responsible use of money and resources is important in any organization. This view leads me to favor greater accountability within the academic function but also to see the need for an accountability strategy uniquely tailored to academic, not corporate, values. Similarly, I favor greater integration of cost issues within the academic function without allowing them to dominate academic values. In my view, traditional academia "outsourced" these matters to internal university business functions. This distanced academics from these issues and created a false sense that academic work could thrive without attention to or constraint from fiscal matters. I see danger in bundled thinking in which some factors are bundled as "the corporate approach," others are bundled as "the academic approach," and debate ensues over which bundle is better. Some sticks from each bundle may be the best combination.

Higher education. I also have had experiences that influence my perspective on higher education. First, my maternal grandparents were Irish immigrants who raised six children on a bricklayer's income during the Great Depression. Although they lived a spare life in America, they believed in opportunity, and they passed on their view of college as the "great equalizer." In spite of their socioeconomic status, more than half of their children obtained a postsecondary education, and nearly all of their children's children are college graduates, many with advanced degrees. My upbringing, then, informs the egalitarian ideals I have for higher education. Instead of educating "the best and the brightest," I want publicly funded higher education available to all—and I would prefer that government subsidize it for those who cannot afford it. I am concerned about shrinking public support for publicly funded higher education and the consequences for individuals if there is a return to higher education as a service for the elite.

A second influential experience with higher education was my ten years as a distance learning manager and administrator at Hughes Community College. These years represented my shift to a second career, and, in retrospect, I realize I held romantic notions of a higher education environment rich with learning, goodwill, and cooperation. Although I found many bright, talented, and dedicated faculty and staff, I also found a culture that too often fostered conflict, competition, and, at times, incivility. In addition, I was stunned to discover that many faculty considered collaboration—one of my personal and professional passions—to be an unwelcome and radical concept. My experience in distance learning informs my view that the traditional values of the academy contrast with my own. Academic culture, it seems to me, most values autonomy and seeks the upper bounds of individual achievement, while I most value creative collaboration and seek the upper bounds of group achievement. In addition, I hold the view that the complex problems of contemporary life require many diversely talented people collaborating in creative ways. I therefore tend to see traditional academic culture as ripe for change. To some extent, I also view academic culture as contributing to the present predicament in higher education. With its rejection of Boyer's (1990) ideas of integrated scholarship and the shallow level of community engagement on the part of most universities, academia, in my view, has insufficiently engaged the public in dialogue about higher education's service to the public good and insufficiently contributed to solving social problems.

A third experience of higher education, again at Hughes, also influences my perspective. Although I met numerous talented and thoughtful administrators, I also met a few who were not. The latter were administrators who viewed faculty as impediments and used unilateral decision-making with inadequate dialogue. In these cases, I watched antagonism grow, deliberations dry up, and decisions harden. In my view, this top-down approach weakened the institution and served no one well. My experience with these administrators informs my view that the practice of top-down administration is not in the best interest of higher education. I see the current changes wrought on academic careers as anguishing and unnecessarily extreme, and I am struck by the numbing adoption of corporate methods without campus-wide dialogue. Surely, higher education can adapt more effectively.

Leadership. I also have had experiences that influence my perspective on leadership. In the middle of my first career, I had the good fortune to belong to a great work group with a wonderful manager. Although I had been part of many different teams by then, I had never had a truly great team experience before this one. As a team, it seemed, we had brilliance, creativity, energy, and fun far beyond what we had as individuals. In part due to our talented manager, we also seemed to have a lot of room to shine as individuals while we cooperated and collaborated. This experience awakened in me a passionate interest in the outer limits of team accomplishment and the conditions that foster great teams. Years later, when I had the opportunity to build my own team at Hughes, I emulated the creative, collaborative dynamics of that first great team, and, my Hughes team became an imperfect but exceptional one. These experiences inform my views about leadership. While I believe there are many types of effective leadership, I tend to value leadership that uses the power of collaboration to elicit innovation and adaptive change.

My View of the Adaptive Challenge in Higher Education. Together, my experiences inform my views about the adaptive challenge that higher education faces. On one hand, I do not hope that higher education returns to the "old" way of academic traditions. In my view, the faculty reward system deemphasized higher education's responsibility to society and dulled the dialogue around these important issues; its emphasis on research distanced academia from community needs and reinforced the elitist position of universities in society. In addition, academics received the professional benefits of autonomy, tenure, and academic freedom without balancing those benefits against the ethical standards and peer oversight usually expected of professional groups

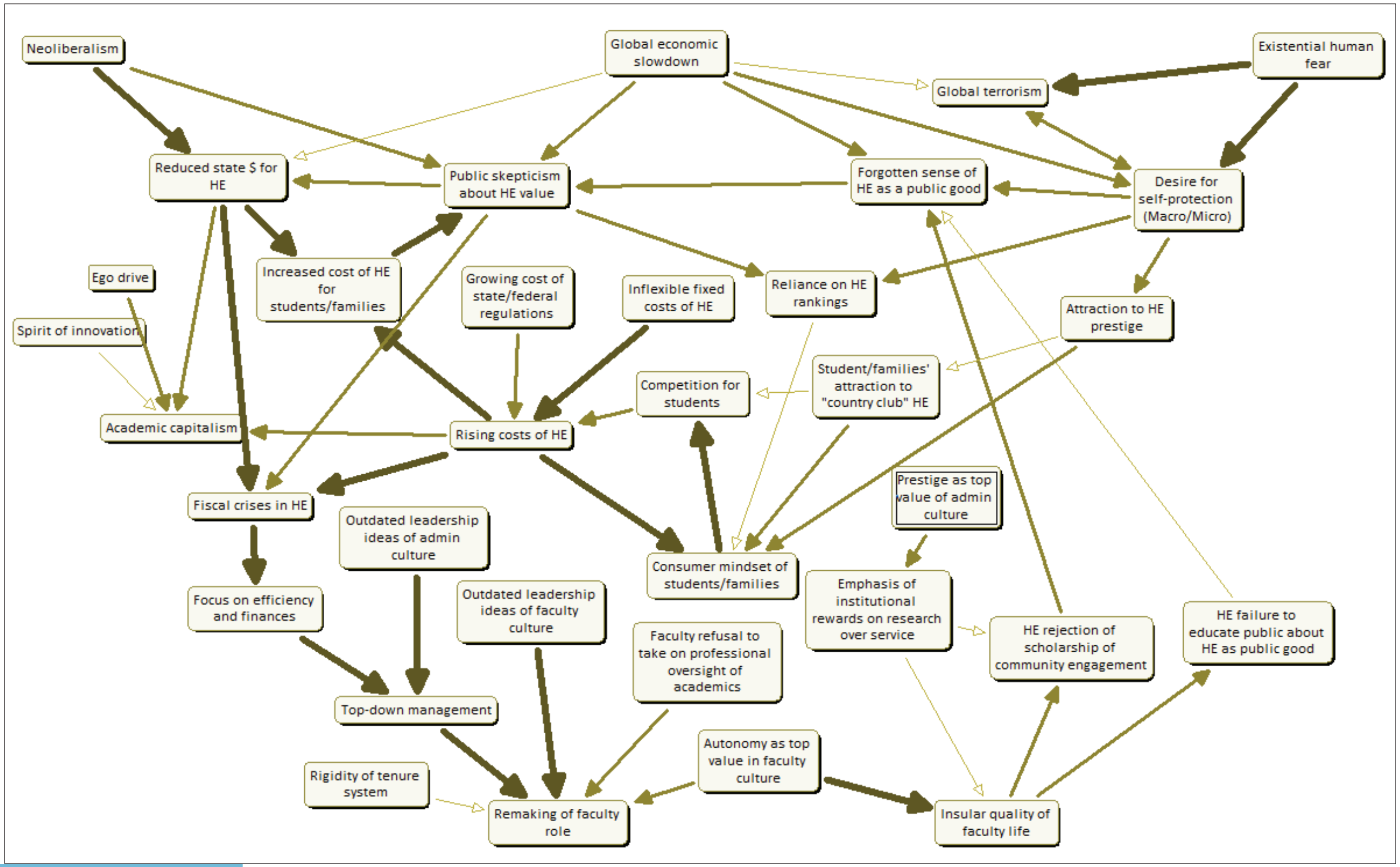
(Lechuga, 2006; Schuster & Finkelstein, 2006a). In addition, the culture valued autonomy over collaboration, depriving higher education of the greater insight and innovation that I believe comes from creative collaboration.

On the other hand, I do not endorse the "new" way of managerialism. In my view, it adopts approaches that are in conflict with the newest and most hopeful ideas about leadership in the modern world. It employs a top-down approach based on hierarchical power, an approach that I believe is ill suited for the intellectual life of higher education and for producing innovative approaches to higher education's adaptive challenge. In addition, it undervalues collaboration at all levels of the organization and among all constituencies, ultimately shrinking the set of possible adaptations for higher education.

I hope for a third way. I believe in the collective intelligence and collaborative creativity of higher education's faculty, staff, and administrators. I believe in the possibility of an inclusive, collective, ongoing dialogue about what matters, one in which new voices join traditional voices and new ideas combine with old ideas. My hope for higher education rests in a collective process that produces new and better adaptations for the entire system.

APPENDIX B

Researcher's Causal Map of Corporatization



APPENDIX C

Consent to Participate in Research Form

UNIVERSITY OF DAYTON - CONSENT TO PARTICIPATE IN RESEARCH

TITLE OF STUDY: Dissertation study entitled *Engaging the adaptive challenge: Potential leaders' cognitive maps of and ideas for responding to corporatization in American higher education*

We are inviting you to be a part of a dissertation research study led by doctoral candidate and researcher Sherry McAndrew from the University of Dayton. Participation is not required. Please read the information below to learn more about the study. Before participating, ask questions about anything you do not understand.

PURPOSE OF THE STUDY

The purpose of the study is to:

- Explore the diverse views that higher education members have about the causes and effects of corporatization in American higher education
- Explore the diverse ideas higher education members have for responding to corporatization in American higher education

The purpose of the study is NOT to:

- Gather data to support one view or another about corporatization in higher education
- Evaluate the relative merits of various perspectives about corporatization in higher education

PROCEDURES

If you decide to be a part of this study, you will:

- Participate in a confidential, one-on-one, audio-recorded interview with the researcher, held in a convenient location for you, conducted during the months of July or August 2016, and lasting approximately 1 ½ to 2 hours—

although you may choose to take longer if you wish. The interview will consist of two parts:

- Using simple instructions provided in the interview, draw a cognitive map that reflects your view of the causes and effects of corporatization in American higher education
- Responding to open-ended questions, share your ideas for how American higher education might best respond to the phenomenon of corporatization
- Review the early stages of the researcher's analysis of your data, and provide feedback and clarification to ensure that she accurately represents your views
- Your time spent reviewing this analysis and providing feedback will be in addition to the time you spend in the interview
- Once you have reviewed the analysis, discuss your feedback with the researcher by email, phone, or in person, whichever is your preference

POTENTIAL RISKS AND DISCOMFORTS

This study poses little – if any – risk or inconvenience to you other than the donation of your time.

ANTICIPATED BENEFITS TO PARTICIPANTS

In addition to contributing to the emerging dialogue about corporatization, you may:

- Enjoy the opportunity to reflect on your work life as it pertains to the issue of corporatization
- Welcome the opportunity to clarify your own thoughts and ideas about corporatization
- By reading the study findings from the dissertation or executive summary, learn about the diverse views held by other study participants from your institution – although all individual identities will be masked
- By reading the study findings from the dissertation or executive summary, gain insight about your organization relative to corporatization

PAYMENT FOR PARTICIPATION

You will not be paid for your participation in this study.

CONFIDENTIALITY

The researcher will:

- Keep all data secure and private using lock-and-key (for cognitive maps and recorded interviews) and password-protected computer files on a computer with limited access (for transcribed digital data and analysis)
- Restrict access to all research data to the researcher and Dr. Carolyn Ridenour, the faculty sponsor, both of whom will not reveal who you are to

others

- Mask the identities of participants and the identity of the institution in all publications that emerge from this study, including the dissertation and executive summary

PARTICIPATION AND WITHDRAWAL

You do not have to be in this study. You may stop participating at any time without penalty.

IDENTIFICATION OF INVESTIGATORS

Please contact one of the investigators listed below if you have any questions about this research.

Doctoral Student: Sherry McAndrew, PhD Candidate in Educational Leadership in Higher Education, 999-999-9999, mcandrews1@udayton.edu

Faculty Supervisor: Dr. Carolyn S. Ridenour, Professor Emeritus, Department of Educational Leadership, 999-999-9999, cridenour1@udayton.edu

RIGHTS OF RESEARCH PARTICIPANTS

You may contact the Chair of the Institutional Review Board (IRB) at the University of Dayton if you have questions about your rights as a research participant: Candise Powell, J.D., 999-999-9999, irb@udayton.edu.

SIGNATURE OF RESEARCH PARTICIPANT *(or legal guardian)*

I have read the information above. I have had a chance to ask questions and all of my questions have been answered to my satisfaction. I have been given a copy of this form. **I certify that I am at least 18 years of age.**

Name of Participant (please print):

____

Address:

____

Signature of Participant

____Date__________________

SIGNATURE OF WITNESS

My signature as witness certifies that the Participant signed this consent form in my presence.

Name of Witness (please print):

____

Signature of Witness

____Date__________________

(Must be same as participant signature date)

APPENDIX D

Brief Introduction to Decision Explorer

By providing a flexible, graphic display and a set of analytical tools, Decision Explorer software (Decision Explorer, n.d.) supports the basic processes researchers employ when they work with idiographic causal maps: creating a map, assessing the overall characteristics of a map, exploring important concepts in a map, and working with clusters in a map. Using screenshots and tool descriptions from Version 3.4.0 Personal Edition of the software, the information below provides a brief introduction to using Decision Explorer for these purposes.

Creating the causal map.

Decision Explorer displays causal maps graphically, as shown in Figure 51. To create a map, researchers can either import the data from text files or create the map manually. To create the map manually, researchers add concepts by double-clicking on a blank area of the screen and entering the name of the new concept and create links between concepts by clicking on the causal concept and dragging an arrow to the effect concept. Various software features allow researchers to create categories of concepts and links and to vary how the different types of concepts and links are displayed on the screen.

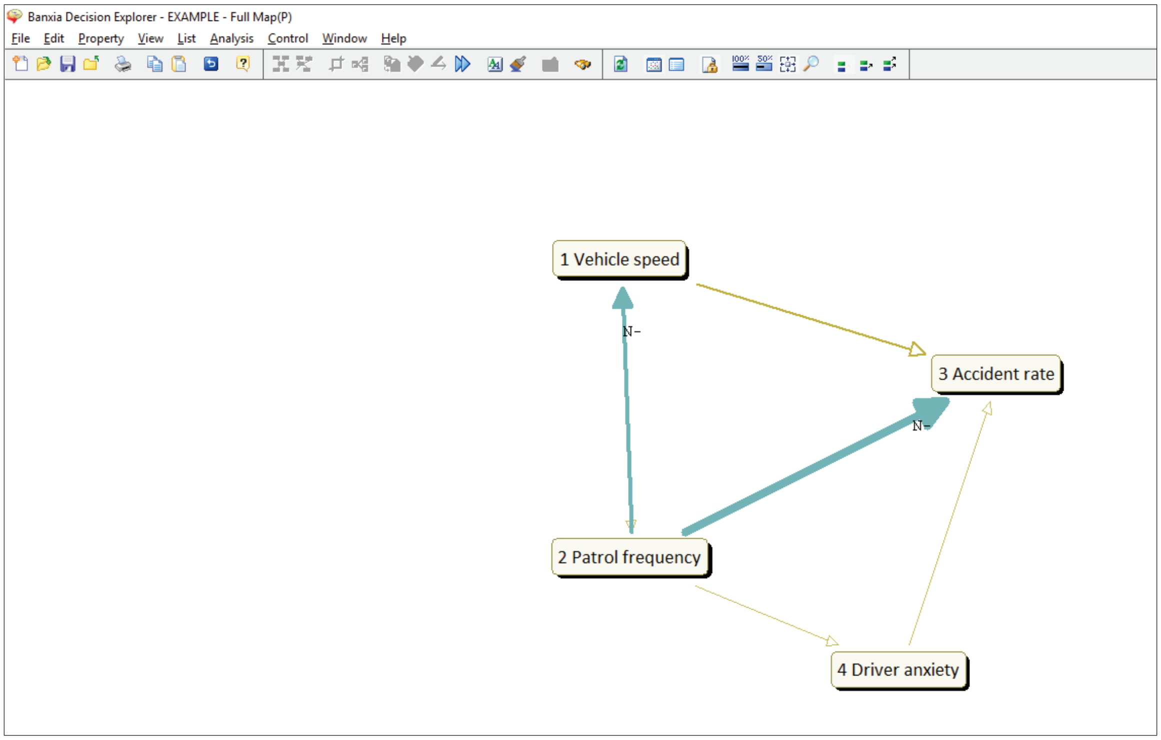


Figure 51. Decision Explorer screenshot that shows its graphic display of a simple causal map with four concepts and five links. The links have been formatted so that the thickness of the arrow correlates to the strength of the link and negative (decreasing) links are depicted in blue and marked near the arrowhead with *N-*.

Assessing the overall map.

By providing a graphic display of the entire map, Decision Explorer allows researchers to visually inspect the overall map and to identify dominant structures and areas of congestion. Because causal map researchers consider only concepts and links to be data—not the physical arrangement of those concepts and links—Decision Explorer allows them to rearrange the concepts on screen as they explore the map; researchers can click-and-drag concepts to new screen locations, while the software maintains and redraws the links. Figure 52 shows the map from Figure 51 after the researcher has moved the Patrol Frequency concept to a new screen location.

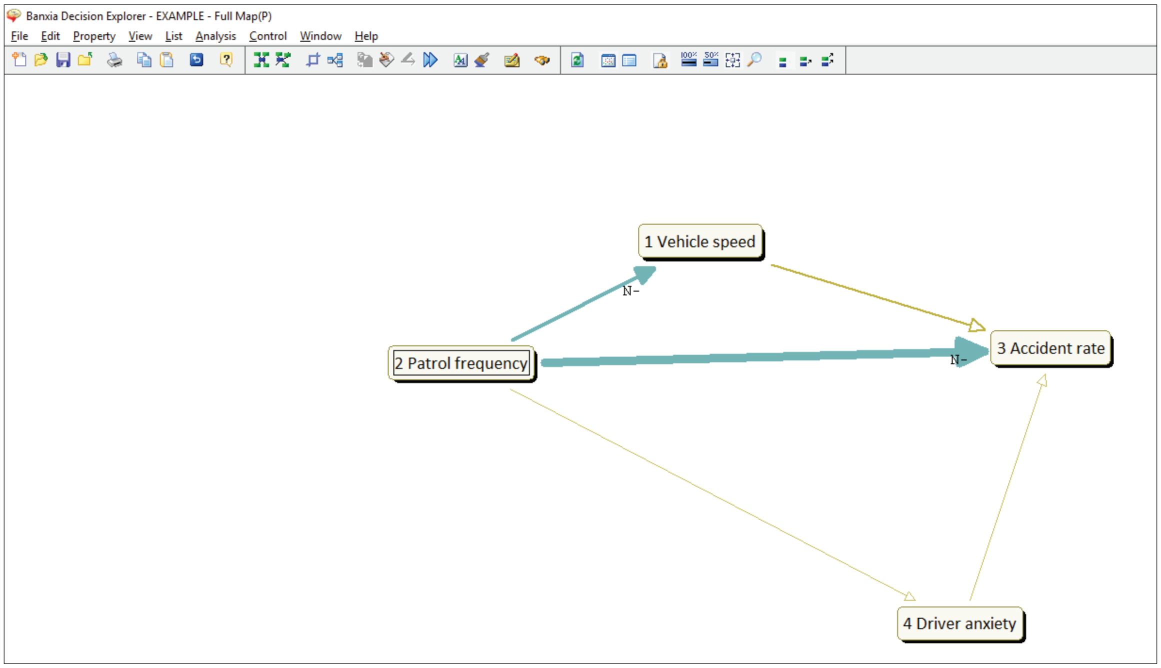


Figure 52. Decision Explorer screenshot that shows the map from Figure 51 after the researcher has clicked-and-dragged the Patrol Frequency concept to a new screen location.

In addition, Decision Explorer allows researchers to use the MAP tool to choose one concept and temporarily display only the immediate concepts and links related to it. Figure 53 shows the map from Figure 51 after the MAP tool has focused it on the Vehicle Speed concept. This feature allows researchers to drill down temporarily on individual concepts without altering the original map, a helpful aid when assessing complex maps.

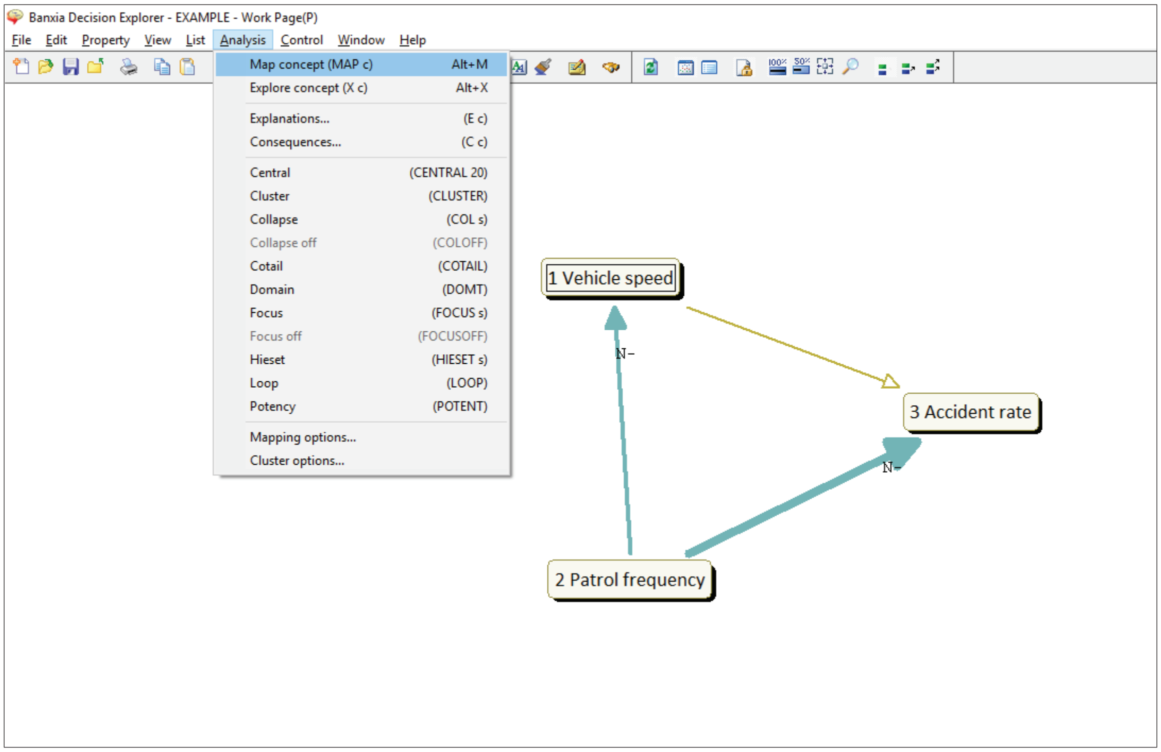


Figure 53. Decision Explorer screenshot that shows the map from Figure 51 after the researcher has used the MAP tool to narrow the display temporarily to concepts and links surrounding the Vehicle Speed concept.

Exploring key concepts in the map.

As shown in Table 92, Decision Explorer provides a number of tools that help researchers identify and explore prominent concepts in a map.

Table 92

Decision Explorer Tools that Identify and Explore Prominent Concepts

Tool	Description
LIST HEADS	Lists the HEAD concepts in the model. A HEAD concept is one that has no further consequences, i.e. it has no links leading out.
LIST TAILS	Lists the TAIL concepts in the model. A TAIL concept is one that has no further explanations, i.e. it has no links leading in.
DOMAIN	Lists each concept in descending order of its DOMAIN count, which is the total number of direct links into and out of the concept.
CENTRAL	Lists each concept in descending order of its CENTRAL score, which is calculated by adding the direct and indirect links into or out of the concept with a distance-decay function that reduces the weight of the links based on their distance from the concept.
EXPLANATIONS	For a chosen concept, lists each path of concepts that ends in a causal link to the chosen concept; each represents a causal chain that might explain the chosen concept.
CONSEQUENCES	For a chosen concept, lists each path of concepts that begins with a link out of the chosen concept; each represents a causal chain that might result from the chosen concept.

Working with clusters in the map.

In Decision Explorer, a group of related concepts is called a cluster (or a set; the terms are synonymous), and there are different types of clusters. Some clusters exist in the map as it was created by the participant: island clusters consist of highly connected concepts that have few links to other areas of the map; tree clusters consist of concepts that create multiple causal chains leading to the same concept; and loops are concepts linked together in a repeating cycle. Table 93 explains the Decision Explorer tools that help identify these types of clusters.

Table 93

Decision Explorer Tools that Help Identify Existing Clusters

Tool	Description
CLUSTER	Performs an analysis of the map based on the similarity of links between concepts and proposes possible island and tree clusters for the researcher to examine, validate, or discard. Based on its analysis, CLUSTER creates new cluster names (cluster1, cluster2, etc.) and marks the appropriate concepts as belonging to each new cluster.
LOOP	Performs an analysis of the map and reports every occurrence of a group of two or more concepts with links that create a repeating cycle. Based on its analysis, LOOP creates new cluster names (loop1, loop2, etc.) and marks the appropriate concepts as belonging to each new cluster.

In addition to existing clusters, Decision Explorer allows researchers to use coding to mark concepts as belonging to researcher-defined clusters, a process similar to the qualitative coding of emergent themes in text. To accomplish this, researchers use the SET command to create new cluster names and use the SET command to mark the appropriate concepts as belonging to the new clusters. A concept may belong to no clusters, one cluster, or multiple clusters; the contents of clusters may overlap.

Whether named clusters are created by the CLUSTER tool, the LOOP tool, or by researchers, researchers can analyze them with a variety of Decision Explorer tools. Some tools, like FOCUS and CSET, provide foundational analysis, while other tools, like HIESET, POTENT, and COTAIL, may not be applicable to all maps. Table 94 lists and explains the Decision Explorer tools for analyzing clusters.

Table 94

Decision Explorer Tools that Analyze Clusters

Tool	Description
FOCUS	Temporarily narrows the map to the concepts that belong to a chosen cluster. When FOCUS is on, the display of the map and the majority of tools behave as though the map contains only those concepts. When FOCUS is turned off, the map returns to its original state.
CSET	Compares two clusters to determine whether the second cluster contains any concepts that are direct or indirect consequences of any concepts from the first cluster and lists those concepts and relationships.
COLLAPSE	Based on a chosen cluster, temporarily collapses the map by hiding all concepts that are not members of the cluster while maintaining links (whether direct or going through other concepts) between concepts in the cluster.
HIESET	For each concept in a chosen cluster, creates a new cluster (hieset1, hieset2, etc.) that contains all concepts that have a direct or indirect causal effect on the concept. Larger hiesets indicate concepts that have more highly elaborated explanations.
POTENT	Using the hiesets created by the HIESET command, lists each concept in descending order based on its potency score, which is calculated by totaling the number of hiesets it belongs to.
COTAIL	Traces the path from each tail concept until a concept is reached that has more than one consequence (a branch point), identifies this concept as a cotail, and lists all cotails in the map. Cotails may be useful for exploring different paths to an outcome and for validating the importance of concepts identified by POTENT.
LSD	Compares two clusters and displays concepts that are in one of the specified clusters but not in the other.
LSS	Compares two clusters and displays concepts that are in both of the clusters.
LSE	Compares two clusters and displays concepts that are in the first specified cluster but not in the second specified cluster.

APPENDIX E

Informal List of Adaptive Challenge Questions

The following is an informal list of questions related to the adaptive challenge that were spurred by my discussions with Evans State University participants. The questions might be used to stimulate engagement with the adaptive challenge, to encourage divergent thinking about the adaptive challenge, or to foster dialogue about the adaptive challenge.

Questions about higher education in general:

- What is the mission of higher education in society?
- What should be the mission of higher education in society?
- What does it mean if we in higher education have pluralistic views of the proper mission of higher education in society?
- What is the nature of the adaptive challenge facing higher education?
- What is the best adaptation to the adaptive challenge facing higher education?
- What is the appropriate relationship between what the public wants from higher education and what higher education provides?
- What is the appropriate relationship between what the state legislature wants from higher education and what higher education provides?

- What responsibility does higher education have to respond to the sociopolitical forces shaping it?
- What justifies public funding of higher education?
- Who should receive a higher education?
- Does higher education not have enough money?
- To what extent is there consonance between the values of higher education and the culture of higher education?
- To what extent should there be consonance between the values of higher education and the culture of higher education?
- How should we in higher education conduct ourselves in times of crisis?

Questions about this particular institution of higher education:

- What is the mission of this institution?
- What should be the mission of this institution?
- What does it mean if we have pluralistic views of the proper mission of this institution?
- What means are acceptable for achieving the mission of this institution?
- What criteria should be used to judge the means for achieving the mission of this institution?
- What aspects of the mission of this institution should we give up if we could not support all of it?
- What is the nature of the adaptive challenge facing this institution?
- What is the best adaptation to the adaptive challenge facing this institution?

- Does this institution not have enough money?
- What organizational changes would you recommend for: Administration? Faculty? Staff? Your own position?
- If you were an unbiased observer, would you answer the above question differently?
- To what extent are we willing to spend time understanding the perspectives of colleagues with views different from our own?

Questions about corporatization in higher education:

- What is corporatization in higher education?
- What are the primary causes of corporatization in higher education?
- What are the primary effects of corporatization in higher education?
- To what extent are these effects desirable or undesirable?
- Who benefits from corporatization in higher education?
- Who suffers because of corporatization in higher education?
- What is being gained because of corporatization in higher education?
- What is being lost because of corporatization in higher education?
- Is corporatization the best possible adaptation to the adaptive challenge facing higher education?

Questions for individuals in higher education:

- Why did you begin working in higher education?
- Why do you work now in higher education?

- What about your work gives you the greatest dissatisfaction?
- What about your work gives you the greatest satisfaction?
- To what extent are you willing to spend time understanding the perspectives of colleagues with views different from your own?
- What gives you hope for the future of higher education?