

Change and Higher Education: A Multidisciplinary Approach

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Higher education now finds itself in a new era and environment in which it is confronted with an array of challenges and forces for change. This paper identifies the key forces for change in higher education, assesses these forces using an established change model (the action research model), and illustrates how change literature from management, human resource development, and economics have the potential to contribute to successful change management in higher education environments.

Keywords: Higher Education, Change, Action Research

Given a long history of relative stability and steady growth, higher education now finds itself in a new era and environment in which it is confronted with an array of challenges and forces for change. Significant change at this point in the evolution of higher education appears eminent due to powerful environmental forces related to technology, competition, and the workplace/workforce (see Kezar and Eckel, 2003; Welsh and Metcalf, 2003; Kemelgor, Johnson and Srinivasan, 2000). These new forces are causing significant shifts directly impacting higher education goals, processes, and decision-making.

Despite the likelihood of substantial change that has swept through most other sectors of the economy in recent years, some doubt the ability of higher education to deal with this magnitude of change. Arthur Levine (2003) laments that providers of higher education “will ignore or move glacially as higher education decision making is prone to do, into the digital era” or that “traditional higher education will rush into, or worse yet, will be pushed headlong into the new digital economy and abandon what is sacred about higher education, those things that no other social institution is capable of providing” (p. 26).

This paper examines change in higher education at a critical point in its evolution. To organize the inquiry, we use an established change model (the action research model) that is widely used for planned change processes. Action research has been theoretically and empirically validated in traditional organizational forms. We use the model to identify where (at what points in the change process) and why (what are the substantive differences between higher education and traditional firms) planned change in higher education may be more challenging than in traditional firms. From that basis, we then use the model to illuminate the differences and gaps between traditional change management and the nature of change management in higher education environments.

The Action Research Model of Planned Change

Since the 1940s, studies have found that “research needed to be closely linked to action if organization members were to use it to manage change” (Cummings & Worley, 1993, p. 8). These findings laid the foundation for contemporary organization development and have guided the theory and practice of planned change for the past 60 years. Action research applies behavioral science knowledge to organizational problems, seeks involvement of organizational members at each stage of the process, and provides feedback throughout the process in order to adapt and recalibrate the action plan. The specific steps in action research have been described differently (see, for example, Shepard (1960), Cummings & Worley (1993), French & Bell (1999), and Rothwell, Sullivan & McLean (1995)): for this paper, Shepard’s recursive four-phased model is selected because it is the most generic model of planned change. This model can incorporate the more detailed elements from the other action research models and it provides the minimal requirements for planned change through action research.

Shepard’s (1960) model “highlights the relations among goals (objectives), planning, and action” (French & Bell, 1999, p. 132). The central focus is research with the purpose of informing current and future action.

The steps are 1) identify the objective; 2) plan the change process; 3) take action; 4) evaluate; and then repeat. The outcome of evaluation may lead to new planning (step 2 in the sequence) or lead to new objectives (step 1 in the sequence). The process is continual, iterative, and is grounded by organizational objectives. We use Shepard’s (1960) four steps to illuminate the unique challenges for planned change initiatives in the higher education environment.

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The paper is organized in three sections. The first section provides the background of the contemporary higher education environment. Two broad categories are discussed: 1) the key factors shaping the environment of higher education, and 2) the forces and catalysts for change. Within each category, we illustrate how these factors and forces can shape and influence Shepard's (1960) planned change process. The *key factors* effecting higher education include 1) governance structures; 2) diverse stakeholders and constituents; and 3) culture. These factors serve as important conduits and mediators of how any planned change process would occur in institutions of higher education. The *forces and catalysts for change* include 1) fiscal and budgetary constraints; 2) rapid growth in the use of information technology; and 3) market forces including the increasing competition for students.

The second part of the paper offers select theories and concepts found within change literature from a variety of disciplines. Scholarship on change from management, HRD, and economics were selected to illustrate the potential contributions of these disciplines. The review is not meant to be comprehensive; rather, the authors provide examples from these disciplines that directly relate to the key factors of the higher education environment.

The third and final component of this paper seeks to reconcile the higher education-specific change models reported in the literature with the examples presented in part two. Specifically, we seek a better understanding of the dimensions of change in higher education that are reflected in the following research questions: 1) how do the factors of and forces on higher education impact the planned change process?; 2) what do other disciplines offer that may inform the planned change process for higher education?; and 3) how can HRD effectively advise higher education institutions on change? Through this analysis we hope to gain a better understanding of the ways in which institutions of higher education experience change and, using the lens of change theory from management, HRD, and economics, how higher education might more effectively manage change in today's environment of turbulent, more market-driven culture.

Change—A Higher Education Perspective

Key Factors in Higher Education

Several unique factors permeate the higher education environment which are integral to the nature and purpose of higher education. These factors include organizational leadership and governance structures, diverse stakeholders and constituents of higher education, and institutional culture (Duderstadt & Womack, 2003; Welsh and Metcalf, (2003); Kezar and Eckel, 2002). Organizational leadership, diversity, and culture substantially impact all four steps of Shepard's (1960) model of planned change.

Institutional leadership and governance. Duderstadt and Womack (2003) discuss institutional governance in higher education in terms of a process that is shared among key constituencies—a governing board of lay trustees or regents as both stewards for the institution and protectors of the broader public interest, the faculty as those most knowledgeable about teaching and scholarship, and the university administration as leaders and managers of the institution. In short, the shared governance in higher education allocates the tasks of leading and managing the institution to the administration, academic matters to the faculty, and public accountability and stewardship to the governing board.

From this perspective, it is clear that the leadership and governance structure of higher education will substantially shape any change process that begins with identifying and building consensus on objectives. The governance structure of higher education, combined with numerous institutional leaders, managers, and academics, resembles more like the governance and leadership of democratic country than the governance and leadership of a typical business organization. Organizational politics, coalition building, and the differential power of both leaders and constituents play a much greater role in higher education organizations than in the traditional view of the firm.

By applying Shepard's (1960) model of planned change to this reality, we find that the first step of the process—creating and agreeing on objectives—can be seen as difficult, if not problematic, for higher education providers. In addition, the subsequent steps in Shepard's (1960) model (e.g., planning, taking action, and fact-finding) all take on a different flavor when one suggests that higher education institutions are more similar to a democratic country than to a business organization. Planned change on a national scale in democratic countries has been labeled as inefficient, shortsighted, lead by special interests, etc. etc. etc. Shepard's model illuminates the gap between planned change in business organizations from planned change in a higher education institution.

Diverse stakeholders and constituents. The dynamics of change in higher education are inevitably influenced by its diverse array of internal and external constituencies. Internal constituencies of higher education institutions include students, faculty, staff, administrators and governing boards. External stakeholders include parents, the public and their elected leaders in government, business, labor, the press and other media, foundations, and other public and private institutions in the community. A key challenge for leaders responsible for change in higher

education is managing the complex roles and relationships between the university and its diverse constituencies, particularly when these relationships are changing rapidly.

Shepard's (1960) model provides a way to identify the potential consequences of diverse stakeholders and constituents on a planned change process. Like the governance structure impact described above, the diverse stakeholders and constituents described by Welsh and Metcalf (2003) are *less* likely to come to an easy agreement about objectives. On a positive note, however, their study found that the planning and action taking steps will be *more* likely to succeed when faculty perceive they are embedded in the planned change process. In most situations, because of the diverse stakeholders and constituents, planned change in higher education institutions will generate coalition building, organizational politics, and the exercising of power in order for the process to continue.

Institutional culture. Recent studies have examined the effects of institutional culture on change in higher education. Smart, Kuh and Tierney (1997) examined the influence of institutional culture, mission, preferred decision-making approaches, and collective bargaining status on institutional effectiveness in two-year colleges. Kezar and Eckel (2002) examined the effect of institutional culture on change strategies by assessing the degree to which change processes are enhanced by following culturally sensitive change strategies and/or thwarted by violating cultural norms. They found that change strategies seemed to be successful if they were culturally coherent or aligned with the institution's culture. Institutions that violated their institutional culture during the change process experienced difficulty. The authors recommend that campuses conduct audits of their institutional cultures before engaging in the change process.

It is widely accepted, in both scholarly and practitioner journals, that culture represents a significant force in any planned change process. Shepard's (1960) model should be congruent with an organization's culture in order to increase the probability of successful change. Each step of the planned change process seeks to be aligned with the culture in order to be successful. In higher education environments, however, studies have found distinct sub-cultures generated from the loose coupling of institutional sub-units (Weick, 1976). The consequence of these sub-cultures is problematic for one overarching planned change process, and it means that each step should be culturally sensitive to a number of sub-units in order to impact system-wide changes. Imagine how difficult it would be to *identify*, let alone *align*, a process with multiple cultures within one organization. Again, Shepard's (1960) model illuminates the potential problems associated with planned change in higher education environments.

Forces Influencing Change in Higher Education

This section examines three major *forces for change* currently impacting the higher education environment. These forces are 1) fiscal and budgetary constraints; 2) the growth of information technology; and 3) market forces with the resulting increased competition for students. Each of these forces directly impacts the first step of Shepard's (1960) model of planned change. In other words, identifying objectives in the higher education environment is shaped simultaneously by each of these forces—and any one of these forces alone has been demonstrated to cause substantial changes in the operation and management of traditional business firms. Following is a brief description of these forces for change currently facing higher education providers.

Fiscal and budgetary constraints. The rising cost of higher education during a period of stagnant economic growth and declining public support has raised concern about both the access to and quality of higher education. During the past twenty years state appropriations as a proportion of the total revenue of public colleges and universities declined by nearly 25%, despite continued growth in college enrollments. During the same period the net tuition per full-time student increased by over 60 percent. Efforts to balance rising costs with the availability of educational services by increasing tuition continue to meet with public resistance. While higher education is exploring ways to reduce its dependence on government appropriations and to diversify its resource base through new, entrepreneurial and market-driven strategies, change on college and university campuses across the nation continues to be driven by fiscal constraints.

The growth of information technology in higher education. Among the most compelling forces for change in higher education today is information technology and the rapid growth in its use to transform learning. Several noted higher education leaders and observers recently have proclaimed the importance of recognizing the significant impact that information technology is having on basic processes of teaching and learning that are so fundamental to higher education (Brown & Duguid, 1995; Duderstadt, Atkins & Van Houweling, 2002; Katz and Associates, 1999; Pittinsky, 2003). These authors discuss the nature of information technology, its relevance and applications to higher education, and most important to change initiatives in higher education, they lay out the compelling opportunities and challenges presented by information technology. These works communicate a coherent and consistent message to leaders and change agents that higher education must take full advantage of the emerging technological possibilities afforded by these advancements.

Market forces and increased competition for students. Reflecting a more market-driven environment in higher education, students are exercising more discretion in selecting educational programs and there is increased

competition for students among higher education institutions. The monopolies over advanced education that universities once enjoyed due to geographical location and credentialing through the awarding of degrees are now being challenged by greater dependence on market forces and less on regulation. Technology is allowing new competitors to bypass the traditional barriers to entering the higher education marketplace such as large capital costs and accreditation. As a result, higher education is evolving from a loosely federated system of colleges and universities serving traditional students from local communities to, a global knowledge and learning industry driven by strong market forces.

Summary of first section. This section has illustrated how a planned change process (Shepard's, 1960) is influenced by the unique factors of and forces on higher education. The four-step model has illuminated how these unique features of higher education can pose challenges to any planned change process. The authors believe that in order to deal with these challenges, we need to look at change from multiple perspectives. The next section describes planned change from three different perspectives: management, HRD, and economics. Shepard's (1960) model is again used to identify the specific contributions and/or thinking from each perspective.

Change: Management Perspective

Management scholars have contributed greatly to our understanding of organizational change. Some management scholars view change as incremental and continuous; others view it as episodic and discontinuous. Regardless of the researcher's perspective of change, most scholars and practitioners agree that *human systems are characterized by some type of continuous change*. In this perspective, Shepard's (1960) model of planned change is continuously iterative. In other words, organizations and even sub-units within organizations are continually involved in some ongoing change process.

However, and it is a big however, current management thinking argues that *change that is determinant and predictable is the exception in organizations, since much of what organizations confront on a regular basis cannot be anticipated in advance*. Management scholars assert that planned change has an important albeit limited role in organizational life, even though it is a role that is often constrained and altered by the unpredictability of events. This perspective argues that events unfold in ways that cannot always be shaped by human deliberation and intervention. Based on this view of the unpredictability of change, management scholars agree that change is more complicated in today's knowledge economy. The increasing pace and complexity of all types of organizational change lead Garud and Van de Ven (2000) to observe that it is more productive to view change as "nested sequences of events that unfold over time in the development of individuals, organizations, and industries" (p. 4). Change is appropriately characterized by a duality wherein organizations are shaped by a continual flow of events that they, in turn, help to shape.

Thinking of change as 'unpredictable' and as 'nested sequences of events' suggests that Shepard's (1960) model may have limited application in today's knowledge economy. Management scholars and practitioners are searching for new theories of change that can inform the chaotic reality of organizational life. Is the notion of planned change itself an artifact of another era? Or, what utility can a model like Shepard's (1960) have in today's knowledge economy?

Van de Ven and Poole (1995) identified four ideal theories of change—teleological change, dialectic change, life cycle change, and evolutionary change. These theories represent fundamentally different bases for change. Each theory focuses on a different set of generating mechanisms and causal cycles to explain the change processes that unfold. These four ideal theories of change can be used to understand how change is "driven" by underlying motors or generating mechanisms. Each theory involves a change process based on a different cycle of change events that is governed by a different "motor" that drives change. These motors determine the scope and nature of change and can be inferred from a systematic analysis of the sequence of events underlying the development of phenomena. An explication of these motors provides a way to systematically explore change processes. In doing so, we can generalize insights between institutional settings in which change is driven by similar motors. Moreover, we can generate additional insights by combining motors to explore more complex processes.

From this perspective, Shepard's (1960) model could be applied on top of each of the four 'motors' of change and could be used to manage the *process* of change after it was generated by a particular motor. That is to say, the motors are deeply embedded in the socio-technical processes of organizations, and once the motors have been identified, a planned change model could guide the decision-making and management of the change process itself. It is assumed that Shepard's (1960) model would be congruent with any motor of change.

Change: HRD Perspective

Like the contributions of management described above, HRD provides its own unique contributions to the change agenda. Human resource development (HRD) claims a long and rich history in theorizing and researching about how organizations develop, grow, and change (see French and Bell, 1999; Rothwell, Sullivan and McLean, 1995, Cummings and Worley, 1993). The components of HRD are usually understood to include training and development, organization development, and career development (McLagan, 1989). For this research project, the focus is on the role of organization development (OD) and its relationship to organizational change.

In modern times, the term ‘organization development’ is broadly understood to focus on ten key dependent variables (Egan, 2000) that enhance organizational effectiveness. Variables that are most relevant for this research project include 1) initiating and managing change; 2) supporting adaptation to change; and 3) engaging organization culture change. Each of these variables is critical for successful planned change.

Shepard’s (1960) model of planned change is a foundational model that represents the values, beliefs, and assumptions of HRD. The HRD profession places a high value on collaborative, reeducative interventions; likewise, Shepard (1960) advocates for collaboration for each step of the process. OD professionals are understood to be guided by a normative-reeducative philosophy when working to facilitate change and focus on creating collaborative decision making environments during times of change. These values, combined with HRD’s foundational reliance on learning theories, provide a different and complementary perspective of change not always found in the management perspective. Shepard’s (1960) model can therefore be used as a framework for planned change from the HRD perspective. The diverse contributions to planned change from HRD, including multiple methods to create change, outcome-based interventions for change, individual change as a prerequisite for organizational change, and cultural change as a primary goal for organization development (OD) interventions, all fit nicely into Shepard’s (1960) four step process.

For example, the multiple methods OD professionals use to facilitate change can include action research (e.g., Shepard’s (1960) model), appreciative inquiry, or critical research, among others. Each method is supported to a greater or lesser degree by a research history supporting to the efficacy of the method, and each method could use Shepard’s (1960) model to inform and manage the process of change. Another example of how Shepard’s (1960) model could be used to manage the process of change is for transformative change processes on the individual and organizational level. Henderson (2002) offered a comprehensive literature review on the major change research and theorizing for HRD. The article compared “prominent theories of change that have been proposed in the four arenas (including) organizational development, organizational learning, adult learning, and psychological development” (p. 187). From this article, it is apparent that learning and psychological development hold a more prominent role in understanding organizational change in HRD than other disciplines, including management and economics.

Shepard’s (1960) model is easily adapted to individual and organizational change processes. Individuals embedded within organizations could be guided by the model in order to grow and develop; likewise, organizations could build upon individual change and manage the process using Shepard’s (1960) model at the organization/strategic level. The main contribution of Henderson’s work to the HRD field, and to planned change in general, is that he illustrates the connection between transformative learning at the individual level with transformative change at the organization level. In this perspective, effective change begins at the individual level: individual transformative learning is required for organizational change. If an organization does not place a high priority (with appropriate resources) on individual transformation, then organizational change interventions may fail.

Change: Economic Perspective

In today’s environment, economic theory and concepts are increasingly impacting educational providers. For example, the New York Supreme Court drew heavily on economic-based research to decide on public school funding (Belfield & Levin, 2001); stock market analysts use traditional economic forecast models to sell stock in publicly-held degree-granting providers (Ortmann, 2001); and European higher education used the economic construct of the ‘market’ in order to “generate serious initiatives in deregulating higher education, in developing performance-based models of resource allocation, in fostering...competition and efficient management structures, and even in considering the ‘privatization’ of higher education” (Weiler, 2001, p. 1).

In light of the prevailing influence of economics on the policy, management, and strategy of higher education, not all scholars think this is appropriate. For example, Winston (1999) found that there are several *significant* economic differences between firms and degree-granting institutions. These differences were identified by economic theory and include: 1) market differences (for-profit vs. non-profit) with resulting information differences

(perfect information vs. asymmetric information); 2) the huge impact of ‘customer-input technology,’ (e.g., students are an input, a component of the quality process, and an output) (Winston, 1999); and 3) wealth differences impact higher education providers differently than the wealth differences of for-profit enterprises. “Schools that get a lot of donated resources from endowments and legislatures and gifts and their capital stocks can and do sell their educational services, in their commercial role, at a lower price for higher production cost and quality” (p. 18).

According to Winston, this means that “the key economic characteristics of higher education...paints a picture of a real world of higher education in which very different educational quality is produced in very different schools at very different cost and sold at very different prices—gross and net—to students with very different input characteristics who get very different subsidies and are often selected from very long queues of applicants, leaving a lot of unsatisfied demand. All of this exists in a world of massive ignorance about what is being bought and sold” (Winston, p. 22-23). These economic characteristics are very different than the economic characteristics of firms and are key to understanding the possible and potential changes in higher education providers. Since this study is focused on understanding change in higher education, the implications of these differences need to be accounted for in any new theory of change.

Change, from the economic perspective, is understood as responses to market conditions. Shepard’s (1960) model *could* be used to guide and manage the change process that emerges out of market changes; however, scholars like Winston question whether or not traditional economic concepts that are appropriate for firms mean the same thing in the world of higher education. The economic literature suggests that change is not really the focal area of greatest interest; rather, the *meaning* and *application* of economic concepts and analyses is under debate. These concepts and analyses continue to be applied to higher education providers despite increasing agreement that higher education providers face unique economic situations.

Comparative Analysis and Implications for Future Research

The changes facing higher education providers are transformational in scope and impact every level of the organization. Higher education providers themselves, of course, work towards implementing and managing change. Change in higher education is typically characterized by collegiality, extended dialogue, consensus, an emphasis on educative excellence, and respect for academic tradition. Change is evolutionary, deliberate, and incremental rather than revolutionary and quantum in nature. The complex governance structure, diverse constituencies, and cultures of higher education contribute to a pace of change that is considerably slower than what is typical in the private sector.

Given the above description of how change typically happens in higher education, Shepard’s (1960) model can easily explain the reality described above. The model suggests, because it is centered on the relationship between objectives and action, that organizations with complex structures and diverse opinions would change differently than organizations with simple structures with heterogeneous opinions. The reason for this is because identifying objectives is quicker and easier for the latter, and slower and challenging for the former.

But we want to do more than explain the current ways that higher education providers implement change processes. We want to identify areas that are particularly challenging to higher education and see how management, HRD, or economics can contribute towards neutralizing the challenges. Following is a chart that recaps the theoretical, methodological, or conceptual contributions of each discipline. These contributions can be viewed as strengths unique to each discipline; for example, the scholarship on the tempo of change is a strength of management, and the scholarship on diversity is a strength of HRD, etc.

When we connect the concepts and strengths from the three disciplines above with the explicit needs of higher education, it becomes clearer how the wide scope of needs is benefited by a multidisciplinary approach. Further, Shepard’s (1960) model has been shown to effectively partner with many of the management and HRD contributions: in other words, Shepard’s model can incorporate many, of the concepts, practices, or theories from these two perspectives. However, the emerging understanding that change is unpredictable and chaotic places great limitations on any model of planned change. Further research on identifying the relationship between planned change and chaos may contribute towards this problem. And finally, from the economics perspective, the issue is not of which change process is best; rather, the issue is to decide what economic information is appropriate for the unique environment of higher education. The misapplication of economic concepts and theories to understand and direct change in higher education is something to be concerned with.

Table 1. *Contributions to Change from Multiple Disciplines*

Management	HRD	Economics
Tempo of change	Outcome based OD interventions	Non-profit economic model
Unpredictability of change	Multiple methods	Information asymmetry
Complicated change (nested sequences)	Degree of change	Customer input technology
Typology of change (generative mechanisms)	Learning/Psychological Development	Unbalanced competition
Process research methodology	Individual transformation for organizational change	
Loose Coupling	Collaborative, reeducative philosophy	
Role of individual ideology	Diversity Research	

Conclusion

This paper has provided an analysis of the tumultuous environment currently facing higher education. Organizations of higher learning are unique in many ways, and Shepard's (1960) model of planned change has illustrated the deep differences between providers of higher education and traditional for-profit firms. In order to contribute to the change agenda of higher education, this research presented select research from three disciplines: management, HRD, and economics. The research was selected based upon its potential to directly contribute to the needs of higher education. The research is not meant to be a comprehensive review of all research that may be applicable to higher education; rather the authors believe that this 'slice' offers the potential for future multidisciplinary research.

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