Schooling in the Post-Industrial World:  
The North Star for Leadership

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A central tenet of our scholarship over the years is that leadership must be viewed in terms of how schooling is evolving and the forces that are driving those changes. For us, therefore, a decontextualized understanding of leadership is insufficient. Our models inform us that both the understanding of leadership and the practice of leadership need to backward map from knowledge about the type of schooling needed in a post-industrial world. This, in turn, necessitates, among other things, an understanding of the economic, cultural, and sociopolitical environment in which schooling is nested.

This article explores the evolution of schooling from the industrial world to the current technological era. As we will see, the scaffolding on which schooling in the twentieth century was built is crumbling. New pillars required to meet new values and goals are being framed up. Whether this reconstruction work is productive will depend in large part on leadership.

We begin by providing an overview of the model that guides our analysis of change in schools over the last 125 years. We then show how one major revolution produced an understanding of schooling that defined the practice of education throughout the industrial era. We close by exposing the tenets of a second revolution underway currently, one that is forming our understanding of schooling in the post-industrial world of the 21st century, an understanding that exerts considerable influence over how we need to think about school leadership.

A Model of Organizational Evolution

Over the last half century, scholars have invested considerable energy in the quest to uncover answers to the question of how industries and organizations evolve, devoting special attention to the influence of environmental movements on the shape and functioning of institutions. In the mid-1980s, in an effort to bring coherence to this work Tushman and Romanelli (1985) crafted their seminal theory of organizational evolution, the punctuated
equilibrium model of organizational change. At the core of their model, Tushman and Romanelli hypothesize that “organizations progress through convergent periods punctuated by reorientations which demark and set the bearings for the next convergent period” (p. 173). According to the theory, convergent periods cover long time spans during which incremental and marginal shifts that refine and elaborate organizational elements (e.g., goals) toward increased alignment dominate. Reorientations, on the other hand, encompass “periods of discontinuous change where strategies, power, structure, and systems are fundamentally transformed toward a new basis of alignment” (p. 173).

In short, industries and organizations within them tend to go along for extensive periods of time with only marginal changes. Then, for reasons explored below, they get pushed out of their orbits. At these times, fundamental changes are needed to ensure success.

According to the model, it is external shocks to the system that necessitate radical change (transformation), shocks that "punctuate" change. Researchers in this field maintain that these disturbances arise from social, legal, cultural, political, economic, and technological shifts in the environment. For example, technological shifts are forcing newspapers and magazines to leave well-established routines and seek out new foundations on which to build. Tushman and Romanelli (1985) also conclude that a sustained period of poor performance can induce disturbances that demand transformation.

The Industrial Era of Schooling: Where We Were

Change Forces (1890-1920)

As just noted, prolonged poor performance is one of the two forces that provide the fuel to cause institutional disequilibrium, to push organizations out of well-established operational orbits. Moving into the twentieth century, there was a widespread and growing feeling that the
system of schooling of the nineteenth century was in trouble. On the one hand, because the center of gravity for the institution was preparation for college, enrollments were quite low and schooling was failing to address the needs of the majority of students who were not planning on attending college (Odell, 1939). In short, schooling at the turn of the nineteenth century was not educating the great bulk of America’s youngsters and was preparing almost no one “for life.”

Equally important, schools were seen as failing society, in particular the rapidly emerging industrialized society. By and large, because the socialization and skill sets needed to function in the new economy were not being provided, schools were seen as out of step with needs of a post-agrarian society. Nor were they providing much help in dealing with the problems accompanying the mass immigration of the time (Author, 2006).

According to Tushman and Romanelli (1985), environmental shifts provide the second axis on which major institutional changes are scaffolded, especially significant alterations in the ambient economic, political, and social contexts impacting an industry. On the political front, the change with the greatest impact on education as we moved into the industrial era was the rise of progressivism and the development of the liberal democratic state. Rooted in discontent with political corruption and an expanded recognition of government as too limited for the new industrial era, the political landscape was noticeably recontoured in the late nineteenth and early twentieth centuries. Direct citizen control and machine politics began to give way to bureaucratized institutions led by a cadre of educational experts (Callahan, 1962; Tyack, 1974).

The social tapestry was also being rewoven during the period from 1890 to 1920. The central dynamic was “the transformation of American society from one characterized by relatively isolated self-contained communities into an urban, industrial nation” (Kliebard, 1995, p. 2): Industrialization and demographic changes were reshaping the nation (Tyack, 1974).
Most important from our perspective here is the fact that these shifts in social conditions resulted in significant changes in schools. As Cremin (1961), Kliebard (1995), Tyack (1974), and Wraga (1994) have all demonstrated, “With the recognition of social change came a radically altered vision of the role of schooling” (Kliebard, 1995, p. 1).

Turning to the economy, we see the emergence of new economic realities brought on by the industrial revolution (Wraga, 1994). At the core of the matter was the transformation from an agricultural to an industrial economy, or perhaps more accurately, given the social changes outlined above, to an industrial society (Cremin, 1955). The nation was witnessing the “advent of machine production and its accompanying specialization of occupation” (Koos, 1927, p. 310). Stated in language that eerily would be reintroduced nearly a century later in reshaping the school to the realities of a post-industrial world, it could be said that by 1890 “national concerns about international economic competition” (Spring, 1990, p. 220) and the demands of “advancing technology” (Krug, 1964, p. 209) began to influence the design of the blueprints being used to shape the foundations of the newly emerging model of education.

Convergence (1920-1990)

The period between 1890 and 1920 began with the publication of one of the two most important reports on education ever produced in the United States and ended with the publication of another—the 1893 Report of the Committee on Secondary School Studies, commonly referred to as the Report of the Committee of Ten, and the 1918 report from the National Education Association titled Cardinal Principles of Secondary Education. It was the time when the learning and teaching foundations that defined comprehensive schooling for nearly a century were poured. It was here that the educational response to the new industrial world that would define the twentieth century was forged. More specifically, it was during this era that the ideology that
would define schooling was developed and implanted in education. We pull the strands of this shifting ideology into three clusters: core values and purpose, technical core, and organizational architecture and governance.

**Core Values/Purpose**

Although public education started out as a practical endeavor, by the end of the nineteenth century, it was dominated by college interests. Preparation for college largely determined what was taught. Agreement on the central aim of public education was short-lived, however. By 1920, the purpose of schooling would be radically redefined (Krug, 1964).

In their famous 1893 report, the Committee of Ten attempted to resolve the question of purpose by “merging the high school’s two functions [preparation for life and preparation for college] into one” (Herbst, 1996, p. 109). The eerily current perspective of the committee was that there was no difference in these two aims and that preparation for college should lead naturally to preparation for life. As Cremin (1955) and others have highlighted, it was the Committee’s belief in the primacy of “improving intellectual ability by disciplining the mind” (p. 297) that allowed them to arrive at this resolution: “The best preparation for life was to strengthen the intellect …. The discipline-centered college preparatory curriculum was viewed as the program best suited for all youth” (Wraga, 1994, p. 2). Practical knowledge, they held, would come later, from work and everyday life (Sizer, 1964).

Analysts have concluded that “the report of the Committee reflected the crossroad between an educational system designed to provide everyone with a common education and an educational system organized to provide everyone with a specific education based on a future social destination” (Spring, 1990, p. 200). The signals provided by the committee—that the purpose of education was to develop the mind—pointed schooling in a direction that urban,
industrialized America of the twentieth century was unwilling to follow: “The Committee had in fact written an epitaph instead of a blueprint for the future” (Herbst, 1996, p. 108). “The Committee did not see the vast scope of the issues facing American schools and thus did not prescribe for them in any way. As a result, the suggestions in the Report became obsolete within two decades” (Sizer, 1964, p. 170).

Those who believed that the aim of education was intellectual development were not able to hold the high ground. Between 1890 and 1920, a new agenda, education for social control, buttressed by a new science of learning known as social efficiency, gradually came to dominate education. This newly forming purpose rested on a rejection of what critics believed to be an outdated view of schooling (Sizer, 1964; Spring, 1990). According to many analysts of education during the early years of the twentieth century, “Intellectual development was of course vital, but it had to be reconciled with the school as a social institution and its place in the larger social order” (Kliebard, 1995, p. 54).

Subject to the pull of the environmental conditions described earlier, a focus on individualism began to give way to the social purposes of schooling. The dominant leitmotif was that of schooling as a mechanism of social control (Kliebard, 1995). Social efficiency, in turn, became the central concept in influencing the reconfiguration of schooling (Spring, 1990) or, as the great historian of the American high school Edward Krug (1972) concluded, schooling became “the cathedral of social efficiency” (p. 150).

Education for social control included the introduction of new ideas, such as specialization, and a reformulation of older ones, such as equality of opportunity (Spring, 1990). It represented a rejection of the prevailing position on the academic function of education and provided an affirmation of the practical aims of schooling (Powell, Farrar, & Cohen, 1985;
Spears, 1941). It acknowledged the role of the school in addressing new socially anchored responsibilities. Analysts argued that “educational functions traditionally carried on by family, neighborhood, or shop [were] no longer being performed; somehow they must get done; like it or not, the school must take them on” (Cremin, 1961, p. 117). Social efficiency meant fundamentally that the function of schools would be to prepare students for the new industrial world that was redefining American society—for what Spears (1941) called “the great and real business of living” (p. 56). Advocates of the new goal of social control “wanted education to produce individuals who were trained for a specific role in society and who were willing to work cooperatively in that role” (Spring, 1990, p. 201).

The Technical Core

The period from 1890-1920 was marked by “a vigorous drive to replace what was commonly regarded as a curriculum unsuited for the new industrial age and for the new population of students entering . . . secondary school in larger numbers” (Kliebard, 1995, p. 156). One change was that academics would be illuminated much less brightly than they had been before the turn of the century (Ravitch, 1983). As the belief that schooling was too academic became ingrained in the American culture, the curricular spotlight was redirected elsewhere (Latimer, 1958; Reese, 1995).

As the academic scaffolding supporting schooling in the nineteenth century was dismantled, a new infrastructure rose up to take its place—one constructed more from the raw materials of personal and practical experiences than from the frameworks of the academic disciplines: Practical education was required and the opportunity for employment took on added significance (Kliebard, 1995). Schooling for life was no longer education for college but rather preparation for a job. When social control as the foundation for schooling, and social efficiency
as the theory of learning, became dominant threads in the tapestry known as education, a diminished—and continually decreasing—role for academics would also be woven into the fabric.

The pieces that complete the pedagogical aspect of industrial-era schooling focus on the organization of the curriculum and on student access to subject matter. Students would no longer be educated alike, with similar, or at least equivalent, curricular experiences. Instead, a number of new ideas would emerge to help reground the curriculum and to shape the variety of learning experiences available to students. One of these perspectives grew directly from the incipient body of knowledge being codified by child development psychologists (Tyack, 1974). Indeed, although not quite pushed into ascendancy, the belief in the student as the axis of the school curriculum was advanced during this era (Krug, 1964). This viewpoint maintained “that children, not books and teachers, ought to be the schools’ starting place” (Powell et al., 1985, p. 261) and “that the child’s own natural impulses could be used as a way of addressing the question of what to teach” (Kliebard, 1995, p. 37).

A second perspective, social efficiency, would hold even greater influence over the organization of the curriculum during the development of schooling for the industrial era. Like their colleagues who saw adolescent needs as the appropriate ground for curriculum development, social efficiency advocates clamored for greater variety in the learning menu. Unlike their colleagues, however, they saw the landmarks on the new curricular frontier defined not by individual interests of students but by societal needs and goals. Students were viewed not as individuals but as members of groups. Subject matter would be organized in different bundles to be parceled out to students in these varied groups (Krug, 1964). As Kliebard (1995) documents, “Predicting future destination as the basis for adapting the curriculum to different
segments of the school population became a major feature of curriculum planning” (p. 13) during the period from 1890-1920. What was called for was education that matched young people to appropriate work roles (Wraga, 1994).

Organizational Architecture and Governance

The revolutionary changes that took root in education from 1890 to 1920 were not confined to vision and learning and teaching. The methods used to govern education and the designs employed to structure schools also underwent significant alterations, which were in directions heavily shaped by the powerful political, social, and economic currents outlined above. The defining element of the organizational revolution was the shift from lay control, which dominated the governance landscape before 1890, to a “corporate bureaucratic model” of governance (Tyack, 1974, p. 6). As was the case in the construction of the learning infrastructure, the new scientific models of school organization and governance provided some of the defining components of education for a post-agrarian world.

The organizational transformation that marked the evolution of education was laced with two central ideologies, a “corporate form of external school governance and internal control by experts” (Tyack, 1974, p. 146). Both elements drew freely from models supporting the development of the post-agricultural business sector (Callahan, 1962; Newlon, 1934). “Working under the banner of the depoliticalization of schooling and eliminating political corruption, reformers sought to remove the control of schools as far as possible from the people” (Tyack, 1974, p. 167), to eliminate community control. As was the case with the development of the differentiated curriculum, the struggle to separate education from politics was powered in part by both antidemocratic ideology and class prejudice. In terms of influence, we know that this movement accomplished much of its goal. By 1920, throughout the nation a closed system of
governance that would dominate education for the next 75 years had replaced much of the more open system that had prevailed at the end of the nineteenth century.

Shifts in the basic governance equation during the early decades of the twentieth century were accompanied by a reconfiguration in the way schools were managed and structured (Callahan, 1962). One distinctive development was the appearance of a class of administrative experts to whom government agents delegated control for the management of schools (Tyack, 1974). Borrowing from the new models of organization and management being forged in the corporate sector, reformers began to develop analogs between the leadership of business enterprises and the management of schools (Callahan, 1962; Newlon, 1934; Tyack, 1974). They argued that to reform education power needed to be concentrated at the top.

In order to facilitate the use of this centralized power and to maximize its potential to effect change, reformers drew up blueprints for a new structure for their institution (bureaucracy) and cobbled together a new philosophy of leadership (scientific management), borrowing freely from materials originally crafted in the corporate sector. In so doing, they brought forth the array of operating principles that would form the organizational backbone for schooling throughout the twentieth century, principles such as authority vested in office, differentiation and specialization of roles, professionalism, separation of management from labor, chain of command, and so forth (Author, 2001).

Post-Industrial Schooling: Where We are Headed (1980 →)

Change Forces

Sense of Failure

As we entered the 1990s, the foundation of schooling that had stood for nearly three quarters of a century had begun to show significant deterioration. As was the case at the dawn of the twentieth century, there was a widespread feeling that schools were performing poorly.
Crosnoe (2011, p. 3) hit the mark directly when she reported that "these are definitely not the glory days of the American educational system." What analysts saw as frustration over the continuing inadequacies of education in the United States was a multi-faceted phenomenon. Or, stated in an alternate form, the perception that the level and quality of education in schools is less than many desire was buttressed by data on a wide variety of outcomes. Specifically, critics argued that data assembled in each of the following performance dimensions provided a not-very-flattering snapshot of the current performance of the American educational system: (1) academic achievement in basic subject areas—compared to student performance in other countries; (2) functional literacy; (3) preparation for employment; (4) the holding power of schools (drop-out rates); (5) knowledge of specific subject areas such as geography and economics; (6) mastery of higher-order skills; and (7) initiative, responsibility, and citizenship (Author, 2006; Murnane & Levy, 1996).

Two issues in particular ribboned analyses of educational outcomes at the turn of the 20th century: (1) the inability of the educational enterprise to enhance levels of productivity to meet the needs of the changing workforce and (2) the failure of schools to successfully educate all of the nation’s children, especially the poor (Author, 2010). While analysts acknowledge that student achievement has remained fairly stable over the last quarter century, they fault education for its inability to keep pace with the increasing expectations from a changing economy (Committee for Economic Development, 1994; Consortium on Productivity in the Schools, 1995; Marshall & Tucker, 1992).

One side of the problem critics discuss is the belief that systems that hold steady in today’s world are actually in decline (Author, 2008). While others see stability, they see damaging obsolescence (Murnane & Levy, 1996). The other side of the productivity issue raised
by these reviewers is the claim that because of the changing nature of the economy outlined below, the level of outcomes needed by students must be significantly increased. They find that the schools are not meeting this new standard for productivity. Complicating all of this is the knowledge that high levels of performance must be attained by nearly all of society’s children (Author, 2010).

What appears to be especially damaging to public education at the current time is the perceived inability of schooling to reform itself. Questions raised by analysts who take the long-term view on this issue are particularly demoralizing. What has resulted from reform efforts, critics argue, has not been an increase in educational quality but rather a proliferation of professional and bureaucratic standards, the creation of subsides for bureaucracy, a widening gap between professional educators and the general public, and the strengthening of a centralized educational system that disadvantages taxpayers and parents (Author, 2012; Hill, Pierce, & Guthrie, 1997). Beers and Ellig (1994) make this point in dramatic fashion when they claim that “in a very real sense we have tried to run the public schools the same way the Soviets tried to run factories, and now we’re paying the price” (p. 20). The effect, critics maintain, is that reform has reinforced the very dynamics that are promoting self-destruction in education. The natural consequence, they hold, must be the emergence of new forms of educational institutions.

Changing Environment

At the same time, and consistent with the Tushman and Romanelli (1985) model, American education finds itself in a roiling environment of economic, political, and social changes. To begin with, it is almost a fundamental law that the economy is undergoing a significant metamorphosis. There is widespread agreement that we have been and continue to be moving from an industrial to a post-industrial or information economy. Key aspects of the new
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economy include: the globalization of economic activity, the demise of the mass-production economy, a privileging of information technology, an increase in the skills required to be successful, and an emphasis on the service dimensions of the marketplace. The ascent of the global economy has brought an emphasis on new markets and cracks in the model of public monopoly (Author, 2006).

Along with these changes, as we discuss below, have come increasing deinstitutionalization, deregulation, and privatization of the American system of education. There is a growing belief that markets offer more hope than the public sector—a belief in "the assumption that left to itself economic interaction between rationally self-interested individuals in the market will spontaneously yield broad prosperity, social harmony, and all other manner of public and private good" (Himmelstein, 1983, p. 16). Supported by market theory and theories of the firm and by the public choice literature, there is a new spirit of market-based entrepreneurship in play (Author, 1999, 2012).

The political and social environments also are undergoing important changes. There has been a loosening of the bonds of democracy (Barber, 1984; Elshtain, 1995). The infrastructure of civil society also has been impaired (Dahrendorf, 1995). As a consequence of these basic shifts—the weakening of democracy and the deterioration of civil society, especially in conjunction with the ideological space that they share with economic fundamentalism—important sociopolitical trends have emerged. One strand of this evolving sociopolitical mosaic is plummeting public support for government (Cibulka, 1999; Author, 1999). In many ways, Americans "have disengaged psychologically from politics and governance" (Putnam, 1995, p. 68). As Hawley (1995) chronicles, "Citizens are becoming increasingly alienated from government and politics. They do not trust public officials" (p. 741) and they are skeptical of the
bureaucratic quagmire of professional control that defined education for almost all of the twentieth century (Author, 2002b).

A second pattern in the mosaic is defined by issues of poverty (Author, 2010; Reyes, Wagstaff, & Fusarelli, 1999). Many analysts have explored the accelerating movement toward a society marked by great wealth and great poverty. According to Dahrendorf (1995), this economically grounded trend represents a new type of social exclusion. He and others are quick to point out that this condition seriously undermines the health of society: "Poverty and unemployment threaten the very fabric of civil society…. Once these [work and a decent standard of living] are lost by a growing number of people, civil society goes with them" (pp. 25-26).

Consistent with this description of diverging life chances is a body of findings on the declining social welfare of children and their families (Reyes et al., 1999). These data reveal a society populated increasingly by groups of citizens that historically have not fared well in this nation, especially ethnic minorities and citizens for whom English is a second language. Concomitantly, the percentage of youngsters affected by the ills of the world in which they live, for example, poverty, unemployment, illiteracy, crime, drug addiction, malnutrition, poor physical health, and homelessness is increasing (Author, 2010, 2011).

**Convergence**

Across the last quarter century, a new convergence has emerged in American schools, one that parallels in scope the changes seen in that institution from 1890-1920. Three central alterations are visible: (a) at the technical level, a change from teaching to learning and a change from transmission to social-constructivist views of learning; (b) at the organizational level, a change from bureaucratic and hierarchical systems to more communal views of schooling; and
(c) at the institutional level, a rebalancing of the governance scale, one that adds more weight to market and citizen control while subtracting influence from government and professional elites. Below we examine these changes.

**The Core Technology**

From the onset of the industrial revolution, education in the United States has been largely defined by a behavioral psychology-based model of learning—a model that fits nicely with the bureaucratic system of school organization in play during the last century. This viewpoint in turn nurtured the development of the factory and medical practice models of instruction that dominated schooling throughout the twentieth century. Under these two models, the belief that the role of schooling is to sort students into the able and less able—those who would work with their heads and those who would work with their hands—became deeply embedded into the fabric of schooling (Goodlad, 1984; Powell et al., 1985).

What is important here is that the current period of upheaval just reviewed has placed us "in the midst of redefining, even recreating conceptions of learning and teaching in schools" (Prestine, 1995, p. 140), i.e., a shift in the operant model of learning is a fundamental dynamic of the current struggle to redefine education. The behavioral psychology-based model that highlights the innate capacity of the learner has been challenged by notions of constructivism and situated learning (Prawat & Peterson, 1999; Rowan, 1995) and by the components of authentic pedagogy (Newmann & Wehlage, 1995). As Prawat and Peterson (1999) inform us, "Social constructivism represents more than an addition to the traditional, individualistic perspective that has dominated research on learning for most of [the twentieth] century. It… represents a dramatically different approach to learning, requiring fundamental changes in how… educators think about the process" (p. 203). Under this approach to learning, schools which historically
have been in the business of promoting student adaptation to the existing social order (Krug, 1964, 1972; McLaughlin & Talbert, 2001) are being transformed to ensure that all youngsters reach ambitious targets of performance (Author, 2010).

The Organizational Architecture

For some time now, “critics have argued that the reforms of the Progressive Era produced bureaucratic arteriosclerosis—and the low productivity of a declining industry” (Tyack, 1993, p. 3). There is an expanding feeling that the structure of schooling that was introduced into the system between 1890 and 1920 and that has dominated education ever since has outlived its usefulness. In particular, it is held that the management tools of the bureaucratic paradigm pull energy and commitment away from learning. Reformers maintain that the structure cemented in place during the first recreation of schooling between 1890 and 1920 is not capable of supporting excellence in education and that, even worse, bureaucratic management has actually been damaging learning (Author, 2001; Elmore, 1993).

It is also argued that bureaucracy has led to siloed schools (Elmore, Peterson, & McCarthy, 1996; Pellicer & Anderson, 1995), that the structure that defined twentieth century schooling is counterproductive to the needs and interests of educators in post-industrial schools. In particular, these reviewers find that the existing structure is incompatible with a professional orientation (Curry, 2008; Little, 1987). They maintain that the hierarchical foundations laid during the reform era (1990-1920) of the industrial period have neutered teachers and undermined "the drawing power and holding power of strong collegial ties" (Little, 1987, p. 502). These reviewers contend that "it has become increasingly clear that if we want to improve schools for student learning, we must also improve schools for the adults who work in them" (Smylie & Hart, 1999, p. 421).
As might be expected, given this tremendous attack on the basic organizational structure of schools, stakeholders at all levels are clamoring for significant reform, arguing that the leadership framework of education needs to be rebuilt using different blueprints and materials (MacBeath, 2009; Olivier & Hipp, 2006). There is widespread agreement that the top down, authoritarian approach to leadership has taken us about as far as it can (Frost & Durant, 2003; Gronn, 2009). There is a significant demand for new ways of organizing schools especially changes in the way they are led (Author, 2002a; Donaldson, 2001).

New perspectives of education feature these new methods of organizing and leading schools (Beachum & Dentith, 2004). In the image of schools for the twenty-first century, the hierarchical bureaucratic organizational structures that have defined schooling since the early 1900s are giving way to systems that are more focused on capacity building and that are more organic (Crowther, Kaagan, Ferguson, & Hann, 2002).

In these redesigned, post-industrial school organizations, to which Louis and Miles (1990) have given the label "adaptive model" (p. 26), there are basic shifts in roles, relationships, and responsibilities: traditional patterns of relationships are altered; authority flows are less hierarchical, for example, traditional distinctions between administrators and teachers begin to blur; role definitions are both more general and more flexible—specialization is no longer held in such high regard; because influence is based on expertise, leadership is dispersed and is connected to competence for needed tasks as well as formal positions; and independence and isolation are replaced by cooperative work (Katzenmeyer & Moller, 2001; Author, 2005).

Furthermore, the traditional structural orientation of schools is overshadowed by a focus on the human element (Crow, Hausman, & Scribner, 2002; Sergiovanni, 1991). The operant goal is no longer maintenance of the organizational structure but rather the development of human
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resources (Fullan & Ballew, 2002; Tichy & Cardwell, 2004). Building learning climates and promoting organizational adaptively replaces the more traditional emphasis on uncovering and applying the one best model of performance (Gray, Hopkins, Reynolds, Wilcox, Farrell, & Jesson, 1999). A premium is placed on organizational flexibility and purpose and values (Ancess, 2003; Louis, Dretzke, & Wahlstrom, 2010; Sergiovanni, 1990, 1992).

A new model for school leadership acknowledges that shared influence strengthens the organization (Crowther et al., 2002; MacBeath, 2005). Institutional perspectives no longer dominate the organizational landscape. Rather, schools are reconceptualized as communities, professional workplaces, and learning organizations (Ancess, 2003; Visscher & Witziers, 2004). Professional community-oriented conceptions that challenge historical bureaucratic understandings of schools as organizations move to center stage (Bulkley & Hicks, 2005; Hayes, Christie, Mills, & Lingard, 2004). Ideas such as community of leadership, the norms of collaboration, inquiry communities, and the principle of care are woven into the fabric of the school organization (Ancess, 2003; Robinson, 2007). The metaphor of the school as community is brightly illuminated (Beck & Foster, 1999; Sergiovanni, 1994).

Institutional Dynamics

Some analysts of the institutional level of schools—the interface of the school with its larger (generally immediate) environment—argue that the industrial approach to education led to a privileging of government and a "cult of professionalism" (Sarason, 1994, p. 84) and to the “almost complete separation of schools from the community and, in turn, discouragement of local community involvement in decision making related to the administration of schools" (Burke, 1992, p. 33). Critiques of extant governance systems center on two topics discussed
extensively above: (1) frustration with the government-professional monopoly and (2) critical analyses of the basic governance infrastructure—bureaucracy.

Many chroniclers of the changing governance structures in schools envision the demise of education as a sheltered government monopoly dominated by professionals. As noted above, in its stead they forecast the emergence of a system of schooling driven by economic and political forces that substantially increase the saliency of market and democratic forces (Author, 1996; Tichy & Cardwell, 2004). Embedded in this conception are a number of interesting dynamics. One of the key elements involves a recalibration of the locus of control among levels of government. Originally called "democratic localism" (p. 305) by Katz (1971), it has more recently come to be known simply as localization or, more commonly, decentralization. However it is labeled, it represents a backlash against "the thorough triumph of a centralized and bureaucratic form of educational organization" (p. 305) and governance of the industrial era of education.

A second ideological foundation can best be thought of as a recasting of democracy, a replacement of representative governance with more populist conceptions, especially what Cronin (1989) describes as direct democracy. While we use the term more broadly than does Cronin, our conception of the solidifying convergence here shares with his a grounding in: (1) the falling fortunes of representative democracy, a "growing distrust of legislative bodies... [and] a growing suspicion that privileged interests exert far greater influence on the typical politician than does the common voter" (Cronin, 1989, p. 4), and (2) recognition of the claims of its advocates that greater direct voice will produce important benefits for society (Author, 2002b).

A third foundation encompasses a rebalancing of the control equation in favor of lay citizens while diminishing the power of the state and (in some ways) educational professionals.
This line of ideas emphasizes parental empowerment. It is, at times, buttressed by a strong strand of anti-professionalism that underscores citizen control, and local involvement (Author, 2012).

The ideology of choice is a fourth pillar that is also rebuilding linkages between the school and parents and community stakeholders. Sharing a good deal of space with the concepts of localism, direct democracy, and lay control, choice is designed to open up both the demand and supply side of markets (Author, 2000).

Conclusion

We find that schools are generally resistant to and able to deflect and accommodate reform efforts during the long stretches of time when previously turbulent economic, political, and social environments have cooled and activity domains have hardened. No matter how hard reformers hammer education during these periods of convergence, change occurs on the margins, if at all.

On the other hand, there is also considerable evidence that the hard equilibrium that defines American education is indeed subject to destabilization and reforming. It does seem to require considerable energy to punctuate the status quo, however. In particular, change depends on major and overlapping strands of environmental pressures. In the last two centuries, we have seen these conditions appear twice. One occurred as the nineteenth century turned into the twentieth and schools changed to respond to the perceived needs of an industrial economy and a post-agrarian web of politics and culture. The second arose as the twentieth century melded into the twenty-first and education began its struggle to recast itself consistent with the political, social, and economic DNA of an information society. The essential elements in the domains of activity that came to define the periods of convergence that preceded and followed the first era of
turmoil were documented above. In addition, our understanding of the cardinal dimensions and elements that will define post-industrial education were described. It is the latter set of changes that define schooling and establish the frames for school leaders today.
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