

IDEOLOGICAL CALL TO ARMS:
ANALYZING INSTITUTIONAL
CONTRADICTIONS IN POLITICAL
PARTY DISCOURSE ON
EDUCATION AND
ACCOUNTABILITY POLICY,
1952–2012

Debbie H. Kim, Jeannette A. Colyvas
and Allen K. Kim

ABSTRACT

Despite a legacy of research that emphasizes contradictions and their role in explaining change, less is understood about their character or the mechanisms that support them. This gap is especially problematic when making causal claims about the sources of institutional change and our overall conceptions of how institutions matter in social meanings and organizational practices. If we treat contradictions as a persistent societal feature, then a primary analytic task is to distinguish their

How Institutions Matter!

Research in the Sociology of Organizations, Volume 48A, 329–391

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ISSN: 0733-558X/doi:10.1108/S0733-558X201600048A012

prevalence from their effects. We address this gap in the context of US electoral discourse and education through an analysis of presidential platforms. We ask how contradictions take hold, persist, and might be observed prior to, or independently of, their strategic use. Through a novel combination of content analysis and computational linguistics, we observe contradictions in qualitative differences in form and quantitative differences in degree. Whereas much work predicts that ideologies produce contradictions between groups, our analysis demonstrates that they actually support convergence in meaning between groups while promoting contradiction within groups.

Keywords: Institutional contradiction; political discourse; education policy; computational linguistics

INTRODUCTION

Where do institutional contradictions come from and how do they influence change? A central insight of institutional theory is that institutions, when understood as self-reproducing social systems, each comprise their own symbolic constructions and material practices (Clemens & Cook, 1999; Friedland & Alford, 1991; Scott, 2013). These logics shape the character and range of permissible actions available to individuals and collectives (Jepperson, 1991; Thornton, Ocasio, & Lounsbury, 2012). They also provide resources to justify new practices (Powell & Colyvas, 2008; Thornton et al., 2012). Within a given field – that is, a system whose members share a commonly recognized area of social life – multiple institutions intermingle (Fligstein & McAdam, 2012; Padgett & Powell, 2012). This intermingling generates tensions because some logics may not correspond with others. Such institutional contradictions provide the foundation for political struggles and the resource material for individuals and collectives to invoke change (Clemens & Cook, 1999; Friedland & Alford, 1991; Seo & Creed, 2002; Thornton et al., 2012).

Analyses in this tradition have made great strides in identifying the relationship between institutional contradictions and change. A legacy of scholarship emphasizes exogenous shocks, such as financial or political collapse, that reveal contradictions and create opportunities for disenfranchised groups to alter regimes (Hall & Soskice, 2001; Hall & Thelen, 2009).

Others emphasize less episodic, yet still external means of unleashing contradictions. The importation of new models from other settings, for example, can reveal tensions that help to unsettle dominant schemas and modes of organization (Hwang & Powell, 2005; Padgett & Powell, 2012). Institutions can also intermingle at the periphery of society, where fields overlap, which creates access to frames for alternative practices, and introduces new organizational forms or legitimating ideologies that justify those forms (Cornelissen & Werner, 2014; Rao, Morrill, & Zald, 2000). Entrepreneurs can then strategically utilize contradictions to promote reform (Ruef, 2010; Suddaby & Greenwood, 2005). Finally, institutions can endogenously generate their own change, or even demise, through contradictions. The evolution of fields, for example, can give rise to new circumstances that do not accord with prior logics, or even legitimate contestation over the logics themselves (Brint & Karabel, 1991; DiMaggio, 1991; Fligstein, 2001; Fligstein & McAdam, 2012). Multiple perspectives emphasize the ubiquity of contradictions across time, groups, and levels of society (Clemens & Cook, 1999; Friedland & Alford, 1991; Seo & Creed, 2002). And they reveal the deeply political, ideological, and discursive aspects of institutional change (Delmestri, 2009; DiMaggio, 1991; Friedland & Alford, 1991; Meyer, Sahlin, Ventresca, & Walgenbach, 2009; Thornton et al., 2012).

Taken together, however, scholarship on contradictions suggests a puzzle. Theoretically, contradictions are pervasive and reside in numerous settings without being strategically utilized or disrupting institutions (Clemens & Cook, 1999; Marquis & Lounsbury, 2007; Meyer & Höllerer, 2010). Their presence and effects are matters for investigation (Friedland & Alford, 1991). Empirically, contradictions can promote reproduction as much as change (Smith-Doerr, 2005; Thelen, 2004). Political discord and debate, albeit focused on narratives of disrupting or preserving institutions, are essential for social and political structures (Hall & Thelen, 2009). If we treat institutional contradictions as a persistent feature of society, then a primary analytical task is to distinguish their prevalence from their effects.

Institutional theory provides guideposts but lacks a theoretical account of the contingent ways contradictions are constructed and persist, especially when they are available to field members but not utilized or recognized – hence in their latency. Moreover, methodological strategies analyzing contradictions are underdeveloped and lack the disconfirmability typically associated with systematic, inferential, or process-based analyses of change (Mahoney, 2008; Mohr, 2000). This gap is especially problematic

when seeking to make causal claims about the sources of institutional change, the likelihood that particular field members will exploit contradictions, or whether such exploitation might successfully alter institutions. Without such developments, theorizing and empirically testing claims about contradictions is stalled because we cannot distinguish *which* contradictions, under *what* circumstances are likely to be consequential for a range of social outcomes such as institutional persistence, change, or the distributive effects of both on society.¹

Our aim is theoretical refinement and methodological development. Rather than analyzing the role of contradictions in producing change, as much rich scholarship has emphasized, we study the logically prior step of how contradictions take hold (stick), how they persist (reproduce), and the methodological strategies we might employ to distinguish them independently of their effects. We ask, how do contradictions take hold in different contexts and in particular forms? How do they persist or remain available to those who might make use of them? How might they be identified and measured, prior to, or independently of, their strategic use? We examine this problem through the lens of institutional theory, although our analysis incorporates insights from organizational, political, and cultural scholarship as well. We develop a framework and propositions that identify ways that contradictions take hold and persist, which we refine through our analysis to address persistence and change. We utilize a novel methodological combination that builds on developments in archival analysis in institutional theory (Powell & Colyvas, 2008; Ventresca & Mohr, 2002), content-based analyses of social mechanisms inspired by pragmatism and cultural sociology (Gross, 2009), and computational natural language processing from linguistics (Turney & Pantel, 2010; Yu, Kaufmann, & Diermeier, 2008).

Extant scholarship emphasizes the circumstances that reveal contradictions. In contrast, our framework emphasizes how such circumstances produce and reproduce contradictions. We demonstrate how contradictions can take qualitative differences in form and quantitative differences in degree. Our argument is simple: contradictions take hold and persist through symbolic and material constructions of social mechanisms. These social mechanisms delineate actors, problems situations and more or less habituated responses to those situations (Gross, 2009) and are filtered through logics at higher and lower social orders (Colyvas & Jonsson, 2011; Jepperson, 1991; Thornton et al., 2012). Whereas higher-order institutions provide the resource material to define actors, problem situations, and responses to those situations; intermediate-level ideologies situate

combinations of higher-order logics (Meyer et al., 2009). From this perspective, institutions reproduce logics, but ideologies generate schematic recombinations of those logics (Delmestri, 2009; Mohr & Neely, 2009; Thornton et al., 2012). These schematic representations both shape and are reproduced through routine articulations of social mechanisms, such as discursive struggles over the legitimate role, meaning, and use of organizational forms (Scott, 2013; Suddaby & Greenwood, 2005). Through this framework, we can identify the qualitatively different forms of contradictions in terms of categories of actors, problem situations, and promoted responses to those situations. We can also understand different degrees of contradiction in terms of the distance in meaning across actors, problem situations, and promoted responses to those situations. This approach lays the groundwork for analyzing the relationship between different forms or different degrees of contradictions and their effects on institutional persistence or on change.

We build our framework and methodological strategy in a setting where institutions openly compete and are fraught with contradictions that are selectively utilized: US presidential election politics, 1952–2012, and the shift of education to federal control. During this period, legislation rooted in ideas about education as a social lever made the sector an arena for established political parties to assert competing definitions of education's role, meaning, and use (Anderson, 2007). We follow discursive struggles and competing ideologies between Democrats and Republicans, which we define as action-oriented systems of ideas that collectives can convert into social levers and make available for mass consumption (Bell, 1960; Brzezinski, 1962; Friedrich, 1963). We trace how parties use their ideological lenses to frame social mechanisms in party platforms over time, between parties, and at two levels – from more general assertions about the public sector of education to more concrete ones about the issue of educational quality and accountability. This approach permits us to observe contradictions in the context of both persistence and change in US party discourse as a new sector enters an established setting of national politics.

We proceed with an overview of the federalization of education in US party politics and the rise of accountability. Next, we define institutions, institutional contradictions, and delineate the means by which contradictions take hold and persist. We then describe our data and methods, followed by our analysis. We conclude with a discussion that situates our analysis in the problem of analyzing institutional contradictions in persistence and change.

THE FEDERALIZATION OF EDUCATION, US PARTY POLITICS, AND THE RISE OF ACCOUNTABILITY

Education has a rich history of policy, legislative, and organizational changes that explain its integration into federal discourse and authority (Anderson, 2007). Early seeds of federal involvement date back to the 18th century when laws mandated land for educational purposes (Anderson, 2007). Subsequent federal activity was limited until World War I and the Depression, when federal economic relief programs began including schools (Anderson, 2007). The 1950s, however, broke new ground with the idea of education's use to solve societal problems (Fleming, 1960). After decades of involvement from the NAACP to end school segregation, the 1954 *Brown vs. Board of Education* Supreme Court decision helped bring legitimacy to education's inclusion in the Civil Rights Movement (Klarman, 1994). The 1958 National Defense Education Act (NDEA) made education part of the Cold War intelligence race (Anderson, 2007; Fleming, 1960). The 1950s heralded distinctive federal involvement, first by intermingling funding with education's use as a social lever, and second by bringing education into national party politics open for ideological debate (Engel, 2000; McGuinn, 2006).

Subsequent policies supported federalization through Democrat and Republican initiatives. In 1965, ESEA integrated education into the War on Poverty. It included Title I, which offered financial assistance to educational agencies serving children of low income families (Kaestle & Smith, 1982). Introduced by Democrat President Johnson, the policy established the basis for allocating federal funds to education through government-determined criteria of poverty and aid (Anderson, 2007; Engel, 2000) – the first time federal aid was provided to all states based on federal criteria (Anderson, 2007). In 1983, President Reagan's National Commission on Excellence in Education released *A Nation at Risk* – a report highlighting the dire state of education (Gardner, 1983). In 1994, President Clinton extended President Bush's work setting national education goals with ESEA authorization, *Goals 2000* (Anderson, 2007). These activities fueled federal authority by making education a public concern and setting national educational goals (Mehta, 2013a, 2013b). No Child Left Behind (NCLB) passed in 2001 as a reauthorization of ESEA, keeping Title I as its centerpiece and including new requirements to improve academic achievement for the disadvantaged through a federal system of rewards and sanctions based on schools' achievement scores (Bush, 2001). NCLB solidified today's notion of accountability policy.²

The rise of federal authority made education a central issue in US presidential politics and a new object for ideological struggles (McGuinn, 2006). Democrats and Republicans have won every US presidential election since 1852 (Ginsberg, Lowi, Weir, & Spitzer, 2010). Democrats are traditionally considered center-left, taking form in advocacy for the government role in alleviating social injustice through progressive taxation. Republicans are viewed as conservative, taking form in their emphasis on individual achievement and minimal government involvement (Farmer, 2006). The parties' competing ideologies lead them to frame issues differently or take distinct stances on issues from taxation (Reed, 2006), the environment (Dunlap, Xiao, & McCright, 2001), to health care (Skocpol, 1997). Education provides another opportunity for competing party ideologies. Democrats and Republicans differ in the degree to which they discuss education publicly (Benoit, 2004) and in the ways they approach ongoing issues in education (Mehta, 2013a, 2013b).

In the 1980s, presidential candidates became more vocal on education, drawing connections between education and debates over the role of federal involvement. In 1988, Republican George Bush campaigned as the "education president" (McGuinn, 2006). Democrat President Clinton rationalized broader federal involvement in school reform by solidifying the link between education and economic growth (McGuinn, 2006). By 2000, education was the central issue in both party' presidential campaigns, both emphasizing educational quality and accountability (Mehta, 2013a, 2013b). This convergence coincided with a bipartisan compromise to reauthorize and reform ESEA along the lines of an expanded federal role (McGuinn, 2006).

Although the question of educational quality and its metrics dates back to the Progressive Era, education's salience in presidential politics laid the foundation for the current accountability environment (Mehta, 2013a, 2013b). President Reagan's 1980s "Back to the Basics" movement mandated more rigorous academic standards (Jeynes, 2007). The 1983 *A Nation at Risk* report also promoted metrics and risk of accomplishment: 9 of the 14 risk indicators included test scores or student achievement reports (Gardner, 1983). The report's perceived authority and its operationalization of risk brought validity to performance-based accountability, fueling a reform movement that promoted outcome standards (McGuinn, 2006). When President Clinton launched his 1994 reauthorization of ESEA, 42 states had standards-based reform (Mehta, 2013a, 2013b). This reauthorization established a framework to help states identify "world-class" academic standards, measure student progress, and provide support for

students not meeting standards. President Bush's NCLB kept and extended Clinton's accountability requirements in three key ways – NCLB required states to disaggregate student achievement data by student subgroups, set AYP goals for closing achievement gaps between students in at-risk subgroups and their peers, and test reading and math in grades three through eight (Linn, Baker, & Betebenner, 2002). NCLB grew controversial due to unintended consequences and even failed in its congressional reauthorization attempts in 2007 (Hallett, 2010; Hallett & Meanwell, 2016; Linn et al., 2002; Spillane, 2004). However, under NCLB, the form and level of federal control in public education has changed with increased support from all political parties. Scholars and pundits treat this accountability era of federal educational control as unprecedented, for its marked shift away from local and state authority and, for its emphasis on performance as criteria for resources (Gordon, 2008; Mehta, 2013a, 2013b).

Despite becoming a central, resilient framework for reforming education, accountability policy has exhibited ongoing dispute in US politics (Hallett & Meanwell, 2016; McGuinn, 2006). Both parties have historically sought to reduce variation among schools in favor of greater standardization and control, extolling quantitative data in the process (Mehta, 2013a, 2013b). Each has approached this process from distinct ideological places. For the Democrats, accountability appeals to the desire to promote equity by diminishing rich and poor variation in school quality. For Republicans, accountability provides a means to ensure that school systems deliver properly for the federal funds (Mehta, 2013a, 2013b). The more recent accountability situation is not about whether or not a party pushes reform, rather how political parties frame the accountability path to school improvement (Mehta, 2013a, 2013b).

GUIDEPOSTS FOR ANALYZING CONTRADICTIONS

Contradictions reflect the multiple ways that institutions' symbolic and material elements interact, and are defined as opposites or opposing forces (Clemens & Cook, 1999; Seo & Creed, 2002). Much institutional scholarship emphasizes contradictions as inconsistencies in structures, meanings, and practices, often rooted in class or dialectical process theories (Clemens & Cook, 1999; Friedland & Alford, 1991; Hargrave & Van de Ven, 2009; Rao, Monin, & Durand, 2003; Seo & Creed, 2002). Although such perspectives are most associated with Marxist analyses of social

structures, more recent applications are more conceptual, emphasizing “long-term, ongoing processes through which organizational arrangements are produced, maintained and transformed” (Seo & Creed, 2002). These approaches emphasize dynamic tensions among opposing, yet interdependent forces that shape and mobilize action. These opposites can be theoretically construed or socially constructed, emerging from historical processes or individual behaviors (Hargrave & Van de Ven, 2009). They also can be understood as taking particular forms (structures, processes, or meaning) or particular degrees (forces that reflect greater or lesser tensions). Because “institutions cannot be analyzed in isolation from each other, but must be understood in their mutually dependent, yet contradictory relationships” (Friedland & Alford, 1991, p. 241) contradictions are a central guidepost to analyzing persistence and change (Clemens & Cook, 1999).

Institutions, Mechanisms, Ideologies, and Frames

Understanding the role of institutional contradictions requires a precise definition of institutions (Hwang & Colyvas, 2011, 2016). Institutional theory emphasizes processes that give rise to and support institutions as well as supra-rational elements of behavior, such as norms, schemas, and scripts that guide action (Friedland, 2009; Powell & DiMaggio, 1991). Institutions reflect social orders, or patterns of self-reproducing interaction sequences, often associated with sets of rules, beliefs, norms, and modes of organizing that together constitute a regularity of behavior (Greif, 2006; Jepperson, 1991; Scott, 2013). This definition shares the emphasis on reproduction processes and socially constructed constraints central to political and cultural sociology, yet contrasts to scholarship that emphasizes the distribution of power and resources over reproduction (Mahoney & Thelen, 2010; Stinchcombe, 1968). In institutional theory, an institution’s necessary condition is that the social pattern “reveals a particular reproduction process” (Jepperson, 1991, p. 145). Routines or habits, for example, support and reproduce patterns of action, thereby comprising self-activating social processes. This emphasis on reproduction is consequential because the stability and disruption of institutions reflects the stability and disruption of mechanisms of reproduction (Colyvas & Anderson, 2016; Colyvas & Jonsson, 2011). Therefore, analyzing change in institutions also requires analyzing persistence (Clemens & Cook, 1999; Hall & Thelen, 2009).

For our research questions, emphasizing reproduction and this persistence/change duality directs attention toward specific self-activating

processes (such as the generation of party platforms) that reinforce institutions (such as US Democracy) and the conditions that disrupt them. We distinguish between mechanisms that reproduce institutions and the patterns of effects that result from such processes (Colyvas & Maroulis, 2015; Espeland & Sauder, 2007), such as the distribution of power and inequality, often the focus of comparative political analyses, and ideological frames and contradictions, which is the focus of our analysis.

We take inspiration from Gross' (2009) pragmatist scholarship, whereby social mechanisms are defined as patterned chains of problem situations, confronted by actors who engage in more or less habituated responses. Action is explained by habit, inquiry, and the processes through which problematic situations are transformed into determinant ones (Gross, 2009; Joas, 1996; Whitford, 2002). When actors confront new problem situations they engage in creative inquiry to produce a response. From an institutional perspective, institutions shape the definition of actors engaged in such action, the form that habits take, the reasoning behind such inquiry, and definitions of the situations they confront (Dunn & Jones, 2010; Jepperson, 2002; Scott, 2013). Both institutional and pragmatist perspectives emphasize meanings in defining the identities of actors, problematic situations, and the range of permissible behaviors in response to such situations. Both emphasize that meanings are often constructed in practice. Therefore, a logical coherence among individuals, meanings, and their actions are more the exception rather than the rule (Gross, 2009; Scott, 2013).

In our analysis, treating social mechanisms as patterned chains of actors, problem situations, and more or less habituated responses permits inquiry into the multiple ways institutions influence reproduction mechanisms, making the interplay of institutions in a field an empirical question (Scott, 2013). Different symbolic constructions and material practices can influence definitions, from the category and ontological standing of actors (such as parents vs. federal government in education), to the identification and delineation of problems (such as quality and accountability), to the theorizations of what practices are appropriate for which kinds of problems (such as student performance testing) (Drori, Meyer, & Hwang, 2009).

Scholarship emphasizes three institutional qualities that are consequential for analyzing contradictions. First, institutions as self-reproducing social patterns reside at multiple levels (Colyvas & Jonsson, 2011; Jepperson, 1991). For example, at a societal level, we might distinguish among institutions of capitalism or religion and the ways in which logics of each produce governance arrangements through conflict and settlement. Within a field, we might focus on specific collectives, such as professions,

that interact with higher-order institutions. Locally, we can identify technologies as institutions since they entail routine self-reproduction and have meanings beyond their own technical requirements (Powell & Colyvas, 2008; Selznick, 1957). Heimer (1999) provides an example of this multi-level institutional character at the intersection of family, law, and medicine in neonatal intensive care units. By observing how routines in practice shaped the meaning and role of different institutions, Heimer demonstrates the affordances and constraints produced by institutionalized practices on the ground, which in turn situate contradictory logics in the decision making process. Thus, the ascription of the term institution is a matter of analytic focus and problem scholars pursue (Jepperson, 1991; Scott, 2013).

Second, institutions comprise ideational and symbolic components, which are often only observable through the social relations that materialize them (Friedland & Alford, 1991, p. 249; Padgett & Powell, 2012). Concrete social relations provide the conduits through which individuals and collectives pursue their goals. At the same time, social relations “make life meaningful and reproduce those symbolic systems” (Friedland & Alford, 1991, p. 249). Institutional scholarship thus favors analyzing both meanings and practices by observing events and also articulations and discourses surrounding actors, situations, and responses to events (Mohr, 2000; Mohr & Friedland, 2008; Mohr & Neely, 2009; Powell & Colyvas, 2008).

Third, despite the durability of institutions that self-reproduction might suggest, institutional orders are in continuous flux and characterized by active struggles and debate (Hall & Thelen, 2009; Padgett & Powell, 2012; Suddaby & Greenwood, 2005). The role of such struggles in persistence and change is an empirical question. Contestation, for example, can reflect institutional durability to the extent that specific structures are invulnerable to challenge (Colyvas & Powell, 2006). Contestation can reflect entropy to the extent that institutionalization processes define new oppositions that overcome established orders (Brint & Karabel, 1991; DiMaggio, 1991). Contestation can also reflect but one mode of reproduction that does not topple an institutional order itself, but produces more modest, incremental changes in the relationship between practices and their meanings, or which institutional logics will take authority over particular domains (Friedland & Alford, 1991). This insight of flux and challenge emphasizes the ways in which institutional processes are deeply political and ideological. They also underscore how much the same mechanisms of reproduction can provide instantiations of both persistence and change (Drori et al., 2009; Friedland & Alford, 1991).

These insights frame our analysis. For clarity, we limit the term “institutions” to the supra-organizational level, following [Friedland and Alford’s \(1991\)](#) distinction of the major institutions of society – Capitalism, Democracy, the State, Family, Religion, and Science. Although the term institution applies to education, political parties, or even to the technology of party platforms, we conceptually distinguish among each. We analyze the integration of the field of education into the federal system and party politics, to which we refer as an institutionalization process. We treat Democrats and Republicans as collectives that, through platform production, articulate symbolic and material constructions, thereby reproducing debate in American politics.

We retain the term logics for symbolic constructions and material practices that reflect higher-order institutions. We utilize ideologies to distinguish lower order systems of meanings between Democrats and Republicans, and frames to reflect the integration of both institutions and ideologies in the articulations of actors, problem situations, and promoted responses to those situations. This approach emphasizes different aspects of logics at different social levels ([Thornton et al., 2012](#)). Ideologies reflect an intermediate, schematic level of symbolic constructions and material practices because higher-order institutions can combine in distinctive ways as a simplifying, cognitive framework, thereby informing understanding and action between competing groups ([Benford & Snow, 2000](#); [Delmestri, 2009](#); [Snow, 1988](#); [Thornton et al., 2012](#)). By reserving logics for the macro-supra cognitive level, we can emphasize institutions’ intermingling in different routinized ways between groups (ideologies) and in particular articulations (frames) that reflect negotiated meanings ([Benford & Snow, 2000](#)). By distinguishing between logics and ideologies, we can emphasize the role of beliefs that are attached to highly institutionalized identities, such as Democrats and Republicans. By breaking down frames into constitutive parts of actors, problem situations, and promoted responses, we can observe these institutional patterns of effects as they interact with broader social changes and reproduction mechanisms.

Party platforms thus provide us a window into one mode of reproducing the federal system and party politics, thereby exerting patterned effects that shape the construction and maintenance of institutional contradictions. Whereas the substance of each platform might change, each represents a repetitively activated means of articulating meanings and promoted practices through political ideologies and ideational and material representations. Party platforms thus provide an occasion for analyzing how contradictions take hold as representations of, and source materials for, institutional persistence and change.

How Contradictions Take Hold and Persist

Scholarship that examines the intermingling of institutions suggests three propositions relevant for the construction and maintenance of contradictions. These abstract propositions provide guideposts for our research problem, as well as a foundation to refine theory as a result of our analysis. We distinguish our propositions with two clauses: the first, more abstract and portable aspect of the proposition, followed by an empirical example that is pertinent to the concrete analysis that we conduct in this case.

First, contradictions have external and internal sources in both structures and processes (Clemens & Cook, 1999). Contradictions are external when multiple institutions exert authority over, or offer relevance for, defining situations or appropriate responses to situations. Friedland and Alford (1991, p. 256) aptly describe these dilemmas in question: “[a]re families, churches or states to control education?” In their view, “[s]ome of the most important struggles between groups, organizations, and classes are over the appropriate relationships between institutions, and by which institutional logic different activities should be regulated and to which categories of persons they apply” Therefore, we would expect that

Proposition 1. Contradictions take hold through competing symbolic and material constructions of actors, problem situations, and promoted responses to those situations, such as when Democrat and Republican parties assert their policy stances on education during presidential elections.

In the context of education policy discourse and party platforms we can understand these competing symbolic and material constructions as Democrats and Republicans assert their ideological differences. Numerous analyses have shown the highly divergent ways that Democrats and Republicans define problems, ascribe those actors who have agency in addressing these problems and what ought to be done as a response. We expect to observe contradictions in the comparison between Democrat and Republican articulations of social mechanisms.

Second, contradictions can be internally generated in that institutional arrangements can lay the foundation for their own change (Brint & Karabel, 1991; DiMaggio, 1991; Zucker, 1977). The institutionalization of a new structure can undermine the ability to recognize or adapt to later structures (Clemens & Cook, 1999; Seo & Creed, 2002; Stinchcombe, 1968); the character of prior arrangements can contradict those of later ones (DiMaggio, 1991; Fligstein, 2001; Kim, 2016). Mehta (2013b)

demonstrates this process in schools. The weak profession of teaching that took hold early in the establishment of the education system enabled subsequent waves of technocratic rationalization, resulting in the more recent accountability environment in constant tension with learning (Coburn & Turner, 2012; Kim, 2016). Therefore,

Proposition 2. Contradictions take hold through the development or maintenance of institutional arrangements over time – notably through the reproduction of social mechanisms that articulate actors, problem situations, and promoted responses to those situations – such as when education integrates into the federal system over time and party platforms reproduce the articulation of social mechanisms in education.

We can thus understand education's 50 years of federalization as the development and maintenance of an institutional arrangement and the repetitively activated production of party platforms as a reproductive site for contradictions to take hold. As presidential elections repeat every four years and political parties generate platforms on contemporary issues, we can expect contradictions to arise over time in the articulation of educational problems, to whom they are directed and what should be done in response.

Third, structural conditions often taken-for-granted as inevitable also provide occasions for contradictions to take hold. Seo and Creed (2002) suggest that contradictions arise through the interaction of differing technical and legitimacy demands, or when actors intersect with different interests, authority, and power. Political party contests in the United States provide apt examples of both, since competing ideologies come into contact over the same material conditions (e.g., economy, defense, education), yet can be understood and interpreted in different ways (Farmer, 2006). Hence,

Proposition 3. Contradictions take hold through competing ideologies between collectives over continuing issues, such as when Democrats and Republicans assert their different stances on quality and accountability in education.

We would expect to see opposing views over the same issues on education as a reflection of Democrat and Republican ideological differences over time. For example, numerous scholars have emphasized the different, often contradictory ways in which competing political constituents frame the same kinds of issues, such as access or school accountability.

DATA AND METHODS

We analyze US party platforms, 1952–2012, by combining archival content analysis and computational linguistics. Data collection took place between 2010 and 2014 and also included interviews with informants from political administration and academia and ancillary archives about educational politics and governance. These sources gave us perspective on the production of platforms in the context of party politics and participants' perceptions of their worlds (Emerson, 2001).

Data Source and Sample

During election years, any party receiving electoral votes produces a platform stating its position on socially salient issues. According to President Obama's National Platform Director, platforms are meant to express the ideals of a leader in such a way that will attract the largest number of supporters.³ Parties will often tailor their platforms to what they believe the public wants to hear to win votes (Burstein, 1991; Page, 1978; Tufte, 1978). Whether or not presidents, upon election, are then wedded to what platforms promised is debatable. Some underscore platforms' vagueness, arguing that ambiguous wording allows candidates leeway in defining their position while campaigning (Brams, 2008; Page, 1978). Others assert that candidates make concrete statements in their platforms that are linked to future governmental spending (Budge & Hofferbert, 1990). Most agree that party ideology plays a large role in determining content (Brams, 2008; Budge & Hofferbert, 1990; Budge, Robertson, & Hearl, 1987; Page, 1978).

Platforms are produced at each party's National Convention when the presidential candidate is nominated. Typically, the Resolutions Committee of the National Convention hears testimony from interested groups, such as advocacy groups or politicians (Budge et al., 1987). The content is ultimately chosen by majority rule among party legislators (Ansolabehere, LeBlanc, & Snyder, 2012). The resulting platform incorporates traditional party positions, statements about current topics, and statements that enhance voter-base appeal (Brams, 2008; Budge et al., 1987; Page, 1978). Overall, platforms tend to emphasize the importance of an area and the party's past record in that area over specific future action (Budge et al., 1987).

We treat platforms as representative of a political party's majority opinion, emphasizing four consistent attributes⁴: (1) their periodic release, (2) their role in articulating ideational and material stances, (3) their role in

embodying presidential candidate's ideology and stances, and (4) their role as a tool for voter appeal. As such, platforms are a mechanism of reproduction that provides a window into strategic attempts to produce coherent narratives about actors, problem situations, and promoted responses.

Beginning our analysis in 1952, four administrations before ESEA, includes a period when education was mostly controlled locally. We limit our sample to Democrat and Republican platforms because scholarship suggests that their basic ideologies have remained consistent, despite their changing foci and issue stances (Ginsberg et al., 2010). We analyze how contradictions take hold and persist across societal levels, focusing on platform text that represent the contrast between more general to more concrete social levels: the education sector and the issue of educational quality and accountability. Each level corresponds with a unit of text: the platform's education sections reflect discourse about the sector and specific text segments from those sections represent the issue of educational quality and accountability within that sector. These data comprise 16 electoral years with an education section in each platforms ($N = 32$), and specific mentions of educational quality and accountability within each education subsection ($N = 155$).

Operationalizing Contradictions

We define institutional contradiction as dynamic tensions among opposing, interdependent forces (Clemens & Cook, 1999; Friedland & Alford, 1991; Seo & Creed, 2002). Our content analysis captures the development of these tensions between and within groups over time, notably the tensions that occur when logics compete for authority over situations (Friedland & Alford, 1991). More specifically, it allows us to identify tensions that arise among each component of how a social mechanism is framed – among actors, problem situations, and promoted responses to those situations. This combination of actors, problems situations, and promoted responses comprise what we refer to as frames, which we trace across time between Democrats and Republicans over the more abstract issues of education and over the more concrete issue of school quality and accountability. Computational linguistics captures the distance between units, such as Democrats and Republicans over the topic of education or over the specific issue of school quality and accountability. Inherent in the idea of opposing, interdependent forces is the idea of dichotomy or contrast. We operationalize this dichotomy by operationalizing contradictions as how close or far text is in

meaning. The closer two units of text are to each other, the lesser the degree of contradiction; the further apart two units, the greater the degree of contradiction. Our combination of archival, content analysis, and computational linguistics seeks to systematically capture contradictions distinctively: content analysis captures contradictions' qualitative differences in form and computational linguistics captures quantitative differences in degree.

Content Analysis

We employed an inductive, iterative approach to thematic and theoretical coding. We first coded thematically for statements about the roles, meanings, and uses of education. This approach highlighted large shifts in education, such as the rise of accountability, along with related discourse. Next, we took an inductive approach to chart ideology. We consulted Democrat and Republican websites and used mission and purpose statements as baseline comparisons of ideological stances. At the core, Republicans expressed that each person is responsible for his/her place in society. Democrats expressed that the government is responsible for the care of all individuals.⁵ We identified four areas where the parties' ideological lenses are expressed: (1) who is responsible for general action; (2) the role of government in education; (3) the root of problems in American education; and (4) solutions to these problems. We examined consistency and contradiction within these areas to document parties' promoted practices and meanings (Colyvas, 2007; Colyvas & Maroulis, 2012; Mohr, 1998).

For our theoretical coding, we treat ideological frames as modes of reproducing meanings and promoted practices. In the context of our study, material practices and symbolic elements of institutions shape the categories and meanings of actor-problem-response frames. Ideological frames can be understood as articulations of these categories in that Democrats and Republicans can employ different habits and perceive different problem situations based on ideologies (Bell, 1960; Brzezinski, 1962). Consequently, we treat ideologies as mental schema that not only shape the problem situations political parties identify in the world, but also which actors are associated with these problems and what resources they mobilize in their responses. Frames reflect the agentic and action-oriented interpretation of "what is going on" or "should be going on" (Benford & Snow, 2000, p. 614). For our theoretical coding, we utilized Gross's (2009) conceptualization of social mechanisms as the basis of our ideological frames, represented as individual or collective actors (A), confronting problem

situations (P), who exhibit more or less habituated responses (hR). Together, these symbolic and material elements of institutions shape the categories and meanings of actor-problem-response frames. We can thus treat the components in the frame as not necessarily linear or coherent in their makeup (Gross, 2009). We analyze actor-problem-response frames as a window into the ways ideologies act as mental schema that shape problem situations and define resources that are mobilized in response (Meyer et al., 2009).

For each actor-problem-response frame, we had to identify the unit of analysis, which we describe as a segment. A segment typically reflected a sentence or set of sentences that represent each element in the frame. In our literature review and application to this analysis, we identified multiple ways in which actor-problem-response frames could be identified, which required interpretation as opposed to literal segmentation of a sentence. This challenge is especially pertinent in this analysis because grammar and rhetorical strategies in public discourse can leave some elements implicit or amplify others (Suddaby & Greenwood, 2005). We addressed this challenge by anchoring our identification of actor-problem-response frames in the problem situation. We defined the actor as the unit of action in the problem situation and the response as the proposed solution or assertion reflecting the problem situation. For our higher social level of the sector, where we utilized each platform's education section, we had to identify a lead actor-problem-response segment, typically at the beginning of each section. Thus, we coded an actor-problem-response frame for each platform education section for each political party per year. For our more concrete "issue" level of analysis, we identified multiple segments from the platform's education sections, because each platform produced multiple segments reflecting the issue of school quality and accountability.

Education is an arena where institutional logics compete for authority (Friedland & Alford, 1991; Hallett, 2010). It is also an arena where priorities and goals that are not clearly aligned with an institutional logic can influence. For example, academic achievement is an overarching goal whose salience is steadily increasing from the classroom to the national level (Bush, 2001; Mehta, 2013a, 2013b). However, it is a goal that cannot be clearly categorized under one of Friedland and Alford's (1991) five institutions. Consequently, in contrast to research that treats institutional logics as the starting point of analysis, we employ a bottom-up approach to frame coding (Hills, Voronov, & Hinigs, 2013). This approach allows us to capture elements of the actor-problem-response

frame that clearly align with an institutional logic as well as those that are relevant to education while not falling exclusively into a logic category (Weber, Patel, & Heinze, 2013).

We collected frame data by generating fine-grained codes of platform text. These codes were almost literal statements from a party's platform. We collapsed these fine-grained codes to steadily broader categories until arriving at a set broad enough to draw comparisons across parties and years, but specific enough to identify singular instances of actors, problems, or promoted responses. For example, a statement on NCLB's success was first collapsed to "extending NCLB success," then coded as "policy." The "policy" code embodies problem situations that include NCLB-specific as well as other policy-related problem situations such as desegregation. We then interrogated these codes for their association with a higher-order institution.

We identified codes that squarely fit with a high-level institution, hybrid codes that could align with multiple logics, and codes that were ambiguous. "School choice" is an example of an actor that aligns with multiple logics. It aligns with capitalism because it is an example of the free-market mentality influencing education policy (Levin, 1992) and the state because it is a public activity that has been bounded by policy definitions. "Schools" is an ambiguous actor because it does not clearly align with any of the five higher-level institutions. For actors, 48% of codes were clearly linked with a higher-level institution, 19% were hybrids, and 33% were ambiguous. For problem situations, 59% of codes linked to a higher-level institution, 30% were hybrids, and 11% were ambiguous. For promoted responses, 84% of codes were clear; 16% were hybrids. Table 1 displays the actor-problem-response codes that represented high-level institutions.

We identified where institutional logics were clearly in tension with each other within actor-problem-response frames. We also paid close attention to what elements of the frame were hybrid or ambiguous. Our bottom-up strategy permitted us to capture the elements that surround institutional logics within actor-problem-response frames (Weber et al., 2013). For example, if a party repeatedly defined "America" as the actor, we could track how this democracy-aligned actor relates to other high-level institutions or if it coexists with hybrid or ambiguous problem situations and responses. Together, the actor-problem-response frames provide tools to study (1) the qualitative form that institutional contradictions take (e.g., whether in the context of defining actors, problem situations, and/or responses to those situations) and (2) the context within which they take

Table 1. High-Level Institutions to APhR Codes.

High-Level Institution	Definition of Institution ^a		APhR Codes
Capitalism	The accumulation and commodification of human activity.	Actor	Economy
		Problem situation	Prosperity, competitive economy, capitalism, failing economy, international competition
		Habituated response	Commit to prosperity
Family	Community and the motivation of human activity by unconditional loyalty to its members and their reproductive needs.	Actor	American youth
		Problem situation	Intergenerational knowledge transfer, tradition
		Habituated response	Support children, tradition, values
State	The rationalization and the regulation of human activity by legal and bureaucratic hierarchies.	Actor	Government, policy and policymakers, accountability, government, testing
		Problem situation	Access, federal reach, governance for mankind, accountability, education reform, performance testing, policy
		Habituated response	Assign roles, allocate resources, define government, abolish commission, review, audit, metrics, promote achievement, reward
Democracy	Participation and the extension of popular control over human activity.	Actor	Own party, America
		Problem situation	American leadership, local control
		Habituated response	Civic engagement, restore, American leadership, understand America
Religion and science ^b	Truth, whether mundane or transcendental, and the symbolic construction of reality within which all human activity takes place.	Actor	
		Problem situation	
		Habituated response	

^aAdapted from Friedland and Alford (1991).

^bAlthough religion- and science-related terms and phrases appear in the platforms' education sections, they were seldom if ever used in the lead text that the APhR frames capture. If they had appeared, we would have expected words such as "prayer," "God," and "faith" to be linked to religion and words such as "data," "measure," and "prove" to be linked to science.

hold and persist (e.g., whether in clear tension with other institutional logics or in coexistence with hybrid or ambiguous frame elements).

Computational Linguistics

An important distinction in text analysis is the difference between content and meaning. Analyzing content tells us what text is about (Hseih & Shannon, 2005), whereas analyzing meaning tells us about the use of language in text (Turney & Pantel, 2010). Methods, such as frequency counts of certain words, help us understand the content of a corpus of text (Hseih & Shannon, 2005). For example, if interested in how salient the education concept is in a body of text, we can count the frequency of the stem word “educat-” which would include words such as “educating” or “educator.” By counting stem words rather than just the word “education,” we capture more words that are directly related to the concept of education. Counting the frequency of a word indicates the degree of import of an idea. For example, if “educat-” consists of 2% versus 25% of a text corpus, we can surmise that the latter text addresses the topic of education at a greater intensity. Whereas frequency counts are helpful for providing insight into a text’s *content*, they tell us less about the *meaning* that is ascribed to a particular word, group of words, or topic. Tracking how much space is dedicated to the stem word “educat-” in platforms might reveal the political salience of the topic of education, but it does not tell us whether or how the meaning of education changed over time. Our computational analysis measures these relationships. It is not intended to capture the absence or presence of words or phrases in text. Rather, it captures the relationships in meaning of words or groups of words.

To analyze meaning in text over time, we employ a vector space modeling (VSM) technique called latent semantic analysis (LSA). VSM refers to any algebraic method that represents text documents as word vectors.⁶ LSA, specifically, goes beyond the level of what is said or written to reveal semantic relationships that other techniques such as frequency counts cannot capture. In other words, it can find semantic relationships that are not immediately apparent from a naked-eye text reading. A major difficulty with semantics is that an utterance is a “noisy” representation of a concept. There are multiple ways to express a given concept so the literal terms in a user’s query may not fully align with the entirety of terms that represents that concept in text (Deerwester, Dumais, Furnas, Landauer, & Harshman, 1990; Hofmann, 2001). The process of creating text involves picking words to convey

concepts. Since words and concepts do not have a one-to-one relationship, any utterance is an imperfect version of a speaker's true communication intent. Two problematic ways this "noise" shows up are synonym (multiple words with same meanings) and polysemy (multiple meanings of one word).

LSA removes this "noise" by examining statistical patterns of word usage to reveal what is intended or referenced in text (Hofmann, 2001; Sagi, Kaufmann, & Clark, 2011). It does so by building "numerical representations of textual units based on word occurrence patterns in a text corpus" (Dam & Kaufmann, 2008, p. 10). LSA assumes that the meaning of a text unit depends on the words with which it occurs (Turney & Pantel, 2010). For example, the synonyms "small" and "little" can appear in the same place in the same sentence without changing the word or sentence meaning (e.g., She tried the pants but they were too *small/little*, so she tried the larger size.). For our purposes, this LSA assumption helps unpack the ways different institutions can be invoked in different contexts. For example, if the statement "He is the *leader* of the nation" has the same quantified meaning as "He is the *father* of the nation," we know that "leader" and "father" are semantically interchangeable. Consequently, we know that in the context of this particular nation, the institution of the state (as invoked through "leader") and the institution of the family (as invoked through "father") can be relevant for the same role. These types of analyses provide insight into the degree of influence different institutions have in a given context. Indeed, due to its ability to operationalize semantic relatedness as a function of text co-occurrence, LSA has broad applications, such as classifying political ideology in Congressional text (Yu et al., 2008) and studying the complex process of language acquisition (Landauer & Dumais, 1997).

LSA uncovers the degree of privilege different groups assign to different institutions in text. We use our LSA measure to capture the degree of contradiction between and within groups over time as measured as distance in meaning. LSA has two main features that are well-suited for our purposes. First, it provides the ability to quantify meaning and measure the semantic distance between two text units (e.g., word, word groups, document). This ability to map dichotomy in terms aligns directly with our operationalization of contradiction. Second, LSA provides the flexibility to quantify the meaning of researcher-determined word groups. This flexibility is especially useful for investigating the distance between political groups when discussing high-level institutions, the education sector, and the more specific issue of educational quality and accountability. Table 2 provides an overview of the types of text analyses we use.

Table 2. Description of Text Analyses.

Type of Analysis	Brief Description	Analytic Purchase
Frequency count	A count of the number of occurrences of a stem word, word, or group of words.	Provides a metric to gauge the import of a topic into a body of text.
High-level institution vector	A “collapsed” word vector that represents one of Friedland and Alford’s (1991) high-level institutions. For example, for “capitalism,” we generated vectors for words such as “economy,” “market,” and “capital” and combined them to create one representative “capitalism” vector.	Provides a means for representing high-level institutions as a single vector in a high-dimensional vector space. This representative vector is used to measure the closeness or distance between the high-level institution and other vectors.
Education sector vector	A “collapsed” word vector that represents individual platform education sections. To create this vector, we generated word vectors for every word in one education section, then combined them to create one platform section vector that represents a particular party’s discourse about the education sector in a particular year.	Provides a means for representing a whole education section as a single vector in a high-dimensional vector space. This vector is used to measure the closeness or distance between platform sections between groups and over time.
Issue vector	A “collapsed” word vector that represents a specific issue. For example, for the issue of educational quality and accountability, we generated vectors for words such as “accountability,” “standards,” and “metrics” and combined them to create one representative issue vector.	Provides a means for representing specific issues as a single vector in a high-dimensional vector space. This representative vector is used to measure the closeness and distance between the issue vector and other vectors.

LSA’s ability to combine the meaning of word groups into a single vector permits us to measure the distance in meaning between groups, within concepts, among societal levels, and over time. LSA provides this flexibility by mapping platform language in a high-dimensional vector space. The vector space contains multiple vectors, each representing a distinct text unit (e.g., word, group of words, platform section). Each vector points in a direction that represents its quantified meaning. The distance

between the vectors is a measurement of similarity in meaning. Thus, the most telling information in the vector space lies in the relationships *among* the vectors, which is measured by the angle between vectors. We therefore represent similarity in meaning as:

$$\cos(d_i, d_j) = d_i \cdot d_j$$

The cosine is equal to the dot product of vectors d_i and d_j . Two text units that have the exact same meaning have no distance between vectors and have a cosine value of 1. If two text units have no similarity in meaning, their vectors in the high-dimensional space will form a right angle with a cosine value of 0. If two text units are perfectly negatively related, or opposite in meaning, their vectors form a straight angle with a cosine value of -1 . Because we operationalize contradiction as degree of meaning distance, a cosine similarity score of -1 represents complete contradiction and a cosine similarity score of $+1$ represents no contradiction. However, if a cosine similarity score is close to 0, it is not considered to be mid-level contradiction. Rather, the text represented by the vectors is treated as being unrelated signaling neutrality in meaning. Methods appendix available upon request.

VSMs quickly and accurately process massive datasets (Turney & Pantel, 2010) and are often used to analyze larger text corpora (Landauer, Foltz, & Laham, 1998). However, their assumptions and basic tenets hold true despite text corpus size. For example, Mohr, Wagner-Pacifici, Breiger, and Bogdanov (2013) use topic modeling on a text corpus of less than 500,000 words, developing a computational tool that uses a VSM to identify and map latent “informational signals” which delineate actors, acts, and scenes within text to study rhetoric. Dam and Kaufmann (2008) use LSA on student interview data measuring science understanding, with only 34 interviews to test interview classifications, knowledge differences brought by instruction, and conceptual change measurements. They compared LSA’s performance to human annotators with a 90% agreement level (Dam & Kaufmann, 2008). These experiments demonstrate LSA’s applicability for large and small datasets.

LSA’s technical capabilities and alignment with our theoretical framework provides an objective means to make analytic observations in text that are not based on researchers’ judgments (Dam & Kaufmann, 2008). LSA also provides a way to precisely study statistical trends in text

corpora, regardless of the size of the corpus (Dam & Kaufmann, 2008; Mohr et al., 2013). Finally, LSA allows us to objectively and systematically map the dichotomy in meaning between and within groups.

CONTRADICTIONS: QUALITATIVELY DIFFERENT FORMS AND QUANTITATIVELY DIFFERENT DEGREES

The Federalization of Education and Competing Party Ideologies

Scholarship emphasizes that the institutionalization of one structure into another creates occasions where logics overlap or ideological contests ensue (Clemens & Cook, 1999). Through this lens, we can understand education's integration into the federal system as an institutionalization process. Similar to DiMaggio's (1991) analysis of the museum sector, this process established an arena for dispute where education was a legitimate topic for political contest.

Table 3 summarizes Democrat and Republican platforms, 1952–2012, in terms of platform size, platform's education section size, education-related stem words, and educational stem word (proportional) occurrences within and outside of the education sections. Both party's education stem word usage remains consistent as a total percentage of platform words. The platforms increase in size over time: In 1952, Democrats use 8,878 words compared to 26,588 in 2012; Republicans use 5,988 words in 1952 compared to 31,290 in 2012. Education's increasing salience is more apparent, however, in the platforms' proportion dedicated to education. In 1952, Democrats dedicate 1.6% and Republicans 0.7% of their platform to education, compared to 4.5% and 5.4% in 2012.

Whereas increasing educational discourse suggests increasing political salience, comparing platforms' thematic content highlights ideological differences. These differences are apparent in how parties frame what education is in service to and how they define actors, identify problems, and propose solutions. In contrast to Democrats, Republicans frame education as serving individual rather than collective actors: 74% of Republican statements focused on the individual compared to 62% of Democrat statements. The parties further reveal their views on education actors through statements about the role of government. When assigning responsibility in

education, 91% of Republican statements emphasize local individuals, whereas 79% of Democrat statements emphasize government. For example, in 1952, Republicans eschew federal intervention stating that, “The responsibility for sustaining ... popular education has always rested upon the local communities and the States.” In the same year, Democrats explicitly include state and federal authority: “Local, State, and Federal governments have shared responsibility to contribute appropriately to the pressing needs of our educational system.” These distinctions continue through 2012 despite large policy shifts. Even with NCLB’s federal control incentives, Republicans in 2004 articulate that, “... it is obvious that state and local governments must assume most of the responsibility to improve the schools, and the role of the federal government must be limited” In the same year, Democrats underscore NCLB’s federal role and criticize the Republican Administration’s federal spending cuts: “When President Bush signed the [NCLB] Act, he said the right things – asking more from our schools and pledging to give them the resources to get the job done. And then he promptly broke his word, providing schools \$27 billion less than he had promised, literally leaving millions of children behind.” Even under bipartisan-supported policy, both parties maintain oppositional views.

The parties’ ideological differences are also apparent in the identification of problems and solutions. In statements about responsibility for education problems, Republicans blame government involvement 96% of the time. Republicans emphasize local responsibility in response to the dangers of federal regimentation: 91% of Republican statements put responsibility in local hands. In contrast, Democrats consistently emphasize federal roles, notably federal funds for educational aid: 92% of Democrat statements about federal solutions propose federal funds. Additionally, 92% of Democrat statements about responsibility for education problems underscore lack of government interference and criticize Republican’s lack of funding actions as damaging to the system. Scholarship suggests that proposed policy solutions have a strong relationship with how policymakers problematize the world (Kingdon, 1995). Whereas Republicans see government involvement as a fundamental flaw in education, Democrats see it as an avenue to improvement. As education gained traction as an arena for political dispute, it also became a forum for parties to assert their ideological stances over the role of actors and the definition of problems and solutions in education.

Table 3. Democrat and Republican Party Platforms by Size and “Educat” Stem Word Use, 1952–2012.

Year	Number of Words in Total Platform		Percentage of Words that “Educat” Represents		Percentage of Words Dedicated to the Education Section		Percentage of Times “Educat” Mentions Occur Outside of the Education Section	
	Democrat	Republican	Democrat	Republican	Democrat	Republican	Democrat	Republican
1952	8,878	5,988	0.15	0.10	1.63	0.68	61.54	50.00
1956	12,839	11,393	0.12	0.11	1.75	4.15	62.50	50.00
1960	16,099	10,680	0.20	0.27	2.72	6.86	45.45	24.14
1964	20,132	8,811	0.20	0.12	2.42	3.13	63.41	100.00 ^a
1968	16,791	10,014	0.30	0.21	2.58	3.70	56.00	47.62
1972	25,623	24,411	0.35	0.30	6.74	5.40	36.67	49.32
1976	21,205	20,476	0.20	0.14	4.24	2.86	20.93	50.00
1980	38,355	34,588	0.24	0.09	5.32	8.23	30.43	54.84
1984	37,362	27,426	0.17	0.17	3.15	8.03	43.75	21.05
1988	4,838	36,270	0.35	0.20	4.51	4.73	58.82	46.48
1992	8,347	28,548	0.24	0.09	5.32	8.23	30.43	54.84
1996	18,107	27,840	0.24	0.17	6.99	3.77	38.64	42.55
2000	24,218	34,788	0.21	0.14	12.69	5.13	30.77	46.00
2004	17,805	42,070	0.17	0.16	7.54	5.54	45.16	47.83
2008	25,957	23,778	0.22	0.24	4.72	7.82	56.90	32.14
2012	26,588	31,290	0.19	0.14	4.50	5.39	60.00	37.21

^aThe 1964 Republican Platform does not dedicate a section to education.

Contradictions among Institutions (Proposition 1)

Institutional theory asserts that institutions need to be understood in terms of overlapping, conflicting logics (Thornton et al., 2012). In platforms, we see multiple instantiations where different institutions are relevant for a given problem (Clemens & Cook, 1999). This overlap is especially evident in the use of terms related to different higher-level institutions, notably capitalism, the state, democracy, family, religion, and science (Friedland & Alford, 1991).

Scholarship on both political ideologies and institutional theory suggests that competing parties will differ in the institutions they extol when asserting political stances. Fig. 1 displays cosine similarities between vectors created to represent each high-level institution (see Table A1) and the platforms' education sections by party. Whereas Democrats' education discourse displays no similarity with the institution of science with a score of .07, Republicans exhibit a moderate level of similarity with a score of .41. Meaning can be constructed and change in multiple ways over large bodies of text, despite similar cosine similarities (Foltz, Kintsch, & Landauer, 1998). For example, as shown in Fig. 1, both parties have similar scores relating the institution of religion and education discourse ($-.45$ and $-.47$). With Republicans' historic promotion of school prayer (Martin & Wolbrecht, 2000), we might expect their cosine similarity score between education and religion to differ from Democrats and actually reflect a much closer alignment in meanings. However, looking more closely at

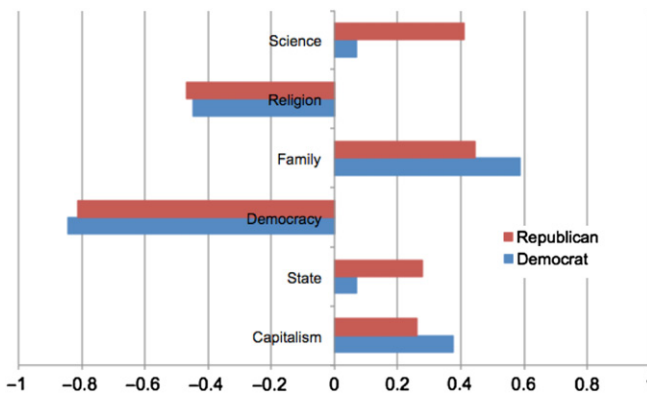


Fig. 1. Cosine Similarity between High-Level Institution Word Vectors and Democrat and Republican Platform Education Sections, 1952–2012.

when and how the parties talk about religion, we see that the apparent similarity in degree of contradiction actually manifests in qualitatively different ways.

When Republicans talk about religion, they keep the religion concept distinct from education, at times offering it as a solution to education's problems. For example, in 1980 Republicans state: "Next to religious training and the home, education is the most important means by which families hand down to each new generation their ideals and beliefs." This statement clearly separates the higher-level institutions of religion and the family from education by not only distinguishing education from religious training and the home, but essentially ranking its importance. Rather than stating that education and religion ought to be the nation's teachers, Republicans assert that religion and education are not interchangeable. This distinction sheds light onto why we observed a different quantified meaning as reflected in their negative cosine similarity. In 2008, Republicans promote school prayer: "We will energetically assert the right of students to engage in voluntary prayer in schools and to have equal access to school facilities for religious purposes." Here, education and religion are separate categories with the school as a site for religious activity. Although we can interpret this statement as a play for structurally intertwining religion and education, the conduit for this play is by making school facilities sites for religious activities, rather than equating learning with prayer, for example, or going to school with going to worship. Some may caution that using schools as sites for religious activity may result in a world where learning is equated with prayer. The educational discourse itself is not melding meanings between these institutions. Nor does it interchange values of religion with education, contrary to what we might expect from the rhetorical moves that Republicans have exhibited with Christian ideals (Martin & Wolbrecht, 2000). Instead we observe stances that place religious activity or actors "in the room" with education, privileging religion in society and at the same time rhetorically extolling education.

When Democrats mention religion, they incorporate the idea with other actors or problems, seldom offering it as a promoted solution. In 1972, they discuss the role of education and state: "Our schools are failing our children. Never, more than now, have we needed the schools to play their traditional role – to create a sense of national unity and to reconcile ethnic, religious, and racial conflicts." Here, religion is but one of three types of conflicts that education can address; the statement integrates conflict across these categories. In 2004, Democrats state: "We will meet

these challenges [raising high school graduation rates, improving early childhood education] together—parents, teachers, principals, educational support professionals and paraprofessionals, along with universities, community-based and faith-based organizations.” Here, Democrats place religion within a community of actors working together to create solutions to education problems. The parties are similar in their statements on religion because they do not treat religion as something that ought to take the place of education and vice versa. They treat religion as separate, either in how they privilege its importance in society or how they situate it within a list of issues or actors. Though this similarity may be reflected in a similar degree of contradiction for the parties, the form that this contradiction takes differs.

These similarities in degree but differences in form are most pronounced when comparing across actors, problem situations, and responses. [Table 4](#) documents party statements in these terms. Each party invokes different institutions to define actors, problem situations, and responses, thereby embedding contradictions within their articulations of social mechanisms. For example, Republicans invoke democracy in 15 of 16 administrations while Democrats invoke democracy in 12 of 16 administrations through the specification of America or their own party as the actor. Both parties also invoke either the state or the family in all of their responses. They invoke the state by assigning roles for governance, allocating resources for the public, or promoting program/performance reviews. They invoke the family by calling on the education system to support children. More high-level institutions are invoked in problem situations, notably the state, capitalism, democracy, and family. Republicans dedicate 75% of problem situations to capitalism by identifying a competitive economy or the nation’s prosperity. Democrats define the same problem situations 38% of the time.

Despite these differences in problem situations, we observe the parties occasionally linking similar sets of institutions across their actor-problem-response frames. Both 1992 Republican and 2008 Democrat frames focus on maintaining a competitive economy as the problem, define America as the actor, and promote the assignment of bureaucratic roles/responsibility as the response. [Table 5](#) displays the education platform text representing these actor-problem-response frames. In both examples, the actor invokes democracy; the problem situation of the economy invokes capitalism; and the response invokes the state. Here we see contradictions take hold through the import of competing institutions in the construction of actors, problem situations, and promoted responses.

Table 4. Democrat and Republican APHR Frames by Education Section, 1952–2012.

Year	Democrat			Republican		
	Actor	Problem situation	Habituated response	Actor	Problem situation	Habituated response
1952	America	Access	Assign roles	America	Tradition	Assign roles
1956	America	Access	Assign roles	Own party	Prosperity	Review
1960	America	Prosperity	Allocate resource	America	Prosperity	Assign roles
1964	America	Local control	Assign roles	Own party	Access	Assign roles
1968	Own party	Access	Assign roles	America	Access	Review
1972	America	Access	Tradition	Own party	Access	Support children
1976	Policy, policymakers	Prosperity	Allocate resources	Local actors	Local control	Review
1980	America	Prosperity	Allocate resources	Local actors	Intergenerational knowledge transfer	Assign roles
1984	America	Competitive economy	Support children	Policy, policymakers	Intergenerational knowledge transfer	Assign roles
1988	Own party	Prosperity	Allocate resources	Own party	Local control	Support children
1992	America	Competitive economy	Allocate resources	America	Competitive economy	Assign roles
1996	Own party	Prosperity	Allocate resources	America	Local control	Abolish commission
2000	America	Competitive economy	Support children	Own party	Prosperity	Assign roles
2004	America	Prosperity	Support children	America	Competitive economy	Support children
2008	America	Competitive economy	Assign roles	America	Intergenerational knowledge transfer	Assign roles
2012	America	Competitive economy	Assign roles	America	Competitive economy	Assign roles

Table 5. 2008 Democrat and 1992 Republican Education Section Framing Statements.

Democrat, 2008	Republican, 1992
<p>In the 21st Century, where the most valuable skill is knowledge, countries that out-educate us today will out-compete us tomorrow ... We must prepare all our students with the 21st Century skills they need to succeed by progressing to a new era of mutual responsibility in education. We must set high standards for our children, but we must also hold ourselves accountable – our schools, our teachers, our parents, business leaders, our community, and our elected leaders. And we must come together, form partnerships, and commit to providing the resources and reforms necessary to help every child reach their full potential.</p>	<p>Americans have come to believe that only a country that successfully educates its sons and daughters can count on a strong, competitive economy, a vibrant culture, and a solid civic life ... The people have insisted that primary responsibility for education properly remain with families, communities, and States, although, from early times, the national government has played a role in encouraging innovation and access.</p>

Contradictions in the Development/Maintenance of Institutional Arrangements over Time (Proposition 2)

A core feature of institutionalization is the introduction of a new structure into existing modes of reproduction (Colyvas & Jonsson, 2011; Colyvas & Maroulis, 2015). The integration of federal activity into education provides the opportunity to observe how contradictions take hold, persist, and change (McGuinn, 2006). Platforms are one means of reproducing democracy and party politics. They also reflect a consistent forum for political parties to assert their stances on education as their historical power in education expands. Consequently, one way we might observe the reproduction of federal activity and the assertion of political stances is through the relationship in meaning between the parties' platforms over time.

Fig. 2 displays cosine similarity scores between Democrat and Republican education sections, representing the parties' education discourse distance in meaning by year. Here we can see changes as federal power became institutionalized in education. Pre-1964, the cosine similarity scores hover between 0.0 and 0.8 with 50% of administrations exhibiting a cosine similarity between 0.0 and 0.2. The parties show a distinct convergence in meaning post-1964 when their cosine similarities

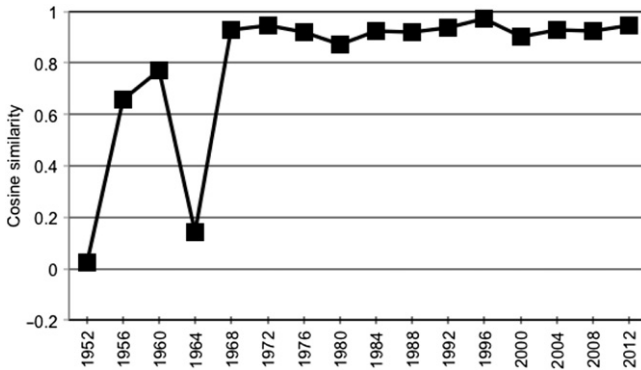


Fig. 2. Cosine Similarity between Democrat and Republican Education Sections, 1952–2012.

stay between 0.8 and 1.0, demonstrating a consistently low degree of contradiction between parties’ educational discourse. The consistent post-1964 similarity aligns with the 1965 passage of ESEA, widely cited as the beginning of federal authority’s rise in education (McGuinn, 2006; Thomas & Brady, 2005).

Closer examination of the text provides insight into the dissimilarity and marked post-1964 similarity between the parties’ education sections. Table 6 displays the 1952, 1968, and 2012 opening statements of the parties’ education sections. In 1952, each party addresses distinct aspects of education: Republicans focus on defining individual roles/responsibilities in education. Democrats first focus on access and educational opportunity, then move into assigning communal responsibility in education. In 1968 and 2012, when they have an increase in similarity in meaning, topics are similar. In 1968, both parties emphasize access and equality, stating that education is a main tool for providing opportunity to Americans and asserting that American education should be open to, and able to meet the needs of all Americans. By 2012, the two parties are still aligned by shifting focus from education in service to equality to maintaining international competitiveness. Both parties establish a link between strong public education and maintaining America’s world pre-eminence. Although the content and framing of the education sections changed over time, Democrats and Republicans changed in similar ways, reflected in their high degree of cosine similarity, as federal power took hold in education.

Table 6. Democrat and Republican Education Section Framing Statements, 1952, 1968, and 2012.

	Democrat	Republican
1952	Every American child, irrespective of color, national origin, economic status or place of residence should have every educational opportunity to develop his potentialities. Local, State and Federal governments have shared responsibility to contribute appropriately to the pressing needs of our educational system.	The tradition of popular education, tax-supported and free to all, is strong with our people. The responsibility for sustaining this system of popular education has always rested upon the local communities and the States.
1968	Education is the chief instrument for making good the American promise. It is indispensable to every man's chance to achieve his full potential. We will seek to open education to all Americans. We will assure equal opportunity to education and equal access to high-quality education.	The birthplace of American opportunity has been in the classrooms of our schools and colleges. From early childhood through the college years, American schools must offer programs of education sufficiently flexible to meet the needs of all Americans – the advantaged, the average, the disadvantaged and the handicapped alike.
2012	Public education is one of our critical democratic institutions. We are committed to ensuring that every child in America has access to a world-class public education so we can out-educate the world and make sure America has the world's highest proportion of college graduates by 2020.	Maintaining American pre-eminence requires a world-class system of education, with high standards, in which all students can reach their potential.

Just as the parties' post-1964 similarity in meaning parallels the historic federalization of education, the ways the parties define education problems reflect historical patterns of debate. Table 4 displays each party's education actor-problem-response frames, 1952–2012. During the 1960s and 1970s, Democrats shift thematically. Prior to 1976, 67% of Democrat problem situations relate to access in education. After 1976, their focus becomes capitalism-related: 50% of problem situations reflect general prosperity; the other 50% reflect a competitive economy. This shift in the defined problem situations mirrors the 1970s' desegregation sentiments and the ways education was framed nationally after 1983 release of *A Nation at Risk* (Mehta, 2013a, 2013b). Republicans

show a similar focus on access in 50% of their pre-1976 statements. Similar to Democrats, they frame education in service to a competitive economy in 40% of statements from 1976 to 2012. However, their additional attention to maintaining local control during the mid-1980s to mid-1990s reflects their persistent resistance to federal involvement. As education became integrated into national discourse and debate, the parties anchor both their political stances on current events as well as their ideological stances in the definition of their problem situations.

*Contradictions through Competing Ideologies over Persistent Issues
(Proposition 3)*

Ideological contrasts also provide a window into the kinds of tensions that ensue through ongoing debate over political issues. These tensions can take hold and persist within arenas where meanings are stable and less contested. For example, as federal power expanded in education, government control became more accepted. The form and reach of that control, however, is debated (Hallett & Meanwell, 2016; McGuinn, 2006). Despite differing ideologies, Democrat and Republican platforms display remarkably little contradiction over their general discourse about the education sector, especially as federal involvement increases and the parties appear to converge over similar issues. The contradictions that emerge, however, take a similar form in how their ideologies shape how they draw on institutions and define actors, problems, and promoted responses.

The question arises whether the apparent similarities between parties disappears in more specific, concrete issues, such as educational quality and accountability. Education quality and standards are persistent, related issues in education that have existed in some form since the early 1900s (Mehta, 2013a, 2013b). Fig. 3 displays cosine similarities between parties for the collapsed word vector representing this issue. Whereas a range of cosine similarities is represented, the overall pattern in the distance between each party's education section and the educational quality and accountability vector is consistent over time. Republicans have a slightly lower cosine similarity than Democrats but this difference is small – the average cosine difference between the parties between 1952 and 2012 is 0.12. This consistent patterning tells us that while

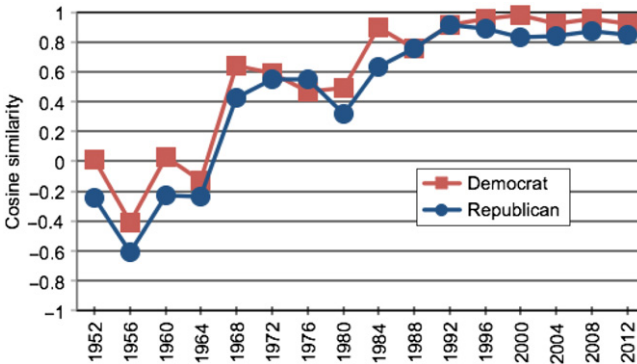


Fig. 3. Cosine Similarity between Democrat and Republican Platform Education Sections and Educational Quality and Accountability Combined Word Vector, 1952–2012.

the meaning of the parties' education sections and combined word vector might change, they change in comparable ways for both parties. Similar to *Fig. 2*, we see a distinct rise in cosine similarity between the meaning of the educational quality and accountability and the parties' education sections post-1964. Prior to 1968, both parties' cosine similarities stay between -0.6 and 0 . The issue of educational quality and accountability is not regularly addressed in the platform sections until 1968. The post-1964 increase in cosine similarity and consistent inclusion of the topic tell us that the issue took hold and persisted from 1968 to 2012.

We do, however, see some variation in distance to the parties' more general education discourse post 1968, also mirroring historical patterns. From 1968 to 1980, the parties' cosine similarities hover between 0.3 and 0.6 , followed by another marked increase between 0.8 and 1.0 from 1992 to 2012. The first increase aligns with the passage of the 1965 ESEA – the first federal policy linking federal funding to measurable school characteristics (*McGuinn, 2006*). The second increase aligns with the 1990's rise of accountability systems and national education goals discussions (*Anderson, 2007*). *Table 7* displays examples of platform excerpts that reference educational quality and accountability from 1968, 1992, and 2012.

Table 7. Examples of Democrat and Republican Use of Educational Quality and Accountability-Related in Platform Education Section Sections, 1968, 1992, and 2012.

	Democrat	Republican
1968	We will seek to open education to all Americans. We will assure equal opportunity to education and equal access to high-quality education ... We also pledge support for high quality graduate and medical education.	The rapidly mounting enrollments and costs of colleges and universities deprive many qualified young people of the opportunity to obtain a quality college education ... No young American should be denied a quality education because he cannot afford it or find work to meet its costs.
1992	We will ... establish world-class standards in math, science and other core subjects and support effective tests of progress to meet them ... school administrators must enforce discipline and high standards of educational attainment.	The critical public mission in education is to set tough, clear standards of achievement and ensure that those who educate our children and accountable for meeting them.
2012	President Obama and the Democrats are committed to working with states and communities so they have the flexibility and resources they need to improve elementary and secondary education in a way that works best for students. To that end, the President challenged and encouraged states to raise their standards so students graduate ready for college or career and can succeed in a dynamic global economy. Forty-six states responded, leading groundbreaking reforms that will deliver better education to millions of American students.	After years of trial and error, we know what does work, what has actually made a difference in student advancement, and what is powering education reform at the local level all across America: accountability on the part of administrators, parents and teachers; higher academic standards; programs that support the development of character and financial literacy; periodic rigorous assessments on the fundamentals, especially math, science, reading, history, and geography ...

In 1968, both parties speak generally about educational quality; both position high-quality education as an arena that ought to be available to all Americans. Neither concretely defines quality. In 1992, the parties are still concerned about education quality, pushing for tough, world-class standards and rigorous accountability mechanisms. They also note that school administrators and teachers play an important role in upholding students to high achievement standards. These points reflect the status of accountability and the standards associated with it in the early 1990s. High-quality education had been a long-standing concern for politicians and, by 1992,

we see tough standards and assessments taking hold as the solution. By 2012, academic standards are a persistent, accepted part of education. Democrats call for increased rigor in standards and praise states for reforming accountability systems. Republicans state that “we know what does work,” praising local accountability, standards, and testing reforms. Unlike 1992, neither party has to push for standards to achieve higher-quality education. Rather, they discuss improving upon existing accountability systems at different levels. These historical shifts in education are reflected in words that the parties treat as synonymous or interchangeable. For example, high achievement has become conceptually linked with high learning levels, reflected in the language the parties use when discussing these ideas which, in turn, is reflected in a high degree of cosine similarity between text that includes talk of achievement.

Although the parties’ meanings co-evolved linguistically, their ideological differences persist, as revealed in their actor-problem-response frames. [Table A2](#) displays the parties’ actor-problem-response frames about educational quality and accountability. Both parties exhibit a distinctive rise post-2000 in quality and accountability statements, mirroring NCLB’s (Bush, 2001) heightened accountability focus. Seventy-one percent of Democrat accountability statements occur between 2000 and 2012, compared to 61% of Republican statements, suggesting that Republicans were discussing the issue of educational quality and accountability before Democrats.

Whereas the issue of educational quality and accountability has become a taken-for-granted part of both parties’ platforms, they differ in their actor-problem-response frames’ content. For example, the parties define 11 different responses in their statements about educational quality and accountability, 7 invoking the state. Despite this range in possible state-related responses, Republicans focus more on evaluation-based responses and concern with quality and metrics; Democrats focus more on support and increased resources. [Table 8](#) displays the parties’ actor-problem-response frames where evaluation-based or support-based responses are defined. Republicans promote auditing, reviewing, or using metrics in 51% of statements; Democrats promote these same responses in 41% of statements. Democrats draw on the state to promote achievement, rewarding good behavior, and allocating resources to schools 24% of the time; Republicans define these responses 15% of the time. Despite invoking the same institution, the parties promote qualitatively different ways of using legal and bureaucratic hierarchies to rationalize and regulate human activity (Friedland & Alford, 1991).

Furthermore, when drawing on different aspects of the state, the parties embed different forms of contradictions within their frames. [Table 9](#) displays

Table 8. Democrat and Republican APhR Frames for the Issue of Educational Quality and Accountability in the Education Section with Evaluation-Base or Support-Based Responses, from First Mention-2012.

Year	Democrat			Republican		
	Actor	Problem situation	Habituated response	Actor	Problem situation	Habituated response
1952	Local actors	Accountability	Allocate resources	—	—	—
1960	American youth	Access	Allocate resources	Education field	Education reform	Allocate resources
1964	Local actors	Improving core subjects	Allocate resources	—	—	—
1968	—	—	—	America	Flexible education	Review
1972	Own party	Education reform	Metrics	Education field	Accountability	Metrics
	Own party	Education reform	Review	American youth	Education quality	Review
1976	Own party	Education quality	Metrics	Education field	Education quality	Metrics
				American youth	Achievement	Metrics
1980	Policy, policymakers	Access	Review	Education field	Education reform	Review
				Own party	Federal reach	Allocate resources
1984	Education field	Education quality	Metrics	Local actors	Education reform	Review
				Teachers	Teacher quality	Metrics
				Education field	Educational aid	Reward

Table 8. (Continued)

Year	Democrat			Republican		
	Actor	Problem situation	Habituated response	Actor	Problem situation	Habituated response
				Education field	Accountability	Reward
				Local actors	Performance testing	Metrics
				Local actors	Education quality	Review
1988	Education field	Prioritizing education	Metrics	Government	Federal reach	Reward
				Educational goals	Education reform	Metrics
				Own party	Teacher quality	Review
1992	Schools	International competition	Reward	Own party	Education reform	Metrics
	American youth	Attrition	Metrics	Educational goals	Accountability	Metrics
				America	Education reform	Metrics
				America	Civic engagement	Metrics
			Own party	Teacher quality	Metrics	
1996	Local actors	Order in the classroom	Metrics	Education field	Education quality	Metrics
	Local actors	Education reform	Review	American youth	Education reform	Metrics
	Accountability	Accountability	Allocate resources	Education field	Education reform	Metrics
	Education field	Accountability	Metrics	Teachers	Teacher quality	Audit

2000	America	Accountability	Reward	Testing	Federal reach	Audit
	High school	Education quality	Promote achievement	Own party	Teacher quality	Allocate resources
	Teachers	Teacher quality	Audit	Own party	Flexible education	Promote achievement
	Education field	Achievement	Metrics			
	Teachers	Teacher quality	Review			
	Teachers	Teacher quality	Review			
	Government	Performance testing	Reward			
	Teachers	Teacher quality	Reward			
	Schools	Achievement	Promote achievement			
	Schools	School competition	Promote achievement			
America	Education quality	Metrics				
Education field	Education reform	Metrics				
Own party	Education quality	Promote achievement				
Own party	Teacher quality	Allocate resources				
<hr/>						
	High school	Attrition	Metrics	Policy, policymakers	Policy	Review
	Teachers	Teacher quality	Audit	Education field	Achievement	allocate resources
	Teachers	Teacher quality	Audit	Local actors	Achievement	Metrics
	Academic achievement	International competition	Promote achievement	Local actors	Education quality	Review

Table 8. (Continued)

Year	Democrat			Republican			
	Actor	Problem situation	Habituated response	Actor	Problem situation	Habituated response	
2004	Learning	Performance testing	Metrics	Teachers	Teacher quality	Allocate resources	
				School choice	School competition	Metrics	
				Local actors	School competition	Review	
				Education field	Policy	Promote achievement	
				Academic achievement	Achievement	Metrics	
2008	Teachers	accountability	Audit	American youth	Access	Metrics	
	American youth	Policy	Metrics	American youth	International competition	Audit	
	Teachers	Teacher quality	Audit	Core subjects	Improving core subjects	Promote achievement	
	Teachers	Teacher quality	Audit	Local actors	Education reform	Metrics	
				American youth	Access	Metrics	
				Government	Federal reach	Audit	
				American youth	Access	Metrics	
				Academic achievement	Achievement	Metrics	
		American youth	International competition	Define entitlements	America	International competition	Review
		American youth	International competition	Promote achievement	America	International competition	Metrics

	American youth	International competition	Metrics	Academic achievement	Achievement	Allocate resources
	Local actors	Flexible education	Metrics	Educational goals	Education reform	Review
2012	Teachers	Teacher quality	Metrics	Educational goals	Education reform	Metrics
	Teachers	Teacher quality	Review	Educational goals	Education reform	Review
	Learning	Education quality	Allocate resources	Education field	Education reform	Audit
				Education field	Education reform	Reward
				Teachers	Teacher quality	Review
				Teachers	Teacher quality	Review

Note: Years in which parties have no relevant statements about educational quality and accountability are marked with a “–.”

Table 9. Examples of Educational Quality and Accountability Statements that Invoke Competing Institutions.

	Statement	APhR Frame
Republican, 1988	We can enhance this record of accomplishment by committing ourselves to these principles: ... We will use federal programs to foster excellence, rewarding “Merit Schools” which significantly improve education for their students.	Actor: Government Problem Situation: Federal reach Response: Promoted Reward
Democrat, 2012	We are committed to ensuring that every child in America has access to a world-class public education so we can out-educate the world and make sure America has the world’s highest proportion of college graduates by 2020. This requires excellence at every level of our education system, from early learning through post-secondary education.	Actor: American youth Problem Situation: International competition Response: Promoted achievement
Republican, 2008	All children should have access to an excellent education that empowers them to secure their own freedom and contribute to the betterment of our society. We reaffirm the principles that have been the foundation of the nation’s educational progress toward that goal: accountability for student academic achievement; periodic testing on the fundamentals of learning, especially math and reading, history and geography; transparency, so parents and the general public know which schools best serve their students; and flexibility and freedom to innovate so schools and districts can best meet the needs of their students.	Actor: American youth Problem Situation: Access Response: Promoted Metrics
Democrat, 2004	We will use testing to advance real learning, not undermine it, by developing high-quality assessments that measure the complex skills students need to develop. We will make sure that federal law operates with high standards and common sense, not just bureaucratic rigidity.	Actor: Learning Problem Situation: Performance testing Response: Promoted Metrics

examples of platform excerpts where the parties invoke competing institutions across the same actor-problem-response frame. The first two rows display response statements that define either promoting achievement or focusing on rewards; the last two rows display statements referencing metrics. In the Republican 2008 and the Democrat 2004 examples, both reference the state to

advocate for metrics to improve education. Both invoke the state by anchoring their actor-problem-response frames in access to a high-quality education or performance testing to advance learning. However, they link state-related problems and responses to different institutions. Republicans invoke the family by defining America's children as the actor deserving access to high-quality education. Democrats invoke science by defining "real learning" as the unit of action, related to performance testing. Despite drawing on the state in similar ways, the parties embed contradictions in their actor-problem-response frames by invoking distinct competing institutions.

CONCLUSION

We began by asking how contradictions take hold, persist, and might be observed prior to, or independently from, their causal effects on change. We drew on a combination of institutional theory, political sociology, and pragmatism for guideposts to identify occasions when contradictions may arise and persist, notably through competing symbolic and material constructions of actors, problem situations, and responses to those situations (proposition 1); the reproduction of these social mechanisms in the development and maintenance of institutional arrangements over time (proposition 2); and competing ideologies of collectives over social issues (proposition 3). Our theoretical and empirical knowledge of Democrat's and Republican's education policy discourse provided fertile ground to observe these conditions where much literature has led us to believe are contradictions (Benoit, 2004; Dunlap et al., 2001; Reed, 2006; Skocpol, 1997).

Our analysis rests on the premise that a large feature of how institutions matter for social meanings and organizational practices has to do with the ways in which they provide resource materials for identifying problems, the subjects of those problems and explicating the means-ends relationships associated with those actor-problem-solutions packages (Scott, 2013). In this vein, our analysis reinforces the claim that contradictions take hold and are maintained in mechanisms that reproduce social arrangements. However, our results prompt us to rethink these propositions and certain conventions in institutional theory. Whereas competing ideologies permit polarization over issues, they permit convergence in meaning between collectives, thereby reducing contradictions. In our analysis, contradiction was neither a necessary nor likely product of ideological differences between groups. On the contrary, we saw remarkable convergence and co-

evolution in meaning between parties in their overall educational discourse and over the concrete issue of school quality and accountability. Although the meaning of education as a sector more broadly and school quality and accountability more specifically changed over time, the parties followed in step, as indicated in their high cosine similarities.

However, within groups, ideologies provided fertile ground for the production of contradictions by permitting each party to recombine high-level institutions in their framing of social mechanisms. Ideologies permitted contradictions to take hold within groups by allowing the parties to align in meaning while enrolling and situating either different institutions or different aspects of the same institutions within their actor-problem-response frames. In this vein, our analysis demonstrates that contradictions can exhibit qualitative differences in form and quantitative differences in degree. Whereas we observed similarities in degree of contradiction between parties, we observed differences in the form that contradictions take.

Part of the explanation behind the difference between our propositions and our analysis has to do with an important distinction between contradictions and other forms of contestation, such as debate, dissent, or even hypocrisy. Contradictions in the literal sense can refer to assertions that are in contrast to other assertions, as is common in expressions of politics. From an institutional theory point of view, however, contradictions require the essential feature of opposites in meaning (often as embedded in structures and processes), rather than opposition in rhetoric or action. As such, contradictions are dynamic, interdependent tensions that are observed through combinations of symbolic and material constructions that can shape and mobilize action. However, other forces can shape and mobilize action, such as routine, crisis, chance, or complexity (Jepperson, 1991; Scott, 2013).

This distinction is important because of the implicit causal roles that contradictions versus contestation play in persistence and change. Whereas much work emphasizes contradictions as resource material for change, ongoing contestation has reflected an important measure of persistence. For example, invulnerability to challenge is regarded as an important indicator of institutionalization, and is expected under conditions when a new logic has taken hold and becomes self-reproducing (Colyvas & Powell, 2006; Thornton et al., 2012). And yet, we have ample research that underscores contradiction's important role in supporting stability (Hall & Thelen, 2009; Meyer & Höllerer, 2010; Smith-Doerr, 2005; Thelen, 2004).

We observe these characteristics – contradictions as dynamic, interdependent tensions that support persistence and change – in our analysis.

By deploying a systematic quantitative and qualitative measure of contradictions, we take the logically prior step to adjudicating their effects by identifying where contradictions reside and persist independently of any inferred relationship to outcomes. This approach supports and extends several claims about the role of contradictions in institutional theory.

First, our analysis demonstrates both quantitative distinctions in degree, and qualitative distinctions in form. These reflections prompt us to articulate our propositions differently with a more bounded scope that distinguishes contradictions between and within competing collectives. Contradictions are likely to take hold internally, within collectives, under the conditions described in our propositions. Furthermore, our analysis suggests that such conditions may permit competing collectives to utilize their ideologies to move closer in meaning while still polarizing in discourse more generally or the social mechanisms they promote more specifically. In other words, they can differentiate. They can also institutionalize this differentiation in ways that permit a remarkably low level of dialectic.

Second, whereas institutional theory emphasizes persistence and change, analyses tend to privilege one over the other (Bridwell-Mitchell, 2015; Clemens & Cook, 1999). Our results demonstrate the numerous ways mechanisms of reproduction can generate occasions for persistence or change in meanings. The articulation of actors, problem situations, and responses reflected distinctive ideological frames. Incremental changes that take place within ideological frames over time can be understood as adaptation rather than profound transformation and therefore play a larger role in reproduction, rather than disrupting institutionalized arrangements (McAdam, Tarrow, & Tilly, 2008; Tilly, 2001). From an institutional theory perspective, profound change is more likely observed through the perturbation of modes of reproduction (Colyvas & Jonsson, 2011; Scott, 2013), for example, in the replacement of the authority of a particular institution in defining problems as evidenced by the silencing off of access as a central problem from the perspective of both parties.

Finally, our analysis supports recent calls for a deeper understanding of causality in sociological analysis, in particular as it relates to qualitative research (Mahoney, 2008; Small, 2013). Numerous analyses make causal claims about contradictions, others emphasize their latency, and still others identify their role in reproduction as much as change. Scant research has been able to unpack the relationship between the sources that give rise to contradictions and their patterned effects on different forms and degree of contradictions. Our approach has been to develop ways in which

contradictions can be identified, measured, and systematically operationalized in these ways. If we posit that contradictions take qualitative differences in form (rather than emphasizing the different sources that give rise to them) and quantitative differences in degree (rather than treating them as discrete), then scholarship can begin to test causal relationships that have been foundational to institutional theoretic claims. For example, a first step would be to examine the baseline proposition that greater forms or greater degrees of contradiction among those forms increase the likelihood of exerting a causal effect on change. A systematic operationalization of the outcome of contradictions opens up the possibility of multivariate methods, from inferential statistics to qualitative comparative analysis to simulation that can unpack abstract theoretical relationships or case-based observations. Only then can we develop theory that unpacks the conditions under which contradictions contribute to persistence, change, or the distributive effects of both on society.

NOTES

1. Hall and Thelen (2009) make a similar critique of theorizing in the context of change more broadly. If we are to understand institutions as continuously in flux and even turmoil, then we need theory to distinguish between changes that are consequential for social and economic efficacy and those that are merely a defining feature of institutional persistence.

2. Some argue that despite this increase in federal involvement, education remains largely a local issue. For example, scholars have used the American educational system as an example of a loosely coupled system (Meyer & Rowan, 1977), whereby schools respond to environmental pressures by making symbolic changes in structure without changes in local activities. Our study focuses less on the linkages between increasing federalization and local educational activity and more on political discourse and debate.

3. M. Yaki, personal communication, May 16, 2011.

4. We recognize the distinction between the platforms as representative of what majority legislators feel is appropriate to be represented and what the majority of legislators feel is most appealing to the voter base. However, because these factors vary over time, whereas the majority rule requirement stays consistent, we treat platforms as representative of party opinion.

5. Retrieved from www.gop.com and www.democrats.org. Accessed on May 20, 2010

6. Recent scholarship emphasizes the merits of other VSMs such as Latent Dirichlet Allocation (LDA; also known as “topic modeling”) (Mohr & Bogdanov, 2013). LSA and LDA are both dimensionality reduction techniques, but LSA uses a linear algebra technique to reduce matrix dimensions and LDA is a statistical machine learning method known as a generative probabilistic topic model. LDA

describes documents as probability distributions of topics. Topics are probability distributions over words. Describing a topic's probability distribution makes topic modeling useful for identifying latent topics that provide a sense of the text's content.

ACKNOWLEDGMENTS

We would like to thank Richard Arum, Lauren Lowenstein Bauer, Amy Binder, Fay Lomax Cook, Roger Friedland, Daniel Humphrey, Brady Jones, Stefan Kaufmann, Andrea Rorrer, James Rosenbaum, Marc Schneiberg, and James Spillane for comments and feedback on this work. We would also like to thank attendees to the Alberta Institutions Conference. Support for this research came from Northwestern University's Institute for Policy Research and the Institute of Education Sciences' Multidisciplinary Program in Education Sciences and the National Science Foundation [SES 0849036].

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APPENDIX A

Table A1. Combined Selected Words to Represent High-Level Institutions and the Issue of Educational Quality and Accountability.

Institution	Combined Words
Capitalism	Stem words: business-, capital-, compet-, cost-, econom-, employ-, market-, money-, profit-, trade-, worker-, Single words: firm, firms, goods, workforce
State	Stem words: administra-, agenc-, budget-, efficien-, federal-, law-, legal-, legisl-, plan-, program-, regulat-, state-
Democracy	Stem words: communis-, conservative-, fascis-, free-, imperial-, liberal-, participat-, partisan-, patriot-, popula-, public-, terroris-, vote-, war- Single words: democracies, democracy
Family	Stem words: child-, daughter-, famil-, father-, mother-, parent-, son-, tradition-
Religion	Stem words: agnostic-, atheist-, Bible-, bless-, Christian-, congregat-, evil-, faith-, God-, Islam-, Muslim-, pray-, religio-, Scripture-, secular-, worship-
Science	Stem words: discover-, evidenc-, expert-, hypothes-, invent-, research-, result-, scien-, statistic- Single words: data, datum
(Issue of) Educational quality and accountability	Stem words: accountab-, assess-, declin-, improve-, rigor-, score-, standard-, test- Single words: quality

Table A2. Democrat and Republican APhR Frames for the Issue of Educational Quality and Accountability in the Education Section, from First Mention-2012.

Year	Democrat			Republican		
	Actor	Problem situation	Habituated response	Actor	Problem response	Habituated response
1952	Local actors	Accountability	Allocate resources	—	—	—
1960	American youth	Access	Allocate resources	Education field Government	Education reform Civic engagement	Allocate resources Assign roles
1964	Local actors	Improving core subjects	Allocate resources	—	—	—
1968	— America	— Education quality	— Define education	America Education field	Flexible education Accountability	Review Metrics
1972	Own party Own party	Education reform Education reform	Metrics Review	American youth Education field Policy, policymakers	Education quality Education quality Achievement	Review Metrics Assign roles
1976	Own party American youth Policy, policymakers	Education quality Achievement Access	Metrics Metrics Review	Academic achievement Local actors Education field	Federal reach Federal reach Education reform	School reform Metrics Review
1980				Schools Local actors America Own party	Achievement Accountability Education quality Federal reach	Assign roles Assign roles School reform Allocate resources

Table A2. (Continued)

Year	Democrat			Republican		
	Actor	Problem situation	Habituated response	Actor	Problem response	Habituated response
1984	Education field	Education quality	Metrics	Local actors	Education reform	Review
	Education field	Achievement	School reform	Teachers	Teacher quality	Metrics
				Education field	Federal reach	Assign roles
				Education field	Educational aid	Reward
				Education field	Accountability	Reward
				Local actors	Performance testing	Metrics
				Local actors	Education quality	Review
1988	Education field	Prioritizing education	Metrics	Government	Federal reach	Reward
				Educational goals	Education reform	Metrics
				America	International competition	Support children
				Policy, policymakers	Education quality	Define entitlements
				Own party	Teacher quality	Review
1992	Education field	Accountability	Assign roles	Own party	Education reform	Metrics
	Schools	International competition	Reward	Educational goals	Accountability	Metrics
	American youth	Attrition	Metrics	America	Education reform	Metrics
				America	Civic engagement	Metrics
				Own party	Teacher quality	Metrics
	Local actors		Assign roles	Education field	Education quality	Metrics

	Schools	International competition	School reform	American youth	Education reform	Metrics
1996	Local actors	Order in the classroom	Metrics	Own party	Federal reach	Assign roles
	Local actors	Education reform	Review			
	Own party	Education quality	Define entitlements			
	Accountability	Accountability	Allocate resources	Local actors	Education reform	Support children
	Education field	Accountability	Metrics	Education field	Education reform	Assign roles
	America	Accountability	Reward	Education field	Education reform	Metrics
	Local actors	Education quality	School reform	American youth	Education quality	Support children
	High school	Education quality	Promote achievement	Teachers	Teacher quality	Audit
	Teachers	Teacher quality	Audit	Education field	Accountability	Assign roles
	America	International competition	Define education	Education field	Education quality	Define entitlements
	Education field	Achievement	Metrics	Testing	Federal reach	Audit
	American youth	Education quality	Define education	Own party	Teacher quality	Allocate resources
	American youth	Education quality	Define education	Own party	Flexible education	Promote achievement
	Education field	Accountability	Assign roles			
	Schools	Education quality	School reform			
2000	Local actors	Accountability	Define entitlement			
	Teachers	Teacher quality	Review			
	Teachers	Teacher quality	Review			

Table A2. (Continued)

Year	Democrat			Republican		
	Actor	Problem situation	Habituated response	Actor	Problem response	Habituated response
American youth	Performance testing	Performance testing	Define education			
Government	Performance testing	Performance testing	Reward			
American youth	Access	Access	Define entitlements			
Teachers	Teacher quality	Teacher quality	Reward			
Schools	Achievement	Achievement	Promote achievement			
Schools	School competition	School competition	Promote achievement			
America	School competition	School competition	School reform			
America	Education quality	Education quality	Metrics			
Education field	Education reform	Education reform	Metrics			
Own party	Education quality	Education quality	Promote achievement			
Own party	Teacher quality	Teacher quality	Allocate resources			
High school	Attrition	Attrition	Metrics	High school	Education quality	School reform
Teachers	Teacher quality	Teacher quality	Audit	Policy, policymakers	Policy	School reform
Teachers	Teacher quality	Teacher quality	Audit	Policy, policymakers	Policy	Review
Academic achievement	International competition	International competition	Promote achievement	Education field	Achievement	Allocate resources

2004	Achievement gaps	Achievement	Support children	Local actors	Achievement	Metrics
	Local actors	Education quality	Define entitlements	Local actors	Education quality	Review
	Learning	Performance testing	Metrics	Teachers	Teacher quality	Allocate resources
				Policy, policymakers	Policy	School reform
				Local actors	Accountability	Assign roles
				School choice	School competition	Metrics
				Local actors	School competition	Review
				Education field	Policy	Promote achievement
				Academic achievement	Achievement	Metrics
	America	International competition	Support children	American youth	Access	Metrics
Education field	Accountability	Assign roles	America	International competition	Support children	
Teachers	Accountability	Audit	American youth	International competition	Audit	
American youth	Accountability	Assign roles	Core subjects	Improving core subjects	Promote achievement	
2008	American youth	Policy	Metrics	Local actors	Education reform	Metrics
	Schools	Education reform	School reform	American youth	Access	Metrics
	Teachers	Teacher quality	Audit	Government	Federal reach	Audit
				American youth	Access	Metrics
				Academic achievement	Achievement	Metrics

Table A2. (Continued)

Year	Democrat			Republican		
	Actor	Problem situation	Habituated response	Actor	Problem response	Habituated response
	American youth	International competition	Define entitlements	America	International competition	Review
	American youth	International competition	Promote achievement	America	International competition	Metrics
	American youth	International competition	Metrics	America	International competition	Assign roles
	Local actors	Flexible education	Metrics	Academic achievement	Achievement	Allocate resources
	Teachers	Education quality	Assign roles	Educational goals	Education reform	Review
	Teachers	Teacher quality	Metrics	Educational goals	Education reform	Metrics
	Teachers	Teacher quality	Review	Educational goals	Education reform	School reform
	Learning	Education quality	Allocate resources	Educational goals	Education reform	Review
				Educational goals	Education reform	School reform
				Educational goals	Education reform	Assign roles
				Educational goals	Education reform	Assign roles
				Education field	Education reform	School reform
				Education field	Education reform	Audit
				Education field	Education reform	Reward
2012						

Education field	Education reform	Support children
Education field	Education reform	Assign roles
Education field	Education reform	Assign roles
American Youth	Achievement	Define entitlements
Teachers	Teacher quality	Review
Teachers	Teacher quality	Review
Education field	Prioritizing education	Assign roles

Note: Years in which parties have no relevant statements about educational quality and accountability are marked with a “–.”