

**Identity Realization and Organizational Forms:
Differentiation and Consolidation of Identities among Arizona's Charter Schools**

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Organizations in an emerging organizational population face an identity problem. Collectively, the organizations cannot yet rely on a coherent and stable definition of what membership in that new industry means. Individually, each organization must also establish its own distinctive identity in order to differentiate itself from competitors and secure resources. In order to explore the relationship between differentiation and the consolidation of recognizable identity element clusters, we examine the emergence of organizational form in the early years of the Arizona charter school industry. This industry is particularly interesting for scholars studying institutional processes because the legislative mandate of the new industry was for schools to experiment and provide education in an unconventional manner. Thus the legislative definition of the organizational form or template for the charter school identity was intentionally underspecified. Using inductive analysis and regression models we examine the process of identity realization occurring among charter schools and assess how the local institutional context of charter schools affected the realization process. The analyses demonstrate that new industries may come to be characterized by multiple element clusters; a single label for an organizational form may be linked to different combinations of identity elements. Our results also demonstrate that identity realization at the organization-level occurs through mimicry and differentiation processes and is facilitated by the local institutional context. In particular, the diversity of organizational resources available to industry entrepreneurs enables identity differentiation from one's peers.

All newly-founded organizations face the challenge of constructing and projecting an identity. These challenges are particularly great when young organizations belong to a novel category of organizations or to an industry which has not yet established its legitimacy. Such organizations typically lack an attentive audience and their members often do not have a shared understanding of what their new industry is or how they are meant to accomplish their objectives. In other words, organizations adopting a new label have not yet converged on a particular configuration of elements recognizable as the content of a legitimate organizational form.

Although form emergence is a critical dynamic in organizational populations and fields, this question has been understudied. As Ruef (2000: 659) argues, organizational analysis has “yet to produce a generalizable explanatory model of the development of the organizational form” despite the centrality of form emergence to a number of organizational theories (see also, Romanelli, 1991). Organizational scholars often make assumptions about the social processes underlying form legitimation (Hannan and Carroll 1992; Minkoff 1997), but there has been little empirical research on the dynamics of form emergence. Although organizational scholars have developed an extensive understanding of how a specific organizational feature diffuses or becomes institutionalized at a field or population level, we know far less about the processes whereby certain core elements of an organizational form come to be established during the early years of a new population. In this paper we examine how inter-organizational mechanisms – mimicry and differentiation - influence the content of an organizational form (i.e., the identity) during emergence. Further, we discuss how the local institutional context of a nascent form shapes the impact of those mechanisms.

To address this issue, we argue that theoretical discussions of organizational form emergence should engage the question of organizational identity. Organizational identity is a broadly used concept that, at one level, describes organizations’ self-definitions (Albert and Whetten, 1985), and at a higher level, particular categories, reference groups and taken-for-granted labels (Zuckerman 1999; Rao, Davis, and Ward, 2000; Rao, Monin, and Durand, 2004; Whetten, 2006; Hannan, Pólos, and Carroll, 2007). An actor’s identity consists of both personal and unique attributes as well as an association with larger

membership categories. Scholars invoke the identity concept as a mechanism underlying organizational and institutional change (e.g. Washington and Ventresca 2004), as the basis for strategic group formation (Peteraf and Shanley, 1997), as a component of institutional logics (Thornton and Ocasio, 1999), and as a reference for the formation of organizational culture (e.g. Barney and Stewart, 2000). Relevant to our topic, scholars have argued that new organizational forms coalesce around common identity features, which become the perceptual focus of their audiences (McKendrick and Carroll, 2001; McKendrick, Jaffee, Carroll, and Khessina, 2003; Hannan, Pólos, and Carroll, 2007).

As Whetten (2006: 220) rightly contends, the concept of organizational identity has been widely adopted and, in the process, stretched beyond recognition. His response is to urge a return to a “central, enduring, and distinctive” definition focused on organizational members’ understandings of “Who are we as an organization?”¹ Yet for all the virtues of a well-defined concept, the identity crisis of the identity concept reflects the commonsense understanding that identity is constituted at multiple levels: an individual’s (or organization’s) understanding of his or her self (“Who am I?”), the identity attributed to an individual (or organization) by others, and the categorical structures or labels that are culturally available for use in answers to these identity questions. Thus the impetus for stretching the identity concept lies in part with this chain of associations, linking self-understandings to categorical identities that are embedded in relational networks or fields (King and Whetten 2008). The location of identity at multiple levels, suggests that we ought to pay more attention to the link between organizational form and identity (Hsu and Hannan, 2005). Thus, in this paper we take the position that how organizations formulate their identities is a key, yet understudied, process underlying form emergence.

This paper looks at how organizations use combinations of elements to create identities within the constraints imposed by understandings of what that form is meant to be and how organizations with their categorical identity are meant to behave. We call this process *identity realization*. We draw on institutional and organizational identity theories to explain identity realization in a new industry.

¹ To this “ideational” component, Whetten adds definitional and phenomenological dimensions, the latter linked to the identity work done by members in response to “profound organizational experiences”.

Institutional theory provides a framework for exploring those factors that contribute to the consolidation of identity characteristics associated with a particular category (Greenwood and Hinings, 1993; Lounsbury and Glynn, 2001; Mohr and Guerra-Pearson, forthcoming). To be seen as a legitimate type of organization, new organizations must strive to look like other organizations of that type. Organizational identity theory, on the other hand, sheds light on the ways in which individual organizations establish difference and manage ambiguity in their social environments through self-definition (e.g. Corley and Gioia, 2004). Organizations not only seek to be similar (for the purpose of attaining legitimacy), but they also strive to be unique in some way in order to enhance their reputation or align with a potential constituency or resource stream (Albert and Whetten, 1985; King and Whetten, 2008).

We might assume that because categories bring order to social forms by imposing boundaries and promoting internal isomorphism (Lamont and Molnar, 2002; Lounsbury and Rao, 2004), organizations using a new form would converge on a particular set of identity elements. Among actors sharing the same categorical identity “[a] coherent pattern of action and meaning develops without any single actor intentionally striving for coherence and conformism” (Sahlin-Andersson, 1996: 74). But convergence among organizations sharing the same categorical identity may be impeded by the contrasting need to differentiate from peers in pursuit of competitive advantages (Porac et al. 1995). No matter how legitimate an organization may appear on the surface, in the absence of distinguishing qualities the organization will fail to find its own unique audience. As Deephouse (1999, 147) states, organizations strive to “be as different as legitimately possible.” Thus, creators of a new identity face the collective question of “what are the central identity characteristics of organizations like us?” and the organization-level question of “what makes my organization different from others in our reference group?” These questions become particularly problematic during the founding of a new industry (Ruef, 2000; Clegg et al., 2007).

Organizations trying to realize a new identity in a new industry must establish recognizable features that all organizations of that type can draw upon for legitimacy, and they engage in organization-level editing of templates in order to distinguish their own organization from the rest of the field (Sahlin-

Andersson, 1996) or to resist existing templates (Schneiberg, 2002). These cross-level processes together account for the determination of the identity content of new organizational forms.

We explore the terrain of organizational identity emergence by looking at the founding years of one particular form – the charter school. Charter schools represent an important “found experiment” in organizational transformation. Primary and secondary education has long been at the core of the American regime of social provision (Flora and Heidenheimer, 1981) and has been a key example of institutional isomorphism (Meyer and Rowan, 1977; Scott and Meyer, 1994). The adoption of state-level charter school legislation in the 1990s offered a threat to this institutionalized field. The policy change was a mandate to “do things differently!” Because much of the national variation in the number and character of charter schools can be explained by differences in state-level legislation, we examine the state with the greatest number of charter schools (as of 2001) in order to isolate organizational processes. In Arizona, also the state with the most permissive legislation in the early years of this reform wave, the category was markedly free of content with respect to what these schools should do, what practices should be followed, or what programs should be offered. Legislation provided public funds to a variety of organizations – public, non-profit, for-profit, and existing private schools – that were freed from most regulations with the exception of civil rights, health and safety, and testing requirements. Consequently, Arizona charter schools initially inhabited a “high leniency category” that imposed few identity constraints (Pontikes, working paper). In the early years of the field, charter school entrepreneurs continually faced the question of “what is a charter school supposed to look like?” Given this major deregulation of publicly-funded education and new opportunities for competition, how did identity take shape under conditions of organizational experimentation?

We conduct two analyses to assess the realization of a charter school identity. First, we use stochastic blockmodels to inductively identify elements shared by schools adopting the charter school identity. This analysis allows us to examine variation in how schools use identity elements over time and to identify major demarcations in the ways that schools differentiated themselves. Second, we use regression analysis to explain variation in adherence to a particular cluster of identity elements.

We demonstrate that as organizations strive for uniqueness, they draw upon identity elements, organizational repertoires, and templates previously made available to organizers in their local context (e.g. Rao, Monin and Durand, 2002). Thus, forming a new organizational identity depends on what other organizations around them are doing and on the availability of differentiation-enhancing resources. Variation in the availability of institutional resources constrains differentiation and leads to certain collective patterns in kinds of identity elements used by schools. Thus, instead of seeing mass convergence on the same kinds of elements, as might be predicted by current accounts of form emergence, the process of identity realization leads to structured differentiation or clusters of convergence on similar identity elements. We also find that identity realization is highly path dependent. The initial conditions of a founding organization are imprinted on its identity (Stinchcombe, 1965; Johnson, 2007). The organization tends to augment its identity over time by selectively adding or dropping elements. Thus, our research indicates that identity realization at the organizational level occurs early on – much of what an organization becomes is imprinted at founding. At the field level, however, identity realization of the organizational form continues to evolve over time as new entrants converge on emerging clusters.

Emerging Identities in the Arizona Charter School Industry

Legislative sponsors envisioned the emergence of charter schools in Arizona as a means to bring innovation and higher performance to an education system seen as stagnant and underperforming. Under the 1994 Arizona School Improvement Act, students could leave traditional public schools and enroll in a charter school run by educational entrepreneurs. Following a call for the “marketization” of public education (see Chubb and Moe 1990; Witte 2000), Arizona lawmakers hoped charter schools would introduce choice and competition to the education system (Clemens and Fry 2001).

The charter school system was designed to look and feel like a market. Schools received funds on a per student basis. Supporters believed that rewarding charter schools for providing new alternatives to students would create incentives to innovate and pressure the public school system to improve. Under the new law a charter could be granted by a school district or one of two state boards. This policy weakened

the control of local school boards and enhanced the autonomy of charter school officials. The institutional and normative authority of professional educational bodies was loosened because charter schools were not required to hire certified teachers. Lawmakers sought accountability by requiring schools to provide annual school “report cards” – posted on a government website – that contained information about the school’s mission, distinctive qualities, and performance. Standardized tests were mandated to measure the effectiveness of a school’s program. Schools were expected to compete for the available students and guaranteed funds that accompanied them. This new industry attracted diverse entrepreneurs: private schools; firms in related industries like child care, adolescent behavioral health, and adult vocational training; parents and teachers committed to specialized curricula; and social service agencies, many of which already had programs for children or youth.

Lawmakers expected charter holders to experiment and try new educational methods. Founders were given the opportunity to invent new educational forms but little direction in design. From our theoretical standpoint, the charter school category imposed few explicit identity constraints. The state charter school law provided a few clear guidelines, but for the most part, it allowed school entrepreneurs to decide which identity elements to include. While the clearest blueprint for educational provision is the traditional school, Arizona’s charter school policy specifically encouraged organizers to differentiate themselves from established public schools. In the first few years, the application form required operators to identify and describe “their innovation”; applicants were expected to explain how their program differed from offerings at regular public and charter schools in the area.

A few examples provide a sense of the heterogeneity of new school designs. The NFL YET Academy in Phoenix used sports training to teach leadership and academic skills. The Flagstaff Arts and Leadership Academy emphasized fine arts in teaching all subjects. The Center for Academic Success was an alternative learning environment where “culturally diverse,” at-risk youth could get school-to-work training. The PPEP-TEC high schools provided secondary education through multiple part-day shifts that accommodated work and family responsibilities. The Eagles Aerie School used agricultural training to teach children the love of learning and service and a “reverence for life.” These examples demonstrate the

exceptional diversity of the charter schools. The only thing many of these schools shared in common was the “charter school” label.

Based on our reading of charter school histories a pair of distinct identity clusters seemed to emerge over time. One cluster consisted of schools targeting at-risk students, offering supplementary social services for students and family members. In addition to the Center for Academic Success and PPEP-TEC (mentioned above), examples of this kind of school include ACE Charter High School and the Tucson Urban League Charter School. ACE (an acronym for Alternative Computerized Education) grew out of a program founded in 1987 by Tucson Youth Development, a 30-year-old job-training program, that in addition to providing education also assisted students in meeting their basic housing and clothing needs. The Tucson Urban League school focused on potential dropouts at all age levels. Prior to the charter school legislation, the school formed an alliance with Tucson Unified School District, taking suspended or expelled students for a base allotment of \$18 per day. Charter school legislation allowed the school to expand its services and enroll more at-risk students.

Another cluster emerged consisting of schools that advocated creative approaches to learning, like those used by NFL YET and the Flagstaff Arts and Leadership Academy. Many of these programs implemented specialized curricula that catered to a select audience that was dissatisfied with the basic education of public schools. School founders often sought to correct a perceived deficiency in the current public school curriculum. These schools loudly proclaimed the innovativeness of their curriculum design. While the focus of the first cluster is on the demographic and socioeconomic status of students admitted, the focus of the latter cluster is on the particular learning process emphasized in the school.

To assess the extent to which these clusters emerged in the population of charter schools, we did an inductive textual analysis of identity statements found in the annual school report cards posted on the Arizona Department of Education website.² Administrators craft the report cards to create public identities for their schools, broadcasting the schools’ defining practices and policies and distinguishing the schools from their peers. One of the institutional purposes of the report cards is for schools to provide

² The web address for the annual Arizona school report cards is <http://www.ade.az.gov/srcs/>.

information that demonstrates their distinctiveness and to give students and parents a basis by which to compare the quality or fit of schools. Because reports cards are mechanisms to distinguish schools from their peers, the elements contained in the documents meet Whetten's (2006: 224) standard for identity requirements as those "*central and enduring organizational attributes* [that] are most capable of satisfying an actor's identity requirement of being readily recognized by all interested parties."³ Indeed, because schools advertise these qualities as being representative of who they are as an organization, they can be seen as de facto commitments of the schools to potential students and parents. Dropping elements from report cards would incur switching costs, as doing so may alienate a school's constituencies and could potentially move a school into a new audience niche, causing confusion and a need for substantial retooling (Hsu, 2006). More generally, because the purpose of the report card is to advertise schools to their key audiences, to demonstrate distinguishing characteristics, and to hold the schools accountable, the report cards are instantiated characteristics of schools' self-definitions (King, Felin, and Whetten, 2009).

We coded elements relating to three important facets of the charter school identity: substantive theme, resources and services, and target population. *Substantive theme* is the particular kind of education a charter school espouses. There were ten coded themes: traditional academic, gifted or college, values and virtues, social justice, patriotism and citizenship, employment or vocational, learning processes, arts emphasis, science and technology emphasis, and a specific kind of curriculum (some of which were Montessori, phonics-based learning, core knowledge, etc.). *Resources and services* are the kinds of tools available to each school to assist them in education and community responsiveness. Seventeen kinds of resources emerged in our coding: computers, library, arts facilities, recreational facilities, professional services for students, social services for students, before and after care, summer and winter camps, tutoring services, employment assistance for students, full day kindergarten, preschool care, adult

³ Following Whetten's CED definition of identity, identity attributes should be temporally enduring, which of course is problematic for young organizations like those in our population. He notes, however, "that the enduring definitional standard does not stipulate that only very old organizational features will be experienced by current members as central and distinguishing features. Rather than waiting for the verdict of natural selection, organizations are capable of signaling their intent to make recent commitments endure" (2006: 225). Schools, naturally, intend that the elements portrayed in their report cards will endure, and thus, they should be viewed as *intentionally enduring* aspects of identity (King, Felin, & Whetten, 2009).

education or GED training, ESL and/or citizenship training, professional services for adults, employment services for adults, and social services for adults. Finally, *target population* captures the kinds of students that the school seeks to educate. We coded three kinds of grade levels: high school, junior high, and elementary. These were not mutually exclusive categories, as a school could serve all three levels. Charter schools could also more target specific types of students in the population – at-risk students, gifted students, ethnic identity students, and at-home students (meaning they did most of the schoolwork from their own homes but were not home-schooled) – although according to the law they must accept any student who applies insofar as space permits.

We collected report card data for the first six years of the new industry, beginning in 1996 and ending in 2001. We concluded data collection at 2001 because of major changes in educational policy that took effect in 2002, including the No Child Left Behind Act, that altered school performance incentives and may have exogenously influenced schools' identities. In February 5th of 2002 Arizona's charter school policy also began limiting the kinds of bodies that could give charters, thus reducing the variety of new schools that could enter the population. Due to these exogenous shifts in the charter school environment, we chose to only collect data through 2001.

Table 1 lists those elements in the order of their frequency as reported in the year 2001. The table reveals high variation in identity elements. The most common element (computer support and training) is found in seventy-five percent of all schools, but the next most common element (a theme emphasizing values and virtues) is only found in forty-five percent of schools.

[Insert Table 1 here]

Although it is clear that charter schools had not converged on a single set of identity elements, we expected that identity elements were correlated in specific clusters, such as the two mentioned above.

We use relational methods to assess the changing empirical structure of the charter school organizational identity (Ruef 1999). Each individual organization can be thought of as an $a_x \times a_z$ matrix, where a represents a specific element. The matrix is a blueprint of the organization, with each cell indicating an element cooccurrence (e.g. a school had both elements x and z). The structure of an identity

at the population level can be thought of as an $A_x \times A_z$ matrix (or $\sum a_x \times a_z$), where a cell in the matrix represents the total number of cooccurrences or linkages in the charter school population (e.g. the number of schools that had both elements x and z).⁴

We transformed the cooccurrence count matrix to a binary variation of the element structure that indicates whether the actual count exceeds the expected count of cooccurrences (an $\hat{A}_x \times \hat{A}_z$ matrix) in order to assess dominant patterns of cooccurrence.⁵ A cell in the matrix with a '1' value indicates that the cooccurrence of two elements is greater than expected. With the $\hat{A}_x \times \hat{A}_z$ matrix we can assess the evolution of identity structure by examining to what extent elements partition into recognizable patterns using stochastic block modeling (White, Boorman, and Breiger 1976). Stochastic blockmodels are based on probabilistic assumptions and allow the researcher to ascertain the likelihood that a given pair of elements are related to other elements in the population in the same way (Holland and Leinhardt 1981; Wang and Wong 1987). Traditionally, scholars have used blockmodels to assess positional grouping of individuals, such as in cliques (White et al., 1976). We apply the same logic to grouping of identity elements. For our purposes, a stochastic blockmodel allows us to assess if identity elements have a greater (or lesser) probability of cooccurring or being present in the same schools and, equally important, to determine which elements have a high probability of not clustering together (i.e., forming zero-blocks). We are, of course, not the first to use positional modeling to assess the content of a new organizational form, but we are the first to apply it to specifically to identity content (Ruef, 1999).

We analyze the structure of the organizational elements with the BLOCKS modeling program (Snijders and Nowicki 2001; Nowicki and Snijders 2001), which uses Gibbs sampling to estimate the probability of cooccurrence. The actual data can be compared against the Gibbs sequences to estimate probability distributions of the blocks. This stochastic approach not only allows the researcher to

⁴ In this matrix, the diagonal (or the correspondence of an element with itself) would equal the number of organizations in the population that have that particular element.

⁵ We obtain a matrix of expected values of the $E \times E$ matrix, where each cell equals the sum of the row multiplied by the sum of column divided by the total. We code each cell as 1 if the actual number of cooccurrences exceeds the expected value of the cell. In this $E \times E$ matrix, cells that are coded one have a greater than expected count of cooccurrence and cells that are coded zero have a less than expected count.

investigate the structuring of elements into blocks (or clusters of elements that cooccur with other elements in the same way), but also makes it possible to estimate the probability that any pair of elements belong to the same block or cluster. Given that the number of blocks or clusters in the data are unknown prior to running the analysis, we tried to fit the data to four possible block structures for each year (two-block, three-block, four-block, and five block structures). Using a goodness-of-fit measure, H_x , we can determine which block structure best characterizes the actual data.⁶ H_x measures the coherence of the block structure. A higher value of H_x indicates that more elements have indeterminate block positions (i.e. it is unlikely that the elements actually fit into any given cluster of elements). If H_x equals one, every pair of elements has the same probability of being present in the same block, (i.e. elements are related randomly). In the most highly structured patterns – where the probability of two elements cooccurring is strongly related to positional structure – H_x should approximate zero. Thus, an additional advantage of using stochastic block models to assess the clustering of identity elements is that it allows us to determine how the cohesiveness of identity clusters changed over time. If distinct clusters emerge in a new population, it should be evident by the level of interconnectedness of elements within a block and the lack of connectedness between blocks. Stochastic block models, compared to regular block models or other approaches, allow us to determine how cohesiveness changes over time. See Appendix A for a more complete description of stochastic blockmodeling and of the goodness-of-fit measure.

The blockmodel results are shown in Table 2. Comparing across the columns, we can see how the structure has changed across time. Looking down the rows, we compare the fits of blockmodels for any given year. The representation with the lowest H_x is the preferred model.

[Table 2 about here]

The table compares a two-block structure with a three-block structure. For all years except the last, the two-block structure has the best fit and is therefore preferred (because H_x is smaller in the two-block structure for those years). By 2001, the three-block structure has the best fit. This divergence

⁶ The stochastic blockmodeling estimation actually provides two goodness-of-fit measures, I_y and H_x , but of the two the latter is the most reliable according to Snijders and Nowicki (2001).

suggests that identity elements were splitting into distinct clusters over time. Thus, we see increasing differentiation among school identities over time.⁷ Looking at the goodness-of-fit measure for the three block structure, we see that this block improves in fit after 1999, while the two block structure loses fitness during that same time period. This tells us that over time the simple two block model is becoming less capable of summarizing the clustering of elements. We interpret this to mean that distinct clusters of identity elements emerged and that each cluster became increasingly internally patterned or coherent over time.⁸ This provides evidence for identity differentiation among charter schools.

Table 3 shows the probabilities of cooccurrence for identity elements for each year of the analysis. The number in each cell of Table 3 can be interpreted as the probability that a cooccurrence exists between any two elements in the corresponding blocks for that specific year. The 1997 structure has two blocks that have a high probability of cooccurrence within blocks (.70 and .79) and a moderate probability of cooccurrence between blocks (.44). The second block is the most internally coherent, where the probability that any two elements in the second block being present in the same organization is .79. One can see that after 1998, however, the probability of elements fitting in the two block structure declines. This gradual loosening of identity elements supports the story told in Table 1 that the two-block model is capturing less variance in element cooccurrence over time.

As indicated in Table 1, by 2001 the three-block structure has the best fit. The first block of 2001 consists of elements that have the same likelihood of cooccurrence with elements in every block, a kind of all-purpose tool-kit of identity elements. The elements of block 1 are just as likely to cooccur with elements in the second and third blocks as they are likely to cooccur together. The first block, then, is a cluster of largely unstructured elements that are used *with the same likelihood by any school in the*

⁷ We also looked at the H_x statistic for four block structures but did not include those results in this paper. The four block structure never fit as well as the two block or three block structures.

⁸ It is worth noting that the population grows each year. Given the small number of charter schools in 1996, a significant number of new charter schools founded in 1997 greatly affected the diversity in the organizational form. In fact, many of the elements were simply absent in the form in 1996 and were not introduced until 1997. This trend of diversification continues over time, although the number of new foundings appears to increase over time. Between 1996 and 1997, there were 53 new foundings. Between 2000 and 2001, 85 charter schools entered the population

population. Thus, it would be inaccurate to describe this block as a distinct identity cluster, but rather this is a group of elements that is equally distributed across all schools in the population.

The elements in the second and third blocks in 2001 have a low probability of cooccurrence between blocks but have a high probability of cooccurrence within the same block. The third block is especially internally coherent. The probability that elements in the third block cooccur in the same block is .96. This indicates a high degree of cohesion among elements found in block three and indicates they were used by the same kinds of schools. Together these findings indicate that a single distinctive and coherent identity did not emerge during the first six years of the Arizona charter school population. Instead, two distinct clusters of identity elements began to take shape by 2001 (as indicated by the blocks 2 and 3 in Table 3), with another set of elements emerging that were used equally by schools in the two clusters (as indicated by block 1).

[Table 3 about here]

Looking at the content of the blocks allows us to describe the two distinct identity clusters. The most coherent cluster (found in the third block of 2001) consists of programs and services that were aimed at helping students and families with personal needs. We label this the “family and social programs”, or FSP, identity cluster. It consists of schools like PPEP-TEC and ACE Charter High School. This block contains three kinds of special services for students (professional, social, and employment/vocational), three services for non-student adults (professional, employment, and social), employment/vocational theme, at-risk student target group, and ethnic identity target group. The clustering of these nine elements makes intuitive sense, representing an attempt by entrepreneurs to target the needs of students and their families not usually addressed by public schools. The cluster also reflects the role played by many social service nonprofits in forming charter schools, bringing social work models to public schooling. Many of these programs are also linked to discrete streams of federal as well as philanthropic funding and state funds that were specifically diverted to charter schools to establish at-risk programs (Reid 1996). Although we do not have data to address this question directly, it is plausible that funding sources may have affected at the least the initial choice to include FSP elements.

The element in the other identity cluster (found in the second block in 2001) are very specific curriculum programs (i.e. arts program) or young-child related service (full-day kindergarten). Elementary grades are also found in this cluster. The presence of the at-home student target group, creative learning process theme, and arts-related services lead us to think that this cluster contains identity elements oriented towards creative and alternative ways of learning. We refer to it as the CAL (creative and alternative learning) identity cluster. It consists of schools like NFL-YET and the Flagstaff Arts and Leadership Academy. The elements in this cluster supplement traditional education with creative and alternative teaching methods.

The first block, consisting of elements with an equal probability of cooccurrence in any school, does not constitute a unique identity cluster. Rather than being an identity cluster, this set of elements is a grab-bag of resources and identity claims that adds diversity to the industry by linking with other elements in various combinations. Many of these elements are basic services, like computer services and libraries. Some of them are very general themes that many schools would embrace, like the back-to-basics and gifted/college education emphasis. To confirm that the blockmodel results were not artifacts of this particular form of data analysis, we also used multi-dimensional scaling to map the identity elements. This analysis yielded very similar results and thus validated our inference that the identity space of charter schools diverged into two distinct clusters. Appendix B shows the map created using multi-dimensional scaling and explains the results.

[Figure 1 about here]

Figure 1 displays the charter school identity hierarchically, as it evolved by 2001. The top level includes mandates prescribed for charter schools under the Arizona law. These legislative mandates, while universal, are broad and can be thought of as *institutional requirements* for belonging to the charter school category. The second level contains the first block of elements that were used to embellish the basic charter school identity (i.e., the grab-bag cluster). The third level consists of elements belonging to either of the evolved identity clusters – the FSP or CAL identity cluster. We argue that these two clusters facilitated the ability of charter schools to distinguish themselves as unique educational providers.

In sum, by 2001 Arizona charter schools had differentiated in a patterned way. Schools seeking to distinguish themselves from peers were increasingly drawn to two distinct clusters. This suggests that despite the existence of a stable identity category, identity elements in the school population did not necessarily become isomorphic. Rather than consolidating, Arizona charter schools developed two distinct clusters of identity elements. In the following section, we examine the local processes of organization-level differentiation that yielded these two identity clusters.

The Dynamics of Identity Realization

In order to develop a more complete theory of identity realization – or the process whereby organizations make concrete their organization-level identity - we need to understand why some organizations choose to adopt elements that associate them with a particular identity cluster. We need an organizational explanation for the emergence of structured differentiation in the charter school population. Focusing on the realization of the FSP identity allows us to empirically explore these theoretical issues.

Given that the FSP cluster became the most coherent of the emerging clusters, we focus our attention on why certain schools chose to adopt these elements. In addition, because of the salience of equity and social justice issues in the public debate about charter schools, the FSP cluster represents an emerging identity with growing attachment to the charter school category. While also emerging as a new identity, the CAL cluster has not been as prominent in public discussion. For those reasons, we limit the analysis of this paper to identity realization within the FSP cluster. We note, however, that we performed the same analyses predicting the number of CAL elements in schools and found very similar results. Therefore, the findings that follow appear to be general and not limited to the realization of FSP identities alone.

Explanations for identity realization

In this section we theorize why schools were likely to include FSP elements in their identity statements. A theory of identity realization must be grounded in an understanding of the institutional conditions of that identity (Lounsbury and Rao, 2004). Creating novel identities necessarily involves the

borrowing and transposition of existing identities (Ruef 2000; McKendrick et al., 2003), piecing together existing organizational repertoires, and focusing one's identity so as to distinguish the organization from surrounding organizational forms (i.e. making a charter school different from traditional public schools) and from peers that belong to the same social category (Sahlin-Andersson, 1996). Identity realization, then, is affected by the joint processes of adopting established characteristics that endow the new organizations with legitimacy, while adding differentiating characteristics that increase the resonance and sharpness of the actor's identity (Baron, 2004). Choosing FSP elements could be the result of mimicry of peers who have already chosen those identity elements or efforts to distinguish one's organization from peers who have chosen another set of identity elements. We consider both possibilities.

Previous research supports the idea that entrepreneurs use extant forms when creating new organizational designs (Stark 1996; Rao and Singh 1999; Schneiberg, 2007). Organizations often adopt the same identity characteristics as their peers when seeking legitimacy. In contrast, when differentiating, organizations adopt identity characteristics that are less common among their peer organizations. Organizations may obviously try to do some of both. They may adopt certain features that have become associated with a particular identity in order to legitimate themselves as part of that identity category, but they may also adopt dissimilar characteristics in order to distinguish the organization (Deepphouse, 1999). Given that identity differentiation is embedded in particular institutional contexts, what kinds of conditions facilitate the ability of new organizations to distinguish themselves from peers?

Because differentiating is an uncertain and costly strategy, we should expect that organizations are more likely to have differentiated identities when supportive institutional resources are available. Although developing a new organizational identity has been described as a process where organizations "must learn new roles without having old models" (Aldrich and Fiol 1994: 648), presumably entrepreneurs are still inspired by the present landscape of templates and schemas in their efforts to innovate. Available cultural schemas provide them with blueprints that might be replicated or transposed in innovative ways (Clemens, 1997; Rao and Singh, 1999; Schneiberg, 2007). The availability of diverse repertoires also indicates a sufficient level of legitimacy for differentiation. Organizations operating in

environments with a great deal of conformity may be implicitly discouraged from implementing alternative ways of organizing. When cultural and material resources are abundant, on the other hand, entrepreneurs are freer to differentiate and design creative organizational structures. Lacking these resources, however, entrepreneurs have to search their immediate environment for those elements. Instead of attempting to differentiate, organizations with fewer resources may try to find shortcuts in organizational creation. These organizations end up reproducing the structures of their peers. They mimic rather than differentiate (Haunschild and Beckman, 1998).

Following this logic, differentiation will be most common when organizations have sufficient institutional resources that enable them to innovate and depart from the norm. The heterogeneity of existing identity templates and organizational repertoires should moderate the ability of new organizations to differentiate. In the presence of institutional resource heterogeneity, actors simply have more options to draw upon when differentiating from their competitors. These settings constitute “contexts of collective creativity” (Armstrong 2002). Organizations in environments with few institutional resources, on the other hand, may reproduce the most predominant model because they have fewer alternative ideas and uncommitted resources with which to work. We develop two propositions based on this discussion. First, organizations are likely to adopt identity elements similar to their competitors when few alternative organizational models are available; and second, organizations are likely to differentiate (i.e. adopt dissimilar elements) when alternative organizational models already exist.

For this particular case, the school district is an important contextual source of identity variation.⁹ Organizations that have access to a diverse toolkit of identity elements in their local school district should be more capable of creating unique identities that deviate from their peers. We should, then, expect that charter schools are more likely to differentiate from their peers when established in school districts rich in alternative organizational models and templates. In the charter school population, the availability of

⁹ Although the great majority of charter schools are not linked to a specific school district, districts represent the context within which charter schools must establish an identity in competition with regular public schools. In Arizona, districts -- both urban and rural -- tend to cover large areas, so we use GIS procedures to locate a school’s relevant district. The geographical district provides a broad measure of the socio-economic and demographic context for organizational founding and identity formation.

existing models and templates is indicated by the presence of “magnet schools” – special public schools with supplemental programs and services designed to enhance the student’s educational experience. Magnet high schools were created as a result of state desegregation orders. These orders created a secondary levy tax that was used to fund innovative high schools with advanced placement courses not offered at other schools, specialized curricula involving arts and other themes, or special school-to-career programs in occupations of a more technical nature. Officials design magnet schools to attract non-minority students to schools that would otherwise have a disproportionate number of minority students. Importantly, the magnet school provided a model of public choice for parents and other educational entrepreneurs and gave them experience with organizing innovative programs prior to the passage of the charter school law. Exposure to public choice through magnet schools increased the availability of alternative organizational models to potential educational entrepreneurs and parents of charter school students. Past experience with public choice also legitimated the enterprise of experimental educational forms. Thus, charter schools founded in districts with existing magnet schools had prior exposure to a diversity of models and templates with which the entrepreneurs could construct new identities. Absent this legitimacy for choice, however, schools may have been likely to conform to the patterns most common among their peer schools.

In sum, schools should seek to adopt similar identity elements as their district peers for legitimacy purposes but this effect is moderated by the presence of magnet schools. Magnet schools provide potential entrepreneurs with alternative organizational models and institutional resources with which to create differentiated charter schools. Thus, we expect the following:

Hypothesis 1: In districts where FSP elements are common among peers, a charter school will be more likely to have FSP elements.

Hypothesis 2: Magnet school presence will negatively moderate the positive association of FSP elements among peer schools in a district and the focal school having FSP elements.

Data and methods

In this analysis we explain panel-level variation in the number of FSP elements present in each charter school. Rather than arguing that schools must adopt a specific number of elements to secure membership in an identity cluster, we maintain that schools fluctuate along a continuum of inclusion in a cluster. The more FSP elements, the closer the school approximates the emerging FSP identity cluster.¹⁰ This conceptualization captures the organization-level variation in an emerging categorical identity, like the FSP identity cluster. The dependent variable of the analysis is the number of FSP elements present in each charter school (tallied annually). The variable ranges in value from zero to eight. No organization ever had all nine elements at the same time.

Independent and control variables

To test hypothesis 1 we include a variable measuring the number of FSP elements (other than those belonging to the focal school) in the focal school's district. To test hypothesis 2 we include an interaction effect calculated with the product of the first variable and a dummy variable indicating the presence of an existing magnet school in the focal school's district. We also include the main effect of magnet school presence in the model. We expect that the first variable should have a positive effect on the number of FSP elements in any given charter school. The interaction effect, however, should have a negative effect – as the presence of magnet schools should make it easier for charter schools to differentiate from schools that have already begun adopting FSP identity elements. In order to reduce multicollinearity, we mean-centered the FSP count variable before calculating the interaction effect (following the advice of Jaccard et al. 1990).

We also control for a number of internal organizational and school district characteristics. Certain schools may simply have more capability of implementing more comprehensive services. From this perspective, schools with more FSP elements are expanding their services as a result of internal growth and organizational capacity. We include six measures controlling for internal organizational characteristics. The first variable measures the total number of other identity elements adopted by the

¹⁰ Because we believe that schools fluctuate in their adherence to a particular identity cluster, our conception of organizational identity is fuzzy and is therefore similar to the “grade of membership” conception of identity espoused by Hannan et al. (2007).

school (i.e., total number of elements in the report card minus the number of FSP elements). This variable accounts for the proliferation of elements over time and the complexity of the school's identity. Two variables indicate the presence of student and family influence on charter school policies and programs. The first variable is the number of parents on the charter school council, and the second is the number of students on the council. It is possible that charter schools with more student and parent input are more likely to include services and programs to help unmet family needs (like employment and social service programs). The third variable is total student enrollment in the school. The adoption of FSP elements may be a function of school size. Larger schools, which receive a greater absolute amount of state funding, may have more capacity to accommodate students and parents with special services. Small schools may lack the internal structure necessary to run advanced programs. The fourth organizational variable is a dummy indicating that a charter school serves high school students. FSP elements may be associated with support services for high school students and the parents of high school students. For example, a student employment program is always associated with older students. We also include a dummy variable indicating whether a school was affiliated with a larger group, either through common ownership or through the use of a shared educational system (as was the case with the PPEP-TEC schools).

Environmental differences associated with varying levels of demand may predict which schools are most likely to use FSP elements. We include three variables measuring local characteristics of the school district. The first is a measure of the density of minorities living in the school district. This is calculated as the number of minorities over age eighteen per square mile. We expected that because ethnic identity target group was one of the elements, minority populations might be one of the primary customer bases for schools with FSP elements and that this group might create demand for this particular identity cluster. The second variable is a measure of the density of enrolled public students in the district, calculated as the number of students attending the public school system per square mile. High student density may be indicative of many kinds of market demands, including dissatisfaction with overcrowded schools and urban conditions (which are often associated with poorer public school service). On the supply side, a large number of students also indicates a larger base of potential charter school

entrepreneurs. In other words, where there are more students, there are also more parents who might be willing to participate in charter school innovation. The third variable is a measure of the percentage of all public students enrolled in a free or reduced-fee lunch program. This is often used as a measure for presence of poverty or lower-income conditions among students. We expect that in districts where there is more poverty, students and their families will have more need for special services.

Table 4 shows the descriptive statistics of the independent variables and a correlation matrix.

[Table 4 about here]

Statistical model

We use negative binomial regression in the analysis. Negative binomial regression is a variant of Poisson regression that is used when the somewhat stringent assumptions of Poisson regression do not hold (see Long 1997). Poisson regression operates under the assumption of equidispersion – that the conditional variance of y equals the conditional mean of y . In many distributions however the conditional variance of y exceeds the mean. This more conservative approach assures that our estimates will be more efficient, and we will not wrongly reject a null hypothesis due to downward-biased standard errors. Though not reported in our models, in all cases NBR was more appropriate because the alpha term was significant, indicating overdispersion.

Because we have observations over several years, we include time dummy variables to control for any unmeasured time varying heterogeneity. Time invariant heterogeneity within observations may also cause biased results by leading to correlation of error terms within schools over time (Stimson 1985). We use a random effects model to take into account unmeasured heterogeneity. Note that we also ran models using district-level random effects (not shown here), and these models confirmed the robustness of our findings.

Results

Table 5 shows the results for negative binomial regression models estimating the annual number of FSP elements in each charter school. In model 1 we include only the control variables. Absent any of the

predicted effects, only two of the control variables are statistically significant. A charter school is much more likely to have FSP elements if it offers courses for high school students, suggesting that one reason schools adopt these characteristics is to meet the demands of older students. The percentage of students enrolled in free lunch programs also has a significant positive effect, indicating that schools are more likely to have FSP elements if they serve a student body of a lower economic status.

Model 2 shows our tests of hypothesis 1 and 2. The district FSP count variable is positive, which confirms hypothesis 1 that schools are more likely to have FSP elements if other schools in their district also have those elements. The interaction effect of the district FSP count and magnet school presence is negative and statistically significant. This finding confirms our hypothesis 2 that schools in districts with magnet schools are less likely to have FSP elements if there are other schools with FSP elements in that same district. On the other hand, schools are more likely to have FSP elements in the presence of other schools with FSP elements and in the absence of magnet schools.

[Table 5 about here]

The findings of model 2 may simply indicate that schools are simply trying to distinguish themselves from competitors that do not have FSP elements. To assess the robustness of our findings, in model 3 we include two additional explanatory variables – the number of schools that have zero FSP elements and an interaction effect of this variable with the presence of magnet schools. If schools truly seek to differentiate themselves from their competitors in districts rich in organizational models, we should expect these variables to have the opposite effects. That is, schools will be more likely to adopt FSP elements in magnet school districts if there are many other schools in the district that have none of the FSP identity elements. The results from this regression model confirm these expectations. The interaction effect is positive, suggesting that the presence of magnet schools also facilitates differentiation from competitors that lack FSP elements.¹¹

¹¹ We also ran a regression model including the number of CAL elements in the district as an independent variable. It is possible that FSP schools were simply trying to differentiate themselves from CAL schools in the district; however, the coefficient was not statistically significant. Note, however, that including CAL elements in the

Model 3, then, suggests that FSP identity realization tended to occur either as the result of conformity with existing schools in districts with low institutional resource heterogeneity or as the result of a differentiation strategy in school districts where FSP elements were not common and institutional resources were more plentiful (as indicated by the presence of a magnet school). Schools are freer to differentiate (i.e. not adopt the same elements as other charter schools in their district) when alternative models of school organization exist locally and when public school choice has previously been legitimated. Schools in districts where alternative models are not available are much more likely to assimilate to the emerging identity standards of their locale. The results confirm the idea that peer mimicry is more common in contexts where institutional resource heterogeneity is low.

An alternative explanation for these effects is that districts with magnet schools exhibit more competition, and competition drives charter schools to differentiate (Deepphouse, 1999). In order to control for the effects of competition, in model 4 we include a variable measuring the extent to which charter schools competed for potential students. The variable is a ratio - the number of charter schools in a district divided by the enrollment density in a district. We also included an interaction effect of the competition variable with the district FSP count. If competition is driving differentiation among charter schools, a school should be more likely to adopt FSP elements if competition is high and few other schools in the district have adopted FSP elements. The results in model 4 confirm that competition positively influences schools to adopt FSP elements, but the interaction effect of competition and FSP elements is not statistically significant. More importantly, including the effect of competition does not change our finding that organizational heterogeneity induces identity differentiation. This effect is independent of the influence of competition on differentiation.

Also of concern are the mechanisms underlying identity realization. Schools may adapt their identities over time or they may choose a particular identity at founding and not deviate significantly thereafter. To assess the extent to which identity realization occurs at founding, we run a regression

regression model did not significantly change the results substantively and so we did not include this model in the paper.

model predicting the number of FSP elements during the founding year of the school. Model 5 in Table 5 shows these results. We see a similar pattern of identity realization during the founding year as we saw for schools in all years. This result suggests that the contextual effects on identity realization are prominent during the founding process. Model 6 in Table 5 shows the results for the years following the founding year. Note that in this model we control for the lagged number of FSP elements possessed by a school. The findings in this model are dramatically different from those in the founding year model. District FSP count and the FSP * magnet school interaction effect are no longer statistically significant. Instead most of the variance is explained by the lagged FSP count, suggesting that after the founding year a school's identity elements are path dependent and less contextually determined. Identity elements are imprinted at the time of founding (Stinchcombe, 1965; Johnson, 2007).

One interpretation of our findings is that when schools adopt FSP elements at founding, it may be difficult to change that identity if it is central to who they are as an organization (Albert and Whetten, 1985). Further adding or dropping of FSP elements may be possible but elaboration of identity elements is likely a function of the centrality of the FSP cluster to a particular organization's identity. The more central FSP is to its identity, the more likely the school would be to add and the less likely they would be to drop these elements. To assess this possibility, we ran additional regression models predicting whether 1) schools added FSP elements in the years after founding or 2) subsequently dropped FSP elements. We included in the regression models a measure of FSP centrality. The centrality variable is operationalized as the percentage of all identity elements possessed by a school that are FSP elements. Thus, the higher the percentage, the more central is FSP to the organization's identity. Table 6 shows the results of these regressions. Model 7 indicates that schools were slightly more likely to add FSP elements to their identities if the FSP identity was already central. We note that this effect is net of the lagged number of FSP elements. Model 8 indicates that schools were much less likely to drop FSP elements if the FSP identity was central. Interestingly, the presence of other FSP elements in the district does not encourage schools to add FSP elements; in fact, it encourages schools to drop FSP elements. The latter finding is the opposite of what occurs during the founding year, when schools are more likely to adopt FSP elements if

other peer schools have already done so. Thus, when considered together, the results indicate that the FSP identity is largely decided and shaped by contextual effects during the founding year. In subsequent years schools may elaborate the identity somewhat, adding more FSP elements if the identity is central and dropping FSP elements if it is less central to their identity. Adaptation after founding typically augments the chosen identity of the school. Dramatic identity change is rare.

[Table 6 about here]

The findings support the idea that the realization of the FSP identity was a product of both convergence and differentiation processes. Schools had a propensity to assimilate the identity elements of their peers within the same district; however, the presence of magnet schools increased the ability of schools to differentiate by adopting elements less common in their local peer context. Identity choice appears to occur primarily during the founding year of an organization, and after that schools continued to realize the FSP identity through elaboration of their central identity elements. If FSP was central to a school's identity, it continued to add elements that supported this identity. If a school had FSP elements but FSP was not central, the school was more likely to drop FSP elements. The models then support the idea that the development of distinct identity clusters in the Arizona charter school industry occurred through a process of identity realization at founding that was itself grounded in the local competitive and institutional context.¹²

Conclusion

Contrary to some theoretical expectations (e.g. McKendrick et al. 2003), organizational form emergence need not yield a single coherent identity. A new industry category may denote legitimacy at a nominal level, especially if the industry was created by legislative mandate as in the case of Arizona charter schools, but there is potential for a great deal of variation in the underlying identity elements. What it

¹² In analyses not shown here, we did not find that charter school identity, competitive differentiation or assimilation had any effects on organizational mortality. It could very well be that we do not have a sufficiently long time span in which to assess the effects of mortality rates on the mix of charter schools; however, increased mortality rates of schools with particular identity elements would undoubtedly change the clustering of identities at the population level.

means to be an organization belonging to a new organizational form may vary. The resulting variance in the realized identities in a new organizational population reflects both the need of organizations to differentiate from competitors and the availability of institutional resources in their local context.

In this paper we provide the groundwork for developing a theory of organizational identity realization. Based on observation and inductive analysis, we learned that a new industry category does not necessarily produce identity convergence. At the same time, organizations in a new industry do not necessarily differentiate wildly from their peers; rather, organizations tend to distinguish themselves in predictable ways – conforming to existing identity patterns when institutional resources are low and differentiating from peers when institutional resources are more freely available. In new industries, organizational entrepreneurs must learn new ways of doing things, experiment, and develop organizational identities that give the organization a degree of distinctiveness. At the same time, identity realization is significantly grounded in the conditions that organizations face during the founding process (Stinchcombe, 1965). Charter schools chose their central identity elements at founding and most of the subsequent alterations augmented and elaborated that chosen identity. The result of this local process of identity realization is a global process of form emergence that may yield several distinct clusters of identity within the same nominal category. Thus, the process of identity realization does not solely occur at the individual organization-level but also occurs through the process of structural differentiation at the form level.

Our findings provide one explanation for the diversity exhibited in organizational identities during the formation process. Rather than looking solely at the organizational level for explanation, we should consider the institutional context of newly forming identities (Aldrich and Fiol, 1994; Schneiberg, 2002). Identity emergence is a highly relational process as it involves awareness of and comparisons to nearby peer organizations. Identity realization is contingent upon the environment, and in particular, it is strongly affected by the existing heterogeneity in the environment. Organizations in environments that are rich in alternative models are less likely to conform to their peers because they have access to more diverse identity templates and because identity differentiation has legitimacy. Organizations in these

environments may be freer to deviate from external identity constraints and create innovative designs. The availability of alternative means of organizing, then, may be one of the keys to understanding the development or restriction of diversity in an organizational population (Clemens, 1997; Schneiberg, 2007). Thus, the study also provides a contribution to scholarship focusing on the institutional foundations of organizational heterogeneity (Schneiberg, 2002; Dacin, Goodstein, and Scott, 2002; Sine, Haveman, and Tolbert, 2003; Schneiberg and Clemens, 2006).

The study asks us to consider the institutional conditions of identity. Not all contexts are as favorable to identity distinctiveness or identity coherence. While many scholars consider distinguishing elements to be central to the definition of identity (e.g. Whetten, 2006), we might be better to ask, under what conditions are organizations more capable of creating distinctive identities? The institutional environment may enable, but sometimes constrains, the ability of an organization to distinguish itself from peers. Similarly, the study speaks to scholars who maintain that identity coherence – or clustering around a single set of organizational features – is a necessary condition of form emergence (e.g., McKendrick et al., 2003). The better question to ask may be, under what conditions will a new organizational form produce a single set of shared identity elements?

Our study suggests that in answering these questions scholars ought to pay careful attention to the initial conditions of founding (e.g., the prevalence of identities in the local context, the availability of alternative organizational models, and the funding streams that give incentives to organize in unique ways). By showing that peers have a strong impact during the founding year of an organization, the study contributes to our understanding of how founding conditions exert “an indelible and enduring influence on how enterprises evolve” (Baron et al. 1999: 528; Boeker 1988). The combined effects of peers’ identities and institutional resources are imprinted in the organization’s identity, creating the blueprint of central and enduring identity elements that become institutionalized in the organization.¹³ In subsequent years organizations augment their most central identity characteristics by adding complementary elements (or dropping unrelated elements). In Selznick’s (1957) terms, organizations make commitments at

¹³ We thank an anonymous reviewer for pointing out this insight.

founding that subsequently shape the evolution of the organization's character. The ongoing augmentation of identity may explain why it took several years for the FSP elements to coalesce as a distinct cluster. Identity realization appears to be a path dependent process that at the individual level is influenced by imprinting effects at founding and at the field level leads to structured differentiation into distinct identity clusters.

Broadly speaking, this study speaks to questions about the generation, maintenance, and stability of social categories and boundaries (Lamont and Molnár, 2002; Hannan, Polos, and Carroll, 2007). Categories and boundaries are thought to induce conformity and order. Categories are often associated with evaluative criteria that make commensuration possible so that units within that category can be easily compared and valued (Zuckerman, 1999; Lounsbury and Rao, 2004; Hsu, 2006). Yet, when a new category is created, the associated evaluative criteria are not yet clearly defined. We lack an understanding of how internal norms and standards emerge in association with an industry or organizational category. Our study speaks to this theoretical problem, suggesting that the process is emergent and highly contingent on local conditions. But perhaps more importantly, our study indicates that new evaluative criteria may emerge unevenly in new industries. Multiple standards may arise. These diverse standards, observed here as distinct identity clusters, may eventually crystallize into competing institutional logics or may coexist peacefully within the same form as alternative modes of organizing (Thornton and Ocasio, 2008). We suggest that many new industries have the potential for instability and institutional change due to the multiplicity of logics and identities (Friedland and Alford, 1991; Clemens and Cook, 1999). Although up until now the Arizona charter school industry has not witnessed a splintering of categorical identities (Lounsbury and Rao, 2004), the presence of distinct identity clusters certainly points to the potential for this sort of categorical change.

One of the purposes of this paper is to prepare the groundwork for a theory of identity realization and form emergence. It seems appropriate, then, to conclude with a few suggestions for future research. Given the importance of the initial conditions of identity choice, scholars ought to investigate this process further. Our historical examples of schools using FSP elements suggest that funding streams may have

determined some schools' abilities to differentiate in this way. The links between funding, institutional resources, and identity choices during the founding process ought to be a subject of future research. Although we did not have detailed data on founder characteristics to assess the question in this paper, future scholarship might also look at the link between founder characteristics and founding conditions on identity realization. Scholars interested in identity realization might also compare this process across different categories of organizations. Although our study explored identity realization in different geographical areas, the institutional context may also vary by the type of category. Some new industry categories may be clearly defined while others are more ambiguous. Other categories may be a spin-off of an existing category (such as the charter school industry), while other categories may be more novel in nature. Future studies might examine how the features of new categories affect the identity realization process. Future research might also examine the flip-side of the process: how does identity realization affect the stability or transformation of existing categories? Research of this sort would require examining organizational populations over a longer time span, given that categorical shift does not frequently occur. But given the importance of categories to establishing organizational identity, identity scholars should be concerned with the consequences of identity heterogeneity (or the lack thereof) on the stability of categories and on other aspects of the institutional environment.

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Table 1: Frequency of Organizational Elements of Arizona Charter Schools in 2001

Organizational Elements	Frequency	Percentage
<i>Substantive theme</i>		
Values and virtues	133	45
Learning processes	106	36
Montessori or other curriculum	103	35
Back-to-basics	98	33
Gifted/college-oriented	92	31
Patriotism/citizenship	56	19
Science/technology	55	18
Social justice	52	17
Vocational	47	16
Arts	26	8
<i>Resources and services</i>		
Computer support and training	222	74
Library/media	114	38
Social services for students	103	35
Before/after care	103	35
Recreation facilities	98	33
Social services for adults	93	31
GED/adult education	72	24
Full day kindergarten	68	23
Arts facilities	52	17
Employment services for students	51	17
Pre-school/childcare	50	17
Tutoring services	45	15
Health/legal services for students	35	12
Employment services for adults	24	8
Summer/winter camp	22	7
Health/legal services for adults	12	4
ESL/citizenship classes	8	3
<i>Target population</i>		
High school	161	54
Elementary	158	53
Junior high	134	45
At-risk	56	19
Academic/gifted	29	10
Ethnic identity	18	6
At-home students	2	1
Total schools	298	

Table 2: Goodness-of-Fit Measures for Blockmodels over Time

Year	1996	1997	1998	1999	2000	2001
Two-Block Structure						
H _x	.01	.15	.14	.32	.28	.40
Three-Block Structure						
H _x	.25	.27	.45	.68	.44	.39

Table 3: Posterior Probabilities of Element Cooccurrence in Blocks

1996			1997			
	1	2		1	2	
1	.60	.02	1	.70	.44	
2	.02	.02	2	.44	.79	
1998			1999			
	1	2		1	2	
1	.78	.41	1	.67	.39	
2	.41	.72	2	.39	.68	
2000			2001			
	1	2		1	2	3
1	.77	.37	1	.53	.55	.52
2	.37	.64	2	.55	.71	.20
			3	.52	.20	.96

Table 4: Descriptive statistics and correlations of independent variables

Variables	Mean	SD	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
1 District FSP count†	0	33.98	1																			
2 Magnet school district	.44	.50	.66	1																		
3 FSP count * magnet†	10.96	27.17	.96	.77	1																	
4 # zero count FSP†	0	9.02	.48	.54	.54	1																
5 # zero * magnet†	2.27	7.51	.60	.71	.66	.92	1															
6 District competition†	0	.82	-.09	.07	-.10	.14	.18	1														
7 FSP count *competition	-2.98	24.08	-.45	-.16	-.45	-.01	-.02	.87	1													
8 Other identity elements	16.11	6.31	.02	.11	-.01	.08	.08	.05	.04	1												
9 Parents on council	2.66	4.55	-.12	-.03	-.10	.08	.03	.10	.13	.19	1											
10 Students on council	.82	2.92	-.06	-.07	-.06	-.11	-.09	-.00	.01	.00	.18	1										
11 Enrollment	153.6	151.9	-.001	.04	.02	.10	.06	-.10	-.07	.17	.25	-.03	1									
12 High school students	.57	.49	.01	-.06	.006	-.08	-.05	-.08	-.10	-.28	-.09	.03	.04	1								
13 Group affiliation	.41	.49	-.06	-.04	-.04	-.06	-.05	.15	.14	-.23	-.06	-.02	-.24	-.01	1							
14 Lagged FSP count	1.5	1.76	.15	-.06	.01	-.25	-.12	.05	-.04	.18	-.04	.17	-.03	.25	-.10	1						
15 Minority density	.61	.83	.29	.37	.33	-.04	.06	-.30	-.36	.08	-.10	-.03	.16	-.02	-.17	-.00	1					
16 Enrollment density	263.1	262.7	.26	.41	.31	.16	.18	-.41	-.43	.13	-.04	-.06	.20	-.08	-.15	-.11	.89	1				
17 % free lunch	50.31	24.86	.31	.17	.29	-.25	-.08	-.02	-.17	-.19	-.15	.05	-.04	.11	-.02	.26	.54	.25	1			
18 1998	.14	.34	-.04	.03	-.03	-.09	-.06	.04	.07	-.09	.004	-.02	-.04	.02	.03	-.01	-.05	-.04	-.01	1		
19 1999	.18	.38	-.005	.02	-.01	-.02	-.02	.04	.06	-.08	.05	-.03	-.03	.02	.02	.01	-.04	-.05	.007	-.11	1	
20 2000	.25	.43	-.03	-.03	-.04	-.02	-.02	.003	-.005	-.01	-.01	-.03	.02	-.003	-.06	.03	.04	.03	.005	-.23	-.23	1
21 2001	.35	.48	.09	-.00	.08	.11	.08	-.06	-.09	.14	-.05	.06	.03	-.005	-.01	-.02	.03	.03	.004	-.30	-.30	-.62

†These variables are either mean-centered or were calculated using at least one mean-centered variable.

Table 5: NBR Coefficients of Independent Variables on FSP Element Count^f

<i>Variables</i>	<i>Model 1</i>	<i>Model 2</i>	<i>Model 3</i>	<i>Model 4</i>	<i>Model 5</i>		<i>Model 6</i>	
					<i>Founding year</i>	<i>Non-founding years</i>		
Constant	14.51 (242.58)	15.89 (213.76)	16.42 (319.17)	14.74 (221.70)	-1.22 (.83)		7.41 (231.63)	
District FSP count		.02** (.007)	.02** (.007)	.02* (.007)		.03* (.001)		-.007 (.004)
Magnet school district		.26 (.23)	-.003 (.26)	.37 (.25)		.33 (.28)		.09 (.16)
FSP count * magnet school		-.02** (.007)	-.02** (.007)	-.02* (.01)		-.02* (.01)		.005 (.004)
# of zero FSP count schools			-.08** (.02)					
Zero count * magnet school district			.07* (.02)					
District competition				.30* (.19)				
FSP count * competition				-.01 (.007)				
<i>Organizational characteristics</i>								
Other identity elements	.06*** (.01)	.05*** (.01)	.05*** (.01)	.05*** (.01)	.07*** (.02)		.02** (.01)	
Parents on council	-.03 (.02)	-.03 (.02)	-.03 (.02)	-.03 (.02)	-.05 (.04)		-.01 (.01)	
Students on council	.02 (.02)	.02 (.02)	.02 (.02)	.01 (.02)	.005 (.03)		.02 (.02)	
Enrollment	-.0004 (.0005)	-.0003 (.0004)	-.0003 (.0004)	-.0003 (.0004)	-.001 (.0008)		-.0004 (.0003)	
High school students	.86*** (.13)	.86*** (.13)	.83*** (.13)	.85*** (.13)	1.14*** (.18)		.18* (.09)	
Group affiliation	.21 (.13)	.23 (.13)	.22 (.13)	.22 (.13)	.47** (.17)		.18* (.09)	
Lagged FSP count							.41*** (.02)	
<i>District characteristics</i>								
Minority density	.02 (.28)	.18 (.28)	-.06 (.28)	.19 (.28)	.15 (.38)		.05 (.17)	
Enrollment density	-.0009 (.0008)	-.001 (.0008)	-.0005 (.0008)	-.0003 (.0004)	-.002 (.001)		-.0003 (.0005)	
% enrolled in free lunch program	.02*** (.004)	.01** (.004)	.01** (.004)	.01* (.004)	.01* (.006)		.004 (.002)	
<i>Time dummies</i>								
1998	.26 (.34)	.19 (.34)	.18 (.34)	.26 (.35)	.29 (.48)		.12 (.59)	
1999	.18 (.34)	.08 (.35)	.10 (.34)	.15 (.35)	.45 (.89)		.05 (.59)	
2000	.25 (.33)	.17 (.34)	.21 (.34)	.24 (.34)	.07 (.46)		.21 (.59)	
2001	.24 (.33)	.15 (.34)	.21 (.34)	.22 (.34)	.18 (.45)		.17 (.58)	
Log-likelihood	-867.96	-863.22	-858.31	-861.55	-236.99		-535.32	
N	630	630	630	630	182		438	

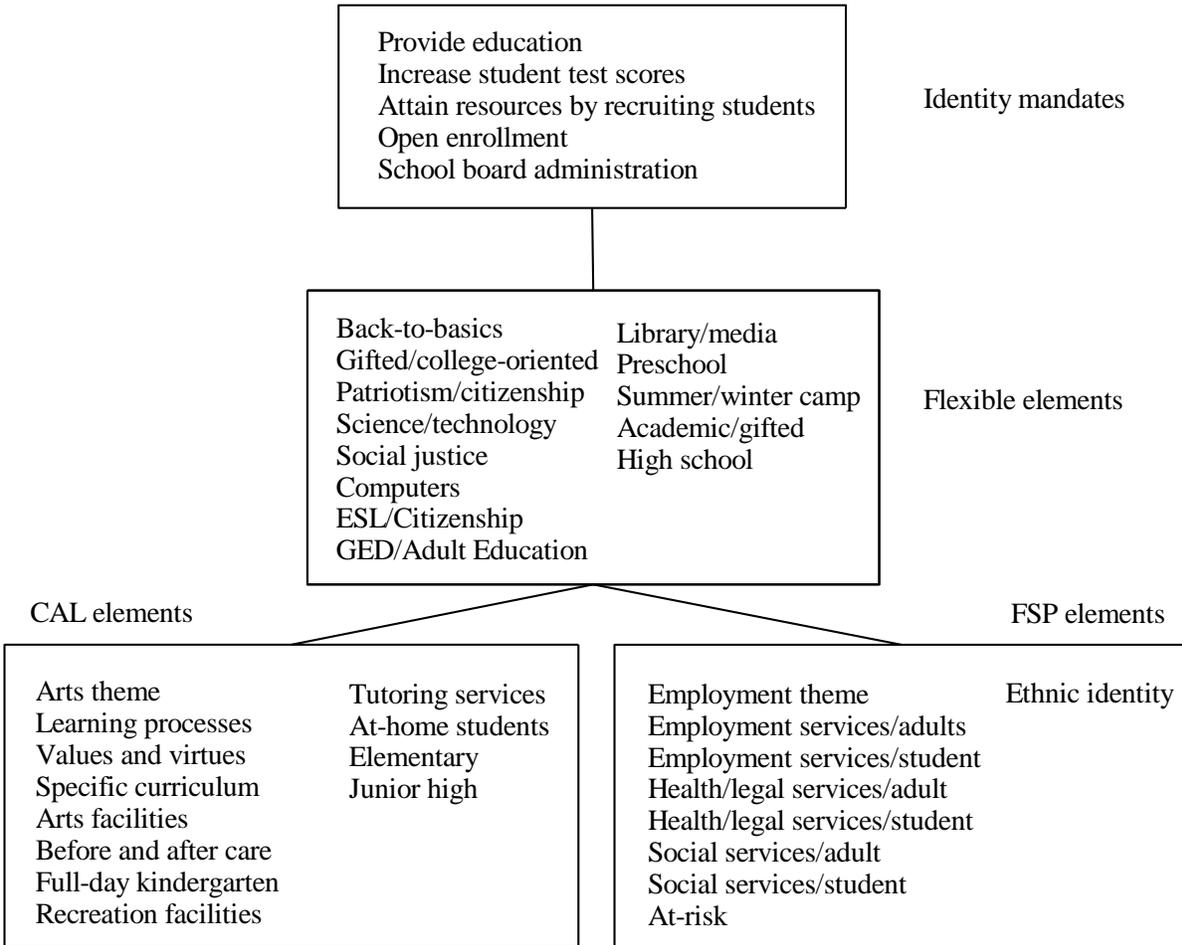
^f***p<.001 **p<.01 *p<.05 †p<.10 (two-tailed tests); coefficients in models 1-4 & 6 include multiple observations for many schools and were estimated using random-effects.

Table 6: Logistic regression of Adding and Dropping FSP Attributes in Years after Founding^f

<i>Variables</i>	<i>Model 7 Adding FSP Attributes</i>	<i>Model 8 Dropping FSP Attributes</i>
Constant	-1.83 (1.44)	.92 (5.22)
FSP attributes as % of all attributes	.006 [†] (.003)	-3.95*** (.90)
District FSP count	-.01 [†] (.007)	-.19* (.09)
Magnet school district	-.16 (.50)	3.45 (3.34)
<i>Organizational characteristics</i>		
Lagged FSP attribute count	-.39* (.16)	18.30*** (3.91)
Parents on council	-.07 (.06)	-.97 [†] (.52)
Students on council	.06 (.08)	1.25* (.53)
Enrollment	-.001 (.001)	.002 (.01)
High school students	1.08* (.43)	7.92* (3.22)
<i>District characteristics</i>		
Minority density	-1.49* (.72)	-5.09 (5.56)
Enrollment density	.003 (.002)	.01 (.02)
% enrolled in free lunch program	.04** (.01)	.07 (.08)
<i>Time dummies</i>		
1998	-1.62 (1.45)	-18.11** (6.07)
1999	-1.57 (1.44)	-20.46** (6.62)
2000	-1.24 (1.37)	-22.17** (6.70)
2001	-1.48 (1.40)	-21.26** (6.54)
Log-likelihood	-146.58	-45.19
N	410	410

^f***p<.001 **p<.01 *p<.05 †p<.10 (two-tailed tests); coefficients estimated using random-effects.

Figure 1: Map of Charter School Organizational Form



APPENDIX A: EXPLANATION OF STOCHASTIC BLOCKMODELING

Blockmodeling is a relational modeling approach that locates nodes in a network (persons, organizations, elements, etc.) according to structural equivalence. Nodes in the same block are related to other nodes in the network in the same ways. The stochastic blockmodeling approach assumes that observable relationships are generated by a probabilistic mechanism. Thus, the goal of stochastic blockmodeling is to uncover the latent blocks that underlie the actual data. Nodes in the same block have the same probability distribution of relations to other nodes. This is an ideal way to model organizational element clustering given the tendency for individual organizations to deviate from ideal forms. Organizational element distributions are probabilistic rather than determined.

Stochastic blockmodels can be generated using Tom Snijders BLOCKS software program (Snijders and Nowicki 2001), which is available at Snijder's personal website - <http://stat.gamma.rug.nl/snijders/socnet.htm>. BLOCKS allows the researcher to identify a network structure without any *a priori* knowledge of the relations between actors. It is a purely inductive approach. The program uses a kind of Monte Carlo simulation called Gibbs sampling. In this approach random samples of elements taken from the actual data are fitted to a pre-specified number of blocks. The program iterates the random data until they fit the specified block structure. Each random sampling is called a Gibbs sequence. The user specifies the number of sequences used to generate posterior probabilities, which indicate how well the actual data fit the given structure. We specified 10,000 Gibbs sequence for each structure.

H_x is the goodness-of-fit measure used to assess which block structure best represents the actual data and also to assess changes in coherence over time. It is calculated in the following equation:

$$H_x = \frac{4}{n(n-1)} \sum_{i \neq j} \pi_{ij}(1 - \pi_{ij})$$

where π_{ij} is the probability that elements i and j are in the same block and n equals the number of elements in the population of organizations.

