### The Mutations of Professional Responsibility:

### Toward Collaborative Community

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Draft chapter for

**Evolving Professional Responsibility in Diverse Communities**, Springer (forthcoming)

Draft: Sept 30, 2012

**Abstract**

Professionals are distinctive insofar as in their primary activities they are oriented by what Max Weber called “value-rationality” – by their responsibility to ultimate values such as education or health or justice. But it is difficult to organize large-scale collectivities in such a way as to sustain value-rationality. Historically, the professions relied on guild-like traditionalistic structures of status and loyalty to ensure their cohesion and solidarity; but this often came at the expense of those ultimate values. Under performance and accountability pressures to overcome this shortfall, many professional occupations have been shifting from the guild form towards bureaucratic and market forms of organization, thereby replacing traditionalistic ties with instrumental-rationality. But these latter organizational forms afford professionals little relief from growing pressure to improve efficiency, quality and responsiveness. We argue that over the past few decades, a cluster of innovative organizing techniques have arisen that allow professionals to respond more effectively to these pressures by giving value-rationality professional responsibility much-needed organizational robustness and resilience. Deploying these new techniques, numerous professional collectivities have begun to reshaping themselves into what we call “collaborative communities.” We illustrate the distinctive features of value-rational collaborative community with examples drawn from prior research on medicine and we show some of its promise with results from a survey in a public school district.

# Introduction

There is a widespread sense that the professions are at a crossroads. At least in the US and UK, the professions have for centuries stood apart from, and resistant to, the rationalizing forces of markets and bureaucracy, claiming to be driven not by self-interest but by a responsibility to higher social purposes, and asserting on that basis the right to autonomous occupational control. In the former, values aspect, the professions aspired to what Max Weber called a “value-rational” orientation ([Weber, 1978](#_ENREF_62)); however, in the latter, organizational aspect, they resembled traditionalistic craft guilds. The gap between aspiration and organization was often all too obvious in the professions’ disdain for efficiency and external accountability.

Over the past half-century, a tide of instrumental rationalization has swept over both established professions and other occupations attempting to assert professional status. This rationalization has been driven by many factors, prominent among them being that aspiration-performance shortfall. Today, even the last bastions of professionalism are under siege: lawyers, physicians, teachers – the most ancient and strongly institutionalized of the professions – are under intense pressure to redefine their professional responsibilities to conform to bureaucratic standards and market competition. Organizationally, the result has been to reduce many professionals to the status of experts in bureaucratic hierarchies or to small capitalist business owners. In terms of efficiency and external accountability, the results have been distressingly mediocre. Where efficiency has improved, it has often been at the expense of quality; and external accountability has been limited to the imposition of blunt and often counter-productive bureaucratic controls and financial incentives.

Our thesis can be stated succinctly. Neither a return to the guild form of professionalism nor further bureaucratization or marketization will enable professionals to meet the challenges we and they face today. The professions should resist these pressures. However, to resist successfully, the professions need to redeem their claims to higher responsibility, and this redemption requires the invention of a new organizational form that supports more adequately the professions’ espoused value-rationality. This organizational form must enable a wider scope of collaboration within and across professions and a deeper dialogue with stakeholders outside the professions.

Our research suggests that recent decades have seen the emergence of a cluster of organizational innovations that allow us to see more clearly the contours of this new organizational form. We call this emergent form “collaborative community” ([Heckscher & Adler, 2006](#_ENREF_25)). These innovations buttress values and trust so as to improve teamwork both within the profession and in relations with other service providers, clients, and other stakeholders. They provide an organizational form that supports professionals’ orientation to their common responsibility. In what follows, we offer some examples from healthcare, and illustrate the impact of this form on performance with data from a school district.

# The professions: From guild to contract

Professional occupations can be characterized by three main attributes: (a) non-routine tasks requiring expertise based on both abstract knowledge and practical apprenticeship; (b) occupational monopoly over this practice jurisdiction and individual autonomy within it; and (c) legal and ethical responsibility for this practice that is typically reflected in values of service. The third of these three attributes makes professionals distinctive in their “value-rational” action orientation: their daily work is oriented by their commitment to ultimate responsibility to values such as justice, health, education ([Satow, 1975](#_ENREF_53)). Such an action orientation contrasts with traditionalistic action, which is oriented to the means of action by habit or attachment to sacred tradition; it contrasts with affectual action, which is oriented to emotional goals; and it contrasts with instrumental-rational action which is oriented to the selection of the most efficient means for reaching taken-for-granted ends.

Weber doubted that value-rationality could form the basis of robust, large-scale, purposive organization because, in his view, it lacks a feature he saw as essential to such endeavors, namely imperative command (Weber, 1978: Vol. I, pp. 271-284; 289-292).[[1]](#footnote-1) Indeed, under value-rationality, actors’ behavior is coordinated, in the first instance, only by their common rational commitment to the shared end-value, and in such a collectivity, the scope for coordination by command is very limited. It is therefore a poor instrument for implementing the will of a master. Weber saw value-rationality as effective only in small, “collegial” organizations —advisory bodies without decision-making responsibilities, and the small leadership groups at the top of large organizations ([Noble & Pym, 1970](#_ENREF_45)) — not in larger-scale organizations under pressure to make “precise, clear, and above all, rapid decisions” (Weber, 1978: Vol. I, p. 277).

In the face of this dilemma, how then have the professions organized themselves? When the professions first arose, they buttressed value-rationality with organizational structures based on traditionalism, borrowing the form of the craft guilds ([Krause, 1996](#_ENREF_29); [Light & Levine, 1988](#_ENREF_35)). The professions thus long resembled guilds — largely traditionalistic, *Gemeinschaft*-type collectivities, reliant on fixed status hierarchies, and oriented to handing on distinctive traditions of expertise that were closely held against outsiders. Trust here was based on adherence to common traditions and embedded in rigid status structures. *Professional responsibility here meant loyalty – loyalty to one’s professional peers, superiors, and traditions.*

The limitations of this form of professionalism are well known. Relative to collectivities based on the self-interested, contractual logic of markets or bureaucracies, traditionalistic guilds were slow to develop and diffuse radically new technologies; they were not effective in coordinating larger-scale undertakings requiring a complex division of labor; and they were resistant to meddling outsiders and foreign ideas. It is hardly surprising that pressures toward efficiency, quality, and accountability have driven many professions away from the guild form. These pressures are external, coming from clients, courts, and regulators ([Scott, Ruef, Mendel, & Caronna, 2000](#_ENREF_54)); they are internal, due to competition from other practitioners ([Gaynor & Haas-Wilson., 1999](#_ENREF_16)); and they are inter-professional, as categories jostle over jurisdictions ([Bechky, 2003](#_ENREF_5); [Halpern, 1992](#_ENREF_22); [Zetka, 2001](#_ENREF_65)).

As a result, over the course of the last century, the organization of the established professions – most notably, medicine, law, and education — shifted towards the instrumental rationality of market and bureaucracy. And as new expert occupations arose — architects, scientists, engineering, accounting, social work, etc. — their claims to professional status encountered deep resistance. (Layton ([1971](#_ENREF_33)) for example traces the failed attempt of engineers to develop a professional status in the face of forces driving them to subordination in corporate hierarchies.) The guild ethos did not entirely disappear, but it was increasingly subordinated to the demands of market competition and bureaucratic controls. By the end of the twentieth century, the independent, self-employed, “liberal” professions represented but one small part of the spectrum of expert occupations, the others taking the form of organizational professions (e.g. managers, salaried engineers, technicians, teachers), and experts for hire (e.g. consultants, project engineers, computer analysts) ([Brint, 1994](#_ENREF_7); [Reed, 1996](#_ENREF_50)). Across this entire spectrum, *professional responsibility increasingly meant conformance to formal bureaucratic standards and to market norms of self-interest.*

# The professions at a critical juncture

The trend towards instrumental-rationality and to organizational forms based on contractual self-interest is incompatible with professionals’ responsibility to higher social purposes. Tensions have mounted accordingly. When insurance companies attempt to control medical treatment decisions through denials of payment authorization, and when they restrict the range of medications physicians can prescribe ([Himmelstein, Hellander, & Woolhandler, 2001](#_ENREF_26); [Warren, Weitz, & Kulis, 1998](#_ENREF_61)), we have seen physician resistance and public revulsion. A wave of hospital conversions to for-profit status have increased profits, but has also led to reduced staffing and salary rates, to increased mortality rates ([Picone, 2002](#_ENREF_49)), and to public anger. When teachers are subjected to standards imposed by U.S. government in the *No Child Left Behind* Act and other reform efforts, teachers and communities often fight back. Law firms have experienced growing turbulence as initiatives for growth, more aggressive marketing, and more individualized performance-based financial rewards have torn the fabric of collegial relations; many firms, even very old and prestigious ones, have split apart or failed.

Moreover, this drive for instrumental rationalization has not addressed a mounting concern that the professions are not only inefficient but also unresponsive to their stakeholders: neither marketization nor bureaucratization has done much to overcome the inward focus of the guild form. Although professions have been primarily legitimated by their claim to serve societal and client needs ([Parsons, 1939](#_ENREF_47)), clients and social institutions have been increasingly dissatisfied with the results. Patient deference to professional judgment has declined over several decades, a trend accelerated by the rise of the easily available information on the internet ([Fintor, 1991](#_ENREF_13); [Landzelius, 2006](#_ENREF_32)). There are strong demands for information on physician performance and greater accountability to the public. Meanwhile, the personal relation between physician and patient has weakened: medical care, as Kuhlman observe ([Kuhlmann, 2006](#_ENREF_30)) observes, is increasingly “disembodied,” founded on information rather than personal trust. These developments have contributed to the rise of malpractice suits and courts’ gradual acceptance of challenges to medical custom ([Peters Jr, 2000](#_ENREF_48)). In university education, a range of constituencies are now questioning the value of research and education. Students (and their parents) have grown less willing to defer to professorial judgment and have become more assertive in demanding justifications for grades and requirements. Student ratings of professors have become popular and influential, undermining the professoriate’s claim of autonomy and guardianship of standards. At primary and secondary levels there has been a substantial “invasion” of teachers’ curricular autonomy by both community school boards and by governmental bodies.

One response by professionals to these mounting tensions has been a hardening of the defense of traditional autonomy. While professions have always insisted on independence, this was in the past a positive claim based on special knowledge that was used for the good of society. However, in the last fifty years this insistance has become increasingly a defensive claim, a wall against the claims made by other actors.

# The emerging contours of collaborative community: Examples from healthcare

We argue that the cause of the current crisis in professionalism is not that professions have left behind the guild model, nor that they have been insufficiently subordinated to market and bureaucracy, but rather that they have not yet developed an organizational form that can effectively buttress their value-rational raison d’être. We argue, further, and against Weber, that this is not an insurmountable problem, although it is certainly a difficult one. In our research, we have documented the emergence over recent decades of a family of organizing techniques that can meet this challenge and overcome Weber’s skepticism. We think of these techniques as elements of a new organizational form for large-scale, value-rational collectivities — a form we call “collaborative community.” In the collaborative community, *professional responsibility means a commitment to a higher social purpose and to the organizational systems that supports collaboration in its pursuit.*

In the following paragraphs, we sketch this new type along four dimensions — norms, values, authority, and economics — using examples from healtchare.[[2]](#footnote-2)

**Norms.** Collaborative communities develop norms that support horizontal coordination of interdependent work processes in a complex division of labor. Traditionalistic guild community relies on what Durkheim ([1997](#_ENREF_9)) calls a mechanical division of labor—pooled, in J. D. Thompson’s ([1967](#_ENREF_58)) terminology—where specialization is limited and coordination relies on norms of inherited practice and status. More complex interdependence can be managed in two ways. One is instrumental-rational and contractual, relying on market prices and bureaucratic authority to ensure coordination. This has been developed to a high level in modern industry, but it is not effective in managing complex knowledge interactions requiring high levels of expertise and trust, and it is precisely these characteristics that are distinctive to the work of professionals. Collaborative community, like bureaucracy, supports interdependence with explicit procedures, but whereas under instrumental-rational, contractual norms these procedures are defined by hierarchical superiors and used by them to monitor performance and drive improvement, under value-rational, collaborative norms the procedures are designed collaboratively and used by peers to monitor each other and to work together to improve performance. In collaborative healthcare organizations, clinical guidelines and pathways may take this form (Maccoby 2006).

In contrast to the traditionalistic model of the medical staff described by White ([1997](#_ENREF_63)), consider the portrait painted by the Institute of Medicine (IOM) of a new health system for the 21st century ([Institute of Medicine, 2001](#_ENREF_28)). Where the traditional (and traditionalistic) care delivery model is one in which “individual physicians craft solutions for individual patients” (p. 124), in the model advocated by the IOM the delivery of services is coordinated across practices, settings, and patient conditions over time. Information technology is used as the basic building block for making systems work, tracking performance, and increasing learning. Practices use measures and information about outcomes and information technology to refine continually advanced engineering principles and to improve their care processes (p. 125). Collaborative learning is the heart of the new model. Its procedures support a focus on patient service; utilization management is a responsibility shared by all physicians; information systems support both individual physician decision-making and collective discussion of individual performance differences; strong leaders develop relationships of trust and communicate a vision ([Maccoby, 1999](#_ENREF_39)). Healthcare organizations such as Intermountain Health Care and the Mayo Clinic exemplify aspects of the emerging model, although neither of them appears to have implemented all its features ([Bohmer, Edmondson, & Feldman, 2002](#_ENREF_6); [Maccoby, 1999](#_ENREF_39); [Maccoby, 2006](#_ENREF_38)). Robinson ([1999](#_ENREF_52)) describes the mutation under way in these terms:

The now passing guild of autonomous physician practices and informal referral networks offered only a cost increasing form of service competition and impeded clinical cooperation among fragmented community caregivers. The joining of physicians in medical groups, either multispecialty clinics or IPAs, opens possibilities for informal consultation, evidence-based accountability, and a new professional culture of peer review. (p. 234)

**Values.** The new model explicitly invokes values of collaborative interdependence (e.g. [Silversin & Kornacki, 2000a](#_ENREF_55); [Silversin & Kornacki, 2000b](#_ENREF_56)). And this interdependence reaches beyond the boundaries of the profession to embrace interdependence with peers from other professions: surgeons, for example, need to develop more comprehensive collaboration with other physicians (such as anesthesiologists), with lower-status colleagues (nurses, clerical, and janitorial staff), with clients (patients), with administrators (hospitals management), with organized stakeholders (unions, patient rights groups), and with regulators (JCAHO, government). Collaboration circumscribed by guild insularity will not satisfy the demands currently weighing on the professions. A more outward-looking, civic kind of professionalism is needed to embody more fully value-rationality ([Hargreaves, 2000](#_ENREF_24); [Sullivan, 2005](#_ENREF_57)).

Rather than defining and maintaining values through internal processes and traditions, collaborative professions are open to dialogue about their purposes with these outside stakeholders. The professions are thus both *value-*rational*,* because they are oriented to ends that represent higher values beyond self-interest, and they are value*-rational* insofar as those ends are subject to rational discussion based on public standards of validity ([Habermas, 1992](#_ENREF_20)). This contrasts to the attitude of most professions today: under pressure from outside stakeholders, and seeking to protect themselves against the alien logic of market and bureaucracy, professions often insist that only they can judge the validity of their work, and that they cannot discuss their value-standards with outsiders. This is one reason that professions have become isolated and de-legitimized by the outside world on which they nevertheless rely for funding and regulatory approval.

A growing number of hospitals are drawing physicians into collaboration with nurses and other hospital staff to improve cost-effectiveness and quality, often bringing together previously siloed departments in the process ([e.g. Gittell et al., 2000](#_ENREF_19)). Bate ([2000](#_ENREF_4)) describes the new form of organization that emerged at one United Kingdom National Health Service hospital as a “network community,” characterized by constructive diversity rather than unity, by transdisciplinary forms of working rather than “tribalism.” Hagen ([2005](#_ENREF_21)) describes how Riverside Methodist hospital in Ohio created “clinical operating councils” that brought cross-functional and cross-status groups together to examine improvement opportunities in broad service lines such as primary care, heart, and women’s health. Other hospitals have found that such committees are an ideal vehicle for developing and tracking the implementation of clinical pathways ([Adler et al., 2003](#_ENREF_3); [Gittell, 2002](#_ENREF_18)). Here, guidelines are not imposed on physicians by insurance companies aiming ruthlessly to cut cost; instead, they are developed collaboratively by teams of doctors, nurses, and technical and administrative staff aiming simultaneously to improve quality and reduce cost. In these new structures, physicians are drawn out of their fiefdoms and beyond their traditional identity as “captain of my ship.” Intermountain Health Care ([Bohmer et al., 2002](#_ENREF_6)) and San Diego Children’s Hospital ([March, 2003](#_ENREF_40)) exemplify such collaborative approaches to pathway development. Beyond the individual organization, “communities of practice” are increasingly being used in lieu of conventional continuing medical education to accelerate learning and diffusion ([Endsley, Kirkegaard, & Linares, 2005](#_ENREF_10); [Frankford, Patterson, & Konrad, 2000](#_ENREF_14); [Parboosingh, 2002](#_ENREF_46)). Quality improvement collaboratives have attracted considerable attention as a way to bring together a broader community around specific improvement goals ([Massound et al., 2006](#_ENREF_41); [Mills & Weeks, 2004](#_ENREF_43)). The most ambitious of these brings together a variety of stakeholders from different hospitals, medical groups, health plans, and employers to learn from each other (Solberg 2005).

**Authority structure.** Collaborative communities equip themselves with distinctive authority structures that enable coordination across multiple dimensions simultaneously. In some of the larger medical groups, governing boards have thus evolving away from simple partnership meetings toward more complex, articulated structures capable of exercising effective group leadership ([Epstein, Fitzpatrick, & Bard, 2004](#_ENREF_11)).

The second aspect of this mutation in authority structures is the changing role of staff functions — from external control to collaboration. Whereas instrumental-rational bureaucracies use staff functions to formulate and enforce standards backed by the authority of top management, staff at collaborative organizations like Mayo and Intermountain Healthcare work with the line organization to capture and disseminate practice-based knowledge. Where Freidson ([1984](#_ENREF_15)) feared that staff functions would fragment the profession and erode the autonomy of the practitioner, the experience of hospitals such as these suggests that strong collaboration between staff and line organizations is a crucial success factor ([Kwon, 2008](#_ENREF_31); [Tucker & Edmondson, 2003](#_ENREF_59)). As a result of this reconfigured staff-line relationship, best practices such as disease management programs, quality-oriented practice pattern information, and financial bonuses for quality are far more common in large, integrated medical groups such as Permanente than in the cottage industry of private practitioners in small offices ([Rittenhouse, Grumbach, O’Neil, Dower, & Bindman, 2004](#_ENREF_51)).

**Economic structure.** Collaborative communities equip themselves to confront the economic implications of their decisions — implications for professional competencies and incentives — without renouncing their commitments to social values. As concerns competencies, broader interdependencies necessitate training to equip professionals with the requisite technical, social, economic, and managerial skills. As concerns incentives, whereas guild doctors focused exclusively on patient outcomes and refused to engage any discussion about fees or value-for-money, and whereas contractual relations orient professionals in the opposite direction, collaborative healthcare organizations encourage physicians to seek the best patient care while also paying attention to the optimal use of society’s resources. This dual orientation creates tensions for the professional (“dual loyalty”), but in collaborative communities professionals accept that they bear some economic responsibility to society and reject the traditionalistic professional strategy of jurisdictional economic monopoly. This means physicians’ compensation models evolve towards a more complex mix of criteria.

# Collaborative community in schools

Teaching is another illuminating case. According to Hargreaves ([1994](#_ENREF_23), [2000](#_ENREF_24)), teaching once relied on a craft type of community. Beginning in the 1960s, teaching required more advanced degrees and moved into the age of the autonomous professional. Although this brought greater status and higher salaries, it also inhibited innovation by impeding the diffusion of superior practices. By the 1990s, a new age had begun, that of the “collegial” professional. In the current period, the scope of collaboration is broadening, drawing teachers into more active civic engagement with the wider community ([Nixon, Martin, McKeown, & Ranson, 1997](#_ENREF_44)). This engagement seems emblematic of true value-rationality.

The flourishing education literature on “professional learning communities” reflects that transition away from craft and autonomous profession, but it is largely silent on what type of community has replaced them. McLaughlin and Talbert ([2001](#_ENREF_42)) point out that beyond the distinction between weak communities and strong ones, it is just as important to distinguish between two very different types of strong community — “tradition oriented” and “learning oriented.” Several other studies have sought to differentiate types of teacher community and their different effects ([Achinstein, 2002](#_ENREF_1); [Little, 1990](#_ENREF_36); [Louis & Marks, 1998](#_ENREF_37); [Wohlstetter & Griffin, 1997](#_ENREF_64)). Our typology aims to gives this critical distinction greater precision and a stronger theoretical foundation.

To test whether the value-rational, collaborative form of community helps professionals pursue their ultimate purposes, we have developed a survey instrument that aims to capture the mix of different types of community at work in any given organization. We have used it with the teachers in one school district, which allow us to test the hypothesis that more collaborative the relations within a school—among teachers, between teachers and administrators, and between administrators and unions—the better will be student outcomes.

As yet, our data are imperfect in many ways. The sample size is small — just 26 schools in our final sample. This makes it difficult to achieve statistical significance. Nevertheless, we find that the *strength of collaborative community* correlates more strongly than that of any other form of community with the *improvement* *in student performance*.

### Methods

With the cooperation of union officials in what we will call the Western School District, we launched a survey in January of the 2011-2012 school year. The district has 30 schools, of which 19 are elementary schools, five are middle schools, and five are high schools. One school is an adult school offering remedial education and career development for older students in the surrounding community .

Over the period of this study, the student body consisted of roughly 20,800 ethnically and linguistically diverse students. Roughly 46% of the student population is on reduced or free lunch, indicating considerable economic hardship in their families.

Four schools were removed from our sample: One school was an elite high school that served especially gifted students. The school was highly competitive with an extensive acceptance process. The other school represented the opposite extreme—a high school serving students with disciplinary problems, such as those with histories of violence or drug use. Given the peculiarities of the student body, we removed these two sites from our sample.  We also excluded the adult school from our sample given its non-traditional student population and because the school did not administer standardized tests. Finally, we removed an elementary school because of a poor participation on our survey. This left us with 26 and a response rate of 69%.

### Variables

**Community type** is measured with a survey instrument we have developed – see Exhibit 1. It has 20 items measuring each of our theoretically-defined dimensions of traditionalistic, contractual, and collaborative relations, as well as a type we call “fragmented” reflecting situations of generalized conflict and alienation. In the school context, “traditionalistic” is associated with the ethic of professional autonomy and independence; “contractual” is associated with structures that subject educators to administrative standardization or market competition; “collaborative” is associated with positive working relations with other teachers within a school, across schools, between teachers and administrators, and between administrators and union representatives. Individual factor scores were averaged to the school level for our statistical analyses.

-------Insert Exhibit 1 about here-------

We have partially validated it through expert surveys and through use in several other contexts. We should note that our constructs are not “reflective” ones but “formative” ones: they are derived from theory, and that theory does not predict that they would load together in either a confirmatory factor analysis, nor a fortiori an exploratory factor analysis. Our theory is best tested not by the covariance of the items but by their combined ability to predict the expected dependent variables. This instrument has been tested in several previous settings—in health care, justice systems, and businesses—and results so far have been supportive.

**Student performance** is measured by Academic Performance Index (API) Score.In California, the Academic Performance Index (API) reflects students’ performance on a variety of assessments, including the California Standards Tests (CSTs), the California Alternate Performance Assessment (CAPA), The California Modified Assessment, and, for high school students, the California High School Exit Examination (CAHSEE). State officials in California use API scores as a primary means by which they monitor and rank the relative performance of schools and school districts and publicize district and school-level scores online: (http://www.cde.ca.gov/ta/ac/ap/). API scores range from 200 to 1000. For this study, we examine the determinants of the API score from mid 2012 (the end of the 2011-2012 school year). It is important to note administrators and teachers do not know how their school performed on the API Index until late into the summer or the start of the following school year (the 2012-2013 school year, in our case). Thus, while our performance data and climate variables were obtained in the same school year, it was not possible that teachers’ knowledge of how their school performed in 2012 affected their perceptions of school climate.

**Controls.**We control for socio-economic disadvantage (SED) using the percentage of students in the school who are on reduced or free lunch in the 2011-2012 school year. Thus, higher numbers for this variable correspond with a greater percentage of socio-economically disadvantaged students in the school. We controlled for school size (the number of full time teachers employed at the site), since larger schools may have more resources on hand (e.g., more personnel to devote to student issues; more financial resources). In predicting API performance in 2012, we also controlled for the API score from the prior year (2011).

### Findings

We provide descriptive statistics in Exhibit 2 and bivariate correlations in Exhibit 4. In the year our study was carried out, school API scores ranged from 740 to 967 (Mean: 849; SD: 66), while the percentage of students in poverty ranged from 13% to 100% (Mean: 53; SD: 28). Collaborative was the best represented community type (Mean: 41), followed by Bureaucratic (Mean: 36), Traditional (Mean: 20) and Fragmented (Mean: 13). In Exhibit 3, the correlation between API score and 2011 and 2012 is positive and very strong, suggesting a high level of consistency in school performance from year to year. The percentage of students who were socioeconomically disadvantaged shows a strong, negative bivariate association with school API score. The Traditional, and Fragmented community types show strong positive associations with one another and negative associations to the Collaborative and Bureaucratic community types. The bivariate association between Collaborative and Bureaucratic community is positive but not statistically significant.

-------Insert Exhibits 2, 3 about here-------

Exhibit 4 regresses API performance against the four community types. Given a high level of multi-collinearity between baseline performance and socio-economic status, we ran models that included baseline scores and excluded socio-economic status as well as models included socio-economic status and excluded baseline scores. The models presented below include both baseline API score and socio-economic status as control variables, but the direction and significance of the coefficients were essentially the same across these different specifications. As shown in Model 1, baseline API, socio-economic status, and school size are strongly associated with API scores in expected directions and together explain roughly 96% of the variance in API. Models 2 through 5 introduce the four community type variables one-by-one. We find a weakly significant positive association between Bureaucratic community and school API score (Model 2). As illustrated in Models 3 and 4, the Fragmented and Traditional communities both show strongly significant negative associations with school API score. The Collaborative type, introduced in Model 5, shows a strongly significant positive association with API score (p < .01). When all four types of community are included in the same model (Model 6), the Traditionalistic and Collaborative ones preserve moderate explanatory power.

-------Insert Exhibit 4 about here-------

Digging further, we can examine the specific role of each of the items composing our community types. Exhibit 5 reveals that all the items composing each of the Community types have similar effects in direction and in approximate magnitude.

-------Insert Exhibit 5 about here-------

## Conclusion: collaborative community among professionals – promise and obstacles

Our survey results for teachers support the theoretical claim for the value of collaborative community in professional contexts. We should not, however, underestimate the difficulties facing the propagation of this new form of professional organization. On the one hand, the continuing ethos and structures of autonomy among the liberal professions create a powerful counterweight to any move toward the broader and denser interdependencies characteristic of collaborative community. On the other hand, the pressure of instrumental self-interest creates a powerful counterweight to any effort to prioritize higher social purposes. Leape and Berwick ([2005](#_ENREF_34)) analyze the multiple factors that explain why progress on quality in medicine has been so slow in recent years, and highlight the role of the culture of medicine and its “tenacious commitment to individual, professional autonomy” (p. 2387) as a “daunting barrier to creating the habits and beliefs that a safe culture requires” (p. 2387). Indeed, even when the appropriate formal organizational structures are in place, the new models face deep resistance:

Many physicians, however, are individualistic in orientation and do not necessarily enter group arrangements very easily or comfortably. [B]uilding physician groups is a difficult process. Most of the groups visited [in this study] are not well organized—they are groups in name only. Whatever group culture does exist is often oriented to preserving this loose-knit affiliation rather than developing a stronger organization. This culture of “autonomy,” however, is not conducive to building an organization that encourages the development of physician-system integration or care management practices. ([Gillies et al., 2001: p. 100](#_ENREF_17)).

As for teachers:

Schoolteaching has endured largely as an assemblage of entrepreneurial individuals whose autonomy is grounded in norns of privacy and noninterference and is sustained by the very organization of teaching work. Teachers are now being pressed, invited, and cajoled into ventures in "collaboration," but the organization of their daily work often gives them scant reason for doing so. Long-standing occupational and organizational traditions, too, supply few precedents; rather, they buttress teaching as a private endeavor. ([Little, 1990: p. 530](#_ENREF_36)).

Cooper et al. ([Cooper, Hinings, Greenwood, & Brown, 1996](#_ENREF_8)) delineate the complex dynamics of change in the presence of sedimented organizational archetypes and active resistance. The professional categories whose market and political positions are most entrenched—such as specialist doctors—can mount formidable opposition to the forces of change. This resistance gains strength from professionals and their allies who feel that the attack on the autonomous liberal profession model is an attack on the quality of professional service ([Fielding, 1990](#_ENREF_12); [Hoff & McCaffrey, 1996](#_ENREF_27); [Warren & Weitz, 1999](#_ENREF_60)).

Despite these resistances and obstacles, collaborative community seems to be a promising way to preserve the core value-rational orientations of the professions in the modern world. It remains to be seen whether this organizational form can flourish or if Weber’s skepticism will be vindicated.

#### Exhibit 1: Survey items for four types of professional community in schools

#### Traditionalistic

1. People here do things the way they have traditionally been done.
2. Disagreements between grades/departments are resolved by trading favors.
3. When we recruit new people in this organization we look for people who will fit in to our established ways of doing things
4. Administrators here are especially protective of teachers who are loyal to them.
5. Union leaders here are especially protective of members who are loyal to them.

#### Contractual / bureaucratic

1. People work according to policies and procedures defined by supervisors or specialists.
2. Disagreements between grades/departments are handled according to formal policies and procedures
3. When we recruit new people in this organization we look for people who have the right credentials.
4. Administrators here focus on ensuring everyone follows policies and procedures.
5. If there is a conflict between teachers and administrators, union and administration rely on the formal collective bargaining and grievance processes to resolve it.

#### Collaborative

1. People participate in defining and improving the school's policies and procedures.
2. Disagreements between grades/departments are dealt with by peers in rational, open, and direct discussion.
3. When we recruit new people in this organization we look for people who will play an active role in contributing new ideas.
4. Administrators here decide jointly with teachers about both work goals and how best to achieve them.
5. If there is a conflict between teachers and administrators, a labor-management team will be put together and will usually be able to solve it.

#### Fragmented

1. It is very hard to change policies and procedures even when they are not helping us work effectively.
2. There is a lot of unproductive tension in relations among grades/departments.
3. When we recruit new people in this organization it's hard for these newcomers to get accepted here no matter what they do.
4. Teachers here often see a lot of unproductive tension in relations with administrators.
5. People here see a lot of unproductive conflict between union leaders and administrators.

**Exhibit 2: Descriptive Statistics**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Variable** | **Mean** | **Std. Dev.** | **Min** | **Max** |
| API 2012 | 849.22 | 66.38 | 740 | 967 |
| API 2011 | 834.70 | 76.35 | 685 | 971 |
| % SED | 52.98 | 27.95 | 13.2 | 100 |
| School Size | 34.25 | 18.96 | 19 | 92 |
| Traditional | 20.31 | 6.54 | 9.51 | 37.63 |
| Bureaucratic | 35.58 | 4.59 | 26.40 | 45.55 |
| Collaborative | 41.87 | 9.59 | 21.55 | 62.36 |
| Fragmented | 13.44 | 7.34 | 2.71 | 28.67 |

**Exhibit 3: Correlations**

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
|  | **Collaborative** | **Bureaucratic** | **Traditional** | **Fragmented** | **API 2011** | **API 2012** | **School Size** |
| Collaborative | (0.756) |  |  |  |  |  |  | |
| Bureaucratic | 0.3431 | (0.535) |  |  |  |  |  | |
| Traditional | -0.7366\* | -0.3997\* | (0.575) |  |  |  |  | |
| Fragmented | -0.8874\* | -0.5040\* | 0.7427\* | (0.746) |  |  |  | |
| API 2011 | 0.1705 | -0.1628 | -0.2195 | -0.0303 | 1 |  |  | |
| API 2012 | 0.2214 | -0.1242 | -0.2875 | -0.081 | 0.9783\* | 1 |  | |
| School Size | -0.2785 | -0.1455 | 0.1857 | 0.2131 | -0.105 | -0.1326 | 1 | |
| SED | -0.0242 | 0.2401 | 0.0942 | -0.0698 | -0.8700\* | -0.9014\* | -0.0977 | |
| Cronebach alphas for Community constructs are in parentheses | | | | | | | | |

**Exhibit 4: Regression results predicting 2012 school performance**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
|  | **Model 1** | **Model 2** | **Model 3** | **Model 4** | **Model 5** | **Model 6** |
| % SED | -0.65\*\* | -0.706\*\* | -0.772\*\* | -0.747\*\* | -0.801\*\* | -0.837\*\* |
| API 2011 | .63\*\* | 0.615\*\* | 0.549\*\* | 0.577\*\* | 0.538\*\* | 0.517\*\* |
| School Size | -.29\* | -0.267\* | -0.242\* | -0.228+ | -0.196+ | -0.200\* |
| Bureaucratic |  | 0.882+ |  |  |  | 0.409 |
| Traditional |  |  | -1.318\*\* |  |  | -0.925\* |
| Fragmented |  |  |  | -0.905\*\* |  | 0.566 |
| Collaborative |  |  |  |  | 0.957\*\* | 0.873+ |
| Constant |  | 350.9\*\* | 466.3\*\* | 426.4\*\* | 407.8\*\* | 427.3\*\* |
|  |  |  |  |  |  |  |
| Observations | 26 | 26 | 26 | 26 | 26 | 26 |
| R-squared | .96 | 0.974 | 0.985 | 0.98 | 0.983 | 0.988 |
| \*\* p<0.01, \* p<0.05, + p<0.1 | | |  |  |  |  |

**Exhibit 5: Item-level correlations between Community type and Performance**

(Col 3 shows the standardized correlation coffecients in a model regressing the residuals from Model 1 in Exhibit4 on each item separately, ranked by size.)

|  |  |  |
| --- | --- | --- |
| Collab | People participate in defining and improving the school's policies and procedures. | 0.118 |
| Collab | If there is a conflict between teachers and administrators, a labor-management team will be put together and will usually be able to solve it. | 0.116 |
| Collab | Administrators here decide jointly with teachers about both work goals and how best to achieve them. | 0.109 |
| Collab | When we recruit new people in this organization we look for people who will play an active role in contributing new ideas | 0.102 |
| Collab | Disagreements between grade-levels/departments are dealt with by peers in rational, open, and direct discussion. | 0.0790 |
| Bur | If there is a conflict between teachers and administrators, union and administration rely on the formal collective bargaining and grievance processes to resolve it. | 0.0651 |
| Bur | Disagreements between grade-levels/departments are handled according to formal policies and procedures. | 0.0542 |
| Bur | People work according to policies and procedures defined by supervisors or specialists | 0.0486 |
| Bur | When we recruit new people in this organization we look for people who have the right credentials. | 0.0288 |
| Bur | Administrators here focus on ensuring everyone follows policies and procedures. | 0.0267 |
| Frag | People here see a lot of unproductive conflict between union leaders and administrators. | -0.0558 |
| Trad | Disagreements between grade-levels/departments are resolved by trading favors. | -0.0666 |
| Frag | It's hard for these newcomers to get accepted here no matter what they do. | -0.0746 |
| Trad | When we recruit new people in this organization we look for people who will fit in to our established ways of doing things. | -0.0797 |
| Frag | There is a lot of unproductive tension in relations among grade-levels/departments. | -0.0829 |
| Frag | Teachers here often see a lot of unproductive tension in relations with administrators. | -0.0923 |
| Trad | People here do things the way they have traditionally been done | -0.117 |
| Frag | It is very hard to change policies and procedures even when they are not helping us work effectively | -0.119 |
| Trad | Union leaders here are especially protective of members who are loyal to them. | -0.124 |
| Trad | Administrators here are especially protective of teachers who are loyal to them. | -0.132 |
|  |  |  |

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1. Recall that Weber argued that while the traditionalistic and instrumental-rational types of social action can form robust organizations (in the latter case, as bureaucracy and market). In his account, however, neither affectual nor value-rational orientations offer strong foundations for social order. Affectual action is foundational in social orders of the charismatic type, and Weber argued that such orders tended to “routinize” and to revert to the traditionalistic or bureaucratic type. [↑](#footnote-ref-1)
2. Much of the material in this section is taken from Adler et al. ([2008](#_ENREF_2)). [↑](#footnote-ref-2)