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Autonomy and Accountability in the Context of Standards-Based Reform

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Abstract

In this article we discuss the effects of one urban school district's efforts to increase the autonomy and accountability of schools and teams of teachers through a standards-based reform known as team-based schooling. Team-based schooling is designed to devolve decision-making authority down to the school level by increasing teachers' autonomy to make decisions. Increased accountability is

enacted in the form of a state-level standards-based initiative. Based on our evaluation over a two-year period involving extensive fieldwork and quantitative analysis, we describe the ways that teachers, teams and school administrators responded to the implementation of team-based schooling. What are the effects of increasing school-level autonomy and accountability in the context of standards-based reform? Our analysis highlights several issues: the "lived reality" of teaming as it interacts with the existing culture within schools, the ways that teachers respond to the pressures created by increased internal and external accountability, and the effects of resource constraints on the effectiveness of implementation. We conclude by using our findings to consider more broadly the trade-off between increased autonomy and accountability on which standards-based reforms like team-based schooling are based.

I. Introduction

The standards movement was one of the key reform strategies developed in the 1990's as states and districts sought ways to raise student achievement. The essential elements of reforms in this paradigm are threefold. First, a set of clearly defined student performance goals for schools to strive towards (usually content standards). Second, an accountability system comprising a set of incentives for schools or districts to achieve the standards and accompanying penalties for failing to move towards them (rewards and sanctions). And third, greater autonomy for districts and schools make decisions that will enable them to improve instruction and achieve the standards (Fuhrman, 1999; CPRE, 1996; Fuhrman & O'Day, 1996).

While earlier reforms were characterized by either a "top-down" (i.e. mandates) or "bottom-up" (i.e. local control) approach, standards-based reform combines both approaches to enable states and districts to define the focus and expectations for educational outcomes and to hold educators accountable for meeting these aims (Fullan, 1994). At the same time, policy makers recognise that instructional improvement needs to be motivated and developed at the school and classroom level and they are developing ways to give schools and teachers increased autonomy to make decisions that affect student learning.

In this article we ask the question: What are the effects of increasing school-level autonomy and accountability in the context of standards-based reform? We investigate this question by exploring the experience of the school district of Cincinnati, Ohio's efforts to expand the autonomy of schools and teachers and construct a framework of accountability within the context of a broader standards-based reform initiative. The district's efforts to increase autonomy at the school and classroom-levels is focused around a reform called team-based schooling in which teachers are organized into teams of three to five teachers who take responsibility for a group of students over multiple years. The expectation is that teachers know best how to serve the needs of their students and should therefore be given greater flexibility and authority to make decisions that affect their students' learning. Teaming is part of a broader standards-based reform movement in the district featuring an explicit set of achievement targets for schools and rewards and sanctions tied to a school's success or failure in achieving their goals. In this article we describe some of the consequences, both intended and unintended, which arise as the theory of increased authority and accountability plays out in the classrooms of Cincinnati's public schools.

In section II, we set the context for our analysis by briefly describing the track

record of site-based management in general and team-based schooling in particular. In section III we describe the design of *Students First*, the Cincinnati Public Schools' ambitious standards-based reform initiative designed to increase local autonomy within a framework of accountability. In section IV we analyze the consequences, both intended and unintended, of increasing local autonomy. Section V explores the effects of expanded accountability, both internal and external. We conclude by summarizing the findings of our research and discussing the implications in relation to the trade-off between increased accountability and increased autonomy on which standards-based reforms like teaming are based.

Method

The source of the data for this article come from an evaluation of team-based schooling in Cincinnati, Ohio being conducted for the Cincinnati Public Schools by the Consortium for Policy Research in Education (CPRE) at the University of Pennsylvania. Since 1997, CPRE has been documenting the evolution and effects of team-based schooling in Cincinnati. This article draws primarily from the first two years of our evaluation and is based on five data sources. First, the CPRE research team conducted extensive fieldwork in the district. During the first year of the evaluation we visited all of the eight team-based schools and interviewed administrators, members of the Instructional Leadership Team, and the full membership of a sample of 16 teams. In 1998-99, the second year of teaming, the research team spent four to five days in each of the 20 team-based schools and interviewed the full membership of a sample of 41 teams.

The second data source for this article is the survey we conducted each year with all faculty in both team-based and non-team-based schools. The response rate varied from 81 to 87 percent each year respectively out of a total of approximately 2,500 faculty. Survey results enabled us to compare team-based with non-team-based schools and has allowed us to examine the longitudinal effects of teaming.

Third, we conducted interviews with the leaders of the Cincinnati education community including leaders of the Cincinnati Public Schools (CPS), the Cincinnati Federation of Teachers, CPS school board, and the Mayerson Academy which is the key provider of professional development to support the implementation of team-based schooling. Interviews focused on leader's perceptions of what team-based schooling would accomplish, the factors that influenced its implementation and impact, and the progress of the reform.

The fourth data source was student achievement, attendance, and discipline information provided by the district's Office of Research. Data were analyzed using hierarchical linear modeling (HLM) to examine the relationship between teaming and student achievement at the school and team level. Finally, we observed Interschool Council Meetings, attended team-based schooling workshops run by the Mayerson Academy and related initiatives produced by the district and union.

Our purpose is not to report in detail the findings of CPRE's three year evaluation of the team-based schooling initiative in Cincinnati. Those interested in further details can read the evaluation reports (Supovitz & Watson, 2000; Supovitz & Watson, 1999; Supovitz, 1998). Rather, we focus here on the implications of the Cincinnati experience with respect to the trade-offs and tensions inherent in expanding autonomy in a tighter accountability framework within the context of standards-based reform.

II. The Trend Toward School-Based Management

Many districts have attempted to increase local autonomy based on the theory that school personnel are most intimately knowledgeable about the best way to educate their students. Mohrman and Wohlstetter (1994) described various types of devolved management structures that have been adopted in the past under the general rubric of school-based management (SBM). SBM requires new forms of governance and management structures within districts and schools, structures that are designed to change the decision-making processes and relations of power. This reform movement operates under the belief in the ineffectiveness of locating power at the top of a school system, where it is furthest from school faculty who are closest to, and therefore most able to influence students. SBM is intended to create structures that support site-based decision-making so that school-based administrators and teachers have greater control over the decisions that affect student learning. SBM is not a new idea, having been implemented in various guises throughout the 1980s and 1990s (Weiss, 1992). But what is different in this latest incarnation is the melding of local autonomy with a system of accountability (Fullan, 1994).

Newmann and Wehlage (1995), in a large study of 1,500 schools, noted that successful schools tended to create a professional community with shared purpose and high levels of collaboration. They noted that successful schools required the authority to act, and had high levels of autonomy over curriculum, school policies, hiring, and, in some cases, their budget as well. Surrounding this cocoon of autonomy, they also cited the importance of external support in the form of high standards for student learning.

Chubb and Moe (1990) argue that private school teachers experience higher levels of autonomy than their public school peers and that this is a key reason why private schools are able to more successfully promote student achievement. In a comparative study of teachers and principals in both private and public schools that set out to test Chubb and Moe's thesis, Glass (1997) found that both participants said they experienced high levels of autonomy. However, they also found that teachers in private and public schools were also subject to a number of factors that mitigated and shaped their autonomy in important ways. Thus, the autonomy experienced by teachers was more complex than typically assumed and "challenges the myth that teachers and principals in private schools enjoy autonomy and freedom from democratic bureaucracy that their public school counterparts do not" (p.1).

Other studies also question whether SBM actually increases school and teacher autonomy. Hannaway (1993) presents a critique of the existing assumptions on which decentralization is based, assumptions that are derived from private sector modes of production. Hannaway argues that decentralization is based on the assumption that teachers' work is traditionally subject to a high level of control and that the limited autonomy of teachers serves to limit their ability to instigate the kinds of change and innovation necessary to promote student achievement. Decentralization and (so-called) greater teacher autonomy aims to give teachers greater control over how they teach. In contrast, Hannaway concludes that, "teachers in successful decentralized districts work under conditions where organizational controls over their behaviour are in fact high relative to what we would expect in traditionally organized schools. Indeed, the discretion of school-level actors in many decentralized systems may be far more restricted than the discretion of school-level actors in traditionally organized systems" (1993, p. 139). In other words, she contends that decentralization *decreases* the amount of autonomy that teachers have to decide what and how to teach and that this occurs through the increased surveillance of their work at two levels: by their peers and by the district through tighter accountability measures. Merely providing increased opportunities for interaction between teacher professionals will not necessarily result in

productive work and change.

The literature that examines the development and implementation of various forms of SBM also points out that the key aim of such designs should be to improve the quality of teaching and learning within schools. In other words, for SBM to be successful, it must not be merely a structural reform, but one that results in instructional change at the classroom level. Darling-Hammond (1996) described in some detail four New York schools that have successfully introduced decentralized, site-based management reforms as a means of creating more consensual decision-making and greater autonomy for schools and teachers with the purpose of approaching teaching and learning in distinctive ways. The success of these schools, argues Darling-Hammond, is that the primary focus of their changes is to create the opportunities for improved teaching and learning.

Team-Based Schooling

One of the particular school-based management strategies that have been developed in an attempt to provide an instructional focus is the use of teacher teams. Teacher teams are designed to enable teachers to have greater involvement in the management and governance of their school and are also intended to facilitate instructional change and innovation as teachers work more closely together to learn from each other. Educators have been experimenting with the "bold new venture" of team teaching since the 1960's (Thomas, 1992; Beggs, 1964), but with little success (Thomas, 1992). The early failures of teaming were attributed to a lack of organizational support, planning time, and role conflict (Hargreaves, 1980; Cohen, 1976).

The last decade has seen a resurgence of interest in teaming largely as a result of the apparent success of production teams in private enterprise and the attempts by some administrators to apply teaming to schools (Mohrman & Wohlstetter, 1994). Darling-Hammond (1994) gives an account of a number of schools who have used teaming successfully in order to create more consensual decision-making and greater autonomy for schools and teachers. More importantly, however, they have used teaming to enable more inter-disciplinary learning for students and to also promote teacher learning which is essential for instructional change.

Friedman (1997) offers a detailed account of one teacher team that developed an innovative vocational design within an urban high school. Friedman argues that teaming requires changes to traditional teaching roles and school structures and that these changes are more complex than those typically envisioned by the proponents of teaming. The success of teaming therefore appears to depend on it not being merely an organizational or structural reform, but one that promotes and supports changes in how teachers teach. Friedman's research alerts us to the need to consider not only the assumptions and intent behind team-based schooling initiatives, but also the existing structures and cultures of schooling that they are enacted upon. Teachers are not passive recipients of reform, but they actively negotiate and mediate policy in a range of ways. It is not so much that policy is enforced from above, but rather that teachers enact policy in a range of ways that result in unintended and intended consequences. As Friedman observed:

... few advocates have inquired seriously into the team concept and exactly how it fits with school practice. This lack of conceptualization is particularly serious in light of the failure of the initial team-teaching movement of the 1960s, which has been attributed to a lack of fit between

the team concept and the role of the teacher, the organizational structure, and the cultural norms of contemporary schooling (1997, p. 335).

This report enables us to undertake the kind of enquiry that Friedman argues is necessary if we are to further our understanding of the effects of the implementation of team-based schooling. If teaming is to be effective, it must result in instructional innovation and improvement. For this to occur, such a reform needs to attend to the relations of power that operate within schools.

III. Autonomy and Accountability in The Cincinnati Public Schools

Cincinnati, Ohio is an urban school district with about 50,000 students in 79 schools. About two-thirds of the students in the district, of which 70 percent are African-American and 28 percent are White, are on lunch assistance. Cincinnati is the forty fifth largest city in the United States. In the 1996-97 school year the Cincinnati Public Schools (CPS) adopted an ambitious and broad-based reform plan called *Students First*. The stated goals of *Students First* were for all students to meet or exceed high academic standards, to have safe and orderly school learning environments, and to satisfy the needs of their "customers" - students, parents, and taxpayers. As a central part of its strategic plan, the CPS designed a form of school organization known as team-based schooling. In essence, the idea behind team-based schooling is that higher student achievement will result from decentralizing decision-making about instruction and resource authority to teams of academic teachers. The teams are to focus on the district's academic and behavioural standards, to collaborate amongst themselves as well as with parents and community members, and to be held collectively accountable for their students' achievement over time. As stated in the district's strategic plan, the organization's reform goal was to become a, "high quality education system that is decentralized and held accountable for results."

The "heart of the system" according to the former superintendent, is team-based schooling. Team-based schooling is written into the contract between the CPS and the Cincinnati Federation of Teachers, ratified in March 1997. The contract sets out the requirements for the composition and function of teams, as summarized below:

- Teams will be comprised of 3-5 core subject academic teachers who will stay with a group of students for at least two years. The teams will be organized by the gateway grades K-3, 4-6, 7-8 and 9-10.
- Teams will develop a curriculum and instructional methods and materials consistent with a school's program focus. They will also decide how to schedule and group their students.
- Teams will take responsibility for all students they serve and will work to ensure that they meet the district and school learning objectives.
- Teams will control funding for instructional supplies, materials, and personnel.
- Teams will stay together for several years in order to ensure maximum benefits from collaboration and longer term relations with students.
- Team-based schools will be governed by Instructional Leadership Teams (ILT), comprised of team leaders, the principal, two parents, and two non-teaching school staff. The ILT will attend to academic decisions and control most non-personnel budget areas.

The district planned to "roll out" the team-based school concept across the

district, beginning with the eight schools that were selected from a pool of those that applied in 1997-98. Twelve additional schools became team-based in the second year (1998-99), and twenty schools in the third year (1999-2000). At the time of writing, in the third year of the reform, the implementation has proceeded as planned and approximately half of the district's schools are team-based.

It must also be noted that teaming is not a new phenomena in the Cincinnati Public Schools. Our 1999 teacher survey data show that in Cincinnati 79 percent of elementary teachers, 73 percent of middle school teachers, and 45 percent of high school teachers who were not in formal team-based schools reported that they informally teamed with at least one other teacher. What is different is that team-based schooling creates a formal structure in schools that explicitly vests power in teams of teachers to make instructional decisions for students.

At the same time, the state and district had accountability systems in place that ranked the performance of schools and attached consequences to their performance. In Ohio, districts are rated annually on a set of 27 indicators, of which 25 are student achievement tests as well as student attendance and graduation rates. Based upon these ratings, districts are put into four categories: effective, continuous improvement, academic watch, and academic emergency. These categories are highly correlated with the socio-economic status of districts. Districts in academic emergency have five years to move out of the category or are threatened with state takeover. CPS is in the academic emergency category, but despite one of the highest levels of poverty of any district in the state, it is not the lowest performing district.

The district's accountability system is called the School Accountability Plan. In it, targets are set for each school in six areas, which are very similar to the state indicator areas. Unlike the state system, targets differ by school, which are set based upon the results of the previous year. Targets are set so that if all schools meet their targets, than the district will meet its target. Based on their performance, schools are rated as either a school incentive award winner, an achieving school, an improving school, a school in intervention, or a school under redesign. Redesigned schools can, and have been, reconstituted. Principals' pay raises depend partially on the performance of their school.

The theory of how teaming works

In interviews conducted in the fall and early winter of 1997 with 14 leaders of the Cincinnati education community, the leaders described how they expected teaming to work. The district leaders emphasized improving student achievement and the quality of the educational experience as the overall expectation of team-based schooling. Leaders hypothesized that team-based schooling would impact the district in a variety of ways. The influences that were mentioned can be loosely organized around four inter-related themes: decentralized control, more focused curriculum and instruction, a more student-focused school culture, and increased accountability.

District leaders described how they expected teaming to shift decision-making about curriculum and instruction from the district to schools to teams of teachers, giving school staff a greater role in critical decision-making about their work and greater control of their budgets. They saw this devolution of authority driving related changes in the central office while giving schools greater autonomy from the central office.

Many leaders therefore stressed that team-based schooling would increase teachers' focus on curricular and instructional issues. They felt that attention to the curriculum standards would increase, improving curricular planning and alignment. They expected that teachers would make more fine-grained decisions about grouping of

students, resulting in more individualized instruction. They also expected that looping (teachers staying with the same group of students over multiple years) would push teachers to expand their curriculum knowledge. In these ways decentralization, along with increased accountability, would lead schools and teams to allocate their resources more productively.

Leaders also envisioned a series of influences that can loosely be called a more student-focused school culture. Under this element of their vision, a series of new relationships and norms would develop in team-based schools. Teachers would get to know students better, would analyze student achievement data and would be better informed as they designed instruction to more effectively meet students' needs. One leader stressed that the teams would form communities, providing a greater reflection of the democracy we live within.

The local leaders also felt that team-based schooling would increase the accountability of teachers. They described how the new teams would give teachers a greater sense of students' accomplishments and encourage them to take more responsibility for the progress and success of individual students. Since each of the teams would be responsible for preparing students for one of the gateway grades at which promotion benchmarks must be met, all teachers would share the responsibility that had previously rested more heavily on those teachers assigned to the gateway grades. Further, it was envisioned that a culture of competition would emerge in the effective team-based schools, propelling teachers to higher quality instructional levels. Teaming therefore has the potential to meet the demands of increased autonomy and accountability at the school level through decentralization, rather than through increased centralization as has been a feature of earlier reforms.

Reforms are seldom implemented in isolation and other initiatives and events often have unintended effects. The implementation of team-based schooling in Cincinnati was no exception. Three events occurred in Cincinnati which both directly altered the implementation of *Students First*, and more subtly influenced the environment within which the reform was unfolding. First, one of the major architects of *Students First*, J. Michael Brandt, retired as Superintendent after the first year of team-based schooling and was replaced by Dr. Steven Adamowski, although the Board restated its commitment to *Students First*. Second, the district experienced severe budget cuts and schools were forced to reduce staff and resources. Third, in the 1999-2000 school year, the district and union went through a prolonged contract renegotiation. Additionally, during the time of the initiative, the district announced major organizational changes, including a reorganization to K-8 schools, a plan to shift to open enrollment for high schools, the adoption of a new facilities plan which targeted which targeted some schools for eventual closure, the expansion of charter schools. This confluence of events and developments generated considerable anxiety and undermined morale among teachers. The overall climate of rapid change and uncertainty disturbed some teachers' confidence in the stability of their teams and in the future of the team-based reform.

IV. Expanding the autonomy of teachers in schools

As we have discussed, the team-based schooling reform envisages that schools, teams and individual teachers will have greater control over how they teach while also being held increasingly accountable for the achievement of their students. This notion of increased autonomy raises a series of important issues that concern the definition and limits of autonomy and the authority that resides at different levels within schools -

including teachers, team leaders, and the principal. These issues also played out between schools and the district. That is, the increased autonomy of teaming created a whole new set of relationships within schools that implicitly modified the existing traditional hierarchy.

The traditional hierarchy of schools has a principal (and vice-principal in larger schools) sitting on top of a traditionally flat organizational structure. Schools often have a large number of committees to make instructional decisions, but formal authority is vested in the principal. Team-based schooling changed the arrangement such that teams of teachers are formally made responsible for instructional decisions about their students. Teams are led by team leaders while the school is led by the Instructional Leadership Team (ILT), comprised of team leaders and led by the principal. The ILT is officially responsible for making school-wide instructionally related decisions. This new, more multi-faceted organizational structure created uncertainty as the members sought to clarify the extent and limits of their autonomy and authority. In the course of our fieldwork these concerns were at the forefront for school faculty as they struggled to implement team-based schooling. In this next section, we explore in some detail the issues around autonomy and authority that arose in schools as their faculty implemented the reform.

The role of the team leader

The key purpose of teams is to establish a structure that provides teachers with increased opportunities to work together to improve instruction. The collective bargaining agreement between the teacher union and the district states that each team shall have a paid team leader and describes the procedures for their selection. However, there is little specification about the team leader's role or the authority they have to make decisions that affect the members of their team. In some teams, members naturally deferred to their team leader to organize the time and resources of the group while in others this process was collaborative. There were a small number of teams in which the team leader's efforts to exercise authority created friction amongst the team members.

In our interviews with a sample of members of 41 teams in the second year of teaming (1998-99), a number of team members and leaders discussed the problems caused by the unclear responsibilities of team leaders. For example, in a team in a K-8 school, some team members did not accept the team leader's authority, especially the teachers who knew they would not be returning to the school the following year. Two of the four teachers had requested and received a transfer to another school and a third did not have his contract renewed. As a result, the team leader said the team was dysfunctional. "The only part where there is really teaming academically is with [the special education teacher]. We share responsibility for his developmentally handicapped kids and my grade 7 to 8 kids. That works great, but it isn't any different from what I was doing before teaming."

In another elementary school, there was a serious conflict between the team leader and one of the team members. The team leader said the conflict was caused by a personality issue, but the teacher said it was due to their different teaching styles. The teacher did not want to follow the team leader's advice on instruction and she said, "The team leader always wants things her way." The team leader commented, "Lots of teachers have different visions but teams need to have a united vision. We don't talk about a philosophy or teaching styles as a team." These examples raise important questions about team leaders' capacity and authority to propel their teams to higher functioning levels.

This lack of definition of the team leader's authority was of concern because in some cases it prevented teams from engaging in instructional change, a central aim of team-based schooling. An elementary school team leader described how the team members found it hard to share student work samples and resisted doing this even though they agreed, in theory, that it was an important practice. One team leader had asked to observe another teacher's class, but it did not happen. "I could have insisted on certain things, like sharing examples of students' work, but I don't see that as my role. I don't feel I have the right to challenge teachers about their practice. My role is to set a tone, an expectation of being professional."

Thus, in theory, while the teams were given autonomy to make decisions about instruction, in practice, the decision-making process required someone with institutional authority to facilitate the process. This lack of definition of autonomy and authority was also evident within the Instructional Leadership Teams (ILT).

The role of the ILT and the principal

The role of the ILT in each team-based school is to develop, review and evaluate the instructional program and to monitor and improve school operations and procedures that impact on instruction. The ILT is also to develop and monitor the school budget and to oversee the formation of teams and can decide on the process by which it makes decisions, for example by vote or consensus, and faculty will also be required to approve the ILT recommendations by majority vote. The ILT therefore, as its nomenclature implies, is to provide a forum for decisions to be made about instruction and those decisions are then to be disseminated and implemented at the team-level. Our observations of ILT meetings and interviews with ILT members and principals in the second year of teaming highlighted the difficulties in implementing a devolved leadership structure.

The design structure of the ILT represents a significant shift in the way decision-making power is distributed within a school. Authority for the overall direction of the school traditionally resided with the principal but the team-based model is intended to shift authority for making some decisions down to the team level. The introduction of the more democratic decision-making through the ILT represents a major change from more hierarchical school power structures.

Although the ILT is intended to be run in a consensual way so all members are able to make an equal contribution to the decision-making process, the reality is that the differential power relations among the various members can undermine the decision making process. We found that the principal (or someone else on the ILT) had to actively push for shared decision-making because the traditional hierarchical culture of schooling predisposes teachers to defer to the principal.

For some principals, moving toward more consensual decision-making processes was a difficult transition to make. The principal, in theory, is an equal member of the ILT with no more authority than anyone else, but the principal's role in monitoring and evaluating staff performance may make teachers reluctant to challenge the principal on an issue. Principals can exercise their power advantage or may suppress differing views from being expressed during ILT discussions. Some principals were described as effective at encouraging consensual processes while others were described as being adept at ensuring their ideas were prioritized and implemented.

Principals promoted their own agendas in direct ways, including actually setting the agenda and facilitating the ILT meetings, and in indirect ways, which some faculty members described as manipulation behind the scenes. In our interviews in the second

year of teaming, one ILT member stated, "The principal stonewalls and dominates the conversation." Furthermore, while most principals paid lip service to the notion of consensual decision-making, there were some whose leadership styles were in direct and stated opposition to this. One principal rarely attended the ILT meetings and made some decisions without consulting the ILT at all. As a result, several ILT members said they would be stepping down as team leaders because they no longer wanted to be part of the ILT. In several schools, principals made decisions that undercut ILT consensus.

Faculty and administrators in the team-based schools were adopting a range of relationships as they sought to navigate the transition from a traditional hierarchical culture to the more democratic culture reflected in teaming. School leaders at one end of the spectrum were remaining traditional. As one team leader described, "A TBS [team-based school] principal needs to understand, explain, share. They need to be willing to let go. [Our principal] doesn't share with us what we need to know and it leads to frustration." At the other end of the spectrum, a principal at another school was adopting democratic decision-making to the extent that he was not willing to make any decisions himself. A team leader in the school commented, "The principal is delegating everything and not being a leader." Most principals were seeking a middle ground. As one principal described, "I try to empower people but they have to understand that this is a hierarchy and I am the principal."

Ideally, the ILT is designed to ensure that decision-making authority does not reside solely with the principal. However, given the complex power relations that operate within schools and the control that the principal has over the retention and promotion of staff, the reality is that most principals still maintain a high degree of control. Some teachers seemed pleased to have a principal they perceived as a "strong" leader who could maintain control of the school. Other teachers questioned whose responsibility it was to ensure that principals in team-based schools operated in ways consistent with the team-based philosophy.

Role of the team vis-à-vis the ILT

While there were issues of authority within the ILT and between the ILT and the principal, there were also issues of authority raised in relation to the decisions being made by the ILTs concerning the division of authority between the ILT and the teams. When interviewed during the second year of teaming, some teachers said they were confused about the role of the team compared to the role of the ILT. In several cases, team leaders felt that the ILT was overriding decisions that had been made by teams, decisions that they felt the teams should have been able to make. This was exemplified by an elementary school where there were a range of opinions about the benefits of multi-age classes and looping (the practice of students remaining with a teacher for more than one year). A team leader in the school commented, "We are still trying to work out the mechanics as far as what teams can or cannot do. This year, the ILT decided either looping or multi-age—one or the other. The majority of the school doesn't want to do either one." This example raises the question of whether there should be some limitations on what teams can decide and what the ILT has the authority to decide.

Differences of opinion about the levels of autonomy and authority within a school need to be discussed and resolved if team-based schools are to function effectively. A team leader in another school commented, "There are some rumbles that the ILT is trying to run everything but teams should be represented by team leaders so this shouldn't be the case." An ILT member in the same school commented, "The ILT makes decisions about programs, budget items, etc. Teams can make decisions within their

teams. Yet for discipline, the encouraged school wide policy is what is best for children."

The role of the district in relation to the school

The lack of clarity within team-based schools about the limits of their authority and autonomy was also reflected at the district level. It was apparent from our interviews with leaders in the Cincinnati education community in 1998-99 that the district had not yet worked out what decisions the school should have the authority to make, and which decisions were the purview of the district. For example, there were a number of examples of the district encouraging schools to make their own decisions about school reform models or curriculum resources and then telling the school that their decision was not acceptable.

We also noted some differences emerging in district leaders' views about how much autonomy should be given to schools. While they generally agreed at a conceptual level that schools and teachers should be given increased autonomy to make decisions aimed at improving student achievement and should be held more accountable for the results obtained, there were important differences of opinion about what this meant in practice. Our interviews suggest that the views of district policymakers on this issue fall along a continuum. At one end of the continuum are those who believe that schools should be given as much autonomy as possible to decide what and how students should be taught, and which reform models to use. In this view, autonomy should be constrained only by the standards (promotion standards and proficiency tests) that are mandated by the state and the district. How school staffs reach these standards is up to them. One leader in the district summed up this position, "Let the standards shape what schools do, but let them find their own way." Furthermore, some of these proponents of increased school autonomy would like to see schools freed from some of the current contract requirements, such as those that limit meeting times and require vacancies to be filled from the surplus pool instead of allowing schools to recruit their own staff.

At the other end of the continuum are those who favor granting less autonomy to schools and teachers. For example, they believe that schools should choose only those whole school reform models previously approved by the district and that teachers should not be allowed to adopt curricular materials that have been tried and failed in several other places in the district. Those in favour of constraining autonomy at the school level believe that setting academic standards for schools is not sufficient, and contend that schools should teach a district-approved curriculum and that students in all schools should follow a core academic program.

These differing views of autonomy are associated with different views of team-based schooling. Those favoring maximum autonomy are content to permit more variation in how ILTs function, how teams are structured, and how resources are allocated by the schools. Those who favor some constraints believe that the district should ensure that team-based schooling is correctly implemented and that the structures are faithful to the original design. In practice, this has raised a number of questions of how the district should respond to issues. For example, a middle school team of a dozen teachers who want to stay together as a team, regardless of the suggested team size of 3-5 teachers; or a principal who ignores the unanimous recommendations of the school's ILT.

As teachers and school administrators sought to define the limits of their authority, they were doing so in the context of a high-stakes accountability framework at both the state and district level. In the next section we discuss the issues that arose in

response to increased accountability in the context of team-based schooling.

V. Increasing accountability

As previously described, the district's reform initiative, *Students First*, contains a school accountability plan in which targets are set for each school based upon indicators of progress, primarily achievement scores in the five core subjects, as well as student attendance, dropout rates, and graduation rates. Progress is defined differently for each school, depending on its previous year performance on these indicators. Rewards and sanctions are meted out based upon school performance each year. Thus the "teeth" of the accountability system are at the school, rather than the team-level. But this does not mean that teams do not feel the bite of accountability.

The pressures of internal accountability

Abelmann and Elmore (1998) make the distinction between systems of accountability that are external and internal to schools. In their conceptualization, state and district accountability systems are external. But internal accountability systems operate in equally powerful ways and are made up of individual responsibility and collective expectations that together shape the ways that people account for their actions. They found that, "strong expectations can influence and shape what a teacher...feels responsible for in his or her work" (p. 17). Similarly, our survey research found that teachers in team-based schools had significantly higher levels of collective responsibility and reported higher levels of involvement in school-related decision-making (Supovitz & Watson, 1999).

Survey data from the second year with all faculty in team-based schools revealed that teachers were overwhelmingly positive about working together on teams. Over 90 percent of team members reported that they worked well together as a team to do what was "best for kids." A similar percent felt comfortable voicing concerns with team members. In interviews, several teachers described how they valued the relationships they were able to develop with other team members. A team member in an elementary school explained, "I like the concept of team-based. You are working with the same group of kids. I like the communication and feedback you get." In a middle school, a team member commented that teams enabled improved communication that helped them to better address the needs of students. "We have more adult communication via teaming. The team spends a lot of time brainstorming on how to mix and match kids."

Teaming also tended to increase the pressure that teachers put on each other. In some cases this was a constructive force, but in others it served to undermine working relationships between teachers. This resulted in higher levels of stress and increased tensions between teachers in team-based schools. Survey results from the first two years of CPRE's evaluation indicated that trust levels between teachers were significantly lower in team-based schools in comparison to non-team-based schools, and that trust levels declined from the year before schools implemented teaming to the end of their first full year in the initiative (Supovitz & Watson, 1999). These results suggest that the introduction of the formal mechanisms of teaming had surfaced issues which were avoidable when teachers did not have to work so closely together. As one team leader commented in the second year of teaming, "There is a cultural shift going on in the school. Teams are more vocal than before and people that used to be passive are more assertive."

Another consequence of increased interactions between teachers around instructional issues was higher levels of conflict. For teachers who may be used to working with other teachers on discipline or curriculum committees, but who are none-the-less used to closing their classroom doors for instruction, teaming can increase opportunities for disagreement. On our survey in the second year of teaming, over half (53%) of the team members reported conflict between members of their team. Personality clashes were the greatest sources of conflict, accounting for 67 percent of the conflicts. Disagreements over the equitable distribution of work, student discipline procedures, educational philosophy, and disagreement over curriculum and assessment issues were also common.

Of course, conflict in itself is not necessarily negative because it may be the product of increased communication among teachers and more engagement in critical discussion of practice and philosophy. Our interviews with team members suggested that conflict was a problem only when it remained unresolved and, therefore, undermined the relationships within teams. Our survey also included a series of questions for the team members who reported having conflict in their teams about how they attempted to resolve it. Over half (57%) of the teams reported that they resolved the conflict amongst themselves but, of the 53 percent of team members who said they experienced conflict, 30 percent said that the conflict remained unresolved. Overall, this means that approximately 15 percent of the teachers were experiencing unresolved conflict on their teams, a percentage that corresponded closely to our interview data.

While team relationships are something that, with the appropriate support and skills, can be improved and strengthened, there are other factors that affect the operation of teams and student achievement which teams have little or no control over. In the course of our research, teacher and student turnover emerged as significant factors affecting teams.

External accountability

In general, there was a certain amount of resistance from teachers to being held accountable for the performance of their students. In our 1998-99 survey of school faculties, over 50 percent of the teachers in the team-based schools did not believe it was fair to hold teams accountable for the achievement of their students. Our fieldwork helped us to understand some of the reasons why teachers felt uncomfortable with this responsibility.

One reason that teachers resisted accountability was high rates of both student and teacher mobility. The design of team-based schooling states that teams will be composed of groups of teachers who will be held jointly accountable for the achievement of a group of students for at least two years. This model assumes that the composition of the teams, in terms of students and teachers, will remain stable to ensure maximum benefits from collaboration and longer-term relationships with students. But teachers were quick to point out the high mobility of their student populations and that high student mobility rates made it unreasonable for them to be held accountable for student achievement. How could they be held responsible when many of their students were with them for relatively little time?

Second, teachers felt that teacher mobility impeded their ability to work together to meet the needs of students. Our survey with faculty in team-based schools in the second year asked teachers if the membership of their team had remained the same over the school year. Less than one-third of teams reported stability (in terms of their teacher composition) from the first to the second year as team-based schools. Of the teams that

did change, about one-third changed significantly and two-thirds experienced minor changes. The reasons for the turnover among team members varied. In some cases they were due to decisions made by team members to leave the teaching field, take long-term leaves, or transfer to other schools or positions. But in many cases, team instability was due to decisions made at the district and school level that affected the school's staffing and resulted in changes to team composition.

We also found that while most teachers felt their autonomy has increased, at the same time, teachers also reported that they experienced significant restraints on their autonomy caused by the introduction of standards-based accountability. Our work suggests that the requirements of standards-based accountability, which brought with it performance standards, pacing guides, curriculum materials and "standards into practice" protocols for those schools that failed to meet their targets may counteract efforts to increase local autonomy.

How were teachers using their increased autonomy and accountability?

The litmus test for the effectiveness of the team-based schooling reform is whether increased autonomy and greater accountability have resulted in the kinds of instructional improvement that leads to increased student achievement. The results of our evaluation show that when teams are structured in ways envisaged by the reform, and when they are engaging in practices that teaming was designed to enable such as planning lessons together, reviewing student work together, co-teaching classes and observing each other teach, then there is a positive impact on student achievement (see Supovitz & Watson 2000 and Supovitz & Watson 1999 for more detailed discussion of the methodology used). However, we also found that implementation varied and there were very few teams that were using the kinds of practices that were positively associated with student achievement. Even when teams were functioning well in terms of team meetings and team relationships, very few teams had begun to engage in instructional improvement by changing the way they were teaching. While our research has shown that there were a number of factors such as resource constraints, lack of definition of authority, and student and teacher mobility that undermined the effectiveness of team-based schooling, the small number of teams that were responding to increased autonomy and greater accountability by attending to instructional improvement is a significant concern.

VI. Discussion

The purpose of this article has been to explore the "lived reality" of team-based schooling--a standards-based reform that aims to increase autonomy and accountability at the school-level. Increased autonomy is to be provided by giving schools and teams of teachers increased control over how they teach and over other factors that influence student achievement such as scheduling, curriculum and grouping of students. Increased external accountability is enacted in the form of state and district level performance targets. Internal accountability is enacted in the form of increased peer accountability within teams. This design assumes that holding schools and teams more accountable for student achievement, while at the same time giving them more autonomy, will enable them to promote student achievement. Our research enables us to make the following observations.

First, implementing any reform requires the recognition that it is enacted into an

existing culture. In this case, team-based schooling did not replace the existing culture and relations of power within schools. Rather, faculty both accommodated and resisted various aspects of the reform so that the "new reality" in schools became a hybrid of both of these at times contradictory schooling structures. Although unarticulated, the success of the teaming design is predicated on a significant shift in relations at every level of schooling and this kind of shift, by necessity, will involve a change in the traditional relations of power by which the daily life of the school is structured. If not made explicit and attended to, these forces have the potential to subvert the kinds of changes on which teaming depends.

Second, the lack of definition and clarity in the reform design about the limits of authority and autonomy that operate at various levels—from the district through to individual teachers—hinders the ability of teachers, teams and schools to exercise the increased autonomy that team-based schooling was intended to provide them with. As our research has shown, this lack of clarity has sometimes resulted in conflict and/or in an inability to focus on the challenging work of instructional improvement. We recognize, however, that the reform process is a "work in progress" and through our research and through its own mechanisms, the district has been closely monitoring the reform and attempting to provide the kinds of guidance and resources that teachers are saying they need.

Third, internal accountability is a powerful force. The pressures of collective responsibility unleashed by placing the responsibility for student achievement on teachers works in both constructive and destructive ways. On the one hand, teachers are forced out of isolation and are held increasingly accountable by their peers for their role in contributing to instructional improvement. On the other hand, as Cohen (1976) and Hargreaves (1980) have pointed out, expanding local responsibility is often accompanied by increased conflict. Our research indicates that conflict can have both productive outcomes, for example when it forces teachers to confront issues that impede instructional coherence, and unproductive outcomes, when conflict is left unresolved and corrodes interaction and trust.

Fourth, while external accountability mechanisms are premised on the assumption that teachers, teams and schools can be held directly accountable for student achievement, in reality there are a large number of factors over which they have very little control but which impact negatively on student achievement. These include such factors as student and teacher turnover caused by decisions made at the district-level in response to resource constraints and school restructuring. As Elmore (2000) argues, if policy makers and administrators are going to hold teachers accountable for certain outcomes, then they need to ensure that teachers have the capacity and resources to achieve those outcomes. Furthermore, while the design of team-based schooling promotes greater school and team-level autonomy, external accountability mechanisms constrain autonomy in very real ways.

Thus far we have focused on highlighting the practical and relational issues that have arisen as teaming was implemented. But in the final part of this article we want to broaden the discussion to consider the trade-off between increased accountability and increased autonomy on which standards-based reforms such as team-based schooling are based. The assumption behind this trade-off are that teachers, teams and schools will respond to greater accountability by using their increased autonomy to engage in instructional improvement. Our research has highlighted some of the very real constraints that serve to limit autonomy and that also raise concerns about the extent to which teachers can be held directly accountable for student achievement in the way that standards-based reforms are designed to do. We have shown how these constraints

hinder the ability of teachers and teams to engage in the challenging work of instructional reform. However, the question we want to raise here is whether—resource constraints and design problems aside—increasing the autonomy of teachers within the context of an external accountability system is the way to improve instruction. Or, to put it another way, do we have evidence that teachers were using their increased autonomy to engage in instructional improvement in order to meet the demands of the external accountability system? Our research shows that most teachers and teams were not. For the majority of teams, teaming is a structural, rather than an instructional reform. That is, teaming can facilitate improved communication between teachers and allow them greater decision-making power over certain areas, but most teams do not use their increased autonomy and greater accountability to engage in instructional reform.

Our research suggests that modifications need to be made to the ways in which autonomy and accountability are used within the context of standards-based reforms. Thus, the question is not so much whether teachers should be given more or less autonomy, or should be held more or less accountable. A more important question is how might autonomy and accountability be used to create incentives for teachers to engage in instructional improvement? One of the ways that this might occur is by modifying the accountability system. At the present time, schools and teams are primarily held accountable for the achievement of their students on standardized tests. However, as we have shown, there are some very real concerns about the fairness of holding teams and schools accountable on such a limited measure of school effectiveness. An alternative would be to hold schools, teams and teachers accountable for their instructional practice so that they are rewarded for those aspects of their work over which they have direct control. In this way, the accountability system would encourage teachers and teams to focus on instructional improvement.

A second way that teachers might be encouraged to engage in instructional improvement is by constraining teachers' autonomy in strategic ways. As we cited in the introduction, Hannaway (1993) pointed out that teachers in successful decentralized districts actually have less autonomy than teachers in traditionally organized schools. That is, while decentralization is typically seen as a means of increasing teacher autonomy, in fact, it constrains teacher autonomy by exposing teachers' practice to increased surveillance by their peers and by the district through the increased accountability measures. Our research shows that this is the case in team-based schools, but that increased surveillance leads to instructional improvement in very few teams. The challenge is to use increased autonomy and surveillance productively—in ways that result in instructional improvement. This is an important observation because while standards-based reforms are designed to trade-off increased autonomy with greater accountability, our research suggests that increasing autonomy and accountability *per se* may not result in instructional improvement. Instead, it may be more constructive to design reforms that constrain autonomy and accountability in ways that require and enable teachers to engage in instructional improvement.

References

- Abelmann, C. and Elmore, R. (1998). *When accountability knocks, will anyone answer?* Consortium for Policy Research in Education Research Report RR-42. Philadelphia: Consortium for Policy Research in Education, University of Pennsylvania.
- Beggs, D.W. (Ed.) (1964). *Team teaching: Bold new venture*. Indianapolis: Unified College Press.

Chubb, J. and Moe, T. (1990). *Politics, Markets, and America's Schools*. Washington, D.C.: The Brookings Institute.

Cohen, E.G. (1976). Problems and prospects of teaming. *Educational Research Quarterly*, 1(2), 49-63.

Consortium for Policy Research in Education (1996). *Public policy and school reform: A research summary*. Philadelphia: Author.

Darling-Hammond, L. (1996). Restructuring schools for high performance. In S. Fuhrman and J. O'Day (Eds.), *Rewards and reform. Creating educational incentives that work*. San Francisco: Jossey- Bass Publishers.

Friedman, V. (1997). Making schools safe for uncertainty: teams, teaching, and school reform. In *Teachers College Record*, 99, (2), 335-370.

Fuhrman, S. and O'Day, J. (Eds.) (1996). *Rewards and Reform. Creating Educational Incentives That Work*. San Francisco: Jossey- Bass Publishers.

Fuhrman, S. (1999). The new accountability. *Consortium for Policy Research in Education Policy Brief*. Philadelphia: Consortium for Policy Research in Education, University of Pennsylvania.

Fullan, M. (1994). Coordinating top-down and bottom-up strategies for education reform. In Elmore, R. and Fuhrman, S. (Eds.), *The Governance of curriculum. Yearbook of the Association for Supervision and Curriculum Development*. Virginia: ASCD.

Glass, S. (1997). Markets and myths: autonomy in public and private schools. In *Education Policy Analysis Archives*, 5, (1).

Hannaway, J. (1993). Decentralization in two school districts: challenging the standard paradigm. In J. Hannaway and M. Carnoy (Eds.), *Decentralization and school improvement*. San Francisco: Jossey-Bass Publishers.

Hargreaves, D.H. (1980). The occupational culture of teachers. In P.Woods (Ed.), *Teacher strategies: Explorations in the sociology of school*. London: Croon Helm.

Mohrman, S. and Wohlstetter, P. (Eds.) (1994). *Organizing for high performance*. San Francisco: Jossey-Bass Publishers.

Newmann, F. and Wehlage, G. (1995). *Successful school restructuring. A report to the public and educators by the Center on Organization and Restructuring of Schools*. Madison, Wisconsin: Board of Regents of the University of Wisconsin.

Supovitz, J. and Watson, S. (2000). *Team-based schooling in Cincinnati: the third year*.

Philadelphia: Consortium for Policy Research in Education, University of Pennsylvania.

Supovitz, J. and Watson, S. (1999). *Team-based schooling in Cincinnati: the second year*. Philadelphia: Consortium for Policy Research in Education, University of Pennsylvania.

Supovitz, J. (1998). *Team-based schooling in Cincinnati: the first year*. Philadelphia: Consortium for Policy Research in Education, University of Pennsylvania.

Thomas, G. (1992). *Effective classroom teamwork: Support or intrusion*. London: Routledge.

Weiss, C. (1992). *Shared decision making about what? A comparison of schools with and without teacher participation*. Paper presented at the Annual Meeting of the American Educational Research Association, San Francisco.

Loup, K. and Blasé, J. (1999). Political forces in education: bright prospects in the shift to systemic reform. In *National Association of Secondary School Principals Association Bulletin*, April, 39-47.

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