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ABSTRACT

Focusing upon the importance of the overall school climate, and viewing school improvement from a cultural perspective, this document presents a report on the first year of a study of culture and cultural processes involved in improving the effectiveness of high schools. The first section discusses the year's three major activities undertaken to design and plan for the study. The second section, on the conceptual framework, presents a rationale for the study that emphasizes the significance of cultural elements in effective schools, and the significance of the interplay between culture and change. It defines and elaborates the concept of culture and identifies some of the study's key assumptions. Processes of cultural change and transformation are described to clarify theoretical constructs that are applicable to educational settings. The section concludes by describing five cultural domains or themes that will guide field research. The third section, on research methods, presents the approach that will be used for field work, including a plan for data collection, site selection activities, and a proposed approach to data analysis. (JD)

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PLAN FOR THE STUDY OF
PROFESSIONAL CULTURES IN IMPROVING HIGH SCHOOLS

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Plan for the Study of Professional Cultures in Improving High Schools

The effective schools research has generated many lists of characteristics of schools that are unusually successful in fostering the achievement of children of the urban poor (Newmann & Behar, 1982). However, these lists can be interpreted from at least two different perspectives, and these perspectives have very different implications for how schools attempt to apply the research (Cohen, 1982). One view which focuses on such characteristics as clarity and primary of instructional goals, strong leadership, and careful monitoring of instruction suggests that effective schools conform fairly closely to classical models of the bureaucratic organization. From this perspective, schools can be improved by "tightening couplings" (e.g., Murphy, & Hallinger, 1984), by strengthening the formal authority system of the school--e.g., more effective supervision, incentives for teachers--and using more rational, goal-based planning cycles.

A more neglected view attends to the importance of overall school climate where staff share high expectations for students and assume responsibility for teaching and learning. This view emphasizes the shared values of all school participants. This cultural perspective suggests that effective schools have what Rutter et al. (1979) call a shared ethos, and is highly congruent with recent explorations of effective corporations (e.g., Peters & Waterman, 1982). This view has very different, but difficult to specify, implications for school improvement. Rather than focusing on specific organizational arrangements or practices, it suggests the importance of a schoolwide transformation of values and beliefs.

However, how such a transformation takes place, what values should change, and how those changes will be reflected in curriculum and instruction are far from clear.

To clarify the uses of this cultural perspective on improvement efforts, Research for Better Schools' Field Studies unit will conduct a one-year study of professional cultures in improving high schools. The study focuses on the professional staff (largely teachers) because their beliefs, values, and behaviors profoundly affect student learning. It concentrates on the secondary level because: (1) so much reformist attention is currently focuses there, (2) less is known about change in high schools than in elementary schools, and (3) what little is known about the secondary level suggests that change is more difficult there and that conventional bureaucratic approaches are less likely to be effective than in elementary schools. It concentrates on schools that are known to be improving in order to increase knowledge about how cultural changes lead to school improvement and how modifications in school programs affect professional cultures. By describing the cultures of improving institutions and how those cultures change, this study will provide the basis for designing new and more effective approaches for improving secondary schools. The approaches to improvement generated by this cultural perspective are likely to be very different from those generated by the more bureaucratic perspective. Thus, this study should greatly enrich the array of strategies for improving high schools using the effective schools research. By doing so it will contribute to a constructive debate on how to make these schools more effective.

This document presents a study plan grounded in the effective schools and excellent companies research, the literature on school change, and an interpretive concept of culture and cultural process drawn from the discipline of cultural anthropology. The plan is presented in three sections: the first describing preliminary planning and design activities; the next focusing on conceptual issues; and the last on research methods. The first section discusses this past year's three major activities undertaken to design and plan for the study. The conceptual section presents a rationale for the study that emphasizes the significance of cultural elements in effective schools and the interplay of culture and change. It defines and elaborates the concept of culture, identifying some of the study's key assumptions. Processes of cultural change and transformation are then described to clarify theoretical constructs that are applicable to educational settings. The section concludes by describing five cultural domains or themes that will guide field research. The methods section presents the approach that will be used for field work, including a plan for data collection, site selection activities, and the proposed approach to data analysis.

PRELIMINARY PLANNING AND DESIGN ACTIVITIES

Over the past year, three activities were undertaken to aid the development of the study's conceptual framework and to refine the design and data collection methods. These activities were literature reviews, fieldwork, and consultation with knowledgeable experts both within RBS and outside the laboratory. This section describes those activities in detail.

Literature Reviews

Planning for the study began with the identification of important recent high school studies. This search generated several works that were read by the entire research team, and formed the basis for discussions at team meetings. Concurrently, one researcher read from the literature on cultural approaches to the study of organizations and schools in particular, theoretical literature on cultural perspectives, culture change and transformation, and recent research on school change. Discussion in the team meetings and the literature reviews led to the identification of preliminary categories or themes which were considered relevant for a high school culture study. As discussion and reading proceeded, these categories were refined to the present five described in the next section. These categories also guided the interviews and observations that took place during the preliminary site visits to six local high schools. These site visits are described next.

Fieldwork

During the spring, site visits were made to six local high schools (1) to test out the value of the categories for guiding fieldwork; (2) to identify possible sites for the study; and (3) to assess the efficacy of short-term site visits for a study of culture. The schools included in this process were nominated either internally by RBS personnel who had worked with the school, or externally by school district officials who suggested the high schools as good examples of improving conditions.

Using an interview guide that listed the preliminary categories, researchers spent two days at each school talking with teachers, administrators, counselors, and students. They also observed some classrooms and faculty meetings. These interviews and observations were summarized as site visit reports that were then used to refine the conceptual framework.

The site visits also helped guide site selection by underscoring the need for empirical data such as attendance rates or test scores as evidence of improvement rather than just reputation as a sole criterion. These visits also reinforced the need for long-term, intensive fieldwork in the study. That is, while all members of the research team felt these visits provided evidence of shared values and beliefs among teachers--a common culture--there was concern that only a small part of the faculty had been included. Thus the researchers had glimpses of a rich and textured professional life, but these were only glimpses. In-depth understanding of nuance and identification of areas of conflict would require time.

Consultation

The final activity, consultation, was intended to serve two purposes: (1) to test out some of our emerging conceptual categories and data collection ideas with researchers who had already conducted studies of high schools, and (2) to identify possible sites. The consultation with RBS personnel focused primarily on site selection but also included discussions of the criteria of improvement, especially in urban areas. Consultation with experts outside the laboratory took place at the annual meetings of the American Educational Research Association (AERA) in New Orleans. There, the members of the research team met with Mary Metz, Philip Cusick, Martin Burlingame, and David Dwyer. These meetings were free-flowing idea sessions that covered such topics as the problems of doing long-term fieldwork in high schools, fascinating "puzzles" that the research discovered, issues or concerns about multi-site, multi-fieldworker research, and computer-based systems for managing qualitative data.

These three activities, then, constituted the preliminary planning for the study that is reflected in the remainder of this document. The next section details the conceptual framework, emphasizing the ambiguity of a cultural perspective and outlining the initial analytic categories that will guide data collection. The final session describes the study methods.

CONCEPTUAL FRAMEWORK

Why Study Cultures?

The importance of culture in organizational analysis has been growing in recent years. Because cultural analysis stresses "questioning taken-for-granted assumptions, raising issues of context and meaning, and bringing to the surface underlying values" (Smircich, 1983:355), it captures unique facets of organizations and expands current knowledge. In addition, cultural elements have been associated with highly successful and productive organizations. Since cultures contribute to success, a cultural approach will continue to be significant for researchers and for those who want to help their organizations become more successful. The effects of culture on change and of change on culture are important for understanding the transformation of organizations from mediocrity to effectiveness. This section builds a rationale for the study by reviewing literature on school effectiveness and school change which highlights cultural elements.

Culture and Successful Schools

Researchers have long been interested in describing the characteristics of successful or effective schools. Specifically, they have searched for those school characteristics that affect the achievement of the whole student body when the analysis controls for family background. A cadre of researchers set out to find and analyze those mostly-urban schools that seemed to be doing an exceptionally fine job of teaching children caught in the web of underachievement, low income or unemployed families, and hopelessness. From this research have come some profound and

yet quite simple and ordinary (in the sense of daily) findings: schools should emphasize and reward learning; teachers should expect minimal basic skills mastery from all students; teachers should assume responsibility for teaching and for student learning; students should be regarded with respect and granted responsibility for the conduct of their lives; staff should engage in a continual process of critical self-examination and renewal; and staff should engage in certain specific practices such as using direct, immediate praise in the classroom, serving as role models by being punctual, and showing concern for the physical environment of the school and the emotional well-being of the children.

Some of these elements of effective schools describe specific practices or behaviors that teachers should engage in, while other elements touch the more elusive realm of attitudes, values, and beliefs--the culture of the school. The significance of culture is seen quite clearly in the work of Rutter and his colleagues (1979) who suggest a way to synthesize the findings on discrete practices and more implicit cultural values. They found that none of the specific practices identified in effective schools contributed to student achievement so much as the whole set of practices combined. The specific practices themselves were not as important as the way they came together to form a school ethos or culture that coalesced practices, beliefs, values, and norms into a caring community that fostered positive development and growth in the adolescents who passed through the school's doors.

Although none of the effective schools researchers set out to study cultures, subsequent writers who review or synthesize that body of research rely on the concept of culture or clearly equivalent terms as descriptive

and explanatory categories. For example, Brookover (1981) summarizes the effective schools research and clusters the findings into three factors: the ideology of the school, the social structure, and instructional practices. The studies he summarizes identify some practices that promote instruction including teaching techniques, careful monitoring of instruction, and strong principal leadership. However, the studies also identify shared knowledge or beliefs about what can and should be taught--the ideology of the school. This ideology includes the beliefs that all students can learn and that it is possible to teach them, high expectations for student achievement, norms of behavior that students consider appropriate, important, and possible, and students' belief that it is possible for them to succeed in the high school setting.

In a review article, Anderson (1982) conceptualizes school climate as "total environmental quality" that can be captured through four sets of variables: ecology, milieu, social system, and culture. Culture is the social dimension concerned with belief systems, values, cognitive structures, and meaning. Anderson identifies nine separate cultural variables that have been associated with either high student outcomes, positive school climate, or exceptional schools. These include teacher commitment, high expectations, an emphasis on academics, rewards and praise, consistency and consensus regarding clearly defined goals, peer norms supporting academics, and a cooperative rather than competitive emphasis.

While our interest in cultures comes from our interpretation of the effective schools research, this same theme is quite clear in recent studies of business. Deal and Kennedy (1982) argue that unusually

effective corporations have special cultures. Similarly, Peters and Waterman (1982) are struck by the explicit attention that excellent corporations pay to values. They conclude that if they were to give only one piece of advice to managers it would be, "Figure out your value system. Decide what your company stands for" (Peters & Waterman, 1982:279). Their list of attributes of effective corporations includes supporting a bias for action and valuing individual entrepreneurship as well as organizational arrangements like maintaining a simple form and a lean staff.

In sum, research on schools and businesses suggests that the most effective ones may have special characteristics. These characteristics include beliefs, practices, and organizational arrangements that do not have an impact separately. Rather, their power stems from the way they come together to form a distinctive ethos or culture. If successful schools are characterized by distinctive cultures that display certain common, albeit general, attributes, then we have some guidelines for expectations about schools moving from being less successful to being more successful. However, we know very little about school-wide change processes and how the whole complex of school characteristics that makes up its culture can be modified.

Culture and School Change

An important part of understanding how to modify school cultures is an understanding of the relationship between existing cultures and change efforts. Past research suggests that a school's culture will affect the acceptance of new practices. Rogers and Shoemaker (1971) found that practices that were most compatible with existing values and activities

were most likely to be adopted. Similarly, Berman and McLaughlin (1975) found that when innovations were implemented in schools, they were usually modified to fit local values. Cultures also can affect the use of outside knowledge. Sarason (1971) argued that the failure of the new mathematics curriculum was partly a result of culture conflict. School and university people simply had different expectations that promoted fatal misunderstandings. Wolcott (1977) documented the same phenomenon in efforts to apply program planning and budgeting to schools. However, certain cultural conditions may promote school change. Although much of the school change research has been on innovations rather than organization-wide change, we can draw some useful inferences.

The success of school improvement depends on people: central office and building-level administrative support and encouragement are crucial to successful change programs (Crandall & Loucks, 1983; Berman & McLaughlin, 1977). They set a tone that supports new practices, tolerates trial-and-error learning, and provides time and opportunities to experiment. Leaders express values in their behaviors and can influence the development of cultural beliefs. Clark, Lotto, and Astuto (1984) summarize the importance of leaders and note that "this influence is often communicated through suasion and the assertion of high expectations" (p. 54).

Teachers also are crucial. If they believe improvement efforts will help them be more effective, teachers will support change (Fullan, 1982), but they generally require training, continuous assistance, and time to practice the new behaviors. Rosenblum and Louis (1981) found that teacher morale and collegiality promoted the successful implementation of

innovations. Similarly, Little (1982) found that teacher norms of collegiality supported experimentation and continuous improvement.

The values and beliefs of school people can affect change processes by encouraging innovative behavior or participation in change programs. To the extent that leaders influence organization-wide cultural values, they can promote and encourage norms of collegiality and continuous improvement. Leaders can also allocate resources supportive of change processes, thereby signaling that change is valued. Teachers, in turn, may interact about professional matters, reflect and critique their own and other teachers' practice, and encourage attitudes supportive of change and improvement.

In summary, the effective schools literature and research on school change suggest the importance of cultures for both success and improvement. A focus on cultures permits the exploration of context, nuance, and taken-for-granted meaning. The following section describes the assumptions of a focus on cultures, elaborates some central concepts, and describes the implications of this approach.

Defining Culture

The cultural perspective on improving high schools makes certain assumptions about social reality. This section displays some of those assumptions and develops a definition of culture that emphasizes language and the importance of rule-making.

One critical assumption of a cultural perspective is that individuals have autonomy and engage in the simultaneous creation and interpretation of

unfolding events. Organizational reality is viewed as pluralistic, subjective, and dynamic. As Brown (1978:375) describes it,

All of us to some degree design or tailor our worlds, but we never do this from raw cloth; indeed, for the most part we get our worlds ready to wear.

The design or tailoring of our worlds, however, takes place within a context; reality is not constructed do novo every moment (Pfeffer & Salancik, 1978; Shott, 1979; Pfeffer, 1981b). People have personal histories and biographic idiosyncracies; organizations also have histories and idiosyncracies carried in the memories of participants and interpreted to newcomers as part of their socialization to the organization (Zucker, 1977). This interplay of individual idiosyncrasy and collective meaning expresses itself in patterns of beliefs and values that we call culture.

Various authors offer definitions of culture. For example, Woods (1983:8) views cultures as "distinctive forms of life--ways of doing things and not doing things, forms of talk and speech patterns, subjects of conversation, rules and codes of conduct and behavior, values and beliefs, arguments and understandings." These forms of life develop when people come together for specific purposes, whether intentionally or unintentionally (Woods, 1983:8). Hansen describes culture as "a tool for organizing experience" (1979:3), while Goodenough defines it as the standards for deciding what is, what can be, how one feels about it, what to do about it, and how to go about doing it (1963:259). However, we find Wilson's (1971:90) definition the most parsimonious and useful:

Culture is socially shared and transmitted knowledge of what is, and what ought to be, symbolized in act and artifact.

This definition calls attention to certain important aspects of the concept. First, culture is knowledge. It is carried in the minds of

organizational members, learned by newcomers, and amenable to change. As an essentially cognitive phenomenon, culture's ultimate locus is in the individual (Goodenough, 1971:20) but is shared by community members and expressed symbolically. Both behavior--act--and the products of behavior--artifacts or cultural materials--carry cultural meaning. Behaviors and objects are not themselves culture, but rather are infused with symbolic meanings that form cultural content. This emphasis on the cognitive and, hence, symbolic quality of culture implies the importance of language as the most sophisticated and complex symbol system. Thus, we will be particularly interested in language: how school people talk about their worlds, what they talk about and do not talk about, with whom, and where.

Language shapes the everyday reality of schools. How people talk about themselves, others, and their work provides cues to themselves and to others about appropriate roles, socially acceptable behaviors, and acceptable reasons for those behaviors (see, especially, Gronn, 1983). In addition, language forces attention to certain information by making that information salient (Salancik & Pfeffer, 1978). The importance of this information context may be heightened in schools where technologies are unclear and events are related only loosely to outcomes (Weick, 1976; Meyer & Rowan, 1977). In these loosely-coupled systems, the construction of reality through face-to-face interaction and linguistic moves may be more important than in organizations which have more clear technologies and where events relate to outcomes sequentially. If this is the case, then people in schools should engage in a high level of symbolic activity. The

context of this activity--the information context--thus becomes critical in understanding organizational life from an insider's perspective.

The definition of culture also draws attention to the notion that culture is both descriptive or interpretative, and prescriptive or normative. It provides knowledge (in Goodenough's term, standards) to help understand what is--to make sense of words, behaviors, and events appropriately. Culture also provides knowledge to guide one's own words and behavior--to prescribe what ought to occur in a given situation and thereby express the cultural norms governing behavior. These descriptive and prescriptive qualities underscore how culture shapes social rules or codes of conduct.

Organizational processes and, indeed, all human interaction are governed by social rules. Whether formal or informal--codified or implicit--rules structure relationships and are "affirmed in daily interaction" (Manning, 1977:45). Goodenough (1971:28) describes rules governing everyday behavior as "a definition of rights and corresponding duties." As such, they "govern how certain categories of persons may act in relation to various other categories of persons and things" (1971:23). An analysis of these rules of everyday behavior reveals the taken-for-granted world of an organization and "how...assumptions are displayed in organizational behavior" (Manning, 1977:46). Rules establish the boundaries of organizationally-sanctioned behavior and are resources used by participants to define and interpret behaviors (Gephart, 1978).

Thus, the definition we will use draws attention to the cognitive and symbolic aspects of culture as well as the power of cultural knowledge to condition the meaning participants attach to events and to define

appropriate and inappropriate behavior. Cultural beliefs and values, however, are not static. Although culture is essentially conservative, it does change. The next section describes the processes of maintenance and change that imbue culture with dynamic qualities while conserving a society's traditional values.

Cultural Transformation

Culture tends to be a conservative, stabilizing force for any social system (Wilson, 1971; Hansen, 1979). Many aspects of a culture have a deep sense of obligation attached to them. People act and think in certain ways because they feel strongly that these are the right things to do. They will resist changing such obligatory elements. In fact, enforcement mechanisms that are part of the culture--like ostracism, loss of status, or loss of access to key resources--may work against certain kinds of change.

Culture is also emergent--it grows and changes as it comes in contact with (or creates) new ideas and values. Culture is, thus, largely in process--it is both static and dynamic. When cultural beliefs are challenged, it is likely that there will be conflict, dispute, disruption, or concern about the change. Participants' beliefs, values, and habitual actions may be threatened because change requires modifying one's behavior in some way. As Fullan (1982:26) notes,

real change, whether desired or not, whether imposed or voluntarily pursued, represents a serious personal and collective experience characterized by ambivalence and uncertainty.

The status quo, or established order, is challenged when change is introduced. The knowledge of what is and what ought to be comes under

dispute, and the accepted meanings of everyday behavior are called into question.

Change Processes

Wallace (1970) postulates three types of cultural change processes that have applicability to school settings. These are (1) moving equilibrium processes, (2) paradigm development processes, and (3) revitalization processes (1970:183-199). The first, moving equilibrium, is a steady state: new cultural elements are acquired at about the same rate that others are discarded. Over time, the culture acquires some new content but there is no radical change. As the new elements diffuse through the culture, there are areas of espousal as well as lags. The more complex the social organization, the more likely there will be pockets of differential acceptance of the new (1970:184). This process could characterize change in the majority of American schools where fundamental purposes, role relationships, and authority systems have remained constant over the years, while new elements have been introduced and dysfunctional ones discarded. Thus, American schools look very much like they did 100 years ago although now children have calculators rather than slates.

The second sort of process, paradigm development, consists of a complete working out of the implications of a set of new assumptions for a particular cultural domain. Wallace (1970: 185-187) provides an example from the Industrial Revolution where the new paradigm relied on the assumption that natural resources such as wind and water could be captured and used to supply energy for intricate machines. Working out the implications for this new assumption took, of course, several decades.

Although its immediate concern was with machines, the paradigm had profound effects on other cultural elements, as is happening today with computers. Well within the tradition of the Industrial Revolution, the new assumption that computers bring is that now machines can do cognitive work quickly, instead of doing only manual work quickly. The meaning of this expanded assumption is being worked out in schools all over America as staff, parents, and children grapple with their beliefs and values regarding computers and cognitive work.

The third process, revitalization, occurs when one individual or a group of individuals sets out to deliberately and consciously change the culture into something more satisfying (Wallace, 1970:188). For this to occur, cultural meanings have become discordant and may be being further distorted by cataclysmic events such as war, famine, epidemic disease, subordination, or through the more subtle processes of acculturation and internal decay. Conditions are ripe for the transformation of cultural elements by a strong leader.

The notion of revitalization captures the essence of change in a high school that has (or is being) "turned around" by a new strong leader. This was the case in Carver High School in Atlanta (described fully in Lighfoot, 1983) where the cataclysmic events were extreme poverty and hopelessness. Because this revitalization process may be important in the schools selected to be in the study, it is described in more detail next.

Settings ripe for revitalization are undergoing extreme stress. Cultural themes and meanings are no longer sustaining, technology does not work, and the social system breaks down. Symptoms of this stress include increases in vandalism, alcoholism, violence, intracultural strife, and

breaking of marital or sexual taboos (Wallace, 1970). Commitment to the public culture begins to wane and the individual feels increasingly disaffected (Goodenough, 1963:280-283). Behavior judged delinquent by the old culture increases and,

people become increasingly frustrated, increasingly prone to irresponsible and delinquent behavior, increasingly concerned with the acquisition of real power (regardless of its legitimacy) in order to enforce compliance with their own wants from their fellows (Goodenough 1963:281).

The culture, then, must be changed to reduce people's stress. Not unusually, this is achieved through the clear articulation of new cultural values by an ideological leader.

The culture is revitalized by this leader through six broad phases. In the first, the leader formulates a code that clearly delimits the emerging culture from the existing one. Next, the code is communicated to others. As followers or believers are attracted, the leader develops an organization to formalize roles and relationships for the emerging culture. The code is then adapted as new inadequacies in the existing culture are discovered. If the movement captures a substantial number of adherents and controls sources of power, then cultural transformation is possible. The culture is revitalized, symptoms of distortion diminish drastically, and the emerging culture becomes routinized.

Thus, cultural change processes may be incremental, refining or modifying the culture's scripts or rules of behavior; they may be additive, through the acquisition of whole new ways of organizing experiences; and, finally, change processes may be dramatic, as in the case of cultural dissolution and revitalization.

For study purposes, each of the three types of change process draws attention to particular features of the school setting that are important. Moving equilibrium is a steady state where new elements may, over time, alter cultural values and beliefs, but this type of change is unplanned and evolutionary. It suggests obtaining an historical perspective about change in high schools, and it underscores the importance of a series of small decisions made by individuals in effecting change. The importance of socialization processes and norm-makers as change agents is highlighted here.

Paradigm development means examining the effects of a new area of education as in the example above about computers, or as in another example about special education. Both areas were based on new assumptions that had to be worked out. For special education, the assumption was that traditional schools should serve the special needs of all children. The implications of this have had profound effects on schools. The notion of paradigm development crystallizes the importance of sources of influence for change on schools and school systems, whether those sources are societal preference (computers) or federal regulations (special education).

Revitalization focuses attention on antecedent conditions symptomatic of cultural distress: vandalism, violence, lateness, absenteeism, interpersonal hostility, boredom, and so on. It also emphasizes the importance of a strong leader in shaping cultural change. Thus, each type of change process highlights important features of the settings and is discussed more fully below.

Moving Equilibrium: Changing Norms

The elements of a culture--its values and beliefs as expressed in behaviors and tangible objects--evolve over time. At a culture's surface are quixotic shifts in fashion, taste, and popular literature. More deeply-held values, such as a belief in charity or a commitment to quality workmanship, change more slowly. Even today, however, changes in certain beliefs and values are apparent in American society.

Individuals and groups influence these changes. They create new fads as well as new values, which then diffuse through the culture. New cultural meanings are diffused through transmission processes. Generally, culture is transmitted to neophytes through education, whether formally in schools or informally at home, explicitly or implicitly. Newcomers are thus socialized to the existing culture; they learn its rules and are able to function appropriately (Wilson, 1971). The core elements are transmitted and conserved so that group members share major aspects of the culture.

Socialization proceeds through stages. First, the newcomer must reject or renounce his or her previous group and identify with the new group through learning specialized language, dress, and social behavior. The second stage entails building commitment to the new group. This process is enhanced if newcomers share hazardous or distasteful experiences, and if "defectors and delinquents, the disenchanting, disabled, or disaffected" are rigorously weeded out (Wilson, 1971:148). Through this process, a group's culture remains intact and viable.

Working against the maintenance functions of socialization are the processes of cultural change when individual norm-makers challenge accepted meanings, introduce new ways of doing things, or enact values different from established ones. These norm-makers impart new meaning to culture and thereby change it as the new ideas or products--innovations--ripple through the culture and become incorporated (or, alternatively, rejected) through diffusion processes.

Innovations may occur spontaneously, as when group members invent them, or they can result from contact with other groups. They are then accepted and used, or rejected (Wallace, 1970). In determining whether to accept or reject, the group must estimate the innovation's potential usefulness: Will it contribute to the satisfaction of a constellation of needs and wants, or will it frustrate them? The culture's members thus decide whether to act as conservators, protecting the corpus of cultural meanings from change, or whether to be innovators, espousing and implementing new ideas or practices. An awareness of these conservative and dynamic aspects of culture will allow us to explore the conflicting values often apparent in situations in flux and to trace the adherence to and disputes about new ideas among professional staff in high schools.

Paradigm Development through Influences for Change

Paradigm development suggests the introduction of new categories of meaning through coherent change activities. At times, these are generated internally; at others, externally. Activities aimed at deliberately changing the school's everyday life may be introduced, or a school may just

begin to do new things--tighten discipline, coordinate and modernize curricula, build commitment and loyalty through teams.

External demands for change may be handled quite differently than internal initiatives. State regulations such as New Jersey's T&E legislation, Maryland's requirements for student competency testing, or Pennsylvania's new high school graduation requirements constitute outside demands for change. Similarly, community disappointment with a school's performance or changing national expectations may serve the same purpose. Such stimuli for change are most likely to have an effect when they are recognized and become a source for action for existing school or district administrators.

Whatever the form, the improvement stimulus serves as a demand for a new kind of performance. That demand may lead to a reconsideration of current beliefs and expectations. Where such a reconsideration takes place, it may facilitate the initiation of change activities and modify the school's professional culture.

Revitalization: Issues of Leadership and Power

When cultural meanings are contested, members try to influence the emerging order. Through processes of persuasion, negotiation, bargaining, and confrontation, the importance of various participant groups within the setting is revealed (Day & Day, 1977). Moves to define the emerging order draw attention to the role of power in shaping cultural meanings.

Power is ubiquitous in social relationships. As Hall (1982:129) notes:

Every social relationships involves power. When a superior asks or orders a subordinate to do something or a professor makes a reading assignment, power is being exercised.

Power has been traditionally defined as A's capacity to get B to do something against his or her will. This definition denies the relational quality of power and importance of costs or trade-offs in the power process. When power is conceptualized as more of an exchange than a coercive act, its transactional quality is emphasized. Referring to work of Harsanyi (1962), Baldwin (1978) calls this "the heart of the power process, i.e., A's manipulation of the incentives (or opportunity costs) that B associates with various courses of action" (page 1232). The value of costs or trade-offs, however, is in part determined by cultural meanings. How then does A manipulate the value (cost or benefit) to B of various decisions?

Power is enacted through language. Although language serves descriptive purposes, it does more than designate objects, concepts, events, or behaviors; it also shapes the meanings and interpretations attached to those events and behaviors (Pfeffer, 1981a, 1981b). Edelman (1967:131) describes this process as follows:

The terms in which we name or speak of anything do more than designate it; they place it in a class of objects, thereby suggest with what it is to be judged and compared, and define the perspective from which it will be viewed and evaluated.

Power, then, is the capacity to influence how people interpret events. This interpretation determines how actual events are perceived and how participants feel about the events (Pfeffer, 1981a, 1981b). When cultural meanings are contested, as is likely in conditions of change, power will determine which group's definitions of the emergent order prevails.

As an authority figure, the school's principal may shape its culture. The principal's reaction to external events, like community demands, affects how those events are interpreted internally. To some extent, the principal shapes the assumptions on which cultural themes rest. He or she may do this formally as when monitoring students' academic progress, raising standards in that area, and making them more relevant (Edmonds, 1979). Or, the principal may use subtle means to affect cultural beliefs and values by serving as a key communication link.

The principal can shape the everyday experience of staff to promote certain culture values. For instance, by scheduling classes so department members have common free periods and by giving them departmental workrooms, the principal can promote collegiality. By minimizing nonacademic activities in the school or promoting academic competition, the principal can enhance the academic goals of the school.

Finally, the principal can provide incentives to promote the cultural themes he or she supports. As an example, by publicly humiliating a teacher who tries a new approach without getting permission or doing adequate preliminary homework, the administrator can ensure that a bias for action will not spread. Alternatively, by encouraging teachers who present research justifications for proposed new ideas, the principal can support a definition of teaching as a science.

Balancing the principal's capacity to influence the culture is the social organization of the professional staff itself. Staff members have a variety of values to offer each other including friendship, esteem, help, and an understanding ear when problems arise. Moreover, the staff has its own informal organization with social leaders and internal factions. These

groups and leaders can reinforce or oppose the orientations of the principal or other formal leaders (Firestone, 1980). A variety of contingencies will determine whether the principal and informal leaders are working in concert or at cross-purposes. However, in change situations, informal leaders often emerge in opposition to principals and may be conservative sources upholding traditional values.

In summary, the conceptual framework that will guide the research assumes that organizational reality is a socially constructed phenomenon. Actors have autonomy and simultaneously create and interpret their social worlds. The concept of culture emphasizes the symbolic aspects of organizational life, highlighting the role of language in creating meanings that define, make salient, and prescribe certain values over others. In addition, the selection of improving schools necessitates analysis of the interaction of culture and change. Because change means the modification of an existing order, it is likely we will see negotiation, dispute, and conflict about the emerging order. This leads directly to considerations of the power of various groups to influence interpretations and meanings--to modify aspects of culture.

Important Domains in Improving High Schools

Culture, thus far, is a rather omnibus concept. Its significance for improvement or effectiveness comes from its specific content--the domains of knowledge that describe everyday behavior in school settings. The task, then, is to describe cultural content in improving high schools and how that content changes. The literature on effective schools and business, and research on change suggest five domains that might comprise an

improving high school's culture. This section defines each of those domains, describes possible variations within them, and suggests indicators of the domains that we might look for. It also discusses the possible effects of change on the beliefs, values, and behaviors subsumed under particular domains.

Collegiality

Collegiality is the sharing of work-related issues among professional staff. It involves interactions about instructional matters and requires respect, trust, and interest in colleagues' work. Rosenblum and Louis (1981) call this the cohesiveness of the work group. Emphasizing the work-related aspect of this domain, both Spady (1984) and Wehlage (1982) suggest that collegiality entails joint decision-making about the work to be done and shared responsibility for its outcomes. It thus involves a commitment to teaching and to the other educators one works with (Clark, Lotto, & Astuto, 1984).

Norms of collegiality provide tacit boundaries on what work issues are talked about, with whom, and where. As rules governing everyday behavior, these norms can vary in scope or range thereby framing the content of teacher talk. Burlingame (1984) found that despite isolation in separate classrooms, teachers used the teachers' lounge to build feeling of commonality: "Tales told in the lounge thus became ways of joining teachers with other teachers" (page 45). The talk patterns avoided conflict, however, thereby preserving the appearance of equanimity and suggesting a norm of consensus. Norms can also vary in intensity, suggesting how strongly conformity is demanded from which subgroups.

Collegiality has been associated with successful schools. Little (1982) found that strong norms of collegiality were evidenced in a wide range of professional interaction with other teachers or administrators and that the interaction was often about instruction. Teachers also observed and critiqued one another and shared planning or preparation for teaching. In successful schools, teachers engaged in these behaviors more frequently, with a greater number and diversity of people and places, and with more concrete and precise language than in less successful schools. Capturing the interactive aspect of collegiality, Spady (1984) describes the staff in excellent schools as "problem-solving teams."

Both Little's (1982) and Spady's (1984) characterizations suggest professional staff relations that are different from what we would typically expect. Instead of thinking of themselves as individuals acting alone and independently, teachers in successful schools apparently think of themselves and their colleagues as team members. Sharing ideas, concerns, problems, and working cooperatively on joint projects become the norm. This shift in conceptualization from solo practitioner to team member entails so much change that Spady (1984) calls it a "paradigm shift."

If collegial relations among professional staff is one hallmark of successful schools, then improving high schools may give evidence of the development or increase of collegiality. Little (1982) provides indicators of collegiality. These include frequent interactions about instruction among teachers or between teachers and other professionals (administrators, counsellors); mutual observation and critique among teachers; shared responsibility for planning instructional activities; and joint preparation for teaching. In addition, we might see more departmental meetings for

planning, feedback, and brain-storming, modification of the schedule to provide joint preparation periods, or increased sharing of materials. Ultimately, increasing collegiality could be symbolized by a shift in language from "I" to "we."

However, there are certain structural features of all schools that make the development of collegial relations difficult. For example, schools have been described as "institutionalized organizations" (Meyer & Rowan, 1977) that tightly control personnel categories (i.e., prescribe who can teach what, to whom, and where) but leave uninspected the central activities of teaching and learning. This simultaneous loose-tight property of schools grants teachers wide autonomy in how they organize and conduct their classes. This autonomy is valued and would likely be protected by teachers. But autonomy seems to work against collegial relations.

Norms of collegiality could demand that teachers work together closely, know one another's work intimately, and share feedback on how the work is going. Beliefs or values supportive of these norms could disrupt the notion of teaching as an autonomous or private activity. Collegial norms might raise the visibility of a teacher's work among colleagues, subject it to inspection through mutual observation and to analysis through mutual critique, and, possibly, suggest changes in the way that work is carried out or in the very nature of work itself. Thus, changing norms might disrupt the established ideas of teaching that protect each teacher from inspection by peers. Teachers might experience threats to their pride and self-esteem because of changes in norms and expectations about behavior. It seems likely, then, that the development of collegial

relations would have to overcome the dearly-held condition of autonomy that teachers have come to value and protect.

However, high schools also are characterized by physical arrangements that separate teachers into discrete classrooms where they spend most of their workdays in interaction with adolescents. This condition separates teachers from other adults, leading them to describe their work as lonely and isolating. This aspect of high schools could lead teachers to welcome the introduction of structures or processes that would foster communication among the adults in the school and lead to more collegial relations. If structures to promote interaction are present, teachers may welcome the interactive parts of collegiality and come to accept the inspection and critique aspects.

Collegial relations among teachers have implications for relations between teachers and administrators. Collegiality suggest a breaking down of the hierarchical authority relations between principals and teachers. That is, instead of viewing each other from the subordinate--superior perspective, they see one another as colleagues--fellow educators committed to children's learning, each having different responsibilities. Ogawa (1984) suggests something similar to this in his analysis of the roles of teachers and administrators. He suggests that each role has evolved differently to meet distinct information processing needs. Thus information demands have lead to distinct specialities to meet those demands. This is a very different conceptualization of administrator-teacher roles than traditional, bureaucratic models.

A further implication of collegial administrator-teacher relations is the idea of "indigenous leadership" from the business literature. Well-run

companies foster idea champions or many leaders throughout the organization. Clark, Lotto, and Astuto (1984:65) suggest that excellent schools encourage this same sort of leadership behavior in everyone:

Effective educational organizations spawn primary work groups and individual "champions" in unusual numbers. The designated leaders create an environment for trial and a tolerance for failure so that leaders can emerge and be sustained at all levels of the school system.

Thus, a collegial atmosphere--one characterized by sharing the "how-to" aspects of work, feelings of trust, respect, and tolerance for risk-taking--fosters a team approach where commitment to shared tasks is high.

Community

While collegiality addresses the professional relations among adults in schools, community touches the relations among everyone--adults and children alike. A sense of community means a collective sense of responsibility for what happens in the school and for what happens to one another. Moreover, it extends beyond the "work," i.e., cognitive learning, of children to include a more holistic concern for others' well-being. Community draws people in and ties them to the school.

The theme of community could vary along both the spatial and temporal dimensions. It seems likely that it would vary between various subgroups of the school population and could also become particularly intense during certain times. We would want to map a sense of community along these dimensions to ascertain how pervasive community feelings are, among what groups, and how this varies over time.

Community is associated with successful schools and well-run businesses. Like the clans in Ouchi's Theory Z companies (1981), successful schools bond people together and to the organization through a sense of concern. Wehlage (1982) captures this in an analysis of programs for marginal students. He attributes some of the success of these programs to teacher culture, one aspect of which is a sense of extended role that concerns itself with all aspects of the children's lives. Teachers believed they were responsible to teach the "whole student" and helped students develop a sense of values and moral direction. The practices of this extended role communicated a sense of caring to the students.

A sense of community could be expressed in this notion of widely-shared personal caring. Preliminary site visits were made to pilot some ideas; these suggested that a high level of attention to the individual, as expressed in caring gestures, helps build commitment to the schools. This was found by Donmoyer (1984) in his study of an exemplary arts program in an elementary school. He noted that the principal enacted (and could articulate) a philosophy of "personal closeness" that was crucial to the development and quality of the school's program. Personal caring means that individuals are not anonymous; one's personal idiosyncracies, uniqueness, and problems are acknowledged and respected by others. Thus, we can expect to see some evidence of behaviors and language that support the idea of caring for the individual.

This reconceptualization of role may entail enormous changes in how teachers think about students, what they define as appropriate areas for concern, and what, as a result, their role-appropriate behavior is in a number of situations. This, too, will entail a paradigm shift. Working

against these changes are a number of conditions in high schools that make the development of a sense of community difficult. One is the way students are defined relative to the school.

Students have been formally defined as members, clients, and products of schools (see Schlecty, 1976, for a discussion). Each definition carries certain expectations that define how the role incumbent will relate to others and how others will relate to the role incumbent.

Student-as-product is perhaps the most pervasive definition, implying a "tabula rasa" state that is acted upon by the schooling process. Metz (1978) describes this as the incorporative definition of student and teaching. If students are products of the educational process, teachers' value or self-esteem derives from the quality of that product, i.e., its academic achievement or attractiveness on the labor market. Much of the emphasis in the effective schools literature on achievement reflects a student-as-product definition.

Both other definitions, student-as-member or as-client, reveal relationships of more equity between students and other actors in the school setting. Membership implies full-fledged, equitable participation, while being a client reveals an economically-based, self-interested, contingent relationship. In either conceptualization, students have power relative to other actors and participate in the educational process. This view is described by Metz (1978) as developmental. Developing a sense of community in a high school will entail determining what the everyday definition of students in the school is and, if necessary, changing it. Since most schools seem to operate with a tacit definition of students as products, it seems likely that this definition will have to undergo change.

In addition, we would expect to see evidence of attempts to overcome the effects of large size. High schools (especially urban ones) are large places, often housing over 2500 adolescents. Teachers may see 150 different faces over the course of a day. Metz (1982) remarks how, despite the fact that there is yet no conclusive evidence that large size impedes school effectiveness,

most of us with experience in schools have probably developed an intuitive feel for advantages of small size (p. 109).

Newmann and Behar (1982:42) remark that in larger organizations there is more potential for people to feel alienated. Gump and Barker (1964:202) describe this as a feeling of redundancy. That is, as high schools grow larger, the additional students become redundant for its various functions. As students become unnecessary, a larger proportion are unable to participate in the activities that bind them to the life of the high school.

The literature on excellent companies suggests that here, too, internal structures are created that help to counteract the sheer size of the organization. Within a smaller group, people feel known and regarded as unique. Effectiveness is attributed, in part, to the individual's sense of belonging to a smaller unit that lessens the impersonality of a large organization. Thus, we will want to discover if improving schools incorporate these ideas; if they have atmospheres of smallness and belonging for both teachers and students.

A third structure that works against feelings of community is the schedule. In high schools, scheduling has become a full-time

computer-assisted function. Often there is one vice principal in charge of scheduling. Owens (1984:17) describes scheduling as

a powerful and readily visible management technique for exercising managerial control and coordination.

The schedule controls students, teachers, and space so that all are accounted for; none are unscheduled for any moment of the day. Changes in the schedule can be difficult if not impossible to effect. A small vignette from the preliminary site visits provides an example:

The setting is a large (2500 students) urban high school. Scheduling is done by one administrator with the assistance of a computer. Scheduling is called "organization" in this school; thus, the computer room is called "the organization room."

One of the teachers in this high school had a fairly severe heart attack. When he could return to work, he was unable to climb the stairs to his usual second-floor room. The department head requested room changes for all Mr. Folly's classes. Once scheduled into a room on the first floor, he could meet his classes and teach them, it was argued.

"The organization room" wouldn't meet this request. Oh, Mr. Folly could teach in the first room; that would be OK. But he would have to teach the classes already scheduled into that room. Room changes for Mr. Folly's classes would have involved too much disruption to a somewhat sacrosanct schedule.

We relate this vignette to provide an illustration of an extreme situation. Clearly, in this high school, the scheduling person and the schedule itself wield considerable power. Protecting the schedule was more important than accommodating a convalescing teacher. Attempts to build school-wide community feelings in this school would have to break down the rigidity of the schedule.

Owens (1984:17) also remarks on the power of the schedule to affect members' perceptions of time:

people will say, "I'll see you third period" (not 9:14); or in

recounting an event during the day, "It happened late in the fifth period." He concludes that "the precision and power of the schedule to control is a dominant characteristic" (p. 17) of the school he studied. Even more telling, it was a tool of managerial control of which the principal seemed hardly aware.

A sense of community, then, could be described as the glue that holds all the disparate parts of the school together and forges it into a coherent, successful organization.

Clear Goals and High Expectations

Successful schools and well-run companies have a sense of themselves: they know what they are about (Clark, Lotto, & Astuto, 1984). They stay focused on their primary tasks, allow experimentation at the periphery, and convey a clear sense of purpose. In Peters and Waterman's (1982) term, they "stick to the knitting;" in Clark, Lotto, and Astuto's (1984:65), they "pay attention to the task at hand." Successful schools have a clear focus: strict attention is paid to teaching and learning. The classroom is protected from unwanted intrusions and extraneous activities are of secondary concern, if they are engaged in at all.

In addition to clear goals, successful schools reveal patterns of high expectations (Clark, Lotto, & Astuto, 1984). Individuals have a keen sense of personal efficacy and expect the same from those around them. Administrators hold high expectations for teachers; teachers expect the most from the principal. Students expect good teaching and a challenge; teachers hold high expectations for all students.

The effective schools literature suggests that, in the case of students, expectations should focus on academic achievement, usually narrowly defined. Such achievement, however, is only one area where high expectations have results. The literature on programs designed to motivate marginal high school students suggests that high expectations are fruitfully applied to student behavior and discipline in the school. And, a vignette from the preliminary site visits suggests that high expectations for behavior are also productively applied to teachers:

The high school has been experiencing "creeping tardiness" among the teachers. Some were arriving later and later to work. The roll book for teachers to sign in sits on the main office desk--a long, narrow barrier between four secretaries and any visitors to that office. Disliking the increasing lateness, the principal decided to take swift action. At 8:25 a.m., the roll book was removed from the main office and placed on his desk. Any teacher arriving after 8:25 a.m. had to sign the book in front of the principal. Although not technically "late," teachers were embarrassed to enter his office and sign in. Teacher tardiness declined dramatically.

Thus, high expectations can apply to the achievement of students, teachers, and administrators, and can also apply to orderly behavior. One of the tasks of high schools is to refine the adolescents' sense of self-control. High expectations for disciplined behavior convey powerful messages about respect for others and for property. Thus, high expectations can incorporate beliefs about how people should perform and about how they should relate to one another.

However, some researchers have found indications that high school teachers and students have struck a "deal" (Cusik, 1973; Sizer, 1984) which suggests low expectations, at least for achievement. The deal can be described as the student offering attendance in class and docile behavior in exchange for limited pressure from the teacher to perform academically.

This negotiated aspect of classroom life is a notable feature of high schools. It implies that students and teachers are co-conspirators in presenting the appearances of learning and order in the classroom. Order has become the ultimate goal with academic learning as the trade-off.

Typical improvement efforts focus on learning or, at least, measured student achievement. It seems likely that such initiatives would disrupt the negotiated order between students and teachers. Teachers would be under pressure for their students to show evidence of greater learning, and students would be under pressure to produce greater amounts of effort. Thus, we will be interested in how improvement efforts focusing on increased learning or achievement will be negotiated between teachers and students at the classroom level. Of particular interest will be how the new order is negotiated, the conflict or disputes associated with it, and the trade-offs that ensue.

Spady (1984) suggests that many of these changes will involve "paradigm shifts" in how teachers think of their profession, each other, administrators, and children. Thus, teachers in excellent high schools think of themselves as team members as well as subject-matter specialists. And they conceive of children not in terms of their instrumental value as "economic producers," but rather in their future roles as "global citizens." Each of these new conceptualizations is considerably more than re-labelling. Each entails a fundamental shift in thinking for and about teachers and students. The new concepts emphasize relatedness and responsibility to others. These are profoundly different concepts of teacher and student than historical ones.

Action Orientation

Successful businesses and, by implication, effective schools reveal a predilection for action rather than reflection, for trial-and-error rather than strategic planning. The focus is on implementation, action, test models, and trials. The goal is to see ideas translated into products or materials, lessons or classes. In these schools, one gets a feeling of energy, of activity, and of action. Successful schools are not passive places.

Schools, however, have been criticized as being excessively faddish. With each new program or curriculum that comes along, so the criticism goes, schools jump on the bandwagon. As Cuban says regarding the effective schools research (1984:130), "practitioners seldom wait for researchers to signal that school improvement can move forward." Faddishness is not what we mean by an action orientation; instead we mean a belief in the importance of self-renewal, small experiments, and trials before the commitment of large-scale resources. Rather than committee-talk to evaluate the potential of a new idea, material, or program, an action oriented school would try it out on a small scale to see how it works. Thus, an action orientation means an attitude of self-renewal that is reflected in small-scale trials, risks, tolerance for failure, and a willingness to cut one's losses.

An action orientation has not been studied in schools. Its importance comes through reasoning by analogy from the excellent companies literature. It seems likely that this domain would be present in improving schools. It might evidence itself in increasing honesty regarding performance and willingness to admit failure among teachers. Staff might be more willing

to ask for advice from colleagues or to "try something new" on their own. It could entail more use of resource centers or curriculum libraries, or a more problem-solving orientation in department meetings. Thus, a bias for action reflects a self-renewing, improvement-oriented constellation of values.

Once again, however, certain structural characteristics of high schools work against the development of an action orientation. One is the fundamentally conservative nature of the schooling process when seen as the socialization of youth. Inculcating cultural values is a protective, conserving process that will deflect attempts at change. Since change, especially improvement, is the rationale for an action orientation, it seems likely that these will conflict.

Second, high school teaching staff have become older, tenured and, in some cases, staid. Although one could expect those who are most secure in their positions (tenured) to be most willing to take risks, this is not often the case. The vitality and creativity of educational organizations requires the regular infusion of youth, a problem recently recognized in colleges and universities. Thus, the very nature of the professional staff in high schools could work against the infusion of an action orientation.

Despite these obstacles, we expect improving high schools to show some evidence of this basic belief in the value of self-renewal. It is likely, however, that this belief will cause distress and anger among some staff. We would trace, then, the development of, dispute about, and growing adherence to, this cultural value.

The Knowledge Base for Teaching

Another important domain of a school's professional culture is its definition of the knowledge base for teaching. This knowledge base defines what constitutes legitimate and useful information about how to go about the act of teaching. This area has received considerably less attention than some of the others discussed so far, probably because it is considered less important to educators. According to Simpson and Simpson (1969:203), "the main intrinsic appeal of the semi-professions (including teaching) is to the heart, not the mind." More recently, Gideonse (1983: iv) has argued that "rigorous commitment to either the knowledge base or inquiry practices in support of instruction does not now characterize. . . the operation of the Nation's schools." He concludes that if educators' actions were based on a sounder knowledge base and on the capacity to conduct their own research, schools would become more effective.

In broad terms, one can imagine three occupational definitions that define the teaching knowledge base quite differently. Each of these has different implications for the ways that educators in improving schools seek out and evaluate educational practices. First, teaching (or counseling or any of the other specialities found in a high school) might be considered a science which has four important characteristics. First, a science encompasses a field that can be analyzed as a set of variables that are observable and measurable. In principle, the relationships among these variables are known, or at least they can be learned. Second, the relationships among variables are identified through verifiable inquiry procedures. These procedures can be used to validate old findings and to

generate new ones. Third, while the results of inquiry presumably can be checked by anyone, in practice the inquiry process is complex and time consuming, so it is usually carried out by specialists. New knowledge is usually generated and validated by researchers. Finally, sciences are always in the process of development. That is, new variables and relationships are being developed that could lead to new and more effective practices.

Where professionals view teaching as a science, we would expect to find continuing efforts to "keep up with the field" by taking courses, attending inservice programs or conferences, and reading relevant journals. When identifying problems and solutions, professionals would try to use the best available expert advice, defining expertise in terms of research competence. They would also evaluate new ideas in terms of both the procedures used and the scientific ability of the people advocating them. When unique solutions to local problems are needed, there would be a heavy premium on using "scientific" procedures to arrive at an answer. As a result of this orientation, educators who define teaching as a science would be particularly open to new ideas and also have a critical capacity to evaluate them.

Second, teaching can be viewed as a craft. The knowledge base of a craft consists of a set of skills and some understanding of when and where to apply them. This knowledge is developed through trial and error, and a good deal of trial and error is used to apply it. The world of a craft is neither as analyzable nor as predictable as the world of a science, nor are the procedures for verifying knowledge as clear. Craft knowledge is typically developed by practitioners rather than by specialists, and it is

shared orally. Craft knowledge does not develop as quickly as scientific knowledge so the expectation that new approaches will soon be available is not as well established.

In a craft-oriented school, we would expect to find infrequent efforts to follow externally-generated developments in the field. Instead, we might find the sharing of techniques among educators within a school. When trying to solve problems, teachers would rely on the ideas of other practitioners rather than experts, and they would try out new ideas to see if they work. Single successful trials might be more important for validation than results from a research design. Teachers would assess the knowledge of experts by asking "how long did you teach and how long ago" and "did you teach in settings like mine," rather than by querying the person's research background or academic credentials. We would expect less openness to new ideas in a craft-oriented school and more willingness to go with what has worked in the past than in a school where teaching was seen as a science. Still, people who see their work as a craft are likely to be pragmatic and will try new approaches that can be shown to work better.

Third, teaching can be viewed as an art. This definition places less emphasis on knowledge and more on innate ability. In an art, "some people have it and some don't." Artists fill themselves with relevant experience and wait for the muse to strike. Some people frequently come up with good solutions to the problems they face while others do not. This view of education is more conservative than either of the other two. People do not seek out new knowledge and are not likely to be receptive to it or worry about ways to evaluate it. Even if something is shown to be successful, there is likely to be an objection that "it won't work for me."

Beyond these three definitions, we can imagine a number of others that downplay the role of knowledge entirely. One version holds that the teacher is only as good as the available students: The bright ones do well and the poor ones fail. This fatalistic view discourages people in a school from seeing out new knowledge or practices and from trying new ideas that are presented to them.

These five domains sensitize us to search out, observe, and explore certain cultural elements in the high schools we study. These domains derive from the research literature and suggest areas that may be important. It is entirely possible, however, that these domains may not be significant: some or all may pale as the detail, richness, and vitality of each school intrudes on our conceptual framework and muddies our tidy categories.

RESEARCH METHODS

A cultural perspective for the study of improving high schools suggests certain methods that are congruent with the perspective's assumptions. First is the selection of an intensive fieldwork approach that seeks to understand the participant's experience and to view the organizational world as they do. To study professional cultures intensively, three high schools have been selected for case study. Teams of two researchers will spend at least thirty days at each site to gain indepth understanding of the cultural aspects of improvement processes. This will provide sufficient time to get beneath the surface of the school's culture, to observe behavior, and to become familiar to teachers. It will also allow time to explore the development of the school's culture over time. The primary data collection will be observation and selected use of interviews.

A major consideration will be the responses of the high school professionals to change processes. Fullan (1982) makes a convincing case for understanding the perspectives of various actors in the change process, and he regards teachers as the most important group of actors. He notes that educational change is multidimensional; involves change in beliefs, teaching approaches, or materials (p. 30); and can have profound effects on teachers' "occupational identity, their sense of competence, and their self concept" (p. 33). Merely being in a school where there are significant organization-wide change processes at work can be deeply disturbing.

Because improvement processes can touch deeply held beliefs, how teachers and other professionals interpret events and behaviors will be particularly interesting. We will focus on reactions to change and proposed change, attempting to understand how professional cultures affect change efforts and are affected by them. This will give us some insight into the process of modifying the symbolic aspects of organizational life--its culture.

The approach will entail two researchers per site. High schools are large places and one researcher easily could find only a "piece of the elephant." Employing two researchers will permit cross-checking of emerging themes and issues and will help balance bias. Moreover, data analysis will be expedited by having two researchers knowledgeable about each school.

Additionally, we will study three high schools. The rationale for intensive fieldwork, two-person teams, and a limited number of sites is the same: each feature of the research approach encourages detailed understanding of professional cultures and maximizes the opportunities to understand the nuances of cultural transformation.

The primary data collection will be through observation. We are particularly interested in observing teachers teach, and then talking with them to understand their actions. This approach has been used by Metz (1978) and McNeil (1981) to uncover significant cultural norms among teachers.

To complement observation, the research will rely on the selected use of interviews. One purpose of interviewing will be to have teachers reflect on recent behavior, as described above. Another will be to discuss

in detail cultural changes. With turnaround schools, these changes will be fresh in people's minds and, thus, reconstruction of event will be possible. We will want to trace the development of improvement efforts as perceived by the professional staff. We will be particularly interested in their accounts of events, their responses and interpretations of those events, and how they have negotiated with the sources of change and among themselves to create an emergent improvement orientation. It is here that the concepts of conflict, dispute, and power will be most useful. A final purpose will be to broaden the sample of teachers to be sure salient subgroups are represented.

This aspect of the study will trace teachers' interpretations of the development of improvement efforts and will focus on the dynamics of that process. We will be interested in the forces teachers see as striving to maintain the established order, and those forces driving for change. The rules of everyday behavior will be under dispute and we will trace how they are modified to support new ideas and practices. It is likely that the content of the school's symbol system will be undergoing change. For example, slogans expressive of new ideas, stories of successful similar schools, and rituals supportive of new goals may appear. We will want to document these occurrences, identify their initiators, and trace the spread of commitment to or dispute about them.

Because our interest is in professional cultures, teachers will be the group of primary interest. We will focus on their beliefs about their craft, assumptions about children, interpretations of administrative

actions and words, and reactions to change processes. Moreover, we anticipate that there will be variance within this group. Thus, even though the study of cultures is the study of shared meanings, "the degree of 'sharedness' is, of course, variable and dependent upon the relative power of individuals and groups acting in a social field" (Goldberg, 1984:160). Metz (1978), for example, identified two broad categories of teachers based on their values and beliefs--their philosophies of teaching. In a different study, Metz (1984) once again found two salient teacher groups, but this time the distinction was based on reactions to and beliefs about school-wide change.

The remaining three parts of this section outline site selection procedures, the data collection plan, and a description of the data analysis processes.

Site Selection

To identify the two to four improving high schools for the research project, we formulated a definition of an improving school, contacted informants and asked for nominations of improving schools, visited each school to ascertain if it was in fact improving and if there was interest in participating in the study, selected a short list of schools, and negotiated final entry.

The definition was intentionally very broad in order to include a wide range of improvements. This definition included the following points:

1. The school could be getting better in a number of areas including instruction, achievement, order and discipline, attendance, or climate.

2. The change might or might not involve a special improvement effort or the "adoption of an innovation" or new teaching approaches.
3. The school did not need to be exemplary, although exemplary schools were not precluded; what was crucial was some real evidence that things were getting better.

Although the schools could vary in a number of ways, we looked for evidence that:

1. The school had actually improved in whatever area school staff saw improvement for the last two or three years. It was not enough to be involved in programs; there had to be demonstrable results in a quantitative form.
2. The evidence of change had to include evidence that students were behaving differently or learning more.
3. The change had to be school-wide and not limited to a single department, grade level, or small group.

Special emphasis was placed on finding improving schools that were in urban settings. For cost reasons, it was also important to identify schools within driving distance of Philadelphia.

To obtain nominations, we contacted the following organizations:

1. The Middle States Association of Colleges and Schools:
Commission on Secondary Schools
2. Bucks County Intermediate Unit (Pennsylvania)
3. Chester County Intermediate Unit (Pennsylvania)
4. Pennsylvania Elementary and Secondary Principals' Association
5. Philadelphia School District
6. Camden County Office of the New Jersey Department of Education
7. Gloucester County Office of the New Jersey Department of Education
8. Burlington County Office of the New Jersey Department of Education
9. Educational Information Resource Center (formerly EIC-South)

In each case, we provided informants with background on purposes of the study and indicated that we would follow up with nominees to get further data. We asked for nominations and descriptive information on the schools selected. In addition to working through these nine agencies, personal contacts and the knowledge of other RBS staff were employed.

Through this process, fourteen possibly improving high schools were identified. In each case, the principal or superintendent was telephoned. Thirteen agreed to discuss the study. In each meeting, the study's purposes, research activities, and feedback to the school were described, and questions were answered. In addition, we asked about the nature of improvements in the school and for evidence that student behavior or learning had changed in a positive direction. This evidence usually took the form of several years of records, including achievement test scores, SAT scores, minimum competency test scores, attendance data, and lateness rates, depending on the claim to improvement made by the principal.

The data were reviewed by RBS staff, and three schools were selected for inclusion in the study. The following table provides some demographic information on each one.

	<u>Adams</u>	<u>Monroe</u>	<u>Jefferson</u>
<u>Grade Pattern</u>	7 - 12	9 - 12	9 - 12
Enrollment	1,000	800	2,000
Percent Minority	05	95	95
District enrollment	2,000	4,000	19,000
City size	16,000	41,000	85,000
City Growth Pattern	decline	stable	decline

Adams High School serves a white collar suburban community that is becoming progressively more blue collar. The community has an historical interest in maintaining a good high school that may now be declining somewhat. The district's leadership is stable; the same superintendent has served for a number of years. The high school has had a good reputation in the area for some time, especially as a school with a positive learning climate. However, in the early 1980s, declining SAT scores raised the possibility that the quality of the academic program was slipping. A new principal was hired in 1982 with a mandate to improve the academic program, and he took a number of steps to tighten the curriculum and emphasize academics. The history of composite SAT scores for the high school indicates that the school did in fact improve over the last two years:

<u>Year</u>	<u>Composite SAT Score</u>
1978	918
1979	914
1980	933
1981	913
1982	879
1983	901
1984	916

RBS staff first visited Adams school in the spring of 1984. We met with the principal and department heads. The department heads expressed some concerns about the study, but these were worked out over the summer. Adams High School has agreed to participate in the study.

Monroe High School is the only high school in a small city with a declining industrial base. Achievement scores have been low throughout the district. About five years ago a new superintendent was hired who is committed to a forceful approach to school improvement. He has sought the assistance of Research for Better Schools, and one RBS program is providing

training and assistance in the high school. In the last two years a new principal was hired to oversee improvement efforts in the high school. The success of those efforts is apparent in the following statistics.

<u>Average Daily Attendance</u>		<u>Percent Passing State Minimum Comptency Test</u>				<u>CAT Grade Point Equivalent</u>	
Year	%	9th Grade		10th Grade		12th Grade	
		Communication	Math	Reading	Math	Reading	Math
81	77	61	55	8.7	9.0	11.0	10.0
82	83	70	74	8.6	8.9	11.2	11.2
83	84	70	70	9.0	10.0	10.9	11.0
84	85	82	78	9.3	10.0	11.2	11.6

When we approached the superintendent early in the fall of 1984, he was very eager to participate in the study; administrative approval was quickly granted. However, it soon became apparent that there was considerable tension between the administration and a substantial portion of the high school teachers. It seemed likely that the study would meet with resistance so strong as to seriously impede data collection unless unusual steps were taken. For that reason, we approached the bargaining unit for teachers separately and asked for its approval of the study in hopes of alleviating this resentment. When that unit raised no serious objection to participation in the study, field work was initiated.

Jefferson High School is located in a declining central city in a large metropolitan area. The city has a large minority population and a severely limited industrial base. The school district was censured by the state several times for the limited quality of its educational program. Jefferson's principal was promoted from an elementary school principalship thirteen years ago. In spite of considerable obstacles, she has

established an orderly internal environment. Moreover, the proportion of students passing the state's minimum competency test has increased for a number of years:

Year	<u>Average Daily Attendance</u> %	<u>Percent Passing State Minimum Competency Test</u>		Math	
		Reading 9th Gr.	10th Gr.	9th Gr.	10th Gr.
81	75	51		43	
82	84	62		69	
83	83	65	50	67	66
84	86	68	66	78	76

We approached the principal of the school this fall. She indicated an interest in participating in the study if her faculty and the administration would agree. With her help a presentation was made to the faculty who viewed the study favorably. With central office and Board approval, this site has been formally included as well.

Data Collection Plan

To ensure data comparability, a core of common data will be collected at each site. There will, of course, be data from each site that is unique and idiosyncratic to that site--those characteristics that lend it its special flavor. While these are important to identify and describe (particularly as they relate to change processes), we must ensure a common core.

Attached is a chart that identifies those events, settings, actors and artifacts that have the greatest potential to yield good data on each of the five domains (see Table 1). Listings within each category provide

Table 1

Data Collection—Sampling

	Collegiality	Community	Goals and Expectations	Action Orientation	Knowledge Base
SETTINGS					
public places (main office, hallways)	/	/			
teacher's lounge or lunchroom		/			
classrooms		/	/	/	/
meeting rooms	/		/	/	/
private offices:					
counselor's		/	/		
disciplinarian's		/	/		
vp for scheduling's		/	/		
coaches'		/	/		
principal's		/	/		
department office or work room	/		/	/	/
gymnasium or locker room		/	/		
auditorium		/			
EVENTS					
events where professionals interact:					
1) faculty/department meetings	/		/	/	/
2) lunch/coffee break/recess	/	/			
3) inservice sessions	/		/	/	/
4) after school (the local pub?)	/	/			
events where professionals and students interact:					
teaching acts		/	/		
extra-curricular activities		/	/		
suspensions and expulsions		/	/		
roster changes		/	/		
crisis counselling		/	/		
assemblies and pep rallies		/	/		
ACTORS					
administrators					
principal			/	/	/
vp discipline (HT)		/	/		
vp curriculum (HT)	/		/	/	/
vp schedule/roster		/	/		
vp student activities (HT)					
counselors		/	/		
coaches		/		/	
teachers					
department heads	/	/	/	/	/
different tenure in building	/	/	/	/	/
different departments	/	/	/	/	/
students					
different ability levels		/	/		
different visibility		/	/		
ARTIFACTS					
documents					
newspapers		/	/		/
policy statements		/	/	/	/
attendance records		/	/		
disciplinary records		/	/		
achievement test scores			/		
objects					
logos	/	/			
mascots	/	/			
trophies			/		
decorations		/			
art work		/			
physical arrangements	/	/			

parameters to bound data collection, and represent the core. We start off with settings because these are the most concrete--a synonym for settings is places. During the first few weeks in the field, we will collect data in the following settings:

- public places (main office, hallways, parking lot)
- teachers' lounge or lunchroom
- classrooms
- private offices:
 - counsellor's
 - disciplinarian's
 - vp for scheduling's
 - coaches
 - principal's
- department office or work room
- gymnasium or locker room
- auditorium
- meeting rooms

In each of these settings, certain events will occur. For example, in the disciplinarian's office there will be the handling of routine infractions, suspensions, or expulsions; in the counsellor's office there may be crisis interventions. Both of these types of events will reveal beliefs about collegiality, community, and goals and expectations. In general, the events will be:

- events where professionals interact:
 - formal routines: faculty/department meetings, evaluations, union meetings
 - informal routines: lunch/coffee breaks/recess, morning arrivals
- events where professionals interact with students:
 - teaching acts
 - extra curricular activities: sporting events, drama productions, music rehearsals
 - suspensions and expulsions
 - roster changes
 - crisis (e.g., pregnancy) counseling
 - assemblies and pep rallies

The first category of events will provide major data on collegiality, goals and expectations, and the knowledge base for teaching. The

faculty/department meetings will be crucial and will entail observation primarily. As teachers discuss curriculum, testing, new state requirements, homework policies, as well as the more mundane aspects of high school life (announcements of schedule change, field trips, time filler), norms governing their definition of teaching and norms regarding how they should relate to one another in a meeting setting will be revealed.

Morning routines and other informal encounters will also reveal these norms but in less structured ways. The brief encounters may contain requests for help, plans for meeting, supportive gestures, queries about how a particular concept or skill is best taught -- any of these events will reflect notions of collegiality and definitions of teaching.

The second category -- events where professionals and students interact -- will provide data about community, goals and expectations, and an action orientation. Both in the classroom and outside, when teachers and students interact, they reveal whether there is a sense of community, what their expectations are for one another regarding behavior and achievement, and whether teachers feel it is important to translate ideas and concepts into actions--lessons and courses.

As data collection progresses, we want to be sure we sample the

perceptions of the following actors:

administrators:
 principal
 vp for discipline
 vp for curriculum
 vp for schedule/roster
counsellors
coaches

teachers:

- department heads
- different tenure in building
- different departments

students:

- different ability levels
- different visibility (i.e., participation in extra-curricular activities)

external actors:

- superintendents
- curriculum coordinators
- board members
- community members
- state education agencies

Finally, we will observe and, if appropriate, collect certain artifacts that will provide data for each of the five domains. Included will be the following:

documents:

- school newspapers
- policy statements
- attendance records
- disciplinary records
- achievement test scores

objects:

- logos
- mascots
- trophies
- decorations
- physical arrangements

The emphasis is on observation in this data collection plan because many of the domains we are trying to understand are implicit and have a high potential for "false positive" responses in a direct questioning situation. Thus we will infer norms and values from behavior patterns and from conversations. Interviews will help us understand the settings and reconstruct the history of change efforts in each school. Interviewing will also be a necessary part of legitimizing our presence.

The next section--Days in the Field--provides a detailed outline of a day's schedule. This schedule can be followed initially to be sure we

become known to key department heads and to "regular" teachers in each department. It will also help establish that observation--"hanging around"--will be a regular part of each day. As we move along, we may want to observe more and interview less, with the interviews designed to test emerging hypotheses or to assess the distribution of adherence to particular beliefs and norms. This section also projects days per week in each site and raises some sampling questions.

Days in the Field

Sample Day

<u>Period</u>	<u>Activity</u>
1	observe disciplinarian's office--"getting into school" processes--lateness procedures, morning activities
2	interview department head
3	interview department head
4	observe classroom
5	observe classroom
6	observe lunchroom activities--students and/or teachers
7	group interview (3 maximum)--either students or teachers
8	interview department head/administrator
9	group interview (3)
	after school--observe sports, rehearsals--coaches and students

Project Days

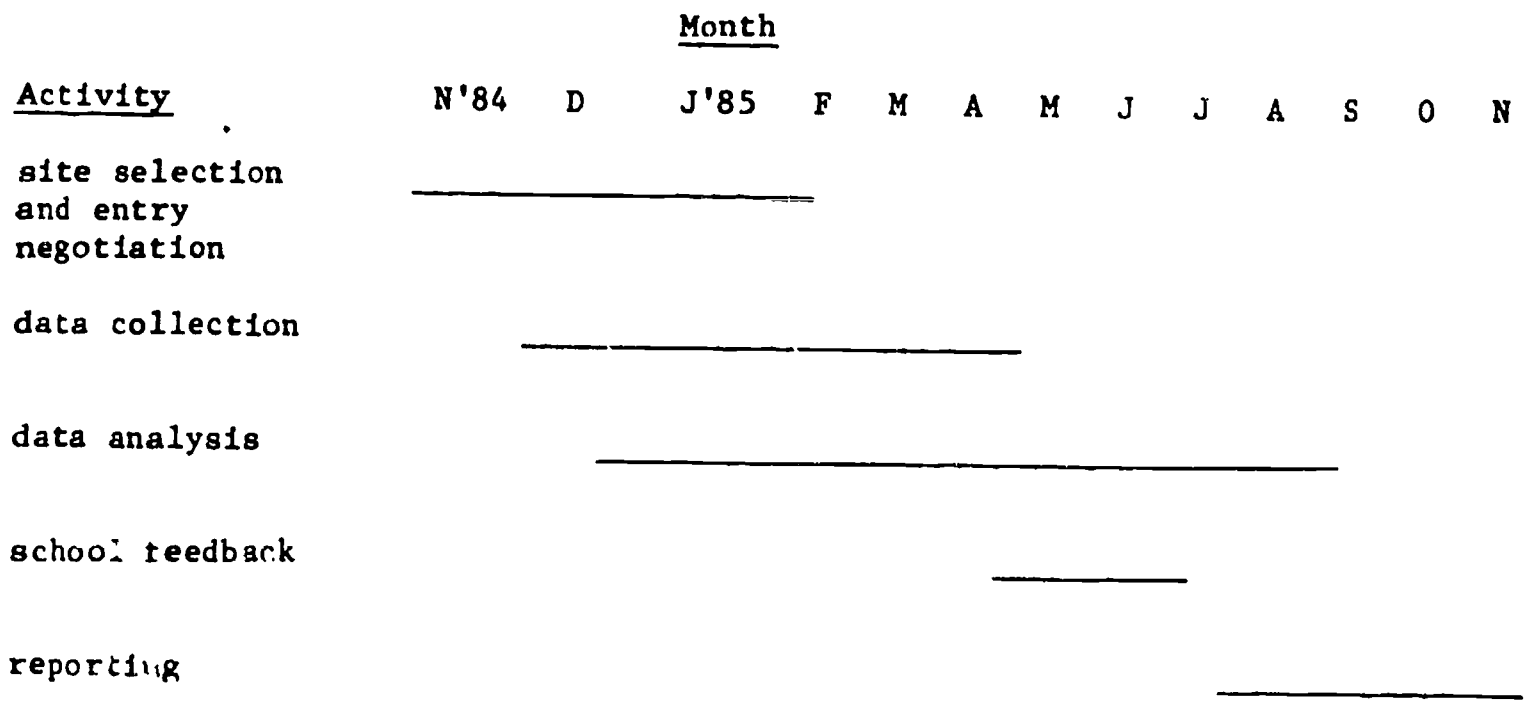
<u>month</u>	<u>primary researcher</u>	<u>Secondary researcher</u>
Nov-Dec	4 days interview Supt., central office people meet building principal, department heads observe department/faculty meetings	0

Project Days (continued)

<u>month</u>	<u>primary researcher</u>	<u>Secondary researcher</u>
Jan	3 days	2 days
Feb	3 days	2 days
March	5 days	3 days
April	5 days	3 days
May-June	feedback to high schools regarding qualitative findings and findings from SAS, if administered	

This schedule allows 20 days for the primary researcher and 10 for the secondary researcher. It also permits a slow start-up through November, December, January and February. Then in March and April there will be two days of field work each week. January and February will give us time to reconstruct the history and develop themes to pursue in more detail in March and April. This timeline is presented in Figure 1 below.

Figure 1. Timeline for research activities, FY 85



▲ = final report

The daily data collection plan allows for a couple of different scenarios. Three department heads could be interviewed in a day, and seven teachers (or students), plus the observation time in the disciplinarian's office, at lunch, in the classroom(s), and after school. On the one hand, we could focus in on some percentage of the staff to interview/observe intensively; alternatively, we could try to interview each teacher in the school. These sampling decisions will have to be made for all sites to ensure comparability.

Data Analysis

Data analysis will rely on three mechanisms to ensure rich and authentic descriptions of professional cultures in improving high schools. The first is regularly scheduled meetings of the research team. The purposes of these meetings will be: (1) to keep the team members aware of the fieldwork at all three sites; (2) to discuss emerging issues, concerns, hypotheses, or data collection problems, and (3) to ensure, through feedback among the team, that comparable data collection activities go on at all three sites.

The second mechanism will be writing analytic memos. These memos will serve as guides for further exploration of domains or categories in the field, as checks on the site-specific data collected, and as verification of emerging hypotheses. They will also serve as the basis for discussion at the team meetings.

Finally, the research will result in two types of written reports. The first is three case studies, one for each site. These case studies will be shared with participants in the study. This interactive feedback

sharpens the analysis, incorporates participants' views as validity checks, and helps engage participants in the study. It is anticipated that there will be informal feedback at each site throughout the study.

In addition to the three case studies, the study will result in reports written around the five domains or categories of collegiality, community, goals and expectations, action orientation, and knowledge base for teaching. As discussed above, however, these categories are designed as guides and, as with any qualitative fieldwork, other categories may emerge that are more pressing as explanations for the phenomena in question. Should that be the case, reports will be written that reflect the new, more potent explanatory categories.

The processes of data analysis will entail three activities: data reduction, data display, and conclusion drawing/verification. These activities will proceed concurrently during the research project, although one may take precedent over the others at various times.

Data reduction begins as soon as the important topics or themes are identified, and continues throughout data collection and report writing. Each choice or research decision (whether of topic, site, person to interview, or what to record as field notes) involves data reduction because it is a narrowing, a selecting, from all possible choices. Other instances of data reduction occur during the coding of raw data and reporting. Each reduction act brings the masses of raw data into more manageable proportion thereby making them easier to comprehend and work with. It is important, however, to remain open to the novel or unexpected insight that may emerge.

Data display is the process of presenting the data. For qualitative data, display usually takes the narrative form. However, qualitative data also can be displayed in graphic formats like matrices, charts, graphs, and tables. Displaying data in these structures forces the researcher to consider what is known and not known about the phenomenon in question, and can suggest new relationships, propositions, and explanations for further analysis. Thus, data display can promote analysis by disciplining the researcher to identify what is known and not known about the setting and can summarize the results of analysis. The study may entail the use of charts and graphs as suggested by Miles and Huberman (1984), although the exact form will depend on the data.

Drawing conclusions and verifying them also take place before, during, and after data collection. Before data collection begins, conclusions may exist as vague and unformed hunches about the phenomenon. As analysis proceeds, however, these conclusions will be tested out and elaborated systematically for their soundness and sturdiness. The conclusions will become more explicit as they are verified by the data in increasingly grounded analyses.

Data reduction, data display, and conclusion drawing/verification are the activities of data analysis which will occur iteratively throughout the study. Rather than suggesting that each type of activity occurs at a specific phase of the research process, the above description highlights how the activities will interrelate and feed one another. Data display may spur conclusions which then require verification; data reduction through

coding may suggest a particular display format that makes the data more comprehensible. Thus, each set of activities will feed the others interactively; all three will combine to present a comprehensive and robust explanation of the professional cultures in improving high schools.

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