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ABSTRACT

The paper identifies current special education practice and the current organization of schools as instrumental in actually creating the category of mildly handicapped students. A dichotomy between departments of special education and educational administration is noted. Only replacement of the system with an entirely different configuration and not rational technical efforts at reform can effect real change. There is a lack of theoretical basis to the mainstreaming debate and in the original formulation of Public Law 94-142, the Education for All Handicapped Children Act. Special education has erred in locating the cause of disability within the person and excluding from consideration causal factors lying in the larger external social, political, and organizational processes. Among topics considered in support of this argument are: school organization and change, professional bureaucracies as machines, response to change demands, organizational paradigms and change, values/power, school organization and disability, the nature of special education, the nature of progress, empirical evidence on the implementation of P.L. 94-142, and prospects for the future. An extensive bibliography is appended. (DB)

AN ORGANIZATIONAL ANALYSIS OF SPECIAL EDUCATION REFORM[1]

Thomas M. Skrtic

Although the education of students who are difficult to teach and manage in regular classrooms has been a controversial issue for most of this century the framing of the problem and the proposed solutions have varied across different historical periods. The controversy first emerged around 1910 when immigration, compulsory school attendance, and other progressive era reforms brought large numbers of such students into public school organizations (Sarason & Doris, 1979). Given the overriding concern for social and organizational efficiency during the progressive era (Haber, 1964), the problem was cast in terms of the efficient operation of school organizations. The solution was to remove these students from regular classrooms and to provide them with a special education in separate classrooms. Although there was some concern for the welfare of children, humanitarianism was secondary to the desire to segregate students who were disruptive to school organization (Lazerson, 1983; Mercer & Richardson, 1975). By the 1930s, the special class organizational model was a standard feature in most urban school districts; and, over the twenty-five years following the Second World War, it was diffused throughout the entire system of public education (Reynolds & Rosen, 1976; Weintraub, 1971).

In the 1960s, however, the controversy re-emerged in a new form within the now-established special education professional and advocacy communities. This time the issue was the ethics and efficacy of the special class model itself (Dunn, 1968; Johnson, 1962). Given the dominant social concern for civil rights, the problem was framed in terms of access to educational opportunity. The solution was to reintegrate or "mainstream" students who were difficult to maintain in regular classrooms--who by this time were thought of as "students with mild disabilities"--and to reorganize special education as a

resource/consulting service. The mainstreaming model officially replaced the traditional special class model as the preferred organizational approach for these students in 1975 with the enactment of P.L. 94-142. Given the unprecedented federal intervention into public education in the 1960s, the dominant social concern in the 1970s became school organization accountability; and the issue of the education of students with mild disabilities was reframed as the capacity of school organizations to comply with the least restrictive environment provisions of P.L. 94-142.

Today a new mainstreaming debate is taking shape within the special education professional and advocacy communities. Its genesis is the growing recognition that, for many students--and particularly those with mild disabilities--mainstreaming is failing (see, e.g., Gottlieb, 1981; Will, 1985, 1986). As a result, "greater access to the mainstream," the rallying cry of the 1960s and 1970s, is being replaced in the 1980s by "full access to a restructured mainstream" (see Reynolds, Wang & Walberg, 1987; Stainback & Stainback, 1984, 1985; Wang, Reynolds & Walberg, 1986; Will, 1985, 1986). Although it has taken three-quarters of a century, the relationship between school organization and students with mild disabilities is beginning to be recognized. The significance of the new mainstreaming debate is that it is about the possibility of a new mainstream.

Ironically, one reason for not recognizing the problem sooner stems from an organizational problem in the field of education itself. The division of labor in schools of education is organized on the basis of occupations (Spring 1980), which means that topics related to students with disabilities are assigned exclusively to departments of special education, while topics related to school organization are assigned exclusively to departments of educational administration. This has resulted in two separate discourses within the profession: one on students with disabilities, which takes school organization for

granted (Skrtic, 1987a, 1987b, in press a), and one on school organization, which avoids topics related to school effects and student outcomes (Bridges, 1982; Erickson, 1979). A second problem--and one of major importance in subsequent sections--is the atheoretical nature of both fields, which has meant that the discourses on both topics are carried out in the absence of any guiding theory. A third problem is that the division of labor in society assigns education topics to the field of education, which has meant that the only "official" discourses on such matters are those that emanate from the professional education community. Although there are "alternative" discourses on both topics, which are largely theoretical and often take the form of criticism of the official discourses, they receive far less attention than the official discourses, particularly from professional educators.

The first purpose of this paper is to highlight some of the contradictions, confusions and faulty assumptions contained within the official discourses, as well as the manner in which the atheoretical nature of these discourses perpetuates the illusion of mild disabilities as a reality external to school organization. The second purpose is to examine special education reform in the context of various theories of school organization and adaptability. On the basis of this analysis, the case will be made that current school organization creates--and can do nothing but create--students with mild disabilities as artifacts of the system, and, furthermore, that rational-technical efforts to reform the system--without replacing it with an entirely different configuration--do little to eliminate mild disabilities or their effects, produce even more students with mild disabilities, and create a new and largely hidden class of student casualties.

The third purpose of the paper is to argue that the atheoretical nature of the new mainstreaming debate obfuscates problem-finding and problem-solving relative to the relationship between school organization and students with mild disabilities. The case will be made in this regard that the current problems identified within the new mainstreaming

debate are largely the result of the atheoretical nature of P.L. 94-142 and that the atheoretical solutions proposed in the new mainstreaming debate will intensify current difficulties and create yet a different set of problems. Although P.L. 94-142 and the new mainstreaming debate represent important stages in the general reform of public education, they both approach problem-finding and problem-solving in the absense of any guiding theory of school organization and acaptability.

The Discourses on Stugents With Disabilities

The official discourse on students with disabilities in the field of special education is grounded in the following set of unconscious assumptions about the nature of disability, special education as a helping profession, and progress in the field.

> (1) disability is a condition that individuals have; (2) disabled/typical is a useful and objective distinction; (3) special education is a rationally conceived and co-ordinated system of services that help children labelled disabled; (4) progress in the field is made by improving diagnosis, intervention and technology. (Bogdan and Kugelmass, 1984, p. 173)

The first two assumptions derive from special education's disciplinary foundation in biology and psychology (see Mercer, 1973; Skrtic, 1986). By their very nature, these disciplines locate the root cause of disability within the person and exclude from consideration causal factors that lie in the larger social, political, and organizational processes external to the individual. The implication is that the official discourse on students with disabilities considers disability to be an attribute of the individual: an objective, pathological condition that individuals have. The case against this erroneous assumption has been made for most cases of mild mental retardation (Mercer, 1973), learning disabilities (Rist & Harrell, 1982; Schrag & Divorky, 1975) and emotional disturbance (Algozzine, 1976, 1977; Apter, 1982; Hobbs, 1975; Rhodes, 1970; Ross, 1980; Swap, 1978), which together make up the vast majority of all students labeled mildly disabled.

The third and fourth unconscious assumptions undergirding the official discourse --that special education is a rational system of services and that progress in the field is rational, cumulative, and technological--derive from the institutionalized theory of organizational rationality (see Skrtic, in press a). The notion of organizational rationality can be understood as the belief in the notion that organizations are prospectively rational, which amounts to taking organizations and their official goals for granted. The first two assumptions of the official discourse yield the idea that all disabilities are objective and pathological, which stands in a mutually reinforcing relationship with the notion of organizational rationality: organizations are rational; disability in a rational context is pathological; and special education is a rationally-conceived organizational response.

The alternative discourse on students with disabilities is carried on by scholars in the social sciences and humanities. The argument is that special education professional knowledge is atheoretical, in that it is grounded narrowly and exclusively in psychological and biological explanations of deviance, which are assumed to be objective knowledge about the true nature of reality. The alternative discourse elevates the importance of social, political, and organizational explanations and considers deviance to be a subjective condition that is socially created and maintained (see, for example, Goffman, 1963; Scheff, 1966; Szasz, 1961; Taylor & Bogdan, 1977). Although much of the work done within the alternative discourse is regarded highly in the disciplines, it has had no meaningful effect on applied research and practice in the field of special education (Bogdan & Kugelmass, 1984), or on special education policy, including P.L. 94-142 (Skrtic, 1986). Although P.L. 94-142 represents substantial procedural changes in the organization and practice of special education in public schools, is not based on theoretical criticism of special education professional knowledge. Rather, it is grounded in a moral, political and legal critique of pre-P.L. 94-142 special education practice (Ballard-Campbell & Semmel, 1981; Biklen,

1985). As such, it rests on the same set of unconscious assumptions about the nature of disability, special education as a helping profession, and progress in the field. P.L. 94-142 does not implicate school organization in the problem of students with mild disabilities.

Here again, the new mainstreaming debate is significant in that it questions school organization and, thus, special education's unconscious assumptions. Nevertheless, this debate, like the field of special education and P.L. 94-142, is atheoretical (has no guiding theory). Although there are exceptions--see, for example, Carrier (1983), Skrtic (1986), and Sleeter (1986)--the case against current school organization within the new mainstreaming debate is based solely on empirical evidence that P.L. 94-142 is failing. In the absence of theory, of course, there is no meaningful way to understand these failures or to ground solutions in anything other than political, ethical, pedagogical, or efficiency arguments for reform. Although these arguments are important and need to be made, they do not promote understanding or provide meaningful direction for reform.

The Discourse on School Organization

Understanding the official discourse on school organization and adaptability requires consideration of the general discourse on organization per se, which, until the end of the Second World War, was dominated by the conventional wisdom of practitioners in business and industry--successful administrators and engineers--whose primary concern was organizational efficiency. After the War, however, the study of organizations became a legitimate area of academic study, based in sociology and attracting scholars from virtually every discipline. Since then, there have been two separate discourses on organization: the prescriptive discourse, carried out by practitioners in business and industry and dominated by an interest in controlling people who work in organizations, and the scholarly discourse carried out by academics in the humanities and in the various social, political, cultural, and behavioral sciences (hereafter, social sciences), and dominated by an interest

in understanding the nature and functioning of organizations and their effects on people and society (see Pfeffer, 1982).

The prescriptive discourse on organization began during the progressive era when the overriding concern for industrial efficiency gave prominence to Fredrick Taylor's notion of "scientific management" (Taylor, 1911). Scientific management is the approach to industrial organization which yielded the familiar hierarchial organizational form, characterized by the pyramidal, top-down structure of formal control relations (think of an organization chart); this will be referred to in subsequent sections as the machine bureaucracy. The overarching goal of the machine bureaucracy is "efficiency", and it is premised on the notion of organizational rationality--purposeful, goal-directed action built into organization structures and processes. From this perspective, organizations and the people who inhabit them are viewed as physical entities, as machines that can be rationally fine-tuned to achieve endless efficiency (Worthy, 1950).

The application of scientific management and the machine model did not end on the shop floor. Emerging as it did in the midst of the progressive era, the notion of scientific management was appropriated by progressive reformers as a means to achieve their goal of social efficiency (Harber, 1964). And while virtually all public administrators were under attack, the nation's schoolmen were particularly vulnerable to the push for scientific management. Raymond Callahan characterized the undue influence of business values and industrial organization on school organization and educational administration as an American tragedy resulting from the unfortunate timing of several events:

> First, by 1910 a decade of concern with reform...had produced a public suspicious and ready to be critical of the management of all public institutions. Second, just at this time Taylor's system was brought dramatically before the nation not with a mundane label such as "shop management" but with the appealing title of "scientific management." By 1912 the full force of public criticism had hit the schools. Third, by 1912 Americans were urging that

> business methods be introduced into the operation of government and were electing businessmen to serve on their school boards. Fourth and of basic importance, was the fact that the "profession" of school administration was in 1910 in its formative stage just being developed. If America had had a tradition of graduate training in administration--genuinely educational, intellectual, and scholarly, if not scientific--such a tradition might have served as a brake or restraining force. As it was, all was in flux. (1962, p. 245)

As a result, the basis for professionalization in educational administration became the prescriptive discourse of scientific management and administration, rather than, say, philosophy, or curriculum and instruction. Instead of becoming instructional leaders or experts in the social and psychological processes of education and learning, school administrators became "experts in how to administrate and control organizations" (Spring, 1980, p. 100). And the first casualties of the scientific management orientation to school organization and administration were students who were difficult to teach and manage in regular classrooms, who were segregated in special classrooms in the interest of school organization efficiency.

Scott (1981) marked the emergence of the scholarly discourse on organization with the publication in English of Max Weber's analysis of bureaucratic organizational structure in 1946 and 1947 (Gerth & Mills, 1946, Henderson & Parsons, 1947). Weber's theory of bureaucracy--in essence, a sociology of organization--provided American social scientists with a theoretical foundation for the formal study of organizations as a disciplined area of inquiry, from which emerged the multidisciplinary field of organization analysis. Although by the early-1950s the field of educational administration continued to be grounded in the business-industrial orientation of scientific management and the machine bureaucracy (Callahan, 1962), in 1954 the leading professors sought to reorient the field by formally adopting the new field of organization analysis as a parent discipline (see Griffiths, 1959, Hayes & Pharis, 1967). But, for a number of reasons, the attempt to ground the field of educational administration in the scholarly discourse of organization

analysis failed (see Cunningham, Hack, & Nystrand, 1977; Halpin, 1970; Halpin & Hayes, 1977). As a result, the field of educational administration--in terms of the dominant conceptualization of school organization and management, the training of administrators and the practice of school administration--remains today essentially as it was in the mid-1950s (Clark, 1985; Griffiths, 1983). The prescriptive discourse, which is the traditional perspective of scientific management and the machine bureaucracy, continues to dominate the official discourse on school organization. Thus, the field of educational administration, like the field of special education is atheoretical. Moreover, unlike special education, which at least is grounded in the disciplines of psychology and biology, even if unreflectively, the field of educational administration has no disciplinary foundation at all, grounded as it is in the prescriptive discourse (Spring, 1980).

Although forty years of research and theorizing in the field of organization analysis have resulted in what appears to be a bewildering array of competing and often contradictory theories of organization, recent developments in the field provide a basis for comprehending the most disparate perspectives within a single analysis (see Burrell & Morgan, 1983; Morgan, 1983; Pfeffer, 1982; Ritzer, 1980, 1983). The analysis to follow is taken from Skrtic (1987a, 1987b, in press a), in which this approach is applied to school organization and adaptability relative to special education reform. Although space does not permit a complete explication of the grounds of the analysis, its general parameters can be discussed.

Four theoretical perspective are presented. The first two (configuration theory and institutionalization theory) can be thought of as representing competing explanations of organization within a structural frame of reference. The next two theoretical perspectives (organizations as paradigms and cognitive theories of organization) can be thought of as relatively complimentary explanations of organization within a cultural frame of reference.

School Organization and Change: Structural Frame of Reference

School organizations are modeled after the machine bureaucracy, which until the 1960s was assumed to be the best and only way to organize. The machine bureaucracy structure was adopted as the organizational model for all public organizations during the progressive era because it was assumed to be the epitome of rationality and technical efficiency (Callahan, 1962; Haber, 1964). And while the sort of technical rationality offered by the machine bureaucracy is appropriate for certain types of work, we will see that it is inappropriate for the type of work that school organizations do.

Whereas virtually all organization theory had been built upon the machine analogy and the idea of "closed systems," the availability of general systems theory in the 1950s introduced the organismic analogy and the concept of "open systems" (Bertalanffy, 1956) into the field of organization analysis. Closed systems are self-contained, isolated from their environments, whereas open systems engage in transactions with their environments and, in the process, change themselves. The open systems concept led to the discovery in the 1960s that not all organizations are machine bureaucracies. In fact, organizations were described that appeared to be different from the machine bureaucracy conceptualization in virtually every respect (Burns & Stalker, 1966; Wilensky, 1967; Woodward, 1965), and the notion of "structural contingency theory" emerged to explain these findings (Woodward, 1965; Lawrence & Lorsch, 1967). The basic proposition of contingency theory is that there is no one best way to organize. Rather, according to the theory, organizational effectiveness results from a good match between situation and structure.

Today, however, the very idea of organizational structure has been modified by Mintzberg's (1979) notion of organizational structuring: the idea that organizations structure themselves into somewhat naturally occurring configurations according to the type of work that they do, the means they have available to control their work, and a variety

of situational factors. Using Mintzberg's ideas, we can understand school organizations as structuring themselves as professional bureaucracies, even though they have always been thought of and treated as machine bureaucracies. Combining the configuration and the institutionalization perspectives, we can think of the machine bureaucracy as the conceptual or normative structure of schools--the structure that people expect because it has been institutionalized in modern, industrialized societies. The professional bureaucracy, then, is the structure that conforms to the technical requirements of public schools: the type of work, means of coordination, and situational conditions.

Differences Between the Machine and Professional Bureaucracies

The difference between the two organizations is the type of work that they do and, thus, the means each has available to coordinate its work. Machine bureaucracies do simple work--work that can be rationalized or broken down into a series of precise, routine tasks that can be fully determined in advance of their execution. Coordination of this type of work can be accomplished by building it into the work through the standardization of work processes, which achieves control primarily through formalization--job specifications, detailed instructions, and rules and regulations. But professional bureaucracies do complex work--work that cannot be rationalized. Complex work requires the application of general principles to particular cases and thus involves uncertainty and cannot be prespecified completely. Organizations configure themselves as professional bureaucracies when their work is too complex to be rationalized and thus too uncertain to be formalized. Complex work requires that the coordination be built into the worker through the standardization of skills, which is accomplished through professionalization (intensive skill training and indoctrination, carried out in professional schools). Simple work is coordinated through formalization (rules and regulations), complex work is coordinated through professionalization (training and indoctrination).

The type of coordination used determines the nature of the interdependency among workers, which, in turn, influences the nature of change in organizations. Professionals enjoy a good deal of autonomy so that they can use discretion to contain the uncertainty of their complex work. Teachers--like other client-centered professionals--work autonomously and personally with their clients, and only loosely with their peers, which shapes the nature of the relationships among workers in professional bureaucracies. Mintzberg used Thompson's (1967) idea of "coupling" (see also March & Olsen, 1976; Weick, 1976, 1982) to explain the nature of organizational interdependencies. The interdependency among teachers in school organizations is an example of "pooled" or "loose" coupling, a situation in which professionals share common facilities and resources but work alone with their clients. Pooled coupling involves the least amount of interdependence among members. Coordination--a loose sort of coordination at best--is accomplished by everyone knowing roughly what everyone else is doing by way of their common training and indoctrination. Compare this to the sequential coupling characteristic of the machine bureaucracy where each worker, like a link in a chain, is highly dependent on other workers. Reciprocal coupling, a type of interdependency to be considered in subsequent sections, requires still more interdependency because members must feed work back and forth among themselves.

Treating Professional Bureaucracies Like Machines

Although the professional bureaucracy configuration provides some idea of the technical requirements of schools as organizations, we should not lose sight of the fact that schools are organized and managed as if they were machine bureaucracies. Moreover, from the institutionalization perspective we know that because schools are public organizations--get their legitimacy and support from the public--their very survival depends on their conformity to what their public wants them to be, which is an organization

that conforms to the institutionalized image of the machine bureaucracy. Thus, schools are forced--by managers (Weick, 1982) and by their institutionalized environment (Meyer & Rowan, 1978)--to adopt all the trappings of the machine bureaucracy (centralized power, tight control of personnel, standardized work processes, formalization, regulated reporting, rational planning) even though these do not fit the technical requirements of doing complex work. In principle, the effect is that the profesional bureaucracy configuration of schools is driven to be more like the machine bureaucracy. And, as Weick noted:

> When conventional management theory [i.e., based on scientific management and the machine bureaucracy structure] is applied to organizations that [are not machine bureaucracies], effectiveness declines, people become confused, and work doesn't get done. That seems to be one thing that is wrong with many schools. They are managed with the wrong model in mind (1982, p. 673).

Professionalization is premised on relatively autonomous professionals using discretion--applying general principles to particular cases--to contain the uncertainty of their complex work. Treating schools a machine bureaucracies introduces unwarranted formalization which, in turn, reduces teacher discretion. Complex work cannot be formalized by rules and regulations:

> except in misguided ways which program the wrong behaviors and measure the wrong outputs, forcing the professionals to play the machine bureaucratic game- satisfying the standards instead of serving the clients. . . .The individual needs of the students--slow learners and fast, rural and urban--as well as the individual styles of the teachers have to be subordinated to the neatness of the system (Mintzberg, 1979, p. 377).

By design, the machine bureaucracy seals off its operations by placing a barrier --formalization--between the worker and the client. The professional bureaucracy removes this barrier to permit a close personal relationship to develop between the professional and the client. Excessive formalization in schools upsets this delicate relationship, which is predicated on unimpeded personal contact between the professional and client. Formalization in the machine bureaucracy at least leaves clients with

inexpensive products; in the professional bureaucracy, formalization leaves clients with impersonal and ineffective services (Mintzberg, 1979).

Decoupled Structures

Fortunately, however, under ordinary circumstances formalization does not work completely in school organizations. From the institutionalization perspective the safety valve that permits schools to get out from under some of the formalization of the machine bureaucracy structure is called "decoupling", which is another way of saying that the formal machine bureaucratic structure that schools are compelled to adopt is disconnected from or has little to do with the way their work is actually done. In fact, according to Meyer and Rowan, the formal machine bureaucratic structure of school organizations is a myth that is created and maintained through symbols and ceremonies for public consumption. Maintaining the myth is very functional for schools because it permits the work to get done according to the localized judgements of those who do it (the essence of the professional bureaucracy structure), while protecting the organization's legitimacy and the flow of resources to it by giving the public the appearance of the machine bureaucracy that it expects.

> Thus, decoupling enables organizations to maintain standardized, legitimating, formal structures while their activities vary in response to practical considerations. The organizations in an industry [broad sense] tend to be similar in formal structure--reflecting their common institutional origins--but may show much diversity in actual practice (Meyer & Rowan, 1977, p. 357).

Combining the configuration and institutionalization perspectives, we can understand school organization in terms of two incompatible structures: (a) a formal structure (the machine bureaucracy configuration) which satisfies the institutionalized public image of what all legitimate organizations should look like, and (b) an informal structure (the professional bureaucracy configuration) which satisfies the technical demands of doing

complex, client-centered work. From the configuration perspective, we know that the two structures are incompatible because formalization and professionalization are incompatible control mechanisms. From the institutionalization perspective, schools live with this basic contradiction by decoupling their mythical machine bureaucratic structure from their actual professional bureaucratic structure, thus buffering their work from the demands of the institutionalized environment. But decoupling does not work completely either. No matter how contradictory formalization may be, it does require at least overt conformity to its precepts and thus circumscribes teacher behavior. If nothing else, overt conformity to misplaced formalization takes time and energy away from the real work (Dalton, 1959).

Similarities Between the Machine and Professional Bureaucracies

The machine and professional bureaucratic structures are similar in two important ways. First, both are bureaucracies because, like all bureaucracies, they use the principle of standardization to produce standard products or services. Second, because they produce standard products or services, they require a stable environment. Both are "performance organizations"; they are designed (read, design themselves) to do one thing well under stable conditions. This means that in principle both the machine bureaucracy and the professional bureaucracy are inherently nonadaptable structures in two respects.

The first type of nonadaptability is related to the use of standardization as a coordination mechanism. In the professional bureaucracy, the set of skills a professional teacher stands ready to use can be thought of as a repertoire of standard programs that are applied to predetermined situations or contingencies. Teaching, like all professional work, entails two primary tasks: categorizing a client's needs so that a particular standard program is indicated, and then applying or executing that program. This "pigeonholing" process, like stereotyping, simplifies matters greatly by allowing teachers to move through their work without having to make continuous decisions at every moment (Perrow, 1970).

But both the diagnosis step and the standard programs are circumscribed. The goal of pigeonholing is only to match a predetermined contingency (a perceived client need) to an existing standard program (Perrow, 1970; Simon, 1977; Weick, 1976). Students whose needs fall at the margins or in the cracks between standard programs tend to get forced artifically into one category or another. A fully open-ended process--one that seeks a truly creative solution to each unique need-requires a "problem-solving" organization what Mintzberg calls an adhocracy, which has no standard programs and is organized to provide novel solutions to each unique problem as it arises. But the professional bureaucracy, like the machine bureaucracy, is a "performance" organization not a "problem-solving" organization. Instead of accommodating unique variations, it screens out heterogeneity and uncertainty and trys to fit its clients' needs into one of its standard programs. A client cannot simply need help, he or she must need the kind of help the professional bureaucracy has been standardized to provide (Segal, 1974).

The second sense in which the professional and machine bureaucracies are nonadaptable structures also arises from their use of standardization as an organizing principle. In this sense, however, standardization is important for the relationship it creates between these organizations and their environments. Because both organizations use standardization to produce standard products or services, they require stable environments. When their environments become dynamic--expect them to do something other than what they have been standardized to do--they are potentially devastated.

Before considering the way these organizations respond to dynamic environments, it will be helpful to distinguish between two types of change demands. First, there are fundamental changes: alterations in the fundamental operations for which the organization has been standardized. In schools, a fundamental change is one that requires the school to

alter the basic operation of its kindergarten through twelfth-grade (K-12) regular education program. This would be a fundamental change because it requires an alteration in the way its primary workers--regular classroom teachers--do their work; the work for which they have been standardized. Second, there are what can be thought of as incidental changes, which are changes that do not require an alteration of the basic K-12 regular education program. Fundamental changes require the school's teachers to do something different from what they have been standardized to do. Incidental changes require the school to do something additional; like adding on a new classroom, program, or specialist (see Meyer & Rowan, 1977).

Response to Change Demands

In the machine bureaucracy, change can be accomplished in a more or less rational-technical manner; here, change is a technical matter of restandardizing the work processes through rerationalizing the work and reformalizing worker behavior. Even though machine bureaucracies, like all bureaucracies, are performance organizations and thus require a stable environment, when changes in the environment demand a change in what the organization does, at least change can be approached on rational-technical grounds. But when its environment becomes dynamic, the professional bureaucracy cannot respond by making technical adjustments in the way it does its work. Recall that, unlike the machine bureaucracy, where each worker does one part of the total job and coordination is built directly into the work processes through rationalization and formalization, the professional bureaucracy's coordination rests within each professional worker by way of inculcation of knowledge and norms through training and indoctrination. To make a fundamental change in what the professional bureaucracy does would require a change in what each professional does because each professional does the entire job individually and personally with his or

her clients. But because schools have always been thought of as machine bureaucracies, the approach for changing them has proceeded on rational-technical grounds (House, 1979)

Rational-technical approaches to change assume that changes in the rules and regulations will result in changes in the way the work gets done. But even well-meaning attempts to change the work by instituting changes in the formalized rules and regulations are deflected from the actual work because the formalized rules and regulations are decoupled from the way the work gets done in the professional bureaucracy. Change attempts that procede on rational-technical grounds have the effect of forcing schools to extend current formalization and thus drive them even more to take on the machine bureaucracy structure (Mintzberg, 1979). So, treating schools like machine bureaucracies forces schools to be more like machine bureaucracies; and rational-technical change efforts extend this push, driving schools to be even more like the machine bureaucracy, thereby leaving students with even less effective and less personal service.

Simply stated, and for very understandable reasons, the professional bureaucracy configuration cannot change its fundamental operations in any substantive way. A key point to grasp is that the inability of this organizational configuration to change is not a dysfunction, in the sense that it <u>can</u> change but <u>won't</u> change; in principle, the professional bureaucracy configuration simply <u>cannot</u> change its fundamental K-12 operation by fiat. But the professional bureaucracy configuration is well suited to making <u>incidental changes</u>. Because professional teachers are trained and indoctrinated to do the entire job individually with their clients, a demand for change that can be carried out by adding a new program--which is to say, a new professional-- can be accomplished virtually overnight. All that is required is a professional teacher (who, as we know, comes pre-standardized to teach), students, and the resources to support the program No massive change or

reorganization is required precisely because of the loosely coupled, cellular internal structure of the professional bureaucracy configuration.

The institutionalization perspective on change starts where the configuration perspective leaves off. It asumes the inability of professional bureaucracy to change, provides an explanation for how it deflects demands for change, and concentrates most on the utility of the process for the survival of schools as organizations and public education as an instiution. Because schools are public organizations, they cannot be unresponsive to public demands for change. Because schools are required to change but yet cannot change, they do the only thing they can do: they create the illusion that they have changed when, in fact, they remain largely the same (Meyer & Rowan, 1977, 1978, Rowan, 1980; Zucker, 1981). Schools relieve pressure for change by signalling the environment that a change has occurred. In this way, schools can maintain their legitimacy and support--their very survival--in the face of being unable to conform to environmental demands for change. This is possible because the signals of change are built into the mythical machine bureaucratic structure which, of course, is decoupled from the actual work.

By extending the idea of decoupling to the internal structure of school organization, the institutionalization perspective can be used to describe incidental changes. Not only is the formal structure of schools decoupled from its informal structure, but the various units (classrooms and programs) are decoupled from each other as well. This is no surprise because we know, from the configuration perspective, that the means of coordination--the standardization of skills--sets up precisely this sort of pooled or loosely coupled interdependency among professionals. A decoupled internal structure permits schools to respond to demands for change by adding on separate programs or specialists to deal with them. These changes need not be integrated into the ongoing structure, they are simply added on segmentally, making any substantial reorganization of activity unnecessary. Because

these add-on units or programs are organized separately, the regular K-12 instructional program is buffered from them (Meyer & Rowan, 1978).

A key difference between the configuration and institutionalization perspectives turns on whether schools as organizations actually attempt to make changes. In the case of the former even well-meaning change attempts get lost in the organization's nonfunctional formalization. In the case of the latter, the nonfunctional formalization exists precisely to absorb and deflect environmental demands for change. In either case, however, the formalized machine bureaucracy structure--and all of its trappings--is nonfunctional as a means to control teacher behavior and, in principle, fundamental changes never occur. Incidental changes, on the other hand, are easily handled. And, transforming a fundamental change into an incidental change is a good way to survive in a dynamic environment, particularly when add-on units can be decoupled internally (see Meyer & Rowan, 1977; Zucker, 1981). Add-on units and the rituals and ceremonies put in the formal structure are important as symbols of change, but they are incidental to or decoupled from the ongoing operation of the basic K-12 instructional program.

School Organization and Change: Cultural Frame of Reference

In order to understand the cultural frame of reference, we must consider the idea of a paradigm. A paradigm is a general guide to perception, a map, a way of viewing the world. Organizations as paradigms, the first theoretical perspective within the cultural frame of reference, is based on Thomas Kuhn's (1970) idea of the role of paradigms and paradigm revolutions in the physical sciences. A paradigm is a way of seeing which, for a time, serves as an orienting framework for members of a scientific community. Scientists working within the strictures of a mutually agreed upon paradigm are doing "normal science." Over time, unreconcilable anomolies or contradictions build up in the prevailing paradigm and set the stage for its overthrow and the introduction of a new paradigm. The

shift to a new paradigm is "revolutionary science." For Kuhn, normal science rests on the mutual acceptance of a given paradigm among the members of a community of scientists. Revolutionary science requries the defeat of what had been the prevailing paradigm and a shift to a new one. The new paradigm provides a different way of viewing the world and making sense of it.

Organizational Paradigms and Change

One way that anomolies are introduced into organization paradigms is through the availability of technical information that the current paradigm is not working. Change based on technical information, according to Rounds (1981), can occur in two ways. It can be a confrontation between an individual (or small constituency group) who rejects the most fundamental assumptions of the current paradigm on the basis of reliable, valid information that the system is not working, and the rest of the organization's members who are acting in defiance of the negative information to preserve the prevailing paradigm. The second way is the case where some small peripheral problem is recognized as indicating a minor flaw in an otherwise viable system. Rounds explained that initially some conservative action is taken to correct the flaw with the least possible increment of change. The corrective measure leads to the unanticipated consequence of raising some new ambiguities about the system. Often new positions are created to deal with the anomolies, which brings new people, ideas, and values into the system, providing the opportunity for new people to lay claim to different parts of the system. Other flaws are detected, and so on, leading to an elaborate feedback loop that calls more of the system into question until the ground is prepared for a radical reconceptualization of the entire organization. In this scenerio, what were initially conservative attempts to protect the system end up undermining it and ushering in a new paradigm.

Rounds (1979) provided another explanation for an organizational paradigm shift in which the anomoly is introduced because of shifting values and preferences in society--rather than because of the availability of new technical knowledge. In this case, paradigms die because the social theory and values underlying them change. This does not remove the older paradigm overnight, however. If the new societal values and beliefs are not consistent with the members prevailing organizational paradigm, resistence in the form of an increase in ritualized activities acts to reaffirm the paradigm called into question.

Thinking Thinkers and Organizational Paradigms

Cognitive theories of organization emphasize individuals as the creators of meaning (the creators of organizational paradigms). The essence of the cognitive perspective is perhaps best encapsulated by Weick's assertion that "an organization is a body of thought thought by thinking thinkers" (1979b, p. 42). Organizations are bodies of thought (paradigms) and these paradigms are created by thinking thinkers--the individual as the creator of meaning. Moreover, Weick made the connection between the cultural and structural frames of reference by pointing out that there are "grains of truth" in the constructions of organizational members. Something is going on independent of the observers, even though members embellish and elaborate those grains of truth vigorously and with originality. Something is going on, "but what happens is that the actor in the organization plays a major role in unrandomizing and giving order to the bewildering number of variables that constitute those grains" (Weick, 1979b, p. 45). Through activity, selective attention, consensual validation, and luck, people in organizations are able to wade into streams of random experience and unrandomize them sufficiently so that some kind of sensemaking map or paradigm of the territory is possible. Now, the paradigm is not the territory, it is only a representation of the world. But, for Weick "the map is the territory if people treat it as such" (Weick, 1979b, p. 45). Things are real if people treat

them as real, and paradigms--correct or not--structure the territory sufficiently so that someone can initiate activity in it, which may produce a workable order.

People's sampling of the environment and the paradigms they construct also are dominated by prior beliefs. For Weick, believing is seeing in organizations, and beliefs are the filters through which organizational members examine their experience. Weick urged analysts to think of organizations as bodies of thought that contain grains of truth which are ellaborated by people as a basis of constructing an organizational paradigm that is treated as if it were real. All this is filtered through prior beliefs, with action serving as the pretext and raw material for sensemaking. Thus, he argued that it is not the actual structural elements (e.g., formalization, professionalization) that are real, but rather the effects of these elements on the grains of truth, maps, beliefs, and actions that yield organizational paradigms. Moreover, Weick argued that the causal arrow also goes the other way. "Maps, beliefs, and thoughts that summarize actions, themselves constrain contacts, communication, and commands. These constraints constitute and shape organizational processes that result in structures" (Weick, 1979b, p. 48). An organization is a cognitive entity, a paradigm or schema--" an abridged, generalized, corrigible organization of experience that serves as an initial frame of reference for action and perception. A schema is the belief in the phrase, I'll see it when I believe it" (Weick, 1979b, p. 50).

Schools have been recognized as perhaps the most ambiguous organizations that we know (Cohen, March & Olsen, 1972) We know that schools configure themselves as professional bureaucracies precisely because teaching is complex and thus ambiguous work. Furthermore, we know that as complex work, teaching in an organizational context requires a coordination mechanism--the standardization of skills--that creates a pooled or loose coupling form of interdependency among teachers, which increases ambiguity even more Moreover, schools exist in an institutionalized environment that expects them to be machine

bureaucracies, and are managed as if they were machine bureaucracies. This creates even more ambiguity by forcing schools to act like a totally different type of organization, decoupling notwithstanding.

Underorganized Systems

Although there are a number of popular metaphors that capture the disorder and ambiguity of schools as organizations--organized anarchies, loosely coupled systems, garbage cans--a key point to grasp is that, although there may be a good deal of disorder, order is not completely lacking. Weick (1985) reminded analysts recently that organized anarchies are organized, loosely coupled systems are systems, and garbage cans have boundaries, and suggested that a more appropriate metaphor for schools might be "underorganized systems." The key idea is that while schools may be as ambiguous and disorderly as organization theorists have portrayed them, there is some order. Moreover, according to Weick, anything or anyone that can create more order can bring about change. Thus, the very underorganized nature of schools that prevents change, is the precise condition that can create change.

Weick used the ideas of superstitious learning--the erroneous interpretation of a change in environment as the direct result of individual behavior--and self-fulfilling prophecy (Jones, 1977) to explain change in underorganized systems like schools. Superstitious learning occurs when organizational members mistakenly see a change in the environment as caused by their own action. As a result, they build into their causal theories--cause maps or paradigms--the belief that they are able to change environments. Of course, this is an error in the sense that it is an incorrect interpretation of what actually happened. But, Weick argued that when environments are sufficiently malleable, acting on this mistaken belief can set in motion a sequence of activities that allows people to create the reality that the belief is true. In changeable environments, an apparent efficacy can

transform a superstitious conclusion into a correct perception. For Weick, self-fulfilling prophecies provide profound insight into how organizations function and change.

Ambiguity in loosely coupled, underorganized systems is reduced when people can incorporate into their paradigms an inference--rightly or wrongly--about cause and effect. When people act on the stored inference as if it were true, a previously loose relationship between cause and effect becomes tightened and the uncertainty surrounding the effect is reduced. Confident action based on a presumption of efficacy can reinforce the inference about efficacy stored in the paradigm. In short, people in ambiguous, underorganized systems can make things happen.

Values/Power

When ambiguity is present, people who can resolve it gain power. And because ambiguity in organizations increases the extent to which action is guided by values and ideology (Weick, 1985), the values of these powerful people--the ones who can reduce ambiguity--affect what the organization is and what it can become. When ambiguity increases, it sets the stage for ideology and values to be reshuffled--what we would call a paradigm shift. The people best able to resolve ambiguity gain power, as does their vision of the world and the organization. The recognition of an important, enduring ambiguity--an unresolvable anomoly in the prevailing paradigm--is an occasion when an organization may redefine itself. Those who resolve the ambiguity for themselves and others can implant a new set of values in the organization, which creates a new set of relevancies and competencies and introduces a source of innovation. Ambiguity sets the occasion for organizations to learn about themselves and their environments and allows them to emerge from their bout with ambiguity in a different form than when they started the confrontation. But, behind it all are people with ideas that are rooted in their values and vision of what can and should be. For Weick, the importance of presumptions, expectations, and commitments

cannot be overestimated. Confident, forceful, persistent people can span the breaks in loosely coupled, underorganized systems with their presumptions, expectations, and commitments by encouraging interactions that tighten settings. "The conditions of order and tightness in organizations exist as much in the mind as they do in the field of action" (Weick, 1985, p. 128; original emphasis).

School Organization, Special Education and Reform

In considering the implications of the analysis of school organization and adaptability for the official discourse on students with disabilities, it will be helpful to organize the remaining discussion according to special education's assumptions about the nature of disability, special education as a helping profession, and progress. The implications of the analysis for the new mainstreaming debate are addressed in the section on "progress" as well as in a concluding section.

School Organization and Disability

At the outset, the assumptions about the nature of disability--that disability is a condition that individuals have and that disabled/typical is a useful and objective distinction--were challenged on the basis of theory choice at the applied science level of special education professional knowledge. At this point we can extend that challenge on the basis of the analysis of school organization. From the structural frame of reference, the professional bureaucracy, in principle, is a nonadaptable structure in two senses, both of which stem from its use of standardization as an organizing principle. First, it is nonadaptable as an organization because bureaucracies are not configured for innovation; they are ill-suited to producing new outputs, a topic to be considered in subsequent sections. For now, it will be important to consider the second way in which the professional bureaucracy is nonadaptable, i.e., nonadaptability at the level of the individual professional because of the use of standardization of skills--professionalization--as a coordinating

mechanism. Under this arrangement, the set of skills a professional teacher stands ready to use can be thought of as a repertoire of standard programs that are applied to predetermined situations, which creates two problems relative to the notion of "disability." First, there is the problem of the nature of these standard programs and, second, there is the problem of the manner in which they are applied.

Considering the nature of these programs, we can ask about their validity. The dominant model of professional knowledge creates the image that they are the end product of a rational system of knowledge production in which positive knowledge--objective knowledge about reality--is engineered by applied scientists to create the models, procedures, and techniques--the standard programs--used in professional practice (see Schein, 1972; Schon, 1984). But, from Kuhn (1970) and others (Barnes,1982; Skrtic, in press b), we know that instead of producing objective knowledge, the process of professionalization produces subjective knowledge--a particular way of unrandomizing the complexities of practice, which, on the basis of authoritarian professional induction, is assumed to be the only way. Thus, the dominant model of professional knowledge yields standard programs that are not inherently valid; they are merely the product of a particular knowledge tradition that is based on the customs and conventions of a professional subculture.

At this point the manner in which these programs are applied can be considered. From the structural frame of reference, teachers, like all professionals, apply their standard programs according to the circumscribed, two-step process of "pigeonholing," which matches a predetermined contingency (a perceived client need) to an existing standard program. As Mintzberg (1979) noted, a common problem associated with pigeonholing is that "the professional confuses the needs of his clients with the skills he has to offer them" (p. 374). This is not a problem as long as the student's needs actually match what the

professional has to offer, but when the learning style and individual needs of a particular student do not match the professional's repertoire of standard programs, the student gets forced artifically into one program or another or forced out of the system altogether. Recall that the professional bureaucracy is a "performance organization"--which is based on the execution of predetermined standard programs--not a "problem solving organization" designed to seek a creative solution to each unique need. The problem of innovation at the level of the individual professional, or what Mintzberg (1979) called the "means-ends inversion," finds its roots "in convergent thinking, in the deductive reasoning of the professional who sees the specific situation in terms of the general concept. In the professional bureaucracy this means that new problems are forced into old pigeonholes" (p. 375). And, it is important to recognize that this is not a dysfunction of the professional bureaucracy structure. It is configured precisely to screen out heterogeneity and uncertainty, to fit its clients' needs into one of its standard programs.

> The fact is that great art and innovative problem solving require inductive reasoning, that is, the induction of new general concepts or programs from particular experiences. That kind of thinking is divergent--it breaks away from old routines or standards rather than perfecting existing ones. And that flies in the face of everything the Professional Bureaucracy is designed to do. (Mintzberg, 1979, p. 375).

The means-ends inversion can be understood from the cultural frame of reference by thinking of a set of standard programs as a paradigm--that is, a technology of standard practices built on beliefs about cause-effect relations (Brown, 1978). From this perspective, a paradigm of standard programs comes to be embedded in the sagas and myths of the practitioner culture as the appropriate technology for doing the profession's work. Regardless of whether these stories are true, they persist because they provide a sense of justification for action (see Brown, 1978; Clark, 1972; Pfeffer, 1982). Once the paradigm of the practitioner culture is in place, it changes very slowly because

anomolies--new information that the technology is not working--are distorted so that they are consistent with the prevailing paradigm (Jonsson & Lundin, 1977). In this sense, professional behavior in schools is governed more by institutionalized, cultural norms than it is by rational, knowledge-based actions designed to improve instructional effectiveness. Things are done in certain ways simply because they have always been done that way. To do anything else in these organizations would not make sense (see Zucker, 1977, 1981). From this perspective, teaching in a professional bureaucracy (applying standard, conventional programs) is a ritualized activity that takes place in an institutionalized environment. Although paradigm shifts can occur, resistance takes the form of political clashes between adovcates of a new paradigm and the defenders of the old one, conservative attempts to patch up the system incrementally, and an increase in ritualized activity (Rounds, 1979, 1981).

In schools, the competence and conscientiousness of individual teachers notwithstanding, the professional pigeonholing process works until it encounters a student whose needs do not fit the prevailing paradigm or available standard programs. This is where most "students with mild disabilities" come from. The implication is that, for students so labeled, "disability" is neither an objective condition that students have, nor is it an objective distinction. From an organizational perspective, being "disabled" is a matter of not fitting the available standard programs in an organization that is not structured to provide novel responses to unique differences. If current school organization and its available standard programs were inherently "correct" and "good," we would have grounds, perhaps, to believe that mild disabilities are conditions students have and that disabled/typical is a useful and objective distinction. But when we can understand that current school organization and its standard programs are simply matters of convention

and tradition, we can understand that calling students who do not fit the standard programs "disabled" is blaming the victims for the inadequacies of the system.

The Nature of Special Education

The adequacy of the assumption about the nature of special education--that it is a rationally-conceived and coordinated system of services that help children labeled disabled--can be assessed by considering the function of special education in current school organization. We can answer this question by considering the nonadaptability of the professional bureaucracy as an organization in conjunction with the status of school organizations as public organizations.

Schools are public organizations and thus depend on the public for their fiscal support and legitimacy--that is, their very survival. Thus, their institutionalized environment is a powerful source of fashion to which school organizations cannot afford to be unresponsive. Although the institutionalized environment is a constant source of pressure in this respect, on occasion value changes in society make additional demands that require school organizations to change (Rounds, 1979). In some instances, school organizations are required to make incidental, add-on changes, which they are able to do quite easily because of their loosely coupled internal structure. In other instances, however, schools are required to make fundamental changes--ones that require teachers to do something other than what they were standardized to do, which are resisted according to the degree to which the values embedded in the change demand run counter to those of the prevailing paradigm (Rounds, 1979). From the institutionalization perspective, school organizations deal with demands from their institutionalized environments by either building symbols and ceremonies of change into their decoupled machine bureaucracy structure, or by converting fundamental change demands into incidental changes and responding by adding

separate programs or specialists to the existing organization, thus buffering the basic operation from the change demand.

The segregated special class--the exclusive model for special education from the turn of the century until the 1970s--is the quintessential example of this process at work. Earlier in this century, when society required schools to start serving new populations of students--children of the working class, children from economically disadvantaged families, children of the ever-increasing immigrant population--the special classroom emerged to deal with children that could not be squeezed into the available standard programs (the prevailing paradigm) of the regular education system (Lazerson, 1983; Sarason & Doris, 1979). Thus, from an organizational perspective, the separate special class served as a legitimating device that allowed schools to signal the public that they had complied with the demand to integrate these new populations of students, while at the same time allowing them to maintain their current paradigm of operation. Once special classes were created, they were decoupled from the internal workings of the school. Indeed, this disjunction between the special class and the rest of the school enterprise was one of the major complaints in the 1960s and 1970s that led to the passage of P.L. 94-142 (see Christophos & Renz, 1969; Deno, 1970; Dunn, 1968; Johnson, 1962). Another special education example is when schools were required to integrate children from minority groups in the 1950s. From an organizational perspective, the overrepresentation of these children in special classes in the 1960s (Chandler & Plakos, 1969; Dunn, 1968; MacMillan, 1971; Mercer, 1973; Wright, 1967) can be understood as school organizations using an existing decoupling device--the separate special class--to maintain legitimacy and public support in the face of failing to meet the needs of disproportionate numbers of these children in regular classrooms

Thus, when one considers the function of special education in current school organization, one can hardly claim that it is a rationally-conceived and coordinated system of services. From an organizational perspective, special education is not rationally conceived because, historically, it has served as a myth and a legitimating device for school organizations to cope with the shifting value demands of their institutionalized environments. Special education services are not rationally coordinated bacause, in principle, they are decoupled from the basic operation of schools. Moreover, the rationality of the overall school enterprise is called into question when one understands that the organizing principle of standardization--which creates the need for myths and decoupling--itself produces as artifacts the "students with mild disabilities" that special education serves.

The unintended consequence of using organizations to provide services to society is that the services are shaped by the nature and needs of the organizations themselves (see Allison, 1971; Illich, 1976). Society wants education, but what it gets is a particular kind of schooling--an education shaped by the organizations that produce it. From an organizational perspective, "students with mild disabilities" are the by-products of these organizations. Is "disabled" a useful distinction? It most certainly is. But from an organizational perspective, the primary beneficiaries are school organizations themselves.

The Nature of Progress

Special education assumes that progress in the field is made by improving diagnosis, intervention and technology. This assumption is embodied in the requirements of P.L. 94-142. The law is perceived to be a new technology--a new organizational paradigm--for improved diagnosis and intervention. Its features are meant to represent advances in diagnosis--for determining which students get into special education and, just as important, which students are kept out. Parent participation, appropriate education,

and least restrictive environment are all related to what are perceived to be advances in intervention.

From an organizational perspective, the requirements of P.L. 94-142 make implicit assumptions about what school organizations are, what they can be, and how to change them. To understand these assumptions, it will be necessary to introduce briefly a third type of organization--in addition to the machine and professional bureaucracies--which, until this point, was only mentioned in passing. The reader will recall that in the discussion of the nonadaptability of the bureaucratic organizational structure the point was made that both the machine and professional bureaucracies are nonadaptable because they are "performance," not "problem-solving" organizations. They are performance organizations because they are organized on the principle of standardization and thus are configured to perfect standard programs, not to invent new ones. But Mintzberg's (1979) "adhocracy" configuration--a term he borrowed from Alvin Toffler (1970) who popularized it in Future Shock--is organized on the principle of innovation. It is the quintessential problem-solving organization.

The best example of this configuration is America's most famous adhocracy of the 1960s, the Apollo Program of NASA's Manned Space Flight Center. It could not use standard programs to accomplish its goal--to put a man on the moon before the end of the decade--because there were none. It had to invent and reinvent its programs as it went along. Like the professional bureaucracy, the adhocracy uses professional workers, but instead of using standardization of skills as a coordinating mechanism--which creates a pooled or loosely coupled arrangement in which each professional functions independently--it places its workers in a reciprocal coupling arrangement premised on collaborative problem solving among teams of professionals. "Faced with a client problem," Mintzberg (1979, p. 436) explained, "the [adhocracy] engages in creative

effort to find a novel solution; the professional bureaucracy pigeonholes it into a known contingency to which it can apply a standard program. One engages in divergent thinking aimed at innovation; the other in convergent thinking aimed at perfection."

The basic problem with P.L. 94 142 from an organizational perspective is that it fails to recognize school organizations as professional bureaucracies, requires them to be adhocracies, and approaches implementation as if they were machine bureaucracies. The failure to recognize schools as professional bureaucracies is a failure to recognize that, in principle, school organizations cannot change their fundamental operations. By requiring schools to be adhocracies (i.e., problem-solving organizations in which teams of regular and special education professionals collaborate reciprocally in the interest of individual students), P.L. 94-142 requires school organizations to be something that they cannot be without a total reorganization. By approaching change as if schools were machine bureaucracies--through new rules and regulations inserted into the existing formalization--P.L. 94-142 fails to recognize that the existing formalization in school organization is decoupled from the actual work.

But, because formalization in the professional bureaucracy requires at least overt conformity, today's schools are replete with formalized symbols and ceremonies of P.L. 94-142 compliance, even though, in principle, many of the law's requirements--and particularly those related to mainstreaming students with mild disabilities--are not possible within current school organization. Although the situation today is more complex, the same process of symbolic and ceremonial compliance that has colored the history of special education's role in school organization is at work in the implementation of P.L. 94-142. Consider two examples.

Programs for students with more severe disabilities--for whom regular classroom integration is not required--are treated organizationally like the traditional segregated

special classroom. That is, these programs are simply added to the existing school organization and decoupled, to one degree or another depending on the local history of special education services, which reflects values embedded in state and local political cultures (see Biklen, 1985; McDonnel & McLaughlin, 1982; Noel & Fuller, 1985; Skrtic, Guba & Knowlton, 1985). The appropriateness of these programs for children depends on the availability of quality special education personnel and the willingness and capacity of local school districts to hire and support them. Beyond this, they have very little to do with the basic school operation.

Programs for students who are considered to have mild disabilities--for whom regular classroom integration, to the maximum extent possible, is required--are quite another matter, however. Remember that students in these programs are in them precisely because they cannot be squeezed into existing pigeonholes in regular programs. So, we see today that, depending on history and political culture, mainstreaming for students who are "mildly mentally retarded" and "emotionally disturbed" means symbolic integration in lunch, art, music and physical education, if that (Biklen, 1985; Skrtic et al., 1985; Wright, Cooperstein, Reneker, & Padilla, 1982), which is hardly different from what was happening before P.L. 94-142. For most students with "learning disabilities" (and some "mildly mentally retarded" and "emotionally disturbed" students) the resource room is the symbol of compliance But, in principle, the resource model simply has no place in schools as they are currently organized.

Recall that work is coordinated through the standardization of the skills of professional teachers, which means that virtually all of the necessary coordination rests within individual teachers, who work closely with their students and only loosely with their peers. In this pooled or loosely coupled arrangement there is no need for teachers to cooperate with one another (Weick, 1976) and, as expected, cooperation is rare (Tye &

Tye, 1984). In principle, teachers working together cooperatively in the interest of a single student for whom they share responsibility--the essence of the resource model--is not consistent with current school organization. The resource model requires reciprocal coupling (Thompson, 1967), which is not the type of interdependency set up by coordination through standardization of skills. Moreover, seeking advice from another teacher or, worse yet, offering unsolicited advice to a colleague--in essence, what the resource model requires--is rarely done in schools (Bidwell, 1965; Bishop, 1977; Glidewell et al., 1983; Lortie, 1975; Mintzberg, 1979).

The list could go on, but the point is that P.L. 94-142 assumes that its implementation context is a rational, machine bureaucracy that is capable of rational-technical change. The problem is that, in principle, P.L. 94-142's goal of appropriate education in the least restrictive environment cannot be achieved as a generalized phenomenon in public education as long as schools are organized as professional bureaucracies and regular and special education professionals are trained, indoctrinated, and acculturated to work individually and deductively as "performers." P.L. 94-142 requires that schools operate as adhocracies in which teams of professionals and parents work inductively as "problem-solvers." Moreover, the harder we try to make school organizations work like adhocracies by fiat, the more we make them work like machine bureaucracies by default. This, of course, makes them even less effective and personalized, which creates even more "students with learning problems." And since there is a legal limit on how many students can be called "disabled", as well as a political limit on how many student failures society will tolerate, a new class of student casualities is created and decoupled from both regular education and special education

Empirical Evidence on the Implementation of PL 94-142 When one considers the empirical evidence on the efficacy of P.L. 94-142 for "students with mild disabilities", it

is apparent that it does not represent advances in diagnosis and intervention, or an improved technology of special education practice. Diagnosis is unreliable, inconsistent, excessively costly, and of little instructional value (Biklen, 1985; Potter, Ysseldyke, Regan & Algozzine, 1983; Skrtic et al., 1985; Stainback & Stainback, 1980, 1984; Reynolds, Wang & Walberg, 1987). Interventions do not appear to be effective (Glass, 1983; Lloyd, 1984), and students continue to be stereotyped and stigmatized (Skrtic et al., 1985; Stainback & Stainback, 1984). As we would expect from the analysis of the professional bureaucracy configuration, the individual needs of "students with mild disabilities" cannot be accommodated by the standard programs available in regular classrooms. As a result, these students continue to be segregated and many of those who attend regular classrooms must be removed to receive services (Wang, Reynolds & Walberg, 1986), a problems that is intensified by the fact that there is virtually no collaboration between regular and special teachers (Lortie, 1978; Skrtic et al., 1985). Rather than a rationally-conceived and coordinated system, services are provided on the basis of social pressure and administrative and organizational convenience (Skrtic et al., 1985; Wang et al., 1986).

Beyond these failures to realize expected benefits, the unexpected outcomes of P.L. 94-142 implementation also conform to what one would expect from the analysis of school organization and adaptability: implementation has resulted in consistently larger numbers of students identified for special education placement (Algozzine & Korinek, 1985; Biklen & Zollers, 1986; Hagerty & Abramson, 1987), many of whom are not actually disabled but simply cannot be squeezed into the available regular classroom programs (Shepard, Smith & Vojir, 1983), while, at the same time, additional students require special assistance but are not identified and thus receive none (Shepard, 1987; Skrtic et al., 1985; Sontag, Hagerty & Button, 1983). Finally, the empirical evidence suggests that, rather than

leading to a new technology for special education equity, the implementation of PL 94-142 has resulted in a system that encourages categorization, sterotyping and exclusion; reduces equal rights; legitimates other forms of discrimination and subjugation; and permits school professionals to treat "handicapped" students like second-class citizens (Hobbs, 1980; Skrtic et al, 1985; Stainback & Stainback, 1984).

The New Reform Proposals. Although at this point it would be difficult to specify the exact nature of all the reforms being proposed within the new mainstreaming debate, there seem to be three universal elements: elimination of the "pull-out" approach, collaboration among regular and special education professionals and the restructuring of current school organization. The proposed solution to the pull-out problem is to eliminate the need to remove students from regular classrooms by allowing regular educators, special educators, and the various special needs educators (in Chapter 1, bilingual, and migrant education programs) to work cooperatively to serve virtually all students in regular classrooms (Reynolds et al., 1987; Stainback & Stainback, 1984; Wang et al., 1986). Of course, such a system would require cooperation among professionals (reciprocal coupling) within a problem-solving organizational framework (adhocracy). And, as we know, such an orientation, in principle, is impossible within the current professional bureaucracy structure of school organization. But the reform advocates also have recognized some of the constraints of the current organization of schools and special needs programs. Although each of the proposals for the reform of regular and special education is somewhat unique, most call for major revisions in current school organization. For example, Wang, et al. (1986) have called for:

> ways to restructure special education and other compensatory and remedial programs within a broad framework. We propose that the reform of special education and other categorical programs must occur in the context of the entire educational system. (1986, p. 8)

But, even though they have argued that "we must begin to make structural changes in our educational system now" (Wang, et al., 1986, p. 7), their analysis of the problem and their solution--as well as those of other reform advocates (e.g., Cantalician Foundation, 1983; Heller, Holtzman & Messick, 1982; Mayor's Commission on Special Education, 1985; Stainback & Stainback, 1984; Will, 1984, 1985)--lack a theoretical basis for understanding school organization and adaptability (and thus the sources of the problems they identify) and the organizational implications of the reform measures they are proposing. Moreover, they fail to recognize that the lack of success of the current reform measure (i.e., P.L. 94-142), which all of the reform advocates use as a rationale for their proposals, stems from the same sort of organizational naivete. Thus, there is the potential for a repeat of the same mistake made in trying to reform special education under P.L. 94-142. That is, we may be preparing for another reform in the absence of a guiding theory of school organization and change.

Prospects for the Future

Although there are serious structural and cultural barriers to realizing the goals of P.L. 94-142, virtually every major study of the implementation of P.L. 94-142 contains examples of successful mainstreaming programs (see, e.g., Biklen, 1985; Sartc et al., 1985; Wright et al., 1982). Furthermore, although the effectiveness of school organizations and their ability to improve has been seriously questioned (see Cuban, 1979, Hawley, 1975), there are effective schools--or, at least, schools that are markedly more effective than others--and schools that are capable of change (see Clark, Lotto, & Astuto,

1984). How can this deviation from the analysis of school organization and change be explained?

One way to confront this apparent contradiction is to consider Weick's (1985) characterization of schools as underorganized systems. As we know, ambiguity prevails in these settings, and where it does people can make things happen. Confident, persistent, forceful people can tighten up the setting for themselves and others, affecting what the organization is and can be. These people can reshuffle the organizational paradigm by injecting it with a new set of values, which are reflected in presumptions, expectations, and commitments. Is there anything to this? Can values expressed as presumptions, expectations, and commitments actually make schools more effective and bring about change?

Apparently they can. In a recent reanalysis of much of the literature on effective schools and school change, Clark, et al. (1984) catalogued the factors that one finds working in a mutually reinforcing way in successful schools. And, at bottom, the difference is people. People acting on their values and affecting what the organization can be. Teachers affect student learning by the expectations they hold for student performance and their own teaching performance (see, also, Brophy, 1983). Students affect one another by their level of achievement and expectations. Principals and superintendents make a difference when they exhibit active support in the form of communicated expectations for success. The key for effective schools "lies in the people who populate particular schools at particular times and their interaction with these organizations. The search for excellence in schools is the search for excellence in people" (Clark et al., 1984, p. 50). And the same holds true for school improvement. "As with the effective school, effective school improvement programs are probably best represented as a 'syndrome' or 'culture' [what we would call a paradigm]

of mutua'ly reinforcing expectations and activities....People matter most in school improvement programs" (Clark et al., 1984, p. 58-59).

And the same holds true for mainstreaming programs. As with effective schools and effective school improvement programs, effective mainstreaming programs are best represented as a culture or a paradigm of mutually reinforcing expectations and activities. People matter most in effective mainstreaming programs (see particularly, Biklen, 1985; Skrtic et al., 1985). School organizations can be responsive to students' needs and professionals can work cooperatively as problem-solvers. But the point is that these organizations are effective, adaptable, and responsive precisely because they operate more like adhocracies than professional bureaucracies. They operate more like adhocracies because the people who inhabit them think and act like problem-solvers. And these people think and act like problem solvers because someone or some group tightened up a loose setting with problem-solving values.

The important thing about the new mainstreaming debate is not the actual reform measures that are being proposed. It is the fact that it is calling more of the prevailing paradigm into question. Recall that changes based on technical information that the prevailing paradigm is not working can occur in two ways--either through a confrontation over the adequacy of the current paradigm between an individual or small group and the remaining organizational members, who seek to preserve the prevailing paradigm; or through conservative attempts to correct a generally recognized flaw (in what otherwise is considered to be a viable system), which eventually result in the recognition of more flaws and ultimately lead to the undermining of the entire system and the introduction of a new paradigm of practice. Both of these processes of change are operating within the general movement to reform special education.

First, we can understand the special education professional and advocacy communities collectively as a small group of vocal participants in the ongoing debate over public education. Prior to the passage of P.L. 94-142 this group called into question the adequacy of the then current special education system. Although at that time they did not question the adequacy of the general education system, they introducted into the debate technical information that the special education system was not working, which, of course, led to the passage of P.L. 94-142. Today a somewhat smaller group of special education professionals and advocates is calling the P.L. 42-142 special education system into question. This time, however, they are arguing that the real flaw is in the regular education system, and they are demanding more than simple access to the mainstream; they are calling for a reconstituted mainstream. In this second scenerio for change we can understand P.L. 94-142 as an initially conservative effort to remediate a flaw in the otherwise viable system of regular education. In this sense, P.L. 94-142 can be thought of as a measure taken to correct the flaw with the least possible increment of change. But the correction measure led to the unanticipated consequence of raising new ambiguities about the overall system. Over the past 12 years of implementation of P.L. 94-142 sufficient anomolies have built up to call more of the system into question. The reform proposals of the new mainstreaming debate reflect a growing recognition of the inadequacies of the overall system of public education.

P.L. 94-142 did more than provide "students with disabilities" with access to the regular education system. It created opportunities for special educators to become more familiar with general education, which exposed some of its basic contradictions to people with problem-solving values. Special educators generally have problem-solving values because of the needs of the clients they work with and, moreover, because traditionally they have worked in adhocracies--special classrooms--within, but decoupled from, the

profesional bureaucracy structure. In large part, this is why P.L. 94-142 which was written largely by special educators, assumes an adhocracy or problem-solving orientation. In a very real sense, the new mainstreaming debate potentially represents a vehicle for the infusion of problem-solving values into the system of public education in this country. The real value of P.L. 94-142 has not been improvement in the education of "students with mild disabilities." Its real and lasting contribution will be what it has done to expose the inadequacies and contradictions of the current system of public education.

The special education community potentially can have its most significant impact on school organization--and thus on the education of all students, including those who are thought of as having, or may actually have, special needs--by injecting problem-solving values into the larger system.[2] This will require that special educators confidently, persistently, and forcefully call the prevailing paradigm into question. The goal of the special education professional and advocacy communities nationally and locally should be to increase ambiguity and thereby set the occasion for the prevailing paradigm to be esnuffled, opening it up to problem-solving values in the form of new presumptions, expectations, and commitments. The moral, ethical, and political arguments behind the struggle for appropriate education in the least restrictive environment have always been correct. But this is not enough. The new struggle must be informed by a broader and more comprehensive understanding of the complex web of social, political, cultural, economic, and organizational interrelationships within which things like education, reform, and "disability" exist. And, of course, education is only one of many institutions implicated here. The special education professional and advocacy communities must be sufficiently courageous and informed to question the morality of the social, political, and economic institutions which, in conjunction with education, act to create and maintain the notion of "the other" in our society.

Note

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2. By using the term "problem" I do not mean to imply that an organization premised on problem-solving values would consider students with unique needs to be problems. A "problem" in this context simply means a situation for which the organization does not have a ready-made response. Thus, a "problem" in an adhocracy is the occasion for creating a unique response. In a bureaucracy, a "problem" is the occasion for either forcing the situation into a configuration for which the organization has a ready-made (standardized) response, or forcing it out of the organization altogether.

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