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Synthesis of Research on the Social Side of Schooling

Schools are social organizations. What teachers and students do can never be comprehended solely in terms of teaching and learning academic subject matter. The formal curriculum of academic knowledge and skills has a counterpart "hidden curriculum" of values and behavior, which is taught implicitly by the social systems of the school and classroom. Educational research and practice, based on the assumption that schools are only or even predominantly settings for academic learning, are severely limited in value, as are research methods and teaching techniques that treat instruction as a primarily technical task. This is the message of ecological studies of schools and classrooms over the past 15 years. It is a message that must be heard if schools are to be improved in the future.

Ecological researchers did not discover the social aspects of schools; earlier thinkers and observers such as Dewey (1916, 1938), Waller (1932), and Parsons (1959) pointed out what many teachers already knew, that teaching and learning differ profoundly from that embodied in such powerful images as Socrates in dialogue with his students, Emile with his tutor, or the psychologist "shaping" rats and pigeons one at a time in the laboratory. Recent ecological studies have revealed the operations of school social systems in sufficient detail to provide a clearer understanding of how they work and what their implications are, both for the socialization of students—their acquisition of values and behaviors appropriate to members of social units—and for their academic learning. Note that socialization is a technical term for a particular kind of nonacademic learning. It is not to be confused with the popular usage of "socializing" to mean participation in informal social activity. In this article, the term is used in its broadest meaning to refer to preparation for membership in society.

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The Domain of Ecological Research

Ecological research in schools is defined by its proximity to the following criteria.

1. It treats teaching and learning as a continuously interactive process rather than as a set of discrete inputs and outcomes. Ecologists are loath to label one event a "cause" and another an "effect." They prefer to trace the exchanges and transformations occurring within a system until they can describe the system as a whole. Once the multiple, often reciprocal, interconnections have been established within a system, it is unnecessary and misleading to isolate a few factors within it and label them "cause" and "effect." Ecological studies of schools attempt to comprehend the behavior of students and teachers in all its complexity rather than in segments, such as teachers' questioning styles or disciplinary techniques and students' response to them. While the effort can never be totally successful because selection and interpretation are essential to understanding, ecological researchers try to minimize their imposition of previously determined interpretive frameworks on school phenomena. I have argued elsewhere (Hamilton, 1981) that ecological studies can include assessments of learning, but to date they have paid much more attention to what happens in schools and classrooms than to how much is learned.

2. Ecological studies treat the attitudes and perceptions of the actors—teachers, students, administrators, parents, and others—as important data about the school and classroom. This contrasts with the behaviorist principle that only visible behavior is worthy of study. Formal and informal interviews and, occasionally, questionnaires are employed in ecological research to learn how people understand and feel about what happens in the school and its relation to their lives. This criterion reflects the anthropologist's wish to obtain an "emic" or insider's perspective and the phenomenological school in psychology and sociology, perhaps best represented by W. I. Thomas's statement, "If men define situations as real, they are real in their consequences" (Bronfenbrenner, 1979, pp. 22–23).

3. Attention to persons and environments as they interact is the sine qua non of ecological research. While research in the tradition of educational psychology has been most concerned with persons, sometimes manipulating small elements of the environment experimentally, ecological research attempts to understand both human behavior and the physical and social context in which it occurs, and to trace the reciprocal influences of persons and environments. This article addresses studies attending more to the social than the physical environment. A recent review of research on the physical environment of the school (Weinstein, 1979) cites only one study that meets the criteria for ecological research.

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4. The ideal ecological study considers person-environment interactions not only within the immediate setting—here the school and the classroom—but the influences on those interactions of other contexts, particularly the family, community, culture, and socioeconomic system. This is the view of ecological research presented by Bronfenbrenner (1979). It is also the approach advocated by Ogbu (1981) in opposition to the prevailing trend in ethnographic studies toward the microscopic analysis of behavior in classrooms with attention to the larger context only to the point of identifying the location, predominant social class, and ethnic composition of the setting. Bronfenbrenner's treatment of this issue begins with the immediate setting ("microsystem") and moves progressively outward, while Ogbu's begins with the phenomena of racial and economic stratification and explores the consequences and self-perpetuating quality of that stratification in home, community, and school settings—but their exhortations to connect what happens in schools empirically with what happens beyond their walls are complementary.

Studies satisfying all four criteria are rare, but most of those summarized in the following pages come close. They are drawn from the fields of anthropology, sociology, and ecological psychology. Studies that examine only a few variables by means of a single method of data collection are absent, except for a few citations when they directly relate to findings from ecological research.

Lessons in Socialization

Visit a fourth grade classroom with Jules Henry (1963). A spelling baseball game is underway. Two captains appointed by the teacher choose up sides. The teacher "pitches" words to the members of each team in order. A word correctly spelled on the blackboard is a "hit" and the speller advances to first base. Four words spelled correctly score the team's first "run." Three errors retire the side. Groans and cheers, triumph and agony accompany the lesson. What is being learned? Henry proposes that along with spelling, children are learning how to write correctly, how to write using chalk on a blackboard, how to screen out the background noise and harassment accompanying their efforts, and how to "read" the reactions of the teacher and their classmates in order to correct themselves. They are also learning to live with absurdity, both the absurdity of English spelling and the absurdity of the analogy between spelling and a baseball game. They are learning to deal with the humiliation that accompanies being chosen last and then letting the team down by "striking out." They are learning about competition and the exaggerated significance of success or failure when one team's winning requires another team to lose (Henry, 1963, pp. 289–290, 297–302).

"Ecological studies of schools attempt to comprehend the behavior of students and teachers in all its complexity. . . ."

Henry's general point was that human beings are "polyphasic" learners—they learn many things at the same time. This quality of human learning means that classrooms teach more than subject matter. Intentionally or by accident, pupils acquire attitudes and behaviors from their classroom experiences. A classroom where quiet pupils sit erect with hands on desks and stand to respond crisply to their teacher's factual questions teaches attitudes and behaviors as surely as the one Henry described, but different ones. He was concerned that the "signal" of the spelling lesson was being drowned out by the "noise" of the tangential learning, but the same danger is present in any type of classroom.

The socialization function of schools has sometimes been termed "the hidden curriculum," but it is hidden only when there is general agreement on what it should be and on the effectiveness with which it is being implemented. The founders of public schooling in the United States certainly never hid their intention to make children into good citizens and hard workers (Cremin, 1977). Neither is it hidden from the pupils and teachers, who are aware that a good deal of teacher time and effort goes into instruction in deportment. But there are hidden elements to it, ways in which the structure of the school and classroom socialize without the teachers' knowledge or intention and sometimes in conflict with stated goals.

Jackson (1968) focused on three structural features of classrooms: crowds, praise, and power. He called attention to the fact that pupils are in groups, which means that they constantly encounter delay in such matters as getting the teacher to answer a question. This results in the necessity of denial of their personal needs on behalf of classroom order and fairness to others who also have needs. Those are probably hard but necessary lessons; crowds and coordination are facts of modern life. It is more difficult to see value in the social distraction from learning that results from being one learner among many. Praise and disapproval are ever-present in classrooms. Pupils can expect to be evaluated, often publicly, for most performances. They must learn to handle the stress this entails and in some cases they must learn to balance the teacher's evaluations with those of their peers. Few children care enough about the teacher's praise to risk constantly offending less-praised peers. Power is something children know about from their experiences in families, but the power teachers exercise over them is fundamentally different from that of parents because it is impersonal, just like the power they will be subjected to as adult citizens, workers, and consumers. (See also Dreeban, 1968; LeComte, 1978.)

One reason why the socialization function of schools has received considerable attention in recent years is that there has been public dissension over its goals and its effectiveness. On one side, critics see the schools as contributing to a breakdown in the social order because of lax discipline and too much student

choice. On the other side, equally dissatisfied critics see the schools as stifling creativity and discriminating against poor and minority students. But such broad-gauge critiques ignore contradictions inherent in the socialization function. As Jackson and Henry suggested, there are both positive and negative aspects to the process from any political or moral position.

Dilemmas of Socialization

One way to illustrate the Janus face of this issue is to turn to a community that has not been subject to such sharp conflict as the nation has experienced over desegregation, Vietnam, and changing social mores, a community that recalls the idealized America of our rural past. Peshkin (1978) studied such a community in rural Illinois, attending especially to its high school, which he found to represent and transmit very accurately the values of the adult community, not so much by conscious design as by the consistent selection of teachers and administrators who shared those values. This congruence between school and community can be seen as the achievement of an ideal sought in many other communities, as Peshkin pointed out with reference to such instances as textbook controversies, decentralization, resistance to busing for school integration, and parochial schools, all cases in which people have attempted to make their schools fit with their community. But this congruence was not without costs.

Peshkin identified four dilemmas created by the close fit of school and community in "Mansfield." First, the practice of hiring school personnel on the basis of their compatibility with the community limited the academic quality of the school.

In hiring a new school superintendent, for example, the board rejected a candidate who had too many new ideas and chose instead one who was "country," who was like the board members and most of the other citizens of Mansfield. A second dilemma resulted from the first: limited emphasis on academic achievement, as exemplified in the selection of personnel, contributed to high intergenerational stability. The children of Mansfield did not learn to

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question their parents' beliefs or to reject their way of life. This situation was problematic, in turn, because of a third dilemma: the values taught in the school included violations of important national values embodied in the U.S. Constitution, most notably the ideal of racial equality. The majority of Mansfielders considered themselves fortunate not to have any nonwhite residents; statements of racial prejudice in class discussions reflected opinions held by many adults and were not effectively disputed. Finally, the prospect of school consolidation, which might have increased academic quality and reduced costs, was strongly opposed by nearly everyone because of the contribution of the school to community life.

In more cosmopolitan communities these dilemmas are invisible. Since schools are presumed to exist to educate children, they are expected to provide the highest quality education possible, even if that means importing teachers from the city, exposing children to ideas and ways of life different from their parents', confronting the conflicts between local values and national ideals, and closing a school building that is too small to offer a sufficient range of courses and minimize costs. The dilemma in Mansfield, as Peshkin graphically portrayed, was that the school did serve very effectively to maintain a sense of community both among the young and among the adults.

Instead of "a nation of strangers" and "alienated youth," Peshkin found in Mansfield a community of friends and relations who cared about each other and a group of youth who knew they belonged. Elderly widows in Mansfield could count on someone shoveling the snow from their walks. On winter evenings, many people stepped outside before going to bed to make sure their neighbors' furnaces were operating. High school juniors and seniors typically went through a period of restlessness, feeling the lack of privacy and chafing at the limited options of a small town. Nevertheless, the majority of those who went to college enrolled in the same small state colleges their teachers had attended, and, upon graduation, lived and worked in Mansfield or a nearby small town, just like their classmates who went to work right after high school. Even those who left permanently to practice specialized professions returned in large numbers for homecoming festivities, retained strong ties of kinship and friendship in Mansfield, and recalled their high school days fondly. When so many personal and societal ills can be ascribed to anomie—the absence of interpersonal connections—the community-building function of Mansfield High School cannot be lightly dismissed or readily exchanged for potential improvements in academic quality, improvements that would be marginal at best, if they resulted in performance at the level of most high schools in the United States.

Socialization Instead of Learning

The limited academic power of typical high schools is documented by Cusick (1973). In the suburban school where he was a participant-observer—the kind of high school with large numbers of students, a staff chosen for their professional qualifications, and no sense of community that would be created by consolidating Mansfield High School—Cusick found that

> The students' most active and alive moments, and indeed the great majority of their school time, was spent not with teachers and subject-matter affairs, but in their small-group interactions which they carried on simultaneously with their class work (p. 58).

Coleman (1961) demonstrated using survey data that high school students usually cared more about their social interactions than academic performance. He laid the blame for this distortion of the academic goals of schools on adults rather than youth. Cusick substantiated this attribution by specifying the structural features of the school that unintentionally created this distortion.

"Horatio Gates" high school, like most large schools, was organized hierarchically, with students clearly at the bottom. Communication flowed downward from administrators through teachers to students. The teachers were subdivided by subject matter and the students were processed in groups. A multitude of rules and regulations governed student behavior and their rewards for complying were almost all in the future. These organizational features had certain intended consequences: they resulted in restricting students' activities and treating them as an undifferentiated mass. But they also had unintended consequences: little student-teacher interaction, little student involvement in formal activities, a fragmented school experience, and minimal compliance by the students with the school's demands, including the demand for academic achievement (Cusick, 1973, pp. 208–213).

The opportunities for peer interactions in and around school, as Parsons (1959) and others have pointed out, are critical to socialization. Children need to learn to get along with other people who are not their parents, siblings, or superiors. It is the balance between the socialization and the academic instructional functions of the school that is at issue. Cusick's most important contribution is his insight into the way in which the school unwittingly tips the balance away from academic achievement. It is not simply a matter of adolescents' irresistible attraction to each other, but the systematic denial of other sources of satisfaction. Classes were dominated by the teachers, leaving students in the role of spectator most of the

time. Attempts to express personal concerns in class were usually ignored or disapproved. Correct and perceptive comments by students were often missed in the bustle of a large classroom. These flaws did not result from teacher ineptitude, Cusick maintained, but from the need to maintain order and deal simultaneously with many students (pp. 49–56).

The picture of extracurricular activities was equally bleak. "A few ran what was to be run, but in truth there was not much to run" (p. 74). The so-called student leaders constituted a small clique and dominated activities to the exclusion of the majority of students, who resented their exclusion. The "leaders" represented only their cliques. The others were no more involved in student-run activities than in any other aspects of the school. Furthermore, the special status of the activity leaders—athletes, cheerleaders, student government officers—simultaneously reinforced the peer structure and conflicted with the academic goals of the school. They were, predictably, the students with the highest status among their peers. They did not, for the most part, value academic achievement or work hard in school. They were allowed to violate many rules of conduct with impunity, especially the athletes. In contrast, students who quietly complied with the rules and did their assignments to the best of their abilities received few rewards from the school.

Cusick pointed out that the student friendship groups served an organization maintenance function by providing information, advice, and guidance about the school's rules and procedures. Isolates who lacked this kind of support often got lost in the organization because it had no formal procedures to deal with them effectively (p. 173). Sieber (1979) also found that elementary school children's interactions with each other supported the goals of a "good" New York City school. Children reinforced the adult norms being taught by demanding fairness and cooperation. They taught each other by clarifying the teacher's instructions, providing assistance with school work, and comparing work so that performance standards were public.

If student behavior responds to the organizational features of schools, as Cusick claimed (see also Schwartz, 1981), then we might expect to see systematic variation related to differences between schools. In many respects schools are very much alike, especially schools serving similar kinds of students. However, substantial differences in "school climate" can be found even among schools in similar communities with students from the same class, racial, and ethnic groups (Brookover and others, 1978). The most powerful presentation of this point of view is Metz's (1978) comparative study of two junior high schools in a city where equal distribution of students by race and socioeconomic status was required by the school board. Differences in attitudes and performance of the students in the two schools could, Metz claimed, be attributed with some confidence to differences between the schools since their student populations were nearly identical in family background. And the differences between the schools and

Highlights from Research on School and Classroom Ecology

The research summarized here suggests that:

- **Children learn more than academic content from their school experiences, especially how to behave in nonfamily groups.**
- **Congruence between the school and community can contribute significantly to a sense of community among both adults and youth, but at some sacrifice in academic quality.**
- **The prominence of peer social interaction in schools can displace the academic function of schools, especially at the high school level. But peer interaction can also serve to reinforce organizational and academic norms.**
- **The prominence of peer interaction among secondary school students is not solely determined by student characteristics; it is a response to the structure and climate of schools.**
- **Marked differences in student behavior and school climate can be attributed to the beliefs and practices of teachers and administrators and the ways in which they interact to form a social system.**
- **Small high schools offer more opportunities per student for participation in academic and extracurricular activities, especially in responsible positions. Small-school students, including academically marginal students, participate in a greater variety of settings and report more and deeper satisfaction from their participation than students in large schools.**

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their students were indeed quite pronounced.

"Hamilton" was notable for disorder, litter, nuisance fires in bathrooms, class cutting, and conflicts among students. Its teachers were polarized between young and old, with each group advocating a distinctive teaching style and teacher role. Dissension among the teachers undercut the authority of all, especially outside the classroom. The dominant student group in Hamilton could be characterized as black dissidents, followed in prominence by white adherents to an emerging "counterculture." (This was a university community in 1967–68.)

"Chauncy" was a newer school building with a design much more conducive to adult supervision and control than Hamilton. A strong principal consistently suppressed disagreement or even substantive discussion among faculty and equally consistently enforced an expectation that teachers would maintain order in their classrooms and in the halls. Conforming white students were the most prominent group in Chauncy even though they were no more numerous than at Hamilton. Neatness, order, and discipline were as noticeable in Chauncy as their opposites in Hamilton.

This was not an unalloyed blessing. Chauncy's order was ostensibly maintained as a means to enable learning, but teachers quickly discovered that if they kept their classes quiet, it didn't matter what they taught and, conversely, if the principal judged their classes noisy, their instructional skills and accomplishments mattered not at all. Teachers in Chauncy had very little interaction with students (as in the school Cusick studied), the better to maintain the social distance underlying their authority and to avoid surfacing the racial and political conflicts that were overt at Hamilton but suppressed at Chauncy. Chauncy teachers were isolated from each other, too, in their efforts to deal with classroom problems. They assumed that such problems were unique and tried to solve them individually, while Hamilton teachers knew that the problems in their classrooms were symptoms of larger problems in the school as a whole and could, as a result, seek advice from each other and attempt schoolwide responses.

Large School vs. Small School

Another structural characteristic affecting student behavior is school size. Large schools are able to offer a greater variety of courses and activities and greater opportunity for specialization. These are some of the reasons behind Conant's (1959) recommendation that school consolidation proceed at least to the point that a high school class have more than 100 members, a recommendation that both signaled and contributed to a dramatic increase in the size of schools over the past 20 years. Soon after Conant's widely heeded report was issued, *Big School, Small School* (Barker and Gump, 1964) was published, challenging the assumption of large school superiority. The book includes a series of studies of 13 high schools in eastern Kansas enrolling from 35 to 2,287 students.

The key insight of this book that applies to other institutions as well as to schools is that the number of opportunities for participation ("behavior settings") does not increase as fast as the number of people. More specifically, while the largest high school studied had 65 times as many students as the smallest, it had only eight times as many academic behavior settings and five times as many athletic behavior settings. Differences between the largest and smallest schools were even smaller in the scope or variety of activities available within the athletic and academic behavior settings.

The reason for this finding is easily explained. A tiny school will field several athletic teams and offer the basic math, English, social studies, and science courses required for accreditation. A large school will have both varsity and junior varsity teams in several sports and offer elective courses in physics and trigonometry. But the increase in the number of different academic and athletic opportunities available in the large school does not keep pace with the increase in enrollment. Therefore, the number of opportunities per student declines steadily.

The increasing ratio of students to settings in large schools results in what the ecological psychologists call "overmanning." The reverse situation in small schools is described as "undermanning" and appears to be advantageous in several respects. In an overmanned behavior setting, such as the varsity basketball team of a large high school, there are far more potential participants than can be accommodated. Hence, tryouts are held and those judged less competent are excluded from the activity. A large proportion of students find themselves on the outside of all school activities or limited to the role of spectator.

In a small school, in contrast, the problem is not selecting participants, but finding enough. Every basketball team needs five players on the court and a few more on the bench. If there are only 50 boys in the school, nearly everyone who can run, jump, and hold a ball will be needed to field a team. Rather than tryouts to select from among would-be players, there will be pressure on all who might contribute to come out for the team. Furthermore, basketball players who can carry a tune will again be pressed into service when it is time to put on the annual musical because the chorus needs more male voices. In large schools, students who participate are much more likely to specialize in one type of activity.

Barker and Gump and their colleagues found that both average numbers of extracurricular activities and the number of different kinds of activities students engaged in were twice as high in the small high schools as in the large ones (pp. 69–74). Moreover, the distribution of participation among students was much more even in the small schools. Students in the large schools were more polarized, with a group of active participants at one end of the continuum and a large group of students who did not participate in any extracurricular activities at the other. In the small schools there were very few students who did not participate in anything.

The kinds of satisfactions students reported from their participation also differed.

Juniors from the small schools reported more satisfactions relating to the development of competence, to being challenged, to engaging in important actions, to being involved in group activities, and to achieving moral and cultural values; while large school Juniors reported more satisfactions dealing with vicarious enjoyment, with large entity affiliation, with learning about their school's persons and affairs, and with gaining "points" via participation (Barker and Gump, 1964, p. 197).

This difference can be attributed to the kinds of positions available to students in extracurricular activities. Proportionately, many more of the students in small schools reported holding positions of importance and responsibility and they held such positions in a wider variety of behavior settings (p. 93). When students in large schools who held positions of importance and responsibility were compared with students holding similar positions in small schools, the difference in satisfaction was considerably reduced, indicating that the greater availability of such positions in small schools accounts for the differences in satisfactions (p. 112).

When students were distinguished according to family background and academic performance into those most likely to drop out of school—the "marginal" students—and "regular" students, the investigators found that in small schools marginal students reported both pressures and attractions to participate in school activities at about the same rate as regular students, while in the large schools marginal students reported fewer pressures and fewer attractions. As a result, the large schools included substantial groups of "outsiders," students with poor academic records and no extracurricular involvement, a group almost unknown in the small schools (p. 123). This finding is consistent with Peshkin's (1978) observation that Mansfield students had a strong sense of belonging.

A small-scale analysis matching juniors in small schools with IQs above 110 with large-school juniors selected by the same criterion revealed that the small-school students were enrolled in a larger number of classes but that a greater proportion of those classes were nonacademic, suggesting that, as in extracurricular activities, the larger number and variety of course offerings in the larger schools leads to specialization rather than to every student taking advantage of the greater number of opportunities (pp. 169–170).

The basic finding of higher levels of participation and greater satisfaction among small-school students has been replicated in subsequent studies. Willems (1967) confirmed that the effects of school size are greatest for the marginal students. Wicker (1968) supported both the interpretation that it is holding responsible positions that determine satisfaction and the attribution of differences in this experience to school size. Baird (1969) found that small-school students had superior achievement in art, writing, leadership, and dramatics, but not in science or music. In a second study, he found that college students from large and small high schools did not differ in their rates of participation in extracurricular college activities but that the difference between large and small colleges was identical to that found in high schools.

This finding can be read two ways. While differences in rates of participation do not appear to carry over into college, and, therefore, may be less important developmentally than Barker and Gump assumed, Baird's study supports the theory of undermanning, that participation rate is determined by the situation rather than by personal characteristics. Grabe (1981) raised questions about the desirability of students experiencing pressure to participate in activities for which they may not be well-suited. He found that self-concept scores were more variable and indicators of alienation higher among small-school students and speculated that these may result from such students experiencing failure in activities they would not have attempted in larger schools, where students can specialize in activities they do well.

Ecological Research

The reader should be warned that ecological studies represent more than a distinctive approach to research on teaching and learning; they are based on an emerging paradigm (Doyle, 1978) that challenges conventional ways of thinking about these phenomena and conventional ways of studying them. The aim of research conducted in this new paradigm to date has been to illuminate the process of teaching and learning rather than to establish general laws to guide instruction. The discovery of general laws has motivated a good deal of social scientific research, but the returns have been meager (Cronbach, 1975; McCeachie, 1974). Bronfenbrenner has proposed that the function of social science with respect to social policy "is not to answer questions but to question answers." This aphorism is an apt summation of the contributions of ecological research to educational practice to date.

The "answers" that ecological research has questioned are really assumptions about the centrality of purely academic activities underlying both research and practice in schools. For example, when the National Assessment of Educational Progress administers tests of students' academic knowledge and skills, the implicit assumption is that these tests comprehend all or most of the important business of schools; their scores provide a valid measure of "educational progress." When teachers are trained to state precise behavioral objectives for their lessons, a similar assumption is made, along with a closely related assumption that teaching is primarily a technical task, which can be adequately performed once objectives have been stated, appropriate content selected, and the most effective instructional methods followed. Ecological research does not deny that academic learning is critically important or that certain technical devices such as behavioral objectives can contribute to improving instruction. It does, however, consistently challenge simple portrayals of what schools do and easy prescriptions for making them more effective.□

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