Findings from a study that examined the effectiveness of schools in closing the academic achievement gap between low and middle socio-economic status (SES) students in grades K-12 are presented in this paper. The main argument is that the schools identified as "effective" did not close the gap without simultaneously lowering the average academic achievement of mid-SES students. The middle-class bias inherent within the traditional organization of public schools has resulted in the failure of the public schools to educate lower-class children. Conversely, middle-class students fail to perform academically in a "reversal of fortune" school environment that is beneficial to low-SES students. In summary, the effective schools movement has failed to expand its research to include nontraditional educational alternatives.

Recommendations for identifying effective schools, ranging from the general to the specific, include examining the effectiveness of cultural paradigms, specific teaching methods, curricula, and reward structures. (67 references) (LMI)
Assumptions of the Effective Schools Movement

For many years researchers have been studying the factors that help students learn (Boocock, 1972, 1980). Recently, this research effort crystallized into a "movement" to find "effective" schools (Edmonds, 1979, 1983, 1986; Good & Brophy, 1986). The effective schools movement meant by "effective schools" those schools that raise academic achievement, presumably more than what has been traditionally the case, and possibly more than educational research into academic achievement might have prepared us to expect (Good and Brophy, 1986, p. 572). There is no definition of "effectiveness" to which every effective schools researcher subscribes (Good and Brophy, 1986, pp. 570-571). Apparently, what unites effective schools researchers is a feeling that public schools are not as effective as they could be, but that there must be at least some effective public schools that could serve as models for the rest to follow. It would make no sense to attempt to find effective schools if all, most, or even many public schools were perceived as effective, and therefore numerous, available, or evident enough to eliminate the need to "find" them. In any event,
the movement did not define exactly by how much, whom, or in what ways should academic achievement be raised to allow a school to qualify as either "effective" or "ineffective;" nor was a commonly acceptable scale constructed, or a method designed, on the basis of which to measure school effectiveness (Levine and Stephenson, 1987; Stedman, 1987). What may be considered as "effective" by effective schools researchers, may be seen on the basis of a different definition as limited, irrelevant, or even "ineffective" (Stedman, 1987). For example, a school that has poor academic performance, and is therefore "ineffective" from an academic standpoint, may still be seen as "effective" if it maintains good discipline, or has effectively carried out any of the other non-academic areas of school policy. This points not only to the importance of a common definition, but also to the highly arbitrary nature of a definition of effectiveness, if not of all definitions (Makedon, 1991), including any that the movement may eventually agree upon. Finally, there are methodological issues regarding the "effectiveness" of methods used to measure effectiveness, such as, the effectiveness of standardized versus criterion referenced tests, or controlled experiments versus participant observation. In this paper, the author limits his examination to the effectiveness of schools in closing the academic achievement gap between low and mid-SES students in grades K through 12, without simultaneously lowering the average academic achievement of mid-SES students. He submits that the schools identified as "effective" did not succeed in closing the academic achievement gap, and offers
suggestions on what might be done to find effective schools that do.

Ar, "Effective" Schools Effective for Low-SES Students?

There are strong indications that of the schools which the effective schools movement identified as effective, there are none that succeeded in closing the academic achievement gap between low and mid-SES students. If true, then it may be said that on the basis of a more narrow definition of effectiveness as the closing of the achievement gap, the effective schools movement failed to find truly "effective" schools. This is particularly important in light of extensive research that has consistently shown for the past 25 years that the single most important predictor of academic achievement in the public schools is student SES (Boocock, 1980, p. 39). Research on academic achievement should have sent a warning signal to effective schools researchers to expand their research sample to include schools where the school is more important a predictor of academic achievement than student SES. Reporting on the correlation between academic achievement and student SES in "effective" schools, Good and Brophy wrote that "decreases in [average school-wide] scores from year to year were significantly correlated with changes in the socioeconomic composition of these schools' student bodies." (1986, p. 587) In other words, as the SES composition of the student body changed, so did the apparent "effectiveness" of each school. Coupled with the high rate of
relative instability of effective schools (only 5% remained effective over a period of three years) (Good and Brophy, 1986, p. 587; Rowan and Denck, 1982), this finding seems to indicate that the schools identified as "effective" did not overcome the influence of student social class, let alone close the academic achievement gap between low and mid-SES students. This is in effect what researchers had found regarding student SES and academic achievement even before the effective schools movement had began (Anyon, 1983; Braun, 1976; Clark, 1965; Finn, 1972; Gans, 1976; Harvey and Slatin, 1975; Kahl, 1953; Leacock, 1969; Lortie, 1975, pp. 10-13, 34-36; Mendels and Flanders, 1973; Rist, 1970; Rosenthal and Jacobson, 1968).

Although the leaders of the effective schools movement offered a seemingly non-traditional definition of "effective school," namely, that schools can make a difference in a student’s achievement, implying that they can overcome perceived deficiencies in a student’s background (Good and Brophy, 1986, p. 583), they did not move their research enterprise beyond the traditional model of schooling. The reason the movement failed to find schools that close the achievement gap may be precisely because it limited itself inside a middle class school paradigm that was ipso facto unlikely to lend itself to closing the achievement gap without changing the paradigm itself. By "paradigm" here we mean a school’s subculture as a whole, including its educational philosophy, reward
system, organization, and academic expectations\textsuperscript{1}. At once radical and conservative, the effective schools movement is probably typical of all reform movements that fail to realize their own underlying assumptions, come to terms with the possibility of radical reform, or the inevitable limitations of traditional research methodologies\textsuperscript{2}. Finally, by limiting itself to largely traditional modes of education, the effective schools movement excluded from consideration the potential contributions of non-traditional learning environments, and in so doing in effect "killed" the educational generalizability of its findings regarding "effective" schools.

**The Middle Class Effectiveness of Ineffective Public Schools**

Reinterpreted as the result of the self-fulfilling prophecy of the middle class bias of the traditional organization of our public schools, research findings regarding the importance of student SES in academic achievement may reflect no more than the failure of our public schools to educate lower class students: they

\textsuperscript{1}We use the term "paradigm" here in the same sense as did Thomas Kuhn in his book *The Structure of Scientific Revolutions* to refer to the models used in scientific inquiry (Kuhn, 1962).

\textsuperscript{2}More critically, it may be said that by limiting its scope of researchable sites to the very school system which it attempts to change, the effective schools movement (by which we mean collectively the effective schools researchers) may betray more its own unwillingness to change, for example, change its underlying assumptions regarding which schools are worth researching, than an unwillingness by the public school system itself (including teachers and administrators) to submit to radical change.
may reflect the middle class effectiveness of "ineffective" public schools (ineffective in the sense of failing to close the achievement gap) (Anyon, 1983; Clark, 1965; Rist, 1970). Middle class students do better academically precisely because of their upbringing in middle class environments, which in turn the traditional school rewards, or values, more highly than the skills, experiences, or learning modalities of the lower class students.

**Limitations of the Cookbook Approach to Effective Schools Research**

As a result of the limited scope of the effective schools research, there developed several lists of cookbook-like suggestions, most of them with little re-examination of the underlying assumptions of effective schools research, and therefore no less limited than the original research methodology that was employed to find them (Ornstein and Levive, 1989, pp. 589-594). Although possibly "effective" within the context of a traditional educational paradigm, these suggestions are no more effective for low SES students than the underlying traditional school paradigm from which they were derived allows. This doesn't mean that the traditional model is devoid of any degree of creativity or imagination, but only that what is being proposed in the effective schools literature is not any more imaginative than the traditional model of schooling can possibly become.

**Alice in a Low-Class School**
As a hypothetical, let us imagine how a middle class child, say "Alice," might compare, academically, with low SES students in a school with pro-low-SES biases. We submit that in schools where school bias is reversed in favor of economically disadvantaged (=low-SES) students, such as, re-writing tests to reflect low-SES values, or restructuring teaching methods to emphasize low-SES learning styles, low-SES students may not only close the achievement gap, but actually surpass their mid-SES peers. Such pro-low-SES schools may be seen as representing a "reversal of fortune" for mid-SES students. As a result of this reversal, mid-SES students may begin to feel inferior vis-a-vis their low-SES peers, or lose their motivation to learn or succeed. For example, teachers may begin making condescending, insulting, or "negative" comments about mid-SES students, such as, call them "spoiled," while praising the perseverance, morality, or lifestyle of low-SES students. In addition to making direct or indirect verbal remarks, teachers may also show bias through such non-verbal means as pro-low-SES expressions or eye contact, body posture, or tone of voice; adopt grading criteria that reward low-SES learning modalities more (for example, reward learning based on direct life experiences, rather than strictly abstract-type learning from textbooks); or

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³There are several studies that seem to indicate that middle class children have higher abstract thinking abilities than lower class children, and therefore are likely to have an easier time succeeding in learning environments, such as, the traditional public school, where such abilities are rewarded (Bernstein, 1961, 1970, 1977; Entwisle, 1970).
select teacher assistants primarily from among the low-SES group.

Although at present we have no information of any studies done directly on the effects of a reversal of fortune on the academic achievement of low and mid-SES students, there is some evidence that a reversal of fortune may create a learning climate that is more conducive to academic success by low-SES students (Clifford and Walker, 1973; Entwisle, et. al., 1974; Harvey and Slatin, 1975; Leacock, 1969; Peters, 1971; Rosenthal and Jacobson, 1968). In an experiment on student achievement and teacher attitudes carried out by Peters, students were divided according to eye color (1971). One day Peters told one group of students with a particular eye color that they are superior to the other group with a different eye color, and the next the other. According to Peters, by the end of each day the group of children who were told that they are superior behaved as if they really were "superior" to the other group, bullied and even attacked the other group, and outperformed the other group in academics. Once roles were reversed, the other group now behaved the same way as the "superior" group had, while the previously superior group now did poorly in academics. As Peters put it, "All of the children enjoyed being considered superior, and the feeling that they were had obviously pushed them to do better work than they had ever done before." (p. 37). Finally, it may be noted that if this reversal in academic achievement might occur, it doesn’t mean that it should, or that a teacher should pit one group against another. It is offered here only as an example of the
effect which a reversal of teacher expectations may have even on students who are otherwise neither discriminated against by society at large, nor considered "inferior" to another group outside their school. If we set up schools that intentionally make economically disadvantaged students feel superior to mid-SES students, then we risk creating an achievement gap between low and mid-SES students, except in this case we are creating the conditions for higher achievement by low-SES students, than by mid-SES students, thus defeating our original purpose of closing the achievement gap.

How to Avoid Reinventing the Wheel of Low-SES Failure

Given the middle-class nature of the traditional public school, it is not surprising that sociologists would find that mid-SES students inside traditionally structured public schools have consistently higher achievement rates. In a sense, researchers merely confirmed the effectiveness of our lower expectations for low-SES students in the public schools, than the "ineffectiveness" of schooling, in general, to help close the achievement gap. Our counterexample regarding the possibility of a reversal of fortune for middle class students also underlines the failure of the effective schools movement so far to expand its research to include non-traditional educational alternatives, especially in light of the many widely known studies regarding the middle class bias of the traditional public school paradigm. Such findings should have sent a warning signal to all school researchers to avoid re-
discovering what researchers had given us enough reason to expect.

**Recommendations for Research**

The recommendations presented here are based on the view of "effectiveness" as the closing of the achievement gap between low and mid-SES students, without simultaneously lowering the average academic achievement of mid-SES students. The author makes recommendations that range from the general to the specific, from examining the effectiveness of different cultures, to the effectiveness of specific teaching methods, curricula, and reward structures. The researcher has almost limitless opportunities for research on the effectiveness of a variety of possible educational paradigms, teaching methods, curricula, and reward structures. These provide the hypothetical fodder on the basis of which to begin asking questions, visualizing possible situations for study, constructing hypotheses, or designing research instruments. They may be represented mathematically in four dimensional space, or logically with intersecting venn diagrams whose content changes, as we change their definition (Makedon, 1989).

**Effectiveness of Cultural Paradigms**

The effectiveness of past cultural paradigms for low-SES students may be extrapolated from what historical, archaeological, or folkloristic knowledge we have regarding their academic
effectiveness. Although historical events may be known only remotely, and then only on the basis of present belief systems that may have been unknown or "invalid" at the time, we may be able to re-construct them, or use them as hypotheses for "re-testing" the effectiveness of their educational methods. For example, one may examine the "effectiveness" of different cultural ideals, meaning, the degree to which such ideals may have contributed to the closing of the achievement gap, from the heroic ideal in classical age, with its emphasis on games and competition, to that of the faithful in the middle ages, with its emphasis on oral or visual symbolism; or, later, during the protestant reformation, the ideal of individual progress, with its emphasis on biblical interpretation. Seen in the context of a larger cultural ideal, it is not suprising that in protestant nations literacy rates have historically been higher than in catholic ones: people felt the need to learn how to read, in order to be able to read the Bible (McClelland, et. al., 1953).

Modern cultures may be studied anthropologically, sociologically, or cross-culturally, as in "comparative education," in order to bring to light their most fundamental methodological assumptions. Finally, research may expand to include the study of non-historical or utopian, although not for that reason alone necessarily unrealizable cultural paradigms; or, lacking historical evidence with which to "test" the effectiveness of a utopian cultural paradigm, by role-playing in hypothetical situations what
their effectiveness might be. Obviously, the effectiveness of different cultural paradigms may be the most difficult to study, since it may require not only re-creating a culture from scratch, which is nearly impossible, but also being able to "escape" one's own in order to see it with "empathy" (Dilthey, 1990). Studying the effectiveness of cultural paradigms may require finding the connection between the larger cultural milieu, and particular educational institutions. Inevitably, one is led to inquire into the possible limitations that a certain cultural arrangement may impose on the effectiveness of its educational institutions; alternatively, there is the issue of the application of "effective" educational methods inside a culture that seems to disapprove of, or disagree with, its underlying sub-cultural paradigm. For example, in a culture where there is an emphasis on economic competitiveness, it may be very difficult for educational institutions that put emphasis on learning for its own sake to flourish. Furthermore, it may be nearly impossible to restructure schools on the basis of even an "effective" institutional model whose subcultural paradigm is disagreeable to the society at large, and whose "effectiveness" may therefore be sacrificed at the altar of cultural homogeneity.

Effectiveness of Educational Institutions

If by "educational institutions" we mean those that educate, then since all institutions educate to some degree, they all
qualify as "educational." All institutions make varying contributions to academic achievement. To improve the effectiveness of schools, researchers could study those institutional characteristics which improve academic achievement for low SES students; the effectiveness of schools may depend, in turn, on the degree to which they are willing to adopt some of these characteristics from institutions other than public schools, such as, the media, corporations, museums, the world of entertainment, or universities. As a result of such comparisons, schools may adopt some of the characteristics of other institutions, which in turn may make them so different from what they are now, that seen in their future form from today's perspective (before they evolve), they may not even be recognized as "schools."

Effectiveness of Educational Alternatives

The sample of researchable "schools" can't be "expanded," in the sense of diversifying it with different school prototypes, by simply including more of the same, that is, more traditionally structured schools, but must also consider all types of non-traditional structures, both those that have been proposed in theory, and those that have been tested, tried, or operate successfully in the private sector. Given an opportunity to examine the effectiveness of non-traditional school models, researchers may be able to find schools that successfully close the achievement gap, but which the effective schools movement did not consider, had
no funds to re-create from known historical records, or lacked the political will or power to focus their attention on them. For example, the movement did not examine any of the educational alternatives that allegedly have been very successful in educating economically disadvantaged students, such as, Maria Montessori’s school for economically disadvantaged students (Standing, 1962); or China’s work-study schools (Hu, 1974); or, more remotely, medieval apprenticeship systems of education (Butts, 1955), classical models of mentoring; city-as-the-school; travelling teachers; or adult role-modeling (Marrou, 1956). Closer to our time, some of the alternative school structures whose "effectiveness" could be studied include any of the alternative schools known to have had at least one prototype or pilot school in operation, but whose effectiveness in closing the achievement gap has yet to be examined (Coleman, Hoffer and Kilgore, 1981; Dewey, 1934; Haertel, James, and Levin, 1987; Kohl, 1969; Kozol, 1972; Neill, 1960; Ornstein and Levine, 1989, pp. 554-566). Also, theoretical alternatives which have yet to be applied, but which are not for that reason alone necessarily unrealizable, or without promise for effectiveness research (Wingo, 1974); or alternatives that co-exist in great variety within the same public school system, which in effect make the system as a whole another type of educational alternative (Fantini, 1973)⁴. The point made here is

⁴Some examples from each one of the above categories may suffice to illustrate the range of possible alternatives that could be studied. These alternatives do not represent an exhaustive list of possible alternatives, but serve to illustrate the variety or "diversity" of educational possibilities. From among the first category, free schools (of the A.S. Neill type), lab schools (of
not that such alternatives are necessarily more effective, since one would then assume precisely that which he set out to find, but that in order to find "effective" schools, the effective schools movement should expand its research efforts to include all possible educational paradigms, methods, or structures. Anything short of that would not only undermine the "effectiveness" of the effective schools movement, since it would exclude from its research precisely those educational possibilities which the public schools lack; but also make it impossible to evaluate the "effectiveness" of even an effective public school, even if one were found, since there would be very few other school paradigms with which to compare any presumably effective school, and therefore no real grounds for considering it any more "effective" than another school-type.

Effectiveness of Teaching Methods

Researchers may study the effectiveness of different teaching

the Deweyan type), Waldorf schools (based on Rudolf Steiner's theory), Montessori schools, military schools, parochial schools, learning networks, schools without walls, educational parks-based schools, museum-based schools, or tutorial schools; or a variety of alternative teaching methods, from mastery learning and critical thinking, to team teaching (Block, 1971; Bloom, 1976; Lipman, 1984). From among the second category, socratic schools, existentialistic schools, perennial type schools, field-based schools, or any other type of school that may be deduced from a philosophy of education, or other psychological or anthropological theory, or past historical practice. From among the third category, the most obvious is Mario Fantini's "schools-within-schools" (Fantini, 1973); or to a certain extent the co-existence of alternatives that is beginning to emerge in some urban school districts as a result of the spread of "magnet schools" (Rosenbaum and Presser, 1978).
methods in the context of different educational paradigms. The traditional school structure, which is that of most public schools, has recently come under attack by several leaders in the education profession, including Albert Shanker, president of the American Federation of Teachers (Finn, 1990; Shanker, 1990). The reform climate that presently exists in the country may present the effective schools movement with a rare opportunity to expand its research efforts to include an examination of alternative teaching methods. The reasons for the success with low-SES students of certain methods of teaching could be studied, or new ones piloted for further study.\(^5\)

The Case of Student Centeredness

In spite of all the arguments in favor of centering teaching around student interests that were made by many eminent educators in the past, such as Rousseau (1979), Pestalozzi (1900), Froebel (1889), and Dewey (1979, 1980, 1934), most public schools are built around "pre-arranged" lesson plans and curricula that usually have little relevance to the life experiences of the students being taught at the time. There is some evidence that suggests that textbook-centered, as contrasted to student-centered teaching methods may be creating a learning environment where it is easier

\(^5\)For example, in South Pointe Elementary School, in Miami, Florida, where teaching and learning processes have been drastically re-organized, low-SES students are allegedly advancing at the rate of 1.5 grade levels for each year they are enrolled (Boyd, 1991).
for mid-SES students to learn (Bernstein, 1961, 1970, 1977; Entwisle, 1970). A textbook-centered approach may be too abstract for low-SES students with immediate life concerns to motivate them to learn, while mid-SES students may have sufficient family stability or resources to allow them to disengage from daily concerns, and therefore to engage in abstract or textbook-like thinking processes.

Freire's Work in Brazil

In his work with illiterate and socially disenfranchised peasants in Brazil, Paulo Freire has shown that a student-centered approach may not only help students acquire academic skills at an unprecedented rate, but also help them focus on finding solutions to social problems (Freire, 1985). Further research may answer the question of the effectiveness for low SES students of the different types of student centered approaches, from the Deweyan type of student-led scientific re-investigation of old truths or ideas, to the Freirean manipulation of linguistic symbols with which to "demythologize" reality.

The Case of Multicultural Curriculum

Research on the effectiveness of different types of curricula may be paired with different teaching methods. For example, whether a multicultural curriculum helps low-SES students close the
achievement gap may depend on the degree to which even a multicultural curriculum is student-centered, that is, made relevant to the present life experiences or interests of low SES students (Banks, 1988). There is a world of methodological difference between studying different cultures as a pre-planned activity from a textbook, and re-enacting cultural patterns on the basis of the expressed interest of the students to re-discover their heritage.

Distribution of Rewards

In addition to studying the effectiveness of different educational alternatives, teaching methods, and curricula, effective schools researchers may also wish to consider examining the effectiveness of different organizational schemes. For example, regarding reward structures, research may be done on the effectiveness of schools that incorporate the dependency needs of low-SES students into their reward structure (Anderson and Evans, 1976; Crandall, et al., 1960; Crandall, 1964; Elder, 1965; Epstein and McPartland, 1977; Kohn, 1959, 1976; McClelland, et al., 1955; Strodbeck, 1958). Schools that have shorter-term reward periods, which seem to lend themselves to academic achievement by low-SES students, may provide rewards that collectively add up to the same graduation results as those that require longer periods for an
The point made here is that we should research the effectiveness for low-SES students of breaking down rewards into smaller steps that seem to reward good work soon after it is completed, as opposed to relying on the students' ability for delayed gratification, which seems to be more the characteristic of middle class students. This may require that before research is done on the "effectiveness" of this approach, the traditional model of schooling is re-designed to correctly reflect how this approach functions, or else there is the methodological risk that the results are irrelevant to the issue at hand.

6To use an analogy, this reward structure may be compared at the college level with getting a Bachelors degree either by enrolling directly in a four year college, which represents a long term commitment of four years that may have greater appeal for middle class students; or by enrolling first in a community college, and then transferring to a four year college, which may represent two shorter-term waiting periods, each rewarded at the end with a college degree. The community college experience may be more rewarding to low SES students whose economic circumstances may have conditioned them to rely on relatively shorter gratification periods.

7The analogy to the community college route to a Bachelors degree is offered as a rough example of how the same academic load in any institution may be subdivided into smaller autonomous units. It is not intended as a model for public schools to follow, nor has the author presented any evidence regarding the effectiveness or non-effectiveness of college-level experiences for low-SES students.
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