### DOCUMENT RESUME

ED 245 398 EA 016 950

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TITLE A Critical Synthesis of School Effectiveness

Research: Implications for Dissemination.

PUB DATE Oct 83

NOTE 19p.; Paper presented at the Annual Meeting of the

Northern Rocky Mountain Education Research Association (Jackson Hole, WY, October 13-15,

1983).

PUB TYPE Reports - Evaluative/Feasibility (142) -- Information

Analyses (070) -- Speeches/Conference Papers (150)

EDRS PRICE MF01/PC01 Plus Postage.

DESCRIPTORS Educational Planning; \*Educational Quality; \*Educational Strategies; Elementary Secondary

Education; Evaluation Criteria; Institutional Research; Research Methodology; \*Research Problems;

Research Reports; \*School Effectiveness

### ABSTRACT

This paper highlights findings of school effectiveness research, identifies major criticisms connected with that research, and discusses implications for dissemination. An ample bibliography follows. Twelve characteristics are associated with quality schools, including high level of teacher expectation, frequent classroom visitation by principals, and parent-initiated involvement. Such factors have limited reliability, however, because effectiveness is too specifically defined, student populations are unstable, and research instruments tend to be invalid. Practitioners should also know that most research has been conducted at the elementary level, that incorporation of these characteristics is no guarantee of achievement gain, and that study quality, not quantity, determines credibility. (KS)

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A CRITICAL SYNTHESIS OF SCHOOL EFFECTIVENESS RESEARCH:

IMPLICATIONS FOR DISSEMINATION

Paper presented at the Northern Rocky Mountain

American Educational Research Association

Jackson Hole, Wyoming

October 13-15, 1983

by

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This paper presentation focuses on school effectiveness research and related issues in three areas. First, it is my intent to share with you some of the major findings from studies of quality schools. Twelve major characteristics of those schools will be highlighted. Second, I will list criticisms identified by previous reviews or by my own perusal of this research. Third, I will discuss resulting implications for dissemination to practitioners. Guidelines for implementation will be explicated in light of limitations. Each area will provide a succinct summary of numerous studies, reviews or commentaries.

# I. Major Findings

Recent research (conducted in the 1970s and 1980s) has identified particular factors that are present in or associated with effective schools. Distinct characteristics were found of teachers, principals, parents, and students in high-achieving schools with low socio-economic status. These characteristics were believed to impact student achievement beyond normally predicted levels. It should be noted, however, that these factors were identified by correlational analysis or by observation; we cannot say that these factors caused high achievement gains. Major findings include the following twelve:

set by the staff and the principal. In their classroom instruction, teachers set individual goals for and with students. These goals include an emphasis on basic skills. 2



<sup>1.</sup> Venesky & Winfield, 1979; Glenn & McLean, 1981.

<sup>2.</sup> Weber, 1971; Brookover & Lezotte, 1979; Squires, 1980.

- 2. Teachers in effective schools use a diagnostic-prescriptive approach to instruction. Diagnosis is a continual process, using both formal and informal measures. Teachers modify or adapt materials and assignments to meet individual needs. Individual student goals are revised throughout the year.
- 3. Effective schools are characterized by continual monitoring of pupil progress. Both formal and informal measures are used for assessment and evaluation. These instruments are used to measure goal achievement.4
- 4. Teachers incorporate interactive activity (oral discussion, review, demonstration and oral directions for new work) into their instruction. Effective teachers rely on large amounts of direct instruction, especially for initial teaching of new concepts.

  Learning centers, materials and media are used to reinforce skills, not to teach concepts.
- 5. Teachers use a balance between large group and small group instruction. Effective teachers do not spend all of their time working with the whole class, small groups or individuals.6
- Teachers allocate more time to subject area instruction. Time is analyzed in three ways: (1) assigned time, or the amount of time blocked out for a given subject, (2) engaged time, or the amount of time within the assigned time students are actively engaged in that subject, and (3) effectively engaged time, or the amount of



<sup>3.</sup> California State Dept. of Ed., 1980; Armor, 1976.

<sup>4.</sup> Weber, 1971.

<sup>5.</sup> Levine & Stark, 1981; Stallings, 1982.

<sup>6.</sup> Kean, 1979; Stallings, 1982.

time students are engaged in activities that produce high success rates (60-90%).7

- 7. Effective schools are characterized by high expectations.

  Teachers have high expectations for all of their students. They believe that every student will master the curriculum. In turn, students have high expectations for themselves and their own achievements.8
- 8. A safe and orderly school climate characterizes effective schools.

  Students assume responsibility for their own belongings and supplies. Pupils are involved in school roles and functions, such as office and teacher assistants, monitors, and leaders.9
- 9. Teachers in effective schools display a lot of the students' work on classroom walls. The work of all students is included. This practice appears to aid in fostering positive self-concept and high student expectations. 10
- Principals in effective schools display instructional leadership behaviors. They hold themselves accountable for the evaluation of basic skills. These principals make frequent classroom observations and go there with specific purposes in mind. 11
- involvement. Three types of parent involvement are found: (1)

  parents involved in classroom activities, (2) parents in school

  governance and (3) parents involved in extracurricular school

  activity. 12



<sup>7.</sup> Brookover, 1979; Bloom, 1974; Fisher, 1978; Westbrook, 1982.

<sup>8.</sup> Good, 1981; Brookover & Lezotte, 1979; Glenn, 1981.

<sup>9.</sup> Rutter, 1979; U.S. Dept. of HEW, 1978.

<sup>10.</sup> Rutter, 1979.

<sup>11.</sup> Weber, 1971; Kean, 1979; Armor, 1976; Brookover, 1979.

<sup>12.</sup> Westbrook, 1982; Brookover & Lezotte, 1979; Clark, 1980.

12. Staffs in effective schools are generally dissatisfied; teachers are not content to maintain the status quo and are constantly seeking new ideas and techniques. Norms of continuous improvement operate. Teachers interact frequently with each other as colleagues concerning instruction. 13

# II. Criticisms and Limitations

There are at least ten major areas of criticism concerning the body of research on school effectiveness. These criticisms reflect study limitations and flaws in design or methods. The two most recent and extensive critical reviews were done by Purkey and Smith (1982) and by various authors in the April, 1983, issue of the Educational Researcher. Both of these reviews are general critiques; no one as yet has done a thorough and consistent critique of each individual study. These general criticisms include the following:

- The definition of an effective school is severely limited. An effective school as defined by Edmonds (1982) is a school which brings an equal percentage of its highest and lowest social classes to minimum mastery. Effective schools are defined by high achievement scores; in so doing, other factors which may define effectiveness are ignored. Rutter (1979), however, did use rates of vandalism in defining an effective school. Also, "average" achieving schools are not considered as effective.
- There is a lack of stability from year to year in the population of "effective schools." A school which was categorized as high achieving one year may look to be an average school the next. A longitudinal study of "effectiveness" would provide a more credible sample.



<sup>13.</sup> Brookover & Lezotte, 1979; Little, 1981.

- 3. Several studies lacked comparison groups. Characteristics of high achieving schools were studied but no comparisons were made with average or low-achieving schools to determine which factors were unique to high achieving schools.
- The independent variables, or the process and content characteristics were identified by perceptions of reality. These were identified by teachers' beliefs of the situation through questionnaires or by observers' reports of reality.
- 5. There are still unresolved conflicts in findings. For example, small group/whole class instruction is a controversial issue in some cases, large group instruction characterized effective programs while in others small group instruction was identified as associated with high achievement.
- 6. In many instances, case studies were not longitudinal.

  Ethnographic techniques were used, rather than ethnography. Some

  "case studies" were only 3-4 pages in length.
- 7. There is a lack of "context rich" studies. We do not know how these variables interact together. A school is a complex social system. The variation of one variable will impact others.
- 8. Instruments used in school effectiveness research generally lack validation or reliability; questionnaires were developed without piloting and study. Information gathered by these measures is subject to skepticism.
- 9. There is a need to study the impact of implementing school effectiveness findings into local practice. Case studies should be conducted to determine effects before embracing a "quick fix" solution.



The school effectiveness research (in light of the future) seems to best fit a scenario of maintaining the status quo or a shift to a conservative movement in education. With its emphasis on basic skills, implementing these findings corresponds to a "back to the basics" movement in education. This scenario is a filter through which the research should be viewed.

## III. Implications for Dissemination

When we as researchers disseminate this literature to practitioners, there are several caveats that need to be mentioned, together with a clarification of its value. First, practitioners should be reminded that most of this research has been conducted at the elementary level. Whether these findings will generalize to the secondary level is an empirical question.

Second, there is no guarantee that incorporation of any or all of these characteristics (on a school-wide or individual classroom basis) will produce achievement gains. Teachers may choose to adopt these findings to determine the effects in their own settings. These findings should be taken as suggestive, not prescriptive.

Third, one must remember that it is not the number of studies that produced the same findings (study quantity) but rather, study quality that determines credibility. Individual study quality must be examined to determine the worth of particular findings.

In summary, the patterns that have emerged from the school effectiveness research are supported, as Purkey and Smith (1982) have said, by theory and common sense. They are intuitive and logical, unifying and positive. After the negativism of the Coleman Report and the National Commission on Excellence Report, the school effectiveness



literature offers promise that teachers and principals can and do make a difference in student achievement.



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