The middle school movement, as a mechanism of educational reform through grade-level reorganization, has attracted a great deal of attention; and the total number of middle schools has grown significantly. This review surveys 19 documents previously announced in RIE, all but four of which are available through ERIC. The material reviewed is organized into and discussed under the topics (1) the identity of middle schools, (2) present status of the junior high and middle school, (3) future prospects for middle schools, and (4) assessment of middle schools. (Author/MLF)
... the middle school [is] a significant and important educational development in process. By no stretch of the imagination of even the most ardent middle school proponents could we present the new organization as having already achieved its promise. In fact, one of the most interesting questions to be answered in education during the 1970's is what happens to the middle school and its potential for effecting educational improvement.

*Alexander (1971)*

Educational reform through grade-level reorganization has long been a topic of discussion. During the sixties there was considerable reorganization of the “school ladder,” resulting in the rapid emergence of middle schools. Although the middle school movement has attracted a great deal of attention and the total number has grown significantly, two basic questions about middle schools are still asked.

First, what is a middle school? Middle schools are identified by their name, grade-level organization, and program characteristics. The middle school is defined as a school consisting of grades five to eight, six to nine, or seven to nine (synonymous with the traditional junior high). Grade five is included in some middle schools because numerous studies confirm that children are maturing earlier.

Authors generally agree on the concept of the middle school as an organization that should parallel a specific period of human growth and development between childhood
and adolescence called “transescence.” Most authors view the middle school as having resulted from dissatisfaction with the traditional junior high school, an organization without a solid rationale for its existence. Writers express hope that the new organization will allow change, flexibility, and structure tuned to the needs of those in transescence.

Some middle schools are working toward the goal of flexible programs with varied exploratory activities and learning experiences based on individual interests and needs. Team teaching, media centers, independent study, and programmed learning are also objectives for the middle school. Regular counseling and guidance for each student are considered important parts of these programs. The emergence of the middle school provides an opportunity for developing educational experiences for students in the critical transitional years.

Second, what conditions currently exist in middle schools throughout the nation? Several researchers indicate that most middle schools are not focusing on the needs and interests of transescents. In fact, they have found little difference between junior high schools and many middle schools, which have adopted the schedule, program, and structure of the traditional junior high. Apparently, middle schools are being developed as much in response to rising enrollments and overcrowding as in response to the concern for meeting the needs of transescents.

All except four of the documents reviewed here are available from the ERIC Document Reproduction Service. Complete instructions for ordering the documents are given at the end of the review.

**THE IDENTITY OF MIDDLE SCHOOLS**

The increase in the number of middle schools during the past few years prompted two professional organizations to compile a detailed report of the schools' characteristics (AASA and NEA 1969). Information for each school includes identification of school system and name of school, date of first year of operation, grades included, number of students, number of staff positions, ability grouping, instructional practices, subjects taught by teams, special subjects (required and elective), and activities. Additional material covers special comments by middle school principals, an index to school systems with middle schools, and a bibliography.

Mellinger and Rackauskas (1970) discuss a national survey designed to identify the characteristics that distinguish the middle school from other types of academic organization. A questionnaire was sent to schools whose names included the words “middle school,” as well as to other schools that could possibly be considered middle schools.

The middle school philosophy, according to the authors, is to prepare students for adult responsibilities without exposing them prematurely to experiences for which they are unprepared. Although less than half of the questionnaire respondents believe their schools are maximally implementing this philosophy, a larger proportion believe their schools are attempting to do so.

A report compiled by Perry (1969) contains addresses from a staff session on the middle school sponsored by the Florida
state education department division of curriculum and instruction. Participants sought to obtain an overall view of the theoretical concept of the middle school, its status in the educational organization, its student population characteristics, and its special requirements regarding teacher education programs. A selected bibliography is included.

Noting that current trends in school reorganization favor a middle school composed of grades six to eight, Myers (1970) raises the question of where to place the ninth grade. In the assumption that ninth graders should be with students of similar maturity levels, a test was made of the research hypothesis that ninth-grade students more nearly resemble tenth-grade students than they do eighth-grade students.

Data on the physical, emotional, intellectual, and social maturity levels of eighth-grade, ninth-grade, and tenth-grade students were gathered from two Missouri suburban school districts. Analysis showed significant differences between eighth-graders and ninth-graders in physical, intellectual, and emotional maturity. The only significant difference between ninth- and tenth-grade students was the greater physical maturity of the tenth-graders. The authors conclude that it would be best to place ninth-graders in senior high schools rather than in junior high or middle schools.

In a paper presented at the University of New York at Buffalo, Eichhorn (1968) suggests that programs should be planned for transescents, each one of whom matures according to his own timetable. This diversity in maturation rates creates diversity in interests and attitudes, as well as irregular social and emotional patterns. If educators understand the complexities of this age group and are willing to create programs suited to its unique characteristics, the middle school can provide a dynamic program of education for transescents.

Eichhorn (1969) outlines various facets of middle school programs:

- a dynamic and active school environment allowing students to learn free of unnecessary restraint
- a revitalized curriculum including three elements: analytical, personal dynamics, and expressive arts
- student grouping reflecting the rate of mental, physical, social, and emotional growth
- activity programs allowing boys and girls to participate both separately and collectively
- flexible schedules facilitating learning
- guidance patterns involving the entire staff in counseling

Read (1969) discusses the basic rationale behind the increase in middle schools in a document prepared for the Future School Study Project. After studying materials published between 1961 and 1968, Read concludes that middle schools (grades six-eight) are effectively meeting the needs of today's youths, who mature physically, emotionally, intellectually, and socially much earlier than did their counterparts at the turn of the century when the junior high school (grades seven-nine) was introduced.

Midjaas (1970b) notes that American education emphasizes the cognitive realm, to the virtual exclusion of affective learning. He cites nine characteristics of the middle school program that balance the cognitive and affective elements in learning and trans-
lates these features into design elements for middle school facilities. Specific recommendations are provided in the areas of instructional technology, media centers, personalized learning territories, space flexibility, large-group instruction, and guidance services.

PRESENT STATUS OF THE JUNIOR HIGH AND MIDDLE SCHOOL

Gatewood and Walker (1971) discuss a comparative study of Michigan middle and junior high schools to determine whether the two organizations differ. Results of a survey of principals of the participating schools indicate that most organizational structures and instructional processes in both types of schools are similar to previous programs and instructional organizations for the middle years. The data also reveal that middle schools were established primarily to reduce overcrowded conditions in other schools, whereas the junior high school organization was intended to provide a program specifically designed for students in the junior high age group.

Pansino (1969) points out the disadvantages of the junior high in contrast to the advantages of the middle school and briefly reviews two books supporting opposite sides of the controversy. In addition to a definition of the middle school, he includes a bibliography compiled from Education Index and Research in Education.

In their report on new curriculum activities in pilot schools of New York City, Ehrlich and Murray (1969) discuss an intermediate school experiment that replaced the junior high school (grades seven-nine) with middle schools of grades five or six through eight. Major curriculum innovations were introduced in foreign languages, the humanities, family living, typing, and the creative and performing arts. The organization of these experimental middle schools comprised sub-schools, educational planning teams, departmentalization, and independent pupil study.

Using results from a variety of tests and interviews, the research team compared middle school pupils with junior high pupils in the areas of mathematics achievement, attitudes toward school, and self-concepts. The only statistically significant differences showed that junior high pupils performed better in arithmetic problem-solving, whereas intermediate school boys had more favorable attitudes toward social studies and science.

FUTURE PROSPECTS FOR MIDDLE SCHOOLS

Speaking at a National School Boards Association convention, Midjaas (1970a) commented that the newness of the middle school poses five major planning problems:

- unfamiliarity with or misunderstanding of the rationale behind the middle school
- the “bandwagon syndrome” faced when any new development in education achieves public attention
- the training of a school staff intellectually and emotionally equipped to make the middle school concept work
- the willingness of school boards and administrators to accept program experimentation and ongoing program evolution
- the dangers of promising too much too soon in an organizational context that is extremely promising but largely untried
Moore and Stevens (1969) analyze a continuous progress plan projected for a Seattle southeast area middle school. The school will be organized to guide the cognitive and affective development of individual students throughout the program.

The arrangement of students and programs through grades five to eight will focus on a combination of small groups and independent study. Eight nongraded sections will be home base for approximately two hundred students. Each student will have a personal advisor and confidant in his teacher-counselor, who will be directly responsible for the pupil's education. The availability of prepared curriculum materials, and the freedom of the student to develop his own materials and to plan along with the teacher-counselor will facilitate individualized learning. The program will be based on a twelve-month school year, within which the student may stop and start as he needs.

Booth and others (1969) discuss use of the educational park and middle school concepts in Fresno, California. They recommend that the Fresno schools seriously consider adopting an organizational pattern containing middle schools. Not only do the values of middle schools make this approach desirable, but adoption of the middle school concept would also facilitate recent innovative trends in Fresno.

**Assessment of Middle Schools**

Three documents by Evans (1970a, b, c) assess the middle school plan in the Fort Worth, Texas, Independent School District. The first (1970a) is a short-term assessment of the plan, generating and testing twenty-seven hypotheses relative to middle school operations. The second document (1970b) is a student questionnaire assessing the educational and social growth of students in the middle school. The third document (1970c) is a teacher questionnaire.

Manlove and Mowrey (1970) report on criteria developed by the National Study of School Evaluation for use in evaluating junior high and middle schools. The sections on “School and Community” and “Philosophy and Objectives” form the foundation for the evaluation process.

Each section in the manual focuses on a specific aspect of the middle school, such as curriculum organization, priorities in educational commitments, instructional areas, student activities, learning media services, student services, administration and staff, as well as the school plant and facilities. An evaluative section is organized on a five-point format: fundamental principles and premises, the nature of the program, its evaluation, school plans for improvement, and a current status scale.

**References**

Abstracts of the following documents can be located in Research in Education. The complete texts are available from the ERIC Document Reproduction Service (EDRS), commercial channels, or both. Publications can be ordered in either facsimile paper copy form or microfiche.

For each order, indicate the ED numbers of the desired publications, the type of reproduction desired (paper or microfiche), and the number of copies being ordered.

Payment must accompany orders under $10.00.
Postage, at book rate or library rate, is included in the price of the document. If first class mailing is desired or if shipment is outside the continental United States, the difference between book rate or library rate and first class or foreign postage will be billed at cost. All orders must be in writing.

Address requests to ERIC Document Reproduction Service, P.O. Drawer O, Bethesda, Maryland 22214.

Alexander, William M. "Introduction: How Fares the Middle School?" The National Elementary Principal, 51, 3 (November 1971).


Booth, William, comp., and others. School Organization Patterns: The Educational Park; The Middle School: PROJECT DESIGN. Intergency Planning for Urban Educational Needs, Number 33. Fresno, California: Fresno City Unified School District, 1969. 40 pages. ED 038 771 MF $0.65 HC not available from EDRS.


Eichhorn, Donald H. "Planning Programs for Transceivers." Paper presented at the University of New York at Buffalo, October, 1968. 9 pages. ED 033 445 MF $0.65 HC $3.29.

———. "Middle School—Promise of the Future". Paper presented at Southeast Missouri State College, March, 1969. 9 pages. ED 033 444 MF $0.65 HC $3.29.


Gatewood, Thomas E., and Walker, George H., Jr. A Comparative Study of Middle Schools and Junior High Schools in the State of Michigan. 1971. 27 pages. ED 054 530 MF $0.65 HC $3.29.


Midjaas, Carl L. "Avoiding the Pitfalls of Middle School Planning." Speech delivered at National School Boards Association Convention, San Francisco, April, 1970. 11 pages. ED 046 109 MF $0.65 HC $3.29.


Moore, James, and Stevens, William. Analysis of
the Middle School Educational Programs. Seattle: Southeast Educational Center, Seattle Public Schools, 1969. 106 pages. ED 039 280 MF $0.65 IC $6.58.


Previous Publications in this Series

1. Computer Applications in Class and Transportation Scheduling, by Philip K. Piele
2. Planning-Programming-Budgeting Systems, by Philip K. Piele
4. Flexible-Modular Scheduling, by Sharon Counts Johnson
5. Principal's Role in Collective Negotiation, by Ian Templeton
6. Year-Round Schools, by Sharon Counts Johnson

While the supply lasts, a free copy of each review may be obtained by writing to the Editor, ERIC Clearinghouse on Educational Management, University of Oregon, Eugene, Oregon 97403.
RESEARCH HIGHLIGHTS

- The middle school philosophy is to prepare youths for adult responsibilities without exposing them prematurely to experiences for which they are not prepared. (Mellinger and Rackauskas 1970)

- Current trends in school reorganization favor a middle school composed of grades six to eight. (Myers 1970)

- Transescents are youths in transition physically, mentally, and socially, each according to his own timetable. They should have flexible schooling programs and a wide range of exploratory activities suited to their unique characteristics. (Fiehr 1969)

- The middle school effectively meets the particular needs of today's youths, who mature earlier than did their counterparts at the turn of the century. (Read 1969)