

What Research Says About the Middle School

Research findings in the middle school to date show a "mixed bag" of results. If some positive trends continue, however, middle schools may yet fulfill their promise.

THOMAS E. GATEWOOD*

DURING its infancy in the early 1960's many of the middle school's early proponents touted its promise. It would be different from the junior high, not only in name and grade organization, but also in the quality of education provided for students. Overcome would be the junior high's weaknesses. Implemented instead would be an educational program focused on the period of growth and development occurring between childhood and adolescence and characterized by:

1. A home base and teacher for every student to provide for continuing guidance and assistance to help him make the decisions he faces almost daily regarding special needs and learning opportunities

2. A program of learning opportunities offering balanced attention to three major goals of the middle school: (a) personal development of the between-ager, (b) skills of continued learning, and (c) effective use of appropriate knowledge

3. An instructional system focused on individual progress, with many curricular options and with individualized instruction in appropriate areas

4. The use of interdisciplinary team ar-

rangements for cooperative planning, instructing, and evaluating

5. A wide range of exploratory activities for the socializing, interest-developing, and leisure-enriching purposes of the bridge school (1).

Yet after a decade of meteoric growth, what has really happened to the original promise of the middle school? What has been learned from the available research?

The following conclusions have emerged from several research studies, many completed only within the past five years.

• *The history of the middle school movement has been characterized by phenomenal emergence of new grade organizations for the middle grades.*

When did you first hear the words, "middle school"? The odds are great that it was not before 1960. A National Education Association survey (29) in 1963-64 found only 20 of 443 school systems reporting schools organized on a grades 5-8 or 6-8 organizational pattern. Only two years later, Cuff (7) identified 449 middle schools (schools

* Thomas E. Gatewood, Associate Professor of Secondary Education, Central Michigan University, Mount Pleasant

having grades 6 and 7 and not extending below grade 4 or above grade 8). Of these schools, 35 percent were organized on a grades 6-8 basis, and 30 percent on a 5-8 basis.

In 1967-68, Alexander (2) reported 1,101 middle schools (using a definition similar to Cuff's). Study of a 10 percent random sample of these schools indicated that 60 percent had grades 6-8, 27.4 percent had grades 5-8, and 12.7 percent had either grades 4-8, 5-7, 6-9, or 4-7 organizations.

Kealy (21) found 2,298 middle schools (using Alexander's definition) a year later in 1969-70. The grades 6-8 organization was still most popular, accounting for 58.2 percent of the schools, followed by the 5-8 pattern at 25.4 percent. Thus, during a six-year period, the increase in middle schools was geometric, with the number more than doubling every two years.

● *Middle schools have been established for reasons more administrative than educational.*

As documented by several studies (2, 11, 16, 17, 22, 36, 40), reorganization of the grades in the middle years has been attributed primarily to such practical reasons as to eliminate crowded conditions in other schools, to utilize a new building, to move grade 9 into high school, and to aid desegregation. More strictly educational reasons such as to provide a more appropriate program for pre- and early-adolescent students, to better bridge the elementary school and the high school, and to implement innovative plans for curriculum, instruction, and organizational structure have been less emphasized.

● *Middle schools have adopted the educational programs and practices of junior highs, thus not successfully achieving the middle school concept.*

The junior high versus middle school controversy has existed since the early days of the middle school. Claims and counter-claims have been made, but only recently has research been conducted to determine whether or not differences really exist.

In truth, the only real difference between most junior highs and middle schools is in name and grade organization. Founded

more upon grounds of administrative expedience than of educational improvement, most middle schools have simply moved the junior high structure, program, and schedule down a grade or two. Or, the programs of grades 5 and/or 6 from the prior elementary school and that of grades 7 and/or 8 from the junior high are maintained so that, in reality, two very different schools are housed in the same building. Most of the research on the topic (2, 4, 5, 15, 17, 19, 23, 26, 30, 31, 40) reports that middle schools tend to have the same high school-type program of studies, departmental organization, Carnegie units, interscholastic athletics, and early socialization activities that have long characterized and plagued junior highs.

Based upon these findings, it should come as no surprise that several studies (14, 17, 24, 33) have found a significant gap between the main tenets of the theoretical middle school concept proposed by leading middle school authorities and actual educational practices in most middle schools.

Some studies (3, 8, 27, 32, 35, 36, 39) have favored the middle school over the junior high; others (10, 20, 34, 37), the junior high over the middle school. However, many of these studies tend to be either too specific in focus, confined to too small a sample, or too conflicting with one another to be very conclusive.

● *The most appropriate grade organization for the middle school cannot be determined from the available research.*

Do fifth and/or sixth graders belong in an elementary or a middle school? In terms of personal, social, and physical characteristics, research (6, 9) indicates that sixth graders are more like seventh graders than fifth graders. The reason is related to the onset of puberty, which has not begun for most fifth graders as it has for sixth graders. Thus, pupils in the fifth grade still resemble children more than they do early adolescents. Research (12, 13, 25, 36) has reported an age for the onset of puberty approximately one to two years earlier than in preceding generations and an accelerated growth process.

Where should ninth graders be placed?

Ninth graders are more compatible with tenth graders than eighth graders in terms of physical, social (9), emotional, and intellectual (28) maturity.

Based upon the foregoing findings, a grades 6-8 organization would appear to be more appropriate. However, some research (4, 18, 27, 39) reports that it makes no difference to the educational achievement (18), self-concept, attitude toward school (27, 39), and acceptance among peers (4) of fifth and/or sixth grade pupils whether they are placed in either an elementary or a middle school. In addition, none of the studies on grade organization takes into account the obvious differences in maturity between boys and girls. Taking this factor into account, and offering a compromise among the many conflicting studies on grade organization, one perceptive educator was moved to suggest, with tongue only partly in cheek, that the best middle school organization would have all seventh and eighth graders, plus sixth grade girls and ninth grade boys.

The Future of Middle Schools

Despite the disparaging evidence reported in the research, some middle schools are becoming more diverse and innovative in their educational programs. The percentage of schools reporting a variety of the following types of practices appears to be increasing each year: interdisciplinary team teaching; exploratory programs; nongraded and individualized instruction; flexible scheduling; open classrooms; innovative plans for reading instruction; and more personalized guidance services.

The movement toward true middle schools has been given much impetus from new state organizations such as those in Florida, Maryland, and Michigan, and from regional organizations such as the Midwest Middle School Association. New publications such as the *Middle School Journal*, *Transference: The Journal on Emerging Adolescent Education*, and *Dissemination Services on the Middle Grades* have emerged to give national identity to the middle school movement. In addition, a plethora of books and articles on

the topic have appeared in recent years. More teacher certification is now found at the state level, which in turn has spawned new pre-service training at the college level and in-service training at the school level.

If all of these positive trends continue, research conducted on middle schools in the future hopefully will reveal more fulfillment of their original promise than that conducted to date.

References

1. William M. Alexander. "How Fares the Middle School?" *National Elementary Principal* 51: 8-11; November 1971.
2. William M. Alexander. *A Survey of Organizational Patterns of Reorganized Middle Schools*. Washington, D.C.: U.S. Department of Health, Education, and Welfare, 1968.
3. Fred Baruchin. "A Comparative Study of Transitional Grades of Middle and Traditional School Types in Upstate New York." Unpublished doctoral dissertation, State University of New York at Buffalo, 1971.
4. David A. Case. "A Comparative Study of Fifth Graders in a New York Middle School with Fifth Graders in Elementary Self-Contained Classrooms." Unpublished doctoral dissertation, University of Florida, 1970.
5. Peter S. Constantino. "A Study of Differences Between Middle School and Junior High School Curricula and Teacher-Pupil Classroom Behavior." Unpublished doctoral dissertation, University of Pittsburgh, 1969.
6. Roy J. Creek. "Middle School Rationale: The Sixth Grade Component." Unpublished doctoral dissertation, University of Pittsburgh, 1969.
7. William A. Cuff. "Middle Schools on the March." *National Association of Secondary School Principals Bulletin* 51: 82-86; February 1967.
8. Thomas E. Curtis. "The Middle School in Theory and Practice." *National Association of Secondary School Principals Bulletin* 52: 135-40; May 1968.
9. Wilfred P. Dacus. "A Study of the Grade Organizational Structure of the Junior High School as Measured by Social Maturity and Opposite Sex Choice." Unpublished doctoral dissertation, University of Houston, 1963.
10. Harl R. Douglass. "What Type of Organization of Schools?" *Journal of Secondary Education* 41: 358-64; December 1966.
11. Educational Facilities Laboratories. *The Schoolhouse in the City*. New York: the Laboratories, 1966.
12. Donald H. Eichhorn. *The Middle School*.

New York: Center for Applied Research in Education, 1966.

13. Dorothy H. Eichorn. "Variations in Growth Rate." *Childhood Education* 44: 286-91; January 1968.

14. John H. Flynn. "Practices of the Middle School in California." Unpublished doctoral dissertation, University of Southern California, 1971.

15. Charles F. Forst. "A Study of the Middle Schools in the County School Systems in the State of Maryland as Compared to Selected Junior High Schools Within the State." Unpublished doctoral dissertation, George Washington University, 1969.

16. Alexander Frazier. *The New Elementary School*. Washington, D.C.: Association for Supervision and Curriculum Development, 1968.

17. Thomas E. Gatewood. "A Comparative Study of the Functions, Organizational Structure, and Instructional Process of Selected Junior High Schools and Selected Middle Schools." Unpublished doctoral dissertation, Indiana University, 1970.

18. Carl H. Glissmeyer. "Which School for the Sixth Grader, the Elementary or the Middle School?" *California Journal of Educational Research* 20: 176-85; September 1969.

19. Dale E. Harris. "A Comparative Study of Selected Middle Schools and Selected Junior High Schools." Unpublished doctoral dissertation, Ball State University, 1968.

20. Alvin W. Howard. *Teaching in Middle Schools*. Scranton, Pennsylvania: International Textbook Company, 1968.

21. Ronald D. Kealy. "The Middle School Movement, 1960-70." *National Elementary Principal* 51: 20-25; November 1971.

22. Leslie W. Kindred. *The Intermediate Schools*. Englewood Cliffs, New Jersey: Prentice-Hall, Inc., 1968.

23. Jack E. Kittell. "Changing Patterns of Education: The Middle School Years." *College of Education Record, University of Washington* 33: 62-88; May 1967.

24. Morris Mellinger and John Rackauskas. *Quest for Identity: National Survey of the Middle School, 1969-70*. Chicago: Chicago State College, 1970.

25. Howard V. Meredith. "Change in the Stature and Body Weight of North American Boys in the Last 80 Years." In: Lewis P. Lipsitt and Charles C. Spicker, editors. *Advances in Child Development and Behavior*. New York: Academic Press, 1963.

26. "Middle School Status in Ten States." *National Elementary Principal* 51: 67-77; November 1971.

27. Patrick F. Mooney. "A Comparative Study of Achievement and Attitude of 10- to 14-Year-Olds in a Middle School and in Other School Organiza-

tions." Unpublished doctoral dissertation, University of Florida, 1970.

28. Norman K. Myers. *Physical, Intellectual, Emotional, and Social Maturity Levels of Eighth, Ninth, and Tenth Grade Students with Implications for School Grade Organization*. Columbia: University of Missouri, 1970.

29. National Education Association Research Division. *Middle Schools*. Washington, D.C.: the Association, 1965.

30. National Education Association Research Division. *Middle Schools in Theory and in Fact*. Washington, D.C.: the Association, n.d.

31. John E. Onofrio. "The Evolving Middle School in Connecticut: Principals' Opinions Concerning Unique Characteristics and Recommended Trends." Unpublished doctoral dissertation, Fordham University, 1971.

32. Harold J. Rankin. "A Study of the Pre- and Post-Attitudes and Academic Achievements of Students in Grades 5 through 10 in a Change from a Junior High Organization to a Middle School Organization in a Suburban School System." Unpublished doctoral dissertation, Syracuse University, 1969.

33. Jack Riegler. "A Study of Middle School Programs To Determine the Current Level of Implementation of 18 Basic Middle School Principles." Unpublished doctoral dissertation, Michigan State University, 1971.

34. Charles I. Schonhaut. "An Examination of Educational Research as It Pertains to the Grade Organization for the Middle Schools." Unpublished doctoral dissertation, Columbia University, 1967.

35. Philip H. Schoo. "Students' Self-Concept, Social Behavior, and Attitudes Toward School in Middle and Junior High Schools." Unpublished doctoral dissertation, University of Michigan, 1970.

36. George C. Simpson and George J. Smith. *Middle School Survey of New York State*. New Paltz, N.Y.: Mid-Hudson School Study Council, 1967.

37. Anthony T. Soares, Louise M. Soares, and Philip Pumerantz. "Self-Perceptions of Students in the Middle School." Paper presented at the 1971 Annual Meeting of the American Educational Research Association, New York, 1971.

38. J. M. Tanner. *Education and Physical Growth*. London: University of London Press, 1961.

39. Edward M. Trauschke. "An Evaluation of a Middle School by a Comparison of the Achievement, Attitudes, and Self-Concept of Students in a Middle School with Students in Other School Organizations." Unpublished doctoral dissertation, University of Florida, 1970.

40. George H. Walker, Jr., and Thomas E. Gatewood. "The Status of Middle Schools in Michigan." *Michigan Journal of Secondary Education* 13: 11-15; Summer 1972. □

Copyright © 1973 by the Association for Supervision and Curriculum Development. All rights reserved.