Along with increasing numbers of middle schools, the past decade has seen the emergence of a middle school philosophy. The present document explores this philosophy which takes into account the wide range of physical, intellectual, and emotional differences among pupils who are between childhood and adolescence. Among the labels applied to these pupils are transcents and emerging adolescents. While no attempt to categorize them is wholly satisfactory, these students are generally identified as those in grades 5 or 6-8, or as 10-14-year-olds. The major portion of this presentation covers middle school historical roots and present trends, philosophy, ideal program characteristics, and staff. Recurrent themes include individual attention and continuous progress up the "school ladder." Various transitional and exploratory functions of the middle school institution are examined. A substantial bibliography is provided. (Author)
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School Leadership Digest
Nan Coppock

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ERIC AND THE CLEARINGHOUSE

The Educational Resources Information Center (ERIC) is a national information system operated by the National Institute of Education. ERIC serves the educational community by disseminating educational research results and other resource information that can be used in developing more effective educational programs.

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FOREWORD

With the School Leadership Digest series, the National Association of Elementary School Principals adds another project to its continuing program of publications designed to offer school leaders essential information on a wide range of critical concerns in education.

The School Leadership Digest is a series of monthly reports on top priority issues in education. At a time when decisions in education must be made on the basis of increasingly complex information, the Digest provides school administrators with concise, readable analyses of the most important trends in schools today, as well as points up the practical implications of major research findings.

By special cooperative arrangement, the series draws on the extensive research facilities and expertise of the ERIC Clearinghouse on Educational Management. The titles in the series were planned and developed cooperatively by both organizations. Utilizing the resources of the ERIC network, the Clearinghouse is responsible for researching the topics and preparing the copy for publication by NAESP.

The author of this report, Nan Coppock, is employed by the Clearinghouse as a research analyst and writer.

Paul L. Houts
Director of Publications
NAESP

Stuart C. Smith
Assistant Director and Editor
ERIC/GEM
Interviewer: If there were one thing about this school you could change, what would it be?

First Pupil: The teachers are good, but sometimes they forget how smart they are and how dumb we are. I would like to have shorter units so I could learn it all.

Second Pupil: Nothing really needs changing. I just want to get rid of these bugs. We tried keeping the windows and doors shut, but it got hot. Bugs got in the cookies in home ec.

Selections from Weber, “The Grassroots: Interviews with Middle School Students”

One pupil talks about the quality of teaching, while the next complains of insects in the cookie jar. This disparity in maturational levels points up the difficulty of identifying a “typical transescent.” It was Donald Eichhorn who, in the early sixties, coined the term transescence to describe the transitional period between childhood and adolescence. Others have called these transitional youth “emerging adolescents,” “in-between-agers,” “children-in-the-middle,” “preadolescents,” and “early adolescents.”

However they are labeled, they are a most heterogeneous group with respect to physical, intellectual, and emotional development.

Note the following additional illustrations from Weber’s interviews: One student likes to do experiments “to see if the books are right,” while another likes to “learn new words and surprise my father. He thinks I’m dumb.” If he could study something not presently offered in his school, one boy requested “football. We don’t play it here, I mean the real kind. I want to play like Roosevelt Grier and need to get started now.” More altruistic motives were expressed by two other students, who requested “sewing—to make clothes for my sisters and brothers when I grow up,” and “health. My
baby sister died, and I don't want no one else in the family to."

While educators recognize the wide range of individual differences among emerging adolescents, they usually end up relying on some artificial means of categorizing them. The most common divisions are according to grade and/or age level. The middle school range covers grades four through nine and ages nine through fifteen. But it is most often limited to grades five or six through eight, or ten- to fourteen-year-olds.

Throughout this paper, the students themselves are the center of attention. Recurrent themes include individual attention and continuous progress up the "school ladder."
The middle school—an institution designed expressly to serve the needs of intermediate pupils—is one of the major educational innovations of the past two decades. Although the first official middle school was founded in Bay City, Michigan, in 1950, it was not until the late fifties and early sixties that a true middle school movement began to take hold. As noted by Lounsbury and Vars, some intermediate schools were designated “middle schools” forty years ago, but a “middle school philosophy” did not emerge until the fifties.

History of Intermediate Education

Despite the relatively recent birth of middle schools, their history is actually that of intermediate education in general. One way of looking at this history is the cyclical view, which sees the same pattern repeated over and over. Lounsbury and Vars, for example, see the emphasis in intermediate education in this century alternating between academic and progressive poles; the junior high has gone through periods of each, and the middle school movement marks the swing back to the progressive.

Another view looks at specific events or individuals as the impetus for the particular path intermediate education has taken. The person usually held responsible for the birth of intermediate education is G. Stanley Hall, who in 1904 contributed to the already notable problems of elementary and secondary education by suggesting that there was an “adolescent age” requiring its own in-between level of schooling. Hall defined the childhood period as gradually terminating at the end of the twelfth year, with the transition to adolescence beginning at that point. Although many educators disagreed with Hall’s identification of three rather than two periods of growth and development, they often had their own reasons...
for seeking to implement an intermediate educational level. And Hall provided them with ready justification.

The resulting institution was the junior high school. In its early years the new intermediate school received its greatest push, according to Ball, from universities, advocates of vocational education, an educational community faced with overcrowding, and teachers wanting new and improved facilities. To these sources of impetus for reorganization, Lounsbury and Vars add three more groups. Public school educators supported the junior high as a means of bridging the gap between elementary and secondary programs and hoped to make schooling more relevant to daily life through the earlier introduction of vocational education. Civic and government leaders saw the junior high as a possible solution to the societal problem of "Americanizing" immigrants. And taxpayers hoped to save money by cutting down the large numbers of repeating students.

Following World War I such administrative factors as the need for new school buildings to relieve overcrowding (why not an intermediate school?) entered the picture. Odetola and others suggest that junior high schools were instituted to extend secondary education downward to students who ended their formal education at the minimum legal age. A junior high would at least expose them to some measure of the secondary school experience. In short, by 1930 nearly half of all secondary pupils were attending reorganized schools.

Subsequent educational developments are summarized by Eichhorn. The most significant was the belief that children at all ages were maturing faster intellectually, socially, emotionally, and personally than in the thirties and forties. This belief contributed to the pressure brought to bear in some cases to put the ninth grade back in the high school.

Today, Lounsbury and Vars estimate, 80 percent of American youth go through some sort of intermediate school. As noted earlier, since midcentury the trend has been toward middle schools. Many of the purposes behind the middle school movement are identical with those behind the earlier innovations in intermediate education. Again, concerns over
bridging the gap, overcrowding, and the growth characteristics of adolescents and preadolescents are cited by various authors as reasons for a new kind of intermediate educational reorganization. Also mentioned are desegregation, curricular innovations, the bandwagon effect, and inability to pass school budgets.

**Patterns of Organization**

Figures from 1966 through 1972, listed in table 1, reveal the relative growth of different types of middle school organizations. Preferences for three, four, and five middle school grades, in descending order, were noted in 1966. Subsequent surveys indicated a continuation of this trend, with the three-grade type of organization gaining while the four- and five-grade types declined proportionately.

It is important to note differences in definitions for each study. The 1966 figures include any school composed of at least the sixth and seventh grades, with none below the fourth or above the eighth. For 1968, "a school which combines into

<table>
<thead>
<tr>
<th>Year of Survey</th>
<th>1966</th>
<th>1968</th>
<th>1970</th>
<th>1972</th>
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<tr>
<td>Number of Middle Schools</td>
<td>499</td>
<td>1,101</td>
<td>1,696</td>
<td>1,906</td>
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<td>5-3-4 Organization*</td>
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<td>60%</td>
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<tr>
<td>4-4-4 Organization</td>
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<td>9%</td>
<td>7.3%</td>
<td>5.4%</td>
<td></td>
</tr>
</tbody>
</table>

*The first integer indicates the number of elementary grades; the second, intermediate grades; and the third, secondary grades. For 1972, schools with five intermediate grades were excluded, and analysis of the three- and four-grade types is not yet complete.

Source: Data from the first three surveys are quoted by Bough, McLure, and Sinks: 1966 from Cuff, 1968 from Alexander, and 1970 from Mellinger and Rackauskas. The 1972 figures are part of a study by Raymer.2
one organization and facility certain school years usually 5 through 8 is the working definition. The 1970 survey characterizes the middle school as “for pupils in grades 4 through 8 with at least two but not more than five grades including 6 and 7 or 7 and 8.” For 1972, middle schools are identified primarily by name and/or the inclusion of grades 5 or 6 through 8.

A Slowing Trend

The middle school movement apparently has slowed down somewhat since 1968, when Alexander observed that the number of middle schools had doubled every other year since 1962. From a survey of five midwestern states, Bough and his colleagues inferred slower, more careful growth in experimental approaches to early adolescent education.

A total of 971 institutions were listed in a middle school directory compiled by Jirka in 1971. This figure is unreliable, however, since schools were included or excluded primarily on the basis of whether they called themselves middle schools. As a result, some schools listed are middle schools in name only, while those actual middle schools that have not adopted the term as part of their official titles are omitted.

Raymer plans to publish a state-by-state directory of 1,906 middle schools later this year. Relying on state departments of education and selected school districts for his research sources, he identifies over twice as many schools as Jirka. Raymer also uses the name “middle school” as one of his identifying criteria. He feels that, at this time, the title ought to coincide with the goals of the middle school philosophy. Although he lists schools with either grades 5 through 8 or 6 through 8, Raymer suggests that administrative convenience or necessity is usually the basis for the four-grade type of organization.

The inadequacies of most middle school surveys can in large part be traced to the fact that we are dealing with an innovative educational concept. Until 1950 that concept was unknown. The appearance of a decline in the number of new middle schools is due in part to the gradual narrowing and
refining of the definition. While there is now greater consensus regarding the primary aims of middle schools than there was in the initial stages of the movement, such issues as organizational bases, curricula, and teaching methods are still vigorously debated.

With only a little over a decade behind it, the middle school movement is certainly not ready for a comprehensive historical study. Nor can its success or failure yet be fairly judged. But its rapid growth over the past several years demands some sort of progress report, as well as indications of how present efforts to educate emerging adolescents might be enhanced.
Although many middle schools continue to emphasize age and/or grade levels, most middle school advocates subscribe to a "middle school philosophy." Inherent in this philosophy is the recognition that these students vary widely in their stages of physical, cognitive, and affective development. A special school is needed to meet the unique requirements of these transitional youth.

Student Growth Characteristics

While the developmental approach is also a part of the junior high rationale, it has received renewed emphasis in the middle school movement. In fact, Eichhorn feels that "there is only one middle school differentiation, and that is the developmental uniqueness of its student clientele; there are different levels of physical, mental, and social development."

Moss decries the formation of middle schools for such reasons as overcrowding and bandwagoning but thinks there is plenty of justification for implementing middle schools based on the growth characteristics of children. Eichhorn's and Moss's statements suggest the two main tenets of the developmental argument—early maturation and multilevel variance.

Not everyone agrees with the developmental rationale. Lounsbury and Vars, for example, voice the belief that "a smoke screen of rhetoric about the educational, social or psychological advantages, ... arguments that simply do not hold up under analysis" too often hide the real reasons for middle school implementation.

*Kagan's contribution to the special middle school issue of National Elementary Principal provides an interesting and knowledgeable discussion of adolescent psychology, which is not dealt with in this paper.
The early maturation hypothesis is based on studies of physical, intellectual, and personality development, which show that sixth (and possibly fifth) graders are in the transitional rather than the childhood period. Or as Ball puts it, fifth and sixth graders are more like seventh and eighth graders than they are like pupils from the fourth grade down. Evidence of the transescent’s physical, intellectual, and personality changes causes Compton also to endorse this view. Davis notes that Havighurst, Mead, and Wattenberg have all vouched for earlier adolescence among today’s youth. Earlier peer culture influence, cited by Smith, also supports this view.

Behind the second part of the developmental rationale is the realization that people mature on different timetables, and that the variance among levels of physical, cognitive, and emotional maturation is most pronounced among transescents. Compton, for instance, suggests nine components for middle schools, based on her observations that, from day to day, ten- to fourteen-year-olds differ within their total group, sexual groups, and even themselves. Therefore the middle school program ought to be designed with their different and ambivalent natures in mind.

Opinions vary on the particular characteristics of age- and grade-level groups within the intermediate range. Some debate the elementary/middle school line of demarcation as it relates to fifth and sixth graders, or ten- and eleven-year-olds. Moss feels that fifth graders “resemble children more than they resemble early adolescents”; thus “elementary school educators should definitely question moving them to a unit supposedly existing for early adolescents.” He notes that a majority of principals still favor keeping ten-year-olds in elementary schools.

Moss cites Glissmeyer’s finding that there were no significant differences in IQs or academic achievement between sixth graders in elementary and middle schools. Both researchers conclude that—at least for this age group—there is no viable basis for assigning overall superiority to either type of organization or grouping arrangement.

On the other hand, Ball compared sixth graders in an
elementary school with those in a middle school on criteria of (a) interaction between teacher and student and (b) educational output. He found that while neither type of school was more effective when examining their total scores, there were differences in individual variables. Razzell insists that the variance in abilities and skills of eleven-year-olds being promoted from primary to secondary grades warrants curriculum planning based on concern for the individual rather than on the type of institution in which learning takes place. Although Moss explicitly favors the placement of eleven-year-olds in middle schools because of earlier onset of puberty, he pauses to raise certain questions for those considering a middle school for ages eleven through fourteen. "If the purposes and programs of the middle school reflect attention to the growth characteristics of 11- to 14-year-olds, [we] should be favorably inclined toward them," Moss concludes, but if not, then either the school should be transformed or the students returned to the elementary school.

Gatewood, quoting Dacus, observes that sixth graders are closer to seventh than to fifth graders in social and physical maturity and in opposite sex choices, and that ninth graders are more compatible with tenth graders. Eichhorn criticizes the emphasis on grade level and vertical organization, though he realizes that these have been major forces in the evolution of the middle school. Both junior high and middle schools have claimed to bridge the elementary/secondary gap, but in practice they have been "one step lower than high school," Eichhorn comments. Now they are beginning to be thought of as "one step higher than elementary."

Departure from the Junior High School

In light of all the other reasons for seeking a new type of intermediate educational organization, it may seem surprising that the most frequently mentioned is dissatisfaction with the junior high school. Many middle school proponents consider the junior high school so hopelessly flawed that it either is, or should be, approaching extinction. Some even speak of
the middle school primarily as “what the junior high is not.”

Eichhorn’s view, however, is less extreme and at the same time an accurate statement of the chief criticism of junior highs: “Many excellent junior high schools are to be found throughout the nation; but too many, especially since the 1950’s, have sought to be, and truly have been, merely a ‘junior’ to the high school.”

Numerous writers criticize junior highs for being miniature copies of secondary schools. From both instructional and extracurricular standpoints, these “junior senior highs” focus on what will happen later—not now—to the student. As McQueen notes, the educational program is not specifically designed and relevant for the in-between youngster, and outside activities consist of such things as marching bands, cheerleading, and interscholastic sports. The list of related charges leveled at the junior high school is long.

Perhaps the most interesting criticisms are two mentioned by McQueen. He repeats complaints that the junior high has forfeited its original goals to solve administrative problems such as overcrowding. Also, he maintains that those goals were not well planned in the first place but were developed as an expedient to correct weaknesses in the 8-4 plan. The allegations are interesting for two reasons.

First, the practice of reorganizing for administrative rather than educational reasons is more true of middle schools than of junior highs, according to Gatewood. Second, although the charge of ill-conceived or poorly rationalized goals may provide a convenient excuse for finding fault with the junior high concept, the fact remains that the middle school philosophy is in many ways identical to that of the junior high. Moreover, most “junior high flaws” are not exclusive to that type of intermediate organization.

Not everyone has jumped on the middle school bandwagon. The junior high has much to recommend it, and junior high schools continue to emerge alongside of middle schools. The placement of fifth and sixth graders with older students is questioned by Baruchin, while both Jennings and Popper favor junior highs over middle schools. Lounsbury and Vars
note that "the junior high school has served rather well as a pilot school for educational innovations, such as core curriculum and team teaching," and it "has enjoyed tremendous success in terms of administrative organization." Moreover, they add, it is hardly surprising that the junior high "has failed to implement broadly the full aspirations of its supporters . . . in view of the fantastic claims made by some . . . advocates." Their quotation of Johnson's summary of such claims is worth repeating:

They proposed to develop healthy individuals of sound moral character who were guaranteed not only to be competent in their jobs and wise in their use of leisure, but worthy parents and good citizens to boot. Indeed, some assurance was offered that in the process the pupil might also enjoy popularity among his peers, a tranquil adolescence, and protection from a sense of failure and frustration.

"If the junior high school has failed, it is because its reach exceeded its grasp," they conclude. "Let us not make the same mistake with the middle school. Let us, rather, set modest, realistic goals, evaluate our work carefully, and be frank in reporting both successes and failures."

Comparison of Junior High and Middle Schools

As will be evident from the following studies, educators so far have followed Lounsbury and Vars' advice. Those who have evaluated the performance of middle schools have tended to be frank in drawing comparisons with their predecessors, the junior highs. Similarities between the two are noted by Chiara and Johnson. On the positive side are the opportunity to develop innovative programs that meet the needs of this divergent age group, the opportunity to break the traditional patterns of teacher education, and rapid growth and acceptance. But the two types of schools also share some negative similarities:

- No definite pattern of grade organization (options include 5-8, 5-9, 6-8, 6-9, 7-8, 8)
○ Establishment for the wrong reasons, i.e., other than to develop programs specifically designed to meet the needs of the students they are set up to serve

○ Lack of unity of purpose and innovative programs to meet the needs of both a changing early adolescent and a changing world (for example, middle school instructional programs in grades seven through nine are comparable to those in junior highs, and grades five and six are still segregated in the new middle school organization and given a repeat performance of the traditional elementary programs)

○ They are ignored by teacher education institutions

Lounsbury and Vars find “very few significant differences revealed so far between junior highs and middle schools by surveys.” In one such study, Gatewood and Walker matched 138 junior highs with 138 middle schools. They found most of the organizational structures and instructional processes of both school types to be similar to preceding programs and instructional organizations for the middle years.

Based on this study and on one of broader scope, Gatewood draws four conclusions. In terms of educational programs and practices, existing middle schools and junior highs have been found generally to be more similar than different. Some differences exist in thinking and philosophy between the two schools, but not necessarily in practice. Implementation of the middle school concept, either by middle schools or junior highs, exists more in the ideal than in reality. Finally, there is no definitive answer on whether a middle school or junior high grade/age organizational structure is more desirable in terms of physiological and sociological grouping.

Such conclusions are backed by other illustrations. In a study of organizational practices, programs, and facilities in 35 New Jersey middle and junior high schools, Davis used eight criteria to test the claimed advantages for middle schools with observations of actual practice. His study yielded no definite conclusions regarding the relationship between middle school theory and practice. In a Dade County, Florida, study of three junior highs and one middle school, Trauschke
and Mooney tested hypotheses stating the superiority of middle school students in achievement tests, attendance, attitudes toward school, and self-concept. Only in the areas of attendance and attitude were the hypotheses found to be true.

Gatewood and Eichhorn concur that educators have been wasting time and resources trying to resolve the middle school/junior high controversy, when they should be putting primary emphasis on the development of an educational program consistent with the diverse individual needs of the emerging adolescents. Both would agree with Lounsbury and Vars that a fresh approach to the goals for schools—however they are organized—and for young adolescents—whatever they are called—is needed: "Only the passage of time will reveal how much further the middle school will retrace the junior high cycle. But it seems certain that it will be no less influenced by the varied realities of school size, pupil population, and existing buildings than was the junior high school before it."
Laying aside the question of the particular type of educational organization, we turn now to a consideration of what ought to characterize the middle school in practice. Several studies treat the characteristics of a typical or good middle school. Three of these are reviewed here, before we proceed to a detailed discussion of curriculum and teaching methods.

In his 1971 Ph.D. dissertation, Riegle isolated eighteen basic middle school principles through an examination of the literature and subsequent consultation with five recognized middle school authorities. Areas covered in the principles are programming and scheduling, student socialization and physical activities, teaching methods, guidance services, evaluation, community relations, and auxiliary services and staffing.

Riegle used these criteria to test the level of practical implementation of middle school theory among institutions in Michigan. At the time of his study, Riegle found that middle school programs still needed considerable improvement in order to apply the concepts presented in the literature. Since Raymer is using Riegle's principles in his expanded study of implementation by the nation's middle schools, it will be interesting to see how much—and to what degree—theory and practice have drawn closer together.

Among Moss's ideal characteristics are four that he considers indispensable, for without them "it is questionable that such schools deserve to be called middle schools, certainly not good middle schools":

- teacher and administrator commitment to the 10-14 age group
- a cooperatively-developed, clearly defined statement of purposes for the middle school
- continual review of objectives and curricula by teachers, administrators, and students
- a guidance program that is a total school concern
Other desirable traits, according to Moss, include core programs for at least two, but preferably for all, middle school years, and flexibility in planning, scheduling, and grouping. Concluding his list are physical education activities related to the students' developmental characteristics, outdoor education programs of concern to all teachers, and evaluation procedures that include student and parent conferences, letters, and checklists.

Less helpful because they are more prescriptive are the recommendations of Flinker and Pianko. Beginning with the observation that the "junior high seems to have outlived its usefulness," the authors lay down specific criteria for the ideal middle school—age and grade range, optimum number of pupils, size of staff, a detailed outline of what should be taught and how, and complete floor plans for a new three-story building (with an alternate design for suburban locales).

It is debatable whether the middle school described by Flinker and Pianko would be considered ideal by others. The middle school has yet to reach the stage in its development where there is widespread agreement about the best features for all middle schools. And despite their verbal endorsement of flexibility in curriculum and other areas, Flinker and Pianko's thoroughly structured model undermines the potential for that feature.

**Curriculum**

Opinions on the content of individual courses and how they should be taught are plentiful—so plentiful, in fact, that a listing of the areas covered (see table 2 on next page) will have to suffice for the purposes of this paper. To examine any of the topics in table 2, the reader should consult the sources listed in the bibliography under each author's name.

Curricular innovations in middle schools take many forms. Alternative programs, drug and alcohol programs, mini-courses, and career education are among those mentioned by Hunt and Jones. Only the last-named is discussed here, since it is one of the hottest changes in curriculum today.
<table>
<thead>
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<tr>
<td>arts and crafts</td>
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### Career Guidance

Later, in discussing counselors, our interest will be with personal guidance—that is, counseling the student in his or her relationships with peers, teachers, or parents and in dealing with social, emotional, or academic problems. Vocational counseling for preadolescents is regarded as equally important, if the amount of literature on the subject is any indication. It is part of the theoretical swing in education back to the practical, to the “real world.”

A frequent criticism of vocational guidance at the elementary and middle school levels is that students are too young. Why should they be pushed into career choices prematurely? Roberts answers this objection by emphasizing that what should be offered is exposure to occupations, not specific direction in choosing one: “Young children can be aware of the idea of work or specific occupations and still grow up...
being full-time children without risking a career choice at the tender age of nine."

Ryan delineates several objectives of a program exemplifying the major goal of vocational guidance in middle schools—to develop occupational awareness rather than career choice. Among her objectives are mutual visits by students and people in the work world to their respective environments and utilization of resource people, organizations, and materials. Ryan is concerned about attitudes toward occupations. She hopes vocational guidance will lead middle school students to think of work as a satisfying commitment rather than as something they must eventually resign themselves to.

Another claim by opponents of intermediate vocational guidance is that it takes time away from education. To this Roberts and others respond that vocational guidance is not inconsistent with the goals of general education. On the contrary, it can be a prime vehicle for achieving proficiency, ability, and command by providing learning experiences involving motivation, critical thinking, decision-making, self-awareness, self-evaluation, and self-direction.

Roberts endorses the basic objectives of a model proposed by Bank for students, teachers, parents, and the community:

- to provide role models the child can identify with, thus aiding in development and implementation of his self-concept
- to provide adequate opportunities for continued expansion of the child's vocational horizons
- to assist the child in developing appropriate attitudes toward work
- to provide opportunities for expansion of the child's vocational vocabulary

In two surveys in intermediate schools, Roberts found a lack of vocational information but a desire for it by both teachers and students.

Many people advocate vocational counseling as a solution to the problems of preparing disadvantaged youth for a useful place in society. Two vocational-occupational guidance institutes sponsored by the Ford Foundation in 1969
and 1971 sought to provide optimum career development for the urban middle school child. The institutes were conducted jointly by the Department of Labor and the National Alliance of Businessmen, and their objectives were commendable. But care should be taken in such programs to avoid a "spoiled image." That is, they should not be limited to disadvantaged or lower-class youth. Furthermore, the world of work should receive full, unbiased treatment with both white- and blue-collar jobs treated realistically.

Concept-Based Curriculum

In contrast to other curriculum theorists, DiVirgilio insists on a conceptual basis for effective curriculum design. He criticizes that brand of middle school curriculum design that uses traditional subject matter disciplines, maintains the same internal organization within grades as exists for their elementary and junior high counterparts, renews emphasis on "exploratory" programs, and uses core-type blocks of time for English, social studies and mathematics, and science.

Not everyone will agree with DiVirgilio. Those who favor such practices as numerous electives and mini-courses would be dismayed by DiVirgilio's charge that "this so often means a smattering of a lot of nothingness." Also, many curriculum planners still believe in "basic units" in the core areas listed above. DiVirgilio advocates instead more relevancy to preadolescent interests and needs. Curriculum planners should realize that new relationships exist among identified subject areas today.

According to DiVirgilio, a good middle school uses its curriculum content to develop all aspects of the human being. He concludes, "The best curriculum for the preadolescent is not necessarily that which someone determines will prepare him for high school but one that will commence where he is as an individual learner."

Teaching Methods

No attempt is made here to cover all relevant teaching methods. Rather, the following should be regarded as examples
of some of those instructional ideals most frequently mentioned in connection with middle schools.

**Individualization**

Individualized learning is one of the favorite suggestions for middle school teaching methods. There are many variations between programs, but the common denominator is their focus on providing individualized instruction to suit the personal learning style of each pupil.

Kratzner and Mannies discuss an individualized learning program that stresses interaction, researching, thinking, speaking, and writing skills. Their curriculum, like DiVirgilio's, is concept- rather than subject-oriented. Kinds of activities include directed studies, mini-courses, individual studies, and pupil-directed projects. The amount of structure and freedom of choice allowed the pupil in each activity varies in accordance with the degree of development in the student's interaction skills.

In Kratzner and Mannies' view, the school's role is one of "teaching pupils those skills which are crucial to the problem-solving process. The ability to cope with change must be the outcome of today's education." A similar program is the Intensified Learning Plan (ILP) described by Evans. In this program the school year is organized into trimesters and students concentrate on fewer subjects for longer daily periods.

**Integration**

A second favorite teaching method is an integrated learning approach, which answers DiVirgilio's plea for an approach different from the traditional devotion to core or block treatment of certain "basic" subjects. The Integrated Learning Program (also ILP, but not to be confused with the Intensified Learning Plan mentioned above) described by Smith sets forth goals of student independence, continuous progress based on development, individual learning, language as an interaction skill, and development of problem-solving abilities, among others.
As evidenced by the programs described thus far, many involve considerable overlapping, often combining several innovative teaching methods. Pumerantz and Galano have devoted a volume to the topic of establishing interdisciplinary programs in the middle school. Aside from features already mentioned, it contains a summary of advantages to students and a companion list of advantages from the perspective of staff and program.

Team Teaching

Closely allied with individual instruction and integrated/interdisciplinary programs is the concept of team teaching. Although it is a fairly recent innovation on a national scale, it has been around long enough for several evaluative reports to appear. DiVirgilio discusses interdisciplinary teams, while others describe case studies of middle schools utilizing team teaching.

In her study of teams of elementary and secondary teachers placed together in two Florida middle schools, Compton observes that teams with both elementary and secondary teachers have greater success than those composed of one or the other alone. Elementary teachers help the secondary teachers with planning of varied activities and grouping students, while secondary teachers assist their elementary team members in developing units of instruction.

Odetola and his coresearchers were surprised by their findings that teacher-teams in a middle school organization failed to enhance students' identification with the school or reduce feelings of powerlessness any more than typical junior high schools are able to do these things. The researchers compared three groups in their sample: middle school teacher-teams; middle school one-teacher, one-class system; and junior high one-teacher system. On questions designed to elicit the students' sense of belonging, pride, happiness, powerlessness, and degree of alienation, the one-teacher middle school rated the most positive response in all areas but one. The exception was powerlessness, where the junior high teachers scored better. In every case, the middle school teacher-teams fared the worst.
In seeking explanations for these "reverse" findings, the investigators suggest that the teacher-teams appeared to cause less, rather than more, personal relationships to exist between teachers and students. Also, middle school students may get more, not less, social and psychological security from a single teacher. These, however, are not the only possible explanations cited by the researchers, and, of course, there is always the possibility of flaws in the research methodology.

Evaluation

Although not strictly a teaching method, the question of how students should be evaluated is relevant to this area. A majority of educators at all levels find much to be desired in traditional grading systems. Briefly, some of the objections are that they are punitive, that they encourage unnecessary or harmful competition, and that they evaluate group rather than individual performance.

One alternative in the Intensified Learning Plan uses tests, questionnaires, and conferences to measure the accomplishment of criterion objectives. The fullest treatment of an ungraded system of evaluation is provided by McCarthy. He discusses organizational structure, curriculum, staff deployment, independent study, the principalship, and guidance—all as they relate to an ungraded middle school.

Compton notes the necessity of including parents in discussions of nongrading, an opinion that is supported by Weber. When Weber asked middle school students how they felt about the grading system (criterion-referenced items rather than grades), some replied that they didn't like to be "different from kids at other schools" and thought their parents didn't understand the new system. Some—both pupils and parents—wanted grades in order to "know how they were doing." Grades meant something to them, accurate or not.

Whether educators will be able to devise an acceptable method of reporting student progress remains to be seen. "Instructional processes which seem best for this age level center on the individual, while traditional marking systems are based upon group performance," Eichhorn observes. "The
challenge is to develop a communications program so that parents are informed of a child's progress in a manner which is acceptable to the parents but which does not destroy progress."

Further comments by Eichhorn provide an appropriate conclusion to this discussion of curriculum and teaching methods:

Educators of emerging adolescents traditionally have started with form and organization as an end rather than a means to an end. Theorists have expounded on ungradedness, departmentalization, core, team teaching, and modular scheduling as ways to ensure improvement in instruction.

There is no quarrel with any of these approaches because each has and can provide sound direction, given the right set of variables.

But Eichhorn strongly objects to the attitude "that unless one fully subscribes to one or the other, the chance for instructional success is greatly reduced. . . . These devices should be considered as tools."
THE MIDDLE SCHOOL STAFF: NEED FOR SPECIAL TRAINING

One of the persistent problems in current attempts to institute middle schools is the quality of instruction. It is all very fine to talk about the goals of middle schools and ways in which these goals might be accomplished. But as Lounsbury and Vars observe, "The staff and the curriculum are what really make the school."

Teachers

To begin with, an aspect often overlooked is the teacher's attitude. The intermediate level more than any other demands a special breed of teacher with respect to temperament, personality, and feelings toward the students. Richardson calls the difficulty of organizing a staff of teachers who really understand and appreciate children of this age group a major pitfall in the evolution of middle schools.

The kinds of competencies a middle school teacher must demonstrate have been listed by Chiara and Johnson. These competencies should reveal certain understandings, skills, and attitudes illustrative of the unique character of the middle school and of the learner's educational development. Lawrence also recognizes personal qualities and understandings as important sets of competencies for middle school teachers.

Aside from those traits that are not amenable to change (e.g., personality, temperament, and attitude toward emerging adolescents), certain obstacles prevent the typical middle school teacher from either already having or acquiring those competencies that can be learned.

The Problem: Inadequate Preparation

Despite the fact that junior high schools have existed for several decades, teacher education institutions have done little in the way of recognizing the need for teachers at the
intermediate level. Therefore, most of those teaching in middle schools at present possess either elementary or secondary certificates, and there is little indication that this situation will change appreciably in the near future.

Gatewood and Walker observe that middle school teachers tend to hold elementary certificates, while junior high teachers are certified as secondary teachers. Another unfortunate consequence of ignoring the intermediate level, as Moss notes, is that most males currently teach at either junior highs or secondary schools. Male teachers are needed at all levels, but particularly in elementary and middle schools. Moss proposes, in fact, that the sex ratio for both teachers and principals ought to approach 50/50.

Also, just as intermediate schools are sometimes implemented for the wrong reasons, teachers are sometimes employed in them for the wrong reasons. Chiara and Johnson state, "The school which was established to provide a transitional experience for the early adolescent has become a transitional school for teachers." They feel that many undesirable practices in middle and junior high schools are due to the lack of committed career teachers. The intermediate school too often serves as "a proving ground for the neophyte, a depository for elementary or secondary misfits, or a wayside station for those waiting for senior high or administrative positions."

Perhaps the failure of teacher education institutions to prepare candidates for the middle grades is best exemplified by the following figures. In 1969-1970, Krinsky and Pumberantz report, 23 percent (37 out of 160) of accredited teacher-training institutions in a survey had middle school teacher preparation programs, and 18 percent (29) provided inservice programs geared to the middle school concept. While this represents a discernible change over earlier surveys, a closer look at their findings is discouraging.

In general, teacher-education institutions are turning out elementary and secondary teachers for careers in the middle school who lack both proper orientation to the philosophy and psychology of the middle school and adequate preparation
for its organizational and instructional patterns and techniques. Present inservice programs are usually confined to unstructured and limited staff consultant services. Defining a middle school education curriculum simply as one or more courses, Krinsky and Pumerantz learned that a mere 11 percent had such offerings for undergraduates and 12 percent for graduate students. Only 4 percent (six schools) made student teaching in a middle school unit mandatory for certification.

Equally disconcerting is the fact that each of the three states with the greatest number of middle schools—Texas, Illinois, and California—has just one teacher-training institution with a middle school teacher-education curriculum. Nor do any of these states have any present or planned middle school certification standards. Finally, Krinsky and Pumerantz provide the following statistics regarding the immediate future of middle school teacher education: 5 percent of teacher education institutions are planning to establish undergraduate courses for preparing middle school teachers, and 2 percent are planning to begin graduate courses. Such prospects are far from overwhelming.

Stainbrook studied the professional preparation of Indiana's junior high teachers in 1959. He repeated his investigation in 1970, adding middle school teachers to his sample, and then compared his results with those of a decade earlier. His conclusions are no less pessimistic than those of Krinsky and Pumerantz:

- There are no major identifiable differences between the professional preparation of today's junior high teachers and those of ten years ago.
- The professional preparation of middle and junior high school teachers in Indiana is quite similar, usually with emphasis on secondary education.
- Teachers and principals of both middle and junior high schools agree that special curricula oriented toward preparation of intermediate teachers would be valuable.
- Inservice college classes specifically related to the junior high are no more frequently a part of the junior high school teacher's inservice activities than they were ten years ago.
Middle school teachers are no more involved in inservice acts than junior high teachers.

Stainbrook also reports that one of the major gaps is the lack of student teaching in either a middle or junior high school.

Needed: Training Geared to Middle Schools

One should not infer from the immediately preceding discussion that all our problems would be solved if only those institutions responsible for the professional preparation of middle school teachers would initiate preservice, inservice, and certification programs along the lines of those now available to elementary and secondary teachers. The exceptional abilities required of middle school teachers necessitate unique teacher-education programs. Several writers offer specific proposals for middle school teacher-preparation programs.

Emphases on technical skills for instruction, media utilization, and development and use of new curricula appropriate to the developmental school are called for by Geisinger. According to Curtis, teacher training should, ideally, be based on proven competency rather than on courses completed or grades received. He suggests a revised program in which attention is given to eight areas, with emphasis on practice and experience.

Several responsibilities of teacher-training institutions are outlined by Krinsky and Pumerantz. Among them is development of mandatory student-teaching practices in all middle school units in order to obtain qualified teachers and administrators. Another responsibility of training institutions is to assist local school systems in developing effective inservice training programs.*

The competency-based approach is shared by both Clarke and Lawrence. Clarke makes several timely recommendations for restructuring the middle school teaching curriculum with respect to both content and method. More than at any other level, the intermediate teacher must be eager, enthusiastic,

*Curtis thinks administrators must accept the responsibility for training their middle school teachers.
energetic, and so on. But many college methods teachers set an example of the kind of passive-learning, lecture format that produces teachers who perceive themselves as lecturers, specialists, and authorities. Such role perceptions are completely inappropriate to the middle school. Clarke urges the combination of college courses for integrated learning so that the prospective teacher can know how to structure his discipline, why certain experiences are valuable, and what learning experiences are needed.

Lawrence recommends the replacement of current emphasis on course grades with three sets of competency criteria: personal qualities, understanding, and instructional skills. Noting that the competency approach must be built on a solid rationale and research base, Lawrence concludes that while there is initial evidence of a significant relationship between his proposed competencies and classroom observations, the ultimate test of this approach is the long-term effect it has on the students and the school. In his view, the competency approach seems well suited both to the middle school movement and to new pressures in teacher education.

Inservice teacher education is the subject of recommendations by Lawrence and Stainbrook. Using his own competency criteria, Lawrence suggests that specific competencies of the inservice teacher be identified as fulfilling partially or completely the middle school certificate requirements. He also suggests that materials be provided so the teacher can build other required competencies without returning to a university. Stainbrook adds the following list of inservice practices:

- Inservice education activities oriented to the middle school and/or junior high should be encouraged for intermediate school teachers, especially for the younger and/or less experienced.
- Both middle schools and junior high schools need their own individually organized inservice education programs to deal with the specific needs of intermediate school teachers.
- Both middle schools and junior highs need some organized orientation program for new staff members.
- For intermediate teachers, especially those in middle schools, inservice activities and instructional leadership by the school
To the principal should include pride in and dedication to teaching in that kind of school.

Teacher education institutions are not solely responsible for the failure so far to adequately prepare intermediate teachers. In fact, the greater share of blame probably belongs to those state education departments and even professional educational organizations that ignore the existence of a level of education between elementary and secondary. Educational theory and conventions usually travel from the top down, but the practical need for competent middle school teachers is obvious in the local school district. Those at the intermediate level must start communicating their needs to the organizations that can do something about it, rather than the other way around.

Greater cooperation among local school districts, teacher-training institutions, and state certification agencies pertaining to middle school education is advocated by Krinsky and Pumerantz. "Through a lack of commitment and initiative," they state, "the colleges of education are in reality perpetuating incompetence in middle education." Also to the point is Eichhorn's statement:

The prevailing attitude continues to be: prepare teachers for the elementary and high school and the middle school/junior high school staffing will take care of itself.

... this lack of emphasis deprives students, at a crucial period, of the professional expertise that the elementary, high school, and university levels enjoy. . . .

The basic problem is a lack of recognition that this level has traditionally received. . . .

There is a crucial need for professional associations, representing all levels of education, to pool their talents in an effort to aid and support the development of programs for youngsters in the middle. . . . While school districts throughout this nation initiate changes in early adolescent education, progress is curtailed and even ended by restraints imposed by related agencies.

Also relevant to this discussion is Moss's reminder about the "educational ladder." In other words, learning should be continuous from kindergarten through the twelfth grade, and no level can safely be overlooked.
Principals

Aside from a few isolated instances, researchers have not addressed themselves to principals. Even fewer have conducted research about middle school principals. This should come as a surprise, since middle school principals are ultimately responsible for the education of transescents.

A recent article by Bobroff, Howard, and Howard is a welcome exception to the general lack of attention paid to principals. The researchers surveyed a random sample of intermediate-level principals from seven states to find out how the principals view their job preparation and actual job requirements. In observing their findings, one should keep in mind that approximately two-thirds of the principals were from junior high schools and a little less than one-third from middle schools. Subjects were asked to provide information about

- previous experience as an administrator, teacher, or counselor
- reasons for holding their present positions
- professional training
- essential abilities, competencies, experiences, attitudes, and characteristics
- problem areas
- reasons for diminished effectiveness or failure
- perceived functions of the school in the middle

The survey yielded many interesting results. Particularly noteworthy were the administrators’ responses regarding professional training of principals and important functions of the school.

First, in the area of professional preparation, principals are no better off than middle school teachers and counselors:

... the principal of the junior high and middle school has seldom had specific training for the position. He clearly sees the need for such preparation and is particularly aware of the need for studying adolescent psychology and understanding the characteristics of this age group.

The lack of formal training in how to deal with preadolescents does not imply, however, that intermediate principals
are totally unsuited to their jobs. Many make up for such deficits with their attraction to this age group.

The second, and more surprising, finding arose out of a question asking the principals to rank various school functions in order of importance. Contrary to the large body of literature stressing the exploratory functions of the middle school, "the responding principals perceived the transitional functions . . . to be of greater importance than any other."

Apparently, principals need to make better efforts to acquaint themselves with research findings. On the other hand, researchers should try harder to speak directly to those held accountable for implementation of programs and achievement of goals.

Counselors

The ambivalent natures and varying rates of maturation among emerging adolescents make them good candidates for counseling. That is, they are more in need of and more open to the benefits of personal guidance than any other age group.

Research reveals that counseling for preadolescents is more prevalent in junior highs than in middle schools. Some middle school planners and administrators assume—falsely—that preadolescent guidance is adequately taken care of by homeroom teachers. But in fact, homeroom teachers have neither the training nor the opportunity to counsel students. At any rate, it is doubtful whether every student would relish the idea of being counseled in front of his peers.

Stainbrook feels that the lack of coursework in counseling and guidance is a major flaw in intermediate teacher training. Either in specific courses or as part of their overall professional education, these teachers' understanding of and skills in counseling should be developed to a degree that enables them to contribute effectively to the guidance function.

Perhaps teachers do need more counseling ability in the intermediate grades. It is certain that at this point administrators cannot safely assume teacher expertise in guidance. Most
supporters of guidance for middle school students, however, insist on the hiring of professional guidance counselors.

Haller defines the role of a professional counselor in the middle school. He also anticipates and describes potential resistance to a guidance program by administrators, teachers, and parents. Some would see it as wasteful of time and resources, others as a low-priority item. Besides outlining his own personal philosophy of guidance, Haller enumerates possible concrete steps to meet these and other objections.

As in teacher education, no traditional counselor education program exists for those wanting to serve in middle schools. To remedy this situation, Knudsen (who uses the terms "middle school" and "junior high school" interchangeably) suggests that we examine and evaluate the characteristics of elementary and secondary school guidance in order to provide continuity with the middle school. Competence in peer relationships and group counseling are recommended as supplements to individual counseling.

Group counseling is one of several examples of successful intermediate-level guidance programs documented by McDonough. The development of teacher-advisers, good counselor/teacher as well as counselor/student relationships, and expansion of guidance services into the community are also mentioned.
CONCLUSION

It would be nice if, in order to ensure the future success of our middle schools, we had only to "change the paint" from "icky" to "red, white, and blue," as suggested by one of Weber's respondents. For an objective assessment of how far the middle school has come in theory and reality, and how far it has yet to go, we will return to a few of the middle school spokesmen heard from earlier.

Unfortunately, middle schools still exist that are such in name and/or grade organization alone. But Kealy offers encouraging evidence that the percentage of "real" middle schools increases each year. Growing numbers have programs that do differ from either traditional elementary or secondary schools and are directed specifically to the needs of emerging adolescents.

Alexander, in an article entitled "What Has Happened to the Middle School?" points out that the middle school name and concept are becoming better understood and more attractive. He also sees evidence that certain characteristic features of better planned and more promising programs for the middle school years are emerging.

Guarded optimism is expressed by Lounsbury and Vars because of the tendency of some educators to hide the real reasons for implementing middle schools. They point out that junior high and middle schools are in many ways similar and have an identical goal—that of providing vital and appropriate educational experiences for youth in the critical transitional years.

In fact, most comparisons of junior high and middle schools have either favored the junior high or found no significant differences. Nesbitt does not regard the inconclusive nature of the research on the efficacy of the middle school movement as cause for pessimism. Rather, he finds within these reports indications of the honest efforts of educators to
structure an appropriate period of schooling for the middle school child.

Eichhorn's list of five current challenges in emerging adolescent education is perceptive:

1. Can middle school educators move beyond the argument of which grades should be in the middle/junior high school?
2. Can middle school educators develop proper perspective regarding the place and function of organizational technique?
3. Can educators devise an acceptable method of reporting student progress?
4. Can educators of emerging adolescents create an effective alliance with higher education, state departments of education, and professional associations?
5. Will the middle school movement accept in practice the theory of uniqueness?

These five areas—deemphasis of grade/age level; awareness of the proper relationship between techniques and goals; student evaluation; formal, explicit recognition by education's power hierarchy; and practical recognition of the uniqueness of the middle school child—are indeed the foremost challenges in the middle school movement.

Nesbitt comments, "Perhaps the real strength of [that] movement is the fact that nothing is settled—that we are witnessing the rebirth of interest in exploration and experimentation." Applauding the potential of the middle school, Eichhorn feels that its success will ultimately rest on the "willingness of those committed to this organization to pioneer creative programs designed specifically for the early adolescent learner" because "the future of any endeavor depends upon the expertise and commitment of its advocates."
NOTES

1. References to Eichhorn are from his essay in Saylor's volume.

2. Telephone interview with Joe Raymer, Principal of Northview Highlands Middle School, Grand Rapids, Michigan, May 10, 1974. Information to be included in his dissertation, a nationwide study on the implementation of middle school concepts, to be published later this year.

3. References to Moss are from "The Elementary School Principal and the Middle School," unless stated otherwise.

4. Compton's article appears in Mullen's volume.

5. For arguments in opposition to junior high schools, see McQueen, Odetola and others, Wiles, Mullen, and Chiara and Johnson.

6. Baruchin, Jennings, and Popper are cited in Moss.

7. Riegle's principles are more accessible in a recent article by Georgiady, Riegle, and Romano.

8. This discussion is from Moss's "Characteristics of a Good Middle School."

9. "Our Middle Schools Give the Kids a Break."

10. Unless otherwise stated, references to DiVirgilio are from "Reflections on Curriculum Needs for Middle Schools."

11. Here, DiVirgilio's "Guidelines for Effective Interdisciplinary Teams" is the source.
Many of the items listed in this bibliography are indexed in ERIC's monthly catalogs Research in Education (RIE) and Current Index to Journals in Education (CIJE). Reports indexed in RIE are indicated by an "ED" number; journal articles indexed in CIJE are indicated by an "EJ" number.

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