

DOCUMENT RESUME

ED 330 082

EA 022 805

AUTHOR Epstein, Joyce L.; Mac Iver, Douglas J.
 TITLE Education in the Middle Grades: Overview of National Practices and Trends. Report No. 45.
 INSTITUTION Center for Research on Elementary and Middle Schools, Baltimore, MD.
 SPONS AGENCY Office of Educational Research and Improvement (ED), Washington, DC.
 PUB DATE Feb 90
 CONTRACT OERI-G-90006
 NOTE 93p.; Some light print in appendices may not reproduce adequately in paper copy.
 AVAILABLE FROM Center for Research on Elementary and Middle Schools, The Johns Hopkins University, 3505 North Charles Street, Baltimore, MD 21218 (free).
 PUB TYPE Reports - Research/Technical (143) -- Tests/Evaluation Instruments (160)

EDRS PRICE MF01/PC04 Plus Postage.
 DESCRIPTORS Educational Objectives; *Educational Practices; *Educational Trends; Elementary Secondary Education; Instructional Program Divisions; *Middle Schools; National Surveys; *Public Schools; Remedial Programs; Report Cards; School Counseling; School Size; School Surveys; Teacher Certification; Teacher Qualifications; Team Teaching; Transitional Programs

ABSTRACT

In spring 1988, the Johns Hopkins Center for Research on Elementary and Middle Schools (CREMS) conducted a national survey of principals in 2,400 public middle grade schools that include grade 7. Using the 1988 survey date, this document presents an overview of educational approaches and practices in schools that serve early adolescents. Topics examined include: (1) grade span; (2) size; (3) grouping; (4) number of teachers per students; (5) changing classmates; (6) homeroom and advisory periods; (7) guidance counselors; (8) teams of teachers; (9) curriculum; (10) instruction; (11) goals for students; (12) transitions and articulation practices; (13) remediation; (14) report card entries; (15) teacher certification; and (16) teacher talents. This document also summarizes principals' reports of their overall evaluation of present practices and presents four conclusions regarding middle grades reform based on survey data. The survey is appended. (50 references) (CLA)

 * Reproductions supplied by EDRS are the best that can be made *
 * from the original document. *

ED330082

Center for Research On Elementary & Middle Schools

Report No. 45

February, 1990

EDUCATION IN THE MIDDLE GRADES: OVERVIEW OF NATIONAL PRACTICES AND TRENDS

Joyce L. Epstein and Douglas J. Mac Iver

U.S. DEPARTMENT OF EDUCATION
Office of Educational Research and Improvement
EDUCATIONAL RESOURCES INFORMATION
CENTER (ERIC)

- This document has been reproduced as received from the person or organization originating it.
- Minor changes have been made to improve reproduction quality.

• Points of view or opinions stated in this document do not necessarily represent official OERI position or policy.

BEST COPY AVAILABLE

EA 022 805

Center Staff

Edward L. McDill, Co-Director
James M. McPartland, Co-Director

Karl L. Alexander
Henry J. Becker
Jonills H. Braddock II
Renee B. Castaneda
Barbara S. Colton
Diane B. Diggs
Doris R. Entwisle
Joyce L. Epstein
Anna Marie Farnish
Denise C. Gottfredson
Gary D. Gottfredson
Edward J. Harsch
Brigitte B. Hinte
John H. Hollifield

Lois G. Hybl
Marva J. Jeffery
Nancy L. Karweit
Melvin L. Kohn
Mary S. Leighton
Barbara M. Luebbe
Nancy A. Madden
Barbara E. McHugh
Laura B. Rice
Karen C. Salinas
Dorothy C. Sauer
Robert J. Stevens
Shi-Chang Wu

Center Liaison

Rene Gonzalez, Office of Educational Research and Improvement

National Advisory Board

Patricia A. Bauch, Catholic University of America
Jere Brophy, Michigan State University
Jeanne S. Chall, Harvard University
James S. Coleman, University of Chicago
Edgar G. Epps, University of Chicago
Barbara Heyns, New York University
Michael W. Kirst, Chair, Stanford University
Rebecca McAndrew, West Baltimore Middle School
Jeffrey Schneider, National Education Association

**EDUCATION IN THE MIDDLE GRADES:
Overview of National Practices and Trends**

Grant No. OERI-G-90006

Joyce L. Epstein

Douglas J. Mac iver

Report No. 45

February 1990

Published by the Center for Research on Elementary and Middle Schools, supported as a national research and development center by funds from the Office of Educational Research and Improvement, U.S. Department of Education. The opinions expressed in this publication do not necessarily reflect the position or policy of the OERI, and no official endorsement should be inferred.

Center for Research on Elementary and Middle Schools
The Johns Hopkins University
3505 North Charles Street
Baltimore, Maryland 21218

Printed and assembled by:
VSP Industries
2440 West Belvedere Avenue
Baltimore, Maryland 21215

The Center

The mission of the Center for Research on Elementary and Middle Schools is to produce useful knowledge about how elementary and middle schools can foster growth in students' learning and development, to develop and evaluate practical methods for improving the effectiveness of elementary and middle schools based on existing and new research findings, and to develop and evaluate specific strategies to help schools implement effective research-based school and classroom practices.

The Center conducts its research in three program areas: (1) Elementary Schools; (2) Middle Schools, and (3) School Improvement.

The Elementary School Program

This program works from a strong existing research base to develop, evaluate, and disseminate effective elementary school and classroom practices; synthesizes current knowledge; and analyzes survey and descriptive data to expand the knowledge base in effective elementary education.

The Middle School Program

This program's research links current knowledge about early adolescence as a stage of human development to school organization and classroom policies and practices for effective middle schools. The major task is to establish a research base to identify specific problem areas and promising practices in middle schools that will contribute to effective policy decisions and the development of effective school and classroom practices.

School Improvement Program

This program focuses on improving the organizational performance of schools in adopting and adapting innovations and developing school capacity for change.

This report, prepared by the Middle Schools Program, summarizes information collected from a nationally representative sample of principals in schools that contain grade 7 to provide an overview of middle grades education in the United States in 1988.

Acknowledgments

The authors wish to thank colleagues at CREMS who assisted in the design of the questionnaire for this survey, including Henry Jay Becker, Jomills H. Braddock II, and James M. McPartland. We appreciate the support of the National Association of Elementary School Principals and the National Association of Secondary School Principals in the survey effort. We are especially grateful to the principals in schools that contain grade 7 who invested their time to provide information about middle grades education.

Abstract

In the spring of 1988, the Johns Hopkins Center for Research on Elementary and Middle Schools (CREMS) conducted a national survey of principals in middle grades schools that include grade 7. Using the data from this survey, this report documents and analyzes the diversity of educational approaches and practices in U. S. schools that serve early adolescents. The topics examined include grade span, size, grouping, number of teachers, changing classmates, homeroom and advisory groups, guidance counselors, teams of teachers, curriculum, instruction, goals for students, transitions and articulation practices, remediation, report card entries, teacher certification, and teacher talents. The report summarizes principal reports of their past, present, and expected future use of 22 practices, and describes principal reports of their overall evaluations of their present practices.

INTRODUCTION

Across the nation, there is new and needed interest in the middle grades. Most recent educational reform initiatives have focused on preschool and early elementary education or on high school improvement and dropout prevention, but educators and policy leaders are beginning to recognize that the middle grades may be central to helping more students succeed and stay in school (California State Department of Education, 1987; Maryland Task Force on the Middle Learning Years, 1989; Carnegie Task Force on the Education of Young Adolescents, 1989; Children's Defense Fund, 1988).

Information on the middle grades is beginning to accumulate. There is a strong, respected literature on the characteristics of early adolescents (Lipsitz, 1980; Hill, 1980; Kagan and Coles, 1972; Peterson, 1988; Simmons and Blyth, 1987; and others). Also, there is a provocative and increasingly influential literature on the theory and design of middle schools as educational organizations (Alexander and George, 1981; Eichhorn, 1966; George, 1977; Johnston and Markle, 1986; Lounsbury, 1984; Lounsbury and Vars, 1978; Wiles and Bondi, 1986; and others). Linking these two themes -- early adolescents and their schools -- is a skeletal but growing literature of case studies (Lipsitz, 1984) and empirical analyses of the organization and effects of schools for early adolescents (Eccles and Midgley, 1989; Epstein, 1981; 1983; Epstein and McPartland, 1979; Mac Iver and Reuman, 1988; McPartland, 1987; McPartland, Coldiron, and Braddock, 1987; McPartland and Wu, 1988; Midgley, Feldlaufer, and Eccles, 1989; and others).

Although educators are increasingly aware of the recommendations about middle grades organization and instruction, we do not have a clear idea of the prevalence or persistence of these practices in middle grades schools today. It is important, too, to know which practices have been tried and dropped, and which practices are likely to be added in the future. The research that has been conducted is limited in the location and nature of the samples of schools and students, the breadth and depth of information on middle grades practices, or the comparisons of alternative organizations of middle grade schools.

To understand and to improve middle grades schools, we need national data that describe in detail the education of early adolescents. In the spring of 1988, The Johns Hopkins Center for Research on Elementary and Middle Schools (CREMS) conducted a survey of principals in middle grades schools that include grade 7 (see Appendix A). With these data we are able to document and analyze the diversity of educational approaches and practices in U.S. schools for early adolescents and begin to understand the effects of different practices on school programs and student progress.

The Sample

This study is based on a probability sample of 2400 public schools, selected from the 25,000 in the United States having 7th grade students. Schools with many different grade spans are in this sample, such as K-8, 6-8, 7-9, 7-12, and other grade organizations that include grade 7. Excluded are elementary schools (e.g., K-6), high schools (e.g., 9-12), or others that do not include grade 7. Also excluded are private and parochial schools.

Schools are sampled with probabilities proportional to each school's estimated enrollment per grade level. Schools in metropolitan areas and schools with higher rates of poverty are over-sampled, with 200 schools in each category added to the initial 2000 schools for the total of 2400 schools. Principals from 1753 schools provided information for this study, including 1344 (56%) principals who returned surveys by mail and 409 (17%) who completed shorter telephone interviews, bringing the raw response rate to 73%. The telephone survey was a random subsample of all non-respondents, bringing the overall weighted response rate to 93% for the items that were common to the mail and telephone surveys.

In analyses that focus on the SCHOOLS, each school is assigned a "weight" to assure the sample is an equal probability (representative) sample of schools in the country, with a sampling variance equal to a simple random sample of the same size. In analyses that focus on

STUDENTS (i.e., the experiences of 7th grade students in schools with different programs), each school is weighted by its enrollment per grade level.

On several questions, principals reported practices separately for each middle grade (from 5-9) in their schools. The national sample of schools that contain grade 7 is not representative of schools that contain grades 5, 6, or 9 because the sample does not include K-5 or K-6 or other elementary-only schools, nor 9-12, 10-12, or other high schools. We are able to make definitive statements only about grade level practices that occur in schools that contain middle grades (e.g. middle schools, 7-8 schools, and junior high schools). We compare the patterns of practices in middle grades schools with the patterns in schools that combine grade 7 with other levels of schooling, such as elementary-middle (K-8), middle-high (7-12), or elementary through high schools (K-12).

The Topics

This report summarizes the information collected from principals in schools that contain grade 7 to provide an overview of middle grades education in the U.S. in 1988. The following topics are discussed:

- Grade Span
- Size (School Size, Grade Enrollment)
- Grouping (Between Class Grouping)
- Number of Teachers
- Changing Classmates (Grouping and Regrouping)
- Homeroom, Advisory Groups
- Guidance Counselors
- Teams of Teachers
- Curriculum
- Instruction
- Goals for Students
- Transitions and Articulation Practices
- Remediation
- Report Card Entries
- Teacher Certification
- Teacher Talents
- Summary of Practices and Trends
- Overall Evaluation of Programs

GRADE SPAN

One of the most common questions about middle grades education is "What is the best grade span for a middle grades school?" It is understandable that educators are interested in grade span. Students often change schools in the middle grades, and the time of transition is often a dramatic signal of growing up to students and to parents. In the survey, we wanted to know about the variation in grade organizations of schools that contain grade 7 in order to study the effects of grade span on school programs, teaching practices, and the successes or problems of students.

Schools in the U.S. that enroll seventh-grade students include about 30 different grade spans. We have categorized these in six groups for analyses and for comparisons.

Elementary-middle: Mainly K-8 schools, but also PreK-7, PreK-8, K-7, K-9, 1-7, 1-8, 2-8, 3-7, 3-8, 3-9, 4-7, 4-8, and 4-9.

Elementary-middle-high: Mainly K-12 schools, but also Prek-12, and 4-12.

Middle school: Mainly 6-8 schools, but also 5-8, 5-7, and 6-7.

7-8 school: Mainly 7-8 schools, but also 7 only.

Junior high: Mainly 7-9 schools, but also 6-9 and 5-9.

Middle-high: Mainly 7-12 schools, but also 6-12 and 5-12.

The six categories represent different "start" grades (elementary or middle) and different "end" grades (middle or high). There are three types of "combination schools" that combine different levels of schooling in the same building. Two grade organizations start with the elementary grades and continue either through the middle grades (e.g., K-8 schools) or through high school (e.g., K-12 schools). One type of combination schools starts in the middle grades and continues through high school (e.g., 7-12 schools). There also are three types of schools dedicated to early adolescents that start in the middle grades. These include middle schools (typically 6-8), 7-8 schools, and junior high schools (typically 7-9).

In this report, we refer to the schools in each category by the the main grade span, i.e., K-8, K-12, 6-8, 7-8, 7-9, and 7-12 schools. These references are shorthand for the full range of grade spans listed above.

The number of schools with different grade spans does not necessarily tell us about the number of students who attend schools of different grade spans. For example, there are many K-8 and K-12 school buildings but most of them are small and enroll relatively few students. Thus, it is important for researchers, educators, and policy leaders to be clear about whether they are interested in the number of school buildings that contain grade 7, or the number of seventh-grade students who attend differently organized schools.

Table 1
National Patterns of School Buildings
and Student Attendance (N=1753 Public Schools)

TYPE OF GRADE ORGANIZATION	% of SCHOLS	% of STUDENTS
Elementary-Middle Combination (K-8)	32.1	9.3
Elementary-Middle-High Combination (K-12)	10.5	2.4
Middle School (6-8)	25.3	39.3
7-8 School	11.0	24.6
Junior High (7-9)	8.4	17.4
Middle-High Combination (7-12)	12.7	7.0

Nationally, about 25% of all public school buildings are designated as middle schools (grades 5-8, 6-8, 5-7, or 6-7), and about 40% of the students in the seventh grade attend middle schools. About 45% of all school buildings decicated to early adolescents are middle, 7-8, or junior high schools. These schools are attended by about 80% of all seventh graders. In contrast, about 32% of the school buildings that contain grade 7 are elementary-middle (K-8 or related) combinations, but these are attended by only 9% of all seventh-grade students.

Table 2
Regional Patterns of School Buildings and Student Attendance

REGION	MOST PROMINENT SCHOOL TYPE (% SCHOOLS by region)	MOST 7th GRADE STUDENTS ATTEND (% STUDENTS by region)
Northeast	ELEMENTARY-MIDDLE (K-8) 31%	MIDDLE (6-8) 36%
South	MIDDLE (6-8) 31%	MIDDLE (6-8) 45%
Midwest	ELEMENTARY-MIDDLE (K-8) 31%	MIDDLE (6-8) 38%
West	ELEMENTARY-MIDDLE (K-8) 51%	MIDDLE (6-8) 33%
NATIONAL	ELEMENTARY-MIDDLE (K-8) 32%	MIDDLE (6-8) 39%

The types of schools and patterns of attendance vary by region. In all regions, more seventh-grade students attend middle schools (6-8) than any other single school type, ranging from 33% of seventh graders in the West to 45% of seventh graders in the South. There are, however, more elementary-middle combination school buildings (e.g., K-8) than other types of schools in all regions, except the South, where middle school buildings predominate.

The table shows that in the West, for example, K-8 (or other elementary-middle) schools are the most common grade organization of schools containing grade 7. Just over half -- 51% -- of the SCHOOLS in the West are of this type. These schools, however, are attended by only 8% of the seventh-grade students in that region. About one third of the seventh graders in the West -- 33% of the STUDENTS -- attend middle schools, which are 18% of the schools in that region.

The percent of 7-8 schools is constant across regions (10-12%). Junior high (7-9) schools are most common in the South and Northeast, with about 11% of the schools in each region of this type. Middle-high (7-12) combination schools are most common in the Midwest, with 19% of Midwestern schools that contain grade 7.

Patterns of grade organization and attendance also differ by the urbanicity of the area. In URBAN areas, middle schools (6-8) are the most prominent grade organization -- 36% of urban

BEST COPY AVAILABLE

schools with a grade 7 are middle schools, and they serve 44% of the students. In SUBURBAN areas, elementary-middle combinations (K-8) are most prominent (36%), but they serve only 8% of the suburban students. By contrast, the 30% of the suburban school buildings which are middle schools serve 40% of the students. In RURAL areas, 33% of the schools are elementary-middle (K-8) combinations, but these are attended by only 13% of the students. In contrast, only 19% of the rural schools are middle schools, but these serve 35% of rural students.

The grade organization of a school is linked to school size and to the enrollment per grade level. Schools with many grade levels tend to be smaller schools overall, with few students per grade level. (See the next section on SIZE).

There are other interesting issues associated with the grade organization of schools. Some educators are concerned about the number of grade levels in schools for early adolescents. In this sample, schools contain from 1 to 14 grade levels, including preschool and high school in Pre-K - 12 schools. Some educators believe that one or two grades in a school (e.g., 7 only, 6-7 only, or 7-8 only) are too few to create a school culture that promotes student attachment to the school. If half the students are entering and half are graduating every year, there is little time to build a school environment of caring and committed teachers and students. Although our data cannot fully address this question, we find that some 7-8 schools resemble 6-8 middle schools programs, while other 7-8 schools look more like junior high (7-9) schools in their programs and course offerings. The 7-8 programs nationwide lack a clear definition or philosophy that guides their programs. Other educators wonder whether enough attention is given to the unique characteristics of early adolescents in combination schools that must distribute services across many grade levels. There is some evidence that, on average, combination schools make trade-offs in their program that reduce their attention to the characteristics of early adolescents.

Another issue concerns the reasons why districts change the grade spans of their schools. Sometimes, grade spans of schools are changed to reflect a new educational philosophy. For

example, in Baltimore, Denver, Seattle, and other districts, all schools for early adolescents became 6-8 middle schools as a matter of policy. Elsewhere, policies have been issued to make or keep all schools as K-6 elementary or K-8 elementary-middle combinations. Decisions to change the grade spans of ALL schools are usually accompanied by plans to improve educational practices. In other locations, however, the grade spans of schools have less to do with educational decisions than with population density and available buildings. For example, 7-8 or 7-9 junior high schools may be left intact until the population of elementary students grows too large for the K-6 school and forces a decision about where to put sixth graders. There is no guarantee that changing grade spans to accommodate demographic demands (i.e., to fit bodies in available buildings) will lead to changing or improving educational programs or practices. With new knowledge accumulating about early adolescence and middle grades practices, however, schools may be able to plan ahead to improve educational practices whether they change grade organizations to support new philosophies or to meet population requirements.

Because grade span is often the result of mechanical and demographic factors, grade span is unlikely to be the main determinant of effective schools for early adolescents. Educators are concerned about grade span, however, so this report pays close attention to the practices that occur in middle schools compared to other grade organizations (also see Becker, 1989; Braddock, 1990; Epstein, 1990a, b; Mac Iver 1990; Mac Iver and Epstein, 1989; McPartland, 1990.)

SIZE

School size is a favorite topic of educators interested in middle grades school reform. The tendency is to think that smaller schools are better schools, but it is not that simple. In this section we review the variety of sizes of schools for early adolescents, and examine the related measures of grade level enrollments and size of staff within schools.

Schools that contain grade 7 range in size from 5 students to over 2,250, with an average size of 452. School size increases from small K-12 schools that average 319 students with about 25 students per grade level, to mid-size middle schools (6-8) that average 557 with about 180 per grade level, to large junior high (7-9) schools that average 733 students per school with about 240 students per grade level. Most 7-8 schools, with an average of 491 students, are smaller in size than junior high (7-9) schools, but the two types of schools are similar in the number of students enrolled per grade level.

School size changes in response to changing birth cohorts. Over the next few years, for example, the number of elementary school students will continue to grow due to the "baby boomlet" of the 1980s. As the number of elementary students increases school districts will need to find space for fifth and sixth graders. Schools with grade organizations of 4-8, 5-8, and 6-8 will be needed in many communities with growing elementary school populations. Presently, many schools that were 7-8 schools are becoming 6-8 schools, either because of the growing number of elementary school students or because of the influence of the "middle school movement" on community decisions about their school programs. Similarly 6-8 schools may become 5-8 schools to accommodate population shifts.

A larger school size will not necessarily change dramatically the number of students per grade level. If grade level or other subgroups of students remain small (as in arrangements that create clusters, houses, teams, or schools-within-a-school), then school size should have little impact on the quality of the educational program or on the success of students, within the range of school sizes operating in the U.S. today. But most schools presently do not use these structures that make big schools small. Size may be a problem, then, in a significant number of middle grades schools until responsive programs are implemented that prevent students from feeling lost, ignored, or anonymous.

School size has different implications in schools with few or many grade levels. The number of grade levels and the grade level enrollments affect whether and how students are grouped within and across grades. For example, K-12 schools have an average school size similar to K-8 and 7-12 schools, but only 35 students per grade level. In these schools if students are assigned to classes by grade level, only within-class grouping is possible because there is, on average, only one classroom of students per grade. Other schools also are restricted in their options for regrouping students between or among two or three teachers, including many K-8 schools with an average of 42 students (or two classrooms) per grade level, and 7-12 schools with an average of 62 students (or three classrooms) per grade level. Large schools and schools with large grade level enrollments have more options and, sometimes, greater flexibility in their grouping practices because there are many students and many teachers working at the same grade level. Middle schools with about 130 students per grade level and junior high and 7-8 schools with about 240 students per grade level have many options to group and regroup students within or between classrooms at the same grade level. Of course, even small schools could group students across grade levels to increase instructional options and alternatives, but few schools use cross-grade grouping at this time. (See section on PRACTICES).

It is important to take grade level enrollments into account when we study practices of grouping students by ability, the number of different teachers students have each day, or the grouping and regrouping practices that schools use to create instructional groups. (See sections on BETWEEN CLASS ABILITY GROUPING, CHANGING CLASSMATES, and NUMBER OF TEACHERS.)

For their sizes, K-12 and 7-12 schools have the lowest student-to-staff ratio, with 11-12 students to 1 full-time equivalent staff, including teachers, administrators, and other staff (about 1:12 FTE). Middle schools, 7-8 schools, and junior high schools have similar student-staff ratios (about 1:15 FTE). K-8 schools have the highest student-staff ratio (about 1:16 FTE). If only the

student-teacher ratio is considered, the ratios are about 14:1, 17:1, and 20:1 for schools that end with high school grade 12, schools dedicated to adolescents, and elementary-middle combination schools, respectively. In each case, compared to other schools, K-8 schools have higher student-adult ratios, on average.

Some schools cannot and will never be able to change the size of the school, but all schools have several options to arrange and rearrange groups of students for instruction. We need to learn how size of school, size of grade level, and the use of small-size structures such as teams or houses affect program designs and student experiences.

School size, like grade span, is probably not the major determinant of successful programs in the middle grades. There are, undoubtedly, very good schools of all sizes in the U.S., just as there are very good schools of all grade spans. Middle grades reform is likely to be affected more by organizational decisions that include how to deal with size in productive ways, and other practices that are discussed in the sections that follow.

BETWEEN-CLASS ABILITY GROUPING

One of the major dilemmas that almost all schools face is how to deal with student diversity in academic skills and, at the same time, minimize the use of labels that separate students and create feelings of helplessness or low self-esteem. Grouping practices are instructional tools that can help teachers meet students' needs and contribute to a positive learning climate, or they can exaggerate differences, label some students as slow or dumb, and contribute to a poor school climate. We asked principals whether they assign students to homogeneous groups on the basis of ability or achievement. There are important differences in grouping practices by grade level, subject, and by school grade span.

Overall, the use of between-class grouping or "tracking" to create classes that are homogeneous in ability is common in grades 5-9. Over 40% of all SCHOOLS use SOME between-class ability grouping, and over 20% assign students to ALL of their classes based on ability. The number of STUDENTS in schools that contain grade 7 who experience at least SOME homogeneous grouping increases across the grades from about 70% of students in grade 5, to 80% in grade 6, to about 85% in grades 7 to 9. The proportion of students who have ALL classes grouped by ability in fully "tracked" programs increases from 12% in grade 5 to about 25% in grades 6-9.

Sixth graders in middle schools are more likely than sixth graders in K-8 schools to have SOME classes grouped by ability, but less than half as likely to have ALL classes grouped by ability, as shown in Table 3. This pattern reflects, in part, the effort of some middle schools to deal with two conflicting demands -- to help students meet their own, individual potential (through some homogeneous grouping by ability, as in math classes) and to help students meet and work with students who are different from themselves (through some heterogeneous grouping in other classes, as in social studies, science, or exploratory activities).

Seventh and eighth graders in 6-8 middle schools, 7-8 schools, and 7-9 junior high schools experience similar grouping practices. Between 7-15% of the students in these schools have NO classes grouped homogeneously, 25-30% have ALL classes grouped homogeneously; and 57-64% have SOME classes grouped by ability.

Table 3

**Between-Class Grouping Experienced by Students in the Middle Grades,
By School Grade Span and Grade Level**

% of Students in Between-Class Ability Groups

	Grade Span						All Schools
	K-8	K-12	6-8	7-8	7-9	7-12	
No Homogeneous Grouping							
Grade 6	41	51	15	--	--	--	22
Grade 7	41	42	14	12	7	30	17
Grade 8	33	49	12	11	7	25	14
Some Homogeneous Groups							
Grade 6	46	32	60	--	--	--	55
Grade 7	41	35	57	61	63	43	56
Grade 8	46	27	58	63	64	47	58
All Homogeneous Groups							
Grade 6	12	17	25	--	--	--	23
Grade 7	19	24	29	27	30	27	28
Grade 8	22	23	30	26	29	29	28

BEST COPY AVAILABLE

Overall, students in "combination schools" (K-8, 7-12, K-12) experience less between class grouping than do students in schools devoted to the middle grades. Students in K-12 combination schools are least likely to be "tracked" or grouped homogeneously by ability in any class. Size of grade level, even more than size of school, probably affects how much grouping by ability occurs at different grade levels in schools of different grade spans. With only 25 students per grade level, on average -- about one classroom per grade level -- classes in K-12 schools are necessarily heterogeneous in ability and grouping is usually within-class.

Grouping practices vary by academic subject at different grade levels. In grades 5 and 6, reading and math are the two subjects most often grouped by ability. In grades 7 to 9, math and English are most often grouped by ability. Students in schools that contain grade 7 are increasingly grouped by ability in math (from 64% in grade 5 to 94% in grade 9) and in English (from 25% in grade 5 to 72% in grade 9). Science and social studies are the subjects least often grouped by ability. These patterns vary by grade organization. In grade 8, for example, 58% of middle schools compared to 75% of junior high schools group students homogeneously in their English classes. But math is more often grouped homogeneously in middle than in junior high schools, 63% vs. 51%, respectively.

The data show that most schools use homogeneous grouping in some but not all subject classes. Grouping by ability for some classes is not necessarily good or bad. The results and effects of grouping depend on appropriate placement, flexible membership, appropriate instructional materials, teaching practices that reward students for progress in learning, and other pedagogical and motivational factors.

The Carnegie Task Force on Education of Young Adolescents (1989) recommends the elimination of all "tracking" that groups students homogeneously by ability. The Maryland Task Force on the Middle Learning Years (1989) recommends that students have no more than one-half day in classes that have been grouped homogeneously by ability, meaning that students

spend at least one-half day in heterogeneous classes. The first recommendation may be a long-term goal that depends on the availability of materials and staff development in instructional approaches that enable teachers to deal effectively with diversity in all subjects. The latter recommendation may be a short-term possibility that requires schools to alter grouping and scheduling practices to create heterogeneous classes in subjects that are enriched by social interactions and diverse perspectives (as in social studies and health), where students start out relatively even in skills or interests (as in most most electives and exploratory classes), or where diverse texts and materials exist and where active learning in heterogeneous groups is feasible (as in science). Braddock (1990) suggests that better criteria should be used to assign students to groups so that they are not assigned to math on the basis of reading skills, for example, and that more flexible criteria should be used so that slower students with high commitment can decide whether they want to work in more challenging groups.

There is, presently, great variation in grouping practices in all grade organizations of schools that contain grade 7. It is clear from these data that educators have many options for organizing and assigning groups of students to their classes and need not rely on only one grouping strategy.

NUMBER OF TEACHERS

Students are sent from teacher to teacher in order to receive more expert instruction from specialists in their subjects. But, students who change teachers every 40-50 minutes may feel that no one teacher knows them very well.

When students have one teacher, the academic program is "self-contained" much like an elementary school program. When students have 4-5 teachers the program is departmentalized, much like a high school program. When students have 2-3 teachers, the program is "mixed" or "semi-departmentalized." As students move through the middle grades, they tend to have more

teachers (McPartland, 1987). In order to study the staffing patterns in schools with different grade organizations, we asked principals to report the number of different teachers students have for their major academic subjects at each middle grade level in their schools. The principals' reports do not refer to teachers of electives or exploratory subjects.

About half of all sixth-grade students in K-8 and K-12 schools have one or two different teachers in an average week, and about 30-40% have 4, 5, or more teachers. In contrast, about 70% of sixth-grade students in middle schools have 4, 5, or more teachers. In part, this is a function of the size of the school and size of grade level. Larger schools with more staff can allow teachers to specialize in one or two subjects. However, the number of teachers a student has (and the number of subjects a teacher teaches) also are influenced by the school's educational philosophies. For example, many K-8 schools consider themselves "elementary school organizations" and maintain elementary school approaches, including self-contained classes for many sixth graders.

By grade 7, however, even K-8 schools assign most students (over 70%) to 4, 5, or more teachers for their major academic subjects. In all other grade organizations, between 85%-100% of the seventh graders have 4, 5, or more teachers. Many K-8 schools organize an internal transition to a middle grades program within the school that gives most seventh graders as many teachers as students have in other grade organizations.

In all grade organizations, sixth graders have fewer teachers than do seventh or eighth graders. On average, schools tend to increase the number of teachers that students meet each year. The average pattern is due, in part, to some schools' efforts to help students make a sequential transition to more departmentalized programs such as those they will experience in high school.

Having many teachers is not necessarily bad or good. For example, in grade 6, when students have 5 different teachers instead of 4, the additional teacher is often a reading specialist

and the students have an extra reading class in addition to their English period. This may be good, especially for students who need to continue to develop basic and advanced reading skills. When students have more teachers in grade 7 or 8, they may be offered reading, foreign language, or elective courses that are enriching and important to early adolescents who need to explore many areas and interests. It may be, however, that when students have one or two teachers, they have closer, more personal supervision and guidance from teachers who will not let them slip through the cracks. This may be especially important to students who need the most help in learning and developing basic skills (Becker, 1987).

Because the number of different teachers for students is partly a function of size of school and grade level, it is doubtful that there is one best way to provide expert instruction and caring relationships in all subjects to all students in all schools. It is important, however, for all educators to give thought to the number of different teachers that students meet each day or week and the consequences of their programs on students. School leaders should understand their responsibility to design programs that provide high quality teaching by subject-matter experts without losing the personal interactions that assure students that their teachers know them and care about their success (McPartland, 1987). Some schools do this by using interdisciplinary teams of teachers who have the same students and so get to know them very well. Other schools balance an emphasis on subject matter specialists by using teacher-advisory groups so that one teacher stays in close and caring contact with a small group of students on a daily basis across the middle grades. (See sections on TEAMS OF TEACHERS and HOMEROOM AND ADVISORY PERIODS.) The organization of teachers' work with other teachers and with groups of students is probably more important than a mechanical count of whether students have one or more teachers for their academic subjects. We will be studying whether and how schools that assign students to few or many different teachers use other practices that help students make frequent, personal contact with at least one adult at school. And we will be considering how grouping practices and changing teachers and classmates affect other aspects of education for early adolescents.

CHANGING CLASSMATES -- GROUPING AND REGROUPING

Depending on the school's policies, students not only change teachers for each subject, but also change classmates once, twice, or many times during the school day. Students may be assigned to all subject classes by ability, based on one criterion (such as a reading test score), or students may be regrouped for different subject classes based on several criteria (such as reading, math, and science test scores, or by interests). When one criterion is used, students travel from class to class with the same classmates (who are similar in their reading skills, for example), even though their abilities may differ in math or other subjects. When multiple criteria are used, students have different classmates with similar abilities in each subject. Variations in grouping and scheduling practices can be used to purposely create some classes grouped by ability and other classes grouped heterogeneously. (See section on BETWEEN-CLASS ABILITY GROUPING.)

Students' classmates may be drawn from a small number of students on a team, or from a large number of students from one or more grade levels in the school. If students are grouped by ability with the same classmates all day every day, they may be labeled as "bright" or "slow" students in ways that affect their self-esteem and their status in their peer group. If students are not "fixed" in the same group all day, especially if some groups are heterogeneous in ability, students may be free of disparaging labels.

Sixth grade students are about equally divided -- one third of the students keep the same classmates for all subjects, one third change classmates for one or two subjects, and one third of the sixth graders change classmates for most periods during the day. Middle schools are mainly responsible for this pattern, as they, more than other grade organizations, regroup students for most classes. For example, in K-8 schools, about 60% of sixth graders stay with the same classmates all day, compared to 25% who do so in middle schools. Students who stay with the same classmates may be grouped homogeneously or heterogeneously, and may have one or many

teachers if the class travels together in a departmentalized schedule through the day. In this way, grouping, number of teachers, and changing classmates can be somewhat independent of each other.

By grade 7 (and thereafter) the pattern changes. Most seventh graders (64%) change classmates for most subjects. This reflects the practices in middle schools, 7-8 schools, and junior high schools. In combination schools (K-8, 7-12, and K-12) however, a significant number of seventh graders (33-50%) remain with the same classmates all day.

Regrouping is especially common in middle schools, 7-8 schools, and junior high schools. By grade 8, 70% of the students in middle schools and 84% in junior high schools are regrouped with different classmates for three or more classes during the school day.

Changing classmates means that students have more opportunities to interact with many students who have different skills and talents. If students change classmates too often, however, they may feel unattached and unknown to any group of peers or friends. Grouping and scheduling practices require thoughtful procedures to prevent the labeling that often comes when students stay in the same group all day, and to prevent fragmentation and feelings of detachment that often come when students change groups many times. Some schools balance regrouping practices by using teacher-advisory periods that keep a small group of students in close contact with each other across the middle grades. Other schools organize activities so that all students make close and continuing contacts with other students on projects and interests of their choice.

There are important connections among the three topics -- BETWEEN-CLASS ABILITY GROUPING, NUMBER OF TEACHERS, and CHANGING CLASSMATES. Educators make important and linked decisions when they choose to group students by ability, use one or more criterion for grouping, assign groups from narrow or broad student populations, give students opportunities to meet and interact with few or many students who are similar or different from

themselves, and assign students to one, three, or five or more teachers who are experts in their field. The challenge for educators is to use these grouping, scheduling, and staffing practices to provide support and instruction to students at the appropriate level of learning without labeling slower students in disparaging ways. Decisions about grouping should also lead to peer support for academic work in school. We will be examining these connections to learn how grouping, scheduling, and staffing practices affect other aspects of school programs in the middle grades.

HOMEROOM AND ADVISORY PERIODS

One of the major dilemmas of middle grades education is how to balance the academic emphases of subject classes with structures that provide early adolescents with the social and emotional support they need to succeed as students. In the middle grades, many schools have departmentalized or semi-departmentalized programs that give students subject classes with many different teachers. (See sections on NUMBER OF TEACHERS, TEAMS OF TEACHERS, and MIDDLE GRADES PRACTICES.) Even schools with interdisciplinary teams often assign students to four, five, or more teachers on a team as students move from English, to math, social studies, science, and other subjects. As students move from teacher to teacher, there is a danger that they will feel that no teacher or other adult in the school really knows them, cares about them, or is available to help them with problems. If students feel that no one cares about them, they are more likely to look outside the school for attention and rewards. If they believe no one is aware of their problems and progress, students are more likely to waste time or withdraw from school activities.

To reduce these risks, many schools are developing more responsive support systems, including homerooms, advisory groups, counseling services, and other activities to monitor and to involve students in more caring environments. Group advisory periods assign a small group of students to a teacher, administrator, or other staff member for a daily or otherwise regularly

scheduled meeting to discuss topics that are important to early adolescents. The idea of advisory periods is to reduce the isolation and anonymity that many students feel, particularly in larger schools (Cawelti, 1988). How prevalent are these structures in schools for early adolescents in the U.S.? What forms and functions do these activities have?

About two thirds (66%) of schools that include grade 7 have one homeroom or group advisory period, and 9% have two such periods. One quarter (25%) of the schools have no homeroom, group advisory, or similar structure. These periods are most common in middle schools (6-8) and junior high schools (7-9), and least common in middle-high (7-12) schools. When schools have one period, they schedule it daily for 20-25 minutes, on average. When two periods are scheduled, the second one is most often added once or twice a week, and the average combined length of time scheduled daily for advisory and homeroom activities is between 30-35 minutes.

In general, schools for early adolescents (e.g., 6-8, 7-8, 7-9) have longer than average homeroom and advisory periods, compared to combination schools (e.g, K-6, K-12, 7-12). Middle schools (6-8) have longer advisory periods with more varied activities than do other schools. Regardless of grade organization, schools serving economically disadvantaged and minority families use more advisory activities than do other schools (Mac Iver and Epstein, 1990).

We asked principals about the activities conducted during homeroom or advisory periods. These range from mechanical tasks conducted during short homeroom periods to extensive social support activities with teachers as advisors. Short homeroom-type activities include: take attendance, distribute notices, make daily announcements, and orient students to rules and programs. Socially significant advisory activities include: meet with individual students about problems, give career information and guidance, discuss academic problems or issues, discuss personal or family problems, discuss social relationships and peer groups, discuss health issues, discuss moral or ethical issues, discuss multicultural issues and intergroup relations, develop student self-confidence and leadership, and other activities.

Some principals noted that advisory and homeroom periods also are devoted to tutoring activities, reading and other skills development, completing homework, club meetings and pep rallies, making awards, and cleaning the school campus. Advisory periods have over 100 different names, including Homeroom and Advisory, Advisor-Advisee, Homebase, Group Guidance, Advocacy Time, Life Skills, Student-Teacher-Advisory Room (STAR) and other acronyms, with some titles based on specific programs, such as "Quest."

We are exploring these data to learn whether daily advisory group activities have measurable impact on other aspects of the school program and on student success in school. For example, regardless of grade span, principals in schools with many and frequent advisory activities expect fewer students to drop out of school before high school graduation (Mac Iver and Epstein, 1989). These principals also give higher ratings to the quality of their guidance programs.

GUIDANCE COUNSELORS

Guidance counselors and their activities are separate and different from teachers who lead advisory groups or homerooms. Principals' reports indicate that trained and certified counselors do many things in schools, from cafeteria duty to crisis intervention, teaching to testing, parent conferences to peer group meetings, and record keeping of all kinds.

Over 80% of the schools that include grade 7 have at least one guidance counselor at least part-time. Schools that include elementary grades (K-8 and K-12) have fewer counselors compared to other grade organizations, or none at all. For example, about half of the K-8 schools have no guidance counselors, whereas all junior high schools have at least one.

The counselors' workloads in almost all schools are very heavy. The average student-counselor ratio is 360 to 1. Counselors in schools that combine middle and high school grades (e.g., 7-12 and K-12) have smaller than average case loads, averaging fewer than 250 students to 1

counselor. In part, this is due to school size, but may also be due to having counselors at the school to deal with special needs of high school students who are making transitions to postsecondary school or work. There is no way to know from these data whether counselors in combination schools serve students in the middle grades or only high school students. Even the relatively "low" case loads, however, are too large for all students to receive effective, personalized, and timely counseling from their guidance departments.

How do guidance counselors spend their time? In schools that contain grade 7, guidance counselors spend most time (35% of their time) with individual students on their problems. Other activities that take more than 10% of the counselors' time, on average, include: scheduling classes or tests, meeting with groups of students to discuss careers, academics, drug use, and other common problems or issues; and conducting routine meetings with individual students at regular intervals.

The grade organization of a school influences how counselors use their time. For example, counselors in middle schools (6-8) and elementary-middle combinations (K-8) spend more time than average in group discussions with students. This is in keeping with a greater emphasis in middle schools on group advisory activities, which often require all members of the school staff -- teachers, administrators, and others -- to conduct the group sessions. Counselors in junior high (7-9) and 7-8 schools spend more time than average on scheduling classes and tests. Counselors in K-12 schools devote more time than average to achievement, competency, and other types of testing. This may be due to the number of tests required for students in 13 different grade levels.

More time spent on administrative and testing tasks means less time for counseling individuals or groups of students. Although counselors have traditionally emphasized one-to-one approaches in student guidance, some school organizations are altering that pattern to increase counselors' time in group guidance. Other organizations seem to overload counselors with more mechanical and fewer interpersonal activities.

Some principals noted other activities that are conducted by their guidance counselors. The most common additions include guiding student clubs and student government, conducting other administrative tasks, conducting conferences with parents, and conducting activities related to special education programs.

Principals rated the overall quality of their guidance and advisory programs on a scale from 1 (Excellent) to 4 (Weak). On average, principals rated their programs between Good and Fair, (Mean = 2.62). The poorest ratings (Fair=3.0) are from principals in schools that include elementary grades (e.g, K-8; K-12 schools) where there are fewer counselors.

There should be some measureable effects of school investments in extensive advisory activities. The data show, for example, that principals in schools that use more advisory activities report that they have more successful guidance programs overall (Mac Iver and Epstein, 1990). Differences in counselors' case loads and uses of time also should affect the extent to which schools emphasize the goals of human relations, personal development, or basic skills and subject matter mastery. Differences in counselors' responsibilities may be linked to the nature of homeroom and advisory activities and the time allocated for regular and frequent teacher-student interactions to demonstrate concern and caring. Schools in which counselors have lower case loads and spend much time on individual or group counseling may have less need for separate advisory periods to fulfill the same goal. We will be exploring these connections in future papers.

TEAMS OF TEACHERS

Interdisciplinary teams of teachers are considered by many to be a key organizational feature of middle grades education. These teams are supposed to minimize or eliminate several problems that teachers face and that threaten the success of middle grades students.

For teachers, interdisciplinary teams may eliminate the isolation that many teachers feel by providing a working group of colleagues with whom to conduct activities and discuss and solve mutual problems. The teachers on an interdisciplinary team can also create connections between and among the subjects they teach to give students the "big picture" -- such as how American history, American literature, art, music and scientific discoveries fit together; or how life sciences, early adolescent development, and literature about human development are integrated; or how other broad topics are better understood because of contributions from math, language, science, and other subjects.

Teachers on a team share the same students. For example, five teachers may share 125-150 students. In theory, teachers on a team know how their students are doing in all subjects, discuss the students' needs for special help with other teachers, arrange extra time for learning, and so on. Teachers may meet as an interdisciplinary team with students' parents (or with students and their parents) to review progress and to plan improvements, covering major questions and topics during one parent-team conference instead of requiring several.

In theory, teachers on interdisciplinary teams are given common planning time to coordinate and integrate content across subjects, arrange flexible schedules, regroup students to provide needed time for learning, discuss students' problems quickly and solve problems effectively, provide time for learning, conduct conferences with parents, and use the team arrangement in other ways to maximize teacher time, effort, and support.

For students, assignment to an interdisciplinary team is supposed to provide a small unit within the larger school with which they can identify. They are grouped and regrouped with the same 125-150 students for the subjects taught by their team of teachers. The aim is to minimize the number of students who feel that no teachers know them, that the teachers do not know how they are doing in other classes, or that no students know them well enough to accept them as friends. In theory, assignment to interdisciplinary teams helps students build team spirit and improves attitudes and work habits because of the closer, more coherent supervision and caring that occurs on a team.

Although teaching teams are important in middle grades philosophy, they often are difficult for schools to implement. Some Department Chairs believe that interdisciplinary teams dilute subject specialization. Some middle grades teachers prefer to identify with a department, as high school teachers do. If schools do not give teams of teachers common planning time, teachers cannot do the kinds of collaborative work that make teams successful. If staff development is not provided, the concepts and potentials of interdisciplinary teaming may not be understood or implemented.

How prevalent are teaching teams in U. S. public schools that contain grade 7? We asked principals about INTERDISCIPLINARY TEAMS (teams of teachers who teach different subjects but share the same group of students). Principals provided information on the number of teachers on these teams, the subjects they teach, how membership and leadership are determined, how common planning time is allocated and used, and the principals' perceptions of the benefits or disadvantages of teacher teams. We also asked about DEPARTMENT or DISCIPLINARY TEAMS (teams of teachers in the same subject area who share students and regroup them to provide more responsive instruction).

Interdisciplinary Teams

Interdisciplinary teams are composed of colleagues who teach different subjects. A typical team consists of one math, one English, one social studies, and one science teacher. Other combinations of subject teachers also are possible. The teachers share the same group of students and, in theory, coordinate their instructional programs across subjects (Merenbloom, 1986).

In our sample of schools that contain grade 7, teams range from 2 to 7 or more teachers. More STUDENTS (34%) -- especially in middle schools (6-8) and 7-8 schools -- experience 4-teacher teams than other team sizes. More SCHOOLS (35%) -- especially elementary-middle and middle-high combinations -- organize 2-teacher teams than other numbers of teachers.

About 42% of early adolescent students (in 37% of the schools that contain grade 7) receive instruction from interdisciplinary teams of teachers sometime between grades 5-9. By far, more middle schools (just over 40%) use interdisciplinary teaming and provide that experience to more students (53%) than do other grade organizations. Overall, schools that include elementary and middle grades (i.e., middle schools, 7-8, and elementary-middle K-8 schools) use teaming more than do schools that include high school grades (i.e., 7-9, 7-12, and K-12).

In middle schools, teaming is used more in grade 6 than in grades 7 or 8. It may be that middle schools (6-8) are newer constructions and teachers introduce teaming in grade 6 with the expectation of extending the practice to other grades over the next few years. Or, it may be that teachers in middle schools purposely decrease the use of teams in grade 8 in order to prepare students for the transition to high school, where teaming is rarely used. Other grade organizations, too, reduce teaming in the 8th grade. Teams of teachers all but disappear by grade nine. Only 10% of the ninth-grade students in 10% of the schools that include grade 7 experience interdisciplinary teaming. (Also, see section on PRACTICES.)

The bottom line is, however, that at this time most schools do not use interdisciplinary teams, including about 60% of the middle schools and about 75% of other grade organizations. Most students in the middle grades (58%) do not receive instruction from interdisciplinary teams of teachers.

How are teachers assigned to teams and how is the leadership of teams determined? These questions were asked only of principals in schools that use interdisciplinary teams in grades 7 or 8 (about 30% of the schools that contain grade 7). Thus the next set of statistics should be interpreted as percents of that subgroup of schools.

Membership of interdisciplinary teams. In most schools that use teams in the 7th or 8th grades (i.e., 76% of the 30% subgroup), teacher memberships on teams are arranged by the school administrators, not by the teachers. In about 40% of the schools, teachers can adjust their team membership if they dislike their assignment. Teachers in junior high schools or middle-high combinations have the most autonomy to decide which team to join. In these schools, where teams are least frequently used overall, it is more often up to individual teachers to create their own teams.

On self-chosen teams or when teachers have more authority in their assignments, team members spend more time engaged in team planning and coordination. Principals who appoint teams and those who allow teachers to choose teams report similar benefits from interdisciplinary teams for students and teachers (Mac Iver, 1990).

Leadership of interdisciplinary teams. Among schools that use interdisciplinary teams in the 7th or 8th grades, about 40% have no leader -- no equivalent to a Department Chair -- to coordinate and organize team activities. In other schools, a team leader is appointed by the principal (28%), or elected by the team (16%). In some schools the leadership rotates among members (5%) or emerges informally (9%). In a few schools, according to comments written by princi-

pals, team members submit formal applications to become team leaders and receive additional pay for the extra work of coordinating and directing team activities.

Overall, in middle schools and 7-8 schools, team members and leaders are assigned by the principal, making the teams a formal and official part of the school organization. More leeway in assignments and leadership is extended in schools where teams of teachers are not formally organized. We will be studying these patterns of team assignment and leadership to see if they matter for the effectiveness of the teams in the different types of schools that contain grade 7. For example, teams with leaders -- particularly elected or rotating leaders -- spend more time on team activities and report more benefits than problems from the use of teacher teams (Mac Iver, 1990).

Subjects taught by the teachers on teams. Overall, the subjects most likely to be taught by team members are social studies (taught by at least one member in 92% of the schools that use teaming), English (91%), math (83%), science (80%), and reading (65%). Fewer than 20% of the schools that use teaming have team members who teach foreign language, home economics, industrial arts, or other subjects.

When there are only two teachers on an interdisciplinary team, it is most common for one teacher to teach English and reading, and the other to teach math. Other common two-person teams pair an English teacher with a social studies or science teacher. The teamed teachers or other teachers who are not on the team teach the other subjects. When there are three teachers on a team, one typically teaches English and/or reading, the second math, and the third science. When there are four teachers on a team, they typically cover English, math, social studies, and science. If a fifth teacher is added to the team, reading is added as a subject for interdisciplinary attention and support.

Very few schools (8%) have more than five teachers on a team, but when they do, foreign language, home economics, or industrial arts are most often the subjects taught by the additional teachers. Schools with a strong commitment to teaming and successful practices are beginning to consider larger teams, including the teachers of elective or exploratory courses. These schools aim to create full teams that include teachers of all subjects who share the same group of children.

Common planning time. About 30% of the schools that organize interdisciplinary teams provide no common planning time for the teachers on the teams to meet together. Smaller schools and schools that include high school grades are more casual about providing common planning time for teams of teachers. Without official common planning time, interdisciplinary team members still may meet together before or after school or during a lunch period, but it is much more difficult to coordinate efforts, design interdisciplinary units of work, meet together with parents, discuss student needs, and so on. Official support for interdisciplinary teaming first becomes evident when administrators provide adequate common planning time for team members.

About 36% of the schools that use interdisciplinary teams give the teachers two or more hours of common planning time each week. These tend to be middle schools and 7-8 schools, in which the majority of students experience teaming. In many cases, the common planning time allocated for teachers constitutes only part of the team's work together. Meetings, conferences, and other planning often occurs before or after school or during lunch periods.

Principals estimated how much time the teachers on interdisciplinary teams usually spend on seven different activities during their common planning periods: individual preparation, coordinating content, revising schedules, regrouping students, diagnosing individual students, planning special events, and conducting parent conferences. Each item had a five-point response scale ranging from 0 (No time) to 4 (More than half the time). Overall, teams of teachers devote most

of their common planning periods -- close to half the time -- to individual teacher preparation (Mean = 2.50). They devote the least amount of time to revising schedules to provide flexible class periods to extend coverage of major topics or for students who need more time for learning (Mean = 0.99). Thus, on average, teachers are spending almost half of their common planning time on individual work, not on team work. This may be necessary if only one planning or "prep" period is provided to teachers each day. Even teachers on teams need time to do their own work. Teachers probably could use one common planning period for teaming and one individual planning period for preparations for teaching. Or, team members might agree that common planning time is to be used for common activities, and other work will be done at other times before, during, or after the school day.

Middle school and 7-8 school teams are more likely than teams in other schools to spend some time (rather than little time) coordinating content, revising schedules, regrouping students, diagnosing individual students, conducting parent conferences, and doing other team-related activities -- but not a lot of time. Even in 6-8 middle schools and 7-8 schools where interdisciplinary teams are more prevalent, teachers use most of their common planning time to work on individual activities.

Only about 10% of the schools that contain grade 7 do all three of the following: (1) use interdisciplinary teams, (2) provide at least 2 hours per week of common planning time for team members, and (3) use more than "a little" common planning time for the kinds of coordinating activities that strengthen interdisciplinary teams. If teaming is to be the keystone of middle grades education, schools have a long way to go to develop strong and well-defined programs for early adolescents (Mac Iver and Epstein, 1990).

Benefits and problems of teaching teams. Principals estimated how frequently in their experience or judgment ten benefits or problems result from the use of interdisciplinary teams of teachers. The most commonly agreed on benefits are that teachers gain social support and under-

standing from team members; instruction is more effective due to team coordination and integration; students' problems are quickly identified and resolved; and students develop team spirit and more positive attitudes. The most commonly agreed on problems are insufficient planning time; lack of flexible school schedules for regrouping students or extending learning time; or teachers insufficiently trained in the team approach. Most principals do not believe that teachers' personality clashes or preferences to identify with subject area departments are problems for the success of interdisciplinary teams. Interestingly, the most common problems can be solved by principals by altering practices of scheduling and staff development.

Overall, principals who do not use interdisciplinary teams in their schools overestimate the problems (including personality clashes of teachers, lack of planning time, flexibility of school schedules, lack of teacher training, teachers' identity with departments) and understate the benefits of teaming (students' problems recognized and resolved, teachers gain social support, instruction more efficient), compared to the principals who use interdisciplinary teams. Principals in schools dedicated to early adolescents (middle schools, 7-8 schools, and junior high schools) note more benefits of interdisciplinary teams for students than do principals in "combination" schools (K-8, K-12, 7-12). The lack of sufficient planning time is less likely to be a problem in schools that use teaming the most, but 68% of these schools still report that planning time remains a problem. There was agreement, however, that interdisciplinary teams help students build team spirit and identify with their group, help teachers find a source of support and understanding, and help teachers present more effective, integrated instruction.

Many principals commented on other benefits, including better coordinated parent conferences and communications with parents, more coordinated homework (which eliminates the excessive demands in many subjects on one day and too little homework assigned on other days), coordinated discipline, less disruption on field trips, and benefits to new teachers from the close connections they have to more experienced team members. Another interesting result of teaming

is that students get to see their teachers working together as professional adults, learning together and discussing and solving problems -- the same behaviors that teachers want to cultivate in students (Meier, 1989). Principals also commented in the survey on other problems -- teaming means more work for teachers and some teachers do not want to do it.

Principals who provide structures to help teachers implement interdisciplinary teams effectively and who believe that there are many benefits from teaming rate their whole school program significantly stronger than principals who have other beliefs or behaviors about teaming (Mac Iver and Epstein, 1990). These practices are more often found in 6-8 middle schools, but regardless of grade span, principals who have organized strong teacher teams believe that they make an important contribution to the overall strength of middle grades schools.

We shall examine how different investments in teaming affect other school programs and emphases. For example, we want to learn whether and how different distributions of time use in common planning periods relate to principals' perceptions of the benefits or problems of interdisciplinary teaming. Importantly, at this time, interdisciplinary teams of teachers are used more in schools where the expected dropout rate is high (Mac Iver and Epstein, 1990), indicating that, on average, middle grades schools with serious problems may be reaching out for promising practices, such as teaming. Future studies will be needed on how teaming and other middle grades components actually affect important student outcomes over time.

Department Teams

Department or disciplinary teams are composed of colleagues who teach the same subject (e.g., a team of science teachers, or math teachers, or others). The teachers are in the same department, but also plan and teach together, creating small-group and large-group lessons and activities by combining classes or regrouping students. This occurs when two or more teachers teach the subject at the same time, so that students can be regrouped during the period to provide various learning activities.

More middle schools (27%) and junior high schools (25%) use disciplinary (or department) teams than do other grade organizations. In schools that contain grade 7, disciplinary teams are used less frequently in grade 5 (in 5% of the schools) than in grades 6-9 (in 13% of the schools). Sometime between grade 5 and grade 9 about 25% of early adolescent students receive instruction in programs that structure departmental teams of teachers who share the same discipline.

Between 25% and 50% of schools that contain grade 7 organize their work in departments with their own chairpersons. Of these schools, up to one half provide their department members with common planning periods, but not all of these departments do their work as "teams." That is, having a common planning period does not guarantee that two or more teachers in a department will work together to design lessons, group or regroup students, or conduct other activities. For example, K-12 schools offer common planning time to department members more than do other grade organizations, but use teaming strategies less than do middle and junior high schools.

CURRICULUM

We can think of middle grades programs in terms of programs that seek to influence the hearts and the minds of middle grades students. In these terms, support systems and classroom structures such as advisory groups, guidance programs, interdisciplinary teams of teachers, responsive grading practices, and other caring activities reach for adolescent hearts; the curriculum and instructional approaches that help students learn as much as they can and enjoy learning reach for their minds. One of the basic needs of early adolescents is to feel competent (Lipsitz, 1984). The content of the curriculum and the instructional approaches that teachers choose foster or limit youngsters' feelings of competence as students.

In some schools, all students take the same courses; in other schools only a few students take algebra, foreign language, or reading courses in the seventh or eighth grades. How does the

grade organization of schools affect course offerings and the numbers of students in different courses? For example, do middle grades students in schools that contain high school grades have more opportunities for advanced classes (e.g., algebra, French) or basic courses (e.g., a full science program) than students in schools that contain elementary grades? Are students in elementary-middle combinations offered more reading instruction than students in other schools?

Principals described the proportion of students in their schools who take different courses during the 7th or 8th grades. These data do not provide a list of all required courses or electives, but describe the proportion of seventh- and eighth-grade students who take basic, advanced, and exploratory or elective classes. For example, principals reported how many seventh or eighth graders take a full year of algebra or two full years of science or physical education, or courses in reading, art, computers, and other subjects that enhance or enrich the curriculum.

Principals estimated the proportion of students who take eleven different academic and exploratory courses in grades 7 or 8, with responses of none, or about 10%, 25%, 50%, or 75% or more. If 10% or 25% of the students in a school have advanced courses, it may be indicative of responsive programs and curricula for bright students; at the same time, this and similar patterns may be indicative of tracking and grouping practices that are not supportive of all students.

Most schools, regardless of grade span, report that most students (50%-75% or more) have two full years of science and two full years of physical education in the seventh and eighth grades. But Table 4 shows that schools with different grade organizations offer different courses to their students.

In the table, the mean scores are based on a 5-point rating scale of 0=0%, 1=10%, 2=25%, 3=50%, 4=75+%. These scores are translated in parentheses to the approximate per cent of students who take these courses. For example, the top line on advanced courses indicates that, on average, about 13% of students take a full year of algebra in grade 7 or 8, with a high of about

16% in junior high schools and a low of about 9% in K-12 schools. Similar estimates are made for each course. The mean scores are reliable estimates of relative emphasis in schools. The percentages, however, are rough indicators. Some underestimate the percent of students involved at the upper end of the distribution (e.g., 75+% may mean any figure from 76%, to 90% or 100% of the students) Some may overestimate the per cent of students in other categories (depending on how principals responded).

Most middle grades students in all grade organizations take mainly basic or core courses and one or two other subjects. This is the result of widespread use of a six-period day, which limits course periods and flexible scheduling. It is also the result of a general conservative emphasis on basic skills, and a lack of attention to creating learning opportunities that are more responsive to the characteristics of early adolescents. The different grade organizations have some distinctive emphases in their course offerings:

- o Elementary-high (K-12) schools tend to deemphasize advanced courses such as algebra and foreign language, perhaps saving them for their students in the high school grades. Relatively few students (between about 4% and 9%) in the middle grades in these schools have opportunities to take these advanced courses. K-12 schools offer few middle grades students art, but offer many students science and physical education. Compared to other grade organizations, the K-12 program of course offerings looks traditional and conservative, much like the programs for 7th and 8th grade students in K-8 schools.
- o Elementary-middle combination (K-8) schools offer more students reading and fewer students physical education and exploratory courses than do other grade organizations. On average, about 60% of the seventh and eighth graders in K-8 schools take reading, compared to 50% in 6-8 middle schools, and 30% in 7-12 middle-high schools. The program for seventh and eighth graders in most K-8 schools resembles a traditional elementary school program.
- o Middle schools (6-8) offer more students reading, computers, and other exploratory electives or mini-courses than do most other grade organizations. Exploratory or mini-courses ranged from common topics that are regular courses in other schools (i.e., computers, foreign language), to numerous unusual topics (i.e., cartooning, the stock market, robotics, dissection, and many others). Courses in computers and keyboarding also are prominent in middle schools compared to combination schools. The program in middle schools looks more innovative, diverse, and responsive to early adolescents than programs in other grade spans.

Table 4
COURSE EXPERIENCES OF STUDENTS IN GRADES 7 and 8,
BY GRADE ORGANIZATION

	MEAN RATINGS FROM 0 (0% Students) TO 4 (75%+ Students)					
	Average ALL schools		MORE likely in:		LESS likely in:	
	\bar{x}	%			\bar{x}	%
ADVANCED COURSES						
Algebra Full year	1.20	(13%)	Jr.High	1.42	(16%)	Elem-High 0.91 (9%)
Foreign Language Full year	0.86	(9%)	Jr.High	1.49	(17%)	Elem-High 0.36 (4%) Midd-High 0.56 (6%)
BASIC COURSES						
Science Two years	3.74	(68%)	Elem-High	3.97	(74%)	Midd-High 3.46 (64%) 7-8 Sch 3.52 (63%)
Physical Education Two years	3.54	(63%)	Elem-High	4.00	(75%)	Elem-Midd 3.29 (56%)
Reading as separate, additional course	2.92	(48%)	Elem-Midd Middle	3.38 3.08	(58%) (51%)	Jr. High 2.35 (34%) Midd-High 2.19 (29%)
ELECTIVES or EXPLORATORY CLASSES <a>						
Traditional Electives						
Art	3.05	(51%)	----			Elem-High 2.05 (27%)
Industrial arts	2.20	(30%)	Midd-High Jr.High	2.93 2.89	(48%) (46%)	Elem-Midd 1.00 (10%)
Home economics	2.11	(28%)	Midd-High Jr. High	2.89 2.82	(46%) (45%)	Elem-Midd 1.00 (10%)
Personal Growth Electives						
Typing	1.18	(12%)	Elem-High Midd-High	1.61 1.62	(19%) (19%)	Elem-Midd 0.56 (.6%)
Computers	2.18	(29%)	Middle 7-8 Sch	2.66 2.47	(41%) (36%)	Elem-Midd 1.65 (20%)
Exploratory and mini-course	1.24	(13%)	Middle	1.57	(18%)	Elem-Midd 0.70 (7%)

<a> Electives are defined as including least 30 class periods; exploratory or mini-courses may be shorter in duration.

- o 7-8 schools offer less science and more computer instruction to students. The 7-8 school programs resemble the course offerings of middle schools (6-8), but are less well-defined and distinctive than the 6-8 schools.
- o Junior high (7-9) schools offer more algebra, foreign language, industrial arts, and home economics than other grade organizations. Junior high programs look more like traditional, subject-centered high schools than other grade organizations.
- o Middle-high combinations (7-12) offer less reading, science, and foreign language, but more typing, industrial arts, and home economics than do other grade organizations. The programs in these schools, on average, resemble the junior high more than other grade organizations, but offer fewer advanced courses than do 7-9 schools.

The information from principals about course offerings suggests that junior high organizations (7-9) that are organized as "little high schools" provide opportunities to slightly more students for advanced courses (e.g., one full year of algebra, or the equivalent of one high school year of foreign language), and provide considerably fewer students with opportunities for reading instruction as a separate course in addition to English. Under these conditions seventh- and eighth-grade students in junior high (7-9) schools who are at risk of failing due to low reading skills may not obtain the extra help needed to succeed in school as readily as students in other grade organizations.

When schools provide seventh and eighth graders with opportunities for advanced courses, they may be increasing the level of challenge and high content overall, or they may be hurrying students into highly competitive situations before they are ready for higher level learning or before they have a strong base of skills on which to build. When schools provide more basic skills and fewer opportunities for advanced classes, they may be strengthening the skills of students, especially those who need more help, or they may be delaying experiences that would help students see school as a stimulating and challenging place for learning.

In other analyses of these data, Becker (1989, 1990) reports that middle grades schools attended by mainly upper-middle class students are more likely than other schools to offer advanced courses to greater percentages of students and use richer instructional approaches.

Schools that start with the elementary grades (K-8, K-12) are limited in their course offerings, especially advanced courses, the arts, and courses for extending students' personal development. They are also limited in the richness of instructional approaches, with more emphasis on drill and practice than other grade organizations. (See section on INSTRUCTION.) These schools offer early adolescents more traditional programs that are not very different from the elementary grades that focus on basic skills. The emphases of the different grade organizations are likely to have some benefits and some disadvantages for early adolescent development. For example, the K-8 schools may help students strengthen their basic skills, but may not be helping students explore their interests, abilities, and environment as much as other grade organizations.

We will be analyzing these data further to determine how course offerings and proportions of students who take them relate to other practices at schools that contain grade 7, and to principals' estimates of student success in school.

INSTRUCTION

Teachers of middle grades students use various instructional approaches, including some that emphasize basic skills or advanced skills and others that promote active or passive learning. Principals were asked to estimate "how often a TYPICAL teacher of each subject -- not the best or weakest teacher -- would use these approaches with an AVERAGE seventh-grade class." They reported whether the instructional approaches would be conducted, on average, daily, weekly, monthly, a few times per year, or never. We wanted to know how these approaches differ in the four major academic subjects -- English, Math, Social Studies, and Science -- and whether and how they differ by the grade organization of the school.

In all four subjects, the most frequent instructional approaches emphasize drill and practice (in language basics, math computation, basic science facts, and facts of history). In the four sub-

jects, writing and editing activities, peer group interactions (tutoring and projects), and the use of technology in science (computers) and math (calculators) are less frequently used than conventional instructional approaches. As others have reported in earlier studies of elementary and high schools (Goodlad, 1983; Sizer, 1984), middle grades principals report that the typical classes in all subjects emphasize more passive than active learning and more attention to teaching strategies than to learning strategies.

There is, however, considerable variation in teachers' instructional approaches, with some schools (about 20%) using non-drill instruction more often and in more subjects than they use drill and practice. Grade organization influences the instructional approaches of teachers.

- o Elementary-middle combinations (K-8) differ from other programs by emphasizing more drill and practice and more attention to literature in English, less use of calculators in math, less use of computers and discovery methods in science, and less writing, group work, and debating in social studies. Instruction in K-8 schools is characterized by greater emphasis on basic skills, and less emphasis on active, exploratory, or technological instructional approaches.
- o Elementary-high combinations (K-12) differ from other seventh-grade programs by emphasizing more drill and practice in English, math, and science but more writing, debating, and project work in social studies. Instruction in K-12 schools is characterized by less writing and editing in English, and less lab work in science, but more social interaction in social studies than in other schools.
- o Middle schools (6-8) differ from other seventh-grade programs by emphasizing less drill and practice in English and in science, and more editing in English, discovery methods in science, problem solving in math, and writing and debating in social studies than other seventh-grade programs. For example, more principals in 6-8 middle schools than in 7-9 junior highs reported that science teachers typically stress methods of discovery on a daily basis (37% vs. 27% in middle vs. 7-9 schools). Instruction in the average middle school is more innovative, active, and student-centered than instruction in other grade organizations.

- o Grade 7-8 schools differ from other seventh-grade programs by emphasizing less drill in English, less use of calculators in math, and more discovery methods in science than other seventh-grade programs. Instructional approaches in 7-8 schools are more like those used in middle schools, but without as consistent an emphasis on student-centered or innovative approaches.
- o Junior high schools (7-9) differ from other seventh-grade programs by emphasizing less drill and practice in English, and less problem solving and use of the calculator in math, but not significantly more of any practices to define an unusual institutional approach. The picture is one of a standard or traditional instruction in most subjects.
- o Middle-high combination schools (7-12) differ from other seventh-grade programs by emphasizing more essay writing and more literature in English, less peer tutoring in math, fewer discovery methods in science, and less writing and debating in social studies. Compared to other schools, instruction in 7-12 schools gives greater attention to student activities and advanced content in English, but rather undistinguished approaches in the other subjects.

Although patterns vary by grade span -- particularly in K-8 and K-12 schools compared to others -- the differences within any type of grade organization are greater than differences between types of schools. And, in addition to grade span, other school and community characteristics influence the use of particular instructional approaches. For example, seventh graders in small towns receive less written work and more drill and practice, regardless of grade span, than students in urban or suburban areas (Becker, 1990).

We will be examining how the profiles of instructional approaches of the different grade organizations are linked to the course offerings and distributions of students taking basic and advanced courses. We want to know, too, how instructional approaches in academic subjects are related to other practices that organize teaching and learning in the middle grades.

GOALS

Principals were asked to rank seven academic, personal, and social goals that they set for all students. Regardless of the grade span of their school, principals rated basic skills and subject

matter mastery as the most important goal, and citizenship (including school and community service) as the least important goal.

Principals in middle schools, 7-8, and junior high schools gave identical ranks, on average, to the 7 goals:

RANK	GOAL
1.	Basic skills (reading, math, writing, speaking, and subject matter mastery)
2.	Personal growth and development (self-esteem, self-knowledge)
3.	Work habits (self-discipline, autonomy, and self-direction)
4.	Attitudes and commitment (positive attitudes about school, class participation, school activities)
5.	Human relations (getting along with others, good race relations, multicultural education)
6.	Higher level skills (reasoning, problem solving, critical and creative thinking)
7.	Citizenship (including service to school and community)

Although all grade organizations put basic skills at the top of the list, the combination schools (K-8, K-12, 7-12) placed even more emphasis than other schools on this goal, whereas schools dedicated to early adolescents (6-8, 7-8, 7-9) gave more weight to the goal of personal growth and development. K-8 schools gave significantly less emphasis than other schools to personal growth and development (self-esteem and self-knowledge). K-12 schools differed from all other schools by giving more emphasis to higher level thinking skills. Middle-high (7-12) combinations differed from all other schools in giving less emphasis to higher level thinking skills and human relations (i.e., getting along with others, race relations, and multicultural education).

It is risky to interpret rankings as clear indicators of what is or is not important to a principal or to a school. It may be, for example, that principals believe all of the listed goals are impor-

tant, and that the differences between the first and seventh ranked choices are not very great. Or, the top rankings may reflect what a school is doing now, and lower rankings what the school would like to do. We know, for example, that all schools teach basic skills, but few have the materials and teacher training needed for strong programs in higher level thinking or multicultural education. High rankings, then, may simply reflect the goals that can be reached.

The rankings may indicate that, despite the wording of the survey question, schools set some goals for SOME but not ALL students. For example, rightly or wrongly, problem solving and creative and critical thinking skills may be ranked relatively low, because schools expect SOME but not ALL students to attain those goals. Similarly, service to school and community may be ranked low because only some middle grades students have the opportunity to participate in such programs, or because such activities are only a small part of school programs.

Nevertheless, consistent patterns of rankings are indicative of the relative importance of goals for all students. It is meaningful that, on average, schools of all grade organizations set basic skills and subject matter mastery as the foremost goal for all students. It is notable that many schools, especially schools for early adolescents, set personal growth and development of self-esteem and self-knowledge as high priority goals. Principals in these schools may be more aware of recommendations that programs for early adolescents should develop positive self-esteem. They also may be working to balance subject-centered and student-centered components of their programs.

School goals for students may affect curriculum offerings, instructional programs, relationships among students and staff, and other practices. For example, early analyses show that regardless of grade span, principals who assign greater importance to higher level skills report more use of active learning approaches to instruction, which are believed to help students improve their critical and higher level thinking skills. Rankings of goals for personal growth and development may be linked to different patterns of use of advisory groups or guidance counselors. Emphases on higher level skills may be reflected in different patterns of course offerings;

emphases on basic skills may be reflected in opportunities for remedial instruction. Schools dedicated to early adolescents rank personal growth and development higher and also more often provide remedial instruction or extra class periods that meet as "elective" classes. This is a relatively unobtrusive way to offer help without the stigma or labels attached to many "pull out" remedial programs.

TRANSITIONS AND ARTICULATION PRACTICES

Middle grades students experience many changes simultaneously; they enter puberty, change schools, revise peer and friendship groups, begin new interactions with their parents, and begin to expand their social boundaries and participation in their communities. Transitions are both difficult and exciting as they mark points of risk and opportunity for student development. Some suggest that students have serious problems making multiple, simultaneous transitions (Simmons, Blyth, Van Cleave, and Bush, 1979). Others find that most students make most changes in their lives successfully (Offer, Ostrov, Howard, and Atkinson, 1988).

Two common transitions in early adolescence come when children move from elementary to middle grades and from middle grades to high school. There are several purposes for articulation activities to ease transitions to and from the middle grades:

- o To assure that children and families are better informed about the school programs, requirements, procedures, opportunities, and about students' and parents' responsibilities at the new level of schooling.
- o To assure that children are better prepared for the curricular and social demands at the new level of schooling.
- o To assure that middle grades educators are better informed of the connections between their programs and those of the elementary schools that their children come from, and those of the high schools that their students will attend; and to help elementary and high school educators understand their connections with the middle grades.

- o To assure that middle grades educators are better prepared to help students adjust to and succeed in a new school environment.

Principals in schools that contain grade 7 reported on ten practices they use with students, parents, teachers, and other school staff to ease the transition of students to the middle grades and to help students move on to high school. On average, principals used from 3 to 4 different practices, with schools in the sample ranging from 0 to 10 practices.

Transition from Elementary to Middle and Middle to High School. The three most common activities used by over 40% of the middle grades principals at the two points of transition are:

More Common Activities...	Transition to:	
	Middle Grades	High School
Elementary school students visit middle grades or middle grades students visit high school for assembly	53%	52%
Middle grades and elementary administrators or middle and high school administrators meet together on articulation and programs	46%	48%
Middle grades counselors meet with elementary or high school counselors or staff	44%	52%

Some practices that are more time consuming, difficult to arrange, or costly are less frequently used. Fewer than 40% of the principals use these practices to ease transitions to the middle grades:

Less Common Activities...	Transition to	
	Middle Grades	High School
Parents visit middle grades school or high school for orientation in the fall after their children have entered	39%	31%
Middle grades and elementary teachers or middle and high school teachers meet together about courses and requirements	37%	35%

Parents visit middle grades school or high school while children are in the lower grade schools	34%	39%
Middle grades students present information at elementary schools or high school students present information at middle grades schools	30%	36%
Elementary school students attend regular classes at middle grades school or middle grade students attend classes at high school	20%	16%
Summer meetings at the middle grades school or at high school	16%	13%
Buddy or big brother/big sister program pairs new students with older one on entry	9%	4%

The grade span of the schools affects the articulation practices. About 27% of the principals said that there was no recognized transition for their students who did not change schools from the elementary to middle grades, mainly in K-8 or K-12 schools. Even though students do not change buildings, most K-8 principals (and about half of the K-12 principals) reported that they conduct some activities to ease the transition from the elementary to the middle grades within the same building. About 17% of the principals reported that there was no recognized transition for their students who did not change buildings for high school, mainly in K-12 and 7-12 schools. Nevertheless, most of these principals conduct some activities to ease the transition from the middle to high school grades within the same building.

K-8 schools are more likely than other schools to invite elementary students to attend middle grades classes, rather than just assemblies about the middle grades. Attending classes at the next level of schooling is a strong transitional practice as it enables elementary students to feel like middle grades students and to see that they will be able to do what students who came before them are doing in class. Attending middle grades classes in the same school is logistically easier than attending middle grades classes in distant schools. Other grade organizations frequently send their elementary students to middle grades schools for short assemblies, without arranging for the potentially stronger practice of having their students attend classes in their future schools. Also, K-8 schools emphasize student visits to high school classes more than do other grade

organizations.

Schools dedicated to early adolescents (e.g., middle schools, 7-8, and 7-9) use more and different articulation practices than other schools at both points of transition. These schools have strong connections between counselors at the elementary and high school transitions, and between teachers and administrators for the transition from elementary to middle grades. Overall, schools with more extensive "elementary to middle grade" articulation programs also have more extensive "middle grade to high school" transitional activities (Mac Iver, 1990).

Parents are taken seriously by many schools, including most middle, 7-8, and junior high schools at both points of transition. Helping parents understand their children's new schools should help more students adjust to their new locations. Schools that involve parents in elementary-to-middle grades articulation activities are more likely than other schools to maintain strong partnerships with parents, including parents more often as volunteers at school, in governance and decision-making roles, and in learning activities at home (Mac Iver, 1990).

Middle-high combination schools (e.g., 7-12) are more like schools for early adolescents than other combination schools (e.g., K-8 or K-12). Middle-high schools are higher than other schools in their use of "buddy" or "big brother/big sister" activities, in part because the high school students are in the same school with the younger students.

Administrators and counselors are more likely than teachers to interact with their counterparts in the schools involved with the students' transitions. Although it is expected that students will be prepared for the course work at the next level of schooling, little articulation of curricula occurs between the elementary and middle grades or between middle grades and high school. Teachers are involved with other teachers from other levels of schooling in only about one third of the middle schools. Clearly, teachers need to be more involved in discussions of topics concerning the coordination of curricula and skills taught in elementary, middle, and high schools.

Principals suggested other articulation activities. These include coordinating a sequence of activities from the spring of the year prior to transition through the summer and fall after the transition, identifying "at-risk" students in feeder schools so that programs can be prepared to help those students make more successful transitions, providing information to the feeder schools about the success and problems of their students in the receiving school, and working with parents after the point of transition to help them understand how to continue to influence their children's education in the upper grades.

Principals were asked to rate the quality of their articulation activities. Few principals (5%) rated their programs as "Weak -- need to design new practices and major changes." Most who thought their programs were weak were from schools where students did not make transitions to new buildings, or were in schools that delayed transitional activities until the fall of the year. About 22% of the principals rated their programs as "Fair -- need to improve or add several practices." Of these, many used the same practices as those who rated their efforts as Good (58%) or Excellent (16%). Simply using certain practices does not mean that a principal will be satisfied with them. Using more practices or more difficult ones may require trial and error to make those practices successful.

Fuller and more diversified articulation programs should make the transitions to and from the middle grades easier for students. Regardless of grade span, principals in schools with more extensive articulation programs report that significantly fewer students are retained to repeat the transition grade (Mac Iver and Epstein, 1990). This is a potentially important connection between a particular middle grades practice and an indicator of more successful school programs. We will be exploring other questions, such as: Do those who take parents seriously before the children enter the school do more to maintain parent partnerships after the transition? Do those who have stronger elementary to middle grades transitions also have stronger middle to high school transitions?

When is the "best time" for students to move to a new school or to new levels of schooling -- in grade 5, 6, 7, 9, 10 or some other grade? Advocates of 6-8 middle schools suggest that the transition from elementary to middle school in grade 6 causes fewer adjustment problems for students than when the change is made to junior high school in grade 7. Advocates of K-8 elementary-middle schools suggest that students would be better off if they stayed in their elementary school and made no transitions until entering high school. They point to the benefits of small and personal elementary schools where students are well known and where adjustment problems can be minimized. The issue is not clear cut, however, because student learning and behavior depend on the design and conduct of activities for students and families that ease the transition to new schools, and even more on the excellence of the school programs after the transition is made.

REMEDICATION

Diversity is one of the key characteristics of early adolescents. Students differ in their skills, talents, and interests. These differences set up serious dilemmas for students and for school programs because of seemingly conflicting needs. For example, early adolescent students want to conform with their friends at the same time that they want to develop their own identity and uniqueness. These students also want to extend their independence at the same time that they need adult guidance. The students' simultaneous needs for conformity and uniqueness, for peer acceptance and self understanding, for independence and for guidance, and other conflicting needs have implications for how schools organize remedial instruction when students fall behind or need special help.

All schools have some students who fall behind or learn more slowly than other students. Over 98% of the principals report having at least one program to help students who fall behind. Over 60% reported pull-out programs in reading or English and over 50% had pull-out programs in math. Over 50% also reported that they organized "coaching" classes before or after school.

Large numbers of schools offered two other opportunities -- summer school (36%) and extra work or homework (44%) -- to help students catch up in their skills and requirements. About 20% used an "elective" period to provide an extra academic class to students who need more instruction in order to pass. Few (3%) ran Saturday classes. These averages suggest that principals are aware of the importance of remedial instruction in the middle grades. The schools offer an average of three different approaches to help students master needed skills.

The grade organization of the school is related to the types of remedial programs offered. Separate schools for early adolescents (6-8, 7-8, 7-9), especially in urban and suburban areas, organize summer schools more often than other schools to provide remedial instruction. Summer school would not be a popular option in areas where schools are not air-conditioned, where long bus rides are necessary, or where students must work in the summer to help their families. Separate schools for middle grades are also more likely than other schools to assign students who need extra work on basic skills to an extra class period during the time other students are assigned to other electives. This option reflects the flexibility in grouping that occurs when students change classes and classmates. In order for these extra remedial classes to occur, students' schedules must include elective or exploratory periods. Such periods provide an unobtrusive way for early adolescents to get extra help when other students regroup for other electives, thereby reducing the stigma often associated with getting remedial instruction in "pull-out" activities (Mac Iver and Epstein, 1990).

Although many schools have pull-out programs and coaching classes, K-12 schools support these programs even more than do other schools. Coaching classes occur more in urban and suburban schools than in rural schools, where before-school and after-school time may be limited by transportation requirements and restrictions.

About one fourth of the principals commented on other types of remedial programs that they have in their schools. These include in-class alternative instruction; alternative schools; in-school tutoring by retired persons, high school students, or parents; special classes and desig-

nated programs with extremely low class size; and others. The programs vary in whether they are mandatory or voluntary, and whether they are conducted in school or in other settings, during the school day or on non-school time, for long or short periods and durations, with professional staff, paid non-professionals, or volunteers. Some schools balance after-school activities with a mix of remedial and enrichment activities, including tutoring, drama, art, music, computers, photography, and other activities (Dorman, 1984). All of these variables need careful study to determine the effects and effectiveness of different remedial instruction programs.

Offering remedial programs does not necessarily mean that they are organized effectively or used by the students who need them. We need to know which types or combinations of remedial approaches do the most good for the most students. Early analyses of these data suggest that schools that have more types of remedial instruction have the highest rates of student retention in grade. Presumably, the remedial activities are in response to students' needs for additional instruction. In schools that use the "extra period" approach to providing remedial services, principals predict lower dropout rates for their students in the future (Mac Iver and Epstein, 1990). No other remedial instruction approaches are associated with lower predicted dropout rates. We will be studying which remedial instruction approaches in the middle grades are related to the other practices that help schools deal with the diversity of early adolescents. (Also see Epstein and Salinas, 1990 on promising programs for raising the quality of education of educationally disadvantaged students in the middle grades.)

REPORT CARD ENTRIES

Just about all schools -- 99% -- give students letter or number grades for academic performance in each subject, but grades for progress and effort are rare. Only about one quarter (26%) of the schools that contain grade 7 give separate grades for effort in each subject. Fewer (18%) recognize student improvement with progress grades in each subject. Some students in all schools may find it impossible ever to earn "A"s or "B"s if performance is judged only in relative terms.

For such students, effort and progress grades could provide important official recognition of good work completed, regardless of the students' relative rankings.

About half the schools grade students on conduct in each subject, and half give written comments. Computer-generated comments are used by about 30% of the schools. Good grades in conduct and positive comments may motivate students to work harder, and let students know that teachers are paying attention to them. Poor grades in conduct and negative comments may not be very motivating, but may help teachers explain poor performance and establish standards for better behavior and study habits in the next grading period.

The grade span of a school is related to the types of marks that are given on report cards.

The following patterns emerge:

- o Middle schools (6-8) and grade 7-8 schools give the greatest number of different types of information on their report cards (3.2 different entries, on average), whereas middle-high (7-12) combination schools give the fewest (2.4 different entries, on average). The most common entries are grades for performance, conduct, and written or computer-generated comments.
- o Grades for effort are most common in schools that end with middle grades -- particularly in elementary-middle (K-8) schools and middle schools (6-8), and least common in schools that contain high school grades, particularly in 7-9 and 7-12 schools.
- o K-8 and K-12 schools are most likely to provide students with handwritten comments. Larger junior high (7-9) schools are most likely to provide students with computer-generated comments on their report cards.
- o K-12 schools are notable for their relatively high use of grades for progress (in 34% of the schools with that grade span). In part, this may be due to relative ease of monitoring the progress of a small number of students at each grade level. Junior high (7-9) schools, which tend to be larger schools, use grades for progress significantly less than other grade organizations.

The urbanicity of schools also is associated with the types of information that appear on report cards. For example, urban and suburban schools are somewhat more likely to include conduct grades in each subject and much more likely to use computer-generated comments. Rural schools -- which tend to be smaller schools -- are more likely to use written comments. This may be related to the prevalence of small K-12 schools in rural areas, and to the more personalized character of smaller schools, or may reflect the existence of fewer computers for administrative purposes in rural schools.

Some principals noted that they use other kinds of grades and messages on their report cards. These include attendance, absence, and lateness by subject; ratings of students' social development, work habits, and citizenship; indicators of the students' levels of learning, reading level, or below-or-above grade level status; and requests for parent conferences. One school devised progress reports that are written by the students and teachers together. Another described a practice of adding handwritten comments to clarify computer-generated checklists. The use of various grades and messages may be linked to the school's goals. It may be, for example, that when schools give grades for citizenship, they rank that as a higher goal for all students. (See section on GOALS.)

As students enter the middle grades, their report card grades tend to go down, even as their overall competencies and knowledge go up (Petersen, 1986). Many students who received top grades in elementary schools receive just average grades when they are compared to a new population of students from other elementary schools. Or, those who were average elementary students may be rated below average in the middle grades. These changing patterns of students' report card grades make clear the need for middle grades schools to use many different evaluations to motivate students who are trying hard but who cannot receive top grades (or sometimes even passing grades) if performance is judged only in relative terms. Effort and progress grades or teachers' personal comments can provide many students with important official recognition that they have completed good work. Such recognition may encourage students to work hard and to maintain or increase their self-concept as learners even if they are not the best students in the class.

Other analyses of these data show that, regardless of the grade span of the school, principals rate their programs for early adolescents as stronger overall if they use progress grades or effort grades on their report cards. Also, progress grades or handwritten comments are associated with principals' estimates of fewer dropouts before high school, particularly males (Mac Iver and Epstein, 1990). The more responsive report card entries may have special meaning for boys,

who tend to get lower grades than girls on average, and thus may need more motivating marks to help prevent school leaving. We need to know much more about how alternative forms of evaluations on report cards (such as No Fail systems that allow students to work without severe restrictions on time), and other types of reports and recognitions affect students' work and progress. These practices may affect other student attitudes and behaviors, including promotion and retention rates.

Virtually every middle grades school in the country uses report cards, but relatively few have designed the form and content of the cards to be responsive to the needs of early adolescents for strong support and recognition of their effort and progress in learning.

TEACHER CERTIFICATION

Teachers in the middle grades vary in their training and certification more than teachers at any other level of schooling. Some teachers are trained as secondary teachers as subject specialists (often for grades 7-12 or the equivalent). Others are trained as elementary teachers (often for grades K-8, 1-6, or the equivalent). Some teachers with K-12 certification teach in the middle grades.

Increasingly, teachers are being given options to obtain separate certification for the middle grades (e.g, for grades 5-8 or 6-8), or "endorsements" that add special competencies to enable teachers to work with early adolescents in particular. A survey of state policies found that twenty-two states have special certification or endorsements for teachers in the middle grades (Children's Defense Fund, 1988). At least six other states are planning or considering these options.

Teacher training differs by the grade organization of the school, on average. Middle schools tend to have a more "balanced portfolio" of teachers -- some trained as elementary (44%) and some as secondary (53%) teachers. Elementary-middle combination schools (K-8) are more heavily staffed by elementary-trained teachers (73%), with few secondary-certified (16%). Tra-

ditional junior high schools are weighted in the other direction with mainly secondary-trained teachers (90%) and few elementary teachers (14%).

Middle schools (6-8) have more elementary-trained teachers than all schools except elementary-middle (K-8) schools. Schools that include elementary grades (K-8, K-12) have fewer secondary-trained teachers than middle schools. Other schools that contain high school grades (7-9, 7-12) have more secondary-trained teachers than middle schools. The typical middle school has a higher percentage of teachers who are specifically certified for the middle grades than do schools with other grade spans.

Principals listed other ways that their teachers are certified, including K-12 and 1-12 certificates, special education, vocational education, and other special subjects. Many schools have teachers who have more than one certificate or endorsement.

The different training schedules may leave gaps in teachers' skills needed in the middle grades. For example, secondary-trained teachers may need additional education on early adolescence and instructional approaches for middle grades schools that differ from those used in high schools. Elementary-trained teachers may need additional education in specific subjects so that they become more expert in the major subject(s) they will teach.

Teachers' training and certification may have important implications for the courses offered, instructional approaches, scheduling and grouping procedures, and other practices that guide the instruction of early adolescents in the different grade organizations. For example, teachers who are elementary-certified may be more "student-centered" than teachers who have secondary subject matter certification, because elementary teacher training puts more emphasis on the teacher's responsibility to understand the needs and interests of individual students than does secondary teacher training. On the other hand, secondary subject-matter certified teachers may provide higher quality instruction in their areas of expertise because of their more specialized subject matter training (McPartland, 1987, 1990; McPartland and Wu, 1988). Whatever their certifica-

tion, all teachers may benefit from new research and new practices for more effective middle grades programs. We will be studying whether and how different mixes of teacher certification in schools of different grade organizations affect other practices and goals of schools.

TEACHER TALENTS

Teachers' training and certification may be related to their special talents and approaches to teaching the middle grades. We asked principals which attributes of 7th grade English teachers they believe are most important. The top three choices -- command of subject area (76%), ability to increase student motivation (62%), and understanding of early adolescence (52%) -- indicate that most principals in schools that contain grade 7 are seeking teachers who balance their emphasis on subject matter with attention to the special needs of early adolescents and their attitudes toward school and learning. Principals placed less importance on teachers' abilities to prepare students for high school (13%), help students make a transition to the middle grades (26%), or teach reading (28%).

Principals' assessments of important talents for their teachers vary by grade organization of the school. In schools that are dedicated to early adolescents -- middle schools, 7-8 schools, and junior high schools -- principals place more emphasis on understanding early adolescence, increasing student motivation, and making successful transitions to the middle grades than did principals in other schools. They place less emphasis on English teachers' abilities to teach reading and study skills. In part, this may be because reading teachers, media specialists, or social studies teachers are responsible for these subjects in some middle grades schools.

Principals in K-8 schools put more emphasis on 7th grade English teachers having a command of their subject, perhaps because many presently in K-8 schools are elementary teachers with less emphasis on subject specialization. Principals in K-8 schools, more than other principals, emphasize English teachers' ability to teach reading. Reading is taught to more students in

K-8 schools than in other schools. (See section on CURRICULUM.) K-8 principals are far less likely to seek teachers with skills in helping students make transitions to the middle grades, mainly because students in K-8 schools remain in the same building.

Principals' attention to teachers' talents also vary by the urbanicity of the schools. Principals in urban settings tend to emphasize the need for teachers with subject expertise and ability to motivate students; suburban principals are more apt to stress teachers' abilities to understand early adolescence and help students make successful transitions to the middle grades; and rural principals, more than others, say they look for English teachers in grade 7 who have the ability to teach reading and study skills. It may be that these emphases reflect skills that the principals consider important and that are underrepresented in their present teaching staffs. For example, many urban schools presently have serious problems motivating students and increasing the students' mastery of subject matter. Many suburban schools are currently staffed by teachers who are trained as secondary teachers and need to enhance their staffs' skills in understanding early adolescents. Many rural schools, especially K-12 or other combination schools, need teachers to provide students with reading and study skills in grade 7 to prepare them for the high school grades that often are in the same school. Or, principals may be thinking of their most talented teachers when they report the attributes they would seek in other teachers.

Other emphases also may reflect present strengths and weaknesses in school programs. For example, one of the more dramatic differences in these data is the greater emphasis of junior high (7-9) and 7-8 school principals on teachers' abilities to help students make the transition to the middle grades. The transition to the seventh grade for junior high has been shown to be a stressful one for some students (Simmons and Blyth, 1987), perhaps more stressful than the transition to the sixth grade for middle school. Principals in schools dedicated to the middle grades that start with grade 7 may be aware of the importance of better articulation practices, something more middle schools (6-8) are already conducting. (See section on ARTICULATION.) Other schools that start with grade 7 (e.g. combination middle-high 7-12 schools) may need to become

more aware of this important skill of teachers in the 7th grade. We will be studying whether principals' preferences for teachers with different talents is associated with different school goals, course offerings, and other program designs.

SUMMARY OF PRACTICES AND TRENDS

We asked the principals in schools that contain grade 7 to report on their past, present, and future use of 22 often recommended practices for the middle grades, including curriculum, instruction, school and classroom organization, staff development, parent involvement, and others. This section summarizes the most and least used practices and the projected use of the 22 practices over the next few years.

Present practices

Practices that are presently used in more than 50% of the schools that contain grade 7 include:

	Most Used Practices (Over 50%)
Common academic curriculum	89%
Conference of parent with all of child's teachers each year	80%
Teachers frequently send information and ideas to parents on how to help their children with homework and skills	67%
Extra-curricular activities or activity periods for all students	65%
PTA or PTO with elected officers and active committees	61%
Staff development in early adolescent characteristics and specific teaching strategies for middle grades	51%

Practices that are presently used in fewer than 35% of the schools with grade 7 include:

	Least Used Practices (Under 35%)
Schools-within-a-school with their own administrative staffs	6%
Flexible time schedules such that today's class periods may be different in length from tomorrow's	19%
Classes organized for cooperative learning where students earn group rewards for mastery of academic skills	20%
Minimum competency tests for promotion to high school	23%
Common planning period for members of departments	25%
Common planning period for members of interdisciplinary teams	28%
An eight-period day	30%
Exploratory or mini-courses for all students in all grades	34%

Other practices, used by between 35% and 50% of the principals, include workshops for parents on school programs and early adolescence; departments organized with their own chairpersons or heads; students assigned to the same homeroom or advisory teacher for all years in the middle school; parents formally recruited and trained to work as school volunteers; and students from more than one grade level assigned together to the same academic classes.

The practices listed above that presently are used by most educators are important, but these practices are mainly unassociated with each other or with the development of a coherent middle school program.

Some of the patterns of present use raise new questions. For example, most schools say that they have a common academic curriculum for all students. But if middle grades students are highly diverse with different skills and needs, schools have to find "uncommon" ways to help students build the skills they need in order to master a common curriculum (Carnegie Task Force

on the Education of Young Adolescents, 1989). Different skill sequences, different lengths of times for learning, different instructional approaches, a "social organization of remediation" (Epstein, 1988a), and other program features may be necessary for a successful common academic program.

As another example, previous studies show that the level of parent involvement in most middle grades schools is relatively low (Epstein and Dauber, 1988), so it is surprising that a relatively high percent of principals report that these activities are occurring at their schools (e.g., over 60% report that they frequently send information and ideas to parents on how to help at home). It may be that one teacher or a few teachers at a school conduct parent involvement practices once in a while with the families of some students, rather than all teachers at all grade levels with all families. The principals' reports may reflect whether the activities ever occur, not that the activities occur extensively by all teachers.

Similarly, most middle grades schools in the nation need to organize and improve staff development activities to assist teachers who are presently prepared to teach high school or elementary school but not the middle grades. It is encouraging that about half of the principals report an emphasis on staff development, but it is unlikely that attention to the topic is adequate in most middle grades schools.

Few schools provide common planning time for teachers on teams or in departments. Many educators, especially middle grades educators, are concerned about the isolation of teachers from their colleagues and the fragmentation of subjects taught. But most schools presently do not give teachers common planning time so they can work together. (See the discussion on common planning time in the section on INTERDISCIPLINARY TEAMS; also, Mac Iver, 1990; Mac Iver and Epstein, 1990.)

Future practices

The patterns of projected use are very much affected by the grade span of the school, as indicated by the next few examples:

Scheduling: Flexible schedules and 8-period days.

- o Principals of **schools dedicated to early adolescents (6-8,7-8,7-9)** predict that they will increasingly adopt flexible scheduling. This system permits class periods to differ from one day to the next in order to accommodate students' needs and varying instructional activities. The use of flexible scheduling could increase from an average of about 15% of the schools presently using this practice to about 35% in the next three years. Flexible scheduling is presently most common in K-8 schools (over 50%) where teachers may have more control over the way they schedule time in self-contained classes or where they may be able to revise time schedules with one or two other teachers.
- o Principals of **schools dedicated to early adolescents** also are more likely than principals in combination schools to consider implementing an eight-period day in order to provide more flexibility in their schedules. In the next three years up to 40% of these schools expect to adopt this practice.

Curriculum and Instruction: Exploratory or mini-courses, independent study, cooperative learning, mixed-grade groups, and extra-curricular activities.

- o Principals of **7-12 middle-high schools** anticipate a big change in their use of exploratory and mini-courses from about 35% at present to up to 80% in three years. In schools for early adolescents, principals also predict increasing their use of this practice from about 45% at present to about 65% of the schools.
- o More principals in **7-8 schools** and **middle-high (7-12) combination schools** than in other schools plan to add independent projects in all subjects to their students' programs.
- o In **6-8, 7-8, and 7-9 schools**, many principals plan to add cooperative learning to their program over the next three years, almost doubling the use of this approach from about 30% to over 50% of these schools.
- o More principals in **K-12 schools** foresee greater use of mixed-grade grouping over the next three years.

Practices for More Responsive Education:

Interdisciplinary teams of teachers, common planning time, homeroom and advisory periods, and parent involvement.

- o All **grade organizations except K-8 schools** expect to increase their use of interdisciplinary teams of teachers over the next three years. In middle schools (6-8), over 70% of the principals expect this to be part of their program within that period, in contrast to fewer than 20% of K-8 principals. The greatest change in the use of interdiscipli-

nary teaming is projected by principals in 7-9 junior high schools with over 25% of the respondents from that grade organization reporting plans to add teams of teachers to their program. Concurrently, junior high school principals expect to decrease their use of departments in the next three years.

- o As many as 60% of the principals in **6-8 middle schools and 7-8 schools** plan to have common planning periods for interdisciplinary teams in their programs in three years, compared to from 10% to 40% of other grade organizations.
- o Principals in **schools dedicated to early adolescents** indicate that the practice of assigning students to the same homeroom or advisory teacher for all of the years in the middle grades will increase from about 15% to 35%.
- o All **grade organizations except K-8 and K-12** expect to increase five major types of school practices to involve families in their children's education. However, some principals in schools of all grade spans are reticent to implement parent involvement practices in the middle grades. Over 50% of the principals report that they do not plan to add parent volunteers to their program. By contrast, few principals (less than 10%) in schools of any grade span, oppose parent-teacher conferences, something that all teachers conduct, even though not all parents are yet included in such conferences.

Rejected practices

Many principals will be adopting the very practices that others say are of no use. In addition to reporting practices that they think they will use in the next three years, the principals reported which of the 22 practices they will not use in that time span. Table 5 compares the per cent of principals in 6-8 middle schools and K-8 schools who say that they have no use for particular practices. These two grade organizations show the most dramatic differences.

Table 5

	NO USE BY MIDDLE SCHOOLS (6-8)	NO USE BY COMPARISON
Interdisciplinary teams of teachers	19%	82% (K-8 schools)
Exploratory or mini-courses	20%	86% (K-8 schools)
Parent involvement of different types (average)	18%	62% (K-8 schools)
Staff development in early adolescence and middle grades teaching strategies	5%	74% (K-8 schools)
Extra curricular activities	11%	76% (K-8 schools)

Less dramatic differences across grade spans exist for the practices that even most middle school principals reject. For example, most middle school principals report that they have no use

for the practices of assigning students to the same homeroom teacher for more than one year (62%), grouping students across-grade levels for instruction (58%), organizing an eight-period day (57%), or establishing school-within-a-school organizations that have their own separate administrative staffs (87%). Over the next three years, large numbers of principals in all grade organizations are likely to continue to reject the use of these practices. Of course, some opinions may change as principals increase their understanding about the organization and implementation of these practices and as new and better information becomes available about the benefits of particular practices.

The principals' plans to use or to reject recommended practices vary by grade span.

Summary of trends

What are the "signature" practices for middle grades education? Which practices are at the heart of middle grades programs and sustain their development? An overall increase of 10% or more is anticipated in the following practices over the next three years in schools that contain grade 7:

- interdisciplinary teams of teachers
- common planning time for teams of teachers
- flexible scheduling
- students assigned to the same homeroom or advisory teacher for
all years in the middle grades
- cooperative learning as an instructional approach
- exploratory and mini-courses
- parent involvement in workshops on early adolescence
- parents as volunteers in the middle grades

These may be viewed as "key practices" in the middle grades in that they are more likely than other practices to be adopted in more schools. Even these popular practices will not be

adopted at the same rate by all grade organizations. Principals in schools dedicated to early adolescents are more likely to add these (and other) practices to their programs.

Overall, principals of K-8 schools are the least likely of all principals to use or to plan to use many practices that are commonly recommended for middle school education. This may be, in part, because the small grade level enrollments of K-8 schools make it impractical or impossible to conduct the same types of programs in the same forms as in the larger 6-8 middle schools. Thus, in K-8 schools, interdisciplinary teaming, common planning time, and exploratory or mini-courses may not be feasible in their typical forms, although variations are possible. Principals and teachers may not believe they need staff development in early adolescence or responsive instructional approaches, because most were trained as elementary teachers. These teachers, however, may benefit from professional development on new middle grades curricula and instructional approaches (Epstein, Lockhard, and Dauber, 1989). Principals may not recognize parents' needs for information and involvement with early adolescents if the K-8 organization emphasizes parent involvement in the early grades.

Or, K-8 schools may purposely reject middle grades practices in order to maintain their elementary school environment and character. However, in some ways, K-8 schools may be unresponsive to the changing needs of their students as they enter early adolescence. Whatever the reasons, K-8 and K-12 schools presently offer and plan to continue very different programs for middle grades students from other schools that serve seventh graders.

The data show clearly that in present practice there is no commonly agreed upon "best" or "essential" practices for middle grades education in this country. Most of the 22 practices are not part of most programs in schools that serve early adolescent students.

Over 50% of the principals say that they have no use for 12 of the 22 practices. About one third of the principals who returned questionnaires by mail reported that they had tried and dropped some of the recommended practices during the past three years. The principals' respon-

ses suggest that most middle grades schools will not adopt many practices that are suggested as important for early adolescents.

There is evidence, however, of general movement toward more responsive practices. Over 70% of the principals who returned questionnaires by mail indicated that in the next three years they are likely to add at least one of the 22 practices that they are not presently using.

It is quite clear that developing an effective middle grades program is a fluid process.

OVERALL EVALUATION OF PROGRAMS

Principals evaluated their middle grades program overall by judging how well their present practices matched their ideal program. On a scale of 1 to 4 (4=Excellent, 3=Good, 2=Fair, 1=Weak), most principals indicated that they had "Good" programs overall (Mean = 2.92), with "basic practices in place, minor changes needed -- a solid program."

Among rural schools, K-12 principals rated their programs as higher (M=3.48) than principals in other grade organizations. Principals of rural junior high (7-9) schools gave their schools the lowest ratings overall (M=2.56). Among suburban schools, the most positive ratings were given by principals in middle schools (M=3.03) and the lowest ratings by principals in middle-high (7-12) combination schools (M=2.62). Among urban schools the highest ratings were from principals of middle schools (M=3.00) and the lowest from junior high schools (M=2.65).

Principals of suburban and urban middle schools rated their programs higher, overall, than did principals in other schools. Principals of 7-9 junior high and 7-12 middle-high schools rated their programs lower, overall, than did other principals. Junior high schools in urban and rural areas, middle-high schools in suburban and rural areas, and 7-8 schools in rural areas suffer by comparison to other grade organizations and locations.

Although it is natural to praise schools that are "excellent or exemplary," the principals' evaluations of their programs cannot be used as reliable or comparative judgments. Those who rate the school as "Fair" and who described their program as "developing and changing" may be improving their schools in more exciting ways than other schools.

Nevertheless, principals' ratings help to identify which practices at one point in time are related to stronger programs. Seven of the 22 often recommended practices were significant predictors of more positive ratings of middle grades programs. The single strongest predictor of higher ratings was the use of common planning periods for members of interdisciplinary teams. Other significant predictors of high ratings of programs were flexible time schedules, common planning periods for departments, eight-period days, extra curricular activities or activity periods for all students, and cooperative learning classes where students earn group rewards for mastery of academic skills. These form another list of what may be key or "signature" practices for the middle grades.

The features that contribute to higher ratings of program quality involve large investments from the schools. Such practices alter the way teachers work together, the time allotted for student learning, the way students work together, and the balance between academic classes and nonacademic activities. Principals rate their programs higher if they have already made these relatively difficult changes in scheduling, instruction, and attention to the diverse skills, talents, and needs of students.

CONCLUSIONS

Which grade span is best for educating early adolescents? How big should a middle grades school be? Are grade span and size the important issues for middle grades reform, or are these topics distracting educators from more important and more difficult issues? With the information available at this time, no one can say unequivocally that one grade span or program is "best" for all middle grades schools in the U.S.

A recent survey conducted by ASCD (Cawelti, 1988) concluded that middle schools (6-8) are more likely than other grade organizations to create programs that feature more practices commonly advocated for education of early adolescents. The Hopkins survey, with a more representative sample and a more extensive base of information on many of the suggested components of middle grades education, provides a more complete and perhaps more complex picture of the schools in the U. S. in 1988 and the issues underlying middle grades reform.

1. Most schools that contain grade 7 have not yet developed educational programs based on recommended practices for the middle grades. Although principals expect to increase the use of some of these practices over the next three years, most schools have a long way to go to develop programs that are genuinely responsive to the characteristics of early adolescents.

If school goals represent the "outcomes" that schools want for their students, then educators in all middle grades schools need to take a hard look at the goals that they presently rank low. Many of the presently low-priority goals are believed to be important for early adolescent development, such as higher level thinking skills, positive human relations and multicultural education, and citizenship and community service.

2. Some practices are more prominent in certain types of middle grades schools than in others. Schools of different grade spans offer different programs, set different goals, evaluate students on different criteria, and plan differently for the future. In some ways, then, grade span makes a real difference in the education of early adolescents.

Overall, middle schools and 7-8 schools use more of the practices that are recommended for responsive middle grades education than other grade organizations. Principals in these schools, particularly in suburban and urban settings, give their programs higher ratings overall. By contrast, junior high schools and middle-high combination schools use fewer responsive practices than other grade organizations. Principals in these schools give lower ratings to the overall quality of their programs for early adolescents. For example, middle-high schools offer students

fewer opportunities for remedial instruction and fewer activities to ease transitions to the middle grades than do other types of middle grades schools. Junior high (7-9) schools are less likely than other middle grade organizations to use comprehensive advisory group periods or responsive report card procedures. K-8, K-12, and junior high schools are weaker than 6-8 middle schools, 7-8 schools, and 7-12 schools in their organization of and commitment to interdisciplinary teaming. K-8 schools are stronger in their emphasis on drill and practice than other middle grades schools. And, there are clear differences in course offerings and instructional approaches, on average, in schools with different grade spans, as described in earlier sections.

3. Regardless of grade span, good practices make stronger programs. Practices vary within categories of schools, and some schools with different grade organizations implement similar programs. Thus, some middle schools operate like junior high schools and vice versa; some K-8 schools have 7-8 schools-within-the-school that operate like effective 6-8 middle schools or 7-8 schools.

Regardless of grade span, principals rate their programs higher overall and expect students to have fewer problems when their schools emphasize practices that support the social, personal, and academic development of early adolescents. For example, according to the principals:

Well-implemented group advisory programs reduce the number of students expected to drop out of school before graduating from high school.

Interdisciplinary teams with leaders, sufficient common planning time, and use of the planning time for team coordination increase benefits for teachers and students, and improve the overall quality of middle grades programs.

Well-implemented articulation practices to ease the transition of students from elementary to middle grades schools reduce the number of students who are retained to repeat the grade of transition.

Particular approaches to remedial instruction -- i.e., extra class periods during the school day -- may benefit middle grades students' learning and reduce the number of students expected to drop out of high school.

Schools that set goals for higher level thinking skills for all students tend to use more active learning instruction to produce those skills.

Other effects of specific practices need to be documented, but the evidence is growing that shows that regardless of grade span, strong implementations yield more significant benefits than weak or incomplete efforts.

In some important ways, then, grade span makes no difference in the education of early adolescents. Rather, what happens in a school or classroom is more important than the name on the school door or the size or shape of the building. The hard work of developing excellent programs is accomplished not by changing grade spans or constructing smaller buildings, but by attending to practices that are responsive to the needs of early adolescents.

4. There is much more to be learned. In order to provide useful information to educators who must make tough decisions about middle grades practices for the early adolescents who attend their schools, we need new data on how student learning, attitudes, and behaviors are influenced by different middle grades practices in schools of different grade spans.

Educators can play a major role, along with researchers, in developing new knowledge about middle grades practices and effects. All schools and districts can conduct simple but legitimate evaluations of new practices that they implement. Information from many local evaluations could accumulate to help other schools develop more challenging and responsive programs for early adolescents.

In research, the upcoming National Education Longitudinal Study (NELS: 88) of eighth-grade schools, students, teachers, and parents sponsored by the National Center for Educational Statistics, and other data collected by the Hopkins Center and by others expressly to focus on the importance of recommended practices for the middle grades, will help advance our knowledge on these crucial issues.

REFERENCES

- Alexander, W. M. & George, P. S. (1981). The exemplary middle school. New York: Holt, Rinehart, and Winston.
- Alexander, W.M. & McEwen, C.K. (1989) Schools in the middle: Status and progress. Columbus, OH: National Middle School Association.
- Becker, H. J. (1990). Curriculum and instruction in middle grade schools. Phi Delta Kappan, 71: 450-457.
- Becker, H. J. (1989). Education in the middle grades: Curriculum and classroom instructional practices. Paper presented at the annual meeting of the American Educational Research Association, San Francisco.
- Becker, H. J. (1987). Addressing the needs of different groups of early adolescents: Effects of varying school and classroom organizational practices on students from different social backgrounds and abilities. (CREMS Report 16). Baltimore, MD: Center for Research on Elementary and Middle Schools, The Johns Hopkins University.
- California State Department of Education. (1987). Caught in the middle: Educational reform for young adolescents in California public schools. Sacramento: California State Department of Education.
- Braddock, J. H. (1990). Tracking in the middle grades: National patterns of grouping for instruction. Phi Delta Kappan, 71: 445-449.
- Carnegie Task Force on the Education of Young Adolescents. (1989). Turning points: Preparing American youth for the 21st century. New York: Carnegie Council on Adolescent Development of the Carnegie Corporation.
- Cawelti, G. (1988). Middle schools: A better match with early adolescent needs, ASCD survey finds. ASCD Curriculum Update, (November).
- Children's Defense Fund. (1988). Making the middle grades work. Washington, D. C.: CDF.
- Dorman, G. (1984). Middle Grades Assessment Program. Carrboro NC: Center for Early Adolescence, University of North Carolina -- Chapel Hill.

- Eccles, J. S. & Midgeley, C. (1989). Stage environment fit: Developmentally appropriate classrooms for early adolescents. In R. E. Ames & C. Ames (Eds.), *Research on motivation in education* (Vol.3), New York: Academic Press.
- Eichhorn, D. H. (1966). The middle school. New York: Center for Research in Education, Inc.
- Epstein, J. L. (1990a). The middle grades: Is grade span the important issue? Educational Horizons, 68, (2):88-94.
- Epstein, J. L. (1990b) What matters in the middle grades -- grade span or practices? Phi Delta Kappan, 71: 438-444.
- Epstein, J. L. (1988a). Effective schools or effective students: Dealing with diversity. In R. Haskins & D. MacRae (Eds.), Policies for America's Public Schools. Norwood, NJ: Ablex.
- Epstein, J. L. (1988b). Schools in the center: School, family, peer, and community connections for more effective middle grades schools and students. Paper presented to the Carnegie Task Force on the Education of Early Adolescents. Baltimore: The Center for Research on Elementary and Middle Schools.
- Epstein, J. L. (1983). Longitudinal effects of person-family-school interactions on student outcomes. In A. Kerckhoff (Ed.) Research in sociology of education and socialization. Vol.4. Greenwich CT: JAI Press.
- Epstein, J. L. (1981). Patterns of classroom participation, student attitudes, and achievement. In J. Epstein (Ed.), The Quality of School Life. Lexington MA: Lexington Books.
- Epstein, J. L. & Dauber, S. L. (1988). Teacher attitudes and practices of parent involvement in inner-city elementary and middle schools. CREMS Report 33. Baltimore: The Johns Hopkins University Center for Research on Elementary and Middle Schools.
- Epstein, J. L., Lockhard, B. L., & Dauber, S. L. (1989). Staff development in the middle grades. CREMS Report 38. Baltimore: The Johns Hopkins University Center for Research on Elementary and Middle Schools.
- Epstein, J. L. & McPartland, J. M. (1979) Authority structures. In H. Walberg (Ed.), Educational environments and effects. Berkeley: McCutcheon.

- Epstein, J. L. & Salinas, K. C. (1990). Promising Programs in Academic Subjects in the Middle Grades. Paper prepared for the Edna McConnell Clark Foundation. Baltimore: The Johns Hopkins University Center for Research on Effective Students for Disadvantaged Students.
- George, P. S. (1977). The middle school: A look ahead. Columbus, Ohio: The National Middle School Association.
- George, P. S. & Oldaker, L. L. (Dec 1985/Jan 1986). A national survey of middle school effectiveness. Educational Leadership, 79-85.
- Goodlad, J. I. (1983). A place called school. NY: McGraw-Hill Book Company.
- Hill, J. P. (1980). Understanding early adolescence: A framework. Carboro NC: Center for Early Adolescence, University of North Carolina -- Chapel Hill.
- Johnston, J. H. & Markle, G. C. (1986). What research says to the middle level practitioner. Columbus, OH: National Middle School Association.
- Kagan, J. & Coles, R. (Eds) (1972). Twelve to sixteen: Early adolescence. New York: W. W. Norton.
- Lipsitz, J. (1980). Growing up forgotten: A review of research and programs concerning early adolescence. New Brunswick NJ: Transaction Books.
- Lipsitz, J. (1984). Successful schools for young adolescents. New Brunswick: Transaction Books.
- Lounsbury, J. H. & Vars, G. (1978). A curriculum for the middle school years. New York: Harper and Row.
- Lounsbury, J. H. (1984)., Perspectives: Middle school education, 1964-1984. Columbus OH: National Middle School Association.
- Mac Iver, D. J. (1990). Meeting the needs of young adolescents: Advisory groups, interdisciplinary teams of teachers and school transition programs, Phi Delta Kappan, 71: 458-464.
- Mac Iver, D. J. & Epstein, J. L. (1990). Education in the middle grades: Teacher teams, advisory groups, remedial instruction, school transitions, and other components for responsive education. CREMS Report 46. The Johns Hopkins University Center for Research on Elementary and Middle Schools.

- Mac Iver, D. J. & Reuman, D. A. (1988). Decision making in the classroom and early adolescents' valuing of mathematics. Paper presented at the annual meeting of the American Educational Research Association, New Orleans.
- Maryland Task Force on the Middle Learning Years. (1989). What matters in the middle grades? Baltimore: Maryland State Department of Education.
- McPartland, J. M. (1990). Staffing decisions in the middle grades to balance quality instruction and teacher-student relations. Phi Delta Kappan, 71: 465-469.
- McPartland, J. M. (1987). Balancing high-quality subject-matter instruction with positive teacher-student relations in the middle grades. (CREMS Report 15). Baltimore, MD: Center for Research on Elementary and Middle Schools, The Johns Hopkins University.
- McPartland, J. M., Coldiron, J. R., & Braddock, J. H. (1987). A description of school structures and classroom practices in elementary, middle, and secondary schools. (CREMS Report 14). Baltimore, MD: Center for Research on Elementary and Middle Schools, The Johns Hopkins University.
- McPartland, J. M. & Wu, S. (1988). Instructional practices in the middle grades: National variations and effects. (CREMS Report 25). Baltimore, MD: Center for Research on Elementary and Middle Schools, The Johns Hopkins University.
- Meier, D. (1989). Presentation at Education Writer's Association Conference. Racine WI: Wingspread.
- Merenbloom, E.Y. (1986). The team process in the middle school: A Handbook for teachers. (Second Edition). Columbus, OH: National Middle School Association.
- Offer, D., Ostrov, E. Howard, K. I., & Atkinson, R. (1988). Teenage world: Adolescent self-image in ten countries. New York: Plenum.
- Petersen, A. C. (1988). Adolescent development. Annual review of psychology, 39, 583-607.
- Petersen, A. C. (1986). Early adolescence: A critical developmental transition? Invited presentation for Division E at the annual meeting of the American Educational Research Association.

- Simmons, R. G., Blyth, D. A., Van Cleave, E. G., & Bush, D. M.. (1979). Entry into early adolescence: The impact of school structure, puberty, and early dating on self-esteem, American Sociological Review, 44, 948-967.
- Simmons, R. G. & Blyth, D. A. (1987). Moving into adolescence: The impact of pubertal change and school context. Hawthorne, NY: Aldine de Gruyter.
- Sizer, T. (1984). Horace's Compromise. Boston: Houghton Mifflin.
- Wiles, J. & Bondi, J. (1986). The essential middle school. Tampa: Wiles Bondi and Associates.

EDUCATION IN THE MIDDLE GRADES: A National Survey of Practices and Trends

March 22, 1988

Dear Principal:

Last week, we wrote to request your participation in the National Survey of Middle Grades Practices and Trends that we are conducting at The Johns Hopkins University Center for Research on Elementary and Middle Schools (CREMS). As indicated in that letter, your school was selected at random from all public schools in the U.S. that include Grade 7.

To participate in the national survey, please complete the booklet and return it in the enclosed postage-paid envelope.

Schools in different districts and locations have different ideas about how to conduct education in the middle grades. Your participation is needed to assure a complete picture of the diversity of educational approaches and practices in schools today. It is important that you respond to each question as objectively as possible. There are no "right" answers. Select the responses that most closely reflect the current conditions in your school.

Joining us in requesting your cooperation in this survey is the National Association of Secondary School Principals (NAESP) and the National Association of Elementary School Principals (NAESP). These organizations recognize the need for up-to-date information on middle level education, and will help disseminate the results to educators in the middle grades.

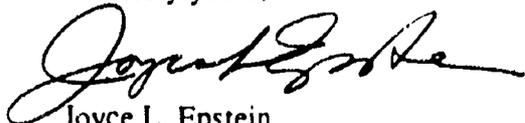
We want to assure you that your responses will remain confidential. They will be grouped with those of about 2500 other principals, and no names of people or schools will ever be used. The attached label permits us to send reminders, if needed, and reports on the results of this study to those who participate, without putting names on the booklets.

To show our appreciation, we will send to you, on receipt of your booklet, a summary of our 1986 state-wide survey of middle grades principals and their practices, conducted in cooperation with the Pennsylvania Department of Education. The earlier study raised many interesting issues that need to be informed by national data in the present survey. We will also send to you a copy of the results of this study later in the year. We hope that you will find the survey and the reports helpful in your planning.

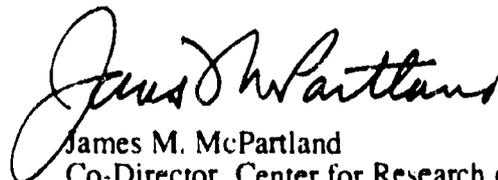
If the letter sent last week failed to reach you and you need more information before participating, you may call, collect, at 301-338-7570.

With your assistance, we will build a comprehensive, helpful base of information for understanding and improving education in the middle grades. Again, many thanks for your time and cooperation in this exchange of information.

Sincerely yours,



Joyce L. Epstein
Director, Effective Middle Grades Program



James M. McPartland
Co-Director, Center for Research on
Elementary and Middle Schools

ABOUT YOUR SCHOOL

Q-1 What are the **LOWEST** and **HIGHEST** grade levels in your school? (Circle **TWO** choices below.)

Pre-K K 1 2 3 4 5 6 7 8 9 10 11 12

Q-2 How many students are currently enrolled in your school?

NUMBER OF STUDENTS ENROLLED: _____

Q-3 What is the approximate average daily attendance in your school?

AVERAGE DAILY ATTENDANCE IN THIS SCHOOL IS (PERCENT): _____

Q-4 How many of the following people work at your school either full-time or part-time? (WRITE IN the NUMBER for each category. If **NONE** write "0").

- | | | |
|---|-----------------|-----------------|
| a) Classroom teachers | Full-time _____ | Part-time _____ |
| b) Administrators | Full-time _____ | Part-time _____ |
| c) Other professionals (resource teachers, counselors, media specialists, etc.) | Full-time _____ | Part-time _____ |

ORGANIZATION

The next few questions ask about staffing, scheduling, and grouping practices in grades 5 through 9 for the grades that are in your school. These questions are about the major academic subjects only -- ENGLISH or language arts, READING, MATHEMATICS, SOCIAL STUDIES, SCIENCE, and FOREIGN LANGUAGE. For Questions 5-7, do NOT consider other subjects or special education classes.

Q-5 In the academic subjects -- English/language arts, reading, math, science, social studies, and foreign languages -- how many different teachers does the "typical student" have during an average week? (For each grade, circle one number or circle "No Grade.." if your school does not include that grade.)

The "TYPICAL STUDENT" in ...	Has How Many DIFFERENT Teachers?					
a) Grade 5	1	2	3	4	5+	No Grade 5
b) Grade 6	1	2	3	4	5+	No Grade 6
c) Grade 7	1	2	3	4	5+	No Grade 7
d) Grade 8	1	2	3	4	5+	No Grade 8
e) Grade 9	1	2	3	4	5+	No Grade 9

Q-6 Do students remain with the **SAME** group of classmates throughout the day for their academic subjects, or do they **CHANGE** classmates for 1 or 2 subjects (such as math and English), or do they **CHANGE** classmates for **MOST** subjects? (Circle one choice for each grade.)

Students in ...	How are the Students Grouped?			
a) Grade 5	Same classmates	Regrouped for 1 or 2	Change classmates for most	No Grade 5
b) Grade 6	Same classmates	Regrouped for 1 or 2	Change classmates for most	No Grade 6
c) Grade 7	Same classmates	Regrouped for 1 or 2	Change classmates for most	No Grade 7
d) Grade 8	Same classmates	Regrouped for 1 or 2	Change classmates for most	No Grade 8
e) Grade 9	Same classmates	Regrouped for 1 or 2	Change classmates for most	No Grade 9

Q-7 For which academic subjects are students assigned to homogeneous classes on the basis of similar abilities or achievement levels? (Circle all that apply in each grade at your school.)

Students in ...	Which Are Homogeneous Classes Based on Ability?							
a) Grade 5	None	ALL	Reading	English	Math	Science	Soc. Stud.	No Grade 5
b) Grade 6	None	ALL	Reading	English	Math	Science	Soc. Stud.	No Grade 6
c) Grade 7	None	ALL	Reading	English	Math	Science	Soc. Stud.	No Grade 7
d) Grade 8	None	ALL	Reading	English	Math	Science	Soc. Stud.	No Grade 8
e) Grade 9	None	ALL	Reading	English	Math	Science	Soc. Stud.	No Grade 9

GUIDANCE AND ADVISORY PERIODS

Q-8 How frequently do the following activities occur during a HOMEROOM or GROUP ADVISORY period in your school? Please circle one choice on each line that comes closest to your program.

If you DO NOT have these periods, write NONE here _____ and continue with question Q-11

How Often In Homeroom or Advisory Period?

a) Take attendance for school records	Daily	Weekly	Monthly	A few per year	Never
b) Distribute notices to bring home	Daily	Weekly	Monthly	A few per year	Never
c) Make daily announcements	Daily	Weekly	Monthly	A few per year	Never
d) Orient students to school programs and rules	Daily	Weekly	Monthly	A few per year	Never
e) Meet with individual students about problems	Daily	Weekly	Monthly	A few per year	Never
f) Give career information and guidance	Daily	Weekly	Monthly	A few per year	Never
g) Discuss academic problems or issues	Daily	Weekly	Monthly	A few per year	Never
h) Discuss personal or family problems	Daily	Weekly	Monthly	A few per year	Never
i) Discuss social relationships and peer groups	Daily	Weekly	Monthly	A few per year	Never
j) Discuss health issues, e.g. drug use prevention, family planning, etc.	Daily	Weekly	Monthly	A few per year	Never
k) Discuss moral or ethical issues and values	Daily	Weekly	Monthly	A few per year	Never
l) Discuss intergroup relations and multi-cultural issues	Daily	Weekly	Monthly	A few per year	Never
m) Develop student self confidence and leadership	Daily	Weekly	Monthly	A few per year	Never
n) Other (please describe)	Daily	Weekly	Monthly	A few per year	Never

Q-9 If your school has one or more periods set aside for some of the activities listed in Q-8, please FILL IN what these periods are called (e.g., homeroom, advisory, or other name) and report how often they are scheduled?

PERIOD(S) CALLED:	Periods Per Week?	Minutes Per Period?	Number of Students?
_____	_____ day(s) per week	_____ minutes per period	_____ students per class
_____	_____ day(s) per week	_____ minutes per period	_____ students per class

Q-10 About how many different students are assigned to each guidance counselor? (Give the guidance counselor-student ratio.)

If you have NO guidance counselors, write NONE here: _____ and continue with question Q-12

NUMBER OF STUDENTS PER COUNSELOR: _____

Q-11 How do guidance counselors in the middle grades divide their time? Please estimate the percent of time a guidance counselor is likely to spend on the following activities. The estimated % should add to 100%.

- a) Testing -- administering achievement, competency, career choice, or others % of time
 - b) Scheduling -- setting up class schedules, test schedules, individual changes, or others % of time
 - c) Group meetings -- discussing careers, academics, drug use, etc. with groups of students % of time
 - d) Individual counseling of students with problems % of time
 - e) Individual, routine meetings with each student at regular intervals % of time
 - f) Teacher team meetings -- participating as a member of an interdisciplinary team of teachers % of time
 - g) Other (describe) % of time
- TOTAL = 100%

Q-12 How well do your PRESENT practices match your IDEAL program for guidance, advice, and counseling of students in the middle grades? (Circle one choice.)

- EXCELLENT -- present practices fit students' needs exactly 1
- GOOD -- basic practices are in place, minor changes needed 2
- FAIR -- need to improve or add several practices 3
- WEAK -- need to design new practices, major changes needed 4

Q-13 What kinds of information are given on student report cards? (Circle all that apply.)

- LETTER or NUMBER grades for academic performance in each subject (A, B, C, D or 80, 85, 90, etc.) 1
- CONDUCT grade in each subject 2
- Grade in each subject for individual PROGRESS or growth (separate from performance) 3
- Grade in each subject for EFFORT (separate from performance grade) 4
- WRITTEN COMMENTS on individual strengths and weaknesses in each subject 5
- COMPUTER-generated COMMENTS on student strengths and weaknesses in each subject 6
- Other (describe) 7

TEACHER CERTIFICATION AND TALENTS

Q-14 Middle schools often have some mix of teachers trained and certified for the elementary grades or secondary grades or middle grades. How many of the teachers in your school are trained and certified (including provisionally certified teachers) in these different ways? (Please give your best estimates of these numbers.)

How Many?

- a) Teachers with ELEMENTARY certification _____
- b) Teachers with SECONDARY SUBJECT-MATTER certification _____
- c) Teachers with specific MIDDLE GRADES certification (separate from elementary or secondary) _____
- d) UNCERTIFIED teachers _____
- e) Other (describe) _____

Q-15 Of the following attributes of a 7th grade English teacher, which THREE do you believe are MOST important. (Circle the numbers for NO MORE THAN THREE CHOICES.)

- Command of the subject area 1
- Ability to teach reading 2
- Ability to prepare students for high school 3
- Ability to help students make transition to the middle grades 4
- Ability to increase student motivation 5
- Ability to teach study skills 6
- Understanding of early adolescent development 7

CURRICULUM AND INSTRUCTIONAL PRACTICES

Q-16 Estimate the proportion of your school's students who will have had these courses or experiences any time during the 7th or 8th grades. (Circle the choice that comes the closest to your estimate.)

	Students Taking in 7th or 8th Grades				
	NONE	10%	25%	50%	75%+
a) A full year of ALGEBRA	NONE	10%	25%	50%	75%+
b) A course in READING separate from but concurrent with a course in English or language arts	NONE	10%	25%	50%	75%+
c) TWO full years of SCIENCE instruction	NONE	10%	25%	50%	75%+
d) A full year of a FOREIGN LANGUAGE (equivalent of high school level I) ..	NONE	10%	25%	50%	75%+
e) TWO full years of PHYSICAL EDUCATION (at least 3 days per week)	NONE	10%	25%	50%	75%+
f) Thirty or more class periods (e.g., at least 2 days/week for 15 weeks) of instruction in ART	NONE	10%	25%	50%	75%+
g) Thirty or more class periods of instruction in TYPING or keyboarding	NONE	10%	25%	50%	75%+
h) Thirty or more class periods of instruction about COMPUTERS and their use (other than typing)	NONE	10%	25%	50%	75%+
i) Thirty or more class periods of instruction in INDUSTRIAL ARTS	NONE	10%	25%	50%	75%+
j) Thirty or more class periods of instruction in HOME ECONOMICS	NONE	10%	25%	50%	75%+
k) Short, exploratory or MINI-COURSES in a variety of skills & topics	NONE	10%	25%	50%	75%+

Q-17 Of the required courses, electives, "mini-courses," or exploratory experiences that your school offers to 7th or 8th graders, list below up to three that you believe are most unique or that add the most to your school's program.

Then circle a code for the length of the course and estimate how many 7th or 8th grade students take that course each year. If your school has no regular or exploratory courses that are unique, write NONE _____ and continue with question Q-18

Titles of Our Most Unique Courses	Duration of Course	Number 7 or 8 Graders Taking Course Each Year
a) _____	Full Year Part Year Short Course	_____ total students
b) _____	Full Year Part Year Short Course	_____ total students
c) _____	Full Year Part Year Short Course	_____ total students

Q-18 Schools set many important goals for their students. If you had to choose among the seven goals listed below, how would you rank their importance in your school program for ALL students. Enter a "1" for the most important goal for all students to attain, "2" for the next most important goal, and so on.

HOW IMPORTANT FOR ALL STUDENTS?	RANK 1 to 7
a) Basic skills (reading, math, writing, speaking, and subject matter mastery)	_____
b) Higher level skills (reasoning, problem solving, critical and creative thinking)	_____
c) Citizenship (including service to the school and community)	_____
d) Work habits (self discipline, autonomy, self-direction)	_____
e) Personal growth and development (self esteem, self-knowledge)	_____
f) Human relations (getting along with others, good race relations, multi-cultural education)	_____
g) Attitudes and commitment (positive attitudes about school, class participation, school activities)	_____

Q-19 Schools vary in the ways they teach major academic subjects in the middle grades. For each of four major subjects, we have listed practices that some schools follow. Please think of a TYPICAL teacher of each subject -- not the best or weakest teacher -- in your school. Please ESTIMATE how often the typical teacher would use these approaches with AVERAGE or MIXED-ABILITY seventh grade classes at your school.

DAILY <==> A typical teacher uses this approach in almost EVERY LESSON
 WEEKLY <==> A typical teacher uses this approach at least ONCE or TWICE A WEEK
 MONTHLY <==> A typical teacher uses this approach ONCE or TWICE A MONTH
 A FEW PER YEAR <==> A typical teacher uses this approach a FEW TIMES A YEAR
 NEVER <==> A typical teacher DOES NOT USE this approach

Typical ENGLISH Teachers in this School...	How Often Done in an "Average" English Class?				
a) Have students write an essay or report at least one page long	Daily	Weekly	Monthly	A few per year	Never
b) Drill and practice on language basics (vocabulary, punctuation, grammar)	Daily	Weekly	Monthly	A few per year	Never
c) Teach content and ideas in literature	Daily	Weekly	Monthly	A few per year	Never
d) Have students edit, rewrite, and resubmit their essays after peer or teacher review	Daily	Weekly	Monthly	A few per year	Never

Typical MATH Teachers in this School...	How Often Done in an "Average" Math Class?				
a) Organize peer-tutoring or cross-grade tutoring	Daily	Weekly	Monthly	A few per year	Never
b) Drill and practice math computation	Daily	Weekly	Monthly	A few per year	Never
c) Organize class periods in a standard way (e.g. review, drill, new work, practice, or similar)	Daily	Weekly	Monthly	A few per year	Never
d) Have students use calculators to obtain answers	Daily	Weekly	Monthly	A few per year	Never
e) Emphasize creative problem solving and math applications	Daily	Weekly	Monthly	A few per year	Never

Typical SCIENCE Teachers in this School...	How Often Done in an "Average" Science Class?				
a) Conduct hands-on laboratory work	Daily	Weekly	Monthly	A few per year	Never
b) Teach, drill, and practice basic science facts	Daily	Weekly	Monthly	A few per year	Never
c) Emphasize scientific methods of discovery	Daily	Weekly	Monthly	A few per year	Never
d) Use computer or video to provide scientific explanations	Daily	Weekly	Monthly	A few per year	Never

Typical SOCIAL STUDIES Teachers in this School...	How Often Done in an "Average" Social Studies Class?				
a) Have students write at least one page of ideas on a topic as an essay	Daily	Weekly	Monthly	A few per year	Never
b) Have students work on joint or group projects	Daily	Weekly	Monthly	A few per year	Never
c) Drill and practice important names, dates, and facts of history	Daily	Weekly	Monthly	A few per year	Never
d) Discuss controversial issues and debate ideas of history and current events	Daily	Weekly	Monthly	A few per year	Never

TRANSITIONS AND ARTICULATION

Q-20 How do you organize the transition from the ELEMENTARY to the MIDDLE grades? (Circle the numbers to the right of ALL of your present practices.)

No transition -- middle grades continue in K-8 program.	1
No special activities until students arrive in the fall.	2
Middle grades students present information at elementary school.	3
Elementary school students visit middle grades school for assembly.	4
Elementary school students attend regular classes at middle grades school.	5
Parents visit middle grades school while children are still in elementary school.	6
Parents visit middle grades school for orientation in the fall after children have entered.	7
Summer meetings at the middle grades school.	8
Buddy or big brother/sister program pairs new student with older one on entry.	9
Middle grades and elementary teachers meet together about courses and requirements.	10
Middle grades and elementary administrators meet together on articulation and programs.	11
Middle grades counselors meet with elementary school counselors or staff.	12
Other(describe)	13

Q-21 How do you organize the transition from the MIDDLE grades to HIGH school? (Circle ALL of your present practices.)

No transition -- high school grades continue in K-12, 7-12, or other program.	1
No special activities until students arrive at high school in the fall.	2
High school students present information at the middle grades school.	3
Middle grades students visit the high school for assembly.	4
Middle grades students attend regular classes at high school.	5
Parents visit high school while children are still in middle grades.	6
Parents visit high school for orientation in the fall after children have entered.	7
Summer meetings at the high school.	8
Buddy or big brother/sister program pairs new student with older one on entry.	9
Middle grades and high school teachers meet together on courses and requirements.	10
Middle grades and high school administrators meet together on articulation and programs.	11
Middle grades counselors meet with high school counselors or staff.	12
Other(describe)	13

Q-22 How well do your present practices match your IDEAL program for your students' smooth transitions to and from the middle grades? (Circle one choice.)

EXCELLENT -- practices fit students' needs exactly	1
GOOD - basic practices are in place, minor changes needed	2
FAIR -- need to improve or add several practices	3
WEAK -- need to design new practices and major changes	4

REMEDIAL INSTRUCTION

Q-23 All schools have some students who fall behind or learn more slowly than other students. Does your school offer any of the following remedial activities for these students?

No special programs, it is up to students to stay on grade level	1
Extra work or homework by classroom teacher	2
Pull-out program in reading or English	3
Pull-out program in math	4
Extra subject period instead of elective or exploratory course	5
After-school or before-school classes or coaching sessions	6
Saturday classes	7
Summer school	8
Other(describe)	9

MIDDLE GRADES PROGRAMS AND PRACTICES.

Q-24 Practices and programs in the middle grades differ in every school. Some practices are tried and dropped. Others are maintained. Still others may be useful in the future. Some practices may never fit the program you plan for your school. Please indicate whether the following have been used at your school in the PAST, are part of your PRESENT program, may be added in the FUTURE, or are NO USE to your program. (For each practice, circle ALL that APPLY.)

PAST <==> Circle PAST if the practice was used at your school in the PAST 3 YEARS before this year
 PRESENT <==> Circle PRESENT if the practice is part of your PRESENT program
 FUTURE <==> Circle FUTURE if the practice is LIKELY TO BE ADDED or KEPT in the next few years
 NO USE <==> Circle NO USE if the practice has not been part of your program and is not likely to be added

At this school ...	CIRCLE ALL THAT APPLY ...			
a) Minimum competency tests for promotion to high school	Past	Present	Future	No Use
b) Common academic curriculum for all students in the same grade	Past	Present	Future	No Use
c) Independent projects for all students in English or social studies	Past	Present	Future	No Use
d) Independent projects for all students in math or science	Past	Present	Future	No Use
e) Departments organized with their own chairpersons or heads	Past	Present	Future	No Use
f) Interdisciplinary teams of teachers who share the same students	Past	Present	Future	No Use
g) Flexible time schedules such that today's class periods may be different in length from tomorrow's	Past	Present	Future	No Use
h) Common planning period for members of departments	Past	Present	Future	No Use
i) Common planning period for members of interdisciplinary teams	Past	Present	Future	No Use
j) Students assigned to the same homeroom or advisory teacher for all years in the middle grades	Past	Present	Future	No Use
k) Classes organized for cooperative learning where students earn group rewards for mastery of academic skills	Past	Present	Future	No Use
l) Students from more than one grade level assigned together to the same academic classes	Past	Present	Future	No Use
m) Exploratory or mini-courses for all students in all grades	Past	Present	Future	No Use
n) Parents formally recruited and trained to work as school volunteers	Past	Present	Future	No Use
o) Workshops offered to parents on school programs and early adolescence	Past	Present	Future	No Use
p) Teachers frequently send information and ideas to parents on how to help their children with homework and skills	Past	Present	Future	No Use
q) P.T.A. or P.T.O. with elected officers and active committees	Past	Present	Future	No Use
r) Conference of parent with all of child's teachers each year	Past	Present	Future	No Use
s) An eight period day	Past	Present	Future	No Use
t) Staff development in early adolescent characteristics and specific teaching strategies for middle grades	Past	Present	Future	No Use
u) Extra-curricular activities or activity periods for all students	Past	Present	Future	No Use
v) Schools-within-a-school with their own administrative staffs	Past	Present	Future	No Use

Q-25 How well do your present practices match your IDEAL of a successful program for students in the middle grades? (Circle one choice.)

- EXCELLENT -- present practice fit students' needs exactly -- exemplary program 1
- GOOD -- basic practices are in place, minor changes needed -- solid program 2
- FAIR -- need to improve or add on practices -- developing program 3
- WEAK -- need to design new practices and major revisions -- changing program 4

TEAMS OF TEACHERS

Q-26 Does your school use **DEPARTMENT (SINGLE SUBJECT) Team Teaching?** Teachers in the **SAME DEPARTMENT** plan and teach together creating small group and large group activities by combining classes or regrouping students.

Circle all grades in which you use DEPARTMENT teams: 5 6 7 8 9 DO NOT USE

Q-27 Does your school use **INTERDISCIPLINARY Team Teaching?** Two or more teachers of **DIFFERENT SUBJECTS** share the same group of students and/or coordinate their instructional programs across subjects.

Circle all grades in which you use INTERDISCIPLINARY teams: 5 6 7 8 9 DO NOT USE

IF YOU USE "INTERDISCIPLINARY TEAM TEACHING" IN EITHER GRADE 7 OR 8, PLEASE CONTINUE. IF NOT, CHECK HERE _____ AND SKIP TO QUESTION Q-34

Q-28 How many teachers are on a typical interdisciplinary team to teach seventh or eighth graders at your school?

TEACHERS ON A TYPICAL INTERDISCIPLINARY TEAM: 2 3 4 5 6 7 or more

Q-29 What subjects are taught by **EACH TEACHER** on a typical interdisciplinary team? (Circle the subjects taught by each, using **ONLY** as many rows as the **NUMBER** of **DIFFERENT TEACHERS** on a typical team.)

a) The FIRST teacher teaches	Eng	Math	SocStd	Read'g	Sci	ForLang	HmEc	IndArt	Advsry
b) The SECOND teacher	Eng	Math	SocStd	Read'g	Sci	ForLang	HmEc	IndArt	Advsry
c) The THIRD teacher	Eng	Math	SocStd	Read'g	Sci	ForLang	HmEc	IndArt	Advsry
d) The FOURTH teacher	Eng	Math	SocStd	Read'g	Sci	ForLang	HmEc	IndArt	Advsry
e) The FIFTH teacher	Eng	Math	SocStd	Read'g	Sci	ForLang	HmEc	IndArt	Advsry
f) The SIXTH teacher	Eng	Math	SocStd	Read'g	Sci	ForLang	HmEc	IndArt	Advsry
g) The SEVENTH teacher	Eng	Math	SocStd	Read'g	Sci	ForLang	HmEc	IndArt	Advsry

Q-30 How are teachers assigned to particular interdisciplinary teams? (Circle one.)

School administrators or department heads make the assignments	1
Teachers choose the other teachers on their teams	2
School officials make assignments, but adjustments can be made	3
Other (describe)	4

Q-31 How is the leader chosen for the interdisciplinary team of teachers? (Circle one.)

No leader is identified	1
Appointed by principal or other school official	2
Elected by other members of the teaching team	3
Leader rotates among members over time	4
Leader emerges informally as the team works together	5
Other (describe)	6

Q-32 How much **COMMON** planning time is **OFFICIALLY SCHEDULED EACH WEEK** for the interdisciplinary team? (Circle one.)

No official common planning time	1
Less than 30 minutes per week	2
Between one-half and 1 hour per week	3
Between 1 and 2 hours per week	4
Between 2 and 3 hours per week	5
More than 3 hours per week	6

Q-33 In a typical planning period for an interdisciplinary team, about how much time is spent on the following activities? Circle one choice for each activity that comes closest to your estimate of the work your teachers do during team planning meetings. If no team planning occurs, write NONE here: _____ and skip to question Q-34

How Much Time Per Planning Period?

	NONE	Little	Less than half	About half	More than half
a) Individual Teacher Preparation. Teachers work on their own lessons, tests, grades.					
b) Coordinate Content. Teachers decide common themes and related topics for instruction.					
c) Revise Schedules. Teachers arrange or alter schedules for classes that need more time.					
d) Regroup Students. Teachers arrange small or large groups of students to match lessons to abilities.					
e) Diagnose Individual Students. Teachers discuss problems of specific students and arrange help.					
f) Plan Special Events. Teachers arrange assemblies, trips, or other team activities.					
g) Conduct Conferences With Parents. Teachers meet as a team with individual parents to solve problems, provide assistance.					
h) OTHER (describe)					

Q-34 There are potential benefits and problems in using interdisciplinary teams in the middle grades. How often do you think the following occur as a result of interdisciplinary teams in your school. If you DO NOT use teams now, what is your judgment about how often these WOULD OCCUR on interdisciplinary teams in your school?

On Interdisciplinary Teams...

How Often Do You Think These Occur?

	Always	Often	Sometimes	Seldom	Never
a) Personalities of the teachers on teams do not mix well and reduce effectiveness					
b) Not enough common planning time is allocated for the team to really work together					
c) Students identify with the team, build team spirit, and improve school work and attitudes					
d) The school schedule prevents flexibility in regrouping students or varying time for different subjects					
e) Teachers are not sufficiently trained in the team approach, so teaching practices do not change much					
f) Individual student problems are recognized quickly and solved effectively					
g) Teachers find it difficult to relate both to their subject-matter departments and to their interdisciplinary teams					
h) Teachers use other team members as sources of social support and understanding					
i) Instruction is more effective due to integration and coordination across subjects and courses					
j) Other benefits or problems (describe)					

ABOUT YOUR STUDENTS, STAFF, AND SELF

The final questions ask for information about your students, your staff, and yourself that will permit the information you provided to be grouped with schools that are similar to your own.

Q-35 Approximately what percentage of your present students and faculty are members of the following racial or ethnic groups? (Write in the percent for each category. If NONE, write 0. Each column should sum to 100%).

	Students	Faculty
a) Black/Afro-American	_____ %	_____ %
b) White/Caucasian (non-Hispanic)	_____ %	_____ %
c) Hispanic-American	_____ %	_____ %
d) Asian-American	_____ %	_____ %
e) American Indian, or Other	_____ %	_____ %
	TOTAL =	100 %

Q-36 Approximately what percentage of the students currently enrolled in your school are from families in the following categories? (WRITE IN percent for each category. If NONE write 0%. Column should sum to 100%).

	Students' Families
a) Professional and managerial personnel	_____ %
b) Sales, clerical, technical, or skilled workers	_____ %
c) Factory or other blue collar workers	_____ %
d) Farm workers	_____ %
e) On welfare or not regularly employed	_____ %
	TOTAL =
	100 %

Q-37 How would you rate the average academic ability of the students when they ENTER this school? (Circle one choice)

- Considerably above the national norm 1
- Somewhat above the national norm 2
- At the national norm 3
- Somewhat below the national norm 4
- Considerably below the national norm 5

Q-38 At the end of last school year (after summer school), about how many students were promoted to the next grade and how many were retained to repeat the same grade this year? (Give approximate numbers or check no grade.)

For 1987 School Year AFTER Summer School...	NUMBER OF STUDENTS...		
a) From Grade 5	_____ promoted	_____ retained	_____ No Grade 5
b) From Grade 6	_____ promoted	_____ retained	_____ No Grade 6
c) From Grade 7	_____ promoted	_____ retained	_____ No Grade 7
d) From Grade 8	_____ promoted	_____ retained	_____ No Grade 8
e) From Grade 9	_____ promoted	_____ retained	_____ No Grade 9



Q-39 What are the major reasons most students are retained to repeat a grade in your school? (Circle all that apply as major reasons that students repeat the middle grades.)

- Failing one course 1
- Failing two or three courses 2
- Failing more than three courses 3
- Excessive absence or lateness 4
- Failing achievement or proficiency tests 5
- Other(describe) 6

Q-40 Based on your experience, past records, or best guesses, please estimate the percent of your present 7th Grade BOYS and GIRLS who will PROBABLY NOT graduate from high school.

PERCENT

- a) PERCENT of present 7th grade BOYS who will probably NOT graduate from high school %
- b) PERCENT of present 7th grade GIRLS who will probably NOT graduate from high school %

Q-41 Including the 1987-88 school year, how many years have you been principal of this school?

YEARS (INCLUDING THIS ONE) AS PRINCIPAL OF THIS SCHOOL: _____

Q-42 What other experiences in education have you had in the past? (Circle all that apply for you.)

- Principal of another elementary school 1
- Principal of another middle/junior high school 2
- Principal of another high school 3
- School (non-principal) administrator 4
- High school grades teacher 5
- Middle grades teacher 6
- Elementary grades teacher 7
- Guidance counselor at any school level 8
- Other(describe) 9

Please use space below for any other comments or ideas that you would like to add.

THANK YOU VERY MUCH FOR YOUR TIME AND YOUR HELP!

Please return your completed survey in the postage-paid envelope provided. Or mail your booklet to National Middle Grades Survey, The Johns Hopkins University -- CREMS, 3505 North Charles Street, Baltimore, MD 21218.