INTERDISCIPLINARY TEAMING

In support of *This We Believe* characteristics:
- Organizational structures that support meaningful relationships and learning
- A shared vision that guides decisions

An interdisciplinary team consists of two or more teachers from different subject areas and the group of students they commonly instruct. Team teachers plan, coordinate, and evaluate curriculum and instruction across academic areas. Teams cultivate meaningful and regular communication with families. Teams often share the same schedule and the same area of the building. For teachers, teams provide a collaborative and supportive work group. For students, teams offer stable relationships with teachers and peers (Jackson & Davis, 2000). Seventy-nine percent of principals in middle level schools report that they had teams in 2000, up from 57% in 1992 (Valentine, Clark, Hackman, & Petzko, 2002).

Principles for organizing effective teams include:

1. Keep teams small in terms of number of teachers and students.
2. Provide sufficient individual and team planning time for teachers.
3. Allow teams to design their students' daily schedule.
4. Assign teams to their own area of the building.
5. Allow teams to work together for multiple years. (Erb & Stevenson, 1999)

Characteristics of highly effective teams include:

1. Student-centered focus.
2. Strong commitment to academic achievement.
3. Collaborative policies and accountability systems.
4. Strong sense of team community.
5. Regular communication with parents.
6. A proactive approach.
7. Teachers who work professionally and collaboratively. (George & Alexander, 2003)

The evidence supporting the positive impact of interdisciplinary teaming on middle grades schools and students is growing (Arhar, 1990; Arhar, Johnston, & Markle, 1989; Dickinson & Erb, 1997; Flowers, Mertens, & Mulhall, 2000; Felner, Jackson, Kasak, Mulhall, Brand, & Flowers, 1997; Flowers, Mertens, &

Mulhall, 1999; George & Shewey, 1994; Lee & Smith, 1993). Students and teachers in schools that have implemented teaming and its associated practices with some degree of integrity consistently report more positive and productive learning environments (Arhar 1990, 1997; Dickinson & Erb, 1997; Lee & Smith, 1993). Several large-scale and comprehensive studies have been conducted that successfully demonstrate the positive effects of teaming on student outcomes. In one study, more highly implemented schools (e.g., teaming, common planning time, small teams, advisory) were found to have higher levels of student achievement and student self-esteem than less implemented schools (Felner et al., 1997). Another study found that schools that are fully engaged in teaming with high levels of common planning time show improvement in student self-reported outcomes (e.g., depression, self-esteem, behavior problems, academic efficacy). Further, student achievement scores improved dramatically, particularly for schools with high percentages of free/reduced lunch students (Mertens, Flowers, & Mulhall, 1998).

Common planning time is deemed critical to the success of an interdisciplinary team because it provides teachers with an opportunity to plan collaboratively (Warren & Muth, 1995). Team teachers should have common planning meetings at least four times per week for at least 30 minutes per meeting (Flowers et al., 1999). At a basic level, teams utilize their common planning time to plan and coordinate team activities (e.g., homework, tests, schedules, special projects). At an advanced level, teams coordinate and integrate curriculum, instruction, and assessment during common planning time. Teachers' shared time should not come at the expense of their individual planning time. When common planning supplants individual time, collaborative work suffers because teachers are concerned with their own workloads (Jackson & Davis, 2000).

Schools structure and organize teams in different ways—there isn't just one acceptable model. Teams can include small partner (two-teacher) teams, three-teacher teams, four-teacher teams, or grade-wide

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teams (George & Alexander, 2003). Several key factors to consider when designing teams include the needs of your students, the number of students per grade, the division of teaching responsibilities, and the design of your building. To ensure a sense of smallness and to foster long-term student-teacher relationships, students can be assigned to teams in a variety of ways. The most prevalent strategies in middle schools include multiage grouping, looping, and schools-within-a-school (George & Lounsbury, 2000). Multiage grouping assigns students from two or more grades together on one team and within their classes. Looping is the practice of keeping students with the same teachers as they move through a middle school. The schools-within-a-school approach is often used in larger schools whereby the school is divided into houses or subgroups that enjoy autonomy and a sense of community that is difficult to attain across the entire school population.

Teams range in size from teams of two teachers and 40 to 60 students to teams of six teachers and 150 to 190 students. Recent experience has led more middle school leaders to favor smaller teams of two to three teachers (George & Alexander, 2003). In *Turning Points 2000,* Jackson and Davis say that teams should be no larger than five teachers and 125 students. The advantages of smaller teams include closer teacher-student relationships; students know each other better; and less complex coordination issues. Researchers have linked positive outcomes to smaller teams. On teams of 90 or fewer students, the use of desirable instructional practices and the quality of team interactions is higher than on larger teams (Flowers et al., 2000). Another study found that teams of 120 or fewer students with a ratio of no more than 25 students to one teacher engage in instructional practices that are linked to positive student outcomes more often than larger teams (Erb & Stevenson, 1999).

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Valentine, J. W., Clark, D. C., Hackman, D. G., & Petzko, V. N. (2002). *A national study of leadership in middle level schools. Volume 1: A national study of middle level leaders and school programs.* Reston, VA: National Association of Secondary School Principals.

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ANNOTATED REFERENCES

Felner, R. D., Jackson, A. W., Kasak, D., Mulhall, P., Brand, S. & Flowers, N. (1997). The impact of school reform for the middle years: Longitudinal study of a network engaged in Turning Points-based comprehensive school transformation. *Phi Delta Kappan, 78*(7), 528-532, 541-550.

This study addresses the impact of *Turning Points* recommendations on 31 middle level schools participating in the Illinois Middle Grades Network in 1991-92. Schools were classified into one of three levels of implementation based on the level of structural changes (e.g., implementation of teaming, frequency of common planning time, lower numbers of students per team, frequency of advisory periods). More highly implemented schools were found to have higher levels of student achievement and student self-esteem, combined with lower levels of student reports of worry and fear. The study cautions about the need to view the Turning Points recommendations as interrelated and not simply as a list of elements to be checked off as they are "implemented." The authors feel that the implementation of these elements is necessary but not sufficient.

Flowers, N., Mertens, S., & Mulhall, P. (1999). The impact of teaming: Five research-based outcomes of teaming. *Middle School Journal, 31*(2), 57-60.

This article describes and discusses five research-based outcomes of interdisciplinary teaming. The analyses are based on a sample of 155 middle level schools in Michigan. Quantitative data were collected through a self-study assessment consisting of written surveys completed by teachers, students, and principals. Qualitative data were collected through telephone interviews with the schools. The study yielded five outcomes of interdisciplinary teaming: (1) common planning is a critical component; (2) teaming improves school work climate; (3) teaming increases parent contact; (4) teaming increases job satisfaction; and (5) teaming has a positive effect on student achievement.

George, P. S., & Lounsbury, J. H. (2000). *Making big schools feel small: Multiage grouping, looping, and schools-within-a-school*. Westerville, OH: National Middle School Association.

This book describes how to create small communities for learning within increasingly larger schools by ensuring long-term teacher-student relationships. The first two chapters review the relevant literature and discuss why smallness and long-term teacher-student relationships are important for young adolescents. After presenting the case, the authors examine three ways in which such relationships can be achieved: (1) multiage grouping; (2) looping; and (3) schools-within-a-school. Research on middle school organizational patterns is also summarized. The last part of the book presents the findings of a national survey on long-term teacher-student relationships that gathered the opinions of 105 educators, 586 parents, and 1,100 students from 33 schools. Overall, teachers practicing long-term teacher-student relationships perceived substantial benefits (e.g., classroom management, accurate diagnosis of student needs, development of a sense of community among students and teachers). Students and parents reported similar attitudes concerning the benefits of long-term teacher-student relationships. The book concludes with a set of guidelines for practitioners interested in implementing long-term teacher-student relationships to make big schools seem small.

George, P. S., & Shewey, K. (1994). *New evidence for the middle school*. Columbus, OH: National Middle School Association.

The results presented here are derived from two large-scale studies: one conducted in 1985 and a follow-up study in 1993. Middle school administrators across the country were asked to respond to written surveys focused on the implementation of the middle school concept (e.g., teaming, flexible scheduling, advisory, school climate) in their school. In the 1985 study, 130 out of 160 schools (81%) participated; the 1993 study included 108 out of 300 schools (36%). Many of the participating schools had been previously identified as exemplary, indicating a higher level of implementation of at least some middle school principles. The 1993 survey yielded the following findings: (1) the majority of schools reported implementation of most of the middle school concept components; (2) the interdisciplinary organization of teachers was central to schools that have been involved in implementation of the middle school concept for many years; (3) advisor-advisee programs, school buildings specifically designed to be middle schools, and foreign language programs, among others, were not found to be critical components in the long-term effectiveness of middle schools; and (4) when effectively implemented, the middle school concept leads to positive outcomes, including improved academic achievement and attendance, lower rates of disciplinary problems, and improved relationships between and among students, teachers, and parents.

ANNOTATED REFERENCES *(continued)*

Lee, V., & Smith, J. (1993). Effects of school restructuring on the achievement and engagement of middle-grades students. *Sociology of Education*, 66 (3), 164-187.

Lee and Smith conducted a multivariate study of middle grades students to examine the impact of attending "restructured schools" on student achievement and engagement. A sample of nearly 9,000 eighth grade students in 377 schools was drawn from the 1988 National Education Longitudinal Study (NELS) to assess the impact of reduced departmental structures, heterogeneous grouping practices, and team teaching on student outcomes, including student achievement, engagement in academic work, and at-risk behaviors (e.g., disciplinary problems). Modest but consistent positive effects of restructuring were found on both student achievement and engagement.

RECOMMENDED RESOURCES

Arnold, J., & Stevenson, C. (1998). *Teachers' teaming handbook: A middle level planning guide*. Fort Worth, TX: Harcourt Brace.
Dickinson, T. S., & Erb, T. O. (1997). We gain more than we give: Teaming in middle schools. Columbus, OH: National Middle School Association.

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Schurr, S., & Lounsbury, J. (2001). *Revitalizing teaming to improve student learning* (Staff Development Kit #3). Westerville, OH: National Middle School Association.

AUTHORS

Steven B. Mertens is senior research scientist at the Center for Prevention Research & Development, Champaign, Illinois.

Nancy Flowers is coordinator of research programs at the Center for Prevention Research & Development, Champaign, Illinois.

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