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Middle Grades Reform

At A Glance

Researchers and policymakers have pointed to the lagging scores of eighth graders on international, national, and state assessments as evidence that students are not prepared to meet high academic standards and that middle grades reform is needed. In response to these concerns, educators have introduced reforms designed to provide middle-level students with academically challenging instruction and developmentally responsive programs. This Information Capsule reviews research conducted on the impact of middle grades reform on student academic and behavioral outcomes. The issue of grade configuration is also reviewed. A more detailed literature review including descriptions of the components of successful middle grades reform efforts is available at Research Services' Web site (<http://www.drs.dadeschools.net>).

Educators and researchers have long debated the most effective way to deliver middle-level education. Most recently, they have suggested that middle schools lack academic rigor and fail to provide activities that encourage adolescents' social, emotional, and physical growth. Researchers and policymakers have pointed to the lagging scores of eighth graders on international, national, and state assessments as evidence that students are not prepared to meet high academic standards and that middle grades reform is needed (Manzo, 2008; National Middle School Association, 2006; Juvonen et al., 2004; Heller et al., 2003). Furthermore, students' entry into middle school are often marked by disengagement from school; lower levels of academic achievement; increased referrals to mental health services; and the start of disciplinary and attendance problems (Shulman & Armitage, 2005; French, 2003; Elias, 2001). In response to these concerns, educators have introduced reforms designed to provide middle-level students with academically challenging instruction and developmentally responsive programs and policies (National Center for Education Statistics, 2000).

In the past, the debate over middle grades reform revolved around claims that programs either focused too heavily on developmental factors at the expense of academics or emphasized academics without considering students' social, emotional, and physical development (National Association of Secondary School Principals, 2006). Middle grades reformers now agree that schools must simultaneously emphasize students' academic and developmental needs, as they prepare them for challenging studies in high school (American Youth Policy Forum, 2006; Cooney & Bottoms, 2003; National Forum to Accelerate Middle-Grades Reform, 2006; Clark & Clark, 2000).

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Research on Middle Grades Reform

Studies have suggested that students attending schools engaged in middle grades reform have fewer behavioral problems and increased levels of self-esteem and academic engagement. Research on the impact of middle grades reform on student achievement, however, has yielded conflicting findings. There are an insufficient number of studies, a lack of longitudinal studies, weak research designs, difficulties comparing studies with conflicting designs, and unknown effects of confounding variables on outcomes. Furthermore, although some studies report higher levels of performance at program schools, as compared to control schools, many fail to specify if these differences are statistically significant. It is, therefore, difficult to draw conclusions with regard to the impact of middle grades reform on student achievement (Byres & Ruby, 2007; Brown et al., 2004).

Keeping the above limitations in mind, following is a summary of research findings on the impact of middle grades reform on student outcomes.

- ◆ **General middle grades reform.** Lee and Smith (1992) conducted one of the first studies examining the relationship between implementation of middle-level reform practices and student outcomes based on a large-scale sample. The researchers used a subsample of data from the National Longitudinal Study of 1988 that included 8,845 eighth grade students from U.S. public and private schools. They found that schools introducing reforms, such as interdisciplinary team teaching and heterogeneously grouped instruction, reported a modest but positive impact on eighth grade students' achievement and engagement. Students attending schools that introduced a larger number of reform elements had higher levels of academic engagement than students attending schools that introduced fewer reform elements. Reforms also contributed to a more equitable distribution of positive outcomes among students from different social backgrounds.

Lee and Smith (1992) also found that school size played an important role in students' levels of engagement, with students in schools that had larger eighth grade enrollments reporting lower levels of academic engagement. Contrary to expectations, middle-level reform efforts were associated with significantly higher levels of at-risk behaviors. The authors suggested that school restructuring may have been more likely to occur in schools with higher initial levels of at-risk behaviors.

- ◆ **Turning Points.** The *Turning Points* program focuses on strengthening students' achievement and socio-behavioral development by establishing a rigorous curriculum, creating a supportive environment, providing a significant adult relationship for every student, and promoting mental health and fitness (Davis & Jackson, 2000). Although most studies have reported that implementation of the *Turning Points* program leads to increases in students' scores on state achievement tests (Association of Illinois Middle-Level Schools, 2004; Mertens & Flowers, 2004b; Backes et al., 1999; Felner et al., 1997), the Center for Prevention Research and Development (2002b) reported that students attending *Turning Points* schools performed at or below average on state achievement tests.

Evaluations of the *Turning Points* program have linked implementation of the program to higher than average levels of self-esteem, academic engagement, and academic efficacy; fewer reports of depression; lower frequencies of problem behaviors; and increased student bonding with and commitment to their schools (Association of Illinois Middle-Level Schools, 2004; Mertens & Flowers, 2004b; Center for Prevention Research and Development, 2002b; Center for Prevention Research and Development, 2002c; Felner et al., 1997).

- ◆ **Making Middle Grades Work.** The *Making Middle Grades Work* (MMGW) program was established by the Southern Regional

Education Board. States build a “comprehensive improvement framework” that becomes the basis for statewide middle grades reform. Components of the “comprehensive improvement framework” include a rigorous academic curriculum; high expectations and a system of extra help and time; classroom practices that engage students in their learning; support from parents; qualified teachers; and strong leadership. Sixteen states, including Florida, participate in the program (Cooney & Bottoms, 2002b). Studies conducted on the impact of MMGW reforms on student achievement have reported that students attending program schools had significantly higher student achievement in reading and math, compared to schools nationally (Cooney & Bottoms, 2003).

- ◆ **Middle Start.** *Middle Start* is a reform initiative that was established by the W.K. Kellogg Foundation and the Academy for Educational Development in 1994, in collaboration with the Center for Prevention Research and Development at the University of Illinois and other Michigan-based organizations and agencies. Originally implemented in Michigan middle schools, the program has since expanded to Arkansas, Louisiana, Mississippi, and New York. *Middle Start* seeks to promote academic excellence, developmental responsiveness, and social equity for students in the middle grades. The program focuses on the development of small learning communities; varied, rigorous, and culturally appropriate curriculum and instruction; and parent and community involvement (Middle Start, 2007).

Studies conducted to determine *Middle Start*’s impact on student achievement have produced mixed results. Some studies reported that students attending *Middle Start* schools posted greater achievement gains than students attending control schools (Center for Prevention Research and Development, 2005a; Center for Prevention Research and Development, 2005b; Mertens & Flowers, 2003; Gopalan, 2001;

Mertens et al., 1999). Other studies found no significant differences between *Middle Start* and control schools’ achievement gains (Corbett & Wilson, 2006; Center for Prevention Research and Development, 2005c). The Center for Prevention Research and Development (2002a; 2002c; 2002d) reported that students attending *Middle Start* schools in Arkansas, Louisiana, and Mississippi kept pace with schools statewide on standardized achievement tests, even though state averages included many more affluent schools.

Evaluations of the *Middle Start* program have associated program implementation with increases in students’ levels of self-esteem, academic engagement, and academic efficacy and with fewer reports of student depression. Students attending *Middle Start* schools have also reported higher educational expectations of themselves than they had prior to program implementation. Some studies have linked program implementation to a decrease in behavioral problems and suspensions, while other studies have reported few changes in behavioral referrals. Several studies found that students attending *Middle Start* schools reported a greater sense of belonging and safety in school, while others found no changes in students’ ratings of school climate (Center for Prevention Research and Development, 2002a; Center for Prevention Research and Development, 2002c; Center for Prevention Research and Development, 2002d; Gopalan, 2001; Mertens et al., 1999).

Teachers engaged in interdisciplinary teaming at *Middle Start* schools reported they viewed their schools as more positive, rewarding, and satisfying places to work; believed they received recognition for their accomplishments more often; felt a stronger sense of affiliation with their fellow team members; and had higher levels of overall job satisfaction (Flowers et al., 1999).

Grade Configuration

The debate over how to configure schools housing middle-level students has intensified in recent years, with some researchers and practitioners challenging the rationale of a separate middle school and many districts converting their middle schools into K-8 schools (Byrnes & Ruby, 2007; Cook et al., 2007).

The amount of research that has been conducted on grade configuration is quite small, considering how widely the policy of K-8 conversion is being adopted across the U.S. Studies that have compared middle schools to K-8 schools have reached no definitive conclusions regarding which school structure is most beneficial to students (Turner & Protheroe, 2004; Coladarci & Hancock, 2002; Howley, 2002; Pardini, 2002; Renchler, 2000; Paglin & Fager, 1997). In general, some research has shown that students attending K-8 schools have higher levels of academic achievement, compared to students attending middle schools (Poncelet and Metis Associates, 2004; Connolly et al., 2002; Offenber, 2001; Franklin & Glascock, 1998; Wihry et al., 1992). Other studies, however, have found no differences between the achievement levels of students attending middle schools and K-8 schools (Weiss, 2008; Byrnes & Ruby, 2007).

One factor that may contribute to more positive outcomes at K-8 schools is school size. In general, middle schools tend to have larger student enrollments than K-8 schools. Research suggests that, as the number of students in K-8 schools increases, the performance of students in the two types of schools converges (Howley, 2002; Offenber, 2001).

A second factor to be considered when comparing middle schools and K-8 schools is the number of school transitions students must make. Research suggests that the absence of school transitions and the greater continuity of experience may help to explain the results of studies that have found more positive outcomes at K-8 schools. Studies on the transition from elementary to middle school and from middle to high school have shown that students experience a decrease in achievement,

an increase in behavioral problems, and increased feelings of anonymity upon their arrival at a new school. Every transition from one school to another appears to disrupt learning (Cook et al., 2007; Smith, 2006; Coladarci & Hancock, 2002; Howley, 2002; Alspaugh, 1998; Paglin & Fager, 1997; Graber & Brooks-Gunn, 1996). Alspaugh (1998) found that double transitions (when students moved from elementary to middle and then from middle to high school) resulted in greater achievement losses and higher dropout rates than single transitions (from K-8 school to high school). Heller and associates (2003) found that transition programs that carefully introduced students to the new environment reduced school failure rates. Falbo, Lein, and Amador (2001) reported that students whose parents monitored their activities and became involved at their schools were more likely to experience smooth transitions from middle to high school. Keeping the majority of a student's peer group intact when students enter high school was found to have a positive effect on high-achieving students' grade point averages, but the opposite effect on low-achieving students (Schiller, 1999).

Several studies have reported that students attending K-8 schools have higher levels of self-esteem, more positive attitudes toward school, and fewer incidents of disciplinary infractions than students at middle schools (Weiss, 2008; Cook et al., 2007; Howley, 2002). Connolly, Yakimowski-Srebnick, and Russo (2002), however, found that students attending K-8 schools were often provided with fewer opportunities to take advanced courses such as Algebra I and foreign languages than students attending middle schools.

Results from grade configuration studies should be treated with caution. Most research is based on case studies or anecdotal evidence. Although many studies controlled for confounding variables such as students' socioeconomic status, parents' level of educational attainment, and school size, other unmeasured factors might have been responsible for the observed outcomes. Clearly, more research is needed to determine how grade configuration impacts students' academic and behavioral outcomes before school districts continue their widespread conversion of middle

schools to K-8 schools (Byrnes & Ruby, 2007; Coladarci & Hancock, 2002; Renschler, 2000; Paglin & Fager, 1997).

Perhaps most importantly, researchers have concluded that the quality of programs and policies, not grade configuration, determines the effectiveness of middle grades education. They emphasize that effective practices can be implemented in a variety of grade configurations. In addition, each community must consider different factors when making grade span decisions and no one particular configuration will necessarily match the needs of every school district (National Association of Secondary School Principals, 2006; Swaim, 2003; Hooper, 2002; Lipsitz et al., 1997b; Paglin & Fager, 1997).

On A Local Note

In the fall of 2007, Paul George (2007) conducted a survey of Florida middle school principals and district directors of secondary education regarding the status of middle school programs throughout the state. Survey responses indicated that many of the essential components of effective middle school programs are disappearing from Florida's middle schools. The majority of respondents reported that three key components of effective middle schools are widely implemented: shared decision-making, active learning styles, and selection of teachers based on interest and skill in working with young adolescents. However, respondents reported that interdisciplinary team organization, advisory programs, curriculum enrichment and exploratory programs, flexible scheduling, and heterogeneous grouping are all offered less frequently than in past years. Respondents identified testing and accountability measures as the primary reason for this decline. Other factors cited by respondents as contributing to the decline in middle school program implementation included state legislation aimed at secondary school reform, components of the No Child Left Behind act, Florida's Class Size Reduction Amendment, union contracts, inadequate pre-service education, and lack of certification and professional development.

Miami-Dade County Public Schools (M-DCPS) established a Middle Grades Task Force in March 2008. The charge of the Task Force was to "... review the literature, research, and best practices pertaining to closing the achievement gap in the middle schools and create an action plan for the revitalization of our middle schools." The Task Force is comprised of individuals who have expertise in and a strong commitment to middle level education, including parents, teachers, administrators, community and business members, union representatives, and higher education administrators.

The Task Force divided into four subcommittees and each subcommittee focused on one of the following four key areas:

- ◆ **Curriculum, Instruction, and Assessment.** Ensure that all middle level students participate in challenging, standards-based curricula and engaging instruction, and that their progress is measured by appropriate assessments, resulting in continual learning and high achievement.
- ◆ **Quality Educators.** Support the recruitment and hiring of teachers and administrators who have strong content knowledge and the ability to use research-based instructional strategies and assessment practices appropriate for middle level students.
- ◆ **Organization.** Support organizational structures and a school culture of high expectations that enable both middle level students and educators to succeed.
- ◆ **Family and Community.** Develop ongoing family and community partnerships to provide a supportive and enriched learning environment for every middle school student.

When the Task Force concludes its current deliberations, a final report will be issued with recommendations to the district on how to improve middle school education. For additional information on M-DCPS' Middle Grades Task Force, contact Curriculum and Instruction at (305) 995-1451.

Summary

Educators and researchers have long debated the most effective way to deliver middle-level education. This debate has traditionally revolved around claims that programs either focus too heavily on developmental factors at the expense of academics or emphasize academics without considering students' developmental needs. Research on the impact of middle grades reform on students' academic achievement has yielded conflicting findings. However, studies do suggest that students attending schools engaged in middle grades reform have fewer behavioral referrals and increased levels of self-esteem and academic engagement.

As part of the middle grades reform movement, many school districts throughout the country have converted their middle schools into K-8 schools; however, research has not offered definitive conclusions regarding which school structure provides students with the most benefits. Two factors that appear to contribute to positive student outcomes frequently observed at K-8 schools are their typically smaller size and the continuity of experience they offer. Most importantly, researchers have concluded that the quality of programs and policies, not grade configuration, determines the effectiveness of middle grades education.

All reports distributed by Research Services can be accessed at <http://drs.dadeschools.net> under the "Current Publications" menu.

A more detailed Literature Review on middle grades reform is available at Research Services' Web site (<http://drs.dadeschools.net>). The Literature Review includes a description of the components of successful middle grades reform efforts, such as flexible scheduling, interdisciplinary teaming, multiage grouping, and the provision of comprehensive guidance and support programs. A full listing of references is also included.