

**Easing the Transition to High School:  
An Investigation of Reform Practices to Promote  
Ninth Grade Success**

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## **Introduction**

The beginning of high school is a critical time for students. Research shows that making a successful transition to high school can help students form lasting attachments to school and increase students' likelihood of graduating from high school. The large, bureaucratic nature of most high schools, however, offers little support for incoming ninth graders, especially for those entering high school with weak social and academic preparation. The current high school reform movement has drawn attention to practices that schools might use to ease ninth graders' transition into high school. Little is known, however, about the character of these reforms, the extent to which they are being used for ninth graders, or their impact on student outcomes. This study begins to address that gap by investigating the types and effects of practices aimed at promoting ninth grade success. Using quantitative data collected from the universe of public high schools in the state of Maryland, we examine specific practices and assess their impact on student attendance, achievement, promotion and dropout rates.

## **Background**

Over the past two decades, research on adolescent development, secondary school organization, and school transitions has emphasized the critical nature of the ninth grade year. Researchers have argued that adolescence is an especially difficult time for virtually all children, characterized by rapid social, emotional, physical, and cognitive development. On the cusp of adulthood, children in their early teens begin the quest for independence yet they continue to need adult guidance and support. Adolescents tend to place great importance on autonomy and a sense of personal self-worth, but also experience an intense need for a sense of belonging and personal relationships with both peers and adults (Alexander & George, 1981).

As a place where students are expected to spend many of their waking hours, high school is a primary context in which the often confusing, tension-filled dynamics of early adolescence are enacted (Fine, 1994; Simmons & Blyth, 1987). However, most contemporary high schools are not structured to meet the developmental needs of adolescents (National Association of Secondary School Principals, 1985; 1996). The large, bureaucratic nature of most high schools challenges students to adjust to new rules, new expectations, and a new social system, while offering little personal attention or adult support (Lee, Bryk, and Smith, 1993). As students struggle to fit in socially, they also face more demanding academic requirements that can be daunting for those with poor prior preparation in core subjects. For too many students, these conditions can lead to feelings of alienation and self-doubt, and ultimately to disengagement from school (Zane, 1994; Epstein & Mac Iver, 1990). Many students who are not successfully integrated into the school community make the decision to drop out early in their high school career, often during or immediately following the ninth grade (Bryk, 1994).

The literature on school transitions also offers insight into the myriad difficulties facing ninth graders. Research shows that times of school transition can be problematic for students as they face a new, more anonymous environment and greater social and academic demands (Roderick, 1993). For ninth graders, the pressure of making a school transition is amplified by the developmental struggles they are facing as adolescents, leading to a greater chance for negative outcomes. In her review, Legters (2000) reports that many ninth graders have a difficult time adjusting to the demands of high school, resulting in lower grades, more disciplinary problems, higher failure rates, and feelings that they don't "fit in" to the high school community. Furthermore, disadvantaged students face even greater challenges as they make the transition to high school and may lack the motivation, interest, and support needed to become

successfully integrated into the new school environment (Braddock & McPartland, 1993; Bryk & Thum, 1989; Legters, 2000; Roderick, 1993). Finally, academic failure during the transition to high school is directly linked to the probability of dropping out. Roderick (1993) reports that over 60% of students who eventually dropped out of high school failed at least 25% of their credits in the ninth grade, while only 8% of their peers who eventually graduated had similar difficulty.

Recent literature on the social organization of secondary schools and on high school restructuring provides insight into practices that may increase student engagement and achievement. By focusing on the distinction between bureaucratic and communal school organization, researchers have identified practices that may help create a sense of community within a school, leading to less student alienation and lower dropout rates (Lee & Smith, 1995; Lee, Bryk, and Smith, 1993; Johnston, 1992; Bryk & Driscoll, 1988). Organizational reforms such as small learning communities, de-tracking in favor of a common core curriculum, and interdisciplinary teaming have been promoted as key reforms in the movement to create more personalized and responsive learning environments at the high school level. Current research fails to address, however, whether and how schools are using these ideas to meet the specific needs of ninth graders and what the impact of those efforts might be. The present study addresses these gaps by examining the types of school reform practices aimed at ninth graders and their impact on student outcomes.

## **Data and Methods**

Primary data collection was conducted for this study in the form of a survey administered to all public high schools in Maryland. With the support of the Maryland State Department of

Education, we surveyed 174 schools in spring 2000 and achieved a 79% response rate. The purpose of the survey was to learn about the kinds of programs and practices Maryland high schools currently are using with their ninth graders, especially those aimed at easing the transition to high school. Data from the survey also provide outcome measures of ninth grade attendance and promotion rates.

A secondary source of data for this study is information about Maryland high schools collected by the Maryland State Department of Education. Measures of student participation, achievement, and background characteristics are collected from each school and reported annually in the Maryland School Performance Report (MSPAP). This source provides contextual information about each high school surveyed (school size, average student socio-economic status, and race/ethnicity composition), as well as outcome measures of dropout rates, school-wide attendance rates, and percent of ninth graders passing the basic skills Maryland Functional Tests. In addition, we used MSPAP annual enrollment data to construct a proximate school-level measure of ninth grade promotion rates by subtracting the number of tenth graders from the number of ninth graders in the previous year, then dividing by the number of ninth graders (e.g. 9<sup>th</sup> in 1993-94 - 10<sup>th</sup> in 1994-95) / 9<sup>th</sup> in 1993-94).

### Analysis Plan

We use the Maryland survey data first to investigate the extent to which the reform practices aimed at improving ninth grade success are being used across the entire sample of schools. We then examine the extent to which use of the practices varies with school demographic characteristics, i.e. student socio-economic status (as measured by percent of students participating in a free or reduced-price lunch program), minority student composition,

and total school enrollment. Finally, we examine whether the use of certain practices is positively associated with ninth grade attendance, achievement, promotion and dropout outcomes. In these analyses, survey questions designed to determine the number of years a practice has been in place and the percentage of ninth graders affected by the practice allow us to qualify practices in terms of their level of implementation, a characteristic not available in previous studies.

## **Findings**

### Distribution of Practices Across Maryland Sample

Survey results reveal that Maryland high schools currently are using a diverse set of practices with their ninth graders. Especially noteworthy is the high rate of use of practices identified by researchers as key organizational reforms to increase student membership in the high school community. Table 1 shows the percent of schools using these and other practices.

A full quarter of high schools currently have a school-within-a-school, academy, or other small learning community for ninth graders, while a third of schools provide students with an extra subject period of instruction, or Double Dose, of a core academic class when extra help is needed. Over one quarter of high schools employ interdisciplinary teams of ninth grade teachers who share the same students, of which half meet at least once a week. Just over half of Maryland high schools report that ninth graders meet in extended class periods, and 34% group students in a homeroom or advisory group that meets regularly throughout the school year. Finally, 13% of Maryland high schools report that they do *not* use ability tracking with ninth graders in *any* of the four core academic classes. In fact, nearly 30% of schools have made an effort at detracking by abandoning the use of ability tracking in at least two of the four core

academic subjects, while two-thirds of schools continue to group by ability in all four core subjects.

Maryland schools also are using more traditional approaches to help ninth graders make the transition to high school, as well as practices not widely recognized by educational researchers. Once considered an innovative instructional strategy and now a seemingly commonplace one, nearly 80% of schools report that teachers use student-centered instructional practices, such as cooperative learning or student-directed projects or activities, an average of once a week or more. Similarly, nearly all (94%) Maryland high schools conduct orientation programs or assemblies for ninth grade students upon arrival at high school. Other noteworthy practices aimed at easing the transition to high school include a special curriculum or class for ninth graders to help them learn appropriate study skills and/or social skills, used by nearly half of the schools surveyed, and a summer enrichment program for entering ninth graders, used by a quarter of Maryland high schools.

For selected practices, schools were asked to disclose the number of years the practice had been in place and the percent of ninth graders affected by the practice. This allowed us to determine the level of implementation of practices according to these two characteristics. Table 1 shows the percentage of schools using certain practices with a “high” level of implementation, demonstrated by a practice being in use for at least three years and affecting at least 75% of ninth graders.

Overall, results show that many of the more innovative practices are not in place in Maryland high schools at the higher level of implementation, indicating that the practices are relatively new or have been implemented with only a target group of students comprising less than 75% of the ninth grade class. Both interdisciplinary teams of ninth grade teachers and

schools-within-a-school for ninth graders are being implemented at a higher level by less than 10% of schools. Survey results indicate that schools-within-a school are a relatively new practice in Maryland high schools, but more often include all or nearly all of the ninth grade class, while interdisciplinary teams are both a new and often targeted practice. Providing a Double Dose of a core academic class is implemented at the higher level in only four (3%) of the schools, proving to be a relatively new practice that schools are choosing to implement with only smaller groups of students who need extra instruction. Of the remaining practices widely mentioned in the research literature, nearly a third of schools have been using extended class periods for at least 3 years and with most or all of their ninth graders, while one in five schools has been using homeroom or advisory groups at a similar level of implementation. Finally, implementation data again reveal that, at least nominally, use of student-centered instructional practices is commonplace according to the administrator respondents.

#### Distribution of Ninth Grade Practices by School Characteristics

Survey results from the entire sample of Maryland high schools reveal the use of a wide array of practices to help ninth graders make the transition to high school. We next asked whether certain types of schools were more or less likely to use these practices, and how types of schools compared across markers of student performance. The results show striking differences in both the use of practices and outcomes when schools are categorized by demographic characteristics.

*SES and Minority Composition:* Based on the distribution of characteristics in the sample, schools were categorized by the percent of minority students (defined as non-White) and the percent of students eligible to receive free or reduced-price meals. Schools with less than



20% minority population and less than 10% of students eligible for free or reduced-price meals were categorized as “Low Poverty, Low Minority” while schools with greater than 50% minority population and greater than 25% of students eligible for free or reduced-price meals were categorized as “High Poverty, High Minority.” Of the 25 schools labeled high poverty and high minority, all are located in or near a big city. The 31 schools labeled low poverty and low minority are located exclusively in suburban and rural or small town settings. Table 2 compares the use of practices and average outcomes for both groups of schools and for the sample as a whole.

In general, high poverty, high minority schools are overwhelmingly using practices to help ninth graders make the transition to high school more than their low poverty, low minority counterparts, and more than the sample as a whole. With the exception of “student-centered instructional practices,” high poverty, high minority schools report a greater use of every other practice reported in Table 2. Specifically, practices aimed at creating a more inclusive, personalized learning community and at leveling the playing field in terms of instruction and ability are being used by disadvantaged schools at much greater rates. Nearly all schools in this category use extended class periods, while close to half have homeroom or advisory groups for ninth graders, as compared to 42% and 32%, respectively, of low poverty, low minority schools. Similarly, schools labeled as high poverty and high minority are nearly four times as likely to use interdisciplinary teams and twice as likely to have a school-within-a-school for ninth graders than more advantaged schools. Use of these practices may show a more concerted effort by high poverty, high minority schools to create a stronger and more personalized school community for entering ninth graders.

In terms of instruction, disadvantaged schools also are implementing practices that may indicate the desire to provide a common educational experience for ninth graders and provide instruction that will bring all students to a common ability level, thereby leveling the playing field for ninth graders as they begin their high school experiences. While no advantaged schools have detracked the four core academic classes, over one-third of high poverty, high minority schools no longer track by ability in any of the core subjects. Over half of disadvantaged schools offer a Double Dose of a core academic class, while the same percent offer a summer enrichment program for ninth graders before they enter high school.

Examining average student outcomes in areas like ninth grade attendance, promotion, and standardized test scores shows striking, yet not surprising, differences in the groups of schools as well. On every outcome, low poverty, low minority schools score higher than both the disadvantaged schools and the sample as a whole. A closer look at outcomes reported by high poverty, high minority schools shows several stark contrasts. While just over two-thirds of ninth graders in these schools had passed the Maryland Functional Math Test by the end of their ninth grade year, nearly all ninth graders in more advantaged schools had passed the test. Promotion rates across school groups show that on average 13 more ninth graders out of 100 fail to make it to tenth grade in disadvantaged schools than in advantaged schools, a difference of 13 percentage points in average ninth grade promotion rate. Schoolwide dropout rates follow a similar pattern, with disadvantaged schools reporting a higher dropout rate than both low poverty, low minority schools and the sample as a whole. Finally, average rates of ninth grade attendance are over 10 percentage points lower in disadvantaged schools.

*School Size:* We hypothesized that large high schools may be more likely to use practices specifically designed to mitigate the potentially alienating effects of large school size.

School-within-a school organization, interdisciplinary teaming, and homeroom or advisory groups all are aimed at personalizing the learning environment and creating closer relationships between students and adults than can typically be achieved in a large school setting. Table 3 compares the distribution of the reform practices for all non-large schools in the sample (where enrollment is less than 1,500 students), all large schools (where enrollment equals or exceeds 1,500 students), large advantaged schools, and large high poverty/high minority schools. We found that, compared to the smaller schools, large schools in general and large advantaged schools were more likely to be using the school-within-a-school practice, but somewhat less likely to be using teaming or homeroom/advisory groups. In fact, none of the large advantaged schools reported using interdisciplinary teaming. In contrast, large high poverty, high minority schools reported using all three practices with much greater frequency than all other schools in the sample. Possible reasons behind these findings are discussed further below.

*Implementation Level of Ninth Grade Practices:* As we noted in our discussion of Table 1, relatively few high schools in the Maryland sample are using reform practices for ninth graders in a manner that suggests widespread (involving at least 75% of ninth graders) and sustained (used for at least three years) implementation. Table 4 further compares the level of implementation for selected practices for the type of schools most likely to be using these practices, i.e. high poverty, high minority schools, with the remaining schools in the sample that do not meet the criteria for that classification. This table shows that high poverty, high minority schools are much more likely to be implementing the practices in a widespread and sustained manner. Nearly two-thirds of high poverty, high minority schools report using extended class periods with at least 75% of their ninth graders for at least three years, compared to only a quarter of non high poverty, high minority schools. Similarly, nearly one quarter of

disadvantaged schools report this level of implementation of school-within-a-school organization for ninth graders, compared with only 3% of the more advantaged schools. Table 4 also shows that, with the exception of a Double Dose academic intervention, a majority of high poverty, high minority schools using each practice has been using the practice for at least three years and with at least 75% of its ninth graders.

### Relationship Between Ninth Grade Practices and Student Outcomes

The foregoing analyses show that most of the reform practices schools are using to ease ninth graders' transition into high school and promote ninth grade success are more likely to be found in high poverty, high minority schools. Moreover, the majority of these disadvantaged schools have been implementing the practices for at least three years and with at least 75% or more of their ninth graders, suggesting a relatively strong commitment to what are, in some cases, fairly radical reforms. The question remains whether implementation of the practices enabled these schools to improve student engagement and achievement.

Unfortunately, the cross-sectional nature of our survey data and the small number of schools in the sample make it virtually impossible to produce a valid and reliable assessment of the relationship between the practices and student outcomes using survey data alone. In a preliminary analysis, we produced mean comparisons to examine the relationships between the presence of the reform practices, different levels of implementation and student attendance, achievement, dropout and promotion outcomes within the sample of high poverty, high minority schools (N=25).<sup>1</sup> This initial analysis showed little discernable relationship between the

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<sup>1</sup> Limiting our focus to high poverty, high minority schools, enabled us to examine a group of demographically similar schools in which different degrees of implementation are represented. In other words, it helped us investigate whether more widespread and sustained use of certain reform practices makes a difference within a group of seemingly equally disadvantaged schools.

practices at any level of implementation and the attendance, achievement and dropout outcomes. It did reveal, however, that high poverty high minority schools with high levels of implementation of certain practices reported significantly higher ninth grade promotion rates than schools implementing the practices in a less sustained or widespread way.

These initial analyses led us to further investigate the relationship between the practices and ninth grade promotion with longitudinal data provided by the Maryland State Department of Education. As described earlier, we used MSPAP annual enrollment data to produce an estimate of ninth grade promotion rates by subtracting the number of tenth graders from the number of ninth graders in the previous year, then dividing by the number of ninth graders (e.g. 9<sup>th</sup> in 1993-94 - 10<sup>th</sup> in 1994-95) / 9<sup>th</sup> in 1993-94).<sup>2</sup> We constructed this measure for the 1993/94 school year and each subsequent year through 1999/00.<sup>3</sup> We chose to begin the time series in 1993/94 because the Maryland State Department named its first “reconstitution eligible” schools in the following 1994/95 school year. Because the state’s reconstitution initiative dramatically shaped the policy context for school reform in Maryland and, consequently, high school reform efforts, we wanted to present data describing conditions in the schools prior to and following implementation of the reconstitution policy.

The following presents our findings for the relationship between a school-within-a-school organization and ninth grade promotion in the 25 high schools identified in earlier analyses as high poverty, high minority. We focus on the school-within-a-school practice because it represents a major departure from traditional high school organization and is potentially one of the most dramatic ways in which a school can restructure to create a more welcoming and

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<sup>2</sup> To check the reliability of this measure of ninth grade promotion the constructed measure for 1999-00 was correlated with the measure of ninth grade promotion for 1999-00 obtained from the school-level survey. The Pearson correlation coefficient ( $r = .62$ ) was significant at the  $p < .01$  level.

<sup>3</sup> Tenth grade enrollment data was obtained for fall of the 2000/01 school year through phone contact with the 25 high poverty high minority schools included in this analysis.

personalized environment for incoming and repeating ninth graders.<sup>4</sup> Limiting our focus to high poverty, high minority schools potentially enabled us to examine a group of demographically similar schools in which different degrees of implementation (none, low and high) are represented. In other words, it enabled us to investigate whether more widespread and sustained use of the school-within-a-school practice made a difference within a group of seemingly equally disadvantaged schools.

*School-Within-A-School Organization and Promotion Rates:* Graph 1 shows how ninth grade promotion rates have changed over time in high poverty, high minority schools that reported using school-within-a-school organization for ninth graders in spring of 2000 at a high level of implementation, at a lower level of implementation, and those that reported not using the practice at all. Two findings emerge from this analysis. First, the data show that although all 25 schools represented in Graph 1 are high poverty, high minority schools, large gaps separate the high, low and no implementing schools in terms of their ninth grade promotion rates. Specifically, the average ninth grade promotion rate among schools not using the school-within-a-school practice is much higher across all years studied than among the schools that reported using the practice. Moreover, schools using the practice at the lower implementation level also began in 1993/94 with a higher average promotion rate than those using the practice at the higher level of implementation.

This finding suggests that meaningful differences exist between the three groups of schools over and above their poverty and minority status. Our investigation into the specific schools in each category revealed this to be the case. All six schools in the high implementer group are comprehensive, neighborhood-zoned high schools located in Baltimore, the most

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<sup>4</sup> A final version of this paper will include analyses of additional practices and of the use of different combinations of multiple practices.

impoverished and only urban district in Maryland. Throughout the early to mid-1990s, all but one of these schools was identified as a reconstitution-eligible school by the state, indicating major deficiencies in school climate and student performance. In contrast, the four schools in the low implementer group included two less problematic comprehensive Baltimore high schools and two suburban schools. The schools in the no-implementer group include not only many schools located in relatively privileged suburban areas (e.g. Montgomery County), but also the magnet and vocational-technical high schools in Baltimore that draw a selected group of high performing students from a city-wide catchment area. In other words, the schools that had implemented the school-within-a-school practice in a sustained and widespread way by spring 2000 were much worse off to begin with and under greater pressure from the state to reform than the other high poverty, high minority schools in the sample.

The second major finding from this analysis is that while promotion rates remained relatively flat among high poverty, high minority schools not using the school-within-a-school practice,<sup>5</sup> schools using the practice achieved net improvements in their promotion rates over the years studied. Low implementing schools achieved nearly an eight percentage point increase, while high implementers on average gained nearly ten percentage points. High implementers achieved especially dramatic gains through 1996/97, at which point promotion rates leveled off and declined somewhat. Though rates fortunately have not returned to the abysmal 1993/94 levels, we believe that possible reasons for this downward trend are related to specific circumstances of the schools in the high implementer group that we describe in the discussion section below.

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<sup>5</sup> This is also the case for the remaining schools in the entire sample whose average promotion rates lie in the 90<sup>th</sup> percentile across all years studied.

Because the results of the longitudinal analysis of promotion rates in schools using the school-within-a-school practice were so dramatic, we further investigated over-time trends in dropout and achievement outcomes in these schools. Dropout rates are schoolwide rates collected annually by the state. Achievement measures are drawn from the Maryland Functional Math Test and represent the percentage of ninth graders in each school having passed the test by the end of the given year.

*School-Within-A-School Organization and Dropout and Achievement Outcomes:* Graph 2 shows how schoolwide dropout rates have changed over time in high poverty, high minority schools that reported using the school-within-a-school practice for ninth graders in spring of 2000 at high and low levels of implementation, and not at all. As in Graph 1, substantial gaps existed in dropout rates among the three groups of schools in 1993/94. At 14.8%, the dropout rate among the troubled high implementers was nearly five times the average among the less troubled schools not implementing the practice. The average dropout rate among the low implementing group lay in between but closer to the more troubled schools at 10.7%. By the end of the decade, however, the gap closed dramatically. In 1999/00, the average dropout rate among the group of schools using the school-within-a-school practice in a sustained and widespread way decreased by two thirds, dropping to just over 5%. Among the low implementers, the rate was cut nearly in half to also just over 5%. The average dropout rate among the group of schools not implementing the practice declined slightly, but far less dramatically than in the other two groups.

Graph 3 shows how the average percentage of ninth graders passing the Maryland Functional Math Test varied across the three groups of schools that reported using the school-within-a-school practice for ninth graders in spring of 2000 at high and low levels of



implementation, and not at all. As in Graphs 1 and 2, initial differences among the three groups of schools are large. In 1993/94, less than a third of ninth graders in the troubled Baltimore zoned schools that eventually implemented the school-within-a-school practice in a widespread and sustained way had passed the Functional Math Test, compared with over three quarters passing in the suburban and more selective schools that never adopted the practice. Fewer than half passed in the schools that eventually adopted the practice at a lower level of implementation. By 1999/00, however, the average passing rate in high implementing schools had risen to over 50%, exceeding the rate in the low implementing schools and closing the gap with the non-implementers by over 15 percentage points.

### **Discussion and Policy Implications**

The foregoing analyses show that public high schools in Maryland are using a number of different reform practices to support ninth graders' transition to high school. One of the clearest findings of this study is that, across the board, reform practices are being used to a greater extent in the most disadvantaged schools. The dramatic differences in measures of student performance and use of practices shown in Table 2 indicate a strong tendency for high poverty, high minority schools to adopt reform practices compared with more advantaged schools. The overrepresentation of reform practices in high poverty, high minority schools makes sense in light of the low attendance, promotion, and achievement rates that likely motivate those schools to try a greater number of innovative or new organizational practices. The policy context in Maryland, where low performing schools are threatened with reconstitution if they fail to develop a reform plan and make rapid improvements, also helps explain this finding.

We also found that one practice, school-within-a-school organization for ninth graders, was implemented with greater frequency in large schools with student enrollments of 1,500 or more. This was expected since this is a practice specifically designed to break down large schools to provide a less bureaucratic, more personalized learning environment for students and staff. However, interdisciplinary teaming and homeroom/advisory groups, practices with a similar purpose, were not overrepresented in large schools. These discrepancies may be rooted in the longstanding tradition of organizing high schools and faculty identities around subject-area departments. While creating a school-within-a-school is no mean task, it is one that can be achieved without challenging the basic identities of high school teachers as subject-area specialists. In contrast, interdisciplinary teaming and homeroom/advisory groups ideally call upon faculty to work together across disciplinary boundaries and relate to students as personal mentors. Our experience working in reforming high schools suggests that these practices require a deeper level of cultural change that few faculties are willing, or even see the need, to attempt.

We did find that school-within-a-school, interdisciplinary teaming and homeroom/advisory groups for ninth graders were all overrepresented in large high poverty, high minority schools, suggesting an interaction among size and student demographic characteristics in a school's likelihood to adopt these practices. However, over half of the large, high poverty, high minority schools using these practices also were identified by the state as reconstitution eligible schools. Hence it is likely that a combination of both internal conditions and external pressure to reform led to the adoption of these practices in these schools.

Because high minority, high poverty schools are most likely to have adopted the reform practices studied here, associations across the entire sample of schools between the practices and student attendance, achievement, promotion and dropout rates are negative, i.e. the schools using

the practices rank lowest on the student outcomes. The cross sectional nature of our survey data limits our ability to investigate the impact of the reforms on students. We attempted to work around this limitation by distinguishing between schools that are using the practices in a widespread and sustained way (involving at least 75% of their ninth graders and implementing for at least three years) from schools using the practices at a lower level of implementation and by looking at the outcomes over time in the sample of high poverty, high minority schools.

Graphs 1-3 suggest that the group of schools that reported using the school-within-a-school practice in a widespread, sustained way in 1999/00 made substantial gains in promotion and achievement and succeeded in lowering dropout rates from the period between 1993/94 through 1999/00. It would be going beyond the data to suggest that these gains can be attributed solely to the introduction or presence of the school-within-a-school approach. We argue, however, that school-within-a-school organization played a significant role in a larger reform process undertaken by this particular group of high poverty, high minority schools since the early 1990s. Recall that all but one of the schools in this group was named reconstitution eligible by the state by the 1996/97 school year. Under state guidelines, each reconstitution eligible school must identify a local reform partner and write a reform plan detailing the changes it will make to turn itself around. Because the first school to be so identified experienced dramatic success with a small learning community approach for their ninth graders, the other schools followed suit with the support of the same local reform partner.

In addition to the influence of state and local partner forces, the Baltimore City Public School System's district office issued a memo in the 1995/96 school year to principals of all neighborhood comprehensive high schools in Baltimore directing them to begin reorganizing their schools into smaller learning communities. While little direct technical support was

provided to the schools to implement this directive, it was (somewhat ironically) in-line with a general trend toward decentralization and site-based decisionmaking that had characterized the district's approach to school improvement in the early part of the decade.

All this is to say that the idea of building a school-within-a-school program for ninth graders came part in parcel with the general pressure to reform in these schools. The question remains, however, whether it was the implementation of the ninth grade academies, as they came to be called, that generated the improvements in promotion rates, dropout rates and test scores, or whether the improvements had more to do with the additional resources, official and public scrutiny, influence of state monitors and local reform partners, and general reform momentum experienced by these schools during this time period. Our data do not allow us to tease apart all of these factors.

A study addressing the actual impact of a school-within-a-school approach, or any of the other practices, would benefit from more extensive implementation data. While we measure the extent of implementation in terms of how widespread and sustained they are in a given school, these measures reveal little about the quality of implementation of that practice. For example, a school-within-a-school or other small learning community for ninth graders can range from a purely nominal change, such as renaming the ninth grade class as the "Ninth Grade Academy," to technical changes such as changing course scheduling or requirements, to instituting deep cultural changes that support the creation of a more personalized, supportive learning environment where feelings of trust and belonging are nurtured between students, faculty, and administrators. The differences in these levels of implementation, though not apparent in our measures, are an essential part of determining what impact these practices may have on student outcomes. A more complete understanding of how schools are implementing practices would

require visiting schools, talking to members of the school community, and comparing different modes of implementation in different contexts across a number of schools. Any argument to promote or scale-up school-within-a-school or other reform practices should be based on a richer understanding of what is needed to achieve high quality implementation than we offer here.

Overall, what these data do tell us is that reform practices are being used by high schools in Maryland to promote ninth grade success and that high poverty, high minority schools are most likely to have adopted these practices. Moreover, they tell us that the high poverty, high minority schools that reported using the school-within-a-school practice in spring of 2000, especially those that report using it in a widespread and sustained way, showed substantial improvements on promotion, dropout and achievement outcomes between 1993/94 and 1999/00. We believe these findings warrant further investigation of the potential of school-within-a-school and other reform practices to improve student outcomes, especially in disadvantaged high schools.

## **Conclusion**

This study contributes to the literature on school reform and restructuring by providing much needed information about effective school organizational practices to ease the transition to high school. As educational researchers and practitioners work to find the best ways to organize high schools for the benefit of teachers and students alike, more attention must be given to the unique needs of ninth graders as they transition to a new school environment while also facing the challenges of adolescence. Identifying specific organizational practices that may increase students' sense of belonging to the educational community, as shown by positive effects on their

attendance, test scores, promotion and chance of graduating from high school, is an important and necessary step on the path to improving the conditions of today's public high schools.

## References

- Alexander, W.M. & George, P.S. (1981). *The exemplary middle school*. New York: Holt, Rinehart and Winston.
- Braddock, J.H. & McPartland, J.M. (1993). Education of early adolescents. In L. Darling-Hammond (Ed.), *Review of Research in Education*, 19:135-170. Washington, DC: American Educational Research Association.
- Bryk, A.S. (1994). More good news that school organization matters. In *Issues in Restructuring Schools. Issues Report No. 7*. Madison, WI: Center on Organization and Restructuring of Schools.
- Bryk, A. S. & Driscoll, M. E. (1988). *The high school as community: Theoretical foundations, contextual influences, and consequences for students and teachers*. Madison: National Center on Effective Secondary Schools, University of Wisconsin.
- Bryk, A.S. & Thum, Y.M. (1989). The effects of high school organization on dropping out: An exploratory investigation. *American Educational Research Journal*, 26(3), 353-383.
- Epstein, J.L. & Mac Iver, D.J. (1990). *Education in the middle grades: National practices and trends*. Columbus, OH: National Middle Schools Association.
- Fine, M. (1994). Chartering urban school reform. Pp. 5-30 in M. Fine (Ed.), *Chartering urban school reform: Reflections on public high schools in the midst of change*. New York: Teachers College Press.
- Johnston, J.H. (1992). Climate and culture as mediators of school values and collaborative behavior. Pp. 77-92 in Judith L. Irvin, (Ed.), *Transforming middle level education: Perspectives and possibilities*. Boston: Allyn and Bacon.
- Legters, N. E. (2000). Small learning communities meet school-to-work: Whole-school restructuring for urban comprehensive high schools. In M.G. Sanders (Ed.) *Schooling Students Placed At Risk: Research, Policy, and Practice in the Education of Poor and Minority Adolescents*, Erlbaum Associates, Inc.
- Lee, V.E., Bryk, A.S., & Smith, J.B. (1993). The organization of effective secondary schools. In L. Darling-Hammond (Ed.), *Review of Research in Education*, 19:135-170. Washington, DC: American Educational Research Association.
- Lee, V.E. & Smith, J.B. (October, 1995). Effects of high school restructuring and size on early gains in achievement and engagement. *Sociology of Education*, 68(4), 241-270.
- National Association of Secondary School Principals. (1996). *Breaking ranks: Changing an American institution*. Reston, VA.

- National Association of Secondary School Principals. 1985. *How fares the Ninth Grade? A day in the life of a 9<sup>th</sup> grader*. Reston, VA.
- Roderick, M.R. (1993). *The path to dropping out: Evidence for intervention*. Westport, Connecticut: Auburn House.
- Simmons, R.G. & Blyth, D.A. (1987). *Moving into adolescence: The impact of pubertal change and school context*. New York: Aldine de Gruyter.
- Zane, N. (1994). When “discipline problems” recede: Democracy and intimacy in urban charters. Pp. 122-135 in M. Fine (Ed.), *Chartering urban school reform: Reflections on public high schools in the midst of change*. New York: Teachers College Press.



Table 1 Percent of Schools Using Certain Practices (N=138)

Practice	Percent of schools using practice	Percent using practice for at least 3 years and with at least 75% of 9 <sup>th</sup> graders
Student-centered instructional practices, such as cooperative learning or student-directed projects or activities, used an average of once a week or more	79.7%	44.2%
Extended class periods	50.4%	32.4%
Special curriculum or classes for 9 <sup>th</sup> graders to help them learn the study skills and/or social skills needed to be successful in high school	44.9%	9.4%
Homeroom or advisory groups for 9 <sup>th</sup> graders which meets regularly throughout the school year	33.8%	19.4%
Extra subject period, or Double Dose, of a core academic class	33.3%	2.9%
Interdisciplinary teams of 9 <sup>th</sup> grade teachers who share the same students	26.6%	9.4%
Summer program for entering 9 <sup>th</sup> graders for enrichment purposes	25.9%	N/A
School-within-a-school, academy, or other small learning community for 9 <sup>th</sup> graders	25.2%	7.2%
No ability tracking in core academic classes	13.0%	N/A

N/A = implementation questions not asked of this practice

Table 2 Use of Practices and Outcomes by School Demographic Characteristics

Practice	Whole Sample (N=138)	Low Poverty, Low Minority Schools (N=31)	High Poverty, High Minority Schools (N=25)
Student-centered instructional practices	79.6%	83.9%	83.3%
Extended class periods	50.7%	41.9%	88.0%
Special curriculum or classes for 9 <sup>th</sup> graders	45.3%	45.2%	54.2%
Homeroom or advisory groups for 9 <sup>th</sup> graders	33.3%	32.3%	44.0%
Extra subject period, or Double Dose, of a core academic class	33.3%	19.4%	56.0%
Interdisciplinary teams of 9 <sup>th</sup> grade teachers who share the same students	26.1%	9.7%	36.0%
Summer program for entering 9 <sup>th</sup> graders for enrichment purposes	26.1%	12.9%	56.0%
School-within-a-school, academy, or other small learning community for 9 <sup>th</sup> graders	24.6%	19.4%	40.0%
No ability tracking in core academic classes	13.1%	0%	36.0%
<b>Outcome</b>			
Average 9 <sup>th</sup> grade attendance rate	91.4%	94.3%	83.9%
Average 9 <sup>th</sup> grade promotion rate	89.4%	93.6%	80.7%
Average school dropout rate	3.1	2.4	3.4
Average percent pass Maryland Functional Math Test, 99-00	87.8%	95.5%	71.7%

Table 3 Use of Practices by School Size and Demographic Characteristics

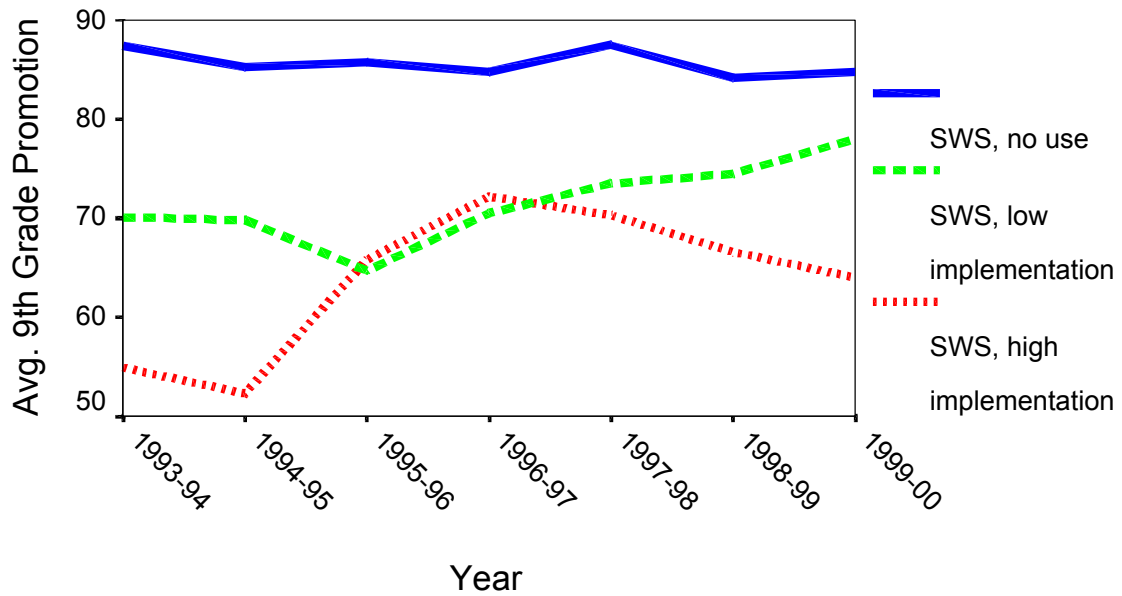
Practice	<i>Non Large Schools Enrollment &lt; 1500</i> (N=91)	<i>Large Schools Enrollment ≥ 1500</i> (N=47)	<i>Large, Low Poverty, Low Minority Schools</i> (N=14)	<i>Large, High Poverty, High Minority Schools</i> (N=7)
Homeroom or advisory groups for 9 <sup>th</sup> graders	36.3%	27.7%	28.6%	57.1%
Interdisciplinary teams of 9 <sup>th</sup> grade teachers who share the same students	27.5%	23.4%	0%	42.9%
School-within-a-school, academy, or other small learning community for 9 <sup>th</sup> graders	20.9%	31.9%	28.6%	57.1%

Table 4 Use of Selected Practices by Level of Implementation and School Demographic Characteristics

Practice	<i>Non High Poverty, High Minority Schools (N=113)</i>		<i>High Poverty, High Minority Schools (N=25)</i>	
	Percent using practice	Percent using practice for at least 3 years and with at least 75% of 9 <sup>th</sup> graders	Percent using practice	Percent using practice for at least 3 years and with at least 75% of 9 <sup>th</sup> graders
Extended class periods	42.5%	25.7%	88.0% (N=22)	64.0% (N=16)
Homeroom or advisory groups for 9 <sup>th</sup> graders	31.0%	16.8%	44.0% (N=11)	28.0% (N=7)
Extra subject period, or Double Dose, of a core academic class	28.6%	0.9%	56.0% (N=14)	12.0% (N=3)
Interdisciplinary teams of 9 <sup>th</sup> grade teachers who share the same students	23.9%	5.3%	36.0% (N=9)	24.0% (N=6)
School-within-a-school, academy, or other small learning community for 9 <sup>th</sup> graders	21.2%	2.7%	40.0% (N=10)	24.0% (N=6)

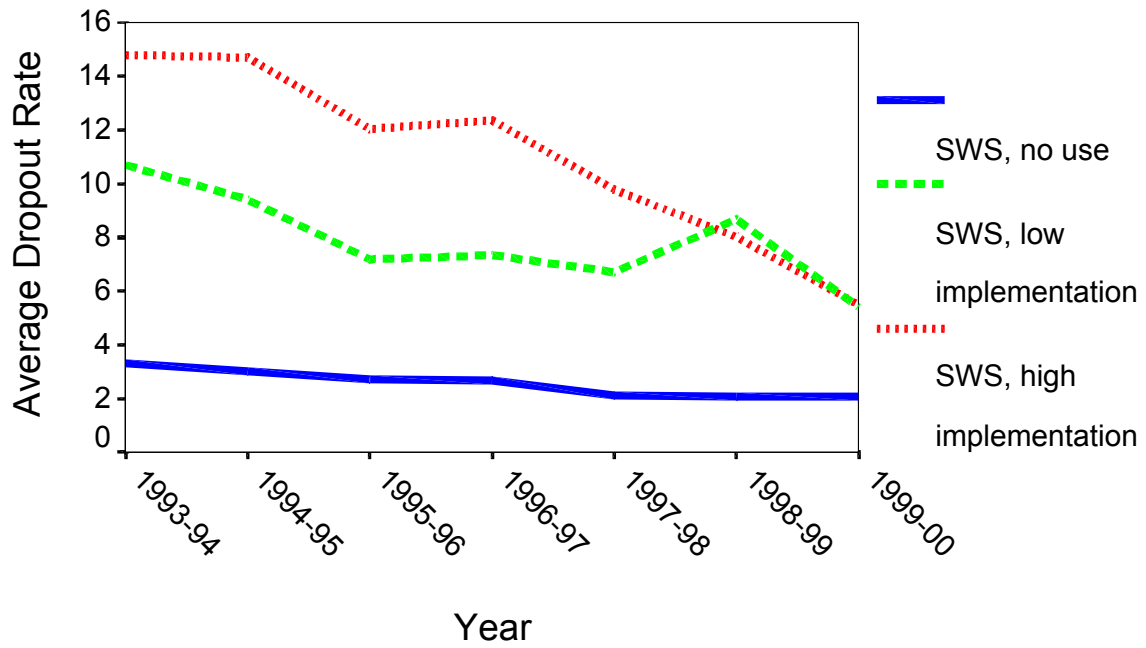
# Graph 1

## 9th Grade Promotion Rate for High Poverty High Minority Schools by use of School-Within-a-School



## Graph 2

### Dropout Rate for High Poverty High Minority Schools by use of School-Within-a-School



### Graph 3

## Percent of 9th Graders Passing MD Functional Math Test in HPHM Schools by use of School-Within-a-School

