Underserved students (low-income, underrepresented minority, or first generation to attend college) do not attend college at the same rate as their white, middle-, or upper-income peers, and research suggests that this discrepancy is due in large part to the lack of opportunity for underserved students beginning in middle school. This briefing paper is intended to help middle grades principals and teachers close the opportunity gap for underserved students. The paper first explores the critical relationship between middle school and postsecondary success, noting that the challenge for parents and school personnel is to help students see the connection between thinking they want to go to college and learning how to prepare for college entrance. Next, the paper details school characteristics contributing to the opportunity gap for underserved students: lower teacher expectations, less effective instructional strategies, less counseling contact, and fewer college preparatory classes after transition to high school. The paper then presents effective middle school practices that benefit underserved students: support for all students, including interdisciplinary teaching, small group advisory programs, and varied instructional techniques that incorporate active engagement and exploration; interventions for underserved students, which include changing instructional structures and strategies, incorporating linguistic and cultural materials into existing curricula, expanding support programs, and helping parents of underserved students. Finally, the paper looks at the prospect of building school capacity for personalizing instruction, increasing student support and student achievement, and eliminating biases in relation to underserved students. (Contains 41 references.) (HTH)
The Middle Grades:
Putting All Students on Track for College

By Sharon J. Camblin*

Introduction

Adults often ask adolescents what they want to be when they grow up. While the question may be innocuous on the part of teachers and parents, when students begin to think about specific occupations and education requirements is critical. The middle grades, those enrolling 10- to 14-year-old students, have an important relationship to college access. The middle grades are when students, families, and school personnel begin to address career aspirations, academic preparation, and college information.

The challenge is how to help all students develop the aspirations and skills to be successful in post-secondary settings. Underserved students (low-income, underrepresented minority, or first generation to attend college) simply do not enroll in postsecondary programs or complete college at the same rate as their white, middle- or upper-income peers. Research evidence suggests that this discrepancy is due in large part to the lack of opportunity for underserved students beginning in middle school (Riley, 1997; Valentine, Clark, Hackmann, & Petzko, 2003). Middle grades educators must become engaged in the discussion of how college access differs for students and involved in making the changes needed to guarantee each child equal postsecondary opportunities and choices. Closing the gap will require middle schools to use the most effective practices for all students, focus on interventions specific to underserved students, and develop the capacity to do both.

The focus of this briefing paper is to help middle grades principals and teachers close the opportunity gap for underserved students. The paper provides a) reasons the middle grades are so critical to postsecondary preparation, b) background on the opportunity gap that exists for underserved students, c) examples of effective practices and what works, and d) recommendations for building school capacity to increase student performance for college access.

* Dr. Sharon J. Camblin is a Special Projects Coordinator with PREL, supporting its work with the Pathways to College Network.
A Critical Relationship

The middle grades have a critical impact on the postsecondary success of students because it is here that two factors collide. The middle grades are the intersection of students’ needs to “get on track” for college and to determine what they will be like as adults. For white, middle- and upper-income students, this collision most often results in a sudden focus on college opportunities. For underserved students, the collision is more challenging. The decisions made during this time have lifelong consequences about how these students see themselves as learners, engage with learning, and set their goals.

The choice to go to college is a three-stage developmental process that includes predisposition, searching, and choosing. These stages begin as early as the 7th grade. According to Cabrera, La Nasa, and Burkum (2001), most 9th graders have already developed both occupational and educational aspirations. Each stage has particular cognitive and affective outcomes that cumulatively prepare students to make certain decisions regarding their college education. Each stage interacts with the previous stage in subtle and complex ways.

Most closely associated with the middle grades is the predisposition stage, which is when students develop their occupational and educational aspirations. A challenge for parents and school personnel is to help students see the connection between thinking they want to go to college and learning how to prepare for college entrance. The ages between 10 and 14 are most commonly when students engage or disengage from school and learning. The transition to middle school has been associated with a decline in academic achievement, performance motivation, and self-perception (National Middle School Association [NMSA], 2002). The middle grades classroom influences whether students see themselves as smart and worthy of taking challenging courses in high school. As they develop an adult self-concept, self-esteem, and racial identity, students make decisions about how academic achievement, certain careers, and college fit into this self-perception.

Research statistics suggest that middle grades students often think about going to college but fail to plan or obtain support for the intermediate steps (Cabrera, La Nasa, & Burkum, 2001; National Center for Education Statistics [NCES], 1994). The tragedy is that the failure at an early age to develop a plan for approaching college has dramatic impact on what actually happens to students, especially those considered underserved. Students who focus on going to college during the middle grades are far more successful at actually attending college despite other challenges (Cabrera, La Nasa, & Burkum, 2001). These students plan their secondary schooling around appropriate course selections and extracurricular activities. They become interested in maintaining good academic performance. In addition, their families become involved in securing information about ways to finance a college education and most often begin saving for the expense.

The Opportunity Gap for Underserved Students

Rothman (2001/2002) suggests that there is an opportunity gap for underserved students that explains their lower college enrollment rates. Through no fault of their own, undeserved students are often deprived of the opportunity to prepare and plan for college. Underserved students are taught different curricula at different levels of rigor, experience cultural stereotyping, and are underrepresented in academically rigorous courses (Silver, 2000). Other deprivations include lower teacher expectations, less effective instructional strategies, less counseling contact, and fewer college preparatory classes.

The irony of the preparation gap is that when underserved students have the necessary academic skills, they can perform admirably in even the most demanding collegiate environments. When
minority students take upper-level math and science classes in high school, for instance, they can be successful in college despite all other challenges. According to a summary report of educational equity and reform between 1990 and 2000 (College Board, 2000), low-income and minority students who master algebra and geometry and have expectations to go to college actually enroll in college at the same rate as their non-minority peers with those same academic experiences. They also succeed at about the same rate.

Lower Teacher Expectations
There is a contrast between student and family plans for college and teacher perspectives on student achievement. A recent poll conducted by Harris Interactive (2001) reports that while 71% of students say they plan to attend a four-year college, 51% of their parents and only 32% of their teachers believe they will actually go. Even more significant is that just 28% of teachers surveyed see going to college as a goal for students in their own classrooms.

Particularly at the middle grades, it is critical to consider the attitudes students develop toward academic achievement. Whether because of limited professional training or personal disposition, teachers who lack high expectations for student learning have a dramatic impact on underserved students. Based on their own beliefs about race, ethnicity, and socioeconomic background, educators make judgments about students' ability to learn, interest in learning, and chances for success in college and beyond. It is important to look at whether students do not succeed because their teachers do not expect them to, convincing them not to try hard in school and closing doors to those students' futures (George & Aronson, 2003; Rothman, 2001/2002).

Even when underserved students have high expectations for themselves after high school, they can develop a discrepancy between their achievement attitudes and their achievement behaviors. Underserved students who hold positive attitudes toward academic achievement, but who are not supported by the school structures or teachers, often develop what only seem to be poor attitudes (Ford, 1995). The result? An inconsistency between a student wanting to be academically successful and actually putting forth the effort to be successful.

Less Effective Instructional Strategies
The lack of opportunity for underserved students to become ready for college is linked to how schools group students and provide instruction. The practices of academic tracking or ability grouping show devastating effects on underserved students. Assignment to different tracks affects the way students view themselves and influences the amount of effort they put into their schoolwork, the way they behave in class, and the extent of their achievement (Hoffer, 1993; Oakes, 1995; Tucker & Codding, 1998). Underserved students are overrepresented in lower tracks.

The tragedy of tracking is that less-experienced teachers who have fewer resources frequently teach lower-track classes. The instructional strategies are less research-based and less effective in achieving academic excellence. In the area of reading at the middle grades, for example, research indicates that the amount of instructional time spent on teaching students how effective readers make meaning of texts has a significant impact on student achievement. Teachers in high-poverty schools spend 39% of their time on reading skills, compared to 55% in more affluent schools (NCES, 1994). Higher-track classes use different kinds of instruction with more emphasis on inquiry methods, problem solving, and small group work. Instruction tends to engage students more directly in their learning and includes working in groups. The lower-track classes are dominated by instructional strategies that are passive; students do lots of worksheets and tend to work alone (Hoffer, 1993; O’Neil, 1992; Valentine, Clark, Hackmann, & Petzko, 2003).
Less Counseling Contact
Adding to the lack of opportunities for students is the lack of academic counseling that would provide information about college preparation coursework. Low-performing students who need assistance in developing educational goals are the least likely to have received such help. High-performing students are much more likely to report that they talked with counselors several times about which classes to take when they reach high school. These students are also much more likely to report that they intend to complete college (Cooney, 2000).

Fewer College Preparatory Classes
The underserved student has greater transition issues into high school and enrolls in fewer college-track courses. In a five-year study of urban middle schools, Balfanz and Maclver (2000) found that poor educational experiences in many of these schools contribute to the inability of nearly half of these students to make a successful transition into high school. And though the research is clear that high school students who take algebra, geometry, and other rigorous mathematics courses are more likely to go on to college, low-income and minority students are far less likely to be enrolled in such courses than other students (Berkner & Chavez, 1997; Riley, 1997). In addition, although 71% of the students who take geometry go on to college (compared to 25% who do not take geometry), only 46% of low-income students take a geometry course (Riley, 1997). The end result is that underserved students take fewer steps in high school to prepare for college and enroll in college at much lower levels.

Effective Practices – What Works
All middle grades educators face the challenge of changing what they teach, when they teach it, and how they teach it in order to increase student achievement (Cooney, 2000). The good news is that middle schools have already identified many of the practices and strategies that can benefit all students, including linguistically or culturally different and first generation college-going students.

Support for All Students
Several national groups have taken on the task of developing standards for and descriptions of middle grades practices that meet the needs of the early adolescent. The National Forum to Accelerate Middle-Grades Reform (1997), for example, proposes that components of effective middle schools include academic excellence, developmental responsiveness, and social equity. Such high-performing schools are focused on keeping all students’ future options open. Teachers are expected to work to educate every child well and to overcome systematic variation in resources and outcomes related to race, class, gender, and ability.

Similarly, the NMSA (1995) and others (Valentine, Clark, Hackmann, & Petzko, 2003) have identified a number of characteristics of exemplary middle schools such as interdisciplinary teaching, small group advisory programs, and varied instructional techniques focused on active engagement, exploratory programs, and transition programs. Exemplary practices converge on developing and keeping a positive school culture, assigning adult advocates for every student, building family and community partnerships, setting high expectations for all, and creating and maintaining a shared vision with educators committed to and knowledgeable about adolescents. Students who do make successful transitions to high school most often stay for several years in middle school with a small team of teachers who provide learning opportunities centered on hands-on, life-related enrichment activities, integrated instruction, and cooperative learning groups (Mizelle, 1995).

Middle schools have also begun to develop the capacity to structure the counselor’s time and the students’ opportunity to talk with a trained adult who has the skill to help them extend their aspira-
tions for college and develop a plan to achieve that goal. In addition to the one-on-one time, schools are striving to involve parents by providing timely information about careers, college-preparatory classes, and expectations for the transition into high school and beyond. One support for the middle grades counselor is an effective advisory program in which students can develop close, trusting relationships with other supportive adults and increase engagement with learning and feelings of positive self-esteem and belonging. Effective advisory programs increase student achievement, promote student-teacher relationships, address general self-esteem and confidence beliefs, link parents with the school, and mediate between academic and social concerns (Cooney, 2000; NMSA, 1995).

All of the research on middle schools points to the need for special attention to the transition into high school. Evidence has shown that transitional discontinuity can have a negative impact on student academic performance (Rice, 1997). The attributes of successful transition programs into and out of the middle school include being sensitive to the anxieties accompanying a move to a new school setting, acknowledging the importance of parents and teachers as partners in this effort, and recognizing that becoming comfortable in a new school setting is an ongoing process, not a single event, and uses different articulation activities. Successful transition programs provide ongoing information about the new school, new programs, and new expectations and offer social support during the transition (Mizelle & Irvin, 2000; National Association of Elementary School Principals [NAESP], 1992).

**Interventions for the Underserved Student**

First and foremost, teachers need to understand and act on the premise that they control the teaching practices and learning experiences that improve student achievement. They need to believe that they can help students overcome the negative effects of poverty and other conditions beyond teachers’ and students’ control (Cooney, 2000). Specific interventions will be needed to provide the kinds of preparation and information that will help students become ready for college. These interventions include changing instructional structures and strategies, incorporating linguistic and cultural materials into existing curricula, expanding support programs, and helping parents.

**Changing Instructional Structures and Strategies**

In high-performing middle schools that serve underserved students, there are clear standards and high expectations, challenging learning opportunities, and a climate of encouragement. Teachers indicate to students the amount and quality of work needed to earn a high grade. Instructional time for math and reading is increased. Highly qualified teachers use instructional strategies focused on making a difference in student learning, including inquiry-based learning, examples and problems that have real-world value, interdisciplinary teaming, and exploratory programs. Small groups and supportive adults are available to monitor individual student progress and provide extra support to students when needed. Perhaps most importantly, students have early positive contact with counselors, teachers, and the school principal, who provide motivation and encouragement for them to attend college (Cooney, 2000; Gay, 1999; George & Aronson, 2003; Krovetz, 1999; National Forum to Accelerate Middle-Grades Reform, 1997; NMSA, 2002; Robles-Delaney, 2001).

**Incorporating Linguistic and Cultural Materials Into Existing Curricula**

Linguistically and culturally diverse students can achieve academic success when the materials used in their classrooms directly link their cultural experience to their learning and reflect the local values and traditions in the classroom environment. To foster success for diverse learners, culturally relevant materials need to include formal curriculum materials, informal classroom materials, and classroom interactions (Camblin & Barlow, 2002). Learning is contextualized because it makes connections with the home culture, scaffolds the learners’ prior knowledge, and individualizes
instruction, which in turn builds on the students' experiences and learning styles. The creation of cultural capital allows students to feel valued in the school environment. The use of culturally relevant materials to increase student achievement penetrates the inner core of the teaching and learning processes, as well as the lives of students (Gay, 1999).

Success with diverse learners requires teachers to have some understanding of culturally determined references for thinking and interacting. Social support is based on an understanding of culture and respect, as well as exposing all students to a high-achieving peer group of various races (Garcia, 1991; Gay, 1999; Nelson-Barber, 1999; Pavel, Reyhner, Avison, Obester, & Sayer, 2002; Pena, 1997; Robles-Delaney, 2001; Trueba & Bartolome, 1997).

**Expanding Support Programs**

Middle schools need to take a hard look at the inclusion of college outreach and enrichment programs during and after the school day. To provide informational outreach, career-based outreach, and academic support, middle schools must develop the capacity to build partnerships with community organizations and postsecondary institutions to intervene on behalf of the underserved student. Researchers and practitioners for the most part agree that outreach efforts that increase students' aspirations, expose them to the rigors of college at an early age, and provide interventions aimed at improving their academic performance are instrumental in illuminating and overcoming the barriers to equitable opportunity for higher education. Effective programs are represented by 10 principles of practice: 1) setting high standards for program staff and students, 2) providing personalized attention to each student, 3) providing adult role models, 4) facilitating peer support, 5) integrating the program with the school, 6) providing strategically timed interventions, 7) starting early and making long-term investments in students, 8) providing students with a bridge between school and society, 9) providing scholarship assistance, and 10) designing evaluations that contribute to the overall results of the interventions (Gullatt & Jan, 2002).

**Helping Underserved Parents**

There is also a critical need to support parents who are poor, less educated, and less knowledgeable about how the education system works so that children can gain access to and be successful in college. Schools that recognize the need to support parents provide opportunities that encourage participation in school activities and include parent education programs. There is a sensitivity among staff members to different cultures and a real attempt to bridge cultural understandings, lessening the need for students to negotiate between different cultural contexts. These schools see the family as a support and make attempts to reinforce education at home (Cabrera, La Nasa, & Burkum, 2001; Gandara, 2000; Robles-Delaney, 2001).

When families and parents are seen by the schools as having cultural capital or the ability to contribute in a positive way to their children's education, students are much more likely to be successful. To better understand students' families, schools need to develop a framework that integrates class, race, culture, and gender in a more holistic view of various familial experiences (Robles-Delaney, 2001). In this way, students have less need to negotiate between two different cultural contexts. Viewing the family as a source of support and building on their interest in school and their desire to see their children succeed could make all the difference.

Other steps schools need to take include reinforcing home literacy experiences and involving parents in middle school student activities. Additionally, providing information on college access, especially financial information, is critical to the support families can offer their children. Cabrera, La Nasa,
and Burkum (2001) contend that saving for college when their children are still in the middle grades is a key expression of parental encouragement for their children to aspire to college.

**Building School Capacity**

Increased capacity in the middle school has the potential for personalizing instruction, increasing student support and student achievement, and eliminating biases in relation to low-income, underrepresented minority, and first generation college-going students. What increase in capacity do middle schools need to meet this challenge, and how do they build this capacity?

**Increased Capacity Needed**

Capacity relates to what is required for any particular organization to achieve its purposes effectively, efficiently, and sustainably (Hilderbrand & Grindle, 1994; Massell, 1998). The traditional definition of school capacity has been the knowledge and skills held by teachers and staff. Today, school capacity is the wherewithal needed to translate vision and high standards into effective instruction and strong student performance. It can also be the collective power of the full staff to improve student achievement (Massell, 1998; Newmann, King, & Youngs, 2001).

Capable schools are those that can not only perform core functions such as classroom management or math instruction well but that also can solve problems, define and achieve specific objectives, and understand and deal with their own development needs in a broad context over a longer period of time (Cohen & Ball, 1999). School capacity is not a passive state, but part of an active process. The increased capacity that middle schools need to develop are the abilities to:

- think systemically, creating organizational knowledge and focus;
- reflect on their own beliefs so that they can evaluate teaching practices;
- see instruction as the interaction among teachers, students, activities, and educational materials; and
- be inclusive in the classroom, school, and local community.

**Building This Capacity**

Efforts to strengthen capacity have focused on "getting the job done" or implementing new programs rather than on building the sustained ability to carry out interventions or strategies over a long period of time. Educators and the public have emphasized what to change rather than how to change.

Policymakers and policy analysts have begun to discuss and implement capacity-building strategies. This implies the development of coordinated and interdependent activities and calls attention to a broad array of actions and processes required for sustained development (Rickett, 2000). Capacity-building strategies are based on the systemic theory that within the school and its larger environment there is an interdependence of the school, students, teachers, and parents that creates sustainable change.

Capacity building for the purpose of increasing college aspirations and academic preparedness for middle schools is based on three actions: focusing on P-16 alignment and program coherence, providing collaborative structures, and supporting professional development. To increase their capacity to serve all students, middle schools are strongly encouraged to do the following:

- Focus on program coherence and a P-16 alignment of standards, curriculum materials, assessments, and instructional strategies. Improved capacity depends on affecting the ways in which teachers and students understand and influence one another and make use of materials (Cohen & Ball, 1999).
• Focus on the environment for the teachers as well as the students. This includes working to create high levels of trust across the staff and providing structures for collaboration such as teacher teams and common planning (Trimble, 2003).
• Establish an ongoing professional development program focused on high achievement for students and a sense of community for the entire school. Provide teachers with technical assistance and coaching in early adolescent and effective middle school practices. Use facilitators to build internal capacity and a greater sense of personal mastery, confidence, and ownership (Moffett, 2000). The level of professional development should be greater than 16 hours annually (Cooney, 2000).

Conclusion

Should middle grades educators be concerned about preparing students for postsecondary opportunities? The unequivocal answer is yes! No level of education is exempt from scrutiny with regard to college access nor is any level excluded from addressing the differences in preparation for college between low-income, underrepresented minority, and first generation college-going students and their white, middle- or upper-income peers.

The investigation of the causes of an opportunity gap is nowhere more important than at the middle school, when students begin to develop college aspirations. Closing the gap for students will depend on abilities of the middle schools to adopt effective practices for all students, provide specific interventions for underserved students, and build increased school capacity.

What would this look like in a school setting? Imagine two middle schools. Both have hardworking teachers and principals who want their students to be successful. Both schools are actively involved in reform efforts. Unfortunately, the first school has not yet developed a common vision for meaningful learning in the middle grades. Expectations for student learning are low, and teachers are unsure of which instructional strategies make a difference. Only some students are slated for or registered in upper-level classes in high school.

In contrast, the second school regularly reflects on what the staff believes about learning and evaluates the instructional strategies in terms of success for all students. High expectations are held for all students. Grouping and instructional practices are based on equity and provide challenging content and upper-level skills for all students. Both academic and social support are given so that students develop personal and academic goals and plans.

The first school describes many middle schools that are challenged by a lack of capacity to meet the needs of all students for a successful transition into high school and on to college. While the desire to serve students may exist, until these schools develop new capacity, there will continue to be an opportunity gap for underserved students.

The second school, described in the chart on page 9, develops processes focused on what is required to achieve its goals effectively, efficiently, and sustainably. Developing the capacity to ensure college access for all students, this school is able to translate a vision of the school and standards for student learning into effective instruction and high achievement for all students. The people who work there demonstrate sustained organizational change and learning, personalization, and increased student support. Racial, class, and gender biases are almost non-existent in terms of student achievement. As they leave for high school, all students are on the college track.
<table>
<thead>
<tr>
<th>The Middle School</th>
<th>Putting All Students on Track for College</th>
</tr>
</thead>
</table>
| Student experiences | Focus on the needs of early adolescents  
| | Hold high expectations for all students  
| | Provide challenging coursework and curriculum for all students |
| School practices and strategies for all students | Utilize small teams of teachers  
| | Practice interdisciplinary teaching  
| | Recommend academic counselors and advisory programs  
| | Vary instructional techniques: hands-on, life-related, enrichment activities, integrated instruction, and cooperative learning |
| Interventions for the underserved student | Emphasize all instructional strategies, especially small groups and supportive adults  
| | Use linguistic and cultural materials that link the home and school  
| | Expand support programs  
| | Provide help for parents |
| Increased school capacity | Think systemically, creating school-wide knowledge and focus  
| | Reflect on beliefs and evaluate teaching practices  
| | See learning as the interaction among teachers, students, activities, and educational materials  
| | Be inclusive of all students and families – in the classroom and in the school |

The author would like to thank the following people for their assistance with this paper: Concept development reviewers: Dr. Michael Pavel (Eastern Washington University), Dr. Gilberto Conchas (Harvard University), and members of the NASSP Middle School Task Force. Draft paper reviewers: Ms. Rosa Aronson (NASSP), Dr. Tom Barlow (PREL), Ms. Monica Martinez (IEL), and Ms. Shayna Klopott (IEL). Editors: Dr. Darcy Bradley (Richard C. Owen Publishers) and Ms. Jennifer Harada (PREL).
References


This product was supported in part by awards from the U.S. Department of Education (U.S. ED) and other federal agencies. The content does not necessarily reflect the views of the U.S. ED or any other agency of the U.S. government.
NOTICE

Reproduction Basis

☐ This document is covered by a signed "Reproduction Release (Blanket)" form (on file within the ERIC system), encompassing all or classes of documents from its source organization and, therefore, does not require a "Specific Document" Release form.

X This document is Federally-funded, or carries its own permission to reproduce, or is otherwise in the public domain and, therefore, may be reproduced by ERIC without a signed Reproduction Release form (either "Specific Document" or "Blanket").