College Readiness Begins in Middle School

ACT POLICY REPORT

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ACT Policy Report

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PREFACE

This study, *College Readiness Begins in Middle School*, reflects ACT's interest in analyzing the critical issues affecting the preparation of the postsecondary applicant pool and the high school experience. It builds on previous policy reports that focus on educational planning and the transition to postsecondary education.

We are indebted to the many students and staff at the 15 schools that contributed to this study. Their generous support and cooperation made this report possible. In addition, administrators from each of the school districts (Chicago; Charleston, West Virginia; Denver; Los Angeles; New Orleans; and Oklahoma City) provided guidance and help in terms of school selection and contact information.

Many individuals outside of ACT provided assistance reviewing draft manuscripts. They include: Elizabeth Cittadine (Chicago Public Schools), Karen Gifford (Long Beach High School, Long Beach, Mississippi), and Laura Perna (University of Maryland). The ACT Policy Research Advisory Panel provided both recommendations about the formulation of the study and reviews of draft manuscripts.

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EXECUTIVE SUMMARY

Middle school and high school are important times for early postsecondary planning, and many educational organizations and the U.S. Department of Education recommend that students begin planning for college as early as sixth grade.[1,2,3] Schools can play a key role in guiding early preparation for postsecondary education through fostering academic preparation and achievement, supporting parent involvement, providing college and career planning information, and helping students through the many steps in postsecondary planning.

The purpose of this study is to:

- Examine the extent of early exploration and planning in certain college readiness areas (i.e., setting educational goals, selecting classes, exploring postsecondary options, and considering ways to meet college costs)

- Explore how parents, school staff, and school experiences help students with their early educational planning

This study reports findings from a survey and focus group discussions with middle and early high school students that demonstrate how people and school-based factors (i.e., classes, extracurricular activities, and pre-college programs) helped shape students' educational and postsecondary planning. Students in this study were from 15 schools in 6 school districts (Chicago; Charleston, West Virginia; Denver; Los Angeles; New Orleans; and Oklahoma City)—a broad array of urban and suburban schools with students from diverse social and economic backgrounds.

Although most students planned to pursue postsecondary education, fewer described their high school program of study as college preparatory. Furthermore, among the students who aspired to attend a two- or four-year college, only two-thirds described their high school program as college preparatory. These findings suggest that there may be a misalignment between postsecondary plans and high school program of study. Many middle and early high school students are failing to take a college preparatory curriculum that is designed to help them develop the skills necessary for college and for their intended careers.

Virtually all students surveyed indicated that their mother or female guardian was very helpful (67%) or a little help (25%) in their high school class selection. Fewer students indicated that their father or male guardian was helpful.

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[1] National Association for College Admission Counseling. (1999). *PACT: Parents And Counselors Together program.* Alexandria, VA: Author.

[2] National Association of Secondary School Principals. (1996). *Breaking ranks: Changing an American institution.* Reston, VA: Author.

[3] U.S. Department of Education. (1999). *Getting ready for college early: A handbook for parents of students in the middle and junior high school years.* Washington, DC: U.S. Government Printing Office.

Most students (86%) indicated that their teachers were either very helpful or a little help in selecting their classes. In the focus group discussions, students revealed that teachers often provided them with information and guidance about classes and how their classes are connected to their postsecondary options and other factors.

Over two-thirds of tenth graders reported that their high school counselor helped them select their high school courses. These students reported that their counselors were very helpful (32%) or a little help (41%) in selecting their high school classes and high school program of study. This compares to just over half of eighth- and ninth-grade students.

Students in this study used information from standardized assessments—EXPLORE® or PLAN®—as part of their educational planning. Most students (70%) indicated that this information helped them as they selected their high school classes. Many students reported that their teachers and/or counselors explained how their assessment results reflected their academic strengths and identified areas needing improvement.

Most students have considered their options beyond high school. Seventy-eight percent of middle and early high school students indicated that they have begun to think about and explore the types of education, training, and work that they might pursue after high school. Unfortunately, a sizable proportion of students (22%) had yet to think about and explore the types of education, training, and work they might pursue after high school.

Over 70% of students indicated that their families had begun to consider ways to pay for the costs of postsecondary education and training after high school. These findings are consistent among students who specifically planned to enter a two- or four-year college.

We offer four policy recommendations that can help schools facilitate effective early educational and postsecondary planning.

1. College readiness should begin in the middle school.

2. Schools should explain to students and their parents the effects of taking a challenging curriculum on their future educational, career, and income options.

3. Schools should use multiple sources of information, including standardized assessments, to help inform students and their parents of the students' progress toward college readiness.

4. Schools should work with families to calculate college costs and develop a plan to meet these costs.

1

INTRODUCTION

Obtaining a college education is generally accepted as both a goal and value among students today. By eighth grade, over 80% of students indicate that they will earn at least a college degree and nearly half also expect to earn a graduate or professional degree (Csikszentmihalyi & Schneider, 2000; Noeth & Wimberly, 2002; Schneider & Stevenson, 1999; U.S. Department of Education, 2002). Students indicate that they want to attend college and pursue careers in professional fields such as business, computer science, teaching, and medicine (Hrabowski, Maton, & Greif, 1998; U.S. Department of Education, 2003a; Venezia, Kirst, & Antonio, 2003). Their desire to go to college is strengthened as they progress through high school and learn about educational and career options. These educational and career expectations are consistent across race, social class, gender, and student achievement level (Freeman, 1999; Kao & Tienda, 1998; MacLeod, 1995; Tracey & Robbins, 2004).

Many factors contribute to the expectation to attend college. Over the last three decades, changes in education and social policy have expanded access to postsecondary education, causing enrollment in colleges and universities to increase. Beginning in the 1970s, the federal government began funding grants to provide tuition assistance for low-income students to attend college and expanded student loan programs to help families meet college costs. Civil rights legislation led to affirmative action initiatives designed to increase postsecondary participation among women and minorities (Bowen & Bok, 1998). These policy changes occurred as high school graduation became nearly universal, increasing the pool of potential college students (U.S. Census Bureau, 2004; U.S. Department of Education, 2003a).

The shift from an industrial economy to one based on service, information, and technology has dramatically increased the importance of advanced skills and credentials. Many jobs now demand that workers have some postsecondary training (Moss & Tilly, 2001; Wilson, 1996). These changes in the U.S. economy, growing competition across the global market, and increasing demand for a skilled labor force have made postsecondary training essential.

The earnings gap between college and high school graduates has changed in proportion to the labor and skill demands of the changing economy. In 1980 college graduates earned 19% more than those with a high school diploma. The earnings gap steadily increased, and by 1999 college graduates earned 58% more than high school graduates (U.S. Department of Education, 2003a). Recent high school graduates enter a labor market that mainly offers low-skilled, low-wage, service-sector jobs with limited possibilities for advancement and stable employment. Students recognize the connection between postsecondary credentials and employment opportunities, express a commitment to postsecondary education, and perceive it as a key to gaining the knowledge and necessary skills to obtain employment (Schneider & Stevenson, 1999).

Although students have ambitious educational and career aspirations, many lack basic information about how to fulfill their postsecondary goals. Many students and their parents fail to plan because they do not have the essential information resources, personal support networks, and structured programs they need to effectively perform educational and postsecondary planning activities (Cabrera & La Nasa, 2000; Hrabowski et al., 1998; McDonough, 1997). Some students and their parents have a vague understanding or hold misconceptions about high school course requirements for college admission, the importance of teachers in college planning, and college tuition costs (Choy, Horn, Nuñez, & Chen, 2000; Hrabowski, Maton, Greene, & Greif, 2002; Schneider & Stevenson, 1999; Venezia et al., 2003).

While parents expect their children to graduate from college and have professional careers, many, particularly those who have not attended college, may neither know the key postsecondary planning steps nor have the skills to assist their children with early postsecondary planning (Institute for Higher Education Policy, 1998; U.S. Department of Education, 1999). Parents and students who lack such information are likely to rely primarily on the school to provide the necessary tools and resources (Epps, 1995; Stanton-Salazar, 1997).

There are multiple steps that students and their parents can take to successfully plan for postsecondary education and become college ready. These steps build upon one another to help students make the transition from secondary to postsecondary education and training (McDonough, 1997). The early stages of postsecondary planning can include, but are not limited to:

- Considering postsecondary education
- Deciding to attend college
- Selecting high school courses to prepare for postsecondary training
- Maintaining good grades
- Gathering information about the college admissions process (including college admissions tests)
- Discussing educational and career goals with counselors, teachers, and parents
- Obtaining information about colleges and academic programs
- Obtaining information about financial aid opportunities
- Exploring college major and career interests

Middle school and high school are important times for early postsecondary planning, and many educational organizations and the U.S. Department of Education recommend that students begin planning for college as early as sixth grade (National Association for College Admission Counseling, 1999; National Association of Secondary School Principals, 1996; U.S. Department of Education, 1999). This early planning gives students the opportunity to take the necessary middle and high school courses to prepare them for postsecondary education, and align their educational goals with their current course taking and educational planning. Schools can play a key role in guiding early preparation for postsecondary education through fostering academic preparation and achievement, supporting parent involvement, providing college and career planning information, and helping students through the many steps in postsecondary planning.

Yet, despite the recommendation to begin postsecondary planning in the middle school and the resources and information that many schools may have available to facilitate this process, early postsecondary planning may not be happening for all students. Many are failing to engage in the early postsecondary planning activities that can help them get ready for college. For example, some high school students do not begin the postsecondary planning process until junior or senior year, when it may be too late to align high school courses with their educational expectations (Immerwahr, 2003; Noeth & Wimberly, 2002).

Purpose

Schools should provide the tools, information, and resources to guide students and their parents through the postsecondary planning process and make successful educational transitions. And it is important for schools to initiate this planning process by the middle school years. This early educational planning can guide students' experiences in middle and high school and help them make informed educational decisions.

However, some schools are failing to help all students engage in early postsecondary planning. Particularly in low-income and minority communities, limited resources may make it difficult for schools to access and effectively deliver postsecondary planning information. These low-income schools are less likely to offer their students upper level and college preparatory courses, particularly in mathematics and science. Just over half of seniors in low-income schools take geometry, compared with 74% of students in more affluent schools (Lippman, Burns, & McArthur, 1996). These students are also less likely to graduate from high school and begin postsecondary education or enter the workforce. Although nearly all students aspire to attend college, many students' school experiences do not prepare them for postsecondary options (Choy et al., 2000; Hrabowski et al., 1998; Hrabowski et al., 2002).

The purpose of this study, then, is to:

- Examine the extent of early exploration and planning in certain college readiness areas (i.e., setting educational goals, selecting classes, exploring postsecondary options, and considering ways to meet college costs)
- Explore how parents, school staff, and school experiences help students with their early educational planning

This study reports findings from a survey and focus group discussions with middle and early high school students that demonstrate how people and school-based factors (i.e., classes, extracurricular activities, and pre-college programs) helped shape students' educational and postsecondary planning. Students reported how these people and factors helped them form educational goals, select classes, explore postsecondary education, and consider ways to pay for college. This report includes policy recommendations to help schools better engage students and their parents in early educational planning and facilitate college readiness. Educational leaders and policy makers can use this study's recommendations to design programs and policies to enhance early postsecondary planning so that it leads to successful transitions from high school to postsecondary training.

2

EARLY EDUCATIONAL AND POSTSECONDARY PLANNING

Early planning often begins when students consider postsecondary education and set educational and career goals. This section reviews background information on students' planning across two specific areas:

■ Middle and high school course planning
■ Postsecondary plans and college costs

We consider these areas to be two of the major building blocks in the early postsecondary planning process. Students and parents can use many resources and tools to facilitate planning within these areas. We further examine individuals, institutions, programs, activities, and experiences that potentially help students consider, develop, and pursue early educational planning and promote college readiness.

Course Planning

A vital aspect of early educational planning involves students taking a curriculum that will prepare them for college. Students who take a challenging curriculum, beginning in the middle school, tend to perform better academically in high school and are better prepared for college than those who take less rigorous courses (ACT, 2004a; Frome & Dunham, 2002; Lucas, 1998). A challenging curriculum helps students stay focused throughout high school, builds their academic skills, helps them develop effective study habits, and keeps them engaged in school-related activities.

Colleges have generally expanded their admission requirements to reflect the need to engage a challenging curriculum (Breland, Maxey, Gernand, Cumming, & Trapani, 2002). Colleges generally recommend that high school students take four years of English; three years of math: Algebra I and II and geometry; three years of science: biology, chemistry, and physics; three years of social studies, including a half credit of economics; and two years of foreign language (Center for State Scholars, 2004; Council of the Great City Schools and ACT, 2001; National Commission on Excellence in Education, 1983; National Governors Association & Jobs for the Future, 2003).

Middle school students who take rigorous courses such as Algebra I can enroll in advanced and higher-level courses in high school. Students in higher-level courses are likely to obtain information about postsecondary opportunities and are likely to apply to a four-year college (Atanda, 1999; National Commission on the High School Senior Year, 2001). Particularly among minority and first-generation college students, those who take higher-level math courses are more likely to attend college (Horn & Nuñez, 2000).

Many students underestimate what classes they will need to adequately prepare for college. Many middle school students do not take the courses prerequisite for advanced high school classes. High school graduation course requirements are often less than, or misaligned with courses necessary for college admission; only about one-third of college-hopeful eighth graders plan

to complete high school courses recommended for college readiness (ACT, 2003). Such a lack of adequate preparation means that students may need to take remedial courses once in college and require a longer time for degree completion (Adelman, 1999). For example, remedial courses in math, reading, and writing are required for over one-third of today's four-year college students and 63% of current two-year college students (U.S. Department of Education, 2003a).

Postsecondary Plans and College Costs

A key aspect of early educational planning involves the exploration of educational and work options. Students have many postsecondary choices, including two-year colleges, certificate programs, four-year colleges, the military, and employment. They often begin taking steps to make their educational goals a reality by taking college preparatory courses, maintaining good grades in these courses, participating in extracurricular activities, and learning about ways to finance postsecondary education (Cabrera & La Nasa, 2000). And they may regularly engage in conversations about their futures with their friends, parents, teachers, and counselors (McDonough, 1997).

Schools use several activities and resources to provide postsecondary planning information. Some schools focus their curriculum around helping students plan and prepare for college. As early as eighth grade, schools may hold informational meetings where students and parents learn about postsecondary planning. Some schools devote specific courses to help students set educational goals, learn about careers, and make plans for their future (Wimberly, 2003).

Local colleges and community organizations often sponsor pre-college programs and initiatives to help students establish educational goals and influence their postsecondary planning as early as middle school. Some receive tutoring, counseling, financial aid information, and career and college planning information through programs such as GEAR UP, Upward Bound, and Talent Search. These programs often require participants to take a rigorous high school curriculum and monitor their academic progress throughout college (Myers & Schirm, 1999).

Although most students have postsecondary goals, many are not taking practical steps to achieve these goals in middle and early high school. They are not accessing the postsecondary planning resources and information that will help them with their educational decisions and explore careers. Often low-income and minority students tend to be the least likely to engage in early educational planning. Their families and communities may lack accurate and timely educational planning information (Csikszentmihalyi & Schneider, 2000; Freeman, 1999; McDonough, 1997). Schools serving these populations have an expanded role to help students plan for the future and to bridge this information gap.

College Costs. Most parents believe that a college education is the best investment they can make for their children (Miller, 1997). Developing a plan to pay college costs is an essential part of early educational planning, often leading students and parents to discuss college costs, research various colleges and their academic programs, and explore financial aid opportunities (Hossler, Schmit, & Vesper, 1999).

However, many parents neglect or are unable to save money, or do not have a plan to pay for college when their children are young. These families may perceive that they cannot afford college. Many students and parents also lack knowledge and information about college costs and options of paying for postsecondary education. Even among high school juniors and seniors who plan to attend college, few have accurate information about college costs. Many students and parents overestimate tuition, room and board, and other college costs, and often do not realize that considerable federal, state, and institution-based financial assistance is available in the form of grants, loans, work-study, pre-paid tuition plans, and tax credits (Pathways to College Network, 2004; U.S. Department of Education, 2003b).

Who and What Helps Students' Planning?

Parents. Parental encouragement is often the strongest factor in helping students develop educational plans (Cabrera & La Nasa, 2000; Hrabowski et al., 1998; Hrabowski et al., 2002). Nearly all parents expect their children to earn college degrees and enter rewarding careers. By the 1990s, over 75% of parents expected their children to attend college, up from 50% in the 1970s (U.S. Department of Education, 2002). Having such high educational expectations is a first step parents take to help their children set postsecondary goals and make continuous progress toward achieving them. Parents often begin encouraging children to attend college as early as elementary school, and their expectations are generally strengthened as students reach high school, regardless of academic performance, interests, or other expectations (Freeman, 1999; Hrabowski et al., 1998; Ogbu, 2003).

Parents can support and motivate students to complete rigorous high school courses and succeed in college (Leitman, Binns, & Unni, 1995; National Commission on the High School Senior Year, 2001; Wimberly & Noeth, 2004). Parents who have timely information about educational planning increase their students' school success, facilitate their college planning, and increase the likelihood that their children will attend college (College Board, 1999; McDonough, 1997).

However, there is often a discrepancy between parents' educational expectations for their children and their postsecondary planning activities (Ogbu, 2003; Wimberly, 2002). Parent involvement tends to decline as students reach middle and high school. Particularly, parents who have not attended college may lack the necessary tools to assist their children with effective planning. They may have high expectations but neither the

information nor the knowledge about what their children need for college readiness, planning, and success. As a result, these parents are less likely to provide timely and accurate information to help their children select high school courses or discuss college (Horn & Nuñez, 2000). Some parents are never or rarely informed about course selection or other educational decisions, leaving students to rely solely on school staff and peers to help them choose courses (Jordan & Plank, 2000; Leitman et al., 1995; Yonezawa, 2000).

Some schools are making efforts to reverse the trend of declining parent involvement by involving them in course selection and educational planning activities (U.S. Department of Education, 2003a). To better inform parents about classes necessary for college admission, many schools provide students and parents information about workplace and college admission requirements, high school classes, and postsecondary options (Wimberly, 2003).

School factors. Schools can help students develop educational goals by providing career and postsecondary planning information, beginning in the middle school. Counselors, teachers, principals, and other school personnel often influence students' educational goals and postsecondary planning. The National Association of Secondary School Principals (NASSP) recommends that every high school student have a Personal Adult Advocate to help personalize their educational experience (1996, 2002, 2004). These advocates can be teachers, counselors, principals, or other school staff who are committed to monitoring students' academic progress and social development and guiding them through the educational planning process.

Personal Adult Advocates develop relationships with students to ensure that they are well integrated into the school and engaged in school experiences. They help foster a school climate in which students are free to learn and can easily access school resources – including educational planning information. They can serve as a buffer to help students navigate through high school and prepare for postsecondary education and future careers. Elements of the Personal Adult Advocate model in which students know that school personnel are concerned about their future have proven to be a key factor for many students' college planning (NASSP, 2002, 2004; Noeth & Wimberly, 2002).

School counselors can play a significant role in students' early postsecondary planning (American School Counselor Association, 1997). They help students develop educational goals, identify educational opportunities, and channel information to students and their parents about postsecondary education. Counselors often provide students with information and knowledge about high school classes that can help them prepare for postsecondary education. They may help students decide what postsecondary options—two- or four-year college, certificate program, military, or employment—best fit their goals, preparation levels, and needs.

However, some counselors are not involved in postsecondary planning until twelfth grade—too late to help students select rigorous high school courses and influence their high school experience (Horn & Nuñez, 2000; Noeth & Wimberly, 2002). Some students make course selection decisions with little guidance from counselors (Leitman et al., 1995). In many schools counselors often deal with students' social, emotional, and disciplinary issues, leaving few resources for academic planning. The National Association for College Admission Counseling (NACAC) (1999) recommends an ideal counselor to

student ratio of 1:100 and sets a maximum of 1:300. The American School Counselor Association (1997) recommends a counselor-student ratio of 1:250; however, the national average is 1:315 and can exceed 1:560 in many large schools. These high counselor-student ratios limit the amount of time and attention counselors can give students (McDonough, Korn, & Yamasaki, 1997; U.S. Department of Education, 2003a).

Given counselors' multiple duties, teachers often help students with educational planning activities. In many schools, class selection begins with teachers reviewing the course options students have for the next year. Students often turn to their teachers for information and guidance about course selection. Teachers often recommend students for specific courses, particularly honors and advanced placement courses, and provide information about postsecondary education and careers. They may be a significant influence on middle school students taking rigorous courses such as Algebra I or studying a foreign language (Adelman, 1999; Frome & Dunham, 2002). Teachers often develop cohesive relationships with their students that lead them to encourage and motivate students to take specific courses, challenge themselves, set educational goals, and succeed in the classroom (Singh & Granville, 1998; Yonezawa, 2000).

Schools can use assessment information to help students select high school classes and guide their postsecondary planning. Throughout their school years, most students take standardized achievement tests and complete career interest measures to assess academic performance and assist in postsecondary planning. Schools can integrate test information into the course selection process to show students how test results align with classroom performance and what academic skills they need to develop through future courses. Counselors and teachers can review assessment results with students and parents to guide course selection and placement in the proper course level to fit the students' academic preparation and achievement (Wimberly, 2003).

Homewood-Flossmoor High School in suburban Chicago, for example, devoted efforts to inform students, parents, teachers, and counselors about the importance of taking rigorous coursework. They use ACT's EXPLORE® and PLAN® programs to develop a challenging curriculum for all students and to link assessment results with corresponding skills. They established programs to teach students the skills and cognitive processes they would need to succeed in science, math, and English courses (ACT, 2004b). ACT (2000) suggests that schools use assessment results to help students:

- Identify academic strengths and weaknesses
- Develop postsecondary education expectations
- Plan for careers and postsecondary education
- Explore postsecondary institutions and program choices, given the student's academic performance and interests

3

THE CURRENT STUDY

Middle and early high school students completed a survey and participated in focus group discussions about their early approaches to postsecondary planning. We administered the Educational Planning Survey to all eighth-, ninth-, and tenth-grade students (N=2,942) in participating schools. This survey included questions about students' high school program of study, high school class selection process, postsecondary planning activities, and whether parents, friends, school staff, and school experiences were helpful to them in making early educational planning decisions. School administrators and counselors selected students (n=263) to participate in focus group discussions about their course selection and educational and career goals to help us gain a more detailed description of their early educational planning activities. We collected this information in late spring 2002, after students had chosen classes for the next school year.

Students in this study were from 15 schools in 6 school districts (Chicago; Charleston, West Virginia; Denver; Los Angeles; New Orleans; and Oklahoma City)—a broad array of urban and suburban schools with students from diverse social and economic backgrounds. Some of the schools served predominately low-income and minority students who are at-risk of not pursuing postsecondary education; others served middle and upper-middle class communities where postsecondary education is common. All schools participating in this study implemented a variety of educational planning activities, which included ACT's EXPLORE program in eighth or ninth grade and ACT's PLAN program in tenth grade. These two measures show academic strengths and weaknesses and provide educational and career guidance information to help students make educational decisions.

To examine their early academic goals and educational planning activities, we asked students about:

- Educational expectations and career goals
- People and factors helping them select classes and high school program of study
- People and factors helping them explore the types of education, training, and work they might pursue after high school
- Plans to pay for college

Educational Expectations and Career Goals

Middle and early high school students reported high educational expectations. Survey findings show that as early as eighth grade nearly all students planned to pursue postsecondary education or training (Table 1). Over three-quarters (77%) of students indicated that they planned to enter a four-year college or university.

In focus group discussions, students recognized that at a minimum they would need to finish high school and pursue some form of postsecondary education or training to work in their chosen field. Many viewed college as only the beginning of their postsecondary education and aspired to pursue graduate

and professional study. They often mentioned they wanted to pursue professional careers in fields such as medicine, law, teaching, and computer technology. Yet, they tended to overestimate the type or amount of education they would need for specific careers.

Table 1

Students' Educational Expectations

Not planning to complete high school	1%
No education or other training planned for after high school	0%
Job training offered through military service	3%
Vocational or technical school	2%
2-year community college or junior college	5%
4-year college or university	77%
Undecided about future educational plans	8%
Other	4%

Although most students planned to pursue postsecondary education, fewer described their high school program of study as college preparatory (Table 2). Furthermore, among the students who aspired to attend a two- or four-year college, only two-thirds described their high school program as college preparatory. These findings suggest that there may be a misalignment between postsecondary plans and high school program of study. Many middle and early high school students are failing to take a college preparatory curriculum that is designed to help them develop the skills necessary for college and for their intended careers.

Table 2

Students' High School Program of Study

College Preparatory	60%
Business or Commercial	8%
Vocational-Occupational	9%
Other or General	23%

Helping Students Select Courses

Middle and early high school students rely on parents, friends, school personnel, and school-based factors such as previous classes, extracurricular activities, and assessment information to help them select high school courses. Table 3 shows the degree to which various people and school factors helped students select their high school classes and program of study.

Table 3

Help in Selecting High School Classes and Program of Study

People	Very Helpful	A Little Help
Mother/female guardian	67%	25%
Father/male guardian	50%	34%
Friend(s)	35%	50%
Teacher(s)	43%	43%
Counselor	25%	35%
Principal	8%	21%
School Factors		
Previous classes	44%	44%
Extracurricular activities	37%	43%
EXPLORE/PLAN	21%	49%

Parents and friends. Virtually all students surveyed indicated that their mother or female guardian was very helpful (67%) or a little help (25%) in their high school class selection. Fewer students indicated that their father or male guardian was helpful. More students reported that their mother was very helpful in selecting high school classes than reported any other person or factor (Table 3).

In the focus group discussions, students indicated that their parents were the most helpful factor in selecting their high school courses and high school program of study. Many reported they selected their courses together with their parents, teachers, and counselors. Some students said their parents wanted them to take challenging courses yet not be overwhelmed by classes and homework, so they would have time to participate in sports, clubs, and other extracurricular activities.

Although their parents were very helpful in course selection, many students recognized that their parents had limited knowledge and information about courses. They were mainly concerned that their students fulfill high school graduation requirements, often assuming that these courses will adequately prepare them for college.

Table 3 shows that friends also helped in early high school planning, as students often selected courses and programs of study with their classmates and friends. Many students revealed that they chose courses identical or similar to those their friends chose so they could share classes. Students discussed how their friendship groups are often formed and maintained around common classes.

School Personnel. Most students (86%) indicated that their teachers were either very helpful or a little help in selecting their classes (Table 3). In the focus group discussions students revealed that teachers often provided them with information and guidance about classes and how their classes are connected to their postsecondary options and other factors. For example, many students reported that their teachers encouraged them to study foreign languages so they could communicate with people from other cultures, and also encouraged them to take courses that fit their interests, such as playing a musical instrument or developing artistic skills.
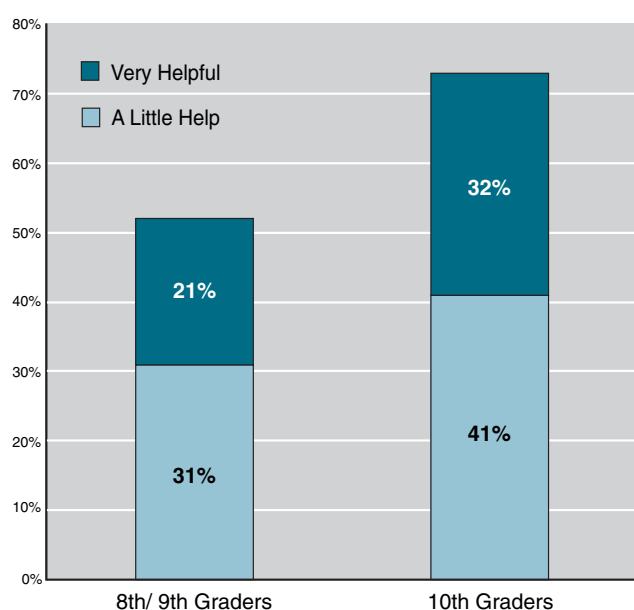

Figure 1: Counselor Influence on Course Selection

Table 3 shows that counselors were helpful with course selection for 60% of students. Yet, counselors provided more course selection help as students progressed through high school. Figure 1 indicates that over two-thirds of tenth graders reported that their high school counselor helped them select their high school courses. These students reported that their counselors were very helpful (32%) or a little help (41%) in selecting their high school classes and high school program of study. This compares to just over half of eighth- and ninth-grade students.

Some students said that they talked regularly with their counselors through formal and informal meetings. Others mentioned that their counselors recommended specific courses—particular academic programs—and pre-college programs to help them reach their educational and career goals. However, some students revealed that they have limited contact with their counselors, and that they have not met individually with them to discuss course selection (which had already taken place). Many students attended schools with high counselor-student ratios, limiting the type and amount of counselor-student interaction, particularly given counselors' extensive responsibilities that often leave little time for educational planning.

Other School Factors. Most students indicated that their previous school classes helped them select their future courses (see Table 3). By eighth grade some students knew the course sequence they would take in high school. Many students had taken a foreign language or algebra in middle school and planned to continue with the next level course. Many noted that their schools emphasized a specific academic area—such as college preparation, the fine arts, or business—and that their courses were set around their academic interests.

Many students participated in extracurricular activities such as academic clubs, which helped them choose courses for the next year. Among those who participated in extracurricular activities, most indicated that these activities were very helpful or a little help in selecting high school classes and high school program of study (Table 3). Some extracurricular activities, such as band, choir, and other fine arts, complemented their classes or were classes in themselves.

Students in this study used information from standardized assessments—EXPLORE or PLAN—as part of their educational planning. Most students (70%) indicated that this information helped them as they selected their high school classes (Table 3). Many students reported that their teachers and/or counselors explained how their assessment results reflected their academic strengths and identified areas needing improvement. These results were used to place students in specific course levels and identify students for tutoring and accelerated courses. Some used the ACT World-of-Work Map to match their interests with various careers.

However, some students reported that their teachers and counselors failed to explain how their assessment results could help them select high school courses and develop postsecondary goals. They often paid attention to only a single numerical score on the assessment and did not review the educational planning information provided. The partial use of assessment information represents a valuable educational planning tool going unused.

Exploring Postsecondary Options

Most students have considered their options beyond high school. Figure 2 shows that 78% of middle and early high school students indicated that they have begun to think about and explore the types of education, training, and work that they might pursue after high school. In addition to having educational expectations, these students were beginning to explore their postsecondary options and make plans for the future. Various people and school factors also helped these students navigate this educational planning process.
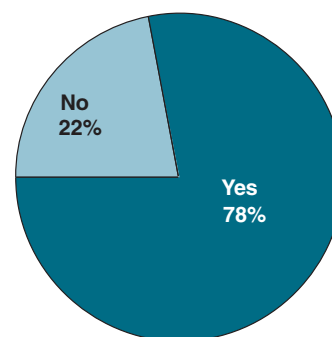
Students Not Yet Engaged in Postsecondary Planning

Unfortunately, a sizable proportion of students (22%) had yet to think about and explore the types of education, training, and work they might pursue after high school (Figure 2). These findings vary somewhat by grade level, as 24% of eighth and ninth graders and 19% of tenth graders had not yet started to explore their postsecondary options. Despite the widespread emphasis on the importance of early postsecondary planning (National Association for College Admission Counseling, 1999; National Association of Secondary School Principals, 2004; U.S. Department of Education, 1999), it is clearly not happening for too many students.

Although these students were not actively engaged in early postsecondary planning, most indicated that they planned to attend a two- or four-year college. And among these students, over half described their high school program of study as college preparatory. They had set educational and career goals but were not taking any steps to make these goals a reality. They revealed

No
22%

Yes
78%

Figure 2: Have students explored the type of education, training, and work they might pursue after high school?

13

that they had not engaged in early planning activities, such as obtaining information about colleges and academic programs or exploring college majors or potential jobs they may enter after high school. When these students eventually approach postsecondary planning, they likely will find that they have missed such key steps as taking appropriate courses, participating in pre-college programs, and obtaining key postsecondary planning information from their teachers and counselors. By failing to plan early, they may be closing the door on viable and potential postsecondary education, training, and employment options for their futures.

College Costs

Students and their families meet college costs through savings, state and federal grants, student loans, scholarships, and other forms of financial assistance. Students' perception of how they will pay for college can affect their college planning. Figure 3 shows that over 70% of students indicated that their families had begun to consider ways to pay for the costs of postsecondary education and training after high school. These findings are consistent among students who specifically planned to enter a two- or four-year college. In focus group discussions, students agreed that financing college is a major concern, yet most seemed optimistic that their parents, savings, and/or scholarships would pay for college.
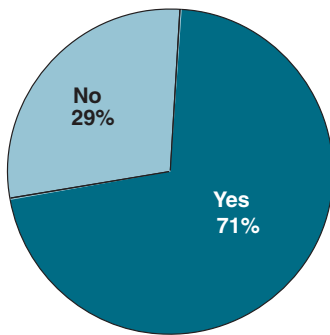
Some students reported that their schools explained various ways to pay for college. Some students were aware of state sponsored scholarships and were working to meet the award criteria. Many were taking high school courses and participating in extracurricular and community activities to meet requirements for local scholarships and financial assistance. Others noted that their schools sponsored financial aid workshops that featured college financial aid officers and bank representatives to discuss paying for college with students and their parents.

Figure 3: Have students and their families considered ways to pay for college costs?

However, nearly one-third of students and their families have not begun to consider ways to finance postsecondary education or training—a key aspect of early planning. Among these students, over half (63%) are in eighth and ninth grade, while over one-third (37%) are tenth graders. At some schools, tenth graders were able to participate in college planning workshops that included information about paying for college, while many eighth and ninth graders were not offered these workshops. Failing to consider ways to pay for college early in the process could result in students overlooking scholarship and financial aid opportunities and could pose a potential barrier to college attendance.

Low-income parents and students often report that they do not receive adequate information about financial aid. They often lack knowledge about the application process and what financial aid is available to them. Consequently, low-income parents and students may not develop a college finance plan (Cabrera & La Nasa, 2000). Many high achieving low-income students are more likely to enter the military than college because of failing to develop a plan to pay for college costs (Choy, 2000). Popular media stories about rising

tuition costs and budget cuts at colleges and universities may compound the issue by making it seem that a college education is unaffordable. This, in turn, may cause many students and their families not to seek college finance information.

Helping Students Explore Postsecondary Options

Parents and Friends. Table 4 shows that for nearly all students their mother or female guardian was very helpful (65%) or a little help (27%) with their future educational exploration. More students indicated that their mother or female guardian was more helpful than any other person or school factor. Slightly fewer students noted that their father or male guardian was very helpful (51%) or a little help (33%) as they began to explore education, training, and work they might pursue after high school. Friends were very helpful for one-third of students and a little help for nearly half of students.

Table 4
Help in Exploring Education, Training, and Work
after High School

People	Very Helpful	A Little Help
Mother/female guardian	65%	27%
Father/male guardian	51%	33%
Friend(s)	31%	49%
Teacher(s)	31%	43%
Counselor	18%	32%
Principal	6%	21%
School Factors		
Previous classes	36%	45%
Extracurricular activities	39%	39%
Pre-college program	27%	29%
Internet-based information	31%	38%
EXPLORE/PLAN	23%	50%

Schools. School staff are a significant source of educational and career planning information for students. Most students indicated that their teachers had helped them explore the types of education, training, and work they will pursue after high school. Fewer reported help from school counselors, although this changed as they progressed through high school. Figure 4 shows that counselors were very helpful (16%) or a little help (29%) for the eighth- and ninth-grade students, while they were very helpful (37%) or a little help (22%) for the tenth-grade students.

Over one-quarter of students indicated that their principal was very helpful (6%) or little help (21%) with their exploration of education, training, and work after high school. These findings were consistent across grade levels.
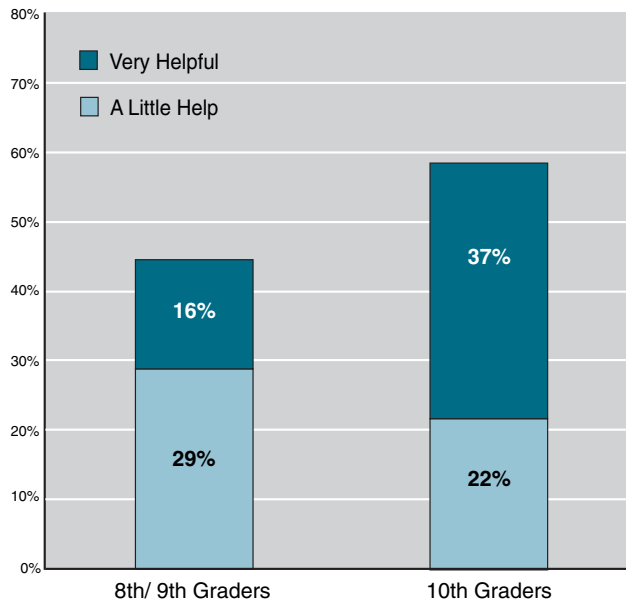

Figure 4: Counselor Influence on Educational Planning

Given the responsibilities and administrative duties principals have, it is promising that principals are still able to help some students with educational planning activities.

Table 4 also shows various school factors that helped students explore the types of education, work, and training they might pursue after high school. More students indicated that school-based factors were more helpful than counselors in exploring these options, which suggests that many obtain postsecondary planning information from sources other than school staff. These students reported that previous school classes were very helpful (36%) or a little help (45%) in this process. Many students participated in various activities outside of regular classroom instruction that helped them in the educational planning process. Findings show that of the students who participated in extracurricular activities, most indicated they were very helpful (39%) or a little help (39%). In addition, over half of pre-college program participants responded that these programs helped them begin to explore the types of education, training, and work they might pursue after high school.

Assessment information (EXPLORE and PLAN) also helped these students explore postsecondary options. Results of these assessments were very helpful (23%) or a little help (50%) as students began to think about and explore the kind of education, training, and work they might pursue after high school.
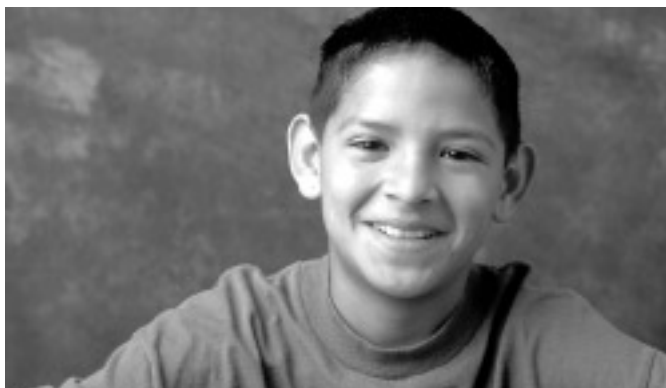
Internet-based information was also helpful: 31% of students found this resource very helpful and 38% found it a little help (Table 4). The Internet is a major source of early educational and postsecondary planning information for students, surpassing counselors (69% versus 50%). This suggests that planning information is more readily accessed from non-neutral sources such as the Internet, and such trends could signify a shift in the way students value and use structured school support.

4

RECOMMENDATIONS

Although most eighth-, ninth-, and tenth-grade students expect to attend college, as this study illustrates, many are not engaging in early educational planning and college readiness activities. Though schools may have the information and the resources to fill this gap and to thoughtfully guide students and their parents through the early postsecondary planning steps, some schools do not always use their educational planning tools to the fullest extent to help students with early planning activities. As a result, some students may delay educational exploration, make uninformed decisions, miss opportunities, and remain uncertain about their plans.

Teachers, counselors, parents, and a variety of school factors (i.e., classes, extracurricular activities, pre-college programs) can help students engage in early educational planning activities. The federal government and many educational organizations (e.g., National Association for College Admission Counseling, National Association of Secondary School Principals) suggest that educational planning begin in the middle school and that resources be provided to help students prepare for college. As early as sixth grade, schools can begin delivering education and postsecondary planning information to help students meet their educational goals.

We offer four policy recommendations that can help schools facilitate effective early educational and postsecondary planning.

1. College readiness should begin in the middle school.

To ensure that students have ample time to consider and explore their postsecondary education and career options, college readiness activities should begin in the middle school and be reinforced throughout the high school years. Schools should help students develop a college readiness plan that serves as a road map and is flexible and always open to revision. This plan can help students and their parents connect their classes and school experiences to their long-term academic and professional goals. Results of the study described in this report demonstrate that many middle and early high school students have not begun exploring postsecondary options, and thus risk being unprepared to make successful transitions to postsecondary training.

State departments of education, as well, can address these postsecondary planning issues from a more global perspective to provide both leadership and concrete program examples to school districts. This college readiness plan should help all students, regardless of their educational expectations and academic performance, develop their own formal educational plan that includes:

- Postsecondary and career goals
- High school graduation requirements
- Middle and high school courses needed to prepare for postsecondary training
- Standardized assessments students will take in middle school and high school and how results will be used

- Potential extracurricular and community activities
- Available pre-college programs
- College finance plan
- College admission steps

2. Schools should explain to students and their parents the effects of taking a challenging curriculum on their future educational, career, and income options.

Schools should regularly reinforce to students and parents that middle and high school courses are connected to achievement of postsecondary and career goals. We know that successful completion of a challenging and rigorous curriculum is often the strongest predictor of college entrance and degree completion (Adelman, 1999). Challenging middle and high school courses can help students develop effective study habits and learn critical thinking and writing skills they will need to succeed in college.

Students should be informed that postsecondary education is required for many careers in today's service, information, and technology based labor market. In the past a high school diploma was often sufficient preparation for most entry-level jobs. Now, given technological advances, job requirements, and changing labor force needs, a high school diploma is no longer enough. Employers often expect workers to have some postsecondary education or a college degree (Moss & Tilly, 2001).

As more jobs require a postsecondary training, college graduates can continually expect to earn considerably more than high school graduates. College graduates are less likely to be unemployed and enjoy a higher standard of living than those with less education. Over a lifetime, college graduates potentially will earn nearly one million dollars more than those with only a high school diploma (U.S. Department of Education, 2003a).

3. Schools should use multiple sources of information, including standardized assessments, to help inform students and their parents of the students' progress toward college readiness.

Standardized assessments provide information about students' academic achievement, educational and career aspirations, and the likelihood students will succeed in college without remediation. The National Governors Association and Jobs for the Future (2003) suggests that schools use standardized assessments to examine students' academic strengths and weaknesses and determine how much they need to improve to be college ready. Commensurately, ACT's Standards for Transition®, for example, describe what students need to know and be able to do in order to be ready for college. These Standards are associated with various score ranges on EXPLORE, PLAN, and the ACT Assessment.

Schools can use assessment information to help students make educational decisions such as choosing courses, considering colleges, and participating in school activities that are connected to their career goals. Students taking EXPLORE, PLAN, and the ACT Assessment®, for example, receive educational and career planning information based on their ACT Interest Inventory and stated career plans. These results are linked to the ACT World-of-Work Map which relates their skills and interests to various jobs.

As the study discussed in this report shows, students overwhelmingly expect to attend college, earn a degree, and pursue professional careers. However, many students are not taking the early planning steps necessary to help them reach their goals. Schools should use available resources and tools to help students explore what courses they will need for their chosen college major, what duties they might perform in various careers, and the job outlook for these fields. This may involve encouraging students to align their extracurricular activities with their educational and career goals. Participating in extracurricular activities helps students develop their talents and skills, learn about different jobs, establish relationships with school personnel, and gather postsecondary and career planning information (Youniss & Yates, 1997).

4. Schools should work with families to calculate college costs and develop a plan to meet these costs.

The National Association for College Admission Counseling (1999) suggests that parents have a financial strategy to pay for college that includes being fully informed about college costs and the options available to help them meet these costs. Schools can help students and their parents develop a college finance plan by providing them with information early in the postsecondary planning process. Schools can refer students and parents to web-based resources that explain different forms of financial aid and estimate financial need (see: **www.act.org/fane**). Students should discuss their educational goals with their parents, particularly about costs and financial concerns. Regardless of income level, parents are more likely to consider a college finance plan when they have specific information about college costs and financial aid options (Hossler et al., 1999; Pathways to College Network, 2004).

Our study clearly shows that many students and their families are not considering college finances as part of their early educational and postsecondary planning. As early as sixth grade, schools can help reverse this trend by encouraging families to explore college finance options. School personnel should be knowledgeable about financial aid and scholarship opportunities, the financial aid process, and how students and parents can obtain financial aid. Schools should also partner with local college financial aid officers, bank representatives, and other community resources to provide financial aid information and help with early postsecondary planning. Schools can help students and parents explore ways to pay for college by:

■ Explaining fixed and variable college costs
■ Exploring various (local, state, and national) scholarships and award criteria
■ Reviewing state and federal financial aid options
■ Providing information about college saving and prepaid tuition programs.

College readiness should be an expectation and a goal for all students—regardless of their educational and career aspirations. To be successful in the service, information, and technology-based U.S. economy, workers need the skills and credentials that postsecondary education provides. Given the long-term course taking and postsecondary planning that college and workplace readiness requires, students must begin the college readiness process as early as middle school.

This study's findings alert educators and school administrators that many students are not taking the necessary early steps to meet their postsecondary goals and become college ready. Schools need to provide students and their parents with ongoing guidance, information, and support as they select middle and high school courses, make postsecondary plans, and consider ways to pay for college. Schools have the potential to meet these needs. It is up to educational leaders and policymakers to help make college readiness a reality for all students.

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