

# The Path to College

A Summary of  
*Helping Students Navigate the Path to College:  
What High Schools Can Do*  
(U.S. Department of Education,  
Institute of Education Sciences, 2009)

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## Acknowledgements

The information in the following summary comes from:

*Helping Students Navigate the Path to College: What High Schools Can Do*, available on the Institute of Education Sciences Web site at <http://ies.ed.gov/ncee> and <http://ies.ed.gov/ncee/wwc/publications/practiceguides>

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It is vital to the U.S. economy and our global competitiveness that we maintain a highly educated workforce. This goal can be met by improving access to higher education and encouraging students to pursue education beyond high school. Although we have seen overall improvement in college attendance rates, low-income students and those who would be the first in their family to attend college continue to have lower college enrollment rates than other students,<sup>1</sup> and poor academic preparation does not fully explain these disparities<sup>2</sup> (*college* refers broadly to all types of 2- and 4-year institutions).

The challenge of increasing college enrollment can be traced to two key requirements:

- Students must be academically prepared by 12th grade to begin taking college-level courses, at least at a 2-year institution, without the need for remediation in any subject.
- Students must take the necessary steps and “follow-through” actions to enter college, including taking college entrance exams, searching for colleges, applying for financial aid, submitting college applications, and selecting a college.

To guide high schools and districts on how to develop practices to increase access to higher education for their students, the U.S. Department of Education’s Institute of Education Sciences gathered a nationally recognized panel of experts in college access programs and research methods to identify strategies that have shown promise in increasing enrollment in college. The evidence for success considered by this panel of experts included experimental and quasi-experimental evaluations that meet the standards of the department’s What Works Clearinghouse (<http://ies.ed.gov/ncee/wwc>) and authoritative analyses of college access practices. From this identification of successful college access programs came five evidence-based recommendations for school- and district-level administrators, teachers, counselors, and related education staff. These recommendations address preparing students academically for college, assisting them in completing the steps to college entry, and improving their likelihood of enrolling in college.

The panel believes that students are best served in schools that develop a:

- **Culture of achievement** with high academic and college attendance expectations
- **Culture of evidence** that uses assessments to determine whether students are on track for college and includes an early warning system for students who are deficient in particular courses

The panel’s five recommendations were derived from examining research studies that evaluated the impact of college access interventions and practices. Of the almost 100 studies examined, 16 studies met What Works Clearinghouse standards and represent the strongest evidence of the effectiveness of college access programs. Levels of evidence, which follow the Institute of Education Sciences guidelines, were assigned to each recommendation.

## Levels of Evidence

- **Strong:** consistent and generalizable evidence that an intervention strategy or program causes better outcomes
- **Moderate:** evidence from studies that allows strong causal conclusions but cannot be generalized with assurance to the focused population, perhaps because the findings have not been widely replicated or evidence that can be generalized has more causal ambiguity than offered by experimental designs
- **Low:** expert opinion based on reasonable extrapolations from research and theory on other topics and evidence from studies that do not meet the standards for moderate or strong evidence

Three of the five recommendations received low evidence ratings, and the level of evidence for the other two recommendations was moderate. However, a low evidence rating does not indicate that the recommendation is less important than the recommendations with a moderate rating. Rather, it suggests that the existing research on college access services is not at a level to provide conclusive evidence of best practices. For example, most college access programs tend to provide a bundle of services, making it difficult for researchers to isolate a specific service's contribution to college readiness and enrollment.

**The panel believes that high schools will achieve the greatest success in increasing student enrollment in college by developing a strategic plan to implement all five recommendations, instead of employing a piecemeal approach.** However, schools must continually monitor, evaluate, and modify, if necessary, the suggested practices to ensure that college access goals are being achieved.



## Recommendations

1. Offer courses and curricula that prepare students for college-level work, and ensure that students understand what constitutes a college-ready curriculum by 9th grade.
2. Utilize assessment measures throughout high school so that students are aware of how prepared they are for college, and assist them in overcoming deficiencies as they are identified.
3. Surround students with adults and peers who build and support their college-going aspirations.
4. Engage and assist students in completing critical steps for college entry.
5. Increase families' financial awareness, and help students apply for financial aid.



## ◇ RECOMMENDATION 1

*Offer courses and curricula that prepare students for college-level work, and ensure that students understand what constitutes a college-ready curriculum by 9th grade.*

### Level of Evidence

Low

### Evidence to Support Recommendation

The evidence for taking a college-ready curriculum consists of findings from six studies that met standards.<sup>3</sup> Two of the studies provided mixed evidence on the effect of a rigorous high school curriculum, with one study showing positive effects on high school performance and college entry and the other finding no effect.<sup>4</sup> Four studies reported positive effects of taking advanced placement (AP) courses and exams on high school completion, college entry, and college degree completion.<sup>5</sup> The evidence for academic advising is stronger, with six relevant programs having studies that meet standards. Most of those programs offer individual assistance to students in selecting the classes needed to prepare for college.<sup>6</sup> Despite the limited evidence for this recommendation, the panel believes that it is critical for high schools to offer the courses needed to prepare for college and to inform students about the required content knowledge for those courses in order to improve college access.

### How to Implement This Recommendation

This two-step process of first offering the relevant college-preparation courses and then advising students to take these courses can be time consuming for school staff. It is suggested that schools employ a coordinated approach, which may involve partnering with colleges to implement dual-enrollment opportunities; using peer tutoring so that struggling students can work with peers who are in honors, AP, or international baccalaureate (IB) classes; and working with middle schools to begin the dialogue in the 8th grade about high school course taking.

Specifically, steps include:

- Offering the courses and curricula needed to prepare all students for the rigor of college classes
- Providing opportunities for prepared students to take college or college-level courses, which include dual-enrollment arrangements, AP courses, and the IB program
- Ensuring that students understand what constitutes a college-ready curriculum before they enter high school
- Developing an individualized 4-year course plan with each 9th-grader that defines the timing and sequence of fulfilling a college-ready curriculum

## ◇ RECOMMENDATION 2

*Utilize assessment measures throughout high school so that students are aware of how prepared they are for college, and assist them in overcoming deficiencies as they are identified.*

### Level of Evidence

Low

### Evidence to Support Recommendation

Nearly 60 percent of students entering college are required to take remedial courses as a condition of enrollment, even though these students, as high school seniors, may have passed state exit exams and met graduation standards.<sup>7</sup> Therefore, the panel believes it is critical that high schools utilize assessments to identify, notify, and assist students who are not on path to college preparation as early as possible in their academic career. Studies of two programs<sup>8</sup> that meet standards suggest that the use of data to identify and notify students of their academic progress during high school had an impact on college outcomes. Evidence also suggests that district- or statewide use of ACT's college-readiness assessments—EXPLORE, PLAN, and the COMputer-adaptive Placement Assessment and Support Services (COMPASS)—to identify and notify students who are not college ready is associated with improved college outcomes.<sup>9, 10</sup> However, this correlation does not mean that requiring students to take those tests caused improved access to college.<sup>11</sup>

### How to Implement This Recommendation

Even though there is currently no single college-readiness assessment commonly available or used by schools and districts, the panel recommends that high schools consider several existing assessments that can provide an early indication of students' academic preparation for college. These assessments could include existing college or community college placement exams, college admissions exams, statewide college- and career-readiness assessments, and local assessments. In addition, academic proficiency information is often contained in existing state assessments. Schools can use a variety of approaches to assist students who need extra instructional support, including double-blocked classes, recovery programs, or tutorials before or after school or on Saturdays. Schools can also partner with postsecondary institutions or existing college access programs to provide small-group or one-on-one tutoring and homework assistance<sup>12</sup> or summer academic enrichment programs<sup>13</sup>.

Specifically, steps include:

- Identifying existing assessments, standards, and data available to provide an estimate of college readiness
- Utilizing performance data to identify and inform all students about their academic proficiency and their progress in becoming college ready
- Creating an individualized plan for students who are not on track that specifies the steps students must take to get back on track academically

## ◇ RECOMMENDATION 3

*Surround students with adults and peers who build and support their college-going aspirations.*

### **Level of Evidence**

Moderate

### **Evidence to Support Recommendation**

According to the National Center for Education Statistics, early in high school, 79 percent of students say they aspire to attend college.<sup>14</sup> However, college plans often fade because students do not take the necessary steps to prepare for and enter college.<sup>15</sup> As a result, the panel believes that linking students with college-going adults and peers is important for building aspirations and supporting college entry. The panel reviewed studies for each of the components of this recommendation. Three out of four studies of mentoring programs that consisted of a one-on-one relationship between a college-educated adult and a high school student showed a positive impact on college enrollment.<sup>16</sup> One out of two evaluations of programs that focused on the role of peers in providing support for college attendance demonstrated a positive impact on college entry.<sup>17</sup>

### **How to Implement This Recommendation**

High schools can recruit volunteer mentors from local businesses<sup>18</sup> and local college students, particularly graduates of the high school, who may be able to earn service-learning credits for working with high school students.<sup>19</sup> Mentors can take on a variety of roles, which include serving as college-going role models, assisting with the college entry process, monitoring academic progress, and listening and advising. In addition to providing hands-on opportunities for career exploration, such as job shadowing and short-term internships, high schools can help students learn about the skills, knowledge, and college degree requirements for their fields of interest and provide examples of colleges in the area that offer those degrees.<sup>20</sup>

Specifically, steps include:

- Providing mentoring for students by recent high school graduates who enrolled in college or other college-educated adults
- Facilitating student relationships with peers who plan to attend college through a structured program of extracurricular activities
- Providing hands-on opportunities for students to explore different careers
- Assisting students in aligning postsecondary plans with their career aspirations

## ◇ RECOMMENDATION 4

*Engage and assist students in completing critical steps for college entry.*

### **Level of Evidence**

Moderate

## Evidence to Support Recommendation

Students, particularly those from low-income families and those who are the first in their families to consider college, face challenges in understanding the steps for college entry, such as taking college admissions tests, searching for colleges, submitting college applications, and selecting a college.<sup>21</sup> The panel reviewed six studies that met standards and that focused on helping students complete the steps to college entry. Three of the six programs had a positive impact on college enrollment.<sup>22</sup> Even though the evidence supporting this recommendation comes primarily from programs that target low-income and first-generation students, the panel believes it is vital for high schools to provide hands-on, often one-on-one, assistance to all students for each step in the college admissions process.

## How to Implement This Recommendation

The key to this recommendation is clearly communicating to students and parents the timelines for taking college admissions exams and submitting college applications. Information about key registration and application deadlines can be communicated, for example, through e-mail or phone “blasts” to all students, visits by counseling staff to English classes, or information tables at athletic events. In addition, high schools can offer exam preparation classes, either directly or by partnering with college access programs or other organizations.<sup>23</sup> Schools can also assist students in completing college applications and writing application essays, either one-on-one or in small-group workshops.<sup>24</sup> High schools can collaborate with college access programs that have funding to support student visits to local or regional college campuses. These visits can include shadowing college students, possibly alumni from their high school; attending classes; hearing from an admissions officer; and touring the campus.<sup>25</sup>

Specifically, steps include:

- Ensuring that students prepare for and take the appropriate college entrance or admissions exam early
- Assisting students in their college search
- Coordinating college visits
- Assisting students in completing college applications

## ◇ RECOMMENDATION 5

*Increase families’ financial awareness, and help students apply for financial aid.*

### Level of Evidence

Moderate

### Evidence to Support Recommendation

Financial aid plays a key role in making college affordable and accessible for many students. However, many students and families overestimate the cost of college and therefore feel it is out of reach because of a lack of knowledge about financial aid opportunities.<sup>26</sup> The application

process, with its complicated forms and complex rules, can also become a roadblock, even for students and parents who are informed about available financial aid.<sup>27</sup> The types of practices included in the panel's recommendation form the backbone of two programs, Talent Search and the Free Application for Federal Student Aid (FAFSA) Experiment. Studies of both programs, which meet standards, showed that they had a positive impact on applying for financial aid and enrolling in college.<sup>28</sup>

### **How to Implement This Recommendation**

Students who think that college is too expensive and thus out of reach may not adequately prepare for college throughout high school.<sup>29</sup> Therefore, the panel recommends that high schools begin college affordability discussions with students and parents starting in the 9th grade, with workshops on scholarship and aid sources in the 10th grade and initial sessions on the financial aid application process in the junior year. In addition, the panel recommends that high schools provide hands-on, individual assistance to students and parents in completing the FAFSA and other aid applications prior to critical deadlines.

Specifically, steps include:

- Organizing workshops for parents and students to inform them prior to 12th grade about college affordability, scholarship and aid sources, and financial aid processes
- Helping students and parents complete financial aid forms prior to eligibility deadlines

## **Conclusion**

These recommendations for administrators, teachers, counselors, and related education staff have an evidence-based record of increasing access to higher education. Any high school's effort to improve college access for its students should begin with developing a strategic plan for implementing these five recommendations and monitoring and evaluating the results of the practices, so that any necessary modifications can be made to the program. Where possible, schools should partner with colleges and college access programs to assist with some of these activities. Because high schools play a critical role in preparing students academically for college and assisting students through the steps to college entry, it is critical that each school develop a college-bound culture where students, teachers, and administrators talk openly about preparing for and going to college. These high expectations can have a significant impact on increasing college attendance.

# Endnotes

<sup>1</sup>Choy (2002); National Center for Education Statistics (2008).

<sup>2</sup>Ellwood & Kane (2000); Smith et al. (1997).

<sup>3</sup>Allensworth et al. (2008); Attewell & Domina (2008); Dougherty, Mellor, & Jian (2006); Hargrove, Godin, & Dodd (2008); Jeong (2009); Keng & Dodd (2008).

<sup>4</sup>Allensworth et al. (2008); Attewell & Domina (2008).

<sup>5</sup>Dougherty, Mellor, & Jian (2006); Hargrove, Godin, & Dodd (2008); Jeong (2009); Keng & Dodd (2008).

<sup>6</sup>EXCEL—Bergin, Cooks, & Bergin (2007); Talent Search—Constantine et al. (2006); Middle College High School—Dynarski et al. (1998); Sponsor-a-Scholar—Johnson (1998); Upward Bound—Myers et al. (2004); Quantum Opportunity Program (QOP)—Schirm, Stuart, & McKie (2006).

<sup>7</sup>Bailey (2009).

<sup>8</sup>College Now—Crook (1990); California Early Assessment Program (EAP)—Howell, Kurlaender, & Grodsky (2009).

<sup>9</sup>ACT (2008a, 2008b, 2009a, 2009b).

<sup>10</sup>Achieve, Inc. (2009); Austin Independent School District, Office of Program Evaluation (2002); Quint, Thompson, & Bald (2008).

<sup>11</sup>ACT (2008a, 2008b, 2009a, 2009b).

<sup>12</sup>Austin Independent School District, Office of Program Evaluation (2002); Calahan et al. (2004); Johnson (1998); Maxfield et al. (2003).

<sup>13</sup>Austin Independent School District, Office of Program Evaluation (2002); Kallison & Stader (2008); Snipes et al. (2006).

<sup>14</sup>National Center for Education Statistics (2004).

<sup>15</sup>Gandara (2002); Kao & Tienda (1998); Roderick et al. (2008).

<sup>16</sup>Career Beginnings—Cave & Quint (1990); Puente—Gandara (2002); Sponsor-a-Scholar—Johnson (1998).

<sup>17</sup>Puente—Gandara (2004).

<sup>18</sup>Cave & Quint (1990); Gandara (2004); Pell Institute for the Study of Opportunity in Higher Education (2006).

<sup>19</sup>Ladd (1992).

<sup>20</sup>Austin Independent School District, Office of Program Evaluation (2002).

<sup>21</sup>Cabrera & La Nasa (2000); Roderick et al. (2008).

<sup>22</sup>Career Beginnings—Cave & Quint (1990); Talent Search—Constantine et al. (2006); Sponsor-a-Scholar—Johnson (1998).

<sup>23</sup>Calahan et al. (2004); Cave & Quint (1990); Johnson (1998); Maxfield et al. (2003); Myers et al. (2004).

<sup>24</sup>Bergin, Cooks, & Bergin (2007); Calahan et al. (2004); Cave & Quint (1990); Kahne & Bailey (1999); Kuboyama (2000); Maxfield et al. (2003); Mehan (1996); Seftor, Mamun, & Schirm (2009).

<sup>25</sup>Calahan et al. (2004).

<sup>26</sup>Grodsky & Jones (2007); Horn, Chen, & Chapman (2003); King (2006); MacAllum et al. (2007); Tomas Rivera Policy Institute (2004).

<sup>27</sup>Dynarski & Scott-Clayton (2007); Roderick et al. (2008).

<sup>28</sup>FAFSA Experiment—Bettinger et al. (2009); Talent Search—Constantine et al. (2006).

<sup>29</sup>Luna De La Rosa (2006).

Note: For a complete list of references, see the actual practice guide, *Helping Students Navigate the Path to College: What High Schools Can Do*, available on the Institute of Education Sciences Web site: <http://ies.ed.gov/ncee/wwc/publications/practiceguides>