**Overview**

The advent of the global economy and narrowing international gaps in educational attainment have caught the attention of the nation’s policymakers. Increasingly, they are focusing on the effectiveness of educational systems as a means of improving the nation’s competitive position. It is now widely acknowledged that advanced skills and preparation, regardless of a student’s post-high school path, are essential for success in the emerging economy. This represents a dramatic worldview shift from a generation ago, when society did not envision a universal expectation of postsecondary education and even debated whether too many Americans were going to college. In short, the nation’s expectations of its postsecondary pipeline have soared in a relatively short period of time.

Unfortunately, that pipeline is not adequately configured to meet society’s evolving demands. A wealth of research and analysis generated over the past two decades culminates in several stark conclusions:

- High school graduation requirements are too weak to assure college and workplace readiness.
- The high school-college transition is anything but smooth.
  - There is a general lack of clarity about what skills and competencies are required for postsecondary success.
  - Students face a bewildering array of largely disjointed assessments at various transition points—high school graduation, college admission, and college placement.
- Opportunities for high school students to engage in advanced, college-level coursework—a strategy for preparing for the rigors of college—are unevenly distributed and frequently underutilized.

As a result, students too often are allowed to develop unrealistic and even incorrect assumptions about preparing for postsecondary education, leading many to “coast” through their high school career, taking the wrong courses (or not enough of the right ones), focusing all of their attention on simply getting into college, and essentially “skipping” the senior year. This leads to increased remediation and attrition on the nation’s campuses, as many students respond to the reality that they are not ready for college by dropping out. This is particularly true for historically disadvantaged and underrepresented populations (low income, first generation, racial/ethnic minority) that tend to have weaker secondary schools and support systems, including the home environment.

Federal and state policymakers and education leaders have worked for the better part of the last generation to bring greater seamlessness to the educational pipeline and thus improve postsecondary access and success. Alignment represents just one part of the policy response that includes increased attention to teacher quality, improvements in the student financial aid system, expansion of early outreach, and the emergence of K-16 efforts and data systems. These efforts
have yielded some progress, but much remains to be done. Significantly, the governing structures and policies of K-12 and postsecondary education have not changed fundamentally from the time when far fewer students went to college and attempts to rethink and revamp systemic roles and relationships have made halting progress. After more than two decades of reform—and untold billions of dollars—the human capital infrastructure is still very much at risk.

Boosting alignment—policy and institutional responses
Though efforts are being made on many fronts, renewed focus is being brought to bear on the problems of secondary-postsecondary alignment, spurred on by recent data that show the United States stalling and/or slipping in secondary and postsecondary attainment. The Bush Administration is proposing expansion of the No Child Left Behind Act (NCLB) to the nation’s high schools, governors are launching a major initiative on high school reform, state legislators are introducing bills to make high schools more rigorous, and the private/philanthropic sectors are investing millions of dollars in these and other efforts. Additionally, the movement toward greater P-16 policy coordination at the state level is maturing, though at an uneven pace, and postsecondary options for high school students are gaining attention at the state level. In sum, a window of opportunity is opening with respect to alignment in the educational pipeline.

For two decades, ACT, Inc. research has documented the benefits of taking a core college-preparatory curriculum. Most recently, it has shown that taking certain “Courses for Success”—biology, chemistry, physics, and advanced math courses beyond Algebra II—have a strong impact on student performance and college readiness. ACT research has also shown that students at all achievement levels can benefit from taking rigorous courses.

U.S. Department of Education research has reached a similar conclusion: the rigor of high school coursework, particularly in mathematics, is the best

High school coursework

Coursework really matters
Over twenty years ago, A Nation at Risk noted the failures of our education system and called for secondary students to complete a more rigorous curriculum—four years of English, three years each of mathematics, science, and social studies, and half a year of computer science, plus two years of a foreign language for college-bound students. Since then, research has repeatedly shown that students who take rigorous coursework in high school attend and succeed in college at greater rates.

Taking advantage of such a window requires simple—and bold—state policy action in the three primary dimensions of alignment: high school coursework, standards and assessments, and postsecondary options. As institutions charged with ensuring broad public access to postsecondary opportunity, state colleges and universities also have a key role to play in promoting and sustaining real progress. Such a movement, however, must start from a clear understanding of these dimensions, including required policy action and promising practices. The following discussion is an attempt at just such an understanding, focusing specifically on alignment issues. This focus is deliberate, but is not meant to minimize the importance of the broader range of issues related to college access and success.

A College Readiness Crisis?

Too few high school graduates meet ACT’s College Readiness Benchmarks, indicating readiness for credit-bearing college courses: 26 percent are ready for Biology, 40 percent for College Algebra, and 68 percent for English Composition.

Only 22 percent are ready for college-level work in all three subjects—English, mathematics, and science.

African Americans, Hispanic Americans, and Native Americans are much less likely to be college-ready than Caucasians and Asian Americans.

Based on early testing of eighth and tenth grade students, students currently at or near the end of the college preparation pipeline will be no better prepared than the class of 2004.

predictor of college completion. Specifically, finishing a course beyond the level of Algebra II more than doubles the odds that an entering college student will graduate. Significantly, the impact of taking a more intense high school curriculum on degree completion is far greater for African American and Latino students. For example, while only 45 percent of all African Americans entering a four-year college directly from high school will graduate, 73 percent of African Americans with a strong high school curriculum will do so.

In terms of results, over past decades, there has been significant progress with respect to increasing the rigor of high school coursework, but much remains to be done. The percentage of students taking the curriculum advocated in *A Nation at Risk* (excluding computer science) has quadrupled, from 14 percent in 1982 to 56 percent in 1998. According to ACT, Inc., the pace of change is slowing down and the number of students taking its recommended core curriculum increased only two percentage points over the past decade. In terms of high-end courses, notable gains have continued in recent years, perhaps because there was so much room to improve. As late as 1992, for example, only 12 percent of students had taken Level 4 math (Trigonometry/Pre-Calculus) by graduation; by 2002 this had risen significantly to 41 percent. The nation is making strides in college and workforce preparation, but further progress is needed.

Requirements matter: the role of K-12

Though many high school students achieve far beyond minimal expectations, it is common that students’ behavior is affected by what is required of them. Therefore, in deciding how high to set the bar, state policymakers directly affect the courses students will take. A recent study by Achieve, Inc. found that 42 states and the District of Columbia define minimum course-taking requirements for graduation, while eight states leave this decision to local school boards. (In many states, districts have the option of adding additional requirements.) Most often, the state sets a specific number of courses that must be taken, but not specifically which courses. The majority of states offer just one diploma for all students, while 18 states offer tiered diploma systems in which more rigorous coursework leads to a college-preparatory or advanced diploma. Research by the National Association of System Heads (NASH) found a great deal of variation among high school graduation requirements across states; for example, some states do not even require Algebra I while others require Algebra I, Geometry, and Algebra II/Trigonometry.

It is significant that for the most part, state high school graduation requirements were developed when college-going was not the norm for most students and were set independent of college admissions requirements. States have been increasing graduation requirements over past decades, but with some concern that too stringent requirements might lead to higher high school dropout rates. These concerns need to be addressed and relevant data need to be collected, but such fears should not stand as a roadblock to higher expectations.

Requirements matter: the role of higher education

Historically, higher education institutions set their own admissions requirements, with no involvement by state agencies. States in which strong higher education systems existed were the exception. Minimum course requirements for college admission have varied widely, both within and across states. Over the past two decades, this has begun to change and currently 30 state coordinating or governing boards set minimum course requirements for college admissions. (Typically, institutions and programs have the authority to add additional requirements.) The nation is moving in the right direction, but policymakers and education leaders have not yet reached consensus in terms of numbers and topics of courses needed for college.

The need for greater alignment

NASH found very little consensus between K-12 and higher education in the courses students should take in high school. [See Figure 1] Specifically, the sectors are closer on numbers of courses than on specific topics. [See Box 1] For example, while 10 states are aligned on the number of
mathematics courses required, only Oklahoma is fully aligned in terms of course topics. Twenty-eight states are aligned on the number of English courses required, but only Georgia, Idaho, Kentucky, and Oklahoma fully align on topics.\[^9\]

Without this alignment many students are confused and underprepared, and far too many end up in remedial classes in college. This is not simply an issue for four-year college students. “Open admissions” community colleges may admit all students, but those students still have to pass placement tests to qualify for college-level coursework. Furthermore, individuals entering the workforce are increasingly expected to have many of the same skills as college-goers. There is great urgency to address this issue for the benefit of the nation’s students.

**Promising approaches**

Two approaches to increasing alignment between high school graduation requirements and college admissions requirements are being tried: developing optional college-preparatory or advanced diplomas and recommending a college curriculum for all.

Under the more incremental approach, eighteen states now offer college-preparatory or advanced diplomas that align more closely with college admissions requirements, though there is not necessarily perfect alignment.\[^10\] While the goal is to move more and more students into these diploma paths, some feel this approach leaves the historically disadvantaged student behind.

The other—and more dramatic—approach is to require a college-preparatory curriculum as the “default” curriculum for all students. Students may be allowed to opt out of this path, typically with parental permission.

A few school districts have had notable success with this approach. Cities such as San Jose, Houston, and El Paso have enrolled many more students in a college-preparatory core, raised student achievement levels, and held dropout rates constant.\[^11\]

Several states have made strides with this approach: Arkansas (Smart Core), Indiana (Core 40), Texas (Recommended High School Program), and South Dakota (Advanced Curriculum).\[^12\]

The National Commission on the High School Senior Year, American Diploma Project, and Pathways to College Network are among the national efforts endorsing the idea of a rigorous core curriculum for all. The primary cautions remain that quality teachers and academic and other support systems must be available to all students. When the right conditions are met, this approach can greatly enhance the preparation of all students for college and the workplace.

A recent study by ACT, Inc. and Education Trust looked in detail at ten “successful” high schools, examining the components of high school courses that prepare students for successful entry into college.\[^13\]
Box 1
DIFFERENCES BY DISCIPLINE IN COURSE REQUIREMENTS FOR HIGH SCHOOL GRADUATION AND COLLEGE ADMISSIONS

English/Language Arts: Both K-12 and higher education generally agree on the need to take four years of English. Higher education is clearer on the need to emphasize writing skills.

Mathematics: Most K-12 systems require 2-3 years of mathematics, while most higher education systems require three. They are far apart on specific courses, with most of higher education wanting at least Algebra I, Geometry, and Algebra II, while most K-12 systems stop at Algebra I or Geometry.

Science: most K-12 systems require 2-3 years of science, but only a few require a laboratory course. Higher education more often emphasizes laboratory courses.

Social Studies: this is typically not a problem area.

Foreign Language: this is rarely required for high school graduation. About half of higher education systems have foreign language requirements. Typical requirements are two years.


Standards and assessments

K-12 standards-based reform
While Carnegie course units remain the basic organizing principle in high schools and colleges, it is well-established that course titles do not equate to specific content and skills. The educational system must have a better way to assure that particular subject matter is being taught, particular knowledge and skills are being learned, and there is consistency across teachers, school districts, and, ideally, states.

Perhaps the most significant innovation in K-12 reform over the past 20 years has been the standards and assessment movement. Currently, subject-based standards are in place in 49 states, defining at the state level the knowledge and skills needed at each grade level in specific subject areas. For the most part, standards are in place up to tenth grade levels, but may not exist for upper-level classes or advanced coursework. Students are assessed on a regular basis to determine their degree of proficiency, but there are not necessarily consequences to the individual for failure to achieve. These K-12 reforms were for the most part the result of legislative action in the states, not a result of collaboration with higher education. Such reforms have created a gap between the knowledge and skills assessed at the K-12 level and those needed for success in college.

Exit exams and end-of-course assessments
Currently, 25 states have exit exams in place or will implement them within the next five years. This represents about half of all public school students, and by 2009, will represent 70 percent of all public school students. The good news is that current exit exams are better than what came before, and they definitely have potential to raise the floor for high school graduation. The bad news is that in their current form, such exams do not go nearly far enough to meet college and workforce expectations. This is not surprising, given that the purposes of exit exams are not very clear, even to the states implementing them. Achieve, Inc. has analyzed the content of exit exams and concluded that exit exams reflect material studied early in the high school career, have cutoff scores that are too low to assure college readiness, and measure only a fraction of the knowledge and skills essential for college and the workplace. Achieve, Inc.'s analysis argues that these tests need to be strengthened over time. Some believe that setting expectations too high will lead to increased high school dropout rates. Empirical studies have presented conflicting evidence as to whether more demanding tests lead to increased dropouts.

Another emerging option available to states is the end-of-course (EOC) assessment. These tests define expectations for specific subjects and are taken immediately after course
completion; they can be used for instructional improvement as well as student assessment and school accountability. Currently, 15 states include, or will soon include, end-of-course exams in at least one subject as part of their high school assessment systems, and 11 states have at least one test in all four core subject areas.

Postsecondary roles and alignment issues
What is clearly missing are comparable standards set by postsecondary education that define the knowledge and skills needed by students to succeed in college. Currently, colleges and universities use one system for college admissions (based on coursework, grade point average, class rank, and SAT/ACT test scores) and another system for placement into college-level courses (based on a variety of tests after college acceptance). The maze of assessments related to high school graduation, college entrance, and college placement confuses students. Public higher education can and must streamline student assessments.

A key factor in preparing students for college is getting the timing of assessments right. It does little good to learn right before college that one is not prepared for college-level coursework, but it is hardly any better to learn it six months earlier. Many groups are calling for implementing assessments in middle and high school to serve as an early warning system for students who are not on track. Armed with this information, teachers and counselors have a better chance of providing students with the courses and services they need to become college-ready.

Promising approaches
Progress is being made on the national and state levels to define standards that span the high school/college transition, improve the timing of assessments, and develop policies that support greater alignment. At the national level:

- ACT, Inc. has developed Standards for Transition that provides a common language for K-12 and postsecondary education that identifies what students need to know and should be able to do to succeed in college. Through its Educational Planning and Assessment System (EPAS), ACT works with schools and states to evaluate student preparedness in 8th and 10th grades. ACT recently launched Ready to Succeed, a national demonstration project that will assess course quality and rigor in selected districts and determine ways to improve them.

- The American Diploma Project, working with high school teachers, college professors, and employers, developed a set of benchmarks that describe the specific English and mathematics knowledge and skills that high school graduates must have to succeed in postsecondary education and the workplace.

- Standards for Success (S4S), a consortium of 28 universities that are members of the Association of American Universities (AAU), developed a comprehensive statement of what students must know and be able to do to succeed in entry-level university courses called Knowledge and Skills for University Success (KSUS). S4S then analyzed 66 state high school assessments from 20 states to determine the degree of alignment that exists between state high school exams and standards for success in entry-level university courses.

- The College Board has adopted S4S as a core element of its Standards for College Success that will serve as the framework for future versions of the PSAT, SAT, and AP tests. Further, Springboard, a new College Board program, takes the standards and maps them from grade 12 down to grade 6 so that students will be better prepared for college success.

At the state level, there are a number of promising starts:

- California State University has implemented an Early Assessment Program that is optional for 11th graders. By adding several higher order questions to an existing 11th grade assessment, the test can be used for college placement purposes.

- South Dakota used its high school feedback system to address placement issues and elected to use ACT subtest scores for both early assessment and college admission purposes. Kentucky is putting into place a plan...
that will use ACT sub-scores to qualify students for placement into specific college-level courses.

- Georgia is the only state claiming college/workforce readiness as an official purpose of its high school exit exam. New Mexico, Texas, and New York report using exit exams for admissions and/or course placement decisions by some public colleges and universities. Other states expressing some interest include North Carolina, Ohio, and Nevada.\(^{22}\)

- In Illinois, every junior must take the ACT assessment as part of the state’s 11th grade assessment. The test serves double duty, and, as a bonus, gets more students thinking about college.

- Ohio has developed “Common Expectations” that define what students should know and be able to do to succeed in college.

- Oklahoma has used ACT’s EPAS for a number of years and has seen improved course preparation and college participation.

- Washington has found that its exit exam is as good a predictor of college freshman success as the SAT and is trying to make it a more useful tool for higher education decisions.

- Wisconsin’s Curriculum Articulation Project aims to create more seamless transitions between high school and college.

- Oregon has been working for more than ten years to align high school exit requirements, college admissions, and college placement through its Proficiency-based Admission Standards System (PASS).

### Postsecondary options for high school students

#### The past and present

For many years, high-achieving students have earned college credits while still in high school. Students take particular courses and earn credit by examination in two well-known programs: the College Board’s Advanced Placement Program (AP), begun in 1955, and the International Baccalaureate (IB) program, started in 1968. In dual enrollment programs, students take college-level courses and earn high school and college credit simultaneously. Though often begun as local partnerships, these programs are attracting increasing interest at the state policy level. Currently, 38 states have dual enrollment policies addressing one or more of the following features: target population, admissions requirements, location, student mix (i.e. high school students or high school and college students co-mingled), background of instructors, course content, method of credit-earning, program intensity, funding, and state mandates. In the remaining states, institutions decide whether to or how to implement programs.\(^{23}\)

#### The potential

All of these programs have greatly expanded over recent years and there is growing realization that these postsecondary options (also called credit-based transition programs) do more than provide college credits. They:

- Prepare students for the academic rigors of college.

- Provide more realistic information to students about the skills they will need in college.

- Help high school faculty prepare students for college.

- Expose traditionally non-college-bound students to college.

- Provide curricular options for students.

- Improve motivation through high expectations.

- Lower the cost of postsecondary education for students.

- Promote institutional relationships between colleges and high schools.\(^{24}\)

A recent survey found that 71 percent of high school juniors and seniors believe that earning college credit for courses taken in high school would help make the senior year more meaningful.\(^{25}\) Research also has documented that AP course-taking is strongly correlated with college success.\(^{26}\)

In effect, the courses themselves represent alignment between
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High school and college—a blurring of the two sectors and movement toward a more seamless education experience. Recognition of the multiple benefits of these programs has brought realization of their potential for helping low- to middle-achieving students prepare for and succeed in college. There is even interest in developing new kinds of options specifically oriented to lower-achieving students. The National Center for Educational Statistics recently estimated that approximately two percent of all Title IV degree-granting institutions have dual enrollment programs specifically geared toward at-risk students, representing about five percent of the institutions (2,050) offering dual enrollment programs. This suggests enormous potential for expansion.27

Finally, there is an inherent tension between the desire to expand postsecondary options to many more students and the need to maintain rigorous academic standards.28 This will continue to be an area of interest and study.

Promising approaches

Several approaches have been used to expand postsecondary options to all students.

Expanding Advanced Placement:
- The College Board reports that progress has been made in closing equity gaps. In some states, traditionally underserved minority populations are no longer underrepresented in the pool of AP examinees.29 The College Board’s AP Potential is a tool available to school administrators that uses PSAT scores to help identify students who are likely to succeed on AP tests. Florida has used AP Potential to increase the number of traditionally underrepresented students who are succeeding.
- Arkansas requires all schools to offer at least one AP course in each of four core areas.
- Virginia’s Virtual Advanced Placement School offers a broad range of AP courses via distance learning.

Expanding dual enrollment:
- Eighteen states mandate that dual enrollment opportunities be provided to students.30
- In 11 states, the secondary or postsecondary institution pays the student’s tuition and in six states, the state pays.31 Washington’s Running Start program, for example, allows qualified juniors and seniors to take up to 18 hours on community college campuses at no cost.

Serving lower-achieving students:
- Early College High Schools (or Middle Colleges) are small schools that “blend” high school and the first two years of college to eliminate the physical transition between secondary and postsecondary institutions. Learning takes place in small, personalized settings that demand rigorous work and provide needed support.32

Cross-cutting issues:
- The U.S. Department of Education’s “Accelerating Student Success” project has undertaken a study of all types of credit-based transition programs to investigate ways in which these programs may support the transition of middle- to low-achieving students from secondary to postsecondary education. It has identified state policies that encourage participation including tuition and fees paid by the state, school district, or college (as opposed to the student); easy transfer of course credit; few or no course restrictions; and good information about the availability and requirements of the programs.
- Florida and Virginia are among the states developing common course numbering systems that include Advanced Placement, International Baccalaureate, and dual enrollment courses so that these courses can be approved for transfer for postsecondary credit.

K-16 and broad policy efforts

It is worth noting that academic alignment issues are increasingly being addressed as a component of broader statewide K-16 initiatives. These efforts bring together representatives from K-12 departments of education and school districts, higher education coordinating boards and institutions, the business community, the governor’s office, the state legislature, and other entities to work together on a common set of goals. They aim to promote student success through
a more seamless educational system, addressing a series of interrelated issues such as curriculum and assessment, early outreach, student financial aid, teacher preparation, data and accountability (including high school feedback reports), and governance structures.

Many national organizations, including the Education Commission of the States and the State Higher Education Executive Officers (SHEEO), have conducted K-16 projects that analyze and promote promising state practices. Together, the National Association of System Heads (NASH) and the Education Trust support a State K-16 Network helping states implement K-16 improvement strategies. The network currently has 22 state members.

Academic alignment issues also lie at the heart of recent efforts to improve the American high school. Most notably, the National Governors Association (NGA), under its “Redesigning the American High School” initiative, recently identified ten steps governors can take to accelerate high school reform. [See Box 2] NGA also has developed a more extensive guidebook of promising state and local practices to help states get started.

NGA and Achieve, Inc. recently sponsored the 2005 National Education Summit on High Schools and released an Action Agenda for Improving America’s High Schools. At the meeting, Achieve, Inc. announced the formation of the American Diploma Project Network, a coalition of states committing to:

- Raise high school standards to the level of what is actually required to succeed in college or the workplace.
- Require all students to take rigorous college and work-ready curriculum.
- Develop tests of college and work readiness that all students will take in high school.
- Hold high schools accountable for graduating all students ready for college and work and hold colleges accountable for the success of the students they admit.

These efforts will be led by the governor, state superintendent of education, state higher education executive officer, business leaders, and others. The coalition currently has more than a dozen member states.

**Conclusion**

This analysis of secondary-postsecondary alignment issues suggests some clear directions that campus, system, and state policy leaders must take to improve the success of students in the educational pipeline. These efforts will be more successful if they take place as part of broader K-16 initiatives—efforts that include early outreach to high school students, improved student financial aid policies, development of the teacher workforce, and better data and accountability systems. They also will be more successful when campuses work to improve the experiences students have after they arrive—the full range of institutional policies and practices that support positive student outcomes. Increasing secondary-postsecondary alignment itself represents a straightforward and promising means to promote student success in the postsecondary educational pipeline. States, universities, and schools know what must be done and many are moving forward with innovative approaches. It is time to take these approaches from the margins to the mainstream across the nation.

State leaders should promote a policy framework that:

- Raises and clarifies expectations for entering freshmen by articulating statewide coursework requirements for college admissions and the knowledge and skills needed to succeed in college.
- Aligns high school exit, college admissions, and college placement assessments.
- Includes “early warning” systems for postsecondary readiness.
- Makes postsecondary options a statewide issue and develops policies that encourage participation of middle- and lower-achieving groups.
- Supports K-16 structures that encourage seamless educational systems.
- Improves data systems to gauge student success and program effectiveness.
State colleges and universities and their leaders have a definite role to play in advancing these priorities. They should:

- Partner systemwide/statewide to develop a basic set of high school coursework and standards for what students should know and be able to do to succeed in the first year of college and broadly communicate these expectations.

- Analyze at the system/state level how state high school assessments and college entrance exams align with college placement exams and collaborate with test developers and others to promote greater seamlessness and reduce duplication among assessments (e.g., by incorporating elements of college admissions and placement exams in high school exit exams).

- Audit institutional participation in postsecondary options programs by identifying policies and practices that encourage student participation.

- Improve data systems (e.g. compatibility between secondary and postsecondary institutions) and better utilize existing data (e.g. feedback reports to high schools regarding performance and remediation of first-year students).

- Participate actively in K-16 collaboratives and encourage their enhancement or formation where they are weak or do not exist.

All stakeholders have a great opportunity—and responsibility—to act now to increase the effectiveness of the educational system, and ultimately, the nation’s competitive position in the global economy. As AASCU’s Public Policy Agenda makes clear, state colleges and universities, in particular, can and must act to deliver America’s promise—to promote public policy that expands educational opportunity and seals the cracks in the educational pipeline.

Endnotes

1ACT, Inc. Crisis at the Core: Preparing All Students for College and Work (Iowa City, IA: author, 2004).
4ACT, Inc., op cit.
8Ibid.
9Ibid.
10Somerville and Yi, op. cit. provides details on advanced diplomas and comparisons to college admissions requirements.
PERSPECTIVES

Achieve, Inc., The Expectations Gap, op. cit., and personal communication from Robert T. (Tad) Perry, Executive Director, South Dakota Board of Regents.

ACT, Inc. and The Education Trust, On Course for Success: A Close Look at Selected High School Courses That Prepare All Students for College (Iowa City, IA: author, 2005).


Center on Education Policy, op. cit.


Ibid.

Center on Education Policy, op. cit.


Preliminary results from National Governors Association “Rate Your Future” survey, April 2005.

Adelman, op. cit.


Education Commission of the States Center for Community College Policy, Postsecondary Options: Dual/Concurrent Enrollment, (Denver, CO: Education Commission of the States, 2001).


Karp, Bailey, Hughes, and Fermin, op. cit.

Ibid.


## Appendix A. State Policies and Practices

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(5) Personal communication with Janis Somerville, National Association of System Heads, April 2005.
(6) Achieve, Inc. website (achieve.org).
Appendix B. Organizations

Achieve, Inc. and the American Diploma Project. Launched by Achieve, Inc., in partnership with the Education Trust and the Thomas F. Fordham Foundation, the American Diploma Project was designed to restore value to the high school diploma. Achieve, Inc. recently formed the American Diploma Project Network, a coalition of states committed to taking action. 

ACT, Inc. Initiatives include Standards for Transition that describes what students need to know and be able to do to succeed in college, the Educational Planning and Assessment System that evaluates preparedness of 8th and 10th graders, and the “Ready to Succeed” demonstration project to assess and improve course quality.

The Bridge Project. Housed at Stanford University (Calif.), this six-year national study explored the policies, perceptions, and practices related to the transition from secondary to postsecondary education.

The College Board. Initiatives include Standards for College Success that identifies the skills and competencies students need to be prepared for college, Springboard that maps the competencies from grade 12 down to grade 6, and the AP Potential program that helps high schools find potential AP students from among their PSAT/NMSQT takers.

Education Trust. The Education Trust works for the high academic achievement of students at all levels, with a focus on low-income students and students of color. It believes that colleges and universities have a major role to play in helping all students succeed. The Education Trust works with several partners, including NASH and the American Diploma Project, to help bring about a coherent K-16 system.

Jobs for the Future (JFF). JFF believes that all young people should have a quality high school and postsecondary education. It coordinates the Early College High School Initiative, whose partners are creating pioneering small high schools where underrepresented students earn a high school diploma and two years of college credit. JFF’s Double the Numbers initiative is designed to support policies that can dramatically increase the number of low-income young people who enter and complete postsecondary education.

National Association of System Heads (NASH). NASH and the Education Trust support a network of public higher education, K-12, and civic leaders who are implementing statewide K-16 initiatives; currently, 22 states are members.

National Commission on the High School Senior Year. This commission was established to examine students’ experiences in the last year of high school and to recommend ways to improve them.

National Governors Association (NGA). As part of this year’s Chairman’s Initiative, “Redesigning the American High School,” NGA explored what governors can do to accelerate high school reform. With Achieve, Inc., NGA sponsored the 2005 National Education Summit on High Schools and released an action agenda.

Pathways to College Network. The Pathways to College Network is a national alliance of organizations dedicated to focusing research-based knowledge on improving college preparation, access, and success for underserved students.

Standards for Success (S4S). S4S is a three-year project of the Association of American Universities (AAU) designed to address what students must know and be able to do to succeed in entry-level university courses and how universities can make better use of state high school assessments in their admissions process.

U.S. Department of Education Office of Vocational and Adult Education (OVAE). OVAE’s initiative, Accelerating Student Success through Credit-Based Transition Systems, is designed to investigate the ways various postsecondary options for secondary students support the transition of middle- to low-achieving students from high school to postsecondary education.