PATHWAYS
TO COLLEGE
NETWORK

# A SHARED AGENDA

A Leadership Challenge to Improve
College Access and Success

The Pathways to College Network is an alliance of national organizations and funders established in 2001 to **improve college access and success** for young people from low-income families, those who are the first generation in their families to go to college, underrepresented minorities, and students with disabilities.

The goal of the Pathways to College Network is to advance college access and success for underserved students, including those who are the first in their families to go to college, low-income students, underrepresented minorities, and students with disabilities.

All of the Pathways work is grounded in data and research. Through a synthesis of research evidence from hundreds of studies, the Pathways to College Network has established six principles to guide the actions of leaders in education and in all sectors of society.

**1** **Principle One:** Expect that all underserved students are capable of being prepared to enroll and succeed in college.

- All students must be challenged by high expectations.

**2** **Principle Two:** Provide a range of high-quality college-preparatory tools for underserved students and their families.

- Require a complete college-preparatory core curriculum.
- Make honors and college-credit courses available to all students.
- Provide early college awareness programs and broad support services to accelerate student learning.
- Make language-accessible college planning and financial aid information available.

**3** **Principle Three:** Embrace social, cultural, and learning-style differences in developing learning environments and activities for underserved students.

- Involve families in supporting learning.
- Affirm students' social and cultural contexts.
- Create environments that support diversity and foster positive intergroup relations.

**4** **Principle Four:** Involve leaders at all levels in establishing policies, programs, and practices that facilitate student transitions toward postsecondary attainment, from:

- elementary to middle school;
- middle to high school;
- high school to college; and
- college to work and further education.

**5** **Principle Five:** Maintain sufficient financial and human resources to enable underserved students to prepare for, enroll, and succeed in college.

- Staff schools and programs with well-qualified teachers, counselors, and leaders.
- Ensure equitable funding that addresses past deficiencies and meets student needs.
- Fund robust need-based financial aid.

**6** **Principle Six:** Assess policy, program, practice, and institutional effectiveness regularly.

- Use assessment models that demonstrate whether practices are working for underserved students.
- Focus on data that provide feedback for continuous improvement.
- Employ a variety of analytical tools, avoiding heavy reliance on any single measure.

## PATHWAYS
TO **COLLEGE**
**NETWORK**

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# Foreword

We should be proud of the commitment that we as a nation have made to our children. Each of our 50 states guarantees a free public education to every young person. That commitment is the backbone of our democracy and free-market economy, and it continues to be one of our great strengths.

But in the 21st century, our commitment needs to mean something different than it did 100 years ago or even 25 years ago. The education paradigm of the agricultural and factory age is no longer appropriate. That was a world where one-third of our young people were prepared for college, one-third got enough of an education to work in a factory or on a farm, and one-third of the students got an education that prepared them for nothing at all. Fortunately for that last one-third, menial jobs were available for most uneducated people who wanted to work.

Today, however, we must aim to prepare all students so that they can successfully undertake postsecondary work. We must do so because the vast majority of future jobs will require education and technical skills beyond high school. In a striking development, most of those who go straight from high school to the workforce now need at least the same skills and knowledge as a student entering a college.

That's why three years ago I encouraged the creation of the Pathways to College Network and was one of the founding members. In taking on this challenge as a nation, we are attempting to do something that we have never tried before. We are seeking to give all of our young people—not just the top third—a first-class education. We are trying to help that middle third and especially that forgotten bottom third reach for the "American dream," just as we have always helped those at the top.

We are already making some progress. More students are taking tough courses in high school. Math achievement is up. More minority students are going to college.

But we must do more. We have a long way to go in order to close the persistent achievement gap between rich and poor, and between White and minority students. This is a gaping hole in our commitment to fulfill the American promise. If we do not work together to change this, our very way of life and economic success are threatened. Working in partnership, we can close the gap, and grow and sustain college-going opportunities for the many, many young people still left behind.

A *Shared Agenda* shows us where we need to go, and how we can get there. It contains the roadmap for accelerating our progress in preparing all students for college and economic success. Whether you are an elected official, a school principal, a community activist, a university president, or run a precollege outreach program, your "to do" list is in this report. Please accelerate what you are doing. The children of America deserve nothing less.

Richard Riley
Former U.S. Secretary of Education

The crux of the Pathways to College Network is to get research-based knowledge about effective policies and practices into the hands of educators, policymakers, and community, corporate, and philanthropic leaders.

# Introduction

In a nation where equal opportunity for all is a bedrock democratic value, getting a college degree still depends far too much on one's economic circumstances or ethnic heritage. High school graduates from lower-income families and those from racial and ethnic minority groups are far less likely to enroll in college than other students. Of those who do matriculate, many never complete a college degree. This leads to a cycle of discouragement for students, a squandering of their talents, and inefficient use of public and private resources.

Today's world demands that educational systems at all levels support high achievement and the development of life-long learning skills for *all* students, regardless of background. If as a nation we are to remain competitive in a global economy, and if we are to attain the goal of being a truly integrated society, we must ensure that the large numbers of underserved students in America achieve at the postsecondary level.

The Pathways to College Network is a national initiative committed to improving college access and success for underserved populations. Pathways focuses knowledge and resources directly on those who *are* being left behind: low-income students, students who are the first generation in their families to go to college, underrepresented minorities, and students with disabilities.

Launched in 2001, the Pathways to College Network comprises a broad coalition of national organizations and funders. As partners in the Pathways Network, we have pooled our expertise to compile research and identify exemplary practices that help us to pursue the important goal of postsecondary education for everyone in our society. We hope to galvanize leaders in education, government, philanthropy, and communities to join with us in a collective recommitment to equal educational opportunity. This report is about the imperative we have as a society to make college a realistic goal for all young people. That goal is what *A Shared Agenda* is all about.

## Partners

ACT, Inc.

American Association of Community Colleges

American Council on Education

American Youth Policy Forum

The Aspen Institute

Association of American Colleges and Universities

The College Board

Council for Opportunity in Education

Education Commission of the States

Institute for Educational Leadership

National Association for the Advancement of Colored People

National Association for College Admission Counseling

National Association of Secondary School Principals

National College Access Network

National Council for Community and Education Partnerships

National Urban League

Pacific Resources for Education and Learning

State Higher Education Executive Officers

The Education Resources Institute

University of California, Office of the President

Western Interstate Commission for Higher Education

## Funders

Daniels Fund

Ford Foundation

Bill & Melinda Gates Foundation

GE Foundation

The James Irvine Foundation

W. K. Kellogg Foundation

KnowledgeWorks Foundation

Lucent Technologies Foundation

Lumina Foundation for Education

Nellie Mae Education Foundation

The Sallie Mae Fund

US Department of Education, Fund for the Improvement of Postsecondary Education

US Department of Education, Office of Vocational and Adult Education

**Convener**
Occidental College

# Executive Summary

After more than three decades of effort and investment to create equal educational opportunity for all, substantial progress has been made in increasing the educational attainment of young people in the United States. But large gaps in college-going and completion persist for many low-income and minority students, and students with disabilities.

*By "underserved students," the Pathways to College Network means low-income students, students who are the first generation in their families to go to college, underrepresented minorities, and students with disabilities. While we focus on youth, we also recognize the importance of improving postsecondary access for adults who need further education in order to achieve their goals.*

*When we say "college," Pathways means a program leading to a postsecondary credential: bachelor's degrees, associate's degrees, and high-skill certificates.*

Most young people in our society hope and plan to go to college. But many of them face difficult challenges along their educational journey and do not have clear pathways to college. Consider just a few facts. High school graduation, college enrollment, and degree completion are still strongly related to income and race:

- Only about half of African American and Latino ninth graders graduate from high school within four years, compared to 79 percent of Asian Americans and 72 percent of Whites.

- Of high school graduates, those from high-income families enter college at rates 25 percentage points higher than those from low-income families.

- By their late 20s, more than one-third of Whites have at least a bachelor's degree, but only 18 percent of African Americans and 10 percent of Hispanics have attained degrees.

These facts—and others like them—demonstrate an educational divide in this country that in some respects has not narrowed in decades. At the beginning of the 21st century, preparing students so that they can succeed in college and other postsecondary programs is a necessity for all, not just an option for some.

The Pathways to College Network is an alliance of national organizations and funders established in 2001 to improve college access and success for underserved students. The Pathways Network has collected a large body of data and research related to improving the academic preparation, college-readiness, and postsecondary achievement of these students.

Today, many underserved students attend schools that have less demanding curricula, less qualified teachers and counselors, and fewer financial resources. Low-income and minority students are much less likely than other students to be in a college-preparatory or accelerated track. Their families do not have ready access to college planning information because of social or linguistic barriers. College financial aid often does not sufficiently address the needs of low-income students; many of those with high unmet need do not enroll in college. The pathways that should lead to college and promising careers are still dead-end streets for too many young people.

Through our synthesis of extensive research, Pathways has established six general principles to guide educators and other stakeholders in efforts to improve college access and success:

1. Expect that all underserved students are capable of being prepared to enroll and succeed in college.

2. Provide a range of high-quality college-preparatory tools for underserved students and their families.

3. Embrace social, cultural, and learning-style differences in developing learning environments and activities for underserved students.

4. Involve leaders at all levels in establishing policies, programs, and practices that facilitate student transitions toward postsecondary attainment.

5. Maintain sufficient financial and human resources to enable underserved students to prepare for, enroll, and succeed in college.

6. Assess policy, program, practice, and institutional effectiveness regularly.

These principles underpin a series of recommended actions for leaders, including elected officials, superintendents, principals, college presidents, outreach program directors, and community leaders. Only through strong leadership and concerted, continued effort by stakeholders and advocates will we create the impetus for change. Some of the actions we recommend are:

- State and federal officials must mandate rigorous, aligned curricula for schools and provide sufficient funding for programs, teachers, and students.

- School leaders should require a college-preparatory curriculum for all students, provide academic and social support for underserved students, and ensure that teachers are well prepared to address different learning styles and cultural backgrounds.

- College and university leaders need to be clear about the skills and knowledge they expect incoming freshmen to have. They should build partnerships with schools, provide teacher training that focuses on the needs of underserved students, and target robust need-based aid and support programs to underserved students.

- Outreach program leaders must provide academic and social support for underserved students and their families, including tutoring, parent involvement, and partnership initiatives.

- Community leaders and family support groups should work with students and families to instill and reinforce beliefs that all students must prepare for postsecondary education. In turn, communities and families must push schools and government to adopt a goal of universal college-readiness and achievement.

Leaders in government, communities, and education should also work with philanthropic and business leaders to help effect and guide change. Together, these leaders must build a strong foundation of support for initiatives to meet the needs of underserved students.

In addition to our recommendations for specific actions, Pathways has produced over 30 papers, policy briefs, and other resources summarizing research findings related to improving college access and success. We also have created an annotated bibliography of more than 600 studies on which the Pathways recommendations are based and we have profiled some 100 examples of policies, programs, and practices reflecting research-based principles and actions. These resources, along with tools to help leaders make the changes we are proposing, are found on the Pathways Web site (www.pathwaystocollege.net).

Looking ahead, the Pathways Network will work on two primary fronts:

First, we will engage in a multi-step communication campaign to disseminate the Pathways agenda and build the public and political will to implement it. With the release of *A Shared Agenda* through Network partner organizations, we are targeting messages to key decision-makers to increase awareness of the importance of the Pathways findings and to influence them to take action. We also are designing messages aimed at underserved students and their families through broad marketing campaigns, in order to motivate them to take the necessary steps to go to college and push system leaders to make the changes needed for them to do so.

Second, we will continue to identify and promote research to guide reforms that will improve access to and success in college by underserved students. Numerous questions about policies, programs, and practices remain that, if answered, could bring about changes to better serve students.

The Pathways to College Network is a collaborative effort by organizations that care deeply about placing a college education within the reach of all young people in this country. Together, we must turn this vision into reality.

# Facing the Challenge

## Where We've Been

Most eighth graders today will tell you that they plan to go to college. Unfortunately, the pathways to higher education are blocked for too many of them, particularly those from low-income and minority families. Until we change education policies and practices so that students from all backgrounds can succeed in college, large achievement gaps will persist, and the highest aspirations of our society will go unrealized.

Creating equal educational opportunity for low-income and minority students emerged as a national priority in the mid-1960s. Along with civil rights and anti-poverty legislation, Congress passed the Elementary and Secondary Education Act and the Higher Education Act, authorizing the first federal support to improve education for large numbers of low-income students. Those sweeping mandates supported opportunities for disadvantaged populations across the education spectrum. Upward Bound was established in 1964 to help low-income students prepare for college. In 1972, Congress created Basic Educational Opportunity Grants (now Pell Grants), the first federal grant program to award financial aid directly to low-income students.

Federal leadership in expanding college access for low-income and minority populations encouraged the development of outreach and persistence programs supported by states, higher education institutions, non-profit organizations, and foundations. Today, literally thousands of such programs exist.

And yet, these interventions clearly haven't been enough. Do we need more financial aid and more access programs? Of course more resources are needed, but money and special programs alone won't get the job done. We have to ratchet up expectations across the board and create a 21st century education system that prepares all students for postsecondary success.
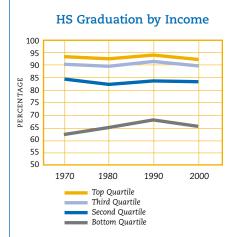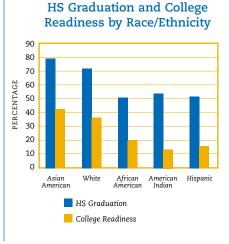
# Where We Are Now

Massive public and private initiatives over the past three decades have led to increased educational achievement for elementary, secondary, and postsecondary students across all income and racial groups. But large gaps in educational attainment still exist. Even today, whether or not our young people graduate from high school, go on to college, or earn a degree has a lot to do with their race and family income. A few snapshots tell the story:
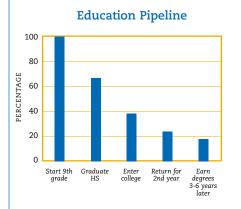
More than 90 percent of students from the top two income quartiles graduate from high school, compared to 65 percent of those from the bottom quartile. This gap has barely changed for 35 years. [1]
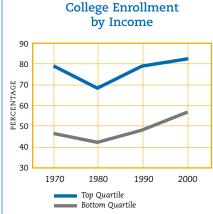
Only about half of African American and Latino ninth graders graduate from high school within four years, compared to 79 percent of Asian Americans and 72 percent of Whites. White and Asian American students are much more likely to take the courses that prepare them for college. [2]

For every 100 students in the U.S. who begin ninth grade, 67 finish high school in four years; 38 go to college and only 18 earn associate's degrees within three years or bachelor's degrees in six years. Underserved students predominate among those who are lost along the educational pipeline. [3]

In 2000, 82 percent of high school graduates from the top income quartile enrolled in college, while only 57 percent of students from the bottom income quartile did so. [4]

### HS Graduation by Income



Legend:
- Top Quartile
- Third Quartile
- Second Quartile
- Bottom Quartile

### HS Graduation and College Readiness by Race/Ethnicity



Legend:
- HS Graduation
- College Readiness

### Education Pipeline



### College Enrollment by Income



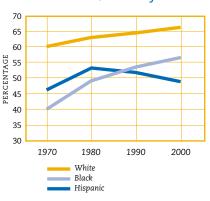Legend:
- Top Quartile
- Bottom Quartile

*Because of their smaller numbers, American Indians and Asian sub-populations frequently are not reflected in education demographics. However, the data that are available demonstrate that many of these groups also are underrepresented in higher education compared to non-Hispanic Whites.*
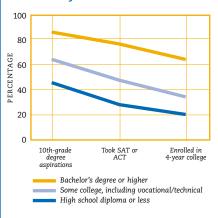
More than 65 percent of White high school graduates in 2000 continued on to college compared with 56 percent of African American and 49 percent of Hispanic high school graduates. [5]
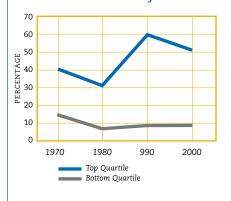
Parental education is strongly related to a child's likelihood of enrolling in college immediately after high school. Sixty-five percent of students graduating from high school in 1992 whose parents had bachelor's degrees enrolled in four-year colleges, compared with only 21 percent of students whose parents had a high school diploma or less. [6]

A child from a family in the top income quartile is five times more likely to earn a bachelor's degree by age 24 than is a child from the bottom income quartile. [7]

By their late 20s, more than one-third of Whites have at least a bachelor's degree, but only 18 percent of African Americans and 10 percent of Hispanics have attained degrees. [8]

### College Enrollment by Race/Ethnicity



White
Black
Hispanic

### College-going by Parent Education



Bachelor's degree or higher
Some college, including vocational/technical
High school diploma or less

### BA Attainment by Income



Top Quartile
Bottom Quartile

### 25-29 year-olds with BA Degree by Race/Ethnicity



White
Black
Hispanic

. . . the many pathways that should have led students to promising careers instead have become one-way streets to low-level jobs and marginal status in contemporary society.

# Still a Long Way to Go

The divide—in some instances a growing one—reflected in these facts and figures should be unacceptable to leaders in education, government, and all who believe that educational opportunity is key to a productive, just society.

Historically, efforts to promote college access have had little connection with attempts to transform the high schools serving low-income and minority students. Most students today attend comprehensive public high schools, created originally in the 1930s with the goal of educating students for adult life through a wide range of academic and vocational tracks. For many decades, few questioned the utility of this model, in which college preparation was seen as an option only for some.

*A Nation at Risk* and other reports issued in the 1980s addressed the failure of high schools to provide students with academic rigor and relevance. But even those landmark critiques did not focus on the college-going rates of underserved students. Current evidence suggests that most reform efforts have not yet resulted in substantially improved college-readiness for low-income and minority students.[9] With a small number of notable exceptions, the many pathways that should have led students to promising careers instead have become one-way streets to low-level jobs and marginal status in contemporary society.

If we consider what current data and research tell us about academic, social, cultural, and financial factors affecting college access and success, it is readily apparent that our education system must change to meet the needs of underserved students and the requirements of 21st century society for a highly educated workforce and citizenry.

## A strong academic program in high school predicts college success better than high grades or test scores.

● A rigorous high school curriculum has greater impact on bachelor's degree completion than any other pre-college indicator of academic preparation, regardless of socioeconomic status or race. [10]

● Fewer than one-third of high school graduates complete the full sequence of college-preparatory courses recommended in *A Nation at Risk,* including foreign language and computing. [11]

● Underserved students have more limited access to rigorous courses; they still lag far behind in taking advanced math and science. [12]

● Some teachers believe that underserved students are unable to meet high expectations and therefore demand less of these students. [13]

● As of 1997, 45 percent of African American students were enrolled in schools that were more than 90 percent non-White. These schools tend to have less rigorous curricula, fewer resources, and less qualified teachers. [14]

## How schools assign students to different curricula has a significant effect on academic performance.

● Only 28 percent of low-income students are enrolled in a college-preparatory curriculum, compared to 49 percent of middle-income students and 65 percent of high-income students. [15]

● African American, Latino, American Indian, and low-income eighth graders are twice as likely as White or upper-income students to be in remedial math. [16]

● African American students are three times more likely than White students to be placed in special education programs and only half as likely to be in gifted programs. [17]

● White students take Advanced Placement examinations at nearly six times the rate of Latino students and more than 13 times the rate of African American students. [18]

### Students with well-prepared teachers achieve at higher levels.

● Teachers in high-poverty and high-minority secondary schools are less likely to have majored in and be certified in the subjects they teach. [19]

● Many teachers are unprepared to work with the diverse student populations in today's schools. [20]

### Students whose home and school cultures are not mutually supportive must navigate different worlds at home and at school.

● A disconnect between home and school cultures limits the effects of classroom learning as underserved students see few connections to their world. [21]

● Family involvement in the education of underserved students is restricted by limited resources, time, confidence, and language skills. [22]

● Rather than working to motivate students, some teachers use students' "low motivation" as an excuse for giving up on underserved students. [23]

● Some teachers give low-income or minority students less instructional time, less academic support, call on them less, and offer them less help than other students. [24]

### Lack of congruence between students' and teachers' college-going expectations is especially problematic for underserved students.

● In a 2000 survey of secondary school students, 71 percent of students indicated that they planned to attend a four-year college. In contrast, their teachers thought that only one-third of these same students planned to attend a four-year college. [25]

### Underserved students and their families are likely to be out of the college information loop.

● They often are unfamiliar with how the education system works and do not have access to social networks that can provide this information. [26]

● Low-income and minority students are not well informed about the college admission process; their guidance counselors often are less experienced in college counseling. [27]

● They are less likely than other students to explore an array of college options, to take college admission tests, or to complete admission procedures—even if they are college-qualified. [28]

● Underserved students have less access to the Internet, an important tool for exploring college opportunities. [29]

● Low-income, African American, and Latino families are less informed about financial aid; they tend to overestimate the cost of tuition and underestimate available aid. [30]

### Low-income students face formidable financial barriers to college access and success.

● School districts with the highest poverty rates receive less per-student funding from state and local sources than school districts with the lowest poverty rates. [31]

● College affordability has become a much greater problem for low-income families. In 2002, public college costs amounted to 60 percent of yearly income of low-income families; private college costs were 160 percent of income. [32]

● Financial aid has not kept pace with increasing college costs: the average Pell grant now covers 25 percent of total costs at public four-year colleges—down from 47 percent in 1975—and 10 percent of private college costs—down from 24 percent in 1975. [33]

● Among college-qualified low-income students who do go to college, fewer than 25 percent earn bachelor's degrees. [34]

### Students with disabilities face unique barriers to entering college and persisting to graduation.

● Transition to college and adjustment issues for such students are confounded by physical and attitudinal barriers. [35]

● College students with learning disabilities experience conflict between their desire to be independent and their interest in using services and accommodations offered to them. [36]

● Students with disabilities identify critical issues as: poorly coordinated planning for transition; isolation; and different expectations for young adults with disabilities. [37]

# Toward a Brighter Future

Getting ready for college must become as much a goal for young people in this country today as graduation from high school has been for the past 50 years. High educational achievement must be the norm for all students, not just an option for some. To get there requires a radical shift in the way we think about how our education system prepares students for college. Not only large-scale reform of K-12 education, but alignment of educational expectations and change from pre-school through college must take place. Preparing students for success in postsecondary education should not be a luxury in today's world; it is a necessity for life, careers, and citizenship.

## Why We Can't Afford Anything Less

**The face of America is changing.** Conservative estimates predict that the United States population will be over 50 percent "minority" by 2080. Today, more then 30 percent of public school students are minorities; in Texas and California schools, non-White students already constitute the majority, just as they always have in Hawaii and New Mexico. Minorities comprised 25 percent of the total workforce in 2000, up from 16 percent in 1976.[38] By 2015, the college-age population will have increased 16 percent over 2000 levels, and will be increasingly diverse.[39] These demographic changes mean that people of color must play an increasingly important role in U.S. society and the national economy. Failure to educate underserved students will have potentially devastating effects on our future prosperity.

**Higher education is crucial in a diverse society.** Research shows that college-educated citizens are more tolerant and understanding of cultures different from their own.[40] They are more likely and more able to assist in the education of their children, more apt to vote, and more likely to be active in civic affairs.[41] Americans today are global citizens who must be prepared to meet the new challenges our status presents: a global perspective is essential to the solution of all "American" problems. By expanding education's reach, we empower generations of previously underrepresented and disenfranchised groups as world citizens.

**We live in a rapidly changing global economy.** High level problem-solving and communication skills are essential for success in the workplace. It is estimated that over 14 million new jobs requiring postsecondary education will have been created between 1998 and 2008.[42] According to one report, the U.S. economy will require seven million more college graduates over the next decade than current graduation rates will produce.[43] A recent report by the Education Commission of the States indicates that even though the number of college graduates is likely to increase significantly by 2015, we will run into trouble if the rate at which American students enroll in college does not increase. If current college-going and completion rates continue, the United States risks losing its competitive edge against developed countries that have markedly increased their college participation and graduation rates.[44]

**Educational attainment means individual and national prosperity.** U.S. workers with bachelor's degrees earn nearly a million dollars more over their lifetime than those with only a high school diploma.[45] According to one study, if minority participation in higher education equaled that of Whites, over $300 billion would be added in gross national product and tax revenues.[46] Despite the clear economic benefits, the United States has dropped from first to 13th place among 32 industrialized countries in the percentage of students enrolling in baccalaureate programs, and stands in 10th place in the percent of traditional-age students completing high school.[47]

# Guiding Principles

Considerable knowledge exists about predictors of college preparation, enrollment, and completion. The Pathways to College Network has reviewed hundreds of research studies, policy reports, and case studies to identify strategies for improved college access and success. Through a synthesis of this knowledge, we have formulated six guiding principles to inform the actions of educators and other leaders. We hope these principles will help translate the Pathways vision of a college education for all into leadership strategies for meaningful change.

# 6 Principles for Change

# 1

## Principle One: Expect that all underserved students are capable of being prepared to enroll and succeed in college.

### Texas Scholars Program

*Texas Scholars is a proven, inexpensive approach to motivating all students to complete a college-preparatory curriculum in high school. Volunteers from local employers visit eighth grade classes to talk about the global economy, the academic foundation needed to qualify for well-paying, meaningful jobs, and the high school courses recommended for college and workforce success. They also organize parent workshops and reward students who complete recommended courses. Texas Scholars results are impressive: the percent of students completing the Scholars course of study statewide rose from 15 percent in 1999 to 59 percent in 2002. The Texas Scholars Program was a springboard for Texas' statewide college-preparatory curriculum, and remains a primary incentive for all students to complete the state's recommended high school program. Twelve other states have created similar programs. For more information, visit www.texasscholars.org.*

*Selected Research Findings*

- Parents', teachers', and guidance counselors' judgments and expectations of student ability influence academic performance and educational attainment, both positively and negatively. [48]

- Students beginning high school with low test scores perform better in college-preparatory math and reading courses than in comparable vocational courses. [49]

- Low-achieving eighth graders are more likely to earn D's or F's in low-level high school English courses than in college-preparatory English. [50]

Research and the many examples of effective practice strongly suggest that the more we expect of students, the better they will do. We need to develop home, community, and school environments in which young people are challenged by high expectations.

Education leaders must instill the belief among parents, teachers, counselors, and other school staff that college-readiness is a goal for all. High expectations will motivate students to achieve and to make going to college a personal goal. Effective college access programs must reinforce high standards and help make explicit what are acceptable levels of academic performance. Superintendents and principals must address prevailing cultural beliefs in their schools and alter practices as necessary to address underserved students' needs.

# 2 Principle Two: Provide a range of high-quality college-preparatory tools for underserved students and their families.

## Middle College High School, LaGuardia Community College

*Middle College High School, located on the LaGuardia Community College campus in Queens, New York, targets students at risk of dropping out of high school by 10th grade. The school combines grades 9-12 with the first two years of college. Classes are small, students receive intensive guidance, and writing is emphasized in every subject, including math and science. Students can take college-credit courses beginning in 11th grade, for which they receive high school as well as college credit. All students who graduate are guaranteed admission to LaGuardia Community College. A recent study found that 88 percent of Middle College students graduated from high school, compared with a 50 percent overall graduation rate for students in New York City. Sixty-five percent of the school's graduates were accepted to four-year colleges, compared with 44 percent of all high school graduates in New York City. Middle college high schools have been replicated at other sites across the country. For more information, visit www.lagcc.cuny.edu/stuinfo/info6c.asp or www.earlycolleges.org.*

## Selected Research Findings

● Rigorous academic preparation, academic and social support, access to information, and parental knowledge about college and financial aid are the most important predictors of college enrollment. [51]

● Students, parents, and educators need high quality information regarding access to rigorous college-preparatory courses and the skills and knowledge required for success in college. [52]

● Early outreach, counseling, support, and planning are integral parts of successful educational experiences for underserved students. [53]

● After-school programs that include educational empowerment activities can help improve underserved students' academic performance. [54]

● Teachers need strong content knowledge of the subjects they teach and a deep understanding of how to teach content to diverse student populations with different learning styles. [55]

School leaders need to work with community, legislative, and post-secondary leaders to make the college-preparatory curriculum the "default" curriculum for all students. College-preparatory "tools" comprise demanding curricula (including honors and college credit courses), early college awareness activities, a wide array of student services to support accelerated learning, and college planning and financial aid information in the language students and families use at home.

Students who are challenged by demanding academic work must be provided with a supportive learning environment where teachers know them well. School leaders must ensure that well-prepared teachers are available to provide additional assistance as students take on challenging work. Effective college outreach programs and strong social support through school and community are essential to students' educational attainment. Early college counseling, including easy-to-understand information about financial aid and admission requirements, is imperative for families with limited literacy skills and knowledge of college planning. [56]

# 3

## Principle Three: Embrace social, cultural, and learning-style differences in developing learning environments and activities for underserved students.

### Puente Project, University of California Office of the President

*Operating both in high schools and community colleges throughout the state, Puente's goal is to increase the numbers of educationally disadvantaged students in California who enroll in four-year colleges and earn degrees. Puente-trained teachers conduct academically accelerated English writing classes that focus on Mexican American and Latino literature and experience. Students are matched with mentors from similar cultural and social backgrounds who are successful professionals. The students also meet regularly with a Puente counselor who guides them through the college application and transfer processes. Puente high school graduates enroll in four-year colleges at twice the rate of students with comparable backgrounds. Forty-seven percent of Puente community college students transfer to four-year colleges, compared to 27 percent of their non-Puente peers. For more information, visit www.puente.net.*

● Effective outreach programs are framed within the appropriate social and cultural contexts of the students served. [57]

● Institutional environments that reflect and affirm student differences and diversity at all levels positively influence achievement for underserved students. [58]

● Negative teacher and peer biases, whether cultural or racial, can impede underserved students' achievement. Educators should be familiar with students' lives outside of school in order to counter this tendency, and be able to recognize underserved students' strengths. [59]

● The involvement of families of underserved students is limited by their lack of confidence in their ability to interact with school staff effectively, limited language skills, and lack of understanding of the types of involvement that are valued. [60]

Teaching approaches, family involvement activities, and assessment of students and programs must recognize the relevant social and cultural contexts of the students they serve. Effective schools and outreach programs affirm students' own backgrounds: students' cultural, linguistic, and historical knowledge is incorporated into courses and extracurricular activities. Students are then able to view their culture, language, and community as true assets in their quest for continued academic success and higher education.

Most families want to be involved in their children's education. Research demonstrates that parental involvement is positively associated with higher grades, lower rates of behavioral problems, and a greater likelihood of going to college. [61] School and community leaders must help families of underserved students overcome social and cultural hurdles that constrain full participation in their children's education.

**4**

# Principle Four: Involve leaders at all levels in establishing policies, programs, and practices that facilitate student transitions toward post-secondary attainment.

## Georgia P-16 Initiatives, Board of Regents of the University System of Georgia

*The Georgia P-16 Initiatives are designed to align educational systems in ways that maximize student success at each level and promote readiness for the next level. Under the P-16 umbrella, the Georgia legislature has aligned high school exit and college entrance standards. Initiatives include preparing and supporting teachers in improving the academic rigor of P-12 education, closing the gap in college-readiness and success between high- and low-income and majority and minority groups, and improving the quality of undergraduate education. Georgia's Leadership Institute for School Improvement, another P-16 initiative, provides support for school leaders in meeting elevated expectations for student achievement and school performance. For more information, visit www.usg.edu/p16.*

*Selected Research Findings*

● An aligned "P-16" curriculum supports progress through successive levels and transitions, from preschool through college. Efforts by states to align high school curricula with higher education entrance criteria have the potential to improve academic preparation for underserved students and to raise college enrollment rates. [62]

● Higher education leaders must be involved in the development of K-12 standards, and K-12 leaders must participate in the revision of college admission and placement policies. [63]

● Outreach programs are part of an educational "pipeline" for underserved students, beginning with early college-going interventions, through support for postsecondary completion. [64]

● Federal, state, and institutional aid programs frequently are not designed to coordinate with or complement each other. [65]

Transitions are points of "leakage" in the educational pipeline. Of special concern are the gap between high school graduation and college enrollment, the high rate of attrition during and immediately after the first year of college, and low rates of transfer from two-year to four-year colleges for those who hope to complete a bachelor's degree.

Inadequate curricular alignment presents a major hurdle to successful transitions. Curricular alignment ensures that students are ready for the next grade, aware of the academic expectations of postsecondary study, and prepared to succeed in first-year college coursework. Too often students can complete high school graduation requirements without meeting the academic requirements to be admitted to four-year institutions or certain health- and technology-related programs at two-year colleges. [66]

Successful transitions also are impeded by inadequate integration and alignment of student financial aid programs. Education leaders and policymakers must collaborate to revamp aid policies so they support, rather than impede, student transitions.

# 5

## Principle Five: Maintain sufficient financial and human resources to enable underserved students to prepare for, enroll, and succeed in college.

### Cleveland Scholarship Programs

*The Cleveland Scholarship Programs (CSP) help students maximize the financial aid they receive from federal, state, and campus sources. Advisors work in every public high school, helping students identify aid sources, complete application forms, and meet deadlines. CSP also awards four-year, renewable "last dollar" scholarships, funded by Cleveland-area donors, to students who need additional aid to cover their college costs. CSP provides a toll-free number for students to call once they are in college for help with scheduling problems, academic concerns, financial aid, and transferring. The assistance CSP provides pays off: for every "last dollar" scholarship awarded, students receive $15 in aid from other sources. Seventy-two percent of CSP scholarship recipients graduate from college, far above the national graduation rate for all students, and more than seven times the college completion rate for low-income students. For more information, visit www.cspohio.org.*

*Selected Research Findings*

● Adequate financial assistance is critical to college enrollment and persistence for low-income students who are otherwise prepared. [67]

● A well-grounded state financial assistance program is integrated with state tuition and financing policies and reinforces students' readiness for college. [68]

● The cost of attendance and financial aid availability are more important factors determining college enrollment for low-income, African American, and Hispanic students, than for White, middle-income, and upper-income students. [69]

● Effective outreach programs require adequate long-term funding, infrastructure, and staff. [70]

● Reducing reliance on local property taxes is an essential element of almost all successful school funding initiatives, often accomplished by shifting more of the responsibility for supporting schools to states. [71]

Adequate funding, including equitable financial support for schools and robust need-based student aid programs—as well as proper infrastructure, staffing, and leadership— are critical to college access and success for underserved students. At the K-12 level, many underserved students are concentrated in districts with lower tax bases and fewer resources for public schools. Resources are needed to correct historical inequities in funding, to promote a P-16 environment, and to eliminate financial barriers to college preparation, enrollment, and degree completion. To be effective, outreach programs require long-term funding to make sustained investments in students, staff, and facilities. The longer students are able to participate, the greater the likelihood they will enroll and succeed in college. [72]

Financial aid policy at federal, state, and institutional levels must focus on assuring financially needy students access to and choice among postsecondary programs without regard to their ability to pay. State fiscal woes contributed to a 14 percent average hike in 2003 public college tuition, the largest annual increase in 30 years. [73] In addition to the diminished "purchasing power" of Pell grants, the increasing dominance of loans in aid packages and the proliferation of merit-based aid at colleges and universities are strategies that are likely to widen further the gap in college participation between low-income and other students. [74] Also, income tax credits for tuition payments benefit low-income families less than middle-income and high-income families: one study concludes that tax credits have failed so far to increase the number of low-income students going to college. [75] Government and institutional leaders must evaluate the impact of all such policies, especially their consequences for underserved students.

# 6

## Principle Six: Assess policy, program, practice, and institutional effectiveness regularly.

### Stranahan High School
### Fort Lauderdale, Florida

*Stranahan High School is a comprehensive high school in downtown Fort Lauderdale serving predominantly minority and low-income students. Using data to assess the school's effectiveness has played an important role in improving the college-going rates of Stranahan students. Teachers and administrators regularly use college readiness data (PSAT, SAT, and AP scores) to make curricular decisions and inform teaching methods. In examining AP scores, for example, teachers realized that students' performance was hindered by their writing skills. To address this problem, they developed an after-school writing class incorporating more interesting, relevant texts. Based on the success of this class in improving the scores of students who participated, teachers integrated the materials used into regular AP courses. Stranahan also measures student readiness by the numbers enrolling in college and the amount of scholarship assistance they receive. Stranahan was one of six successful high schools studied by the Pathways to College Network. For more information about Stranahan, visit www.broward.k12.fl.us/stranahanhigh/ or www.pathwaystocollege.net (Strategies for Success).*

*Selected Research Findings*

● Monitoring student performance and reporting progress to students, teachers, parents, administrators, and policymakers improves the level of student learning. [76]

● Evidence of effectiveness and research describing and documenting effective models can improve practice. [77]

● Additional rigorous research is needed to assess the effectiveness of programs designed to promote access to and success in college by underserved students. [78]

Rigorous assessment models that address the needs and issues of underserved students and their families are essential to students' educational attainment. Effective assessment must employ an array of analytical tools to focus on learning, feedback, and improvement. Integrated information and data systems are needed to monitor individual student performance and to report on progress. Effective schools use assessment data to diagnose student needs, target interventions, track progress, and ensure that all students are being reached. Such data are at the heart of successful school reform initiatives.

Evaluation designed to improve practice also contributes to the effectiveness of college access programs by tracking student and program performance in terms of the later success of students.

At the postsecondary level, tracking data allows higher education leaders to assess institutional effectiveness in preparing teachers and school leaders. Higher education leaders should also insist on sound, program-specific evidence of efficacy in institutional programs designed to enroll and retain underserved students. Similarly, policymakers must require that comprehensive assessment be part of the program design for state financial aid programs. Misalignment between program intentions and implementation often is not recognized until after awards have been made. [79]

Further research is needed to assess rigorously program effectiveness across the board, including parent involvement programs, high school reform initiatives, and college outreach and retention programs. Internal institutional evaluation should focus on the "how's and why's" of program success or failure and use feedback to spur rapid improvement. [80]

# Taking the Lead

Expanding pathways to college calls for the systematic, long-term involvement of many segments of society, including families, communities, schools, colleges and universities, the business and philanthropic sectors, and government. It is crucial that leaders at all levels hold each other and themselves accountable for ensuring that students make successful progress along education pathways from kindergarten through higher education.

## Action Strategies for Leaders

Public officials and education leaders, together with community, corporate, and philanthropic leaders, must effect and guide change in the systems that educate children and young adults. Together, these leaders also must help build a broad foundation of support. Teachers, counselors, outreach professionals, and others interacting directly with students must affirm student aspirations and help them pave unobstructed pathways to college. Parents, families, and other caring adults play a pivotal role in nurturing college and career dreams and in helping young people at every stage of their journey.

What follows are actions key leaders can take. We focus on five groups: state and federal policymakers, school superintendents and middle and high school principals, college and university presidents and deans, college outreach program leaders, and community leaders and family advocacy groups. All recommended actions are supported by research evidence.

## Actions for **State and Federal Officials**

Federal and state policy frequently drives change in practice. Elected and appointed government leaders, particularly at the state and federal levels, should introduce and adopt public policies to advance college preparation, enrollment, and completion for under-served students.

### Curriculum Standards

Designate the college-preparatory curriculum as the "default" curriculum for high school graduation; make it a condition of eligibility for state scholarship assistance.

Align high school graduation requirements with state content standards and postsecondary admission requirements.

Set middle school standards in mathematics and English language arts to prepare students for college-preparatory courses in ninth grade.

### Instructional Standards

Require middle and high school teachers to have a college-level background in the content areas they teach.

Fund training programs for teachers and counselors in the social and cultural background and learning-styles of underserved students.

Provide class release time and stipends for specific training for teachers to implement improvements in their instructional methods and to learn from and share with colleagues.

### School Financing and Student Financial Aid

Provide low-income school districts with extra state support to offset limited local tax revenues and equalize funding between high and low poverty communities.

Adopt policies that provide additional state resources for schools and districts to help underperforming students meet state high school graduation standards and pass high-stakes assessment tests.

Create need-based financial aid policies that are easy to understand, predictable, and that reinforce students' preparation for college. Simplify the aid application process.

Promote increased investment in the Pell grant and other need-based aid.

Align financial aid policies with state tuition policies.

Provide for early aid commitments guaranteeing students support if they take specific steps to prepare for college.

Increase public support for institutions enrolling and retaining large percentages of high-need students.

Evaluate financial aid policies to determine whether they are achieving their goals and addressing public priorities.

### College Planning Information

Support broad-based, well-researched marketing activities and the development and dissemination of college planning information to motivate underserved students and their families to prepare for college.

Assess the impact of marketing and college planning information on student behavior.

### P-16 Alignment

Create structures that connect K-12 and postsecondary governance and foster P-16 alignment.

Form state and regional leadership groups such as P-16 councils to facilitate communication and planning at all levels to ensure that learners are prepared for the challenges of the next level.

Align the knowledge and competencies expected of high school graduates with those needed to undertake successfully first-year college courses and to transfer among postsecondary institutions.

### Assessment

Integrate data systems to track the progression of students from middle school through a college degree and transition into the workforce.

Make goals and results public through targeted progress reports.

## Actions for School Superintendents and Middle and High School Principals

The K-12 school system has primary responsibility for assuring that all students leave high school ready for postsecondary success. Superintendents and principals must articulate the vision of college-readiness for all and help their staff confront misguided beliefs about student achievement and college access. Leaders must develop school cultures that help all students master a rigorous curriculum and make clearly defined postsecondary plans.

### Curriculum Development

Make the college-preparatory course sequence the core curriculum for high school graduation.

Create middle/high school teacher teams to facilitate understanding of competencies students need for success in high school college-preparatory and advanced level courses.

Align middle and high school standards so that students are academically prepared for a college-preparatory curriculum; align curricula within subject areas to provide academic continuity from year to year.

### Instructional Development

Understand that student cognitive development depends on repeated exposure to inquiry-based and problem-solving learning over time; design courses and teaching strategies to contribute to these skills.

Develop systems to identify underperforming students early and accelerate their learning in college-preparatory courses.

Reallocate professional development resources to focus on English language arts and mathematics.

Partner with higher education institutions to provide teachers with content training in mathematics and sciences and help uncertified teachers become credentialed.

Infuse classrooms with multicultural experiences that affirm students' backgrounds, using their language, culture, and experiences as instructional tools.

Provide class release time and stipends to train teachers to implement improvements in their instructional methods and to learn from and share with colleagues.

### Social Support

Develop structures that facilitate supportive relationships for students with caring adults and peers.

Integrate counseling, supplemental academic support, and college access programs to help students in greatest need of assistance.

### Assessment/Using Data

Collect and use data to track student performance in college-preparatory courses. Disaggregate data to assure that all students are making progress.

Arrange for all students to take the PSAT, PLAN, and/or college placement tests no later than 10th grade in order to assess their progress toward college-readiness.

Provide ongoing assessment of progress and feedback for teachers, students, and parents using measurable outcomes of students' academic progress.

Incorporate data on students' high school achievement into middle school decision-making and planning, and include data on college achievement in high school planning.

### College Planning/Transitions

Partner with higher education institutions to provide early and ongoing college planning information and exploration activities, and college and financial aid application assistance.

Develop partnerships with higher education institutions, college access programs, and school-to-career programs that provide support to assist students with making successful transitions from high school through the first year of college.

### Parent/Family Involvement

Seek guidance from families about what information and resources they need in order to support their children's college aspirations.

It is crucial that leaders at all levels hold each other and themselves accountable for ensuring that students make successful progress along education pathways from kindergarten through higher education.

Familiarize families with school academic support and college planning services; make it easy and comfortable for them to use these resources.

Establish clear goals for parent involvement; seek parent input in creating "family friendly" schools.

Embrace the cultural, social, linguistic, and community backgrounds of parents and families; tap into values that support student achievement and college aspirations.

## Actions for College and University Presidents, Vice-Presidents, and Deans

Higher education has two crucial roles in creating clear pathways to a college credential. One is as a partner with K-12 schools: preparing teachers, clearly conveying the academic skills needed for first-year college work, and collaborating with schools to prepare students for college success. The other role is providing meaningful learning experiences and support, including adequate financial aid, to enable underserved students in college to achieve successfully.

### Admission/Transition to College

Provide high school leaders with specific, clear information about the knowledge and skills that students need in order to succeed in first-year college courses without remediation.

Partner with high schools and community-based college access programs to assist students, families, and staff with college and financial aid awareness and planning.

Offer dual enrollment and other bridge programs to help underserved students make successful transitions to college.

### School Partnerships

Initiate and support college access programs; provide supplemental services to schools with large low-income populations and low college-going rates.

Reinforce school efforts to provide academic support for students challenged in college-preparatory courses, including tutoring and reading, math, and study skills development.

Provide content area professional development for mathematics and science teachers.

Collaborate with school leaders to recruit, prepare, and support new teachers to work in schools with large numbers of underserved students.

### Financial Aid

Target low-income students for need-based aid, make grants the primary form of aid for the neediest students, limit loan burdens and the necessity for students to work more than 15 hours a week.

Use equitable criteria for merit aid so that underserved students are not excluded from these programs.

Offer low-income students more grant aid in their first two years. Monitor the effects of different types of financial aid packages on the level of student engagement and student work hours.

Design aid programs that commit grant aid to students in middle school or early in high school.

### Support

Address parents' concerns and expectations regarding their children's college experience; provide them with information and advice to help support their children's college achievement.

Develop systems to identify underprepared students early in order to accelerate their learning and to monitor student progress over time.

Focus on first-year students, providing comprehensive services that are prescriptive and proactive.

Integrate academic support with teaching and learning, including tutoring, supplemental instruction, learning communities, tailored developmental instruction, and study skills instruction.

Provide social activities and personal counseling that affirm the cultural, linguistic, and social backgrounds of underserved students.

Strengthen relationships between community colleges and baccalaureate institutions to support the transition of students to four-year degree programs.

Provide support to help underserved students make successful transitions to work and/or graduate school.

### Assessment

Implement measurable goals for retaining underserved students and evaluation processes that provide for program improvement and evidence of effectiveness.

Track and follow up underserved students to determine effectiveness of specific retention interventions; provide feedback for program improvement.

Disaggregate data to identify and address gaps in performance based on income, race, and other factors.

## Actions for Outreach Program Leaders

College outreach program leaders are uniquely positioned to advance the postsecondary preparation of underserved students because of their exclusive focus on this goal. In addition to working directly with individual students and their families, program leaders have the opportunity and responsibility to collaborate with the schools their students attend in order to maximize students' readiness for college.

### Academic Instruction/Support

Place high priority on helping students gain access to, and succeed in, rigorous college-preparatory and early college-credit courses.

Provide tutoring, tailored developmental instruction, and study skills instruction, integrated into students' courses where feasible.

Align academic instruction and support with state and district standards skills required for success in first-year college courses without remediation. Establish structures to accelerate students' learning and school achievement. Monitor students' school participation closely in order to identify problems and provide early interventions to address difficulties.

### Social Support

Integrate proactive academic and personal counseling that supports the standards of both the program and partner schools.

Structure opportunities for students to provide and receive help from staff and peers with academic achievement and college and career planning.

Facilitate students' awareness and use of existing school and community resources.

Implement structures to limit student attrition and provide students with continuous support over time and from one program to another.

### Family Involvement

Understand families' perspectives and respond to their needs and interests.

Create structures to facilitate parent/family awareness and use of support services and college planning resources.

Establish clear goals and definitions of family involvement with input from parents/families. Include them in establishing program goals and outcomes.

### Partnerships

Build strong relationships with partner schools and higher education institutions focused on improving student achievement, college-readiness, and transition issues. Incorporate ongoing collaboration among program and school staff.

Establish measurable goals for collaboration, including identification of ways in which each partner is accountable for achieving goals.

Involve local businesses, employers, and community-based organizations as program partners.

### College Information/Transitions

Provide students and families with comprehensive college and career planning resources and activities, and repeated exposure to college over time, including campus visits and other campus-based activities.

Give students extensive support in identifying and applying for financial aid, and in maximizing aid from all sources.

Provide ongoing training to ensure that staff members are well equipped to assist students with college planning, financial aid, and application processes.

Provide bridge programs to support students in making successful transitions from middle to high school and from high school through the first two years of college.

### Assessment

Involve partners, staff, and families in planning and implementing assessment activities to determine program effectiveness. Monitor effect of specific interventions on student achievement and make adjustments to improve outcomes.

Arrange for all students to take college admission and/or college placement tests early in order to assess their needs and readiness for college-level work and to improve instruction and support services.

Provide assessment data and ongoing feedback to program staff, students, and parents using measurable outcomes of students' academic progress.

## Actions for Community Leaders and Family Advocacy Groups

Young people follow the example of families as well as leaders in their own communities. Grass-roots leadership is essential if communities and families are to believe that a college education is truly within the grasp of all students. Advancement in educational opportunity is more likely to occur if families and community leaders demand it of schools, higher education institutions, and government.

### Expect college preparation for all students

Insist that policymakers and school leaders make preparation for college and support through college completion for all students the norm in all schools and colleges.

Talk with underserved students and their families frequently about students' future plans and the community's hopes for them to go to college.

### Raise community awareness of the importance of college for *all* students

Support campaigns that attempt to prompt changes in students' and families' beliefs and behaviors in order to advance student achievement and enrollment in college.

Use the media and other public forums to communicate to the general public the urgency of investing in many more underserved students going to college, and the public benefits of doing so.

### Encourage and support family involvement

Make parents and families aware of the important role they play in students successfully navigating pathways to college.

Develop families' knowledge regarding college costs, financial aid, eligibility requirements, and application processes.

Inform families about college admission requirements, the courses students have to take in high school, admission tests, the process of applying for college, and where students can get help with college preparation and planning.

Provide parents and families with guidance in actively supporting their children's school achievement, college aspirations, and success.

### Hold public officials, school, and higher education leaders accountable

Support leaders who advocate the policies and funding levels necessary to enable underserved students to prepare for and succeed in college.

Monitor data that will indicate progress toward the goal of universal college-readiness.

### Guarantee that underserved students in your community can afford to go to college

Organize efforts to raise financial aid dollars for low-income students.

Organize volunteers to assist students and families with completing financial aid applications.

Publicize the availability of financial aid to low-income and minority communities.

# Looking Ahead

The crux of the Pathways to College Network is to get research-based knowledge about effective policies and practices into the hands of educators, policymakers, and community, corporate, and philanthropic leaders. Now, with publication of *A Shared Agenda* and dissemination of recommended actions for leaders, Pathways will focus broadly on communication aimed at building public and political will to implement needed change. At the same time, we are continuing research efforts to identify further steps policymakers and educators can take to improve college access and success for underserved students.

## Getting the Word Out:
## *A Shared Agenda* and Beyond

The long-term success of the Pathways initiative depends on our ability to inform and engage key stakeholders, from influential elected officials to practitioners working on the front lines. Many of the Network's desired outcomes are catalytic; our strategies are intended to create awareness that will lead to a re-thinking of policies and programs that affect under-served students. A range of resources and background materials that complement *A Shared Agenda* is available on the Pathways Web site (www.pathwaystocollege.net), which functions as a clearing-house for research and other information on college access for underserved populations. As partner organizations take Pathways messages to their constituencies, the Network's next phase will focus primarily on communicating in ways that will prompt constructive change.

## Pathways Web site and Clearinghouse

The release of *A Shared Agenda* and related materials in print form, on CD-ROM, and through the Pathways Web site is a beginning point of concerted efforts to communicate with a range of audiences about the Pathways agenda. In addition to *A Shared Agenda,* our Web site houses more than 30 papers produced by the Pathways partners that summarize our research findings on college access and success and an annotated bibliography of more than 600 reports and studies from which the Pathways recommendations are drawn, with Web links when available. The site also includes more than 100 examples of policies, programs, and practices reflecting research-based principles and actions, as well as "tool boxes" to assist leaders and practitioners in implementing these strategies.

## Activities of Pathways Partners

Thirty-four organizations and funders contributed to developing the principles and recommendations articulated in this report. Partners are part of a coordinated effort to communicate Pathways recommendations to their members and constituencies, encouraging them to incorporate the Pathways agenda into their own work and creating a chain of direct links to effect institutional and public policy change. Partners will infuse Pathways findings into their publications, Web sites, member services, and other outreach programs. They will host policy forums and ask members to include Pathways recommendations as priorities in their government relations agendas. They will hold workshops and make presentations at national and regional conferences and institutes. The goal of these ongoing activities is to develop a cadre of Pathways "champions" among leaders and practitioners who will take action in schools, on campuses, in government, and in communities.

The combined strength of organizations representing state legislators, school and college leaders, foundations, race/ethnic advocacy groups, researchers, and outreach programs means that the Pathways partners can make significant strides toward implementing the shared agenda that we have developed. Now, our communication efforts must also engage additional collaborators across the country. There are scores of organizations, government entities, and private initiatives committed to improving college access for underserved populations that share our goals. We want to capture the interest that already exists and channel it in ways that promote effective strategies for change.

## Communicating Change

With the publication of *A Shared Agenda* as a starting point, the Pathways to College Network will undertake a multi-step communication campaign aimed at education *providers*, as well as the students, families, and communities that are the *consumers* of education. The overall goal of this effort is to take measurable steps toward changes needed to increase college access and success for underserved students.

Our objective in communicating with state and federal policy-makers, school and higher education leaders, and education funders—the providers of education—is to create among them the same sense of urgency Pathways partners feel about implementing our shared agenda. By communicating with students and families in low-income and minority neighborhoods, we hope to equip and empower them to push the system to change for the better, and to actively engage them in making their own college-preparatory plans.

In undertaking these communication efforts, Pathways will be guided by a study we commissioned on existing "social marketing" initiatives to make families aware of college and financial aid opportunities and to influence them to go to college. Through this study, we know that effective social marketing requires a high standard of research, knowledge, technique, and assessment. From increasing awareness of Pathways issues to influencing actions by decision-makers, opinion leaders, and families themselves, our ongoing communication must be well-planned, compelling, and focused on specific, measurable outcomes.

# Ongoing Research

While our primary thrust will be communicating the recommendations of *A Shared Agenda,* we need to continue to pursue answers to questions about how policies and practices can be changed to better serve students. Some of the areas that we have identified are listed below. The unique needs of students with disabilities in the college transition process should be a priority throughout, since virtually no research exists on these issues. [81]

## Transitions

Easing the transitions along the college pathways is central to improving college access for underserved students, as underscored by persistent high school dropout rates and major differences in college continuation and completion rates by income and race. Critical questions include:

● How do P-16 policies demonstrably help students navigate key transitions?

● What are the effects of state and local education financing policies on postsecondary aspiration, preparation, enrollment, and persistence?

● How do changes in testing policies affect college access and success?

● What state and local policies enhance the capacity of schools to prepare underserved students for college?

● What behaviors, structures, and processes must be in place to enable successful transitions?

## Transforming High Schools

High schools need to be at the center of efforts to improve college access. Data on all aspects of the high school experience must be used to study factors that influence postsecondary continuation and persistence.

● How can school structures, practices, and environments be changed to promote college-going for all students?

● What strategies are most effective in enhancing low-performing schools' academic preparation of students?

● What is the role of academic socialization in student success, particularly among boys?

● What structures and processes have to be in place for students to leave school believing they have broad opportunities, e.g. for all students to consider science and technology-related careers in the same way?

● Does teacher and counselor preparation need to change in order to positively affect postsecondary preparation and a school's college-going culture?

● How does early information about postsecondary opportunities affect college-readiness and the transition from high school to college?

● Do discrepancies in, and access to, and the utility of technology affect postsecondary aspirations and preparation?

## Linking Schools and Outreach Programs

For outreach programs to have long-term, systemic effects, they must be incorporated into school and system plans to provide all students with clear pathways to postsecondary success. [82] Program practices and interventions also need to be rigorously evaluated in order to better understand their impact on student achievement.

● If schools focus on preparing all students for college, what is the best role for outreach programs?

● What components of outreach programs have the most significant effect on students' college preparation, enrollment, and achievement?

- What is credible evidence of outreach program impact?

- What indicators promote, rather than impede, cooperation between schools and outreach programs? How can collaboration be strengthened?

### Family and Community Involvement

Increasing the engagement of families and community members in students' education is critical to improving college access.[83] While family and community involvement is well-defined and well-researched at the elementary school level, much less is known about these issues at the middle, high school, and college levels.

- What are the needs of families with different cultural, social, and linguistic backgrounds?

- Why does getting information about college preparation, planning, and financial aid affect families with similar backgrounds differently?

- What are effective family and community involvement strategies related to school success and college access issues for middle and high school students?

- Under what circumstances can parents and families be moved to take action to support their children's college aspirations?

- Who is best situated to engage families and community members in student achievement and college access issues? Who should work directly with students and schools, and who should train others to do this work?

### Financial Aid/College Affordability

Well-grounded financial aid programs are integral to an overall P-16 strategy to facilitate college access. Ideally they should reinforce college-readiness by providing incentives for students to complete rigorous college preparation and to achieve academically on the postsecondary level. To reach this goal, additional research is needed on the following:

- How does student and family knowledge of financial aid affect high school achievement and college choice?

- How do different types of aid—need-based grants, merit awards, loans, and work-study—affect college achievement and degree completion?

- How do changes in tuition and financial aid policies affect student enrollment and persistence?

### Improving Postsecondary Achievement

Underserved students should be able to complete college goals in a timely manner, commensurate with their life responsibilities and expectations. Institutions that successfully integrate, educate, and graduate underserved students are responsive to students' academic, social, and cultural needs and continually evaluate institutional instructional and support programs. Questions needing additional research are:

- What are the most significant factors affecting postsecondary completion for underserved students?

- How does student engagement vary among different types of students and institutions?

- How does making the skills and knowledge required for college academic success more understandable affect students' first-year performance?

- What combinations of interventions and practices contribute significantly to the success of different groups of students?

- How do institutional tuition and financial aid policies affect achievement and degree completion?

- What policies and practices encourage transfer from two-year to four-year colleges for underserved students?

- What are the most effective mechanisms for systemically integrating postsecondary institutions into college preparation efforts within middle and high schools?

The Pathways to College Network has compiled substantial research-based evidence that can reliably guide leaders and practitioners toward best meeting the needs of underserved students. As we continue to focus on "what works" in our ongoing research, and as we communicate widely to advance the Pathways agenda, we will not lose sight of all that is at stake for the well-being of young people and the prosperity of our society.

## The true conclusion to this report will be written in the actions of leaders who take our shared agenda to heart. It will, we hope, be evident in new, research-based policies and practices put in place through the collective efforts of an expanding array of partner organizations, funders, and leaders from all sectors of society. Everything that is written here is prologue to a time when the snapshots from our American album will no longer show young people unprepared for tomorrow's jobs and responsibilities as global citizens. The Pathways vision for the end to this story is much more of a commencement than a conclusion, with mortarboards as far as the eye can see.

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Council for Opportunity in Education
1025 Vermont Avenue, NW, Suite 900
Washington, DC 20005
www.trioprograms.org

Education Commission of the States
700 Broadway, Suite 1200
Denver, CO 80203-3460
www.ecs.org

Institute for Educational Leadership
1001 Connecticut Avenue, NW
Suite 310
Washington, DC 20036
www.iel.org

National Association for the Advancement
of Colored People
4805 Mount Hope Drive
Baltimore, MD 21215
www.naacp.org

National Association for College
Admission Counseling
1631 Prince Street
Alexandria, VA 22314
www.nacac.com

National Association of Secondary
School Principals
1904 Association Drive
Reston, VA 20191
www.nassp.org

National College Access Network
1422 Euclid Avenue, Suite 1548
Cleveland, OH 44115
www.collegeaccess.org

National Council for Community
and Education Partnerships
1400 20th Street, NW, #G1
Washington, DC 20036
www.edpartnerships.org

National Urban League
120 Wall Street
New York, NY 10005
www.nul.org

Pacific Resources for Education
and Learning
900 Fort Street Mall, Suite 1300
Honolulu, HI 96813
www.prel.org

State Higher Education
Executive Officers
700 Broadway, Suite 1200
Denver, CO 80203
www.sheeo.org

The Education Resources Institute
31 St. James Avenue, 6th Floor
Boston, MA 02116
www.teri.org

University of California,
Office of the President
1111 Franklin Street, 9th Floor
Oakland, CA 94607
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Western Interstate Commission
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## Research Scholars Panel

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# Appendix A: Selecting Research-Based Strategies

A primary goal of the Pathways to College Network is to move policy and practice forward by translating what is known from research into practical and useful information for policymakers and practitioners. Identifying what qualifies as the "best" research, however, poses a particular set of challenges in the field of education.

Education research has a long history. A great deal of the research undertaken has been criticized for lacking rigor or being unsystematic in both its methods and conclusions. A national movement for implementing "evidence-based" policies and practices has lent a new urgency to the improvement of standards for evaluating educational research. The movement is manifested most clearly in organizations, current publications, and recent federal law committed to defining high-quality research. No Child Left Behind (NCLB), passed in 2002, established specific criteria for the types of research that must be used by states and districts seeking federal funding at the K-12 level.

Rigorous qualitative research can elicit greater understandings of perceptions, attitudes, and processes. It addresses background information, such as identification of a problem, implications of a theory, challenges inherent in initiating and instituting a practice, or the meanings that people attach to these interventions. Qualitative research can increase general knowledge by which studies on the effectiveness of an intervention, practice, or program, can then be applied. So, while this type of research as a whole may not meet the requirements set out by NCLB, much rigorous qualitative research is relevant to understanding students' preparedness and persistence in college, as well as the practices or programs designed to address these issues.

Pathways believes that "high-quality" research is research which carefully selects and implements the design and methods most appropriate to address the question at hand. We also support the definition of "high-quality" research advanced by the National Research Council (NRC). The underlying premise of NRC's definition is that research adhere to the following "principles of inquiry":

- Pose significant questions that can be investigated empirically.
- Link research to relevant theory.
- Use methods that permit direct investigation of the question.
- Provide a coherent and explicit chain of reasoning.
- Replicate and generalize across studies.
- Disclose research to encourage professional scrutiny and critique.[1]

Pathways interprets these guidelines to include research that comprises a variety of methods and research designs. All of the principles and strategies in a Shared Agenda are supported by *high-quality research*.

Among the principles identified by Pathways is a call for continuous use of data and additional high-quality research to identify the strategies and programs that most effectively improve the college preparation, access, and success of underserved students. Practitioners urgently need to know the principles and strategies that promote college preparation, access, and success of underserved students. *A Shared Agenda* calls for high-quality research that documents not only the outcomes of specific programs and strategies, but also research that identifies practical strategies and programs that will most effectively advance policy and practice to improve the educational attainment of underserved students.

[1] Shavelson, R., & Towne, L. (Eds.) (2002). *Scientific research in education.* Committee on Scientific Principles for Education Research. National Research Council. Washington, DC: National Academy Press.

# Appendix B: Annotated List of Pathways Research Papers, Reports, and Other Publications by Focus Area

*All publications listed are on the Pathways Web site (www.pathwaystocollege.net)*

## P-16 Policy

Baum, S. *The federal government and the student aid partnership.*
See *Financial Aid Policy*.

Crowe, E. (2003). High quality teaching. In *Student success: Statewide P-16 systems*. Denver, CO: State Higher Education Executive Officers (SHEEO).
The quality of teaching in the classroom may be the most important factor affecting student learning. Postsecondary and K-12 systems should share the responsibility for effective teacher training and continuing teacher professional development. This paper highlights some of the most effective state policies surrounding teacher training, including: ensuring that teachers have solid preparation in both their subject matter and the basics of pedagogy, ensuring that aspiring teachers receive adequate apprenticeship experience in teaching and mentoring, and incorporating technology into the curriculum on university campuses.

*Financial aid – A shared agenda to achieve access and success for underserved students.* (2003, August). Pathways to College Network.
See *Financial Aid Policy*.

Longanecker, D. A., & Blanco, C. D. (2003). Student financial assistance. In *Student success: Statewide P-16 systems*. Denver, CO: SHEEO.
See *Financial Aid Policy*.

L'Orange, H. P., & Voorhees, R. A. (2003). Data and accountability systems. In *Student success: Statewide P-16 systems*. Denver, CO: SHEEO.
The data and accountability systems of most states are not well designed to provide practitioners with the feedback they need to monitor and improve student performance. The strongest state systems permit teachers to diagnose and address learning gaps, enable school leaders to assess the performance of a school in terms of the later success of its students, enable school leaders to identify successful teaching methods, enable policymakers to assess system-wide performance, and encourage the K-12 and postsecondary domains to align goals and educational strategies.

*Pathways to and through college: Linking policy with research and practice,* "Western Policy Exchanges." (2003, January). Western Interstate Commission for Higher Education (WICHE).
Although college attendance has been expanding, low-income students and students of color are still consistently underrepresented in college success statistics. It is critical to shift the focus of higher education reform from simply providing access to providing *access for success*. This article summarizes the discussion at the September 2002 Western Regional Policy Forum, which addressed factors affecting college access and persistence, including financial aid, access to a rigorous high school curriculum, and family involvement in education.

Rainwater, T., & Venezia, A. (2003). Early outreach. In *Student success: Statewide P-16 systems*. Denver, CO: SHEEO.
Early outreach programs are designed to provide students whose parents have not had experience in higher education with the personal guidance and information they need to prepare for and succeed in college. The most successful programs share certain components, including an individual focus, engagement of young people in the context of their own culture, access to information highlighting the

importance and attainability of postsecondary education, information on the academic standards required at each step, and high-quality teaching and coaching. Despite the value of these programs, they lack the capacity to serve all students who could benefit; because of this, the components of successful early outreach programs should be embedded into the K-12 educational system.

SHEEO. (2001, October 22-24). *Report of Rhode Island case study site visit.*
A case study team visited five states chosen for their substantial progress in one or more of the following dimensions of a P-16 educational system: State Leadership, Teacher Quality, Data and Accountability Systems, Curriculum Development/Assessment of Learning, Early Outreach, and Student Financial Aid. This report is a summary of observations from the visit to Rhode Island, including praise for the state's strong focus on teacher quality, its "Children's Cabinet" structure for policymakers, the effective leveraging of soft money to build the P-16 agenda, and the reallocation of resources to support teacher training and remuneration.

Somerville, J., & Yi, Y. (2003). Curriculum and assessment systems. In *Student success: statewide P-16 Systems*. Denver, CO: SHEEO.
Despite the evidence that a rigorous college preparatory curriculum in high school is the best predictor of college success, many states have neither required nor encouraged students who aspire to college to take rigorous courses in high school. Issues include: negative stereotypes about student ability, a shortage of qualified teachers, fear of increased dropout rates, desire to avoid high-stakes assessments for secondary school students, and a lack of curricular alignment between the secondary and postsecondary domains. It is clear that stronger curriculum and assessment policies are necessary to increase educational opportunity and achievement. The essay highlights promising state efforts in this direction.

State Policy Inventory Database Online (SPIDO). (2002). http://www.wiche.edu/Policy/SPIDO/index.asp, WICHE.
SPIDO is an online database that provides a searchable inventory of state-level policies and resources related to student achievement and access to and success in higher education. SPIDO covers the following policy domains: Articulation and Alignment, Data and Accountability Systems, Early Outreach Programs, Equity Issues, Remediation, Student Financial and Other Incentives, and Teacher Quality Initiatives. SPIDO's audience includes state and national policymakers, education leaders, practitioners, and education consumers.

**State P-16 Policy Roundtables**

Indiana P-16 Policy Roundtable. (2002, August 13).
*Summary Report.*
The Roundtable meeting in Indiana convened to examine strategies by which Indiana could increase its "high achieving pipeline" for students, as well as improve support for classroom teachers. Discussion focused on the following: (1) How do we increase the number of students taking and completing gateway academic courses? (2) How do we improve the quality of instruction in these courses? (3) How can our teacher preparation programs further ensure that new teachers can meet higher expectations for student achievement focused on the state's academic standards? (4) How can we improve and expand teacher professional development activities to provide our current teaching force with the skills and knowledge necessary to teach Indiana's more rigorous academic standards?

Montana P-16 Policy Roundtable. (2002, October 2).
*Summary Report.*
The Policy Roundtable in Montana convened to discuss the following issues: shrinking K-12 enrollments, NAEP scores above national averages, high graduation rates from high school, low college-going rates, declining levels of state support for higher education, fairly high college costs compared to income levels, a preponderance of students enrolled in four-year colleges, little state investment in financial aid, low college completion rates, a difficult state budget crisis, and a culture in which a significant portion of the population does not value a college education.

Tennessee P-16 Policy Roundtable. (2001, October 10).
*Summary Report.*
At Pathways' first state P-16 Roundtable, participants discussed teacher education and curriculum alignment. They agreed to form the core of an ongoing voluntary P-16 council in Tennessee that will focus on ways to improve student learning and quality of teaching, and to produce a document entitled "The Case for P-16 Education in Tennessee" summarizing the benefits of a P-16 approach.

Washington P-16 Policy Roundtable. (2001, December 4).
*Summary Report.*
The Roundtable meeting in Washington focused on getting the P-16 agenda on the table for state policymakers and education leaders. Issues discussed included: the need to focus on learners, better linkages across education levels, the need for high expectations, and whether all students should take a college-preparatory curriculum in secondary school.

## Financial Aid Policy

Baum, S. (2002). *The federal government and the student aid partnership.*
Though it is both necessary and appropriate for the federal government, state governments, postsecondary institutions, and the for-profit and non-profit sectors to play distinct roles in the higher education financing process, they often find themselves at odds, rather than working together toward a common goal. The federal government must take the lead in clearly articulating the overarching goal of student aid and coordinating efforts between the actors to maximize equity and efficiency in the system.

*Financial Aid – A shared agenda to achieve access and success for under-served students.* (2003, August). Pathways to College Network.
This brochure summarizes Pathways' key findings in the area of financial aid. The brochure lists strategies corresponding to each finding and identifies the appropriate target (federal government, state governments, or institutions) for each strategy.

Longanecker, D. A., & Blanco, C. D. (2003). Student financial assistance. In *Student success: Statewide P-16 systems*. Denver, CO: SHEEO.
The challenge facing student aid programs is to provide sufficient aid to ensure college affordability while providing students with an early *assurance* of affordability so that they can make the proper choices to prepare academically for postsecondary education. The federal student aid program is insufficient to meet these needs without a commitment from the states. Many states, however, are facing difficulties keeping tuition and fees low at state institutions amid rising enrollments and costs. This essay examines the various approaches states have taken to address these issues and describes the components of some promising state-level aid programs.

**National Dialogue on Student Financial Aid**

A major initiative led by the College Board in partnership with the Pathways to College Network, the National Dialogue on Student Financial Aid explored financial barriers to postsecondary access and proposed policy solutions to expand college access and success for all students. Based on public hearings involving more than 700 individuals and 170 associations, as well as findings by leading policy researchers, the National Dialogue proposed an Action Agenda. That Agenda, and research summaries produced by the National Dialogue, are described below.

*Challenging times, clear choices: An action agenda for college access and success – investing more equitably and efficiently in higher education, creating value for America.* (2003 January). The College Board.
After surveying the state of financial aid in the country, the Action Agenda lays the groundwork for moving forward on the principles and suggestions of the Blue Ribbon Panel of the National Dialogue on Student Financial Aid. The principles are as follows: (1) The fundamental purpose of student financial assistance is to assist financially needy students; (2) The federal government should lead in developing programs and incentives to promote investment in need-based aid; (3) Expanding access to college for all students is essential to the nation's social progress and economic prosperity; (4) We must invest more equitably and efficiently in college success skills such as adolescent reading, writing, critical thinking, etc.; (5) Accountability for outcomes should focus on measuring the degree to which student access, persistence, and success are increased.

Johnstone, B. D. (2003, January). *Fundamental assumptions and aims underlying the principles of federal financial aid to students.*
In this analysis, Johnstone lays bare eight fundamental assumptions underlying the federal financial aid system, including the following: higher education is the province of the states; costs for higher education are appropriately shared by taxpayers, parents, students, and philanthropists; aid should be sufficient to bring higher-priced private education within reach for students whose parents have contributed up to a reasonable limit. Johnstone argues that the system is neither wrong nor broken, and asks reformers to resist the urge to fundamentally change it. The assumptions are not perfect, however; there are "stress points" in the assumptions that suggest possible changes, including the assumption of the ubiquitous parental contribution amidst an increase in non-nuclear families and the current trend towards merit-based rather than need-based aid.

Malveaux, J. (2003, January). *What's at stake: The social and economic benefits of higher education.*
Citing the shift in the public perception of higher education from a public good to a personal investment, and the concurrent shift in financial aid from primarily grant-based to primarily loan-based, Malveaux's essay makes the case for higher education as a societal benefit worthy of taxpayer support. Higher education brings significant economic benefits to our society – creating wealth and preventing poverty – as well as significant social benefits – increasing civic participation, increasing parental involvement in K-12 schooling, and providing an opportunity for upward mobility.

Baum, S. (2003a). *The financial aid partnership: Strengthening the federal government's leadership role.*
Baum's essay calls for the federal government to refocus the national financial aid agenda on providing access to higher education for *all* qualified students. Because the various other partners in the financial aid system – state governments, non-profits, and for-profits – necessarily base their policies on narrower agendas, the federal government must be the entity responsible for creating incentives for all partners to act in accordance with a clearly articulated national agenda focused on college access for all students.

Heller, D. E. (2003, January). *State financial aid and college access.*
Heller's paper documents the recent trend in state financial aid programs from providing need-based aid to providing merit-based aid or aid with some merit component. The paper discusses the funding sources of state aid, the effect of the current economic downturn on higher education appropriations in many states (leading to tuition increases when needy students can least afford them), and the impact of these trends on college access for the most financially needy. Heller points to Indiana's "Twenty-first Century Scholars" program and California's "Cal Grant" program as demonstrating promising practices.

Baum, S. (2003b). *The role of student loans in college access.*
In the wake of the introduction of the federal Stafford Loan program in 1993, the relative importance of student loans in financing higher education has increased. Evidence shows that borrowing to attend college is a sound financial decision for most students, although in one survey half of the respondents reported feeling burdened by their debt payments. More adequate grant funding continues to be necessary as the prospect of substantial borrowing discourages enrollment among some students, especially those from low-income and underrepresented groups.

McPherson, M. S., & Schapiro, M. O. (2003, January). *Getting the most out of federal student aid spending – Encouraging colleges and universities to promote the common good.*
McPherson and Schapiro argue that the federal government needs the partnership of individual colleges and universities to achieve its college access goals. Directly opposing the idea prevalent among federal policymakers that "a dollar going directly to a college or university is a dollar wasted," they propose creating a "cost of education" allowance to be paid to higher education institutions for each Pell grant student enrolled. This system would provide colleges with a needed economic incentive to enroll Pell grant students rather than more affluent students, while reaffirming the partnership between the federal government and colleges in promoting college access.

## K-12 Practice, Including Pre-college Outreach Programs & Family Involvement

Camblin, S. J. (2003). *The Middle grades: Putting all students on track for college.*
The middle grades play an important role in college success because they are when students, families, and school personnel begin to address career aspirations, academic preparation for higher grade levels, and college information. This paper, addressed primarily to principals and teachers of the middle grades, establishes the significance of these years for postsecondary success, discusses the opportunity gap that faces underserved students in planning and preparing for college, and sets forth effective practices and recommendations for building school capacity to address the gap.

Camblin, S. J., Gullatt, Y., & Klopott, S. (2003). *Strategies for success: Six stories of increasing college access.*
This case study paper examines six high schools that have embedded the effort to increase college readiness and access for underserved students into the structure of the school, rather than relying on external programs. A cross-case analysis reveals common elements and successful strategies.

Crowe, E. (2003). High quality teaching. In *Student success: Statewide P-16 systems.* Denver, CO: SHEEO.
> See *P–16 Policy.*

Environmental scan of parental and family involvement, national research centers and technical assistance providers. (2002).
This web-based scan provides profiles for 12 centers/technical assistance providers involved on a national scale in researching or otherwise supporting parental and family involvement (PFI). Each profile lists the center's mission, classifies its activities, lists PFI-related programming, and describes PFI-related research.

George, P. (2002). *How do educators' cultural belief systems affect underserved students' pursuit of postsecondary education?*
This paper examines the role played by educators' expectations, as developed from their cultural belief systems, in creating barriers to college access. School procedures and guidance structures that favor the White middle class, culture clashes in the classroom between teachers and students, a weak home-to-school connection, and teachers' preconceived notions of student ability or lack of ability are cited as factors that affect students' pursuit of postsecondary education. George also suggests reform initiatives to address these problems.

Gullatt, Y., & Jan, W. (2002). *How do pre-collegiate outreach programs impact college-going among underrepresented students?*
The first half of this paper surveys the history of pre-collegiate academic development programs, reviews the literature in the field, and discusses the principles of practice common to outreach programs. In the second half, effective practices are identified and four exemplary programs are described. The paper concludes with suggestions for future research.

Jones, R. (2002). *Pre-college academic programs and interventions.*
A list of effective pre-college outreach programs that compile the following information: date founded, location, description, intervention type, cohort served, key components, funding, evaluation, and Web site address.

*Literature review: Intervention methods and programs for pre-college entry for disadvantaged students.* (2002).
A literature review in the field of pre-college outreach programs and interventions. The review includes compendium studies of academic preparation and pre-college counseling programs; parental and peer support involvement programs; federal and state initiatives; financial assistance; institutional collaborations; mentoring initiatives, and school-to-work programs.

Martinez, M. R., & Klopott, S. (2003). *College readiness for all: A framework.*
This paper presents a conceptual framework for ensuring that high schools adequately prepare all students for postsecondary education. The framework has five basic tenets: having high expectations; academic rigor and support; social support; P-16 alignment; and quality evaluations. Each aspect of the framework is discussed in terms of recommendations, strategies, and challenges.

Martinez, M. R., & Klopott, S. (2003). *How is school reform tied to increasing college access and success for low-income and minority youth?*
This paper evaluates specific high school reform initiatives (e.g., Equity 2000, America's Choice, International Baccalaureate, Project GRAD) in terms of their impact on predictors of college-going behavior among low-income and minority students. The reform initiatives are categorized based on the primary issue they address: academic rigor in the curriculum, the academic and social structure of the school, and curricular alignment. The paper identifies promising practices within existing initiatives and offers recommendations for future reform.

Martinez, M. R., & Klopott, S. (2003). *Improving college access for minority, low-income, and first-generation students.*
This paper synthesizes the conclusions from three white papers commissioned by the Pathways to College Network into five summary recommendations: (1) Raise expectations for all students. (2) Provide academic support. (3) Improve social support for students. (4) Advance K-16 Alignment. (5) Make quality evaluations a component of all new efforts. The three papers synthesized are: "How Do Educators' Cultural Belief Systems Affect Underserved Students' Pursuit of Postsecondary Education?" (George, P.); "How is School Reform Tied to Increasing College Access and Success for Low-Income and Minority Youth?" (Martinez, M., & Klopott, S.); "How do Pre-Collegiate Academic Outreach Programs Impact College-Going Among Underrepresented Students?" (Gullatt, Y., & Jan, W.).

Pathways to College Network. (2002). *Resources in involving parents and family members in their children's education.*
This annotated bibliography of 272 studies and reports covers education literature in the field of parent/family involvement and community engagement.

Rainwater, T., & Venezia, A. (2003). Early outreach. In *Student success: Statewide P-16 systems.* Denver, CO: SHEEO.
> See *P–16 Policy.*

Somerville, J., & Yi, Y. (2003). Curriculum and assessment systems. In *Student success: statewide P-16 Systems.* Denver, CO: SHEEO.
> See *P–16 Policy.*

Salchek, S. (2002) *Parental and family involvement literature review and bibliography: Exploratory report.*
This report summarizes a review of research literature on parental and family involvement. Drawing from more than 200 studies, the report includes a brief summary of parent and family involvement theory and of organizational, programmatic, and political trends related to parent/family involvement. It also describes promising practices and program models identified in the literature, and identifies gaps in the research on parent/family involvement related to high school students.

## College Success & Achievement

Myers, R. D. (2003). *College success programs: Executive summary*.
Myers identified and analyzed college retention programs that had demonstrated effectiveness in retaining and graduating traditionally underrepresented college students through ongoing, longitudinal, qualitative, and quantitative evaluations. The goal of the report is to provide higher education professionals with accessible, research-proven evidence of successful program strategies that improve the learning, success, satisfaction, persistence, retention, and graduation rates of underrepresented college students. The report also considers the effectiveness of program models being implemented at two- and four-year institutions and identifies "best practices" to advance college access and success for underrepresented students.

Myers, R. D. (2002). *College success programs: An annotated bibliography*.
Myers researched postsecondary retention programs to determine which had been evaluated as having a positive impact on student success, or presented anecdotal or descriptive evidence of positive impact. The literature related to these successful programs is presented by program type in an annotated bibliography.

Myers, R. D. (2002). *College success programs: Demonstrating effectiveness in retaining and graduating traditionally underrepresented college students*.
Myers summarizes 54 programs identified in research literature as having demonstrated effectiveness in retaining and graduating traditionally underrepresented students. The summaries include the program goal, a general description, key components, and information about evidence of effectiveness and funding sources.

## College Access Campaigns/Social Marketing

CommunicationWorks, LLC. (2003). *Capturing the college potential of students from underserved populations: An analysis of efforts to overcome social and financial barriers to college*.
This report surveys a cross-section of social marketing campaigns nationwide that aim to educate the public on issues concerning college access and the value of pursuing postsecondary education. Each campaign is reviewed in terms of goals, scope of outreach, strategies, tactics, messages, funding, and results. The report offers implications for a strategy to produce a coordinated national social marketing effort and identifies gaps in the current array of efforts.

# PATHWAYS TO COLLEGE NETWORK

The Pathways to College Network is an
alliance of national organizations and
funders that promotes college access and
success for underserved students.

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