



Center for Innovative Thought

Winning

The Skills Race
and Strengthening
America's
Middle Class:

AN ACTION AGENDA FOR
COMMUNITY COLLEGES

Report of The National Commission on Community Colleges

JANUARY 2008

Members of the Center for Innovative Thought

Arlene Ackerman

Christian A. Johnson Professor of Outstanding Educational Practice, Teachers College, Columbia University

Herb Allison

Chairman, President and CEO, TIAA-CREF

George R. Boggs

President and CEO, American Association of Community Colleges

Victor J. Boschini, Jr.

Chancellor, Texas Christian University

Gene A. Budig

President Emeritus, American League, University of Kansas, West Virginia University, and Illinois State University

Gaston Caperton

President, The College Board

John Casteen

President, University of Virginia

Sally Clausen

President, University of Louisiana System

Larry Faulkner

President, Houston Endowment

Michele Forman

Social Studies Teacher, Middlebury Union High School, Vermont

Walter J. Haas

Chairman, Evelyn and Walter Haas, Jr. Fund

Bob Kerrey

President, The New School University

C. Peter Magrath

President Emeritus, National Association of State Universities and Land-Grant Colleges

Morton Schapiro

President, Williams College

Harold Shapiro

President Emeritus, Princeton University



Winning

The Skills Race
and Strengthening
America's
Middle Class:

**AN ACTION AGENDA FOR
COMMUNITY COLLEGES**

Report of The National Commission on Community Colleges

JANUARY 2008

The National Commission on Community Colleges

Augustine (Augie) P. Gallego (Chair)	Chancellor Emeritus, San Diego Community College District, CA
Sharon Blackman	President, Brookhaven College, TX
Sunil Chand	President, College of DuPage, IL
Ding-Jo Currie	President, Coastline Community College, CA
Christine Johnson	Immediate Past President, Community College of Denver, CO
Martin Lancaster	President, North Carolina Community College System, NC
Eduardo Marti	President, Queensboro Community College, NY
Paul Sechrist	President, Oklahoma City Community College, OK
Robert G. Templin Jr.	President, Northern Virginia Community College, VA
Ronald A. Williams	Immediate Past President, Prince George's Community College, MD
John N. Yochelson	President, Building Engineering and Science Talent, CA

STAFF

Stephen J. Handel	Senior Director, National Office of Community College Initiatives, The College Board
Nereida Moya	Administrative and Legislative Associate, Western Regional Office, The College Board

Table of Contents

Executive Summary	5
Preface	13
Chapter 1: America’s Overlooked Educational Asset	15
Chapter 2: Obstacles to the Vision	27
Chapter 3: Recommendations	33
Conclusion	41
Appendices	43
A. Commission Charge	43
B. Acknowledgments	45
C. The <i>Achieving the Dream</i> Initiative	47
References	49

The College Board: Connecting Students to College Success

The College Board is a not-for-profit membership association whose mission is to connect students to college success and opportunity. Founded in 1900, the association is composed of more than 5,400 schools, colleges, universities, and other educational organizations. Each year, the College Board serves seven million students and their parents, 23,000 high schools, and 3,500 colleges through major programs and services in college admissions, guidance, assessment, financial aid, enrollment, and teaching and learning. Among its best-known programs are the SAT[®], the PSAT/NMSQT[®], and the Advanced Placement Program[®] (AP[®]). The College Board is committed to the principles of excellence and equity, and that commitment is embodied in all of its programs, services, activities, and concerns.

For further information, visit www.collegeboard.com.

Executive Summary

American community colleges are the nation's overlooked asset. As the United States confronts the challenges of globalization, two-year institutions are indispensable to the American future. They are the Ellis Island of American higher education, the crossroads at which K–12 education meets colleges and universities, and the institutions that give many students the tools to navigate the modern world.

In the century since they were founded, community colleges have become the largest single sector of American higher education, with nearly 1,200 regionally accredited two-year colleges enrolling 6.5 million students annually for credit (nearly half of all American undergraduates) and another 5 million for noncredit courses. Students range in age from teenagers to octogenarians, annually taking courses in everything from English literature, biochemistry, and statistics to foreign languages, the arts, community development, emergency medical procedures, engine maintenance, and hazardous waste disposal.

These institutions:

- Certify nearly 80 percent of first responders in the United States (police officers, firefighters, and emergency medical technicians);
- Produce more than 50 percent of new nurses and other health-care workers;
- Account for nearly 40 percent of all foreign undergraduates on American campuses;
- Enroll 46 percent of all U.S. undergraduates, including 47 percent of undergraduates who are African American, 47 percent of those who are Asian or Pacific Islander, and 55 percent and 57 percent, respectively, of Hispanic and Native American undergraduates;
- Award more than 800,000 associate degrees and certificates annually; and
- Prepare significant numbers of students for transfer to four-year colleges and universities where they complete bachelor's degrees. Nationally, half of all baccalaureate degree recipients have attended community colleges prior to earning their degrees.

Beyond these official statistics, community colleges offer a start in life to many people who become leaders in business, industry, literature, the arts, public service and government, health, the sciences, and space exploration.

Yet, despite this evidence of success and productivity, community colleges are largely overlooked in national discussions about education. As a policy concern, they are often invisible.

The ingrained habit of ignoring the current and potential contributions of community colleges must be broken if the United States hopes to respond effectively to several significant trends reshaping national and international life:

- ***The growing economic vulnerability of the United States.*** The National Commission on Community Colleges’ analyses (see Tables 1 and 2 of the report) indicate that half of the new jobs created in the United States in the next 10 years will require at least some postsecondary education. Even in high-demand science, technology, engineering, and mathematics (STEM) fields, the role of community colleges is critical. To meet the nation’s needs in STEM fields, the United States should plan on a 25.1 percent increase in the number of associate degrees awarded and a 19.7 percent increase in bachelor’s degrees awarded.
- ***Challenges to the stability of the middle class and social mobility.*** The gap between rich and poor in the United States is growing. Yet the evidence is indisputable: An associate degree permits the community college graduate to almost double the average annual earnings of high school dropouts (\$37,990 compared to \$19,915).
- ***Dramatic changes in the nation’s demographics and population.*** The American population is aging; the face of America is changing as almost all the growth in the number of high school graduates is made up of minority Americans; young adults are experimenting with new patterns of schooling and work. Amid all these changes, community colleges are well equipped to help address the needs of the nation and its people.
- ***The imperative to rebuild the capacity and vigor of our nation’s schools and communities.*** Community colleges are skilled community builders, often the conveners of local community life. In naming these institutions, the use of the term “community” was no accident. Although the needs of the many communities in the United States are diverse and change over time, an effective community college must *see itself and be seen as* an institution dedicated to serving the needs of its community, whatever those needs may be.

The four “megatrends” outlined above are reshaping the United States. There is every reason to be confident as Americans look ahead. But if we are to succeed, a level-headed examination is required of the pitfalls that lie between where community colleges find themselves today and the Commission’s vision of the future.

Obstacles to the Vision

Four serious obstacles stand between where we are today and the capacity of community colleges to fulfill their promise.

- ***Rising costs.*** The history of higher education in recent decades has shown that when state budgets have tightened, higher education inevitably suffered. Community colleges, which receive a larger share of their budgets from public sources than four-year public institutions do, suffer disproportionately. Given the students community colleges serve—many of them low-income, minority, first-generation, immigrant, and working full-time—even modest increases in college costs impose potential obstacles to student participation and success.
- ***The mismatch between demands and resources.*** The second challenge is intimately related to the first. A serious mismatch exists between the many jobs community colleges are expected to do—educate students for whom English is a second language, provide developmental instruction to high school graduates without college-ready skills, offer occupational training programs for local businesses, provide adult

education and literacy services, and permit students to complete the first two years of a four-year degree—and the resources provided to get the job done. At the same time, lack of support for facilities means that many buildings are becoming outdated or are simply inadequate for current and future education and training needs.

- ***A culture that emphasizes access more than success.*** Beyond financial obstacles, the most significant challenge facing community colleges is a changing world in which their most attractive asset—the commitment to student *access*—must now be matched with a commitment to student *success*. The multiple intentions of community college students—the search for basic skills, employment credentials, personal enrichment, transfer and nontransfer degrees and certificates—make it difficult to measure student success in the community college context.
- ***The challenge of monitoring outcomes.*** The Lumina Foundation and its partners have created the *Achieving the Dream* initiative, aimed at developing a “culture of evidence” and “data-based decision-making” at 83 pilot institutions in 15 states. One finding from this effort is particularly instructive. Most community colleges experience difficulty monitoring and assessing their own processes. While they gather large amounts of data on students, there is little incentive to examine whether students are accomplishing their academic goals in a timely way.

Those four challenges frame the response required to make real the Commission’s vision of a vibrant and healthy community college sector responding to national needs.

Recommendations

The Commission calls for a new three-way agreement involving national leaders, state officials, and community colleges—a new social contract designed to put community colleges at the forefront of the effort to enhance American communities and ensure national competitiveness. All parties in this new effort must bring something to the table. The Commission asks federal officials to provide at least a portion of the financial support required to make universal access to two years of education beyond high school a reality. State leaders must rededicate themselves to the state-local partnership on which an effective community college system depends. At the same time, community college leaders should mount an effort to reinvigorate the commitment of their institutions to access, success, and excellence. Our reach may exceed our grasp, but the goal should be universal student success.

Recommendation I. THE COMMISSION RECOMMENDS *that Congress and the President cooperate to enact The Community College Competitiveness Act of 2008, federal legislation that will bring community colleges fully into the twenty-first century and allow them to respond to the challenges facing the nation’s workforce.*

Major features of the Act should include:

- ***A statement that in an era of global competition, it is the policy of the U.S. government to encourage universal public education through at least 14 years of schooling as the minimum educational requirement.*** The United States cannot succeed in the more competitive economic environment of the twenty-first century with educational expectations that were appropriate in the twentieth. The universal expectation today

must be that all young people should continue their formal education for at least two years after high school—enough time to earn a certificate, a technical diploma, or an associate degree or to prepare for transfer to a baccalaureate degree-granting institution.

- ***A new Department of Labor program centering on emerging workforce development needs in community colleges.*** The United States cannot advance economically without the human resources required to compete in the new global marketplace. In the employment areas anticipating the greatest job growth over the next decade (including biotechnology, nanotechnology, genetics, environmental engineering, energy, health care, and new manufacturing technologies), community colleges need to be one of the nation’s leaders. The Commission believes a new Department of Labor program investing in these critical workforce development areas is an essential investment in the American future.
- ***Amendments to key financial aid programs to help all students, especially those in community colleges.*** The Commission calls on Congress to amend Title IV of the Higher Education Act to:
 - Implement the recommendations of the Secretary of Education’s Commission on the Future of Higher Education *by funding Pell Grants for community college students at 70 percent of the average cost of attending a public four-year institution of higher education.*
 - *Support students enrolled for at least one-third of a full course load with all federal aid programs.* Currently, federal programs such as the Stafford Loan are not available to students enrolled less than half-time. Without financial support, many community college students must work full-time to fund their education. The existing policies make college attendance and completion more difficult for students with the fewest resources.
- ***Support for facilities construction and modernization.*** The Community College Competitiveness Act should provide for a matching grant program to states to encourage facilities construction, remodeling, and modernization.
- ***Funds for guidance and counseling.*** To assist students (especially students from underserved groups) in making the best use of the educational options offered by community colleges, the Commission recommends that a formula grant program based on state population be established that would require states and localities to match federal funds to expand high school and community college guidance and counseling.
- ***A commitment to a culture of evidence.*** The Commission recommends that Congress include in the Community College Competitiveness Act of 2008 an appropriation sufficient to assist the colleges to improve the success rates of their students by bringing the *Achieving the Dream: Community Colleges Count* research initiative to scale across the country.

Recommendation II. THE COMMISSION RECOMMENDS *that community college leaders work with governors and state legislators to shore up an inadequate system of community college finance, facilitate transfer in areas of critical national and state need, and align K–20 systems.*

The Commission believes that state leaders have an essential role to play in securing adequate funding for community colleges and aligning the educational activities of K–12 schools, community colleges, and public four-year colleges and universities. Three critical areas are:

- **Finances.** It seems clear that the original financial model is broken. It is time for statewide task forces to take up this issue, involve local community leadership in the discussion, and suggest new possibilities for the future.
- **Transfer.** The nation’s need for baccalaureate-level graduates in science, technology, engineering, and mathematics (STEM), as well as elementary and secondary school teaching, will number in the millions in the decade ahead. Moreover, the nation must close the baccalaureate completion gap affecting students from low-income backgrounds and some ethnic minority groups. One of the most productive ways to proceed, at both the state and national levels, would be to expand opportunities for community colleges to provide the first two years of undergraduate work, with the understanding that properly qualified students with associate degrees can transfer to four-year campuses with status as juniors. Moreover, the Commission believes statewide articulation agreements on acceptable programs of study that qualify students for junior standing on transfer should be developed to encourage degree completion.
- **K–20 Alignment.** States should encourage community colleges to work both with K–12 schools and four-year institutions to improve curriculum alignment. They should work with four-year campuses to improve articulation agreements providing for relative ease of transfer, and with K–12 systems to improve preparation, create secondary schools on campus, and offer dual enrollment systems.

With regard to states, the Commission notes that a variety of entities, including the National Governors Association, the National Conference of State Legislatures, the Education Commission of the States, and the Business Roundtable, have all been key stakeholders in the effort to reshape American education. The Commission hopes that each of them places the role of community colleges in economic development and state and national competitiveness high on the agendas of their national meetings. This includes efforts to re-examine funding mechanisms, to work with community college leaders to explore funding possibilities based on additional metrics beyond enrollment (see Recommendation III), and to help develop cultures of evidence on community college campuses as advocated by the *Achieving the Dream* initiative.

Recommendation III. THE COMMISSION RECOMMENDS *that two-year college leaders develop new accountability measures that better assess the unique and varied missions of their institutions; respond to national goals for associate and bachelor’s degree production; and commit themselves once again to the expectation of universal student access and success.*

- **Developing New Metrics for Community Colleges.** Most accepted measures of academic productivity do not apply to complex, open-access institutions with multiple missions. The “drive through” nature of community colleges—anathema to many in traditional higher education—is nonetheless a significant part of the appeal and immense popularity of community colleges. The Commission believes that

community college leaders, working with national community college organizations such as the American Association of Community Colleges and the Association of Community College Trustees, as well as with groups having expertise in assessment, should develop a multiyear working group to identify essential metrics that measure the scope and productivity of community colleges.

- ***Meeting National Goals for Associate and Bachelor's Degree Attainment.*** To meet critical workforce needs and maintain a global economic presence, the United States must increase degree production by at least 37 percent over and above current rates. Associate degrees must increase 25.1 percent and bachelor's degrees by 19.6 percent. Moreover, this rate can be achieved only if we are successful in increasing degree production for students from racial and socioeconomic groups that have been underrepresented in higher education. Community colleges are the primary institutions offering the associate degree, and they play an increasingly important role in baccalaureate production via transfer. Community college presidents and chancellors should assume a leadership position in identifying effective ways of responding to the national demand for the increased output of college degrees.
- ***Emphasis on Access, Excellence, and Success.*** A modern American society of highly competent workers and responsible citizens depends on a powerful community college system. Without losing their historical commitment to access, community colleges must rededicate themselves to the expectation of student success. Community colleges, as designed and functioning today, provide equal educational access and opportunity, but have been less adept at focusing on success, excellence, and program completion—or, it is worth noting, have had little support to do so. Universal success here is defined as the expectation that each student will meet his or her goals—enrichment, employment skills, transfer—on a timetable consistent with the student's needs.

The Commission believes that a newly redesigned system of community colleges should continue to guarantee open access, while offering multiple educational options and seeking new partnerships with the local business community. At the same time, community colleges should be committed to what the *Achieving the Dream* partners have termed a “culture of evidence” in which they continually reflect on and improve their policies and practice, pay constant attention to leadership and faculty development needs, and develop new and more appropriate metrics to measure productivity and demonstrate accountability. The Commission is convinced that community college leaders must work with business groups and organizations representing governors, state legislators, and state agency officials to develop new measures of academic productivity that respect the complex operations of open-access institutions with multiple missions.

A Crusade Against Ignorance

Like beacons, American institutions of higher education throw off light in many directions. That light is reflected with special brilliance when it falls on America's 1,200 community colleges and the students enrolled in these institutions—often the first in their families to complete secondary school or progress beyond it. Thomas Jefferson was certainly correct when he called for a crusade against ignorance as the best protection for a democracy, writing that, “No other sure foundation can be devised for the preservation of freedom and

happiness.” Confronted by ignorance and its companions—poverty, illiteracy, intolerance, and injustice—the people of the United States have always put their faith in education. That faith has sustained free inquiry, free expression, free men and women, the dignity of the individual, and access to opportunity. Wherever a community college or university is located, it shines as a symbol of the American people’s respect for the best that is in them: a beacon offering safe passage to freedom through knowledge and wisdom.

Preface

Early in 2005, the College Board established the Center for Innovative Thought to identify challenges to America’s educational well-being and suggest strategies for addressing them. By bringing together some of the best minds in education, the College Board hoped the Center could help foster a national passion for education and create an environment in which students enter and succeed in higher education.

Last year, convinced that community colleges play an indispensable and overlooked role in American life, the Center established the National Commission on Community Colleges and asked the Commission to explore how to build upon, improve, and expand the role of two-year institutions in the years and decades ahead. The data are very clear: Nearly half of all undergraduate enrollment is found in community colleges, with an enrollment increase of about 18 percent over the last decade. How can the nation build on that capacity? How does it make sure these colleges play their role in bringing the American economy back to the cutting edge competitively? How does it make sure that two-year institutions are at the center of national debates about the future of education, our communities, and our national life?

This report from the Commission responds to that charge. It presents a stark assessment of the challenges facing the United States. We are challenged economically. The middle class is under siege. Demographics are changing the face and the age of the nation. Our people need a much better sense of other lands, languages, and cultures. And the time has arrived for us to think anew about how to reinvigorate our nation’s schools and our communities. In all of these areas, two-year colleges are uniquely equipped to make profound contributions.

The Commission makes bold recommendations here. It calls for a new Community College Competitiveness Act that makes universal public education through the associate degree the minimum expectation in a knowledge economy. It asks for a new social contract involving communities, states, and the federal government, an agreement urging each to strengthen and advance the critical work of community colleges. It suggests that community colleges need to build a “culture of evidence” to expand support for their mission and work. Above all, the Commission insists that the nation’s competitive future rests on making the next great education advance—expanding universal public education for two years beyond high school.

Against this backdrop of the Commission’s work, I make a commitment to put the College Board’s expertise at the service of the nation’s community colleges. The College Board sees many opportunities to advance the work launched by this Commission, and we will take advantage of them. We will act as a convener, bringing together education leaders from around the country to tackle issues raised in this report and propose solutions that will strengthen community colleges and advance the educational goals of the students they serve. But these efforts are just a beginning. The College Board’s mission of connecting

students to college success and opportunity is a vision consistent with that of community colleges; it is a vision that will guide this important partnership.

On behalf of the College Board, I applaud the leaders, faculty, staff, and students who make up the complex mosaic of America's 1,200 community colleges, and I thank the Commission for the contributions it has made to American education with this important document.

A handwritten signature in black ink that reads "Gaston Caperton". The signature is fluid and cursive, with the first letter of each name being capitalized and prominent.

Gaston Caperton
President, The College Board

Chapter 1

America's Overlooked Educational Asset

American community colleges are the nation's overlooked asset. As the United States confronts the challenges of globalization, two-year institutions are simply indispensable to the American future. They are the Ellis Island of American higher education, the crossroads at which K–12 education meets higher education, and the institutions that give students the tools to navigate the modern world. They also serve as a dependable source of leadership in all walks of our national life and are the nation's best hope for creating the college-educated workforce required to secure American prosperity.

In the century since they were founded, these colleges have become the largest single sector of American higher education. The scale and scope of community colleges is impressive (see Community College Fact Sheet). Some 1,200 regionally accredited two-year colleges are within driving distance of more than 90 percent of the population. Enrollment for credit amounts to 6.5 million students annually (nearly half of all American undergraduates). When noncredit students are added, enrollment nearly doubles—11.6 million Americans, ranging from teenagers to octogenarians, annually take courses in everything from English literature, biochemistry, and statistics to foreign languages, the arts, community development, emergency medical procedures, engine maintenance, and hazardous waste disposal.

Most of these colleges are public, and they include independent, tribal, and historically black institutions. Compared to four-year institutions, two-year colleges

Community College Fact Sheet	
Number/Type of Community Colleges	
Public	991
Independent	180
Tribal	31
Total	1,202
Enrollment	
Students	11.6 million
Credit	6.6 million
Noncredit	5 million
Full-time	40%
Part-time	60%
Demographics	
Average age	29
21 or younger	43%
22–39	42%
40 or older	16%
Women	59%
Men	41%
Minorities	34%
Non-U.S. citizens	8%
Community Colleges Enroll	
All U.S. undergraduates	46%
First-time freshmen	45%
Native American	57%
Hispanic	55%
Asian/Pacific Islander	47%
Black	47%
Student Employment	
Full-time students employed full-time	27%
Full-time students employed part-time	50%
Part-time students employed full-time	50%
Part-time students employed part-time	33%
Degrees/Certificates Awarded Annually	
Associate degrees	550,000
Certificates	270,000

Source: American Association of Community Colleges. All data available under "Community College Research" at www.aacc.nche.edu/.

enroll a more nontraditional student body—typically older than students enrolled at four-year institutions (16 percent are over the age of 40); female (59 percent of the students are women); working (77 percent of full-time community college students are employed either full- or part-time); and minority (34 percent of students are members of minority groups).¹ Community colleges also enroll greater numbers of students who are the first in their family to attend college; students who must care for dependents while attending school; and students with disabilities.²

Community colleges are a prodigious engine of economic growth, helping produce an educated and skilled workforce that improves the quality of life in their communities and collectively across the United States. Two-year colleges have a significant impact on both communities and individuals, expanding economic and social choices for students, while helping secure the health and welfare of their communities and our nation. According to the American Association of Community Colleges, for example, community colleges:³

- Certify nearly 80 percent of first responders in the United States (police officers, firefighters, and emergency medical technicians);
- Produce more than 50 percent of new nurses and other health-care workers;
- Account for nearly 40 percent of all foreign undergraduates on American campuses;
- Enroll 46 percent of all U.S. undergraduates, including 47 percent of undergraduates who are African American, 47 percent of those who are Asian or Pacific Islander, and 55 percent and 57 percent, respectively, of Hispanic and Native American undergraduates;
- Award more than 800,000 associate degrees and certificates annually; and
- Prepare significant numbers of students for transfer to four-year colleges and universities where they complete bachelor's degrees. Nationally, half of all baccalaureate degree recipients have attended community colleges prior to earning their degrees.⁴

Beyond these official statistics, community colleges offer a start in life to many people who later become leaders in business, industry, literature, the arts, public service and government, health, the sciences, and space exploration (see *Incubators of Leadership*).

It is no exaggeration to say that if community colleges did not exist, Americans would have to find other ways to educate most of the men and women who put out fires, fight crime, expand small firms, and care for the sick and elderly. They would also have to find other (probably more expensive) ways to introduce many immigrants, minority Americans, and foreign students to the benefits of higher education. America, as we know it, is inconceivable without the contributions of these institutions.

Yet, despite this evidence of success and productivity, community colleges are largely overlooked in national discussions about education. As a policy concern, they are often invisible. For example, *Rising Above the Gathering Storm*, a highly influential 2007 analysis of America's competitive challenges from the National Academy of Sciences, hardly

1. Kent A. Phillippe and Leila G. Sullivan (2005). *National Profile of Community Colleges: Trends and Statistics* (4th Edition). Washington, DC: American Association of Community Colleges, p. 20.

2. Phillippe and Sullivan (2005, p. 47, 53) and U.S. Department of Education (1999). *An Institutional Perspective on Students with Disabilities in Higher Education*. Washington, DC: U.S. Department of Education, National Center for Education Statistics (Table 4, p. 6). Retrieved December 10, 2007, from <http://nces.ed.gov/pubs99/1999046.pdf>.

3. American Association of Community Colleges, "Community College Research" at www.aacc.nche.edu/.

4. See Sara McPhee (2006). *En Route to the Baccalaureate: Community College Student Outcomes*. Washington, DC: American Association of Community Colleges.

Incubators of Leadership

In providing education for all, community colleges have helped launch the careers of many distinguished people in all walks of American and international life. These leaders over the years included:

Name	Professional Achievement	Community College Attended
Bill Anoatubby	Governor, Chickasaw Nation	Murray State College, OK
Nolan D. Archibald	Chairman and CEO, Black and Decker	Dixie College, UT
Tom Arnold	Actor, Comedian	Indian Hills Community College, IA
Rose Marie Battisti	Director, Asian Children Services	Herkimer County Community College, NY
Bonnie Blair	Olympic Speedskater	Parkland College, IL
Carol M. Browner	Administrator, EPA	Miami-Dade Community College, FL
Gene Budig	President of MLB's American League	McCook Community College, NE
Richard Carmona, M.D.	U.S. Surgeon General	Bronx Community College, NY
Benjamin J. Cayetano	Governor of Hawaii	Los Angeles Harbor College, CA
Eileen Collins	Astronaut	Corning Community College, NY
Maureen Dunne	Rhodes Scholar	College of DuPage, IL
Margarita Esquiroz	Judge, Eleventh Judicial Court	Miami-Dade Community College, FL
Charles Flemming	Ambassador to UN from St. Lucia	Bronx Community College, NY
Parris N. Glendening	Governor of Maryland	Broward Community College, FL
Henry B. Gonzalez	U.S. Congressman	San Antonio Junior College, TX
Fred A. Gorden	Commandant, U.S. Military Academy	Kellogg Community College, MI
William Haddad	CEO MIR (Russia)	St. Petersburg Junior College, FL
John Hannah	President, Michigan State University	Grand Rapids Junior College, MI
Leland Hartwell	2001 Nobel Prize in Medicine	Glendale Community College, CA
Michell Hicks	Chief, Eastern Band of Cherokee Indians	Southwestern Community College, NC
Oscar Hijuelos	Pulitzer Prize for Fiction	Bronx Community College, NY
Rich Karlgaard	Publisher, <i>Forbes</i> magazine	Bismarck State College, ND
Margaret Kelly	CEO, RE/Max International	Oakland Community College, MI
Jim Lehrer	Co-Anchor, <i>MacNeil/Lehrer NewsHour</i>	Victoria College, TX
George Lucas	Film Director	Modesto Junior College, CA
Ray Marshall	U.S. Secretary of Labor	Hinds Community College, MS
Francis C. Martin	Commander, 42nd Air Base Wing	Seminole Community College, FL
Samuel O. Massey	Colonel, United States Air Force	Holmes Community College, MS
Sarah McClendon	McClendon News Service	Tyler Junior College, TX
R. Bruce Merrifield	1984 Nobel Prize in Chemistry	Pasadena City College, CA
Kweisi Mfume	President, NAACP	Baltimore City Community College, MD
George Miller	U. S. Congressman	Diablo Valley College, CA
Jon Nakamatsu	Winner, Van Cliburn Piano Competition	Foothill College, CA
Stephen W. Nicholas	Pediatrics Director, Harlem Hospital	Casper College, WY
Beverly O'Neill	Mayor, Long Beach	Long Beach City College, CA
H. Ross Perot	President, Electronic Data Systems	Texarkana Junior College, TX
Rudy Perpich	Governor of Minnesota	Hibbing Community College, MN
Silvestre Reyes	U. S. Congressman	El Paso Community College, TX
Norman B. Rice	Mayor, City of Seattle	Highline Community College, WA
Sharon Rohrbach,	Founder, Nurses for Newborns	St. Louis Community College, MO
Annette Sandberg	Chief, Washington State Patrol	Big Bend Community College, WA
Richard M. Scrushy	Chairman & CEO HealthSouth Corp	Jefferson State Community College, AL
Jim Sinegal	President, Costco Corporation	San Diego City College, California
Bola Ahmed Tinubu	Governor, State of Lagos, Nigeria	Richard J. Daley College, Illinois
Gaddi Vasquez	Director, U.S. Peace Corps	Santa Ana College, CA
J. Craig Venter	Founder, Institute for Genomic Research	College of San Mateo, CA
John White	Pulitzer Prize-winning Photographer	Central Piedmont Community College, NC

Source: American Association of Community Colleges (www.aacc.nche.edu/).

mentions community colleges.⁵ Although President Bush's recent budgets have provided support for a Job Training Grants program directed at community colleges, this support is modest and provides training for only a limited number of workers. The most recent congressional action on global competitiveness, America COMPETES Act of 2007 (H.R. 2272), was signed into law in August 2007. While replete with references to middle schools, high schools, undergraduate, graduate, and postgraduate educational needs in science, technology, education and mathematics (STEM), it mentions community or two-year colleges only rarely.

The ingrained habit of ignoring the current and potential contributions of community colleges must be broken if the United States hopes to respond effectively to several great trends reshaping national and international life:

- The growing economic vulnerability of the United States;
- Challenges to the stability of the middle class and social mobility;
- Dramatic changes in the nation's demographics and population; and
- The imperative to rebuild the capacity and vigor of our nation's schools and communities.

The United States cannot address any of these issues adequately unless it harnesses the energy and institutional strengths of community colleges to these great tasks.

Growing Economic Vulnerability

Americans and their public policy leaders have come to understand the need to improve the competitiveness of the American workforce. The challenge is that the United States is facing fierce competition from other growing economies that, while not more productive, employ workforces willing to work for a fraction of the wages paid in developed economies.⁶

In the emerging knowledge economy, a high school diploma is no longer an adequate entry-level credential for the world of work. For front-line, high-skill work in today's world, technical credentials in the form of certificates or associate degrees are the minimum required for productive entry in the nation's economic life. People without advanced skills run the risk of being economically disenfranchised. What is required is that the United States raise education levels across the board—among high school and two- and four-year college students alike.

In September 2006 when releasing the report of the Secretary of Education's Commission on the Future of Higher Education, Secretary of Education Margaret Spellings said that Americans understand "90 percent of the fastest-growing jobs require postsecondary education."⁷ Still, Americans should diagnose the situation properly and respond in the

5. Committee on Science, Engineering and Public Policy (2007). *Rising Above the Gathering Storm*. Washington, DC: National Academy of Sciences.

6. "The United States is the most productive country in the world," according to the Chairman of the Council of Economic Advisers. "U.S. output per capita is approximately 30 percent higher than the developed European countries and Japan. Furthermore, growth in American productivity has been high... This is indeed quite remarkable for a country that is already at the top of the productivity pyramid." See "Prepared Remarks of Edward P. Lazear, Chairman of the Council of Economic Advisers at the National Economists Club," July 13, 2006. Retrieved on October 13, 2007, from <http://www.whitehouse.gov/cea/lazear20060713.html>.

7. *A Test of Leadership: Charting the Future of Higher Education* (2006). Washington, DC: U.S. Department of Education. Retrieved on December 14, 2007, from <http://www.ed.gov/about/bdscomm/list/hiedfuture/reports/pre-pub-report.pdf>.

right way. The fastest-growing occupations are not necessarily the occupations providing the greatest number of jobs. A sound strategy should pay attention to both rate of growth and absolute numbers.

Table 1 outlines the occupations predicted to grow the fastest between 2004 and 2014 that require a bachelor's degree (or higher) and promise very high earnings.⁸ The table encompasses occupations anticipated to enjoy job growth of 30 percent or more over 10 years. These are jobs emphasizing, in the main, science, technology, engineering, and cutting-edge work in electronics and medicine. In a complex interaction with markets and laboratories, these occupations both drive and are driven by research and development. These are the seedbed occupations spurring new frontiers in innovation and economic growth. Meeting the job-growth goals outlined in Table 1 is essential to America's competitive future.

Table 1
Fastest-Growing Occupations (2004-14) with Very High Annual Earnings
Requiring at Least a Bachelor's Degree*

Occupation	Job Growth in Decade	Percent Increase Over Decade	Education Required
Network Systems/Data Analysts	126,000	54.6	Bachelor's
Physician Assistants	31,000	49.6	Bachelor's
Computer Software Engineers/Apps	222,000	48.4	Bachelor's
Computer Software Engineers/Software	146,000	43.0	Bachelor's
Network/Systems Administrators	107,000	38.4	Bachelor's
Database Administrators	40,000	38.2	Bachelor's
Physical Therapists	57,000	36.7	Master's
Medical Scientists (not epidemiologists)	25,000	34.1	Doctorate
Occupational Therapists	31,000	33.6	Master's
Postsecondary Teachers	524,000	32.2	Doctorate
Hydrologists	3,000	31.6	Master's
Computer Systems Analysts	153,000	31.4	Bachelor's
Biomedical Engineers	3,000	30.7	Bachelor's
Employment/Placement Specialists	55,000	30.5	Bachelor's
Environmental Engineers	15,000	30.0	Bachelor's
Total Job Growth in 10 years	1,538,000		

***Very High.** BLS defines "very high" as a median income of \$43,600 or more.

Table 1 displays simply the (1) fastest-growing occupations requiring (2) at least a bachelor's degree and (3) paying high salaries. Many other occupations do not meet all three criteria. Some are not growing; others do not require a minimum of a college degree; others are not high paying. Indeed, some occupations requiring high levels of education are not growing but are likely to employ as many people, if not more. For example, it is estimated that half of all K-12 teachers need to be replaced every five years.⁹ That means that more than two

8. Adapted from Daniel E. Hecker, "Occupational Employment Projections to 2014," *Monthly Labor Review Online*, November 2005, Vol. 128, No. 11. See Table 2, "Fastest-growing Occupations, 2004-14." Retrieved October 11, 2007, from www.bls.gov/opub/mlr/2005/11/contents.htm. VH = very high earnings (median income of \$43,600 or more). Table 2 also calculates high, low, and very low earnings averages with medians at \$28,580, \$20,190, and less than \$20,190, respectively. (Median: half the incomes are above the figure; half below.)

9. *Teachers and the Uncertain American Future* (2006). New York: The College Board, Center for Innovative Thought.

million new teachers will have to be produced in the coming decade, but since the field of elementary and secondary teaching is not growing rapidly, the demand for teachers does not appear in Table 1, although colleges and universities must educate these teachers.

Looking solely at growth rates, therefore, is deceptive. If the base number of jobs in an occupational category is fairly small (e.g., biomedical engineers), even a healthy growth rate of 30 percent produces only a small number of additional jobs (in this case, 3,000 new jobs in 10 years, an average of 300 annually).

While Secretary Spellings is correct in pointing out that 90 percent of the fastest-growing jobs in the United States will require some postsecondary education in the coming decade, that does not mean that all or even most new jobs require a four-year degree. Postsecondary education encompasses four-year institutions, two-year institutions, and proprietary (for-profit) programs teaching everything from truck driving to computer repair over the course of a couple of weeks. Employment and labor analyses indicate that many new jobs in America will require the type of training and education that are the specialties of America's community colleges: associate degrees, certificates, and other credentials. Indeed, it seems clear that a significant share of the education required by that 90 percent of fast-growing jobs will, in all likelihood, be provided in community colleges (see Table 2). As reported by the Department of Labor, half of the jobs expected to grow most significantly in the coming years will require a college degree or postsecondary training, and the training for 60 percent of those jobs (nearly 2.7 million) can be handled exclusively by community colleges. Even among the remaining 40 percent that will require a bachelor's degree (about 1.7 million jobs), community colleges can be expected to play a prominent role by providing lower division education as part of a reinvigorated transfer function.

The need to produce more college graduates in high-demand STEM fields and more technologically competent frontline workers explains recent estimates of a “degree gap” hovering over the United States, especially in such areas as biotechnology, nanotechnology, genetics, environmental engineering, energy, health care, and new manufacturing technologies.¹⁰ These estimates indicate that to close the “degree gap” between the United States and several other advanced economies among young workers, the United States should plan on a 25.1 percent increase in the number of associate degrees awarded by 2025 and a 19.6 percent increase in bachelor's degrees.

While the need to increase bachelor's degree completion rates is essential, a consensus about the need to increase the number of students who earn associate degrees, certificates, and other credentials also is developing. Beyond the job-growth figures from the Bureau of Labor Statistics outlined in Table 2, two recent reports (one from the National Association of Manufacturers (NAM) and the other from the Workforce Alliance) argue for the importance of high-tech skills among frontline workers in America's “forgotten” middle-skill jobs.¹¹ According to the NAM survey, 90 percent of respondents report moderate to severe shortages of qualified, skilled production employees. Today's skill shortages are “extremely broad and deep, cutting across industry sectors [with] a widespread impact

10. Travis Reindl (March 2007). *Hitting Home: Quality, Cost and Access Challenges Confronting Higher Education Today*. Boston: Jobs for the Future and Lumina Foundation. Reindl compares degree production for younger and older adults in member states of the Organization for Economic Co-operation and Development (OECD), including the United States.

11. See National Association of Manufacturers (2005). *2005 Skills Gap Report—A Survey of the American Manufacturing Workforce*. Washington, DC: National Association of Manufacturers; and also Harry J. Holzer and Robert I. Lerman (November 2007). *America's Forgotten Middle-Skill Jobs: Education and Training Requirements in the Next Decade and Beyond*. Washington, DC: Workforce Alliance.

on manufacturers' abilities to achieve production levels, increase productivity, and meet customer demands."

The Workforce Alliance report is equally sobering. It argues that the "demand to fill jobs in the middle of the labor market—those that require more than high school, but less than a four-year degree—will likely remain quite robust relative to supply, especially in key sectors of the economy." The jobs of interest and greatest growth are high-skill and likely to be concentrated in registered nursing (including nurses without a bachelor's degree), health technicians, emergency and health-diagnosing positions, construction occupations, respiratory, recreational and radiation therapists, and several blue-collar positions, including carpenters, heavy equipment maintenance workers, and heating and air-conditioning technicians.

Table 2

Projected Job Growth, 2004—2014, in Occupations with Largest Job Growth by Education Required

Occupation by Education	Job Growth to 2014	Percent Increase to 2014	Total by Education/ Training	Proportion by Education/ Training
Jobs Requiring Short-Term Training			4,406,000	49.8%
Jobs Requiring AA, AS, AAS, Certificate, or Medium-Term Training			2,691,000	30.57%
Registered Nurse	703,000	29.4%		8.0%
Heavy-truck Driver	223,000	12.9%		2.5%
Maintenance/Repair	202,000	15.2%		2.3%
Medical Assistant	202,000	52.1%		2.3%
Executive Secretary/Assistant	192,000	12.4%		2.2%
Sales Representative	187,000	12.9%		2.1%
Carpenter	186,000	13.8%		2.1%
Customer Service	471,000	22.8%		5.3%
Nursing Aide/Orderly	325,000	22.3%		3.7%
Jobs Requiring Bachelor's Degree			1,736,000	19.7%
Manager	308,000	17.0%		3.5%
Elementary Teacher	265,000	18.2%		3.0%
Accountant/Auditor	264,000	22.4%		3.0%
Computer Systems Analyst	153,000	31.4%		1.7%
Postsecondary Teacher	524,000	32.2%		6.0%
Software Engineer	222,000	48.4%		2.5%
GRAND TOTAL			8,833,000	100%

Source: Bureau of Labor Statistics. Authors' calculation. Retrieved July 5, 2007 from www.bls.gov/emp/emptab3.htm. BLS defines education and training demands "needed by most workers to become fully qualified."

In short, all of these lines of evidence point convincingly to education and training at the community college level as a key element in making sure that the U.S. fields a competitive economy, in which employers can count on the skilled workers they need, and that permits all Americans to share in the nation's prosperity.

Challenges to the American Middle Class and Social Mobility

Not only is the nation vulnerable, but so are individuals. A large body of emerging evidence suggests that the American middle class is in a lot of trouble and that social mobility has slowed to a crawl.¹²

The growing income gap between the wealthiest and poorest Americans and increasing pressure on the American middle class are cause for concern:

- Recent analyses of Congressional Budget Office data indicate that the top 10 percent of households received 46 percent of the nation's income in 2004. This large share is atypical, representing the biggest percentage of all but two of the prior 70 years. The top one percent of households received an astonishing 19.5 percent of the nation's income.
- The proverbial rising tide is not lifting all boats. According to a Goldman Sachs analysis, average income for the bottom 60 percent has been essentially stagnant since the 1990s.¹³
- Meanwhile, Princeton Economist Alan S. Blinder, a former member of the Council of Economic Advisers and an ardent defender of free trade, worries that the outsourcing of work by corporations headquartered in the United States potentially threatens up to 40 million American jobs.¹⁴
- A 2006 study of major metropolitan areas completed for the U.S. Conference of Mayors revealed a wage gap between the jobs lost through 2003 and those regained in 2004 and 2005. The average annual wage in the top 10 sectors that lost jobs was \$43,629, while the average annual wage in sectors that gained jobs was \$34,378, a decline of 21 percent.¹⁵

The painful domestic realities of globalization cannot be ignored or wished away. Trade among nations helps raise living standards abroad, a cause for celebration. It produces markets for American products, provides low-cost goods for American consumers, and has boosted the stock market, on which many Americans rely for their retirement security. But these undeniable benefits are accompanied by unhappy side effects. Globalization seems to threaten job security in the United States, thereby undermining public support for free trade. Health-care coverage and pension benefits are under siege. Unemployment insurance and income security for dislocated families require attention. And above all, efforts to provide education and training to help displaced workers develop new talents and skills should be a priority.

All of these powerful global forces fall with savage effect on those least equipped to deal with them, many of whom are low income, minority, or both. Students from poor neighborhoods (urban and rural) and students of color often come from communities with little history of college attendance. Yet low-income students can give themselves a measure of protection from the vagaries of global forces by enrolling and succeeding in community colleges. Data from the U.S. Census Bureau confirm common sense. A lifelong economic premium is attached to continuing one's education beyond high school. In 2005, finishing high school instead of dropping out (including receipt of a GED) added more than \$9,500 to average

12. See Greg Ip, "Income-Inequality Gap Widens," *Wall Street Journal*, October 12, 2007. Ip reports that the income gap between rich and poor has hit a post-World War II record, according to data from the Internal Revenue Service and may be the highest since the 1920s.

13. See Theresa Tritch, "The Rise of the Super-Rich," *New York Times*, July 19, 2006.

14. Alan S. Blinder, "Offshoring: The Next Industrial Revolution?" *Foreign Affairs*, March/April 2006.

15. U.S. Conference of Mayors (2006). *U.S. Metro Economies, 2004–2005*. Washington, DC: U.S. Conference of Mayors.

annual earnings for men and women aged 18 and over. Even simple college attendance (without attaining a degree of any kind) provided a handsome premium—about \$2,000 more each year, on average, above what a high school graduate earns. An associate degree permitted the community college graduate to almost double the average annual earnings of high school dropouts (\$37,990 compared to \$19,915). With receipt of a bachelor's degree, average annual earnings soared to more than \$54,600 according to the Census Bureau.¹⁶ The annual differences in some ways understate the lifetime impact of degree attainment. Over a 40-year working lifetime, a high school graduate can expect to earn, on average, a little more than \$1,100,000; his or her more fortunate peer with a community college degree outpaces them with earnings of \$1,519,000 over 40 years. It can be the difference between life lived at the edges while worrying about paying bills and a more comfortable lifestyle with the promise of being able to educate one's children.¹⁷

The conclusions are self-evident. Community colleges can be a powerful tool helping American communities absorb the shocks that globalization administers. For individuals, particularly those from low-income or minority backgrounds, community colleges can open the door to opportunity through the surest route to personal security and income growth, an associate or a bachelor's degree.

Dramatic Demographic Change

Three substantive demographic developments, with enormous implications for education, are reshaping the population of the United States:

- The aging of America.
- The changing face of young America.
- New life cycles and patterns among young adults.

A century ago, average life expectancy in the United States was less than 50 years; today people expect to live well into their 80s. Hardly any aspect of national life will be left unshaken by the effects of this historic shift. With more leisure time, many more older Americans can take advantage of opportunities to study, reflect, and travel. In this “aging population,” many Americans will require more health care—probably much more expensive health care. At the same time, as the population of retirees grows, younger workers will come under increasing strain to maintain the Social Security system that places a safety net, in the form of income security and medical care, under Americans in their golden years.

Meanwhile, the face of young America is changing dramatically. Demographic projections from the Western Interstate Commission for Higher Education (WICHE) indicate that the number of high school graduates in the United States will grow by 15 percent between 2000 and 2020.¹⁸ Much of that growth will represent students of color.¹⁹ The number of white

16. U.S. Department of Commerce, Bureau of the Census, “Earnings Gap Highlighted by Census Bureau Data on Educational Attainment.” Press Release, March 15, 2007. Retrieved November 28, 2007, from <http://www.census.gov/Press-Release/www/releases/archives/education/009749.html>. Within press release on Web site. See also Table 9, entitled “Educational Attainment in the United States, 2006,” for a detailed breakdown of mean annual earnings by educational attainment.

17. For a more extensive discussion regarding the benefits of higher education, see Sandy Baum and Jennifer Ma (2007). *Education Pays: The Benefits of Higher Education for Individuals and Society*. New York: The College Board.

18. Western Interstate Commission for Higher Education (2003). *Knocking at the College Door: Projections of High School Graduates by State, Income, and Race/Ethnicity*. Boulder, CO: Western Interstate Commission for Higher Education.

19. Wayne Locust, “The Demographics: Who’s in the Cohort?” Presentation to the College Board’s Task Force on Admissions in the 21st Century, New York, NY, June 1, 2007.

students is expected to decline by about 15 percent, while the number of African American and Native American students will grow by 8 percent and 50 percent, respectively. The number of Asian American high school graduates will double, while the number of Hispanic graduates will explode by 170 percent. The population demographics around which higher education organized itself in the past are changing before our eyes, a situation likely to challenge traditional ways of thinking but also likely to offer great opportunities for institutions alert to respond to it.

Finally, the traditional pattern, in which young adults first completed their education and then launched a career, is rapidly becoming the exception rather than the norm. The “traditional” college student—under 24 years of age, attending school full-time, living on campus, and completing a degree in four years—is already a minority on campus. Across two- and four-year colleges, most students today are nontraditional in some way. They delay enrollment; they attend part-time; they are parents; they work either full- or part-time; they drop in and out of school; and they typically take six years or more to attain a baccalaureate. Traditionalists may decry some of these changes, but the reality is that the rigid separation of schooling, jobs, and “real life” that once characterized education and the world of work has rapidly become a dated notion.

In all of these areas—an aging America, a younger and more ethnically diverse America, and an America experimenting with new ways of making the transition from school to work and youth to adulthood—community colleges are uniquely equipped to lead the national response.

Rebuilding School and Community Capacity

In the opening paragraph of this report, the National Commission on Community Colleges noted that community colleges are the crossroads where K–12 schools meet higher education and that these two-year institutions offer new Americans the tools to navigate our national life. The Commission is deeply committed to both propositions.

As the lowest-priced institutions of higher education in the United States, community colleges are obvious staging grounds for trying to close many of the gaps in American life. They can contribute to closing the student achievement gap between white and minority students in K–12 education. As open door institutions, they can close the gap between the school preparation expected for a college degree and the skills and competence with which many students leave Grade 12 (see The “Open Door” to the Community College). They can close the gap between the immigrant promise and the immigrant experience by integrating new Americans into our national life. And, by providing the first two years of college education at affordable rates, they can help close the growing gap between the resources available to large numbers of low-income students and the burgeoning costs of college attendance.

Community colleges, in brief, can be sound and effective mediators between the worlds of K–12 and four-year institutions. They can reach into K–12 with their teaching capacity to help improve student preparation. Many community colleges are already doing so, with programs such as *Running Start* in the State of Washington, which provides college classes and joint high school and college credits to high school students (and gives teachers a college teaching experience). And they can extend into the four-year realm, both to help

The “Open Door” to the Community College

One way to illustrate how community colleges are committed to access is to imagine that each student has a key to the campus marked “demonstrated achievement.” Any student approaching the community college will find the main door open. The key is not required.

But the student who wants to earn a bachelor’s degree ultimately has to open the door marked College Transfer. That door requires the key, in the form of high school prerequisites in math, language, and science. If the student’s key will not open the College Transfer door, he or she can look around for other doors. One might be marked “Short Term Education” and aim at immediate employment. That door probably opens right away.

Alternatively, the student can find the door marked “Developmental and Pre-College Courses.” Like the main door, no key is required to open this door. After completing developmental courses, the student will probably have the key to open the College Transfer door.

“Access” and “open door” do not mean that anyone can enter any program without regard to prerequisites. It means that options are available in the effort to help community colleges fulfill their commitment to access and equity.

Adapted from: *The Community College Story* (3rd ed.), by George B. Vaughan, 2006.

improve preparation and to provide the general education foundation required for any college degree.

The Commission does not pretend that meeting these promises will be easy. The chapter that follows outlines some of the roadblocks along the way, but there is no doubt that, in the effort to align high school and collegiate curricula and experiences, community colleges are the logical place to start. Community colleges truly are the crossroads at which K–12 and higher education come together.

They are also skilled community builders. They are often the conveners of local community life. Their flexibility and agility in responding to the needs of local employers are well-known. Fully 95 percent of the employers who have hired two-year college graduates recommend community college workforce and training programs.²⁰ And these colleges are energetically integrating first-generation college attendees and immigrants into our communities: 39 percent of community college enrollment is made up of first-generation college students; and nearly one community college student in ten is not an American citizen.

Great Challenges and Great Possibilities

Now is not the time for Americans to falter in the face of the challenges before them. The issues described in this chapter pale in comparison to the challenges the United States has overcome in the past and the great achievements made possible when a challenge was met by determination.

The four “megatrends” outlined above are, it is true, reshaping the United States. Still, there is every reason to be confident as Americans look ahead. Difficult and demanding days lie before us, but Americans have succeeded before, and so we shall again. But if we are to do so, a level-headed examination of the pitfalls that lie between where community colleges find themselves today and the Commission’s vision of the future is imperative.

20. American Association of Community Colleges. See “CC Stats Home” at <http://www2.aacc.nche.edu/research/index.htm>.

Chapter 2

Obstacles to the Vision

Substantively, four serious obstacles stand between where we are today and the capacity of community colleges to fulfill their promise. Several of the obstacles are policy issues, principally around finances; the National Commission on Community Colleges urges governments and other entities to secure the resources to deal with them. Several are issues internal to community colleges and higher education; the Commission challenges the higher education community to respond.

The four issues are:

- rising costs;
- the mismatch between demands and resources;
- a culture that emphasizes access more than success; and
- the challenge of monitoring outcomes.

Rising Costs

While not as dramatic as at public and private four-year institutions, tuition and fees at community colleges have increased steadily since the early 1990s. The last 20 years have also witnessed serious erosion in public financial support for community colleges. In fiscal 1981, state appropriations accounted for almost half of community college revenue; today it has declined to 38 percent.²¹ Table 3 displays current sources of revenue for public community colleges:

Table 3

Revenue Sources of Public Community Colleges

State funds	38%
Tuition and fees	20%
Local funds	19%
Federal funds	7%
Other	16%

Source: American Association of Community Colleges, 2007 (www.aacc.nche.edu/).

The combination of local funds and tuition and fees now exceeds state contributions; it is also significant that tuition and fees now outweigh local funds in supporting community college operations. Federal support for general revenue is quite modest (just 7 percent),

21. Thomas Bailey and Vanessa Smith Morest (2006). *Defending the Community College Equity Agenda*. Baltimore: The Johns Hopkins University Press.

while other sources of revenue (principally development and contract income) provide almost as much as local government.

The pattern of spending for higher education in recent decades has shown that when state budgets have tightened, higher education inevitably suffered. Spending on colleges and universities is typically seen as more “optional” than spending on elementary and secondary education, prisons, state security, and road maintenance. In this situation, community colleges, which receive a larger share of their budgets from public sources than four-year public institutions, suffer disproportionately. Moreover, given their significant commitment to developmental education—an effort rarely funded by states at levels sufficient to support the full scope of this enterprise—community colleges often find themselves in a deficit before the first student is enrolled.

Community colleges are often quite rightly viewed by policymakers and the public as the “least expensive” solution to a variety of troubling issues in higher education, particularly issues of access and equity. But without proper support, community colleges struggle to meet the nation’s needs.

Given the characteristics of students that most community colleges serve—many of them low-income, minority, first-generation, immigrant, and working part-time—even modest fee increases pose painful obstacles to potential and current students. Moreover, when local economies suffer downturns, community college enrollments go up as the unemployed seek new skills. Another potentially serious downside exists as well: as average annual tuition, fees, and room and board at private institutions exceed \$32,000 annually (with total costs in excess of \$50,000 annually at the most selective private institutions), and while average, in-state costs at four-year public institutions total more than \$13,500, savvy middle- and upper-income students can crowd lower-income students out of public community college classrooms, where annual tuition and fees average just \$2,361.²²

As tempting as policymakers find it to close budget holes by encouraging community colleges to raise tuition and fees (while costs for books, materials, and computer supplies escalate), the temptation flies in the face of the mission policymakers have assigned to these institutions.

Mismatch Between Demands and Resources

The second challenge is intimately related to the first. A serious mismatch exists between what community colleges are asked to do and the resources provided to get the job done.

Community colleges are asked to bring students and adults who do not speak English into the economic mainstream. They are asked to provide basic skills and remedial instruction to high school graduates who arrive on campus without the prerequisites required for college-level study. They are expected to provide a variety of occupational programs tailored to the needs of local businesses, along with personal enrichment courses to enhance the quality of life of local citizens. And, of course, they are expected to provide transfer programs that will permit students to complete the first two years of college at less cost to themselves, their families, and the state.

22. Tuition and fee data are from College Board (2007). *Trends in College Pricing, 2007*. New York: The College Board.

Meanwhile, facilities on many campuses urgently require attention. Community colleges in most states depend on local revenues for facilities construction and maintenance. On occasion, bonds require supermajorities of 60 percent or more to pass, and community college issues are often in competition with equally compelling needs for K–12 facilities. In many communities and states, the classrooms, labs, and shops on two-year campuses are poorly designed for current needs, and institutions find themselves trying to teach tomorrow’s skills on yesterday’s equipment. On most campuses, some facilities are nearing the end of their useful life. Few states have dedicated capital resources to building, maintaining, and upgrading community college facilities, and even fewer federal resources have been devoted to this important need since the last great era of community college building in the 1960s and 1970s.

In many states, the decades-old agreement around community college support was simple: states paid instructional costs, including instructors’ salaries and benefits, and local taxpayers picked up the rest of the tab. But taxpayers have often capped assessments, and states have cut support. *Inside Higher Education* recently quoted Stephen Katsinas of the University of Alabama’s Education Policy Center: “Basically, the agreed-upon funding formula doesn’t necessarily work anymore in a lot of states. The governors and legislatures don’t remember them, they don’t understand them, and they don’t follow them.”²³

One of the things that has happened as tuition and fees increase is that community college leaders have sought to limit the size of the increases and the corresponding impact on low-income students by cutting expenses. Faculty and staff expenses have been reduced through programs of early retirement or reductions in force. The number of part-time and adjunct faculty employed has gone up in an effort to control costs. Hiring freezes, employee travel restrictions, elimination of programs, reducing the number of course sections, eliminating counseling—all of these strategies and others have been employed in the effort to balance budgets.

Each of them in the end is self-defeating. Public officials cannot have it both ways. They cannot, on the one hand, insist (correctly) that education is the key to the future and, on the other, starve higher education of the resources needed to realize that future. As one member of the Commission quipped, “Community colleges have done so much with so little for so long that legislators now think we can do almost anything with nothing!”

Emphasis on Access More Than Success

Beyond financial obstacles, the most significant challenge facing community colleges is a changing world in which their most attractive asset—the commitment to student access—must now be matched with a commitment to student success. When examining community college success in terms of student outcomes, the results are a mixed bag, with extremely positive findings in some areas matched by troubling data in others. There is no doubt about the large-scale success of the community college movement, as a movement. This report earlier noted how community colleges are responsible for enrolling large proportions of first responders, health-care workers, and students from ethnically and racially diverse backgrounds.

23. Elizabeth Redden, “When the Balance in Funding Suddenly Shifts,” *Inside Higher Education*, July 30, 2007. Retrieved from <http://insidehighered.com/news/2007/07/30/texas>.

Still, other recent efforts to account for outcomes provide more sobering reading:

- According to researchers at the Community College Research Center at Columbia University, nationally only about half of community college students complete a certificate or degree within eight years of their enrollment in college.²⁴
- While data show that community college students who transfer to four-year colleges and universities perform well compared to their peers who start college at four-year institutions, the number that successfully transfer falls far below what will be needed for the nation's workforce.²⁵
- Lumina Foundation research, drawing on several dozen community colleges across the country, indicates that only 29 percent of the students who attempted developmental math completed the course within three years. For developmental courses in English, the figure was 37 percent.²⁶
- The Lumina research also reveals that just 30 percent of those referred to introductory college English completed the course within three years. For introductory college math, the rate was about 20 percent.

Community college leaders argue that students enter their institutions for a variety of reasons and that “completion” cannot be measured in traditional ways. The multiple intentions of community college students—the search for basic skills, employment credentials, personal enrichment, transfer and nontransfer degrees—make the identification of appropriate completion measures extremely difficult.

It also needs to be said that the policy structure in place to finance higher education may unintentionally reinforce these dynamics. The financial rules of the game do not encourage completion. For example, the Indiana Commission for Higher Education recently issued a working paper suggesting that it would be wise to replace “the enrollment growth model with a course completion incentive. The goal of the incentive is to move emphasis away from simply filling seats to ensuring that students progress toward a degree.”²⁷

Moreover, community colleges are often evaluated using student completion measures that do not capture the myriad goals of their students, or by measures that they do not fully control. Transfer rates are a case in point. Not only is student transfer only one of several community college missions, it is, in fact, a partnership with four-year colleges and universities.²⁸

Nevertheless, while the Commission acknowledges the difficulty of identifying institution-specific completion measures appropriate to the needs of community colleges, creating such measures is essential to help students meet their education goals. There are, however, many examples of community college success. After carefully quantifying enrollment and success goals for its community colleges, Texas found its progress so encouraging that, in 2005, it was able to raise the bar for its goals to include awarding an additional 55,500

24. Bailey and Morest (2006), p. 3.

25. In a recent survey conducted by the Community College Survey of Student Engagement (CCSSE), about 71 percent of community college students list “transfer” as their first or second goal. (See CCSSE, *Act on Fact*, 2006.) But available evidence suggests the proportion succeeding is probably considerably lower.

26. Thomas Brock et al. (May 2007) *Building a Culture of Evidence for Community College Student Success: Early Progress in the Achieving a Dream Initiative*. New York: Teachers College.

27. Indiana Commission for Higher Education (2007). *Reaching Higher with College Completion* (Working Paper, August 15, 2007 draft). Indianapolis: Indiana Commission for Higher Education.

28. It is also worth noting that transfer rates are a problematic completion measure because many community college students never intend to transfer. In addition, there is no general agreement on how such a rate should be calculated. Depending on how the term is defined, transfer rates have been found to be as low as 5 percent and as high as 96 percent. See Stephen J. Handel (2007).

associate degrees by 2015.²⁹ When the University of California system accepted a partnership agreement with the state’s 109 community colleges, it succeeded, over a seven-year period, in increasing the numbers of transfer students from California community colleges by 33 percent.³⁰ Meanwhile, the Southern Regional Education Board points to work in Florida, North Carolina, Georgia, Virginia, Arkansas, and Maryland to illustrate how to improve transfer rates—the importance of articulation committees, core curricula, common course numbering systems, transfer guides, guarantees of transfer, and the like.³¹

The Challenge of Monitoring Outcomes

As the prior section revealed, it is not enough to get students in the door. Students need to be prepared for success in college, and they require assistance of various kinds if they are to succeed. One of the problems with an emphasis on access and with funding based on enrollment counts is that programs can operate in “silos.”³² Lacking an institutional imperative for completion, there is no need to connect credit and noncredit courses, certificate programs, and transfer programs. Divisions between these various programs can be maintained, and outcomes in the form of graduation, certificate receipt, or transfer may not necessarily receive a lot of attention.

That very realization helped drive the establishment of the *Achieving the Dream* initiative. The initiative has helped create a “culture of evidence” in an effort to encourage “data-based decision-making” at 83 pilot institutions in 15 states, institutions courageous enough to understand that they needed better ways of monitoring their own performance.³³

One of the findings from this initiative is especially instructive. Most community colleges experience difficulty monitoring and assessing their own processes. While they gather large amounts of data on students from enrollment forms, placement examinations and transcripts, there is little incentive (given enrollment-driven funding formulas) to examine whether students return in succeeding semesters or are accomplishing their academic goals in a timely way. The colleges in this initiative agreed to evaluate their data more closely to look at student outcomes.

Apart from these findings, several capacity issues also stand out. First, if colleges want to build a culture of evidence, their technology systems and institutional research capacity both need to be upgraded. Some of the colleges involved had computerized record systems designed for accounting purposes rather than student tracking, and they were unable to perform the data analysis required by the initiative in a timely way. About one-third of the colleges reported having insufficient institutional research capacity to support broad-based use of data for decision making.

Second, community college faculty and staff must embrace the sustained use of data to improve student outcomes. At many community colleges, this will require a fundamental

29. Texas Higher Education Coordinating Board (2000). *Closing the Gaps: The Texas Higher Education Plan*. Austin, TX: Texas Higher Education Coordinating Board. (Goals updated 2005.)

30. Stephen J. Handel, “Second Chance, Not Second Class: A Blueprint for Community College Transfer,” *Change: The Magazine of Higher Learning*, September/October, 2007.

31. Southern Regional Education Board (2006). *Clearing Paths to College Degrees: Transfer Policies in SREB States*. Atlanta: Southern Regional Education Board.

32. Thomas Bailey and Vanessa Smith Morest, “The Community College Equity Agenda in the Twenty-First Century: Moving from Access to Achievement.” In Bailey and Morest (2006).

33. See Appendix C for additional information about the *Achieving the Dream* initiative.

shift in how faculty and staff evaluate their successes and failures, especially given the fact that many faculty and staff members are unaccustomed to using data for this purpose. Although college presidents seem to strongly support these efforts, they report that some staff and faculty members feel the data will be used against them or are skeptical about the promise that it can help improve student success.

Of course, simply demanding data collection and analysis from community colleges will not miraculously improve outcomes. The need to build a culture of evidence in which faculty, staff, and administrators can have confidence is essential if institutions are to be able to monitor and improve their own performance.

Developing a Response

Those four challenges—rising costs, the mismatch between demands and resources, a culture that emphasizes access, and the challenges of monitoring community college processes and outcomes—frame the response required to make real the Commission’s vision of a vibrant and healthy community college sector responding to national needs. Implementing the vision requires a three-way agreement involving community colleges and leaders at the state and national level. In this new agreement—a new social contract—community college leaders should commit to an evidence-based culture and a system designed around student success, while public leaders commit themselves to making the investments required to implement that culture and secure the American future.

Chapter 3

Recommendations

The National Commission on Community Colleges calls for a new three-way social contract involving national leaders, state officials, and community colleges—an agreement designed to put community colleges at the forefront of the effort to enhance American communities and ensure national competitiveness.

All parties in this new effort must bring something to the table. The Commission asks federal officials to provide at least a portion of the financial support required to make universal access to two years of education beyond high school a reality. We ask that the President and Congress collaborate to enact a new Community College Competitiveness Act as the foundation of a commitment to two years of education beyond high school. State leaders must rededicate themselves to the state-local partnership on which an effective community college system depends. At the same time, community college leaders must mount an effort to reinvigorate the commitment of their institutions to access, success, and excellence. Our reach may exceed our grasp, at least initially, but the long-term goal should be universal student success.

I. Enact the Community College Competitiveness Act of 2008

THE COMMISSION RECOMMENDS *that Congress and the President cooperate to enact the Community College Competitiveness Act: federal legislation that will bring community colleges fully into the twenty-first century and allow them to respond to the challenges facing the nation's workforce.*

Federal officials once led the way in laying the groundwork for the expansion of community colleges through the recommendations of the 1948 Truman Commission, the 1963 Facilities Act, and the 1965 Higher Education Act (see History of the Community College Movement). The Commission asks that they do so again by enacting the Community College Competitiveness Act of 2008.

Major features of the Act should include:

- ***A statement that in an era of global competition, it is the policy of the United States government to encourage universal public education through at least 14 years of schooling as the minimum educational requirement.*** As the eighteenth century turned into the nineteenth, literacy skills in the United States required little more than the ability to write one's name and perhaps decipher a newspaper headline. As the nineteenth turned to the twentieth, most Americans were expected to complete elementary school. Following World War II, for the first time in American life, graduation from high school became a universal expectation.

The United States cannot succeed in the more competitive economic environment that the twenty-first century promises with educational expectations that were appropriate in the twentieth. We must lift our sights. The universal expectation today must be that

History of the Community College Movement

Significant Historical Events in the Development of the Public Community College

1862—Passage of the Morrill Act. The Morrill Act of 1862, often referred to as the Land Grant College Act, expanded access to public higher education—focusing on the agricultural and mechanical arts and sciences—for students previously excluded from higher education.

1901—Founding of Joliet Junior College in Illinois, the oldest public junior college in the country.

1904—The “Wisconsin Idea” advanced by the University of Wisconsin emphasized that the university was to assist the general public through extension services and assistance to the state government.

1907–1917—California authorized high schools to offer postgraduate courses, provided state and county support for junior college students, and provided for independent junior college districts that had their own boards, budgets, and procedures.

1944—Passage of the GI Bill of Rights broke down economic and social barriers to allow millions of Americans to attend college.

1947—The Truman Commission called for the establishment of a network of public community colleges that would charge little or no tuition, serve as comprehensive cultural and civic centers, and serve the area in which they were located.

1960–2005—Number of community colleges jumps from 412 to 1,186, aided by the federal Facilities Act of 1963 (which helped construct new campuses) and the Higher Education Act of 1965, and subsequent amendments, providing student financial aid.

2001—Centennial. Community colleges celebrate 100 years of service to the United States.

Source: *The Community College Story* (3rd ed.), by George B. Vaughan, 2006.

all young people should continue their formal education for at least two years after high school, enough time to earn a certificate, a technical diploma, or an associate degree or to transfer to a baccalaureate-granting institution. Such a statement would be a realistic acknowledgment of the new challenges facing the United States and its workforce.

- ***A new Department of Labor program centering on emerging workforce development needs in community colleges.*** A variety of programs in the U.S. Departments of Labor, Health and Human Services, and Education provide a range of workforce development, education, and training efforts (Workforce Investment Act; Adult Education; Career and Technical Education; Vocational Rehabilitation programs; Temporary Assistance for Needy Families; and the like.). These efforts provide for one-stop referral services, displaced worker assistance, literacy efforts, and employment training in schools and community colleges; sheltered workshops for adults with disabilities; and job training for adults on public assistance. Yet, as invaluable as these programs are, they cannot adequately respond to the global changes in employment described in this report without sufficient funding.

The Commission calls for a federal commitment to workforce development grounded in community colleges that is commensurate with the need to win the international skills race. We cannot succeed internationally without the human resources required in a global environment. In the employment areas anticipating the greatest job growth outlined in Chapter 2 (including biotechnology, nanotechnology, genetics, environmental engineering, energy, health care, and new manufacturing technologies), community colleges need to be one of the nation’s first lines of defense. The Commission believes a new Department of Labor program focused on these emerging workforce needs is a critical investment in restoring American competitiveness.

- ***Amendments to essential federal financial aid programs to help all students, especially those in community colleges.*** The Commission is concerned about completion rates of community college students as well as the colleges’ ability to accommodate the

educational needs of students from low-income backgrounds. In addition, part-time students, who vastly outnumber students enrolled full-time at community colleges, are rarely provided with federal financial support that might make their educational journey easier. Research indicates that a critical variable for degree completion is continuous enrollment, even if students complete only one or two courses per term.³⁴ Eligibility for financial aid may encourage part-time students to remain continuously enrolled.

Therefore, the Commission calls on Congress to amend Title IV of the Higher Education Act to:

- **Implement the recommendations of the Secretary of Education’s Commission on the Future of Higher Education by funding Pell Grants for community college students at 70 percent of the average cost of attending a public four-year institution of higher education.**³⁵ Pell Grants are among the most effective ways to help low-income students succeed in college. Recent research by the Lumina Foundation indicated that Pell Grants recipients were significantly more likely than nonrecipients to complete developmental and gatekeeper courses at *Achieving the Dream* colleges and also significantly more likely to earn credentials or to be in college in the third year.³⁶ Moreover, the Pell Grant program continues to serve the neediest students in the United States.³⁷ The Commission believes that increasing the size of Pell Grant awards may be the best way to help students getting in to and through two- and four-year institutions.
- **Support students enrolled for at least one-third of a full course load with all federal aid programs.** Currently, federal programs such as the Stafford Loan are not available to students enrolled less than half-time. Without financial support, many community college students must work full-time to fund their education. The existing provisions have the perverse effect of making college attendance and completion more difficult for students with the least resources.
- **Support for facilities construction and modernization.** The Community College Competitiveness Act should provide for a matching grant program to states to encourage facilities construction, remodeling, and modernization. The general idea would be a formula grant to states (based on population) to be matched by the state, and in turn by local communities, for capital projects such as buildings, remodeling, and upgrading of equipment and technological infrastructure.
- **Increase funds for guidance and counseling.** The most vulnerable members of community college student bodies—immigrants, non-English speakers, first-generation college students—are likely to find the range of educational options, academic prerequisites, and potential degree outcomes complicated and bewildering. Yet there are troubling reports that community colleges are often forced to choose between cutting back counseling or reducing course offerings. A formula grant program based on state population would require states and localities to match federal

34. Clifford Adelman (2007). *The Toolbox Revisited: Paths to Degree Completion from High School Through College*. Washington, DC: U.S. Department of Education.

35. In the past, Pell Grants have been awarded in a complex process that gauges students’ ability to pay against costs of attendance. One of the guiding principles of the Pell Grant program over the years has been its tuition sensitivity provisions, which originally limited the grants to 50 percent of the cost of attendance. The Commission applauds the new College Cost Reduction Act recently signed into law for taking steps in the right direction around student aid. It eliminated the Pell Grant tuition sensitivity provision, a rule that has deprived community college students from receiving larger grants.

36. Thomas Brock et al. (2007).

37. See Bryan J. Cook and Jacquelyn E. King (2007). *2007 Status Report on the Pell Grant Program*. Washington, DC: American Council on Education, p. 27.

funds to expand high school and community college guidance and counseling. Such a program can help ensure that high school guidance counselors receive professional development while building and maintaining essential guidance programs in community colleges themselves.

- **Commit to a culture of evidence.** The *Achieving the Dream* initiative described in Chapter 2 deserves emulation across the country (see also Appendix C). All of the elements of the three-way social contract are critical, but this one is particularly important. Unless institutions are able to develop and sustain the institutional data systems required to create a culture of evidence, they will experience great difficulty holding up their commitment to transform themselves into institutions emphasizing access, success, and excellence. Without these systems and training in the uses (and abuses) of data analysis, community colleges will not be able to monitor their own progress or assess outcomes.

Achieving the Dream has brought together the resources and developed the strategies and protocols to help community colleges create student success strategies and build a culture of evidence in which decisions are based on data about student achievement. Given the promise of this effort, the Commission recommends that Congress include in the Community College Competitiveness Act of 2008 an appropriation sufficient to bring this initiative to scale across the country.

II. States should live up to their responsibilities

THE COMMISSION RECOMMENDS *that governors and state legislative leaders work with community college leaders to shore up an inadequate system of community college finance, facilitate transfer in areas of critical national and state need, and align K–20 systems.*

Earlier in this document, the Commission pointed to shortcomings in state financing systems, a need to expand the production of both associate and bachelor's degrees in critical areas (such as STEM and teacher production), and mismatches between K–12 programs and higher education. More than 500,000 new postsecondary teachers will need to be produced in the next decade to meet national needs—needs made all the more compelling with the projected retirements of large numbers of current two- and four-year faculty.³⁸ None of these problems will be solved by commissions, by recommendations from blue-ribbon groups, or by the national government. Their resolution requires difficult and detailed work on the ground, by the institutions involved, and by local communities and states (which have the constitutional responsibility for providing education in the United States).

The Commission believes that community college leaders, state by state, should call on public officials to create working task forces to address these difficult challenges and implement policy and legislative solutions. In that respect, three areas appear to be critical:

- **Finances.** It seems clear that the original financial model is broken. While it is true that community colleges are a good value, their leverage will surely wane unless there

38. Data made available to the Commission from Pima Community College in Arizona indicate that 55 percent of Pima faculty (average age 59) will be eligible for retirement in 2008, a number that jumps to 67 percent in 2010, when the average age reaches 60. See Pima Community College, *Projected Faculty Retirements*. (PowerPoint presentation to the Board of Governors on October 9, 2007).

are financing systems in place to assure sustained investment. Now is the time for states to take up this issue, involve local community leadership in the discussion, and suggest new possibilities for sufficient, sustainable funding.

- **Transfer.** As this document makes clear, the number of baccalaureate-level graduates needed by the nation in science, technology, engineering, and mathematics (STEM) and elementary and secondary education will rise to the millions in the decade ahead. Closely linked is the nation's need to close the baccalaureate completion gap, a persistent equity imbalance in which low-income, African American, Native American, and Hispanic students earn four-year degrees at much lower rates. As noted in a recent report by Jobs for the Future: "The United States needs to increase its production of postsecondary education degrees *and* reduce gaps in achievement among racial and socioeconomic groups. Otherwise, the country will not be able to meet workforce needs, maintain international economic competitiveness, and improve the quality of life for all Americans."³⁹

One of the most productive ways to address our workforce and equity needs, at both the state and national levels, would be to expand opportunities for community colleges to provide the first two years of undergraduate work, with the understanding that properly qualified students with associate degrees can transfer to four-year campuses with status as juniors. Community colleges are already the higher education institution of first choice for many students who are members of groups that have been historically underrepresented in higher education.

It is the Commission's belief that the goal of producing more (and better) four-year graduates in these fields can be advanced through an unprecedented partnership involving community colleges and four-year colleges and universities. Over the past century, community colleges have prepared millions of students for transfer to a four-year college or university. It is one of the cornerstones of the two-year college mission that should be drawn on to meet national needs.

This enhanced partnership should include an expanded effort to improve articulation between two- and four-year institutions so as to strengthen the transfer pathway and expand access to the baccalaureate degree. The Commission believes that statewide agreements on acceptable programs of study that qualify students for junior standing on transfer should be developed by the faculty. Such agreements can encourage degree completion.

- **K-20 Alignment.** States should encourage community colleges to work both with schools and four-year institutions to improve curriculum alignment. They can work with four-year campuses to improve articulation agreements providing for relative ease of transfer and with K-12 systems to improve preparation, offer dual enrollment systems, and expand promising models for student academic advancement, such as the Gates Foundation "middle college high school" initiative.

A key issue with regard to alignment is that at the K-12 level many low-income and minority students are mobile. They move around a great deal, from school to school, district to district, and even state to state. Standards and requirements in schools, districts, and states vary widely. While the Commission recognizes that this is a difficult issue with complex practical, governmental, and constitutional ramifications,

39. Reindl (2007), p.1.

it also believes that the development of common curriculum standards would be helpful and that schools, districts, and states could voluntarily subscribe to them.

While the above three-part agenda for states is ambitious, the Commission does not hesitate to put it forward. States are much more intimately involved with financing community colleges than the federal government, and the success of these institutions depends on the willingness of legislators and governors to advocate strenuously for their needs.

The Commission notes that a variety of entities, among them the National Governors Association, the National Conference of State Legislatures, the Education Commission of the States, the U.S. Chamber of Commerce, the National Association of Manufacturers, and the Business-Higher Education Forum, have all been key stakeholders in the effort to reshape American education. The Commission hopes that each of them places the role of community colleges in economic development and state and national competitiveness high on the agendas of their national meetings. This includes efforts to re-examine funding mechanisms, to work with community college leaders to explore funding possibilities based on additional metrics beyond enrollment (see Recommendation III), and to help develop cultures of evidence on community college campuses as advocated by the *Achieving the Dream* initiative.

III. Community Colleges should recommit themselves to access, success, accountability, and excellence.

THE COMMISSION RECOMMENDS *that two-year college leaders develop new accountability measures that better assess the unique and varied missions of their institutions; respond to national goals for associate and bachelor's degree production; and commit themselves once again to the expectation of universal student access and success.*

The contributions of community colleges to their communities—their productivity in addressing student needs and goals, community service, contributions to higher education, and their influence as engines of workforce development—are difficult to document. The effort to do so is hampered by a lack of appropriate accountability metrics and by the use of traditional metrics that mirror the aims, aspirations, and cultures of four-year institutions.

- ***Developing New Metrics for Community Colleges.*** Measuring productivity within community colleges is difficult— but not because these colleges are unproductive. Indeed many community and business leaders applaud the colleges for their productivity, nimbleness, and ability to turn on a dime. The challenge is that most accepted measures of academic productivity do not apply to complex, open-access institutions with multiple missions. The “drive-through” nature of community colleges—anathema to many in traditional higher education—is nonetheless a significant part of the appeal and immense popularity of community colleges.

The Commission believes that community college leaders, working with national community college organizations, such as the American Association of Community Colleges and the Association of Community College Trustees, and with groups having expertise in assessment, should develop a multiyear working group to explore questions such as:

- How do we define the value of workforce development and how do we measure it?
- How do we define the role of the community colleges in responding to local corporate needs? What value do we place on that? How do we measure it?
- How do we value, define, and measure the role of developmental education?
- How can we create a metric to assess the productivity of institutions in meeting the needs of students who come to college unprepared?
- How do we measure community colleges' roles as community conveners?
- What is the appropriate base for assessing student transfer rates and how do we go about doing it properly?
- What is the responsibility of community colleges to provide programming designed to improve the quality of life for local citizens? And how do we put a value on that?

All of these questions point to fundamental issues that are important to community colleges, the students they serve, higher education, and the public that foots the bill.

- ***Meeting National Goals for Associate and Bachelor's Degree Attainment.*** Community colleges are pivotal institutions in the nation's quest to win the skills race. What we need to do is clear enough. According to a report by Jobs for the Future, to meet critical workforce needs and maintain a global economic presence, the United States must increase production of all types of postsecondary degrees by 37 percent over and above current rates. Associate degrees must increase by 25.1 percent and bachelor's degrees by 19.6 percent.⁴⁰ Moreover, this rate can be achieved only if we are successful in increasing degree production for students from racial and socioeconomic groups that have been underrepresented in higher education.

Community colleges are the primary institutions offering the associate degree. They play a critical and increasingly important role in baccalaureate production via transfer. And they have always been especially welcoming to students from racial and socioeconomic groups whose enhanced performance in earning degrees will be essential to winning the skills race. Community college presidents and chancellors should assume a leadership position in identifying effective ways of responding to the national demand for the increased output of degrees.

What Will These Redesigned Community Colleges Look Like?

The Commission is convinced that community college operating assumptions must be strengthened and supplemented, and in some cases transformed, if the expectation of universal success is to be met. The characteristics of community colleges in this new vision will include the following:

- ***They will continue to be open access, but strive to increase completion rates.*** The Commission has no desire to change the historic commitment of community colleges to open access and second chances, but increasing completion rates is essential.

40. Reindl (2007), p. 2 (see Figure 1).

- ***They will continue to offer multiple educational options.*** The Commission is convinced that one of the great strengths of community colleges lies in the way the colleges meet the diverse goals and objectives of their students. This commitment to program diversity and flexibility in adjusting program options should continue.
- ***They will establish new partnerships with the local business community.*** Redesigned community colleges will continue to welcome business interest in their offerings while also reminding the business community that it needs to be part of the solutions proposed in this document. American corporations cannot get better education and training services more inexpensively than through community colleges. A renewed community college system will seek new partnerships—or extend already established partnerships—with the business community
- ***They will be committed to a “culture of evidence.”*** The Commission applauds the groundbreaking work of the funders, partners, and community colleges participating in *Achieving the Dream*. Here is an area in which community colleges are blazing a trail for the rest of higher education. As Recommendation I makes clear, the Commission is convinced that it is time to bring this powerful model to national scale.
- ***They will continually reflect on and improve their policies and practices.*** A transformed community college does not avoid risks. It experiments relentlessly. It is a place where challenges are viewed as a step on the road to success because continuous improvement is the goal. When grounded in a culture of evidence, policies and practices can be reviewed, modified, and improved on an ongoing basis.

Conclusion

A Crusade Against Ignorance

Higher education in America is many things. It is 14.5 million undergraduate students and 3.2 million professors, administrators, and employees toiling on their behalf.⁴¹ It is research breaking new ground in medicine, increasing the nation's wealth, and improving the quality of American life. It is public service putting knowledge into practice across the length and breadth of the United States. It is nearly 1,200 community colleges preparing adults of all ages for life, learning, and citizenship. Like beacons, American institutions of higher education throw off light in many directions.

That light is reflected with special brilliance when it falls on the students enrolled in community colleges, often the first in their families to complete secondary school or progress beyond it. In recent years, American leaders have become preoccupied with markets, bottom lines, and international competition. But citizens know that the meaning of America to the rest of the world must surely be something greater than balance sheets, profit margins, and shareholder value. Thomas Jefferson was certainly correct when he called for a crusade against ignorance as the best protection for a democracy, writing that, "No other sure foundation can be devised for the preservation of freedom and happiness."⁴² Confronted by ignorance and its companions —poverty, illiteracy, intolerance, and injustice—the people of the United States have always put their faith in education. That faith has sustained free inquiry, free expression, free men and women, the dignity of the individual, and access to opportunity. Wherever a community college or university is located, it shines as a symbol of the American people's respect for the best that is in them: a beacon offering safe passage to freedom through knowledge and wisdom.

41. See Phillippe and Sullivan (2005), pp. 38–39 (Table 2.7) for data on students and U.S. Department of Education, *Digest of Education Statistics 2005*, Chapter 3-A, Table 222 for faculty and staff data. Retrieved on December 10, 2007, from http://nces.ed.gov/programs/digest/d05/tables/dt05_222.asp?referrer=list.

42. Thomas Jefferson (1786/1984). *Writings*. Washington, DC: The Library of America.

Appendix A

Commission Charge

National Commission on Community Colleges

Community colleges play an indispensable role in American education, and it is certain that their importance will increase in the years and decades ahead. The data are compelling and unambiguous: More than 46 percent of those who attend higher education are enrolled in two-year institutions—an increase of 18 percent over the last decade. Yet community colleges have not always been at the center of national debates about the future of education. If the United States is to achieve its goals, both in terms of quality and equality, community colleges must play a central role in the development and implementation of national educational solutions.

The National Commission on Community Colleges will develop a report that documents the critical role that community colleges play in American education and will make recommendations on how the influence of these institutions can be expanded to respond to the challenges facing the nation.

Appendix B

Acknowledgments

The members of the National Commission on Community Colleges want to express their appreciation to a number of people whose assistance made this report possible.

Our first acknowledgment goes to the College Board and its Center for Innovative Thought for establishing the Commission. College Board president Gaston Caperton and College Board Professor and Senior Advisor Gene Budig were tireless in their support of this effort.

We want to note also the leadership of Augustine Gallego, chancellor emeritus of the San Diego Community College District and chairman of the Commission. Augie provided exemplary direction to our work with his commitment to making sure all points of view were heard and considered.

Our staff support was outstanding. Stephen Handel, senior director of the College Board's National Office of Community College Initiatives, was indefatigable in tracking down information, writing background papers and briefs, and keeping us on task. He was ably helped by Nereida Moya and Anna Cody who took care of the administrative details involved with a complicated project such as the Commission.

We are grateful for the outstanding presentations we received at our meeting from George R. Boggs, president and chief executive officer of the American Association of Community Colleges (AACC), C. Peter Magrath, president emeritus of the National Association of State Universities and Land-Grant Colleges and senior presidential advisor to the College Board, and J. Noah Brown, president and CEO of the Association of Community College Trustees. The College Board's Community College Advisory Panel participated at one of the Commission's meetings and provided ongoing counsel throughout the Commission's tenure.

A number of people outside the Commission reviewed earlier drafts of our report and offered suggestions and support. We want to thank them. George Boggs of AACC read multiple drafts of the report and provided valuable insights. In addition, we appreciate the careful readings and suggestions we received from Peter Burnham, president of Brookdale Community College and chair of the Middle States Commission on Higher Education, J. Noah Brown of ACCT, Eduardo Padrón, president of Miami-Dade College, Judith Eaton, president of the Council for Higher Education Accreditation, Belle Wheelan, president of the Commission on Colleges, Southern Association of Colleges and Schools, and Tom Rudin, James Montoya, Alan Heaps, and Sandra Riley of the College Board. Sandy Baum, professor of economics at Skidmore College and senior policy analyst at the College Board, provided valuable guidance on financial aid issues. We also shared our plans with community college presidents and educational leaders in Arizona, California, Connecticut, Florida, Iowa, Illinois, Oklahoma, Oregon, Massachusetts, Minnesota, Missouri, New York,

North Carolina, and South Carolina, as well as our colleagues at the League for Innovation in the Community College, the Community College Leadership Program at The University of Texas at Austin, and the RC 2000 Association. Even if we did not always follow the advice we received, we were always informed by these conversations and reviews, and our colleagues bear no responsibility for any errors or omissions in this report.

Finally, James Harvey of Harvey Associates, Seattle, Washington, assisted with drafting this report. The College Board's Marketing and Publication Services unit carefully edited, fact-checked, and designed the document. We appreciate their help.

Appendix C

The Achieving the Dream Initiative

(Adapted from *Fact Sheet: The Achieving the Dream Initiative*⁴³)

Achieving the Dream is a multiyear national initiative to help more community college students succeed (earn degrees, earn certificates, or transfer to other institutions to continue their studies). The initiative is particularly concerned about student groups that have faced the most significant barriers to success, including low-income students and students of color.

Achieving the Dream works on multiple fronts, including efforts at participating colleges, research into effective practices at community colleges, public policy work, and outreach to communities, businesses, and the public.

Using Data to Drive Change

Achieving the Dream focuses colleges on understanding and making better use of data to improve student outcomes. Through *Achieving the Dream*, participating colleges assess what is happening on their campuses in an open, straightforward, and rigorous way, and then make lasting changes in their own practices and cultures. This work includes disaggregating student achievement data—breaking it down by race, age, and other demographic characteristics—to better understand and begin to close performance gaps. *Achieving the Dream* colleges also track cohorts of students over a period of time. This approach makes it possible to accurately assess students' progress and outcomes and to identify gaps in achievement.

Strategies for Improvement

In addition to evaluating their own student data, colleges gather input from their students, faculty, staff, and communities. They then adopt strategies for improvement based on these findings. Many colleges, for example, are putting a sharper focus on developmental education.

Research, Public Policy, and Public Support

Achieving the Dream participants are conducting research related to improving student outcomes at community colleges and are building public support for community college

43. Additional information can be found at http://www.achievingthedream.org/_images/_index03/FS-Dream.pdf.

access and success. In addition, *Achieving the Dream* participants are advocating public policies—such as policies to improve states’ capacities for collecting and analyzing student data and to make financial aid more accessible to part-time students—that may lead to higher student achievement.

National Partners

American Association of Community Colleges; College Spark Washington; Community College Leadership Program, University of Texas-Austin; Community College Research Center, Teachers College, Columbia University; The Heinz Endowments; Houston Endowment Inc.; Institute for Higher Education, University of Florida; Jobs for the Future; KnowledgeWorks Foundation; Lumina Foundation for Education; MDC; MDRC; Nellie Mae Education Foundation; Public Agenda.

References

- Achieving the Dream Initiative*. (2006). *Fact Sheet: The Achieving the Dream Initiative*. Retrieved on December 21, 2007, from http://www.achievingthedream.org/_images/_index03/FS-Dream.pdf.
- Adelman, Clifford. (2007). *The Toolbox Revisited: Paths to Degree Completion from High School Through College*. Washington, DC: U.S. Department of Education.
- American Association of Community Colleges. (2007). *Community College Research*. Washington, DC: American Association of Community Colleges. Retrieved December 9, 2007, from www.aacc.nche.edu/.
- Bailey, Thomas and Vanessa Smith Morest. (2006). *Defending the Community College Equity Agenda*. Baltimore: The Johns Hopkins University Press.
- Bailey, Thomas and Vanessa Smith Morest. (2006). "The Community College Equity Agenda in the Twenty-First Century: Moving from Access to Achievement." In T. Bailey and V. S. Morest (Eds.), *Defending the Community College Equity Agenda*, pp. 1–27. Baltimore: The Johns Hopkins University Press.
- Baum, Sandy and Jennifer Ma (2007). *Education Pays: The Benefits of Higher Education for Individuals and Society*. New York: The College Board.
- Blinder, A. S. (2006). "Offshoring: The Next Industrial Revolution?" *Foreign Affairs*, March/April. Retrieved on January 9, 2008, from <http://www.foreignaffairs.org/20060301faessay85209/alan-s-blinder/offshoring-the-next-industrial-revolution.html>.
- Brock, Thomas, et al. (2007). *Building a Culture of Evidence for Community College Student Success: Early Progress in the Achieving the Dream Initiative*. New York: MDR and Columbia University, Teachers College, Community College Research Center.
- College Board. (2007). *Trends in College Pricing, 2007*. New York: The College Board.
- College Board. (2007). *Destinations of Choice: A Re-Examination of Community Colleges in American Education*. San Jose: The College Board, National Office of Community College Initiatives. www.collegeboard.com/communitycolleges.
- College Board. (2006) *Teachers and the Uncertain American Future*. New York: The College Board, Center for Innovative Thought.
- Cook, Bryan J. and Jacquelyn E. King. (2007). *2007 Status Report on the Pell Grant Program*. Washington, DC: American Council on Education. Retrieved on December 13, 2007, from <http://www.acenet.edu>.
- Committee on Science, Engineering and Public Policy. (2007). *Rising Above the Gathering Storm: Energizing and Employing America for a Brighter Economic Future*. Washington, DC: National Academies Press.
- Community College Survey of Student Engagement. (2007). *Act on Fact: Using Data to Improve Student Success: 2006 Findings*. Austin: Community College Survey of Student Engagement.

- Handel, Stephen J. (2007). "Second Chance, Not Second Class: A Blueprint for Community College Transfer." *Change: The Magazine of Higher Learning*, September/October.
- Handel, Stephen, J. (2007). *It's Not a Math Problem: Why Focusing on Transfer Rates Diverts Us From Promoting Baccalaureate Completion for Community College Students*. (Working Paper #4). San Jose: The College Board, National Office of Community College Initiatives. www.collegeboard.com/communitycolleges.
- Hecker, Daniel E. (2005). "Occupational Employment Projections to 2014." *Monthly Labor Review Online*, November, Vol. 128, No. 11, pp. 70–101. Washington, DC: U.S. Department of Labor. Retrieved October 11, 2007, from www.bls.gov/opub/mlr/2005/11/contents.htm.
- Holzer, Harry J. and Robert I. Lerman. (2007). *America's Forgotten Middle-Skill Jobs: Education and Training Requirements in the Next Decade and Beyond*. Washington, DC: The Workforce Alliance.
- H.R. 2272: American COMPETES Act of 2007. Retrieved October 11, 2007, from <http://www.govtrack.us/congress/bill.xpd?bill=h110-2272>.
- Indiana Commission for Higher Education. (2007). *Reaching Higher with College Completion*. Indianapolis: Indiana Commission for Higher Education (Working Paper, August 15, 2007 Draft).
- Ip, Greg. (2007). "Income-Inequality Gap Widens," *Wall Street Journal*, October 12.
- Jefferson, Thomas. (1786/1984). *Writings*. Washington, DC: The Library of America.
- Locust, Wayne. (2007). "The Demographics: Who's in the Cohort?" Presentation to the College Board's Task Force on Admissions in the 21st Century, New York, NY, June 1, 2007.
- McPhee, Sara. (2006). *En Route to the Baccalaureate: Community College Student Outcomes*. Washington, DC: American Association of Community Colleges. Retrieved December 7, 2007, from http://www.aacc.nche.edu/Content/ContentGroups/Research_Briefs2/B_B_Brief_Final.pdf.
- National Association of Manufacturers. (2005). *2005 Skills Gap Report—A Survey of the American Manufacturing Workforce*. Washington: National Association of Manufacturers and Deloitte Development. Retrieved December 9, 2007, from http://www.nam.org/s_nam/bin.asp?CID=202426&DID=235731&DOC=FILE.PDF.
- Phillippe, Kent A. and Leila G. Sullivan. (2006). *National Profile of Community Colleges: Trends and Statistics* (4th ed.). Washington, DC: American Association of Community Colleges.
- Redden, Elizabeth. (2007). "When the Balance in Funding Suddenly Shifts." *Inside Higher Education*, July 30. Retrieved on December 10, 2007, from <http://insidehighered.com/news/2007/07/30/texas>.
- Reindl, Travis. (2007). *Hitting Home: Quality, Cost, and Access Challenges Confronting Higher Education Today*. Boston: Jobs for the Future and Lumina Foundation for Education. Retrieved December 9, 2007, from <http://www.jff.org/Documents/HittingHome.pdf>.

- Southern Regional Education Board. (2006). *Clearing Paths to College Degrees: Transfer Policies in SREB States*. Atlanta: Southern Regional Education Board. Retrieved December 9, 2007, from http://www.sreb.org/main/Goals/Publications/07E06_Clear_Paths.pdf.
- Texas Higher Education Coordinating Board. (2005). *Closing the Gaps: The Texas Higher Education Plan*. Austin, TX: Texas Higher Education Coordinating Board.
- Tritch, T. (2006). "The Rise of the Super-Rich," *New York Times*, July 19. Retrieved on January 9, 2008 from <http://www.truthout.org/cgi-bin/artman/exec/view.cgi/62/21309>.
- U.S. Conference of Mayors. *U.S. Metro Economies, 2004–2005*. Washington, DC: U.S. Conference of Mayors.
- U.S. Department of Commerce, Bureau of the Census. (2007). "Earnings Gap Highlighted by Census Bureau Data on Educational Attainment." Press Release, March 15, and Table 9 titled, Educational Attainment in the United States 2006. Retrieved November 28, 2007, from <http://www.census.gov/Press-Release/www/releases/archives/education/009749.html>.
- U. S. Department of Education. (2006). *A Test of Leadership: Charting the Future of Higher Education*. Washington, DC: U.S. Department of Education. Retrieved on December 14, 2007, from <http://www.ed.gov/about/bdscomm/list/hiedfuture/reports/pre-pub-report.pdf>.
- U.S. Department of Education. (2005). *Digest of Education Statistics 2005*. Washington, DC: U.S. Department of Education, National Center for Education Statistics. Retrieved on December 10, 2007, from http://nces.ed.gov/programs/digest/d05/tables/dt05_222.asp?referrer=list.
- U.S. Department of Education. (1999). *An Institutional Perspective on Students with Disabilities in Higher Education*. Washington, DC: U.S. Department of Education, National Center for Education Statistics (Table 4, p. 6). Retrieved December 10, 2007, from <http://nces.ed.gov/surveys/pubs99/1999045.pdf>.
- Vaughan, George B. (2006). *The Community College Story* (3rd ed.). Washington, DC: American Association of Community Colleges.
- Western Interstate Commission for Higher Education. (2003). *Knocking at the College Door: Projections of High School Graduates by State, Income, and Race/Ethnicity*. Boulder, CO: Western Interstate Commission for Higher Education.

Members of the Board of Trustees The College Board

Lester P. Monts, *Chair*, Senior Vice Provost for Academic Affairs, University of Michigan, Ann Arbor, Michigan

Youlonda Copeland-Morgan, *Vice Chair*, Former Vice President and Dean of Admission and Financial Aid, Harvey Mudd College, Claremont, California

Georgette R. DeVeres, *Past Chair*, Associate Vice President, Admission and Financial Aid, Claremont McKenna College, Claremont, California

J. David Armstrong Jr., President, Broward Community College, Fort Lauderdale, Florida

John A. Blackburn, Dean of Admission, University of Virginia, Charlottesville, Virginia

Peggy F. Cain, School Counselor, Andover High School, Andover, Massachusetts

Gaston Caperton, President, The College Board, New York, New York

Roderick G. W. Chu, Chancellor Emeritus, Ohio Board of Regents

Ferlin Clark, President, Diné College, Tsaile, Arizona

Suzanne Colligan, Director of College Counseling, Georgetown Visitation Preparatory School, Washington, District of Columbia

Madeleine R. Eagon Rhyneer, Vice President for Admission and Financial Aid, Willamette University, Salem, Oregon

Sheldon Ekland-Olson, Rapoport Centennial Professor of Liberal Arts and Director of Division of Statistics and Scientific Computing, University of Texas at Austin, Austin, Texas

JoAnn W. Haysbert, President, Langston University, Langston, Oklahoma

Donald M. Honeman, Associate Vice Chancellor for Enrollment Management, University of Massachusetts Dartmouth, North Dartmouth, Massachusetts

Evelyn Hu-DeHart, Professor of History and Ethnic Studies and Director, Center for the Study of Race and Ethnicity, Brown University, Providence, Rhode Island

Allison G. Jones, Assistant Vice Chancellor, Academic Affairs and Student Academic Support, California State University, Long Beach, California

Jerome A. Lucido, Vice Provost for Enrollment Policy and Management, University of Southern California, Los Angeles, California

Michael E. Malone, Professor of Education Leadership, Jacksonville State University, Jacksonville, Alabama

Peggy O'Neill Skinner, Science Department Head, The Bush School, Seattle, Washington

Shirley A. Ort, Associate Provost and Director of Scholarships and Student Aid, University of North Carolina at Chapel Hill, Chapel Hill, North Carolina

Raymund Paredes, Commissioner of Higher Education, Texas Higher Education Coordinating Board, Austin, Texas

Lisa Quiroz, Senior Vice President, Corporate Responsibility, Time Warner, New York, New York

Beverly A. Richardson, Vice President of College Advancement/Provost for the James Kerney Campus, Mercer County Community College, Trenton, New Jersey

Michael N. Riley, Superintendent, Bellevue School District #405, Bellevue, Washington

Susan M. Rusk, Counselor Coordinator, Washoe County School District, Reno, Nevada

Judy K. Sakaki, Vice President of Student Affairs, University of California, Oakland, California

Donald A. Saleh, Vice President for Enrollment Management, Syracuse University, Syracuse, New York

Morton O. Schapiro, President, Williams College, Williamstown, Massachusetts

Paul W. Sechrist, President, Oklahoma City Community College, Oklahoma City, Oklahoma

Joellen L. Silberman, Vice President for Enrollment, Kalamazoo College, Kalamazoo, Michigan

Robert J. Weintraub, Headmaster, Brookline High School, Brookline, Massachusetts



CollegeBoard

connect to college success™