

The background of the cover features a warm, orange-toned photograph of a wooden desk. A green desk lamp is positioned in the upper left, casting a soft glow. In the center, a stack of several books is visible, with a black graduation cap resting on top. The entire scene is framed by a decorative, repeating geometric border.

A Deficit of Understanding

*Confronting the Funding Crisis
in Higher Education and
the Threat to Low-Income
and Minority Access*

*Eduardo J. Padrón, Ph.D.
President, Miami Dade College*

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Miami Dade College (MDC) is the largest institution of higher education in America.

MDC has the highest enrollment of Hispanics and the second highest enrollment of African-Americans of any college or university in the nation.

Executive Summary

Higher education in America is in financial crisis. Soaring college costs and major cutbacks in financial aid have had a disproportionate impact on low-income and minority students. The effects are sustained by a still questionable economy, tax policy that has shrunk state revenues, and the real costs of fighting a war.

Higher-education enrollment has surged in the past five years. Unlike a traditional business that benefits from economies of scale, colleges and universities find few opportunities to cut costs without affecting quality. Generous interaction between students and faculty remains a cornerstone of learning.

For Hispanics, quality educational opportunities are critical. As the nation's largest minority and by far the fastest growing segment of the American population, only education will open the door to full participation in the country's economic and civic life.

Increasing Costs

Public four-year costs rose over 14 percent last year. Tuition and fees rose in every state, and for the ten-year period ending in 2003-04, those costs rose 47 percent at public four-year schools.

Increasing college costs have a severe effect on low-income students and families. Compared to the 47 percent increase in costs, personal incomes have risen only 10 percent. Published charges at public four-year colleges registered an astronomical 71 percent of a low-income family's earnings, compared to 5 and 19 percent for upper- and middle-income families respectively. Up to 25 percent of academically qualified low-income students no longer even apply to college.

States in Crisis

The recent history of state funding to higher education reveals cracks in the foundation of support. While most states generated increased revenues throughout the 1990s, higher education did not compete successfully with other elements of state funding. In the recent recession, states followed a traditional pattern of cutting education budgets, the largest discretionary item, and raising tuition.

Overall state funding to higher education increased by 1.2 percent, the smallest increase in a decade. In the two states with the most Hispanics, California and Texas, funding rose but one percent. Appropriations actually decreased in 14 states. Projections indicate that state funding for higher education would need to increase annually by six percent to maintain current service levels.

A Deficit of Understanding

Each new student adds to the cost of higher education's learning enterprise. Mushrooming operational costs, largely beyond the control of the institutions, add to the debt burden. Beset by shrinking revenues and higher costs, some in Congress have urged higher education to function more like a business. Such a business-like approach would alter the mission of the institutions. They would offer fewer courses, close departments, eliminate remedial programs, cut back on support services like counseling, and hire more adjunct instructors in place of full-time professors.

K-12 Feels the Pressure

The states' and the nation's fiscal woes affect K-12 and the lives of young people both in and out of school. State education policy is characterized today by high-stakes testing, adopted in over half the states. Proponents hail accountability and cite higher achievement as evidenced by generally rising test scores. Other decry the "one-size-fits-all" nature of the tests, and their unfair assessment of minorities, particularly Hispanics.

The testing movement has generated unintended consequences. With added pressure to perform, school personnel increasingly counsel low-performing students to leave high school in favor of G.E.D. and adult-education programs. Several public school systems across the country, including New York City and Houston, have discovered that students who are "pushed out" are classified under bureaucratic categories that hide their failure to graduate.

Hispanics and Access to Higher Education

Trends indicate significant increases in America's Hispanic population, now the largest minority in the country. Of the 5.6 million additional school children in the U.S. by 2025, 5.2 million – 93 percent – are projected to be Hispanic. A turnaround in Hispanic access to higher education is urgent.

Despite the increase in population, Hispanic enrollment in college is not keeping pace with the increase of college-age Hispanics or with the other main population groups. In 2000, 22 percent of Hispanics between 18 and 24 enrolled in college, compared to 31 percent and 39 percent of African-Americans and whites, respectively.

For Hispanics, lack of success in K-12, English deficiencies, cultural expectations, and a lack of effective interventions contribute to a smaller presence in higher education. Hispanic high school graduation rates are significantly lower, and drop-out rates significantly higher, than their white and African-American peers. Hispanics do not benefit from a history or culture of success in education; more than 40 percent of Hispanics in college are the first in their families to attend. Income levels add to the stress; 23 percent of Hispanics and 30 percent of Hispanic children live in poverty. For every \$1,000 increase in annual tuition, 6 to 8 percent of the Hispanic population loses access to higher education.

Financial Aid and the Illusion of Access for Low-Income Students

Student aid was designed to ensure that low-income students had the opportunity, equal to their high-income peers, to attend college. That understanding has eroded as grants have been replaced largely with loans and tax credits at the federal level, and merit-based aid has lessened the influence of financial-need criteria. Through 1995, high-income families received a 62 percent increase in access to federal monies, compared to 22 percent for middle-income families and 16 percent for low-income families.

Since the early 1970s, the cost of paying for public college, as a percentage of family income, has risen for low-income families from 42 percent to 71 percent, as opposed to a constant 19 percent and 5 percent for middle- and upper-income families, respectively. Low-income students face an annual short-fall of \$3,200 for public two-year and \$3,800 for public four-year institutions; high-income families confront unmet need of just \$400. Students from the richest 25 percent of households are seven times more likely to earn a college degree than students from the poorest families.

Declining Strength of the Pell Grant

Though the Pell Grant's overall disbursements have reached an all-time high of \$11.7 billion, its purchasing power has declined dramatically. A quarter century ago, Pell maximum awards covered 84 percent of public four-year costs; in 1999-2000, maximum awards covered only 39 percent of costs.

Research indicates that unmet financial need prevented 400,000 academically qualified high school graduates of low- and moderate-family income from attending a four-year college within two years of graduation. One hundred sixty-eight thousand were unable to attend any college at all. If the same levels of unmet need persist through the year 2010, over two million college-qualified students will be unable to afford college at the time of graduation.

A New Horizon . . . Or a Worsening Storm?

Congress is considering the reauthorization of the Higher Education Act (HEA), the source for \$60 billion dollars in federally-funded student financial assistance programs. The best likelihood of additional funding is an increase in the loan ceiling, which has remained virtually constant since 1972 although costs have ballooned by about 900 percent in all sectors of higher education. Many in Congress would rather the government exit the loan business. But when federally funded loans fall short, students turn to lending sources that invariably charge higher rates. Raising the loan ceiling helps, but still poses drawbacks for low-income students.

The HEA reauthorization will address funding for more than 240 Hispanic-Serving Institutions (HSI), accounting for 45 percent of the nearly 1.4 million Hispanics in college today. The need to open the doors of higher education to the immense number of young Hispanics is obvious. HSIs will need a significant infusion of federal funds in a relatively short time if they are to provide sufficient access. It appears, however, based on preliminary budget proposals, that the 2004 HEA will provide incremental relief at best.

Higher education is the cornerstone of democracy. Yet, in the world's richest democracy, college is increasingly inaccessible to the poorer people in American society. The opportunity to learn must be protected and the solutions do exist: raised Pell maximums, increased state funding, new tax policy and revenue streams and greater accountability for all sectors of education. Much more can and should be considered.

The challenge is not only one of equity and quality of life, but one with enormous economic and political impact. It is perilous for a nation, any nation, to forego the talents of large numbers of young people. This failure reverberates throughout the political, economic, and social environment.

When it comes to financing American higher education, many observers fear we are courting the perfect storm.

For Hispanics, only education will open the door to full participation in the country's economic and civic life.

Living in South Florida, one becomes familiar with the warning signals of approaching storms. Brilliant skies and a Spring-like breeze may mask more ominous signs. The thick, sudden stillness and the unusually dark horizon wrench you back to the reality of hurricane season.

What season it really is when it comes to financing American higher education is the matter of some debate. Record-setting financial aid allocations and record numbers of college students suggest balmy weather. But a glance at the horizon will bring you up short. In fact, the gale is approaching on several fronts, and many observers fear we are courting something akin to the perfect storm.

Students and families are buffeted by soaring college costs and major cutbacks in financial aid. And it appears that the effects will be sustained by a struggling economy and tax policy that have shrunk state revenues by billions of dollars. Across the country, states are experiencing the worst fiscal crisis since World War II. In addition, the real costs of fighting a war are being increasingly felt, particularly in the depletion of social programs.

For Hispanics, quality educational opportunities are critical. As the nation's largest minority and by far the fastest growing segment of the American population, only education will open the door to full participation in the country's economic and civic life. As the storm gathers force, however, it threatens those who are most vulnerable.

The combination of factors weighs heaviest on low-income students and families, including the 38% percent of Hispanics who are low-income or living beneath the poverty threshold (U.S. Census 2000). Today, Hispanics account for 18 percent of the college-age population but only 9.5 percent of college enrollment. As well, an overwhelming percentage of the nation's children will be Hispanic in the next two decades. At stake is the long-term viability of a social compact to provide low-income students with access to higher education that has served aspiring college students for over 50 years.

Increasing Costs

Higher tuition and fees reflect several trends. First and foremost, rising college costs are a direct consequence of decreased or slow growth in state appropriations. States are hard pressed to maintain support for higher education, especially in periods of economic decline, and colleges have little recourse but to pass on the cost of operations to the student.

Ironically, for colleges and universities these appear to be prosperous times, and indeed they are when it comes to enrollment. Record numbers of baby boomer offspring, immigrants and minorities, and a recession-era workforce looking to upgrade skills are bursting the capacity of many college classrooms. Enrollment is up by 20 to 40 percent over the past three years at most public institutions. At Miami Dade College, now the largest college in the nation, enrollment has risen by 39 percent in the last three years.

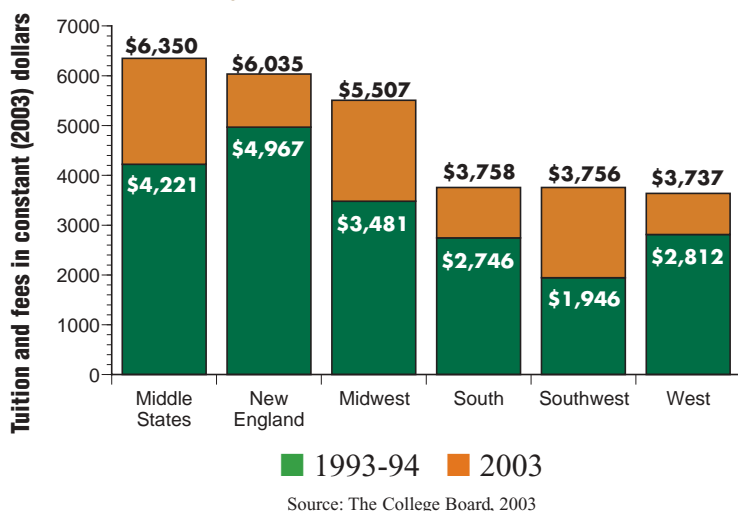
But higher education costs are enrollment-driven and labor intensive, meaning that costs rise with additional learners. Unlike a traditional business that benefits from economies of scale, a learning enterprise offers few opportunities to cut costs without affecting the quality of teaching and learning. Generous interaction between faculty and students is required. Maintaining low student-teacher ratios and providing the necessary support is expensive.

Trends in College Pricing, released in 2003 by the College Board, reports dramatic increases in the cost of attending both public and private institutions. Surveying 2,800 post-secondary institutions nationwide, the report found average increases at two- and four-year schools as follows:

- **Public four-year:** an increase of 14.1 percent for tuition and fees (\$4,115 to \$4,694) and an overall 9.8 percent increase when room and board are included; total average costs are \$10,636;
- **Public two-year:** an increase of 13.8 percent for tuition and fees (\$1,674 to \$1,905); and
- **Private four-year:** an increase of 6 percent for tuition and fees (\$18,596 to \$19,710) and an overall increase of 5.7 percent when room and board are included; total average costs are \$26,854 (College Board 2003).

On average, the study found that public colleges receive approximately one third of their funding from state governments, and the higher percentage of cost increases reflect the decline from that source. The past year's increase is the highest in over three decades. It follows an 8 percent growth rate from the previous year, a figure that had been the highest in the past twenty years. For the ten-year period ending in 2003-04, tuition and fees rose 47 percent at public four-year colleges and universities.

Four-year Public Institutions



Tuition and fees at two-year institutions remained far more constant over the decade, rising at an inflation-adjusted 22 percent. But the previous year's increase was very high by historical standards, reflecting the loss of state funding that is, in many cases, more severe than the decrease at four-year public colleges. As the educational stepchildren of most state systems, community colleges fight an uphill battle for their fair share of funding.

For private institutions, the level of increase is not extraordinary but for the first time since 1984-86, the rate of increase has been sustained for three years running. Overall, tuition and fees at four-year public colleges rose in every state last year. Sixteen states pressed increases beyond 10 percent. Increases were as high as 24 percent in Massachusetts; 20 percent in Texas, Missouri, and Iowa; 19 percent in North Carolina; and 17 percent in Ohio. No region was exempt. All but two states saw tuition and fees raised for community colleges, with 10 states registering increases of more than 10 percent (Trombley 2003).

Increasing college costs have a disproportionate impact on low-income students and families. Compared to the 47 percent increase in public four-year education costs over the past ten years, personal incomes have risen just 10 percent. It follows that the published charges at public four-year colleges represented an astronomical

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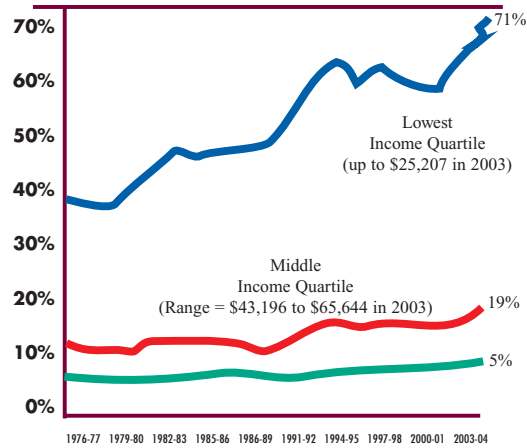
71 percent of a low-income family's earnings. The previous high had been 64 percent, which had held steady since 1993. Compare that to a consistent 5 percent and 19 percent for upper- and middle-income families respectively (College Board 2003).

“If economic growth is slower than normal, if states continue to cut taxes, or if states increase spending in areas outside of higher education, then the outlook for support of higher education will be even worse.”

National Center for Public Policy and Higher Education, February, 2000

State funding for higher education increased by a mere 1.2 percent, the smallest increase in a decade.

Total Charges at Public Four-Year Institutions as a Share of Family Income, 1976-77 to 2003-04
(Enrollment weighted)



Note: Total charges included tuition and fees plus room and board; income data ranges are based on 2001 figures updated using changes in the CPI. Source: Annual survey of Colleges. The College Board, New York, NY; Pre 1987 tuition data are from Integrated Postsecondary Education Data System (IPEDS), U.S. Department of Education, National Center for Education Statistics; income data from the U.S. Department of Commerce, Bureau of Labor Statistics.

Faced with this inordinate level of cost burden, up to 25 percent of low-income students with qualifying grades and entry test scores no longer even apply to college, as stated in an editorial, *The New York Times*, 29 October 2003. The ultimate damage will be an upsurge in the well-known cycle of poverty that straps untold numbers of poor youth to dead-end, dispiriting employment. The economy, too, is denied thousands of much needed, qualified workers for emerging industries.

States in Crisis

The recent history of state funding for higher education reveals long-standing cracks in the foundation of support. While almost every state saw increased revenues throughout the nineties, the percentage increases in higher education were smaller than the percentage increases in total state budgets. Higher education was not competing successfully with other elements of state funding. Higher education's share of the overall pie was getting smaller, both nationally and in most states. However, the size of the pie had increased significantly and did provide additional revenues for higher education, masking the reality that in most states the share continued to shrink (Hovey 2000).

From the perspective of the prosperous nineties, it was possible to forecast hard times ahead for higher-education funding. Even without a major economic downturn, it was predicted that close to 80 percent of states would show gaps between the cost of merely maintaining existing public services and the revenues expected under the prevailing tax policy. Again, a robust national economy masked the structural deficit between funding necessary services and fact-based revenue projections.

Needless to say, the economic downturn greatly exacerbated the dilemma. The report of the National Center for Public Policy and Higher Education in February 2000 was prophetic: “If economic growth is slower than normal, if states continue to cut taxes, or if states increase spending in areas outside of higher education, then the outlook for support of higher education will be even worse” (Hovey 2000).

The decline in state funding confronting higher education follows a long-standing pattern. Recessions often catch state governments off guard, with their budgets significantly out of balance. In response, states tend to cut higher-education spending more severely than other programs as higher education represents the largest discretionary spending item in state budgets. For the past quarter of a century, the patterned response has also included raising tuition (Hovey 2000).

The prosperity of the nineties was characteristically followed by a recession. True to form, state spending for public colleges and universities dropped sharply last year. The National Center for Public Policy and Higher Education reports that state funding for higher education, measured in current dollars, increased by a mere 1.2 percent, a sharp decline from the previous year’s 3.5 percent and the smallest increase in a decade. In the two states with the most Hispanic residents, California and Texas, education funding rose but 1 percent. Appropriations actually decreased in 14 states, with the largest decline being 11 percent in Oregon. Given the enrollment increases and the ever-increasing cost of doing business, the National Center projects that state funding for higher education would need to increase annually by 6 percent merely to maintain current service levels.

Several examples of the states’ struggles demonstrate the extent of the problem. In Massachusetts, despite the huge tuition increase, the University of Massachusetts’ flagship campus at Amherst has engaged in a familiar austerity routine. The University reduced the incoming class by 1,000 students, denied salary increases across the board, and eliminated seven athletic teams. Beyond the obvious drawbacks, such measures have a deadening impact on morale and creativity, as each new proposal meets a fiscal roadblock.

California’s case is the most striking, albeit heightened by a dramatic energy crisis that sapped the state’s revenue coffers. Nonetheless, the approach typifies the dearth of possibilities within the present mindset. Then-Governor Davis parlayed a \$304 million cutback to the 23-campus Cal State system with the promise of a \$150 million increase the following year. Instead, Governor Schwarzenegger arrived determined to cut state spending. His proposed budget raises costs for all sectors of higher education, and will scale back the entering classes in the University and Cal State systems by 10 percent, or 7,000 qualified students, as reported by Peter Y. Hong, in *The Los Angeles Times*, 7 March 2004. The plan, reflective of the tangled troubles of states and higher education, would interrupt a 40-year commitment to California’s graduating high school seniors – the top eighth would have a place in the University of California, the top third at Cal State. The Governor’s plan refers these students to community colleges, with an offer of free tuition for two years

The Governor’s faith in community colleges should be applauded. But like community college systems across the country, it is short-changed relative to four-year schools. According to Community College Chancellor Mark Drummond’s recent testimony at the State Capitol, “for every dollar that community colleges receive from the state, CSU receives \$1.83 and UC \$3.62.” He also noted that a tuition increase from \$11 to \$26 per credit would damage seriously the aspirations of many poor students in the state. Ranking 45th in state spending for community colleges, community college officials estimated one year ago that close to 100,000

Given enrollment increases and the higher cost for doing business, state funding for higher education will need to increase annually by 6 percent, merely to maintain current service levels.

students – conservatively - would be denied access pending the tuition increases. A third or more will be Hispanic.

California’s predicament typifies the assault on the quality and availability of higher education across the country. “We’re facing a train wreck,” said David W. Breneman, economist and Dean of the University of Virginia’s Curry School of Education, as cited by Rhonda Rundle and Jim Carlton, Wall Street Journal, 28 August 2003. “We’re going to lose a significant part of the next generation. I don’t know what those folks will do other than very low-wage grunt work.”

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Florida also joins the list of states struggling to fund the state system adequately. Still reeling from economic blows inflicted by 9/11, Florida’s tax revenues lag and any movement toward new revenue streams is consistently thwarted. The education system remains one of the lowest in the nation in funding and, again the community college system bears the heaviest brunt. Miami Dade College’s 2003-04 allocation reflected a significant reduction, following two years of severe under-funding as enrollment grew by over 20 percent. The state has been unable to provide any support for this growth, amounting to over \$64 million in lost funding to the College. Funding per full-time equivalent student has plummeted 25 percent in two years. Governor Bush, however, is a strong supporter of the community college system, and along with key legislators has moved to restore a significant portion of the lost revenues.

Given the overall fiscal condition of the states, a marked improvement in funding is very unlikely in the foreseeable future. State revenue collections continue to drag, showing lower-than-budgeted collections in sales and personal and corporate income taxes. On the expense side, a record 37 states cut their already-passed budgets by nearly \$12.6 billion in 2002. The pattern continued in 2003 when 37 states again cut their existing budgets, this time by \$14.5 billion, the largest cuts in the history of The Fiscal Survey of the States (National Governors Association 2003).

A Deficit of Understanding

Though critics call it disingenuous and political posturing, Congress and state legislators decry the higher tuition and fees. As part of the upcoming Higher Education Act reauthorization, members of the House Education Committee recently proposed a bill that would cut federal financing to colleges whose tuition hikes are more than double the rate of inflation or the consumer price index.

The proposal met strong resistance and the penalty aspect was removed. But placing the blame on higher education represents a failure to acknowledge the larger problem. As noted earlier, higher education is a product much in demand, as evidenced by dramatic increases in enrollment across the nation. But as demand rises, government support has been withdrawn and each new student adds to the debt burden. Moreover, costs that are largely beyond the institution’s control continue to rise: union contracts, utility and insurance rates, maintenance of overused physical plants, and the enormous costs of educational and administrative technology, to name a few.

The aforementioned bill suggested that higher education is not accountable enough to the consumers, and refers to “wasteful spending.” The Congressional authors made a general call for efficiencies that suggest that higher education should behave more like a business.

If a business were beset by rising costs and diminished revenues, management would eliminate the least profitable enterprises, downsize the workforce, and raise prices to the point the market would bear. For higher education, such a business-

Placing the blame on higher education represents a failure to acknowledge the larger problem.

like approach would mean offering fewer courses, closing departments, eliminating remedial programs, cutting back on support services like advisement, and hiring more adjunct instructors in place of full-time professors. As Stanley Fish, Dean of the College of Liberal Arts and Sciences at the University of Illinois at Chicago, observed in a recent New York Times column, members of Congress and state legislatures and the consumers – parents and students – would scream foul. “That’s not what we’re paying for,” they would complain, but of course, as Fish noted, that would be exactly what they were willing to pay for.

K-12 Feels the Pressure

Unfortunately, the fallout from the states’ and the nation’s fiscal woes is not limited to higher education. K-12 and the lives of young people both in and, ultimately, out of school are being affected. Under the rubric of greater accountability for schools, national and state education policy is today characterized by high-stakes testing. In well over half the states, stringent exams, emphasized throughout the school year, define individual student and school performance. The use of testing spurs a complex debate. Proponents hail the accountability measures as responsible for higher standards and achievement, evidenced in part by generally rising test scores. Those who question the merits of the tests criticize their “one-size-fits-all” nature and cite data demonstrating that minorities, particularly Hispanics, are assessed unfairly via standardized tests. They complain that over-reliance on standardized tests frustrates the training teachers receive to address individual needs and learning styles.

The No Child Left Behind Act also has generated strong reactions in school systems across the country. An alliance of bipartisan Oklahoma legislators urged Congress to repeal the law that implements No Child Left Behind, while Utah lawmakers spoke of abandoning the program. One or both legislative bodies in 12 states have joined a widespread outcry against the President’s plan, which they see as a cumbersome federal intrusion on local schools, according to a report by Sam Dillon, in *The New York Times*, 8 March 2004.

The standards and assessment debate will undoubtedly rage on but a growing stock of evidence highlights the unintended consequences of the testing movement. With the pressure to perform, school personnel increasingly counsel low-performing students to leave high school in favor of G.E.D. and adult education programs. Many do leave but never enroll in the alternative programs. Not surprisingly, the impact is most decided with struggling students from low-income minority homes. As Tamar Lewin and Jennifer Medina reported, *The New York Times*, 31 July 2003, the students who are “pushed out” of the New York City public schools are classified under bureaucratic categories that hide their failure to graduate, rather than tarnish a given school’s statistics. Critics suggest that dropout rates, now hovering at 20 percent, would increase by 5 to 10 percent if the “push-outs” were included.

Lewin and Medina also noted that a similar problem dogs the Houston school system. A state audit found that in some schools more than half of the students discharged should have been classified as dropouts. Other states are uncovering similar problems as school and district personnel respond to these increased pressures.

Statistics from the city of Chicago suggest that these policies are feeding an already deep-rooted problem. Citing a report from Northeastern University’s Center for Labor Market Studies, Bob Herbert, *The New York Times*, 20 October 2003, reported 22 percent of all residents between the ages of 16 and 24 are both out of school and out of work. The figure climbs to 26 percent when ages 20 to 24

Twenty-two percent of all Chicago residents between 16 and 24 are both out of school and out of work; for African-American men between 20 and 24, the rate is 45 percent.

“Failure to complete high school is almost equivalent to economic suicide.”

*Neeta Fogg, Senior Economist,
Center for Labor Market Studies,
Northeastern University*

At a time when young people should be building a foundation for their lives, this group is disconnecting.

An additional one million Hispanic students would be enrolled in college if the rate matched that of white students.

are considered. African-American men between 20 and 24 are out of school and work at a dreadful rate: 45 percent. Overall, 100,000 in Chicago are in this circumstance; 5.5 million nationwide. “Failure to complete high school is almost equivalent to economic suicide” noted Dr. Neeta P. Fogg, a senior economist at the Center for Labor Market Studies and co-author of a study on education and the youth labor market in Illinois. Young people who leave school are not welcomed by the job market. From 1973 to 1998, the average hourly wage for high school dropouts fell 31 percent, adjusting for inflation (Mishel, Bernstein, and Boushey 2003). The Center for Labor Market Studies called 2002 the “worst job market for teens in 37 years.” At a time when young people should be building a foundation for their lives, this group is disconnecting. The difficulties these young people face can only expand to confront society as a whole.

Hispanics and Access to Higher Education

As the number of Hispanics in America continues to rise, the impact of the funding crisis on them will be all the more exaggerated. From 1990 to 2000, the Hispanic population in the United States increased by 44 percent. The increase far surpassed the overall population growth of 10 percent and is expected to continue into this century. Now the largest minority in the country, Hispanics number 35 million, or 12.5 percent of the general population according to the 2000 Census. An increase of 15 percent is projected by 2015.

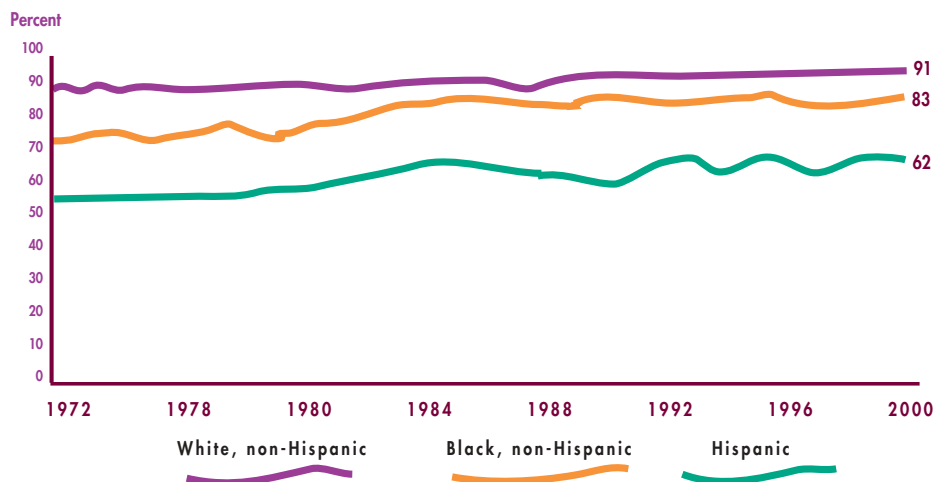
The median age of Hispanics is 26.6 years, compared to a median of 35.8 for the total population. The Hispanic median will become even younger. Of the additional 5.6 million school children living in the U.S. by 2025, 5.2 million — a startling 93 percent — will be Hispanic, according to the U.S. Census. As indicated earlier, Hispanics account for 18 percent of the college-age population, but only 9.5 percent of college enrollment. A turnaround in access is urgent if the youthful generations of Hispanics are to have an opportunity at prosperity.

Despite the significant rise in population and the abundance of college-age youth, the percentage of Hispanics enrolling in college has increased only slightly, neither keeping up with the overall increase of college-age Hispanics, nor matching the increase for the other two main population groups. From 1980 to 2000, Hispanic enrollment of 18- to 24-year-olds increased from 16 percent to 22 percent (National Center for Education Statistics 2003). By contrast, African-Americans’ rate of enrollment increased from 19 percent to 31 percent, and the largest increase was for non-Hispanic whites whose percentage rose from 25 percent to 39 percent during the same period. Thirty-six percent of Hispanic high school graduates enroll in college, also trailing African-Americans (39 percent) and whites (44 percent). When the real numbers are calculated, an additional half-million Hispanics would be in college if they attended at the same rate as African-Americans; an additional one million Hispanic students would be enrolled if the rate matched that of white students. Instead, the gap between whites and Hispanics widened from 9 to 17 percent during the period in question (Hispanic Association of Colleges and Universities 2000).

The reasons Hispanics trail in critical educational analyses are deep-rooted. They span a range of factors that include a lack of success in K-12, English deficiencies, cultural expectations, and a lack of effective interventions. In 2000, 62 percent of Hispanic high school seniors graduated, compared to 83 percent of African-Americans and 91 percent of whites. The dropout rate for Hispanics was also extreme at 28 percent, relative to African-Americans (13 percent) and whites (8 percent). The relatively low high school completion rate for Hispanics, as well as lower college enrollment, is influenced by the weaker performance of

immigrants, whose numbers continue to rise. In fact, a greater percentage of Hispanics completed high school in 1984 (63.7 percent) than in 2000. During the same period, percentages for African-Americans and whites rose between 2 and 4 percent.

High School Completion Rates



Source: U.S. Department of Education, NCES, 2001

Two-fifths of Hispanic adults over 25 have not graduated high school; one fourth have less than a ninth grade education.

The gaps in participation and success in education are not surprising given Hispanics' vulnerability to well-known risk factors. Despite a growing recognition by Hispanic parents of the importance of higher education, too few can counsel from experience. More than 40 percent of Hispanics in college are the first in their families to attend. As well, an inordinate number of siblings have dropped out of high school. More than two fifths of Hispanic adults over 25 have not graduated high school, and more than one fourth have less than a ninth-grade education (Schmidt 2003).

Income levels and often poverty add additional stress. Almost 23 percent of Hispanics live in poverty, about the same percentage as African-Americans, and well beyond the 7.7 percent of whites. Worse, 30 percent of Hispanic children make the poverty rolls, compared to 9.4 percent of white children. Perhaps most important, the schools that most poor Hispanic children and teenagers attend lack for a range of resources, from technology to experienced teachers and principals to advanced placement courses. Hispanic students are less likely than their white peers to take the rigorous science and math courses that prepare students for college. "A robust curriculum is the single greatest predictor of college success," states Paul Ruiz, a chief researcher for the Education Trust (Schmidt 2003).

Strong family ties are standard in many Hispanic cultures, particularly among immigrants. While higher education is valued today, there is distinct conflict for many young Hispanics, especially in low-income homes. Children often live at home past high school and lend financial support. A considerably smaller number than their white peers go away to college, most attending two-year schools and working at least part time. The combination of all these factors takes a toll, and significantly more Hispanics fall away at every juncture in the education pipeline than white students. Hispanics earn only 6.2 percent of all bachelor's degrees, rising from just 2.3 percent in 1980. Journeying further becomes less likely: Hispanics hold 4 percent of doctoral degrees and account for only 2.9 percent of all full-time faculty and 3.2 percent of college administrators.

"A robust curriculum is the single greatest predictor of college success."

*Paul Ruiz,
The Education Trust*

For Hispanics, the road to college is obviously fraught with difficulty long before they encounter the present tuition and funding pressures. But clearly, tuition hikes are likely to increase the gaps noted above all the more. The Educational Testing Service, in a report submitted to Congress in 2000, estimated that for every \$1,000 increase in tuition, 6 to 8 percent of the Hispanic population loses access to higher education (Carnevale 2000). This is an alarming projection. The report also noted the importance of Pell Grants to poor Hispanics and the disproportionate impact on Hispanics of the failure to invest adequately in Pell.

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Financial Aid and the Illusion of Access for Low-Income Students

Across the nation, the number of college-age students will rise by about 15% in the next ten years. The nation's higher education institutions will be looking at 3.7 million more college students by 2015. Eighty-five percent of this increase will be minority students and about half of these will be from low-income homes. Yet another generation of poor and minority youth risks losing the chance of a higher education and finding itself consigned to the bottom rungs of society.

Student aid, whether federal or state, was originally about access. Access is simple: it is meant to ensure that low-income students have the opportunity, equal to their higher-income peers, to continue into post-secondary education. This includes entry to a four-year institution or a two-year community college, with the chance to transfer or enter the workforce directly. The government's role has been to support this objective, particularly at publicly funded institutions.

Today, at federal and state levels, that understanding has eroded. Merit-based aid has lessened the influence of financial-need criteria. Grants have been replaced with loans and tax credits at the federal level. Grade point averages and SAT scores have gained leverage over family income. Obviously, high standards of performance are to be encouraged, but merit dollars and loans come at the expense of need-based funding.

For Hispanics, both trends have negative implications for college attendance. Relatively poor and wary of shouldering increased debt, increasing numbers are forced into an unwelcoming job market to support their families. Reliance on standardized testing has also reduced access, given that Hispanics score 9 percent to 11 percent lower than white students on college-entrance exams.

Since the late 1980s, most federal aid has shifted from grants to subsidized loans and tax credits. Not surprisingly, the affluent have gained disproportionately. Through 1995, high-income families (above \$75,000 per year) received a 62% increase, compared to 22% for middle-income families (\$25,000-75,000 yearly) and 16% for low-income families (below \$25,000 per year) (Pugh 2000). It follows that college participation of students from families earning below \$25,000 per year remains 32% below students from homes with family income over \$75,000. This is the same disparity that existed over thirty years ago. Low-income students attend college at half the rate of their high-income peers, despite comparable qualifications (Advisory Committee on Student Financial Assistance 2001).

The College Board reports, in Trends in Student Aid 2003, that students received a record \$105 billion in financial aid for undergraduate and graduate study in 2002-03. That figure represents an increase of 12 percent after adjusting for inflation. Grants and loans per full-time equivalent student (FTE) rose 67 percent and 147 percent, respectively, during the past decade (College Board 2003).

But a decreasing percentage of federal aid is distributed according to need. Furthermore, loans increasingly dominate the available support, amounting to 69 percent of total federal aid today, up from 47 percent in 1992. The advent of tax

Student aid, whether federal or state, was originally about ensuring access for low-income students. That understanding has eroded.

credits has not helped, for this approach, like Stafford and other federal loan programs, is not targeted to low-income students. About a third of the tax credit dollars accrue to taxpayers with incomes of \$60,000 or higher; less than half go to those with incomes below \$40,000. Most low-income families (below \$25,000) do not qualify at all because they pay no income taxes. Those who do receive a Pell Grant face reduced eligibility for tax credits and, in some cases, lose it altogether. (Advisory Committee on Student Financial Assistance 2001). College savings plans are, likewise, attractive to middle- and upper-income families but serve a disproportionately small percentage of low-income families.

It comes as no surprise that since the early 1970s, the cost of paying for public college attendance, as a percentage of family income, has grown from 42 percent (Advisory Committee on Student Financial Assistance 2001) to 71 percent for low-income families (College Board 2003). As indicated earlier, the same percentage cost factor has remained virtually constant for middle- and upper-income families, resting today at 19 percent and 5 percent respectively. Today, students from the richest 25 percent of households are nearly seven times more likely to earn a college degree than students from the poorest families (Advisory Committee on Student Financial Assistance 2001).

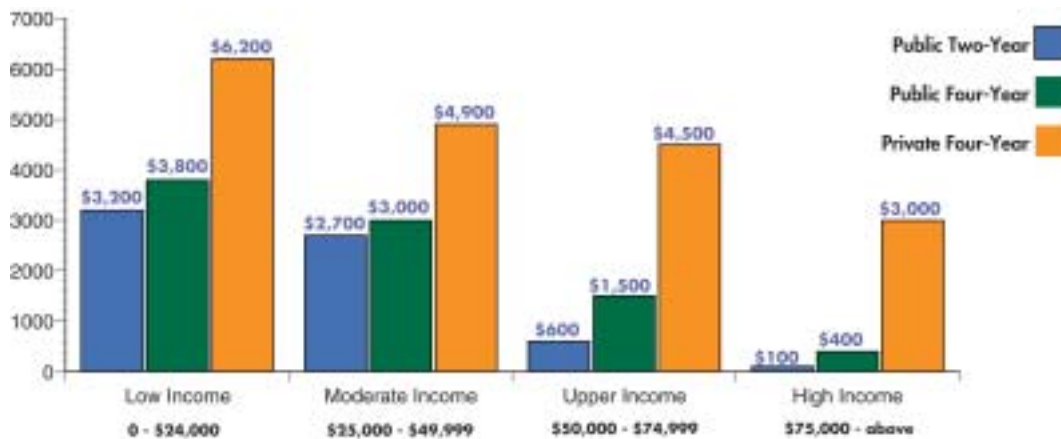
In *Empty Promises: The Myth of College Access in America*, and its previous report to Congress, *Access Denied*, the Advisory Committee on Student Financial Aid defined the nation's neediest students as those who show the largest shortfall in financial resources relative to the cost of attending a public college. The reports emphasized that total aid from federal, state, and institutional sources is insufficient to ensure financial access for academically qualified, low-income students, even at the nation's less expensive colleges.

For low-income students, unmet financial need is oppressive. After all the student aid and loans are distributed, low-income students face an annual shortfall of \$3,200 for public two-year and \$3,800 for public four-year institutions. By contrast, high-income families confront unmet need of just \$400 (Fitzgerald 2003). Poorer students borrow heavily and work long hours, often taking a second job. Study time is minimized and grades fall. The burden on parents becomes unmanageable and, too often, students are forced to choose between college and making ends meet.

Low-income students attend college at half the rate of their high-income peers, despite comparable qualifications.

BARRIERS

Average Annual Unmet Need Facing High School Graduates (Full-time Dependent Students)



Source: U. S. Department of Education NCES 1999

Low-income students face an annual shortfall of \$3,800 for public four-year institutions; high-income families confront unmet need of just \$400.

Declining Strength of the Pell Grant

The Pell Grant is the federal cornerstone of need-based aid for low-income students. It was established in the 1970s as, essentially, a voucher program to ensure that low- and moderate-income students would have access to colleges and universities. Overall disbursements reached an all-time high of \$11.7 billion, reflecting a 15% increase in the past year. But the good news is immediately tempered by the additional numbers of recipients. Pell funded 4.8 million students, an 11 percent increase, which held the average grant to only 3 percent growth.

A more serious consideration, however, is the Pell Grant's loss of purchasing power. A quarter century ago, the Pell maximum awards covered 84 percent of public four-year costs. In 1999-2000, only 39 percent were met (Advisory Committee on Student Financial Assistance 2001). Today, the College Board reports that the average Pell Grant covers 33 percent of costs at the average two-year college, 25 percent at the average four-year institution, and just under 10 percent at the average four-year private institution.

With an unstable economy and state aid in question, there is more pressure than ever on the Pell Grant to support low-income students' college aspirations. Most of these students work to meet their college costs, but their efforts are neutralized by the incongruous "Student Work Penalty." For every dollar earned beyond \$2,430, students are penalized fifty cents on each potential Pell Grant dollar. Moreover, if the student's contributions push family earnings beyond \$22,000, the same penalty is enacted. With approximately half of Pell's dependent recipients applying from families earning under \$20,000 (National Public Radio 2003), a staggering amount of aid is lost to this outlandish penalty. Absurdly, the penalties apply to cooperative learning that assigns students to the workplace as part of their learning experience.

A revision to the federal formula for calculating grants that would have cut \$270 million and eliminated 84,000 students from the Pell rolls has been postponed for additional study. But the potential trickle-down effect is significant. As Dr. Brian Fitzgerald, Staff Director of the Congressional Advisory Committee on Student Financial Assistance, tells it, "The Pell Grant is the student-aid equivalent of the canary in the mine." Small changes in the formula that produce seemingly small changes in the grants will have a magnified effect because states and institutions use the same formula to determine eligibility for state grants and institutional aid. Considering that 22.1 percent of African-Americans and 21.2 percent of Hispanics live beneath the poverty threshold (U.S. Census 2000), \$400 or perhaps less, can be the difference between going to college and taking a subsistence job. In fact, the research compiled by the Advisory Committee for the 2001-02 school year indicated unmet need prevented over 400,000 academically qualified high school graduates of low- and moderate-family income (up to \$49,999) from attending a four-year college within two years of high school graduation. One hundred sixty-eight thousand were unable to attend any college at all.

Projections through the year 2010 are ominous to say the least. If the same levels of unmet need persist, the Advisory Committee projects over 2 million college-qualified students will not attend college upon graduation. The longer they wait, the less likely they are to make it back to higher education, particularly given the work they are likely to find with only a high school diploma. At Miami Dade College and community colleges across the nation, many older students do, in fact, beat the odds and make strides toward meaningful careers. But the present levels of support are wholly inadequate to maintain a quality learning environment for the constantly increasing numbers of students.

A quarter century ago, the Pell maximum awards covered 84 percent of public four-year costs; in 1999-2000, only 39 percent were met.

Pell's incongruous Student Work Penalty: For every dollar earned beyond \$2,430 annually, students are penalized fifty cents on each potential Pell Grant dollar.

Merit-based Aid Contributes to the Access Dilemma for Low-Income Students

The trend in state financial assistance has further weakened the prospects of attending college for low-income students. Florida is one of many states that has redirected financial aid resources into merit scholarships that reward grade point average and SAT scores. Far less emphasis is accorded need-based criteria and need-based aid has decreased. While merit scholarships have provided significant benefit to students throughout the state, financial need for low-income students remains substantial. In particular, the needs of community colleges students argue for a better balance of merit- and need-based assistance.

In Miami-Dade County, 57 percent of previous-year public school graduates who attend a public college or university do so at Miami Dade College (Florida Department of Education 2003), yet only one out of a hundred Bright Futures scholars is among them. Fifty-nine percent of Miami Dade College students are low-income (below \$25,000) and over half of these students live beneath the poverty line. The College has the highest number of Hispanics and the second highest enrollment of African-Americans of any college or university in the nation (Miami Dade College Institutional Research). They come from inner-city high schools, many of which are among the state's lowest-performing schools according to the state's grading system. They do not qualify in large numbers for merit-based aid, yet their potential must not be dismissed. Their success is in the community's best interest, and they underscore the importance of need-based aid.

Merit-based programs across the country are precluding substantial assistance to over 43 percent of America's higher-education population who attend a community college. Fifty-eight percent of the states' need-based funding comes from five states: California, Illinois, New Jersey, New York, and Pennsylvania. By contrast, states like Georgia, Alabama, Virginia, Alaska, and South Dakota are effectively eliminating need-based aid, as several other states move down the same road (Schmidt 2000).

The financial crisis has generated extreme reactions, such as the controversial proposal put forth by the University of Miami, Ohio, which combines significant increases in tuition with scholarships for in-state residents. This is intended to acknowledge the contributions of taxpayers while establishing the market value of the institution. Such practices enhance the University's financial flexibility in competing for meritorious students under the guise of need-based aid.

Miami of Ohio's proposal is but one more reaction to the fiscal crisis. It provides symptomatic relief for the institution but further threatens access for low-income students. In many ways, it is a desperate action that misses the forest for the trees. Unfortunately, most publicly supported institutions have few options.

Such merit aid remains controversial and a countervailing response has evolved. Led by Harvard, several prestigious private and public institutions have rejected the selective use of need-based aid. Harvard's policy requires no contribution for families earning under \$40,000, ensuring that ample numbers of low- and moderate-income students will attend.

A New Horizon . . . Or a Worsening Storm

In 2004, Congress will consider the reauthorization of the Higher Education Act (HEA). The HEA, established in 1965, is the authorization for all federally funded

If the same levels of unmet need persist through 2010, over 2 million college-qualified students will not attend college upon graduation.

The trend in state financial assistance has further weakened the prospects of attending college for low-income students.

The federal loan ceiling has remained virtually constant since 1972, while costs have ballooned by about 900% in all sectors of higher education.

For Hispanics and other low-income minority students, increased debt prospects can serve only to turn many away at the doorstep.

student financial assistance programs. In this academic year, the HEA provided \$60 billion in loans, grants, and work opportunities for students and families. As well, the HEA funds programs for student services, facilities, technology, minority-serving institutions, international education, and graduate study. Reauthorization is hardly in question, but every six years Congress considers revisions and new initiatives that affect the overall allocation.

Clearly, poorer students need increased support to meet the financial demands of paying for college. After all the political wrangling is over, the best likelihood of additional funding will come through an increase in the loan ceiling. The upper limit of \$2,500, established in 1972, has remained virtually constant while costs have ballooned by about 900% in all sectors of higher education. These factors account, in great part, for the growing unmet need for students at both public and private institutions.

Politicians on both sides of the aisle are loath to support an increase in grant funding. A shaky economy, a war, and a growing aversion to any funding that resembles an entitlement bode ill for significant increases in the Pell or other grant programs. Loans have the advantage, from a governmental point of view, of being paid back with interest.

The education community has long argued for an increase in grant funding. The 91 percent of students (Wolanin 2003) who favor increasing loan limits do so, undoubtedly, with a leery eye toward pay-back time. The United States Student Association, along with the American Association of Community Colleges and the American Association of State Colleges and Universities continue to lobby against an increase in the loan maximum. Needless to say, the banking industry favors an expanded loan ceiling and many Republicans in Congress would rather the government exit the loan business and stop competing with private industry.

When federally funded loans fall short, students are forced to do business with lending sources that invariably charge higher rates than the variety of government loans. Raising the loan limit will help in this regard but the drawbacks are obvious, and they are exaggerated for low-income students. Low-income minority students already confront a host of personal challenges. Increased debt prospects can serve only to turn many away at the doorstep.

In the present atmosphere of budget deficits and foreign spending, an increase in the Pell maximums is not likely. It should be noted that the past HEA authorization called for a Pell maximum of \$5,800 but the existing maximum is only \$4,050. Authorization does not equal appropriation, and Congress has only met the HEA authorization amount three times since 1972, the last time being 1979-80 (Wolanin 2003).

“Front-loading” the Pell will undoubtedly receive attention. This approach, favored by candidate George W. Bush in 2000, would increase the Pell maximum for the first two years of college, but become loans for the remaining two years. Based on the fact that most dropouts occur in the first two years, front-loading theorizes that students will gain confidence during that initial period, enough to shoulder the responsibility of a loan burden the rest of the way. To be sure, criticism of front-loading is ample, and accompanied by an expectation that it will again backfire most powerfully in the lives of poor and minority students.

In the past decade, more than 240 colleges have earned the designation of Hispanic Serving Institution. The designation, with associated federal funding, requires that one quarter of the school’s students be Hispanic, and that half of the student population qualify as low income. These colleges and universities account for 45 percent of the nearly 1.4 million Hispanics in college today. The HEA will

hear proposals for new federal investment over the next six-year cycle that address pre-collegiate outreach, financial aid, student retention, immigration, and teacher education among other recommendations.

Antonio R. Flores, President of the Hispanic Association of Colleges and Universities points out that HSI's are the "newest kid on the higher-education block." The HSI designation dates back to 1992, while the better known and better funded Historically Black Colleges and Universities (HBCU) were identified in 1837. Mr. Flores points to HBCU's as a potential model for HSI growth. Today, HBCU's receive almost three times the funding allocated to HSI's, approximately \$250 million to \$85 million. (Hispanic Association of Colleges and Universities)

Serious consideration must be given to the huge growth in college attendance and the immense number of young Hispanics who will soon be of college age. If HSI's are to deliver quality education, they will need an extraordinary boost in a relatively short span of time. If the 2002 to 2003 requested budget increase of 3.6 percent from the White House is an indication, the 2004 HEA promises incremental growth at best.

The nation's budgetary woes and overseas commitments cannot be eliminated from the appropriations process. This is our shared context. But something is seriously amiss in the overall. The complexity of the context is allowed to stand as justification for the half measures that produce front-loading, unmet need, and immense loss of opportunity. Spending on education cannot be discretionary. From that understanding, we ought to build a new context, one that protects the opportunity to learn. That should be a fundamental value that is backed up at every level of government, supported by private industry, and made real through the hundreds of educational institutions across the nation.

Nevertheless, the cornerstone of the world's richest democracy is increasingly unavailable to the poorer people within its society. A growing body of data demonstrates an enduring trend toward a dangerous status quo, propped up by a stagnant set of policies that will, as the real numbers grow, serve a decreasing percentage of those in need.

The solutions exist and are open to debate; raising of Pell maximums, increased state funding to education, new tax policy and revenue streams, greater accountability for all sectors of education, and much more are possible in providing quality educational options for all people. But clearly, the stalemate will continue until the need is fully acknowledged by all parties and a far more integrated approach between the federal government, the states, institutions, and students and families is accomplished.

The challenge is not only one of equity and quality of life, but also one with enormous economic and political impact. It is perilous for a nation, any nation, to forego the talents of large numbers of young people. It is particularly unwise in an uncertain economy and in an era of discovery that demands new skills at an unprecedented rate. In the end, wasted talent translates into individuals who find no entry into the nation's range of opportunities. This failure reverberates throughout the political, economic, and social environment.

Spending on education cannot be discretionary. We should protect the opportunity to learn.

It is perilous for a nation, any nation, to forego the talents of large numbers of young people.

Bibliography

- Baum, Sandy and Payea, Kathleen. 2003. Trends in College Pricing. New York: College Board Publications.
- Baum, Sandy and Payea, Kathleen. 2003. Trends in Student Aid. New York: College Board Publications.
- Cabrera, Alberto F. 2002. Hispanics in Higher Education. In Forest, J. and Kinser, K. (eds). Higher Education in the United States: An Encyclopedia. California.
- California Community Colleges. 2004. "Chancellor Drummond Testifies at Senate Budget Hearing." Available from World Wide Web:
http://betasite.cccco.edu/news/press/press_2004/press_march/press_031004.htm
- Carnevale, Anthony, 2000. Crossing the Great Divide. Educational Testing Service. As quoted in Smith-Montealegre, Camilo. Hispanic Links News Service. Available from World Wide Web: <http://www.puertorico-herald.org/issues/vol4n24/HigherEd-en.shtml>
- Fitzgerald, Brian. 2003. Empty Promises: The Myth of College Access in America. Advisory Committee on Student Financial Assistance. Washington, D.C. Available from World Wide Web: <http://www.ed.gov/ACSFA>
- Fitzgerald, Brian. 2002. Access Denied. Advisory Committee on Student Financial Assistance. Washington, D.C. Available from World Wide Web: <http://www.ed.gov/ACSFA>
- Florida Department of Education. 2003. Readiness for College 2001-2002. Tallahassee.
- Governor's Task Force on Equity in Educational Opportunity. 2000. Report of the Governor's Equity in Educational Opportunity Task Force. Florida.
- Hispanic Association of Colleges and Universities. 2000. The Increasing Presence of Hispanics and Hispanic-Serving Institutions. Texas.
- Hispanic Association of Colleges and Universities. 2003. HACU Recommendations for HEA. Washington. Available from World Wide Web:
[http://www.hacu.net/hacu/Higher_Education_Act_\(HEA\)2_EN.asp?SnID=662840510](http://www.hacu.net/hacu/Higher_Education_Act_(HEA)2_EN.asp?SnID=662840510)
- Hovey, Harold. 2000. State Spending for Higher Education in the Next Decade: The Battle to Sustain Current Support. Cited in The National Center for Public Policy and Higher Education. California. Available from World Wide Web:
http://www.highereducation.org/pa_003/
- Hrubos, Natalie. 2003. Tuition Rises Nationwide. The Digital Collegian. Pennsylvania, 2003. Available from World Wide Web:
<http://www.collegian.psu.edu/archive/2003/10/10-30-03tdc/10-30-03dnews-08.asp>
- Lee, John. 2003. Access and Choice. NEA Higher Education Research Center Update. Volume 9, Number 1. Available from World Wide Web: <http://www.nea.org/he/heupdate/vol9no1.pdf>
- Lee, John. 2003. Higher Education: Who Benefits? NEA Higher Education Research Center Update. Volume 9, Number 3. Available from World Wide Web:
<http://www.nea.org/he/heupdate/vol9no3.pdf>
- Miami Dade College. Department of Institutional Research. 2001. Miami.
- Mishel, Lawrence, Jared Bernstein, and Heather Boushey. 2003. The State of Working America, 2002/2003. New York: Cornell University Press.

- National Center for Education Statistics. 2003. Status and Trends in the Education of Hispanics. Washington, D.C. Available from World Wide Web:
<http://www.nces.ed.gov/pubs2003/hispanics/Section12.asp>
- National Education Association. 2003. NEA Statement of Principles on Federal Funding for Higher Education. Washington, D.C. Available from World Wide Web:
<http://www.nea.org/he/fiscalcrisis/neastmt.html>
- National Governors Association and the National Association of State Budget Officers. 2002. The Fiscal Survey of the States. Washington, D.C. Available from World Wide Web:
<http://www.nga.org/cda/files/NOV2002FISCALSURVEY.pdf>
- National Public Radio. 2003. All Things Considered. Transcript of Michele Norris interview with Brian Fitzgerald. Washington, D.C.
- Office of Minorities in Education. Program of American Council on Education Division of Programs and Analysis. 2002. 2001-2002: Nineteenth Annual Status Report on Minorities in Education. Available from World Wide Web:
<http://www.acenet.edu/programs/caree/status-report/e-summary.cfm>
- President's Advisory Commission on Educational Excellence for Hispanic Americans. 2003. From Risk to Opportunity: Fulfilling the Educational Needs of Hispanic Americans in the 21st Century. Washington, D.C.
- Pugh, Tony. 2000. Merit Aid Goes to Affluent Kids. Free Press Washington.
- Ruppert, Sandra. 1995. State Legislative Priorities, Policies, and Perceptions. NEA Higher Education Research Center Update. Volume 1, Number 6. California.
- Schmidt, Peter. 2000. Boom in Merit-Based Scholarships Drives 8.8% Rise in State Funds for Student Aid. Chronicle of Higher Education.
- Schmidt, Peter. 2003. Academe's Hispanic Future. Chronicle of Higher Education.
- State of Florida. State University System. 2001. Four Years of the Florida Bright Futures Scholarship Program. Florida.
- Symonds, William C. 2001. College Crunch. Business Week, August 27.
- Trombley, William. 2003. The Rising Price of Higher Education. The National Center for Public Policy and Higher Education. California. Available from World Wide Web:
http://www.highereducation.org/reports/affordability_supplement/affordability_1.shtml
- Wolanin, Thomas R. 2003. What to Expect in the Reauthorization of the Higher Education Act. Public Policy Paper Series Number 03-04. Association of Governing Boards of Universities and Colleges.