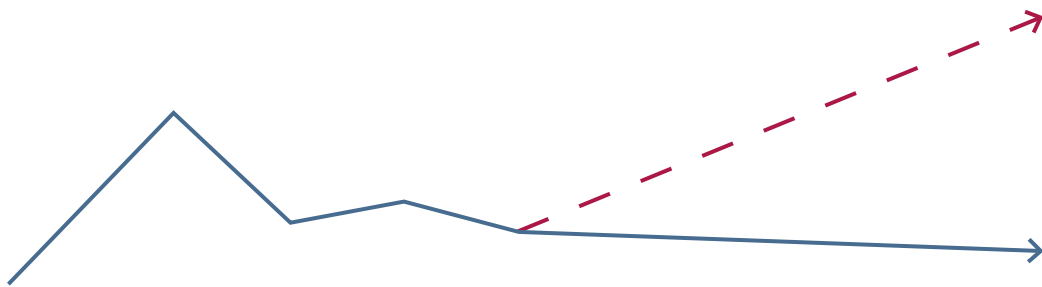


DROPPED?

Latino Education and Arizona's Economic Future



VIRGINIA G.
PIPER
CHARITABLE TRUST

Helios
Education Foundation

ASU Morrison Institute
for Public Policy
ARIZONA STATE UNIVERSITY

DROPPED?

Latino Education and Arizona's Economic Future

April 2012

Principal Authors

Bill Hart, *Senior Policy Analyst, Morrison Institute for Public Policy*

C.J. Eisenbarth Hager, *Senior Policy Analyst, Morrison Institute for Public Policy*

Contributors

Sue Clark-Johnson, *Executive Director, Morrison Institute for Public Policy*

David Daugherty, Ph.D., *Director of Research, Morrison Institute for Public Policy*

Tom Rex, *Associate Director, Center for Competitiveness and Prosperity Research, W.P. Carey School of Business, ASU*

Eric Hedberg, Ph.D., *Faculty Associate, ASU*

Joseph Garcia, *Director of Communications, Morrison Institute for Public Policy*

Erica Edwards, *Graduate Associate, Morrison Institute for Public Policy*

Andrea Whitsett, *Project Manager, Arizona Indicators, Morrison Institute for Public Policy*

Joe West, *Graduate Associate, Morrison Institute for Public Policy*

Christine Totura, Ph.D., *Senior Policy Analyst, Morrison Institute for Public Policy*

Morrison Institute wishes to express its gratitude to the educational experts who reviewed this report.

This project was made possible by generous grants from
Virginia G. Piper Charitable Trust and Helios Education Foundation.



ARIZONA STATE UNIVERSITY



Dear Fellow Arizonans,

As longtime champions of education, Virginia G. Piper Charitable Trust and Helios Education Foundation are pleased to present this timely Morrison Institute for Public Policy report, *Dropped? Latino Education and Arizona's Economic Future*.

Ten years ago, Morrison Institute's landmark report, *Five Shoes Waiting to Drop on Arizona's Future*, urged Arizonans, from policymakers to parents, to deal with the substantial and persistent academic achievement gap between Latino and White students. Failing to address this issue, the report warned, would have serious economic consequences for all Arizonans.

That "future" has arrived.

Some key points:

- *Dropped? Latino Education and Arizona's Economic Future* is a not merely a reminder – it's a call to action. The report's findings are further evidence that Arizona has not fully recognized or embraced education as its best investment for the future.
- This report is not about ethnicity; it is about demographics and economics. Lagging Latino educational performance will become an increasingly critical workforce issue as Arizona's Latino population grows into eventual majority status.
- Updated data and new projections warn that interventions to correct the education attainment gap are essential if Arizona is to remain fiscally healthy and capable of competing in the global economy.
- Arizona simply cannot wait another 10 years for another report, another dire warning or another undereducated generation to enter the economy unprepared and unable to fully compete and succeed.
- *Five Shoes* provided the framework; *Dropped?* completes the picture. In short, Arizona is at risk of becoming a second-tier state, educationally and economically.

Arizona must have a frank discussion now about its commitment to education and demonstrate its resolve to develop a skilled and educated workforce. We offer these data and projections for consideration in that dialogue. Resolving this urgent social and economic issue will require all Arizonans to join together in taking the necessary next steps.



Judy Jolley Mohraz, Ph.D.

President and CEO
Virginia G. Piper Charitable Trust



Paul Luna

President and CEO
Helios Education Foundation







DROPPED?

Latino Education and Arizona's Economic Future

Executive Summary	8
Introduction: Then and Now	10
Ten Years Ago: A Look Back at <i>Five Shoes</i>	12
Why Is There a Gap?	15
The Data: Demographics, Education, Economics	18
What Happens Next?	28
Now Is the Time	33
Some Strategies	35
Endnotes.....	38

Executive Summary

Ten years ago, Morrison Institute for Public Policy examined five worrisome trends that, if neglected by the public and policymakers, were thought likely to jeopardize Arizona's future prosperity and quality of life. The result, published in 2001, was *Five Shoes Waiting to Drop on Arizona's Future*.

Today, one of those five stands out for its urgency, its political sensitivity and for the challenge it presents to the future economic well-being of all Arizonans. Ten years after *Five Shoes*, Arizona's Latinos* – our fastest-growing population group – still struggle against barriers to educational achievement that keep them lagging well behind the state's White population in educational performance. In fact, the achievement gap between Hispanics and Whites has not changed significantly since the *Five Shoes* report.

This imbalance represents a grave threat to Arizona's future economic health. One reason concerns demographics: In the coming years, Latinos will provide an increasingly larger share of the state's leaders and workers, and will eventually comprise a majority of Arizonans. A second reason is economics: Education and skills training are expected to become even more important drivers of workforce quality,

earning potential and economic growth than they are today. The Georgetown University Center on Education and the Workforce estimates that 61% of all jobs in Arizona will require some training beyond high school by 2018. Arizona now increasingly competes with a global array of economic rivals. If it is to develop, attract and retain well-paying, high-skill industries that will pay good wages and enhance the quality of life for all Arizonans, the state must have a critical mass of trained workers and the promise of more to come.

Low educational achievement is usually linked to low earning power. A substantial average income gap already exists today between Arizona's Latinos and Whites. As the former make up an increasing share of the state's total population, the average income level for all Arizonans could actually drop. Less income means less purchasing power, which drags down overall economic growth and, consequently, tax revenues. Lower tax revenues means additional strains on state budgets and services. On the other hand, one recent study estimates that, if Arizona reduced its number of Latino high school dropouts by half, those additional graduates would earn an additional \$31 million a year, allowing them to spend an additional \$23 million annually.

* The terms "Latino" and "Hispanic" are used interchangeably in this report.
The term "White" refers to non-Hispanic Whites.

Philip L. Francis
Chairman and CEO, PetSmart, Inc. (Retired)
Community Volunteer

It is self-abusive and foolish to continue on the glide path of our K-12 academic achievement in Arizona. Every other good program will be overwhelmed by the lack of an employable workforce. I have spent my life believing that education is an investment to be carefully and frugally managed – but an investment with a massive payback. Yet somehow and sometime in Arizona it has become an ugly expense to be minimized – to zero if possible. I would like a re-vote. We are dooming grandchildren to a reduced standard of living and quality of life. Trying to ignore the reduced investment will not make it all OK.



More specifically, below-average educational attainment within a rapidly growing population can lead to:

- Fewer qualified workers to fill increasingly complex positions
- Lower average incomes
- Less average disposable income to drive consumer demand
- Reduced consumer purchasing power
- More families living in poverty
- Fewer residents with health insurance coverage
- Greater demands on public services and benefits
- Lower per-capita tax revenue
- A reduced ability to attract quality businesses to the state

Has this shoe dropped? Can the grim future contemplated in this report be averted? There have been some encouraging signs and positive efforts, from both the public and private sectors. Polls routinely report that most of Arizonans place education among their highest priorities. Arizona has been a national leader in supporting school choice. Conferences, commissions and experts have presented a wide array of potential reforms. Arizona, it seems, does not lack ideas so much as the willingness to act.

Some of the more commonly proposed strategies are listed at the end of this report. But if the state is to address the issue of Latino educational performance, it should keep four general considerations in mind:

- **GOING LONG TERM** Fixing the educational system will take decades. Policymakers must agree that this is a priority that transcends election cycles.
- **TAKING RESPONSIBILITY** Leadership is essential to making real changes. All Arizonans need to be part of the solution, from elected officials to educators and parents of all students in the public education system.

Governor Jan Brewer State of Arizona

Every student can learn. No matter the background, the neighborhood, or the household circumstances. I know this to be true, right down to my very core. So, we're setting higher standards for our students and demanding that the bar be met. We're asking more of our schools, tracking their performance and passing the information to parents. We're partnering with the business community to ensure the skills our children learn today better match the job descriptions of tomorrow. No more excuses, because our children can't afford them anymore. And every student can learn.



- **PAYING UP** Arizona spends less on education per pupil than nearly every other state. While money alone is not the answer, it is impossible to expect improvement without investment.
- **CONSIDERING CONTEXT** Arizona's education problems are embedded in a complex set of interlocking issues, including poverty and English language skills. Any student of any ethnicity would struggle to overcome such barriers. Enhancing Latino educational performance requires addressing the socio-economic barriers many Hispanic families face.

Ten years ago, Morrison Institute recommended – as others before and since have recommended – that Arizona leaders “place the educational interests of Latino young people at the top of the state’s agenda.”

If that was the assignment, Arizona is failing. We cannot afford – literally and figuratively – to continue to do so.

Introduction: Then and Now

The future has a sobering habit of arriving whether we're ready or not.

What was once an issue of concern for Arizona now approaches a crisis. Ten years ago, Morrison Institute for Public Policy examined five worrisome trends that, if neglected by the public and policymakers, were thought likely to jeopardize Arizona's future prosperity and quality of life. The result, published in 2001, was *Five Shoes Waiting to Drop on Arizona's Future*.

The trends examined in *Five Shoes* ranged from taxes to leadership; all remain important to Arizona's future. But today one issue stands out for its urgency, its political sensitivity and for the challenge it presents to the future economic well-being of all Arizonans. Ten years after *Five Shoes*, Arizona's Latinos* – our fastest-growing population group – continue to display substantial shortcomings in educational performance levels, lagging well behind the state's White population. In fact, the educational achievement gap between Hispanics and Whites has not changed significantly since the *Five Shoes* report.

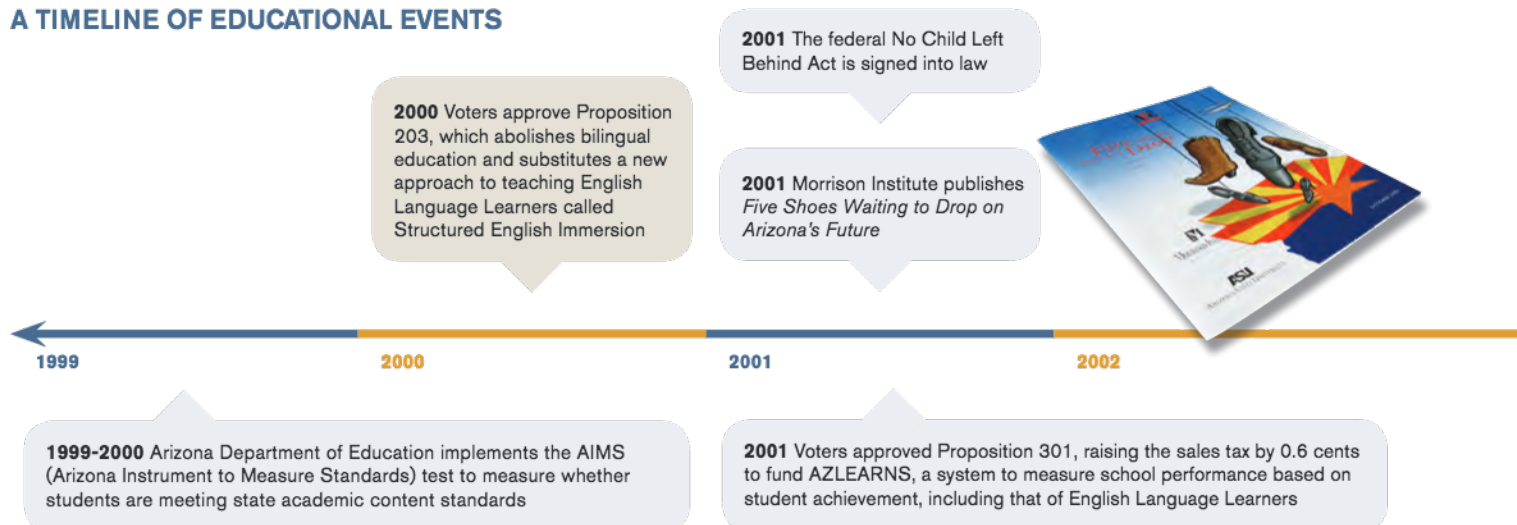
* The terms "Latino" and "Hispanic" are used interchangeably in this report. The term "White" refers to non-Hispanic Whites.

This imbalance is troubling in itself. But it also represents a grave threat to Arizona's future economic health. In the coming years, Latinos will provide an increasingly larger share of the state's leaders and workers, and will eventually comprise a majority of Arizonans. Meanwhile, education and skills training are expected to become even more important drivers of workforce quality, earning potential and economic growth than they are today.

A substantial average income gap already exists today between Arizona's Latinos and Whites. As the former make up an increasing share of the state's total population, the average income levels for all Arizonans could actually drop. Less income means less purchasing power, which drags down overall economic growth and, consequently, tax revenues. Lower tax revenues place additional strains on state budgets and services.

The conclusion seems inescapable that Arizona Latinos' lower levels of educational attainment constitute a serious impediment to the future prosperity of *all* residents, regardless of their views on immigration, public education

A TIMELINE OF EDUCATIONAL EVENTS



or on the proper role of government in society. This is due to two factors that trump ideology and are highly unlikely to change course:

DEMOGRAPHICS Between 2001 and 2010, Arizona’s non-Hispanic population grew by 17.3%.¹ The state’s Latino growth rate was 46.3%. Latinos now comprise nearly one-third of the state’s population and about 47% of its children under 19. Arizona Latinas on average are younger than White women and tend to have larger families. Nearly 100% of Hispanic children under 5 years of age in Arizona – children of both documented and undocumented parents – are U.S. citizens.² Arizona is expected to be a “majority-minority” state within perhaps two decades. Latinos will eventually constitute the majority.

ECONOMICS Like all states, Arizona now increasingly competes with a global array of economic rivals. If it is to develop, attract and retain well-paying, high-skill industries that will pay good wages and enhance the quality of life for all Arizonans, the state must have a critical mass of trained workers and the promise of more to come. In addition, the unceasing momentum of technological change means that

even many traditionally “low-tech” occupations are increasingly requiring higher-level skills and training. A recent national study predicted that, by 2018, 61% of all jobs in Arizona will require some training beyond high school.³

This report’s emphasis on the state’s Latino population is not to deny that similar concerns also apply to thousands of Arizona’s African American, Native American, Asian American and White children, or that the state contains many educated and prosperous Latinos. Nor is this issue limited to numbers of university degrees; Arizona’s K-12 system, community colleges and vocational and technical schools all play critical roles, given that a competitive workforce demands a multitude of skills and technical competencies.

This potent combination of demographic and economic factors led Morrison Institute to update the *Five Shoes* data and to consider what might lay ahead. Ten years ago, Morrison recommended – as others before and since have recommended – that Arizona leaders “place the educational interests of Latino young people at the top of the state’s agenda.”

That future is here.



2006 Proposition 203 creates First Things First, a statewide body that funds quality early childhood development and health, and is itself funded by a tax on tobacco products

2005 Legislature funds full-day kindergarten for poorest schools

2006 High school class of 2006 becomes the first required to pass AIMS in order to graduate

2003

2004

2005

2006

2006 Proposition 300 requires post-secondary students who can't prove citizenship to pay out-of-state tuition and denies them access to financial aid; it also denies adult education to undocumented residents and denies child-care assistance to undocumented parents

Ten Years Ago: A Look Back at *Five Shoes*

Too often we say: 'If only someone had warned us...we would have acted.'

In 2001, *Five Shoes*⁴ addressed five public policy issues “that could overwhelm us if we don’t spot them now and aggressively use our knowledge to plot a positive course for the future.” These fundamental problems, the report argued, “could make or break Arizona’s success in the future.”

The shoes:

- Difficulties in attracting and keeping a skilled workforce
- The challenge of competing in the global “knowledge economy”
- A lack of effective leadership in the public and private sectors
- An outdated state tax code riddled with costly exemptions
- A large Latino population impeded by low educational attainment

The five are of course interrelated, and each is closely linked to the educational attainment of the state’s fastest-growing population group. If, for example, Arizona is to develop a skilled workforce to compete in the global knowledge

economy, that workforce will be a largely Hispanic one. If, as many argue, Arizona’s tax code is too riddled with loopholes and too dependent on the sales tax, its performance will only worsen in the presence of a large cohort of undereducated, low-paid workers; meanwhile, the demands on public services are very likely to increase.

And if effective leadership were ever needed in Arizona, it is needed here.

Five Shoes’ discussion of Latino education began on a positive note – the premise that the growing presence of young Latino residents represented a significant potential benefit to Arizona in the form of a young and energetic workforce. This was considered especially true given the aging of the Baby Boom generation. The large cohort of young Latinos entering the workforce, the report asserted, could drive economic growth and tax revenues that would enhance the quality of life of all Arizonans. In addition, *Five Shoes* noted that many of the state’s Latinos were already upwardly mobile, registering advances in education levels, job quality and income.



2007

2008

2009

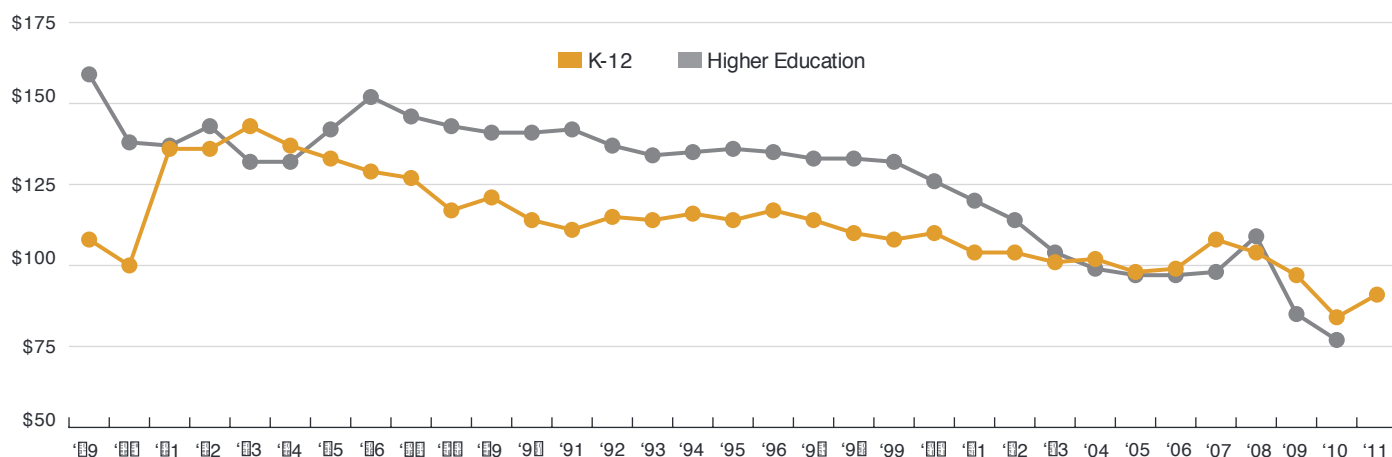
2007 Legislature extends free full-day kindergarten to all schools

2009 U.S. Supreme Court rules that further hearings are necessary in the long-running *Flores v. Arizona* case involving state funding for English Language Learners

Unfortunately, *Five Shoes* concluded in 2001, Latinos' progress and potential were offset by low educational attainment. "Too many Latinos," it reported, "fail to acquire

the education, training and mentoring needed to succeed in a skills-based economy." Barely half of Arizona Hispanics, for example, obtained a high school education. State and

FIGURE 1: EDUCATION APPROPRIATIONS PER STUDENT PER \$1,000 OF PER CAPITA PERSONAL INCOME, ARIZONA STATE GOVERNMENT GENERAL FUND



Note: Numbers are rounded.

Source: Arizona Joint Legislative Budget Committee, U.S. Department of Education, National Center for Education Statistics and the U.S. Department of Commerce, Bureau of Economic Analysis.

2010 Legislature ends free full-day kindergarten

2010 Legislature restricts ethnic-studies program in the Tucson Unified School District

2010 Arizona fails for the second time to win a share of \$3.4 billion federal "Race to the Top" education grant

2010 Voters approve temporary one-cent sales tax to fund education and other services

2010

2010 Gov. Brewer signs Senate Bill 1070, which, among other provisions, requires police to check the immigration status of persons they reasonably suspect are in the country illegally

2010 Voters defeat Proposition 302, which would have abolished First Things First

2010 Arizona signs on to the national Common Core State Standards for educational achievement

William C. Harris
President and CEO,
Science Foundation Arizona

At Science Foundation Arizona, we have been working to understand how to inspire students and teachers throughout Arizona, realizing that excellence will not result from a one-size-fits-all model. We see the Arizona STEM Network as critical to developing a world-class workforce. That includes recognizing that our Hispanic students provide Arizona an extraordinary asset – a talent pool with smart, ambitious kids with the potential of one day launching the next Intel or Google. As the U.S. and Arizona fall behind our global peers in educational performance, we need

to stop making excuses and start believing in the potential of our kids. That takes a laser-like focus on performance, high expectations, high standards and engagement for all of our students. There's no time to waste.



national testing consistently found Arizona's Hispanic fourth-, eighth- and tenth-grade students trailing Whites by large margins in reading, science and math. Latino high-schoolers remained underrepresented in Advanced Placement courses and lagged far behind Whites in college graduation rates.

As a result, *Five Shoes* noted a much higher percentage of Arizona Latinos – compared to Whites – stuck in low-paying, low-skill jobs, while relatively few worked in professional or managerial positions. This in turn contributed to keeping Latino income levels significantly below those of White workers.

The report acknowledged that Arizona would continue to generate construction and other lower-end service jobs. But the primary concern was that Latinos' soaring population growth and overall low education levels could leave the state with too few skilled workers, stunting Arizona companies' growth and discouraging new ones from moving here.

In conclusion, *Five Shoes* noted that "Too often we say: 'If only someone had warned us...we would have acted.'"

It seems we were warned.

2011 Governor Brewer announces the appointment of Dr. Craig Barrett as Chairman of the Arizona Ready Education Council, formerly known as the Governor's P-20 Council, which will implement Arizona's education reform plan, Arizona Ready

2011 Legislature fails to pass bill that would require schools to determine citizenship of students

2011

2011 Legislature considers, rejects the DREAM Act that would provide certain undocumented youth with in-state tuition at Arizona public universities

2011 Arizona Department of Education pilots the Move on When Ready program, which enables students who take an intense two-year curriculum and pass exams to graduate as sophomores and attend community college

Why Is There a Gap?

The imbalance is neither unique to Arizona nor limited to Latinos.

Before examining the updated data and considering what they might mean for Arizona's future, it's worth asking why a gap in educational attainment between Arizona's Whites and Latinos exists in the first place. A good starting point is the fact that this type of imbalance is neither unique to Arizona nor limited to Latinos. Latinos throughout the country tend to have less schooling and fewer diplomas and degrees than Whites and Asian Americans, as do African Americans and Native Americans. Among Whites, lower-income children tend to perform less well than higher-income ones.

And Arizona students as a whole do not fare well when compared to national averages. According to the National Assessment of Educational Progress (NAEP), Arizona consistently scores below the national average in math, science, reading and writing. Further, the U.S. itself is academically mediocre by international academic standards. According to the 2009 Programme for International Student Assessment, the U.S. ranks 17th in reading, 23rd in science and 31st in mathematics among developed countries.⁵ As noted above, this report focuses on Latinos because of their demographic dominance in Arizona, not because of factors related to ethnicity itself.

National experts cite several factors affecting educational achievement and attainment, regardless of racial/ethnic group. Two reports by Paul Barton and Richard Coley for the Educational Testing Service summarize the factors affecting

educational achievement and attainment.^{6,7} These factors can be broken into two broad categories: those that affect the home environment, and those that affect the school or learning environment.

Life at Home

Setting aside the good intentions parents have for their children, there are number of environmental factors at home that affect a child's preparedness for school and ability to be academically successful. These factors transcend race or ethnicity. Several home factors include:

- **SINGLE-PARENT HOUSEHOLDS** Children in single-parent households do not perform as well academically as those in two-parent families.
- **UNSTABLE FAMILY INCOME** High poverty, food insecurity, and unemployment are outgrowths of having a low income, and all negatively affect a child's educational achievement. Low-income families are less likely to have access to nutritious meals, essential to the brain's development.
- **TALKING AND READING TO BABIES AND YOUNG CHILDREN** Before starting kindergarten, differences in children's academic abilities are measured. Those with lesser abilities had not been read to by their parents as frequently as others and, more generally, did not hear as many words spoken.

2012 Tucson Unified School District abolishes its Mexican-American studies program after an adverse court ruling

2012

2011 Arizona is awarded \$25 million in federal "Race to the Top" funds

- **HOME AS AN EDUCATIONAL RESOURCE** The availability of books, magazines, newspapers and the Internet, as well as a desk or table at which to work, all affect academic development. The amount of time watching television is negatively associated with educational achievement.
- **PARENT PARTICIPATION** Parental involvement in a child's education leads to better student achievement and fewer behavioral problems at school.
- **LACK OF SUMMER ENRICHMENT** Exposure to academic and enrichment activities during a summer vacation help to mitigate or eliminate the "summer reading loss."
- **FREQUENT CHANGING OF SCHOOLS** Changing schools leads to social and academic disruption, as expectations at the new school frequently differ from the original school. The student and parent lose the social connections and support system that were built at the original school.
- **CURRICULUM RIGOR** Student achievement is linked to high academic expectations and variety of courses offered at the school, such as Advanced Placement.
- **TEACHER PREPARATION AND EXPERIENCE** Particularly in math, teachers being prepared in the subject matter they teach is linked to better student outcomes. Research also establishes a correlation between the number of years as a teacher and the outcomes of the students.
- **TEACHER ABSENCE AND TURNOVER** Several studies have found that teacher absences are associated with lower student achievement.
- **AVAILABILITY OF INSTRUCTIONAL TECHNOLOGY** The use and integration of computers into the classroom are associated with positive student outcomes.
- **SAFETY AT SCHOOL** Not surprisingly, fear and lack of discipline within a school affect a student's ability to learn.

Learning at School

While we can encourage certain environmental factors to be adopted at home, we have little control over individual families' lives. However, we can have more impact on the school environment through policies and funding. Barton and Coley cite several factors that affect the learning environment at school. Once again – these factors transcend race and ethnicity, but are often more prevalent in schools in lower-income neighborhoods and those with more minority students. Several school factors include:

"[Latino parents'] aspirations are very high with regard to education," said Gene Garcia, emeritus professor of education and Vice President for Education Partnerships at Arizona State University.⁸ "They believe education will make a difference for their kids. What they don't have is the instrumental knowledge about how to make that work." Garcia said this is especially true for Arizona's undocumented-immigrant population, which he said consists to a great degree of "immigrant families raising citizen children."

Two studies published by the Pew Hispanic Center provide particular insight into Hispanic educational issues. In

Merl Waschler

President and CEO, Valley of the Sun United Way

The success of Latino youth is vital to Arizona's productivity and well-being. To truly prepare our Latino youth for success, we must focus on closing the "readiness gap." Studies continue to show that by the end of 5th grade, Latino students from low-income households are nearly three grade levels behind their peers in literacy and continue to fall behind in other educational areas. We cannot let these trends continue. We must work together to ensure students start Kindergarten ready to learn, graduate high school, complete post-secondary education and enter the 21st century workforce. It all starts with readiness – adequately preparing students and their families, and committing community resources to break down the academic achievement barriers.



How Far Behind in Math and Reading Are English Language Learners?,⁹ Rick Fry indicates that English language learners (ELL) score far below the rest of the population on both math and reading on the NAEP tests. In addition, the scores of Hispanic ELLs are lower than those of Hispanics who can speak English.

In *Latinos and Education: Exploring the Attainment Gap*,¹⁰ Mark Lopez reported the results of a national survey of Hispanics. While nearly 90% of young Latinos (16 to 25 years old) understand that a college education is important to success in life, less than half plan to get a college degree (a lower percentage than non-Hispanics). The primary reason for the discrepancy is the need to support a family. Poor English skills also were frequently cited as a reason.

"A large part of [the gap] is simply due to the fact that so many kids come to school not speaking academically related English and a home Spanish language that is not bolstered with academic vocabularies and discourse," Garcia said. "Second, there's immigrant status – so many kids are living with parents born outside the U.S. who have no experience or knowledge of the U.S. school system and limited schooling in their own country."

Garcia said a third factor is a lack of "educational capital," which relates to the parents' educational level and ability to promote values and behaviors that translate into academic success. This is different, he said, from parents' desires for their children's educational success.

Ron Shoopman
President,
Southern Arizona Leadership Council

When it comes to jobs and education, Arizona can, and must, do a better job preparing for the future. Developing and supporting policy that narrows the educational performance and attainment gap should be a priority and will ultimately help Arizona's economic attainment. Business leaders get this. My fear is that Arizona could lose ground in the

percentage of its workforce that is college-educated and see its greatest growth in its workforce that has less than a high-school education. It won't be a shoe that drops on our future, if we allow this to happen, it will be a boot.



Four factors – single-parent household, parents reading to children, hours watching television, and the frequency of school absences – were found by Barton and Coley to explain 68% of the differences across states in eighth-grade reading scores on the National Assessment of Educational Progress (NAEP) test.

The Data: Demographics, Education, Economics

Arizona's Latino population soars, but the education achievement gap persists.

How much has Arizona progressed since 2001 in the area of Latino education?

What challenges does the state still face, and how could it maximize the potential of this large and youthful population?

To address these questions, we first consider trends in key demographic indicators over the past decade.

A Changing Population

The major demographic headline in the United States during the past three decades has been the rapid, large and continuing increase in the Latino population. This is due both to large-scale legal and illegal immigration and to “natural increase” – the excess of births over deaths. The 2010 U.S. Census, for example, revealed that the nation’s Hispanic population grew by 46% since 2000, representing more than half of the nation’s total growth over the past decade; Latinos now account for about one in four Ameri-

cans under age 18.¹¹ Demographers at the U.S. Census Bureau expect the U.S. to reach “majority-minority” status – when Whites dip below 50% of the population – between 2040 and 2050.¹²

Arizona exemplifies this trend. Since 1980, the state’s total population has risen from 2.7 million to 6.4 million. All racial groups – including Whites, African Americans, Asian Americans and Native Americans – have grown in numbers. But their growth has been dwarfed by the rise in Arizona’s Latino population: In 1980, Latinos made up 16% of Arizona’s total population; today, that number is 30%; Whites, meanwhile, have declined from 75% of the state’s population to 58%.

These trends are expected to continue. While the Census Bureau does not currently issue state-level population projections, Arizona could reach “majority-minority” status as soon as 2030.

Bob Robb
Columnist, The Arizona Republic

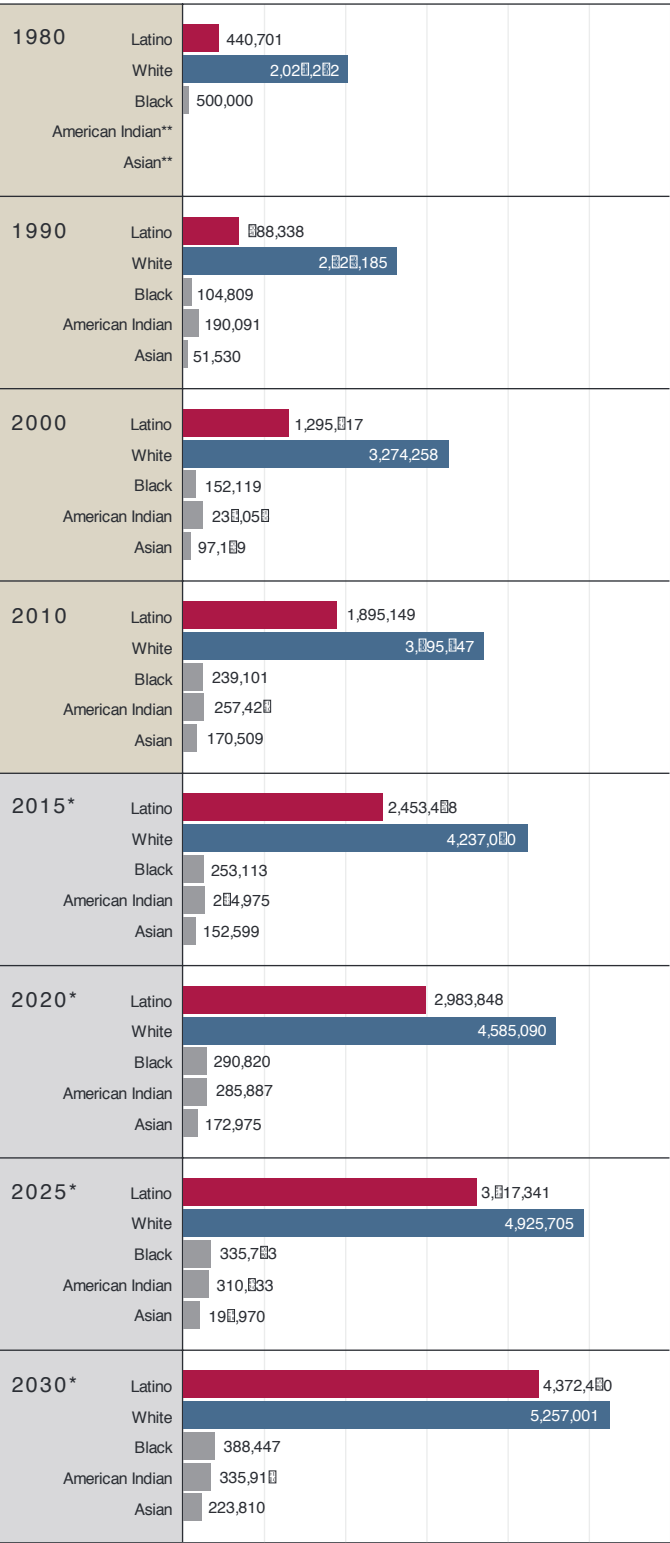
Education reform in Arizona has failed due to a lack of focus and steadfastness.

Reforms have moved in all directions at once, and been constantly changed or replaced.

Meanwhile, kids continue in alarming numbers to graduate from high school without high school level skills. Latino students suffer disproportionately from this failure. Education reform should focus on that specific task, getting virtually all high school graduates to have high school level skills. It ought to be achievable. After that milestone is reached, education reformers could be turned back loose to pursue their ambition of making all our kids rocket scientists or brain surgeons.



FIGURE 2: ARIZONA RESIDENTS BY ETHNICITY, 1980-2030



Note: **Projected. *Data unavailable due to changing census categories.
Source: U.S. Department of Commerce, Census Bureau, Decennial Censuses, 1980-2000; Projections were created for Morrison Institute by the U.S. Census Bureau and the U.S. Census Bureau's Social Research and Marketing Firm.

Elliott Pollack
CEO, Elliott D. Pollack & Company

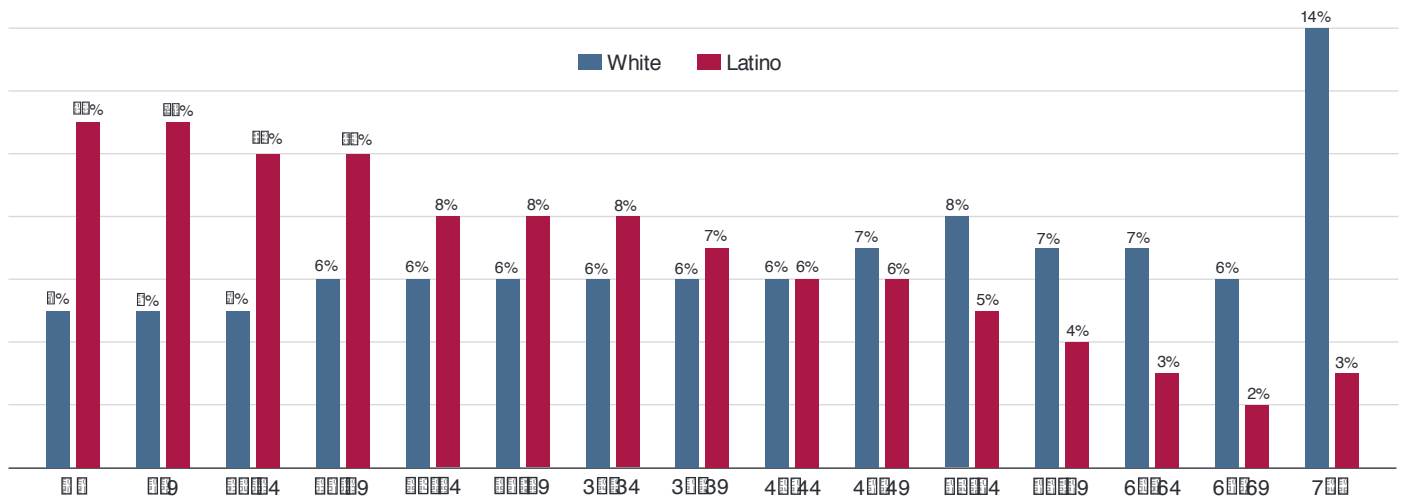
It is clear that Arizona’s Latino population will grow disproportionately, making them even more important in the state’s leadership and workforce. Education will also become more important, as even blue-collar jobs will require a higher level of the 3 R’s. Not all jobs will ever be high quality; yet the economic multiplier effect will still be enhanced by high-paying base jobs. Thus, our mission should



be to create a climate that is favorable to high-quality base jobs. If we can’t grow skilled workers locally – the preferable solution – we have to make Arizona attractive enough to import workers with the necessary skills.

Demographers at the U.S. Census Bureau expect the U.S. to reach “majority-minority” status – when it takes up less than half of the population – between 2020 and 2030.

FIGURE 3: AGE DISTRIBUTION OF ARIZONA RESIDENTS BY ETHNICITY, BY PERCENT, 2010



Note: Numbers are rounded.

Source: U.S. Department of Commerce, Census Bureau, 2010 census.

Younger and Older Arizonans

Not only has the state's proportions of Latinos and Whites shifted over the past 30 years, but the internal makeup of each group is very different. The crucial variable is age. Arizona today, and into the future, consists chiefly of two large populations: a young Latino sector preparing to be the state's leaders and workers of tomorrow, and an aging White population that is exiting the workforce.

Arizona's demographic future thus seems clear. While the birth rate among Arizona's Latino community has declined in recent years, it remains much higher than that of Whites at 65 births for every 1,000 Latinas as compared to 46 births per thousand White women.¹³ This higher birth rate, together

with the recent influx of hundreds of thousands of young immigrants, creates a significantly younger Latino community, with 41% of Latinos being 19 years or younger, compared with only 21% of Whites.¹⁴ Further, Arizona is now home to more Latinos under age 18 than Whites – 781,158 versus 764,689, respectively.

On the other hand, Arizona's White population is heavily impacted by the Baby Boom generation, now aged roughly between 48 and 66. Some 42% of White Arizonans are over 50 years old, while only 11% of Latinos fall into that category; for every Latino over 55, there are six White Arizonans.

Another useful metric is median age, the "middle age" that separates the higher half of a population from its lower half. That number for Arizona Whites is 44 years old; for

Maria Harper-Marinick

Executive Vice Chancellor and Provost, Maricopa Community Colleges



The success of Latinos is essential to Arizona's social and economic prosperity. Latinos comprise 15% of the labor force – and rising. Latinos in the U.S. will represent 60% of the nation's population growth between 2005 and 2050. They are the largest minority group in K-12 in Arizona but do not participate sufficiently in post-secondary education. Our educational systems, government and service agencies must work together to make it easier for our Latino students to attain a college degree or certificate. We must raise awareness about the value of a college degree for improved quality of life.

Latinos, 25. This median age difference underlies an economic reality that confronts the entire state: Arizona's Whites are aging, with their productive work years nearing their end, while Latinos are in the K-12 education system, trying to acquire the skills to be Arizona's future workforce.

Changing Classrooms

Arizona's K-12 public school system reflects these changing Arizona demographics. K-12 enrollment increased steadily between 2001 and 2011.¹⁵ The fastest-growing segment is Latino youth, which has grown by over half in just one decade. Meanwhile, non-Hispanic students grew by less than 6% during the same period.¹⁶ By the 2011 school year, there were a mere 8,000 more White youth than Latinos in a system that educates more than 1 million students. If current population trends continue, the number of Latino students could exceed the number of Whites by the beginning of the next school year.

Many Arizonans have blamed this large influx of Latino students into an already strained public school system on illegal immigration, and question the state's responsibility to educate non-citizens. Supporters of this view seek solutions in laws prohibiting non-citizens from attending public school and otherwise pressuring undocumented

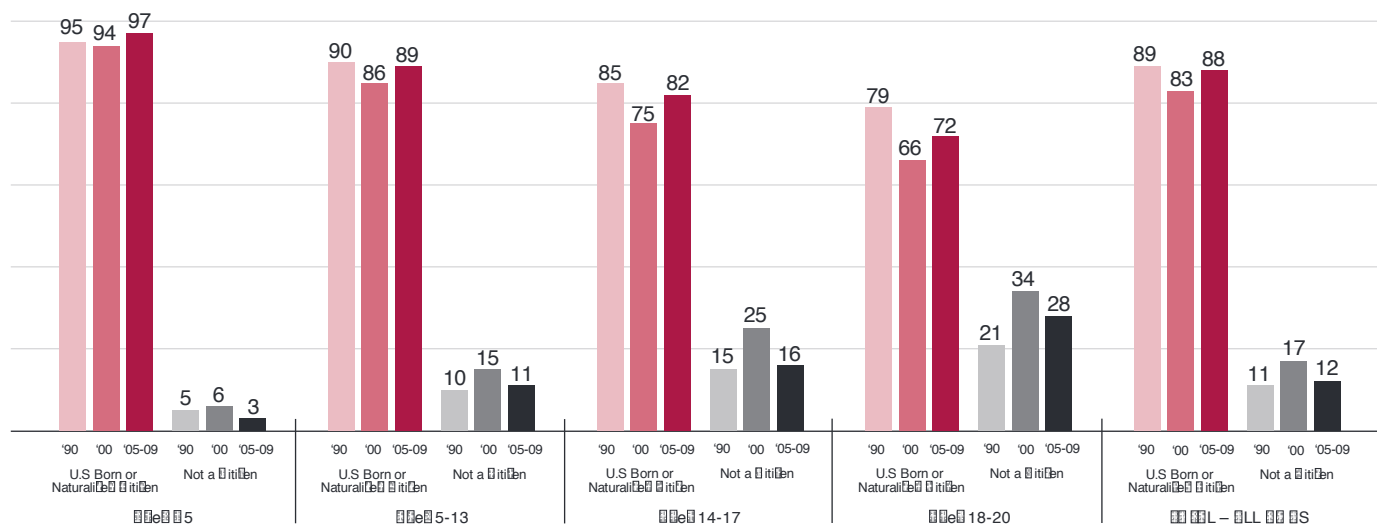
residents to leave the state. However, while illegal immigration has clearly played a major role in the growth of Arizona's Latino population, the state's young Latinos are overwhelmingly U.S. citizens.

Some 88% of Latino youth under 20 years of age are naturalized citizens or were born in the U.S. Among Arizona Latino children under 5 years of age, that percentage leaps to 97%. Further, demographers project that the future growth of the Latino population will come more from natural increase than from immigration. Thus, the issue of educating Arizona's Latino children is one of educating U.S. citizens rather than undocumented immigrants.

Making the Grades

Many Arizona Latinos enter the education system already beset by critical disadvantages that have contributed to their relatively small progress during the past decade. One is economic well-being. The latest figures from the Census Bureau show that the poverty rate among Arizona Hispanics has been more than twice that of non-Hispanics over the past two decades.¹⁷ Hispanics who are not citizens have a much higher poverty rate than citizens, but even Hispanic citizens have not experienced any narrowing of the gap with non-Hispanics over the last 20 years. In every age group,

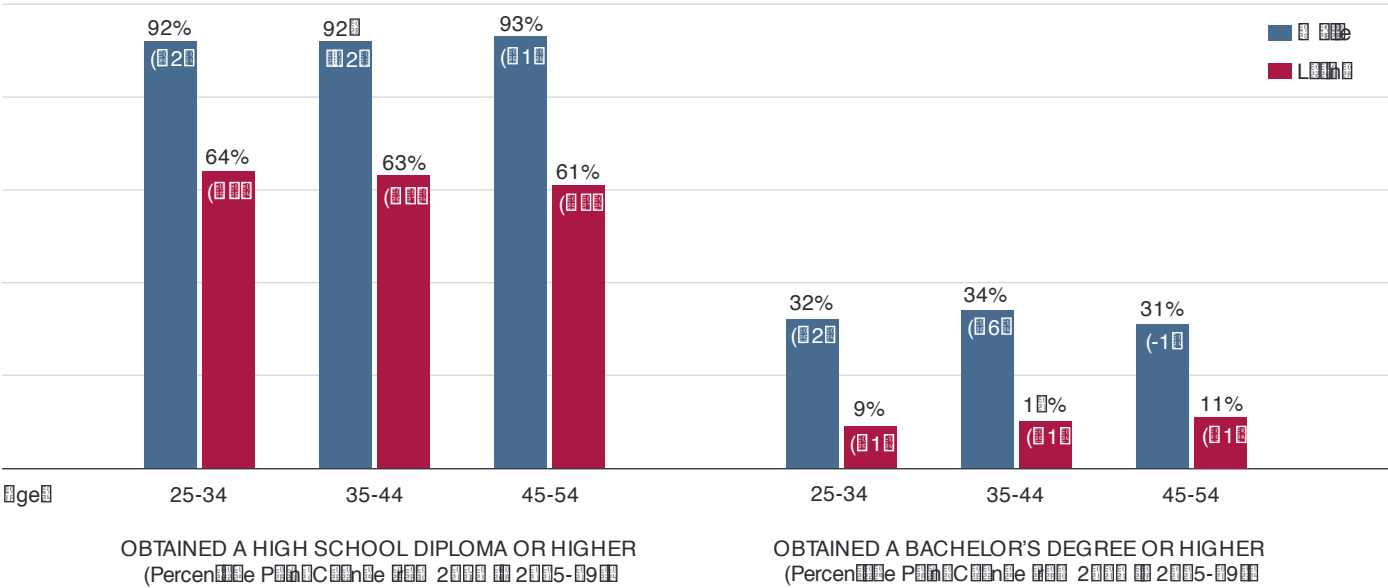
FIGURE 4: **LATINOS LESS THAN 21 YEARS OF AGE IN ARIZONA BY CITIZENSHIP, PERCENT SHARE OF TOTAL, 1990-2009**



Note: Numbers are rounded.

Source: U.S. Department of Commerce, Census Bureau, decennial census (1990 and 2000) and American Community Survey (2005-09).

FIGURE 5: PERCENT EDUCATIONAL ATTAINMENT, 2005-09*, AND PERCENTAGE POINT CHANGE IN ARIZONA FROM 2000



Note: *Uses a 5-year average for greater accuracy. Numbers are rounded.
Source: U.S. Department of Commerce, Census Bureau, decennial census (2000) American Community Survey (2005-09).

the median household income of Hispanics in 2009 was less than that of non-Hispanics.

A second challenge facing many Arizona Latino students concerns parental education. A significant body of research confirms that parental education is a key influence in predicting success in school.¹⁸ Parents with higher levels of education often encourage behaviors or routines that lead to long-term academic success, such as reading outside of school or visiting teachers when a question arises. But more than 65% of Latino adults in Arizona have no educational experience outside of high school.¹⁹ The picture looks less bleak when one includes parents who have achieved associates degrees or some college; this boosts Latino adult participation in postsecondary education to more than one in three adults. Yet this remains well below the 69% rate among Whites.

The third major disadvantage besetting many Arizona Latinos concerns language. Scholars generally agree that the primary language spoken at home influences a child's academic performance. Early deficits in reading English among many Latino children limit their academic success at subsequent grade levels and can result in lower academic achievement across every level of education.

The language issue appears to be especially critical among Latino noncitizens. The proportion of U.S.-born Hispanics speaking Spanish at home has decreased over time. Yet in 2010 more than 70% of Arizona Latino households spoke Spanish at home, ranging from 56% among U.S.-born Latinos to 97% of Hispanic noncitizens. More than 80% of U.S.-born Hispanics who speak another language at home spoke English "very well," and more than 90% spoke English at least "well" in 2009. In contrast, only 20% of Hispanic noncitizens spoke English "very well."²⁰

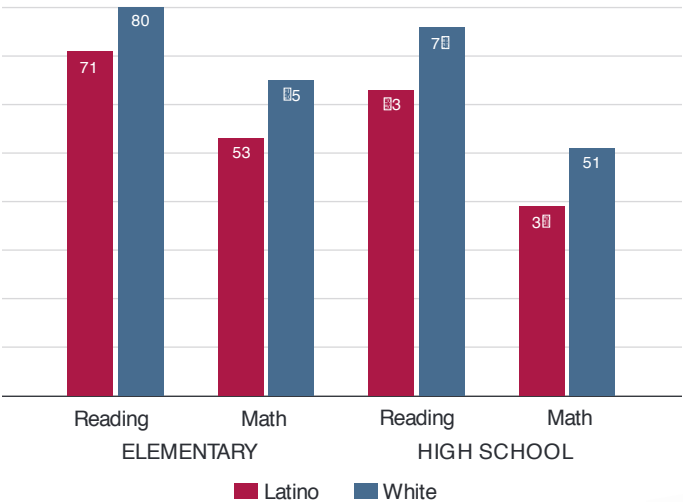
How Arizona's public schools should deal with their large population of English Language Learners (ELLs) has been a controversial issue since well before *Five Shoes* was published. In 1992, families in Nogales filed a class-action lawsuit in U.S. District Court, claiming that Arizona schools had failed to identify ELLs and fund adequate programs to help them. State officials fought the case vigorously while approving some reforms in ELL funding, but the plaintiffs' side was upheld in the district and circuit courts. Arizona appealed to the U.S. Supreme Court, which in 2009 sent the case back to the appeals court with instructions to hold further hearings concerning, among other things, changes that Arizona has made in ELL instruction.

Meanwhile, bilingual education in Arizona was abolished in 2000 by statewide approval of ballot Proposition 203. It was replaced by a system called Structured English Immersion (SEI), in which ELLs attend daily four-hour blocks of English instruction. How well SEI is working has been disputed,²¹ as has the total number of ELLs in the public schools.

Once students enter the K-12 system, standardized test scores provide a gauge of academic achievement, as well as a glimpse into how well schools are preparing students for college and careers. In Arizona, Arizona's Instrument to Measure Standards (AIMS) and the National Assessment of Educational Progress (NAEP) are accepted measures of academic achievement.

In 2011, 39% of Latinos passed the AIMS high school math exam and 63% passed reading, while half of Whites passed math and 76% passed reading. Latinos' lagging scores suggest that many are still leaving school unable to meet basic expectations of high school graduates; many enter the world unprepared for the modern workforce.

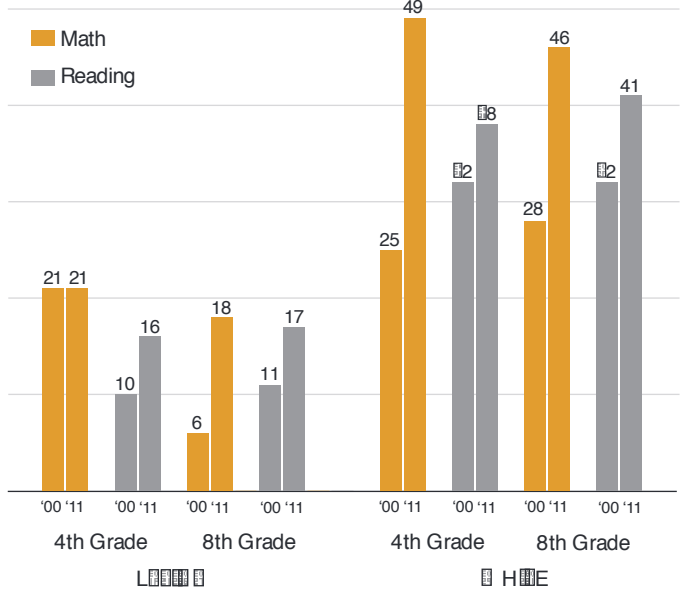
FIGURE 6: PERCENT PASSING AIMS SUBJECT TESTS, 2011



Note: Numbers are rounded.
Source: Arizona Department of Education.

NAEP tells a similar story. The overall average NAEP scores for Arizona White students were considerably higher in both 2000 and 2011 than for Latino youth. According to the 2011 NAEP results, Latino elementary school students were much less likely than Whites to reach the levels defined as “proficient” or “advanced” performance in math and reading. This gap only worsened in Arizona’s public high schools: Only 17 out of 100 Latino students entering high school are prepared to work at grade level (or higher) in math and reading.

FIGURE 7: PERCENTAGE AT OR ABOVE “PROFICIENT”, NATIONAL ASSESSMENT OF EDUCATIONAL PROGRESS (NAEP), 2000 AND 2011



Note: Numbers are rounded. *Math tests were administered in 2000; reading tests were administered in 2002.
Source: National Center for Educational Statistics, Institute of Educational Sciences.



In Arizona, Arizona's Instrument to Measure Standards (AIMS) and the National Assessment of Educational Progress (NAEP) are accepted measures of academic achievement.

Susan Carlson
Executive Director, Arizona Business and Education Coalition

We say that we want to develop a highly skilled workforce, but we continue to zero out funding for education.



The future of Arizona's competitiveness lies in the hands of a well-educated workforce that will likely be predominately Latino. At present, many of these are youngsters who cannot see the pathway for themselves from middle school, through high school and on into postsecondary; if they do, they cannot afford tuition. Their parents don't know how to access the postsecondary system or to pay for it. *Five Shoes Waiting to Drop* was written a decade ago – yet the challenge posed then remains: Our future depends on how we treat and educate this growing population.

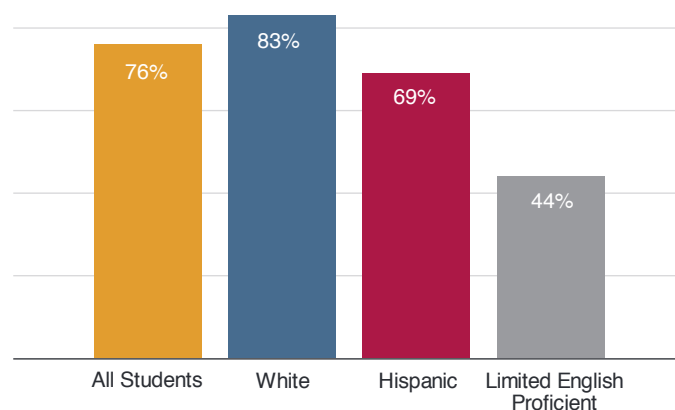
The inability to work at a high school level in core subjects such as math and reading often leads to frustration and failure which, in turn, can contribute to the dropout rate. In any case, Arizona's Latino students' dropout rate is twice that of White students, according to the state Department of Education. A 2011 national study places this fact in the context of Arizona's long-term economic health.²² The Alliance for Education estimates that if Arizona were to cut in half its number of 2010 Latino high school dropouts, those graduates would earn an additional \$31 million each year, allowing them to spend an additional \$23 million annually. This would mean that the economic "multiplier effect" over years and decades of improved graduation rates and increased earning potential could be enormous – benefitting not only these individuals, but all Arizonans.

Ready, Or Not?

Most Latino students do stay in school and graduate. That is good news, but a high-school diploma is far less valuable today than it once was – especially in a state like Arizona that seeks to participate fully in the "knowledge economy."

Looking beyond the high school diploma, many graduates are encouraged to shift their focus to college- and career-readiness. One tool used to assess college- and career-readiness is participation in and scores on Advanced Placement (AP) exams. AP courses allow qualified high school students to take college-level courses. Based on their performance on the AP exam, students can earn college credits.

FIGURE 8: ARIZONA'S FOUR-YEAR HIGH SCHOOL GRADUATION RATE, 2009



Source: Arizona Department of Education.

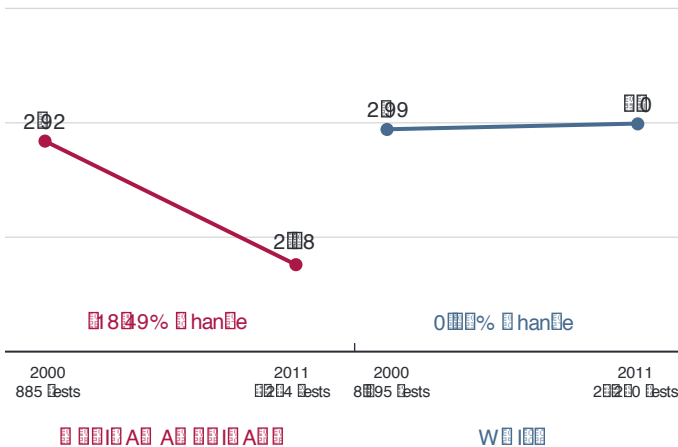
Here, Arizona's numbers are striking. Over the past decade, the number of AP exams taken in the state has increased by a remarkable 254%, with Latinos' participation increasing by 752%. Like the decreasing dropout rate, this rapid progress must be considered a positive development for Arizona. Also like the decreasing dropout rate, Latino students' gains have occurred within the context of rising scores for nearly all students.

On the other hand, while more Latino students are taking AP exams, they are, as a whole, actually scoring lower than a decade ago. AP exams are scored on a five-point scale, with 1 representing "no recommendation" for college credit and 5 representing "extremely well qualified." During the past decade, White students' average scores have stayed flat;

however, average scores among Latino students dropped. This may in part be due to the aforementioned sharp increase in the number of test-takers. A decade ago, only the highest achieving students took AP courses, while today a far wider range of students do so. Arizona has been successful at encouraging more Latinos to participate in AP classes, but scores – and the chance of getting college credit – have fallen.

Notably, in 2000 Latino and Mexican American students (these are the categories used by the College Board) performed above their overall average test scores in the areas of art and language, which includes Spanish literature and comprehension, while White students demonstrated higher proficiency in math, physics, and the social sciences. A decade later, Latino students demonstrated progress in math, physics, and social sciences, although their overall scores dropped substantially.

FIGURE 1: ADVANCED PLACEMENT TEST MEAN SCORES FOR LATINO AND WHITE STUDENTS, 2000 AND 2011

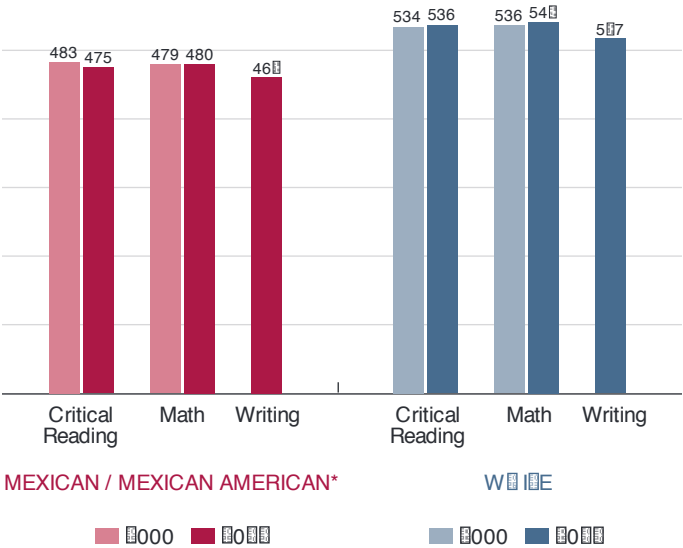


Note: This category designation is used by the College Board.
Source: The College Board Advanced Placement Program.

The Scholastic Aptitude Test (SAT) is a national series of tests designed to assess high-school students’ academic readiness for college. The achievement gap between Arizona Latinos and Whites in SAT scores is consistent with those found in AIMS and NAEP scores. Arizona’s Latino students score lower than Whites in all tested areas. Average scores have not changed significantly or consistently over the past decade by race or ethnicity. Poor scores on the SAT restrict

students’ choices for post-secondary education and leave them less likely to gain entrance to high-level schools and programs that can lead to high skills and occupations.

FIGURE 2: SAT MEAN SCORES BY RACE/ETHNICITY, 2000 AND 2011



Note: The Writing Section was not added to the SAT until 2005. This category is not limited to U.S. citizens. This category designation is used by the College Board.
Source: The College Board SAT Subject Tests.

Taken together, this set of metrics that Arizona uses to measure the achievement level of its K-12 students point to a persistent and pervasive gap between Latinos and Whites. Although more Latino students may be present in classrooms due to declining dropout rates, their measures of academic achievement remain substantially below that of Whites.



State Sen. Richard Crandall
Chairman, Senate Education Committee

The conversation in homes, schools, business corridors and the Legislature about the need for an educated workforce is rising to a fever pitch. Unfortunately, only a handful of visionary leaders have picked up the baton and translated the conversation to action. Given Arizona's demographics, we are going to need collaboration on an epic scale to impact our minority population in a way

that keeps Arizona competitive while improving the quality of life for all. No one group can do it alone. To impact the hundreds of thousands of students we are talking about we will need a concerted effort by all.



After High School, Still Trailing

A major goal of the public K-12 education system is to prepare students to participate successfully in the increasingly competitive global economy – that is, graduates who are college- or career-ready.²³ And there is considerable evidence that Arizona's future economic health will depend upon on more high school graduates obtaining some type of postsecondary education.²⁴

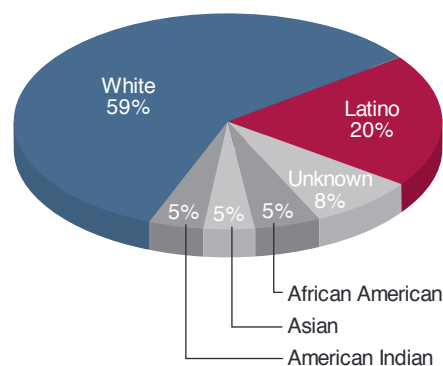
A large body of academic research ties a population's education attainment to its economic stability and prosperity, from increased home ownership rates to decreased incarceration rates. A 2009 study estimates an \$8,000 per year earning difference between an Arizona high school graduate and one who acquires at least some postsecondary education.²⁵ The same study finds that those with a bachelor's degree can expect to earn nearly twice as much as a high school graduate.

However, the commonly cited data regarding college- and career-preparedness after high school – such as eligibility for university study, higher education institution enrollment, and postsecondary graduation rates – all point to the conclusion that Latino students have a tougher time getting into postsecondary institutions, staying in, doing well, and achieving degrees and certifications.

One indicator is the population of Arizona students who meet criteria for state university eligibility. Over the past two decades, racial and ethnic patterns of eligibility have remained relatively stable, with White students more likely than Latinos to qualify for admission to Arizona public universities. Between 1989 and 2006, Latino eligibility rates hovered between 30% and 40%, while the rates for the state's total population of students were between 40% and 50%. The difference between Latino and Whites is even wider, with White students eligible at rates upwards of 60%.

In 2009, 350,425 students enrolled in Arizona's public community colleges and universities. Barely 20% of these post-secondary students are Latino, even though approximately 33% of Arizona's college-age population is Latino, and more than 30% of Latino high school students are eligible for university study.

FIGURE 11: ARIZONA ENROLLMENT IN TWO-YEAR COMMUNITY COLLEGES AND FOUR-YEAR PUBLIC UNIVERSITIES, 2009

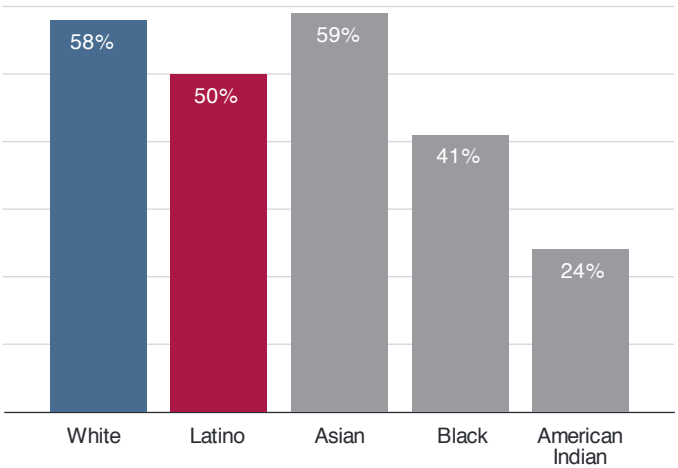


Source: The Integrated Postsecondary Education Data Systems (IPEDS).

In 2009, Latino students in Arizona's public universities were less likely to graduate than their White peers.

In 2009, Latino students in Arizona’s public universities were less likely to graduate than their White peers. One out of every two Latino students who began college finished their baccalaureate degree within six years of enrollment, whereas 58% of White students graduated.

FIGURE 12: ARIZONA POST-SECONDARY GRADUATION RATES, 2009



Source: The Integrated Postsecondary Education Data Systems (IPEDS).

But those numbers mask a deeper disparity. In 2010, Arizona’s three state universities conferred 23,487 bachelor’s, master’s and doctorate degrees. Only 13% of these degrees were awarded to Latinos, while two-thirds went to White students. At the graduate level, the participation rate among Latinos decreased further; only 122 doctorate degrees, out of a total of more than 1,500, were conferred to Latinos in 2010.²⁶



In 2010, Arizona's three state universities conferred 23,487 bachelor's, master's and doctorate degrees. Only 13% of these degrees were awarded to Latinos

Jaime Molera
President, Arizona State Board of Education

If we don’t address the problem of academically bankrupt schools, a generation of students will not be able to compete for quality jobs. Regardless of a student’s race or ethnicity, all children deserve access to a quality education. First and foremost, high expectations are key. Many Latinos succeeded because their parents (and in many cases – as in mine – a single parent) would not tolerate failure. While we must improve state policies, Latino families must insist on quality, and not accept excuses that prevent their kids from achieving at the highest levels. We need to incentivize the expansion of top-performing schools and the successful pedagogies they employ, while at the same time drastically change the environments (and leadership) that produce little or no academic gains.



What happens next?

If the Latino education gap continues, Arizona's economic future is at risk.

In 2001, Five Shoes painted a grim picture of Latino education attainment, sounding an alarm about Arizona's future economic competitiveness. More than a decade later, the data portray a future that is, if anything, worse.

As noted earlier:

- Arizona's Hispanic population is soaring as a percentage of the total, while our White share is shrinking.
- A wide gap in educational achievement persists between Arizona's Latinos and Whites.
- Education is among the most important factors in achieving prosperity and well-being for individuals and families
- Arizona's ability to attract industry and compete in the global economy will be jeopardized by an under-educated, low-skilled workforce.

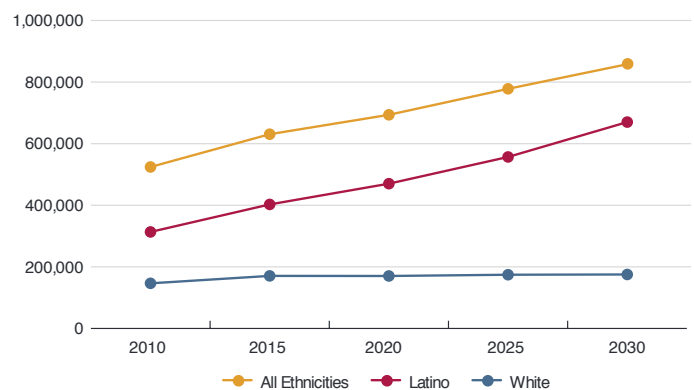
What could this mean for Arizona?

Predicting the future is always a risky undertaking. Still, it's useful – and sometimes necessary – to consider the possible outcomes of present policies. It seems inevitable that, unless something is done to improve Latino educational achievement, Arizona's population of under-educated workers will continue to grow. In addition, low education levels can lead to collateral problems such as above average unemployment levels, low annual incomes, a high proportion of residents in poverty and reduced state revenues.

In an effort to create a more concrete picture of Arizona's possible future, population projections were made, based on past and current trends, in a number of demographic and economic categories.²⁰ By their nature, the resulting findings are tentative, and are here presented as such; as the Great Recession has demonstrated, unforeseen events can have major impacts. Still, the projections serve as benchmarks to help portray what might happen if Arizona continues its present course.

For example, if nothing is done to close the educational achievement gap, the number of Arizona adults with less than a high school education could rise from around 524,000 in 2010 to nearly 858,000 in 2030. The vast majority of these, perhaps 670,000 or 78%, will be Latino. Many or most will likely suffer the financial consequences, as will the rest of the state.

FIGURE 11: ADULTS 25 YEARS AND OLDER NOT COMPLETING A HIGH SCHOOL DEGREE

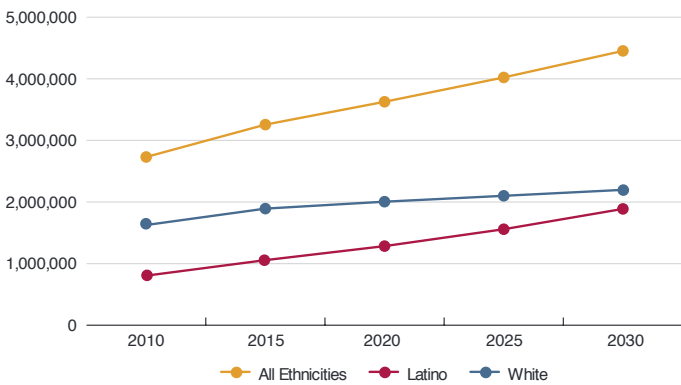


As more businesses become increasingly automated and data-driven, the need for highly trained employees becomes more critical. Education and training beyond high school are becoming a necessity rather than a luxury. The Georgetown University Center on Education and the Workforce estimates that 61% of all jobs in Arizona will require some training beyond high school by 2018. In assessing post-secondary education, however, the future for Arizona Latinos continues to look bleak.

Much of the emphasis on post-secondary education revolves around two-year educational and training courses. In 2010, among adults 25 years of age and older, about 34% had completed some type of two-year education/training program. But, again, the proportion of Latinos completing a two-year certification (17%) is less than half the proportion among Whites (40%). As the Latino population grows at a much faster rate than Whites, the number of Latinos left behind

educationally will likely grow dramatically. Between 2010 and 2030 the number of Latinos failing to complete a two-year training/education program could grow from 804,000 to 1,888,000, amounting to a lost generation of young adults.

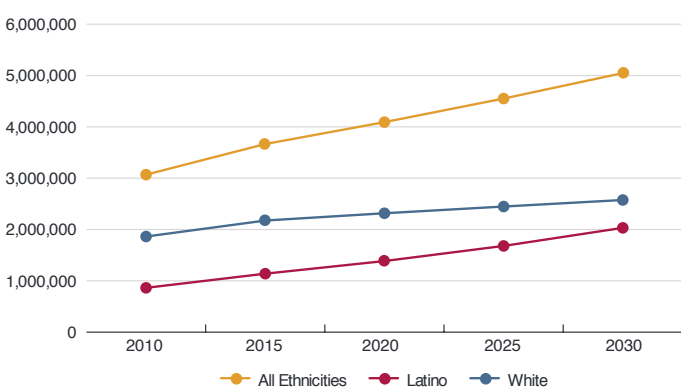
FIGURE 14: ADULTS 25 YEARS AND OLDER NOT COMPLETING A 2-YEAR DEGREE



The projections are also grim for college graduation rates. In 2010, nearly 90% of Latinos 25 and older had not completed a college degree, compared with 69% of Whites. By 2030, despite the inevitable demand for educated workers, little

seems likely to change; only about 10% of Latinos will graduate from college compared with slightly more than 30% of Whites. Population growth will generate a greater number of Hispanic college graduates in 2030 than in 2010, but the proportions within ethnicities will look the same: Nearly one in three Whites will have earned a four-year degree compared with one in 10 Latinos. In short, the number of those failing to acquire a 4-year college degree grows more rapidly among Hispanics than among Whites.

FIGURE 15: ADULTS 25 YEARS AND OLDER WITHOUT A COLLEGE DEGREE



State Sen. David Lujan
 District 15
 Chief Administrator, ASU Preparatory Academy



Because Latinos will eventually make up a majority of Arizona’s population, we would be foolish to ignore that Latino children will comprise a significant portion of our future workforce and leaders. We must prepare them today to compete in a global economy, and without a doubt that means focusing on their education. I believe it is possible to narrow the gap in educational performance and attainment if we support programs that are successfully demonstrating the ability to do so. But we need a comprehensive approach that also makes parents and other family members active participants in the education of their children, and we need to start early.

The Economic Impact

As Arizona's Hispanic population grows, its impact on virtually all statewide social and economic sectors will be felt more profoundly. A burgeoning Hispanic population with below-average educational attainment levels will almost certainly leave Arizona at a serious disadvantage in its economic competition with other states and nations by drawing down statewide financial and educational metrics.

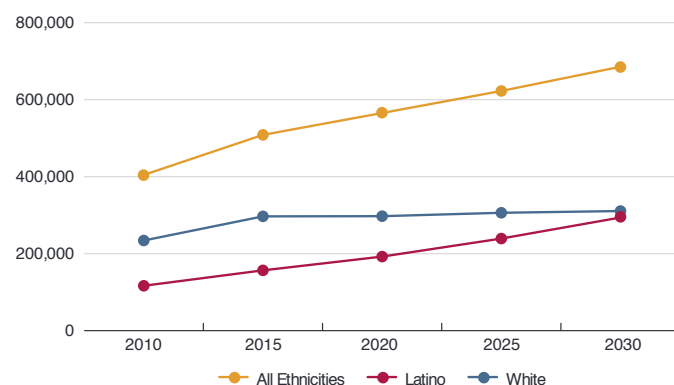
Below-average educational attainment within a rapidly growing population can lead to:

- Fewer qualified workers to fill increasingly complex positions
- Lower average incomes
- Reduced consumer purchasing power
- More families living in poverty
- Fewer residents with health insurance coverage
- Greater demands on public services and benefits
- Lower per-capita tax revenue
- A reduced ability to attract quality businesses to the state

Unemployment

Unemployment rates currently trend higher among Latinos than among Whites – 12.1% and 8.6%, respectively, in 2010; that means 117,000 Arizona Latinos 25 and older were unemployed compared with 234,000 Whites. If unemployment rates remain constant, by 2030 those numbers draw much closer together – 311,000 Whites will be unemployed compared with 294,000 Hispanics. Viewed another way, Whites today make up 58% of unemployed Arizonans 25 and older, while Latinos comprise 29%. By 2030, Whites will represent 45% of unemployed Arizonans and Latinos, 43%.

FIGURE 11: NUMBER OF UNEMPLOYED ADULTS 25 AND OVER



Whites today make up 58% of unemployed Arizonans 25 and older, while Latinos comprise 29%.

By 2030, Whites will represent 45% of unemployed Arizonans and Latinos, 43%.

Craig R. Barrett
Retired CEO/Chairman, Intel Corporation
Chairman, Arizona Ready Education Council

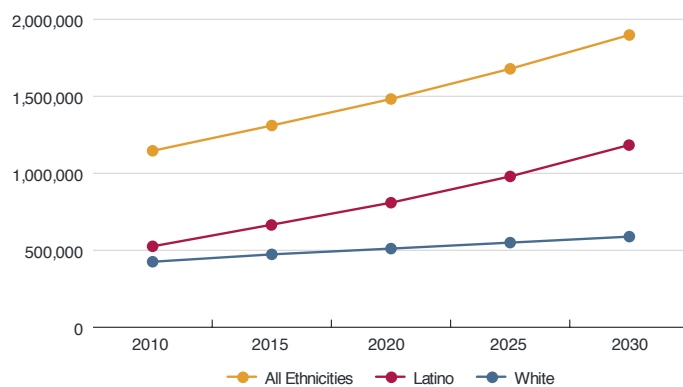


I agree with the points raised in this report – they are supported by data and by the reality that surrounds us. We know that Latinos and Whites can all do better. For example, Latinos in Florida already do better than Whites in Arizona. The key to better educational performance is simple: good teachers, high expectations, and tension (feedback loops, pay for performance, school choice, etc.). But the education establishment is slow to change. We just need the political will to move faster on the educational reforms we have been talking about for years, and make sure the reforms touch every kid.

Poverty

Poverty is much more prevalent among Hispanics than among Whites. In 2010, 18% of Arizonans were living below the federally defined poverty level, which is \$11,170 for a single individual and \$23,050 for a family of four. Nearly half – 46% – of those living below the poverty level are Hispanic, while 37% are White. The high percentage among Hispanics is particularly noteworthy because Whites currently make up 58% of the total state population, while Hispanics represent about 30%. By 2030, if projections hold true, 62% of Arizonans in poverty will be Hispanic, and 31% White.

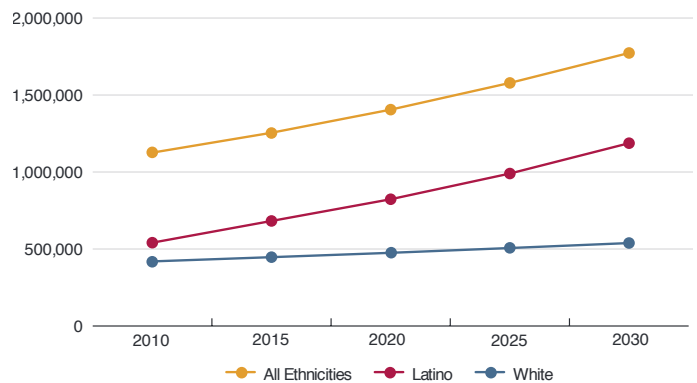
FIGURE 11: NUMBER OF PEOPLE LIVING IN POVERTY



Health Insurance

Health insurance coverage – or the lack of coverage – may well change in unforeseeable ways, given today’s robust nationwide debate on this issue. In Arizona, however, it’s likely that it will in any case be directly impacted by the growth of the Hispanic population. Between 2010 and 2030, the number of Hispanics without health insurance coverage of any kind could more than double, from 541,000 to 1,187,000. Among Whites, that number will increase by only about 120,000, from 419,000 to 539,000. This issue is largely driven by poverty. As poverty levels increase, the proportion of state residents with health insurance coverage decreases.

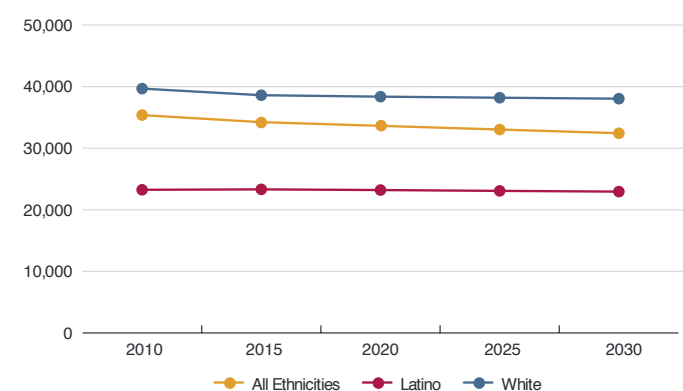
FIGURE 12: NUMBER OF PEOPLE WITHOUT HEALTH INSURANCE



Incomes

A substantial income gap exists today between Arizona Latinos and Whites. In 2010, among adults 25 and older, the average income for Hispanics was \$23,242; among Whites, it was \$39,667. Averaging the two ethnic groups incomes yields a combined average income of \$35,339. Looking into the future, and measuring in 2010 dollars, by 2030 the combined average income for Hispanics and Whites will have dropped to \$32,423 – another impact of the larger proportion of undereducated and unskilled residents in the state. Less disposable income means less purchasing power, which drags down economic growth and tax revenues. Lower tax revenues will result in less overall state resources at a time when progressively larger numbers of the Hispanic population will likely need more state services.

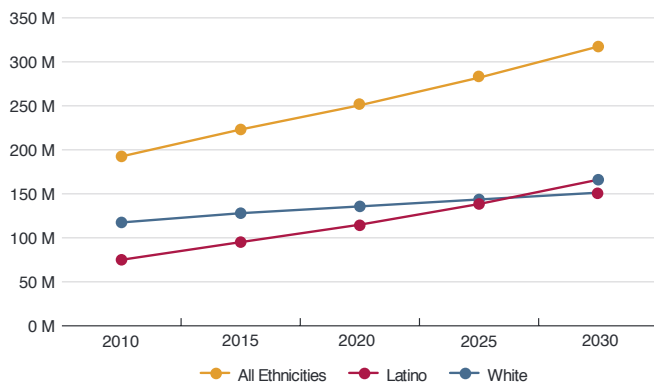
FIGURE 13: AVERAGE INDIVIDUAL INCOMES



By 2030, 62% of Arizonans in poverty will be Hispanic and 31% White.

The total welfare^{III} payout for Arizona Hispanics and Whites in 2010 was \$192,525,352. Of that total, 39% was paid to Hispanics – \$75,032,698 – and 61% to Whites – \$117,492,654.^{III} By 2030, payments to Hispanics and Whites could grow to \$317,377,251. However, 52% of those payments will go to Hispanics and 48% to Whites – a reversal driven by the growing Hispanic population.

FIGURE 20: TOTAL WELFARE PAYOUT



These projections, however tentative, point to the conclusion that Arizona could face a serious economic crisis. While most public- and private-sector leaders argue that the state must find a path to excel in the highly competitive global economy, it in fact risks becoming a second-tier state with an under-educated workforce, degraded revenue opportunities, a heavy financial burden of public services and fewer features to attract new businesses and entrepreneurs and to retain existing ones.

Has the shoe dropped?



José A. Cárdenas

General Counsel, ASU and former chairman, Lewis & Roca, LLP

There is no disputing the Morrison Institute's 2012 findings regarding the dismal state of Hispanic educational attainment in Arizona. The statistics may be no worse now than they were when *Five Shoes Waiting to Drop* was released in 2001. But back then, most Arizonans seemed to believe in what the authors called "The Latino Promise: The Benefits of Being a State of Immigrants." Ten years later, those words are rarely heard in a post-9/11-great-recession world seething with anti-immigrant fervor. Fulfilling the Latino Promise will be more difficult than ever, but it is still the key to achieving the promise that Arizona holds for all of us.



Now Is the Time

Arizona must tap the potential of its fastest-growing population group.

Few public policy issues are more hotly debated than education. Disagreements thrive over everything from school funding to school uniforms to how to calculate per pupil spending. These are worthy topics, but the data in this report argue persuasively that policymakers and engaged citizens must address the bigger picture: We are not preparing many of our students adequately to handle the competitive challenges of a global economy; and we are particularly failing to tap the enormous potential of Arizona's fastest-growing population group. If Arizona does not deal with its current and increasingly significant educational attainment gap, the state faces a very real possibility of economic decline.

Arizona does not lack ideas. Numerous suggestions have been put forth from the *Five Shoes* report as well as other reports, councils and experts. We have attended many conferences, issued many resolutions and read many reports – like this one. Most have been ignored. True, there have been some encouraging signs and positive efforts: Arizona has been a national leader in the promotion of school choice through its support of charter schools; strong majorities supported the creation of First Things First and defended it against its opponents; in the depth of an economic recession, Arizonans voted to increase their taxes on the promise that education funding would not be cut; Move On When Ready is being tested in several school districts; educational leaders came together for a successful Race to the Top effort. These and others represent admirable efforts to improving the K-12 and post-secondary systems.

There has been no shortage of recommendations for reform. Indeed, those contained in *Five Shoes* remain relevant today. And it seems unlikely that research – including that for this report – will unearth startling new approaches that haven't been offered before.

This report's final section contains some of those ideas, gleaned from a variety of sources. First, however, it's worth noting four general considerations that must be in place if real progress is to be made.

GOING LONG-TERM

Improving educational outcomes for Arizona's Latinos – for all students – will not happen quickly, even if the state were to launch an immediate all-out intervention. Even the most creative and widely accepted reforms would take years to filter through the system, and will only succeed in doing so if a critical mass of leaders and voters maintain their support for them. But, in Arizona as elsewhere, political attention seems too often limited by the length of the election cycle.

TAKING RESPONSIBILITY

As *Five Shoes* noted, leadership is a rare and precious commodity – and essential if a serious effort is launched to improve Latino education. Clearly, this must include Arizona's elected officials at the state, local and district levels. But energy and effort must also be expended by other Arizonans in their private and professional lives – even if they don't have children in the system. Leaders in the Latino community, employers, community-based organizations, principals, and teachers must all be committed to closing the achievement gap. And, importantly, parents must participate as fully as possible – at home, at school meetings and at the ballot box – in enhancing their children's educational improvement.

PAYING UP

The 800-pound gorilla in the discussion is funding. Arizona routinely hovers near the bottom of all 50 states in funding per student. While money alone will not close the gap, it is not possible to expect improvement without investment. As difficult as it is in a relatively low-income state still emerging from the Great Recession, Arizona must acknowledge that public education funding is part of the solution, and must be permanently increased.

CONSIDERING CONTEXT

The experts, the data and common sense all point to the vital importance of families' socio-economic status to their

children's success in school. Any student of any ethnicity will struggle to overcome barriers such as poverty, poor nutrition, ill health, unsafe neighborhoods and residential instability – and this doesn't even consider the quality of the local school. None of this is to deny that the task of learning and progressing academically falls primarily upon the families and children involved. But it is difficult to see how any initiative to enhance Latino educational performance in Arizona can succeed without taking these associated factors into account.

As noted earlier, the negative consequences of the Latino educational achievement gap will almost inevitably fall on *all* Arizonans, regardless of race, ethnicity, age, citizenship status or number of children currently in the public system. Similarly, meaningful improvements cannot be accomplished without a willingness from all sides of the education debate to compromise in the service of success. No one group or viewpoint will get all it wants, but Arizona might get what it needs. Nothing of substance can happen without this first step.

Now is the time.



Policy Recommendations from Five Shoes

1. Make high-quality early childhood programs universal and implement them first in Latino neighborhoods.
2. Recognize that one-size-fits-all funding and curricula formulas are not doing the job.
3. Improve the “pipeline” that moves Latino students from high school into higher education, particularly in technical fields.
4. Press for a federal education initiative for border states.

Some Strategies

Since the publication of *Five Shoes* in 2001, more than a dozen reports and articles have been released and numerous conferences convened about Arizona's educational achievement gap. If we broaden our view to the national level, they become too many to count. In the hope of stimulating discussion, below are listed a number of recommendations from other reports:

Commit to Excellence for All Children

"Meeting the first challenge will require providing more rigorous coursework, better schools, better instruction, and possibly more time to 'make up' for the learning that is lost outside of school – when middle-class students are receiving academic enrichment that low-income Latino students do not receive. Currently, the primary means to closing the achievement gap at the elementary-school level are placing students in better schools, providing some kind of early intervention, or providing them access to special educational opportunities, such as gifted education."

Patricia Gándara, *Fragile Futures: Risk and Vulnerability Among Latino High Achievers* (2005), Educational Testing Service; <http://www.ets.org>

"Ensure full access for Hispanic American students to enter college and demand greater accountability in higher education for Hispanic graduation rates. Challenge the nation's postsecondary institutions to graduate 10 percent more Hispanic American students from colleges and universities each year, than are currently graduating, over the next decade. Urge institutions to explore the increased development of retention programs that would benefit Hispanic American students."

President's Advisory Commission on Educational Excellence for Hispanic Americans, *From Risk to Opportunity: Fulfilling the Educational Needs of Hispanic Americans in the 21st Century* (2003); <http://www2.ed.gov/about/inits/list/hispanic-initiative/from-risk-to-opportunity.pdf>

Go Beyond the Traditional K-12 Experience

"We recommend state governments collaborate with local communities to offer high-quality educational experiences with a variety of schedule options. Young Hispanic children ages 3 and 4 years should be given access to free, state-funded preschool whose enrollment is done on a volunteer basis. Evidence suggests that high-quality prekindergarten programs improve school readiness for young Hispanic children and decrease achievement differences between racial/ethnic groups at kindergarten entry."

Eugene Garcia and Bryant Jensen, *Early Educational Opportunities for Children of Hispanics* (2009), Society for Research in Child Development; www.srcd.org

"Research indicates that many alternative schools do a good job of educating problem students. So, look at alternative schools, as options for hard to reach students because they seem to work for at-risk students."

Richard Verdugo, *A Report on the Status of Hispanics in Education: Performing a History of Neglect* (2006), National Education Association; http://www.nea.org/assets/docs/HE/mf_hispaniced.pdf

"Strategies that officials should consider include: authorizing the creation of more high-quality charters, pilot schools, and other nontraditional-model schools that provide families with access to schools with distinctive approaches to teaching and learning."

Council on Foreign Relations, *U.S. Education Reform and National Security* (2012); <http://www.cfr.org>

"Support educational and supplemental programs that expand after-school programs, interventions, and test preparation courses (e.g., high school exit exam, SAT, ACT)."

National Council of La Raza, *A Homecoming Journey: The Reenrollment Experience of Latino High School Dropouts* (2009); http://www.nclr.org/images/uploads/publications/file_ASecondChance_10_09.pdf

"Target financial resources for wraparound services to integrate services such as mental health care, family counseling, substance abuse counseling, job training, early childhood care, and after-school programs into the school's programmatic infrastructure."

National Council of La Raza, A Homecoming Journey: The Reenrollment Experience of Latino High School Dropouts (2009); http://www.nclr.org/images/uploads/publications/file_ASecondChance_10_09.pdf

"Create an Office of Education and Workforce Communication to provide channels for compelling information about the economy, economic development, and career navigation for middle school students to mature workers. Providing timely and age-appropriate career information in the K-12 system will establish relevance of curriculum and increase the desirability of applied education."

Morrison Institute for Public Policy, Do Learn and Earn: Arizonans' Experiences Competing in the Race for Good Jobs (2011); <http://morrisoninstitute.asu.edu>

"Develop partnerships with Latino-serving community-based organizations to provide effective family outreach. Much like federal policymakers, state policymakers should also look to develop partnerships with immigrant-serving institutions, faith-based organizations, and community-based organizations to provide effective outreach and share information with Latino families."

National Council of La Raza, Preschool Education: Delivering on the Promise for Latino Children (2011); http://www.nclr.org/images/uploads/publications/Preschool_Education.pdf

Support Educators

"We recommend state governments provide pay and benefits to qualified preschool teachers that are equal to those of public school teachers. This would provide the economic incentive to recruit and maintain a well-educated, reasonably stable group of preschool professionals."

Eugene Garcia and Bryant Jensen, Early Educational Opportunities for Children of Hispanic Origins (2009), Society for Research in Child Development; www.srccd.org

"A Major Talent Initiative for Teachers. With a looming wave of retirements and more schools opening every day, Arizona's educational system will soon be overwhelmed by the impending shortage of teachers. But one thing this state does know how to do is target a need in the workforce and create a system designed to plug the hole. As with nurses, and engineers in the biosciences, Arizona should set a state-wide goal for teacher recruitment and training – and meet that goal. The state can follow through by creating innovative and coordinated processes, including fellowships for school leaders to attend leadership academies, programs that teach collaborative education processes with data analysis, and high-quality mentoring for new teachers."

Morrison Institute for Public Policy and The Center for the Future of Arizona, Why Some Schools with Latino Children Meet the Needs...and Others Don't (2006); <http://morrisoninstitute.asu.edu>

"Hire more specialists in schools so they could help Hispanic students, such as bilingual specialists, psychologists, and social workers."

Richard Verdugo, A Report on the Status of Hispanics in Education: Overcoming a History of Neglect (2006), National Education Association; http://www.nea.org/assets/docs/HE/mf_hispaniced.pdf

"We recommend that state governments continue to fund and experiment with teacher preparation programs to recruit more Spanish-speaking undergraduates and teachers who are trained in second language acquisition to work as language specialists."

Eugene Garcia and Bryant Jensen, Early Educational Opportunities for Children of Hispanic Origins (2009), Society for Research in Child Development; www.srccd.org

"The strong and steady principal is one of the keys to beat-the-odds schools. And the role principals must play is changing. So Arizona needs a new kind of Leadership Institute for Principals. These institutes should focus not on traditional matters such as budgets, buildings and buses but on the new skills required – leadership, learning, and linking people and resources. And these institutes should be aligned with programs of leadership and entrepreneurship because principals in low-performing schools must be prepared to be turn-around specialists. The institutes could be funded by the state, foundations or the school districts themselves."

Morrison Institute for Public Policy and The Center for the Future of Arizona, Why Some Schools with Latino Children Meet the Needs...and Others Don't (2006); <http://morrisoninstitute.asu.edu>



Set a Goal of a Post-Secondary Degree

“Link high schools and higher education institutions so that course work and expectations in high school are clearly related to higher education.”

Richard Verdugo, *A Report on the Status of Hispanics in Education: Overcoming a History of Neglect* (2006), National Education Association; http://www.nea.org/assets/docs/HE/mf_hispaniced.pdf

“Offer retention programs for Hispanic students, mentoring family members on how to enter and stay in college, and programs that build on the strengths of students.”

Richard Verdugo, *A Report on the Status of Hispanics in Education: Overcoming a History of Neglect* (2006), National Education Association; http://www.nea.org/assets/docs/HE/mf_hispaniced.pdf

“Pass the ‘Development, Relief, and Education for Alien Minors (DREAM) Act’ to allow the approximately 65,000 immigrant students who graduate high school annually to pay in-state college tuition rates if they meet their state’s criteria for residency.”

National Council of La Raza, *A Promising Journey: The Reenrollment Experiences of Latino High School Dropouts* (2009); http://www.nclr.org/images/uploads/publications/file_ASecondChance_10_09.pdf

“Restore state postsecondary scholarships and institute programs to accelerate graduation as incentives for participation in postsecondary education and to reduce loan debt on first-generation and low-income families. Paying for college or job training as well as managing student loan debt are major obstacles for first-generation college goers and adults re-careering. Accelerated graduation strategies such as those underway through Arizona’s Getting AHEAD initiative must be expanded.”

Morrison Institute for Public Policy, *Educate and Earn: Arizonans’ Experiences Competing in the Race for Good Jobs* (2011); <http://morrisoninstitute.asu.edu>

Be Data-Driven

“We’ve repeatedly stated in this report that the beat-the-odds schools collect and use data in different ways. They produce new data about their students constantly and disaggregate it so that they can understand the needs of individual students. Businesses, universities, and foundations, among others, can initiate efforts to help schools obtain the necessary technological systems – and the skills to use those systems – so that techniques for a broader range of metrics and for constant assessment are well known and readily available to all schools.”

Morrison Institute for Public Policy and The Center for the Future of Arizona, *Why Some Schools with Latino Children Meet the Odds...and Others Don't* (2006); <http://morrisoninstitute.asu.edu>

“Require states to develop early learning guidelines that establish benchmarks for English-language development. As the Early Learning Challenge Fund becomes available through the Race to the Top initiative, these competitive grants to states should incentivize the development of comprehensive, inclusive early learning standards that are based on current research on second-language development.”

National Council of La Raza, *Preschool Education: Delivering on the Promise for Latino Children* (2011); http://www.nclr.org/images/uploads/publications/Preschool_Education.pdf

“To ensure smooth implementation of the expanded Common Core, the Task Force urges: (that the) standards must be accompanied by different kinds of accountability systems, which use information to guide policy and practice, as well as more advanced assessments, mentioned above, which test essential skills like decision-making and problem solving. Better accountability and assessment systems will spur implementation by educators who are seeking professional success for themselves and academic success for their students.”

Council on Foreign Relations, *U.S. Education Reform and National Security* (2012); <http://www.cfr.org>

“While real differences in performance exist across school systems, inconsistencies in how data are gathered and reported make it difficult to understand the factors shaping the achievement gaps at the system level. This hinders policy makers and educators in their pursuit of better outcomes. ... Moreover, relatively few states and systems currently put useful and timely data on how individual students are progressing in the hands of educators and parents. Given the \$600 billion that the United States spends annually on its public school systems, and the enormous economic stakes riding on improved student achievement, it is remarkably shortsighted to invest so little in insights about educational performance.”

McKinsey & Company, *The Economic Impact of the Achievement Gap in America's Schools* (2009); http://mckinseysociety.com/downloads/reports/Education/achievement_gap_report.pdf

Endnotes

- 1 U.S. Census Bureau, decennial censuses.
- 2 U.S. Census Bureau, decennial censuses (1990 and 2000) and American Community Survey (2005-09).
- 3 Anthony P. Carnevale, et.al., *Help Wanted: Projections of Jobs and Education Requirements Through 2018*, Georgetown University Center on Education and the Workforce (2010); <http://cew.georgetown.edu/jobs2018/>.
- 4 Morrison Institute for Public Policy, *Five Shoes Waiting to Drop on Arizona's Future* (2001); <http://morrisoninstitute.asu.edu>.
- 5 Organization for Economic Cooperation and Development (2010), Programme for International Student Assessment 2009 Results.
- 6 Paul Barton and Richard Coley, *The Family: America's Smallest School*, (2007), Educational Testing Service; <http://www.ets.org/research>.
- 7 Paul Barton and Richard Coley, *Marsing the Achievement Gap* (2009), Educational Testing Service; <http://www.ets.org/research>.
- 8 Interview with the authors, February, 2012.
- 9 Rick Fry, *So Far Behind in Math and Reading Are English Language Learners* (2007), Pew Hispanic Center; <http://pewresearch.org/pubs/499/english-language-learners>.
- 10 Mark Lopez, *Latinos and Education: Exploring the Attainment Gap* (2009), Pew Hispanic Center; <http://www.pewhispanic.org/2009/10/07/latinos-and-education-explaining-the-attainment-gap/>.
- 11 U.S. Census Bureau, decennial censuses.
- 12 Jennifer M. Ortman and Christine E. Guarneri, *United States Population Projections: 2000 to 2050*, U.S. Census Bureau (2009); <http://www.census.gov/population/www/projections/analytical-document09.pdf>.
- 13 Arizona Department of Health Services, Bureau of Public Health Statistics (2009).
- 14 U.S. Department of Commerce, Census Bureau, American Community Survey (2010).
- 15 The Arizona Department of Education, enrollment data, 2001-2011.
- 16 The Arizona Department of Education data includes all races in the non-Hispanic classification.
- 17 U.S. Census Bureau, decennial censuses (1990 and 2000) and American Community Survey (2005-09).
- 18 Pamela E. Davis-Kean, "The Influence of Parent Education and Family Income on Child Achievement: The Indirect Role of Parental Expectations and the Home Environment" (2005) *Journal of Family Psychology*; <http://www.mikemcmahon.info/ParentEducationIncome.pdf>.
- 19 U.S. Census Bureau, 2006-2010 American Community Survey.
- 20 Data for this and the following paragraph come from the U.S. Census Bureau, decennial censuses (1990 and 2000) and American Community Survey (2005-09).
- 21 See for example Karen E. Lillie, et.al., *The Implementation of Structured English Immersion in Arizona*, The Civil Rights Project, University of California at Los Angeles (2010).
- 22 Alliance for Education; *Education and the Economy: Boosting the Nation's Economy by Improving High School Graduation Rates among Students of Color and Native Students* by [redacted]; http://www.all4ed.org/files/EdEconBrief_sebsoc.pdf.
- 23 While this report focuses on traditional academic educational metrics such as high school and college graduation rates, the same concerns apply to the entire range of post-secondary education including vocational and technical schools and other certificate programs; all are crucial to Arizona's economic health.
- 24 Andrew Sum, Ishwar Khatiwada, Joseph McLaughlin; *The Labor Market Experiences and Earnings Fortunes of Arizona Working Age Adults 2000-2009* by [redacted] by Educational Attainment; November 2009; <http://www.az-aall.org/AALL/Pages/Awareness/Labor%20Market%2011%202009.pdf>.
- 25 Andrew Sum, et. al., op cit.
- 26 The Integrated Postsecondary Education Data Systems (IPEDS), 2010.
- 27 The projections were created for Morrison Institute by GeoLytics, a social research and marketing firm.
- 28 "Welfare" includes SSI payments to elderly, blind or disabled persons with low incomes, TANF, and General Assistance.
- 29 Additional payments went to other ethnic groups including Whites, African Americans, Native Americans and Asian Americans, totaling approximately \$55 million.

Morrison Institute Board of Advisors

Current April 2012

Carolyn Allen
Retired Arizona State Senator
District 1

Betsey Bayless
CEO
Arizona Integrated Health Systems

Don Budinger
Chairman and Founding Director
The Rodel Foundations

Chad Cammell
Arizona State Representative
District 10

Laurel DeBolsie
Former Executive Director
League of Arizona Cities and Towns

Ed Ho
Vice President and Chief Sustainability Officer
AES

Bernoy Harrison
Vice President and Executive Vice Provost
Arizona State University

James Heiler
Vice President and Managing Director
AECOM Worldwide

Chris Herstam
Government Relations Director
Helix Robotics

Edmundo Mendez
President and CEO
Hispanos for a Sustainable

Mike Rutinson
Executive Manager
East Valley Aviation Aerospace Alliance

Paul Bennett
President and CEO
The Flinn Foundation

Jonathan Howell
Dean College of Public Programs
Arizona State University

John M. Comish
Arizona State Senator
District 10

Michael J. Dennis
Vice President Strategic Planning
SRM

Ludy Bailey Mohr
President and CEO
Virginia E. Piper Charitable Trust

Richard Morrison
Attorney
Salmonella & Weldon

Barry Muro
Director of Policy Metropolitan Policy Program
Brookings Institution

Cathy M. Lee Nelson
Former Vice President of Community Investment
General Dynamics Systems

Mary McHugh
Rock Creek Innovations LLC

John McWhiteman
President
Whiteman Foundation

John M. M. M.
President and Publisher
The Arizona Republic





Established in 1982, Morrison Institute for Public Policy is a leader in examining critical Arizona and regional issues, and is a catalyst for public dialogue. An Arizona State University resource, Morrison Institute uses nonpartisan research and communication outreach to help improve the state's quality of life.

411 North Central Avenue, Suite 900, Phoenix, Arizona 85004-0692 / 602.496.0900

morrisoninstitute.asu.edu



A private foundation honoring the philanthropic legacy of Virginia Galvin Piper, the Virginia G. Piper Charitable Trust works to strengthen the health and quality of life of people residing in Maricopa County, Arizona.

1202 East Missouri Avenue, Phoenix, Arizona 85014 / 480.948.5853

vipertrust.org



Enriching the lives of individuals in Arizona and Florida by creating opportunities for success in postsecondary education.

2415 East Camelback Road, Suite 500, Phoenix, Arizona 85016 / 602.381.2260

helios.org

