AZ Workforce: Latinos, Youth and the Future

by Nancy Welch
Morrison Institute for Public Policy

Produced as part of the César E. Chávez Leadership Lecture

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© 2008 by the Arizona Board of Regents for and on behalf of Arizona State University and its Morrison Institute for Public Policy
Arizona State University is proud to unveil *AZ Workforce: Latinos, Youth and the Future*, the initial publication of the inaugural César E. Chávez Leadership Lecture.

Colleges and universities play a key role in advancing their states and the nation in terms of perpetual innovation, competitiveness, and the challenges associated with the societal inequality that is a consequence of economic prosperity. ASU recognizes this responsibility and is engaged in helping to move Arizona and the U.S. forward in these areas.

In 2001 the Morrison Institute for Public Policy released its landmark report, *Five Shoes Waiting to Drop on Arizona’s Future*, which identified one “shoe” as a huge hole in Arizona’s educational system—the lack of educational success of Latinos.

Today, ASU has joined with the Helios Education Foundation, SCF Arizona, Greater Phoenix Leadership, and the Arizona Hispanic Chamber of Commerce to provide data that clarifies and educates community leaders as to the issues we face in the development of Arizona’s future workforce.

Best regards,

Michael M. Crow, Ph.D.
President

Arizona State University
Helios Education Foundation is pleased to support the César E. Chávez Leadership Institute. We are also proud of our partnership with ASU Office of Public Affairs in presenting the inaugural César E. Chávez Leadership Lecture.

As we strive to create opportunities for success in postsecondary education for all individuals in Arizona and Florida, Helios understands the critical role of higher education in enriching lives. Creating a qualified and educated workforce is key to enriching our community.

On behalf of Helios Education Foundation, we would like to thank Roberto Suro for sharing his experience and insight with today’s guests, and applaud the Leadership Lecture Planning Committee and supporters for their efforts to provide this opportunity for dialogue focused on the development of Arizona’s future workforce.

Sincerely,

Vince Roig          Paul J. Luna
Chairman           President & CEO

Helios Education Foundation
As a leading advocate of workplace safety in our state, SCF Arizona is happy to support the César E. Chávez Leadership Institute, the Chávez Leadership Lecture and the emphasis on education and workforce development.

In teaching today’s students the value of higher education and community development, the Chávez Institute grooms Arizona’s future civic, economic, cultural and business leaders.

I also commend the contributions being made today in creating an informed public. *AZ Workforce: Latinos, Youth and the Future* will provide data that shows us the critical role Latinos will continue to play in the state’s well being, and, along with the insights from today’s guest lecturer Roberto Suro, adds a needed layer of knowledge in this subject.

SCF Arizona is proud to be part of today’s Chávez Leadership Lecture in recognizing the importance of increasing the number of Arizona youth who are able to attend colleges and universities; providing that much needed pipeline for the workforce of tomorrow. I applaud the Chávez Institute and today’s worthwhile Chávez Leadership Lecture.

Sincerely,

Don Smith
President & CEO

[SCF Arizona logo]
AZ Workforce: Latinos, Youth and the Future

Executive Summary

Unemployment is up. Consumer spending is down. Governments are facing revenue shortfalls. For a state used to some very good times, the “apparent but unofficial recession,” has prompted soul searching about how to not just get back on track, but also come back more competitive than before. Arizona certainly has strengths on which to draw. However, many in the public and private sectors would agree that the state’s workforce is a piece of unfinished business. They would also concur that:

- A skilled workforce is critical to expanding the state’s economy. Arizonans must have the skills employers need. Arizona ranks 17th on Milken Institute’s State Science and Technology Index overall, but 33rd among states on the Human Capital Index.
- Demographic shifts have put workforce issues front and center. Aging and minority growth in light of enduring disparities make Arizona’s current workforce a priority.
- Arizona’s employers will have to look harder at homegrown workers. Conservatively speaking, for every K-12 student another Arizonan needs help with skills. More than 430,000 Arizonans do not speak English well, while more than 600,000 Arizona’s did not finish high school.

Arizona More Hispanic Than the Nation, Selected Characteristics, Working-Age Population, 2006

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The Big Picture

Between 2000 and 2006, Arizona was routinely the first or second fastest growing state in the nation. Natural increase during that time accounted for 29% of the state’s expansion. Domestic migration provided 52%.

International migration added 19% of the increase. Hispanic residents now comprise 30% of Arizona’s population. Arizona’s working-age population numbered 4.7 million in 2006 with its prime working-age population at 3.2 million. By 2030, Arizona may have more than 10 million residents. Arizona’s population will be mostly in the Sun Corridor, the state’s “megapolitan” area. The generation to replace older workers has less education than today’s workers.

The Pipeline, Renewal, and Entrepreneurs

Arizona’s pipeline has shown some improvements, but other states and nations are moving ahead as well. Arizona still is affected by underachievement and lack of parity among minority and majority students. Lack of preparation for college-level work continues to plague movement ahead. Residents in need of “renewal” could represent a new source of workers. Literacy, English as a second language, and adult education are fundamental, but capacity is small in comparison to the need. Arizonans have long agreed on the value of quality jobs and the need for more of them. Not surprisingly given the tough economic times, members of the Arizona Indicators Panel said the “one thing” that would improve everyone’s quality of life was a better economy and higher quality jobs.

Workforce issues are a special mix of hard facts and soft realities, detailed statistics and personal choices. From the vantage point of 30,000 feet, Arizona appears to be making progress on the basic skills for states: alignment, achievement, and access. Yet Arizona has much to do to improve its pipeline and particularly it’s the capacity to support renewal among workers. Arizona is no longer simply a small state with big dreams. It is now a place with a megapolitan future in a hypercompetitive world. That reality demands new mindsets and tools. While creating a quality economy is always a work in progress and trends will come and go, the constant is people to work, invent, and build. Arizona’s commitment to people will have to be big enough to match its megapolitan future.
AZ Workforce: Latinos, Youth and the Future

Unemployment is up. Consumer spending is down. Governments are facing revenue shortfalls. One prominent economist said recently that Arizona’s economy might take years to recover. For a state used to some very good times, the “apparent but unofficial recession,” 1 has prompted soul searching about how to not just get back on track, but also come back more competitive than before.

Arizona certainly has strengths on which to draw. However, Arizona is no longer simply a small state with big dreams. It is now a state with a “megapolitan” future in a hyper-competitive world. That reality demands new mindsets and tools. While creating a quality economy is always a work in progress and trends will come and go, the constant is people to work, invent, and build. And when it comes to that people part, Arizona’s workforce is a piece of unfinished business with gaps that will have to be filled to be competitive. Fortunately, many in the public and private sectors agree on the basics:

- A skilled workforce is critical to expanding the state’s economy. Arizonans must have the skills employers need. Arizona ranks 17th on Milken Institute’s State Science and Technology Index overall, but 33rd among states on the Human Capital Index. Arizona is 35th on the outcomes of its student pipeline from 9th grade to college.
- Demographic shifts have put workforce issues front and center. Aging and minority growth in light of enduring disparities make Arizona’s workforce a priority.
- Arizona’s employers will have to look harder at homegrown workers. Conservatively speaking, for every K-12 student another Arizonan needs help with skills. More than 600,000 Arizonans did not finish high school, and approximately 430,000 Arizonans do not speak English well.

Back when 3% unemployment was common, Arizona’s labor markets were almost always described as “tight.” Employers from agriculture to high tech complained about too few workers and insufficient skills. Healthcare institutions and construction firms scrambled for workers and coped in part by making work more flexible and looking to foreign born employees. Even with 5.6% unemployment, the concerns have not gone away. Many observers worry that the same problems will come back even bigger and tougher as the economy improves. Business people and policymakers are smart to be thinking ahead. Nothing in the economy, even with a wrenching downturn and a worrisome financial crisis, suggests that the need to enhance the skills of Arizona’s workers will disappear anytime soon. Labor force experts Harry Holzer and Robert Lerman described the situation clearly in a recent report: “It is beyond dispute that high level skills are more valued in the labor market than ever before, and that skills must rise the most among least-educated workers to reduce poverty and inequality in the United States.” 2

Indeed, hard times may be the best time to take another hard look at Arizona’s workforce and its competitiveness. Written on behalf of the César Chávez Leadership Institute for the inaugural Leadership Lecture, this paper is intended to inform discussion of workforce issues.

20 Years of Workforce Change

Thanks to the baby boom, new women workers, and other factors, the quality and quantity of workers didn’t use to be an issue. But more than 20 years ago, experts began sounding alarms about potential shortages of workers and skills in such reports as Workforce 2000. The effects of slow labor force growth, increasing diversity, aging, and rising skill requirements were changing the nature of work and the characteristics of those who did it. Workforce 2020 reiterated: “For all workers, the premium on education, flexibility, and foresight has never been greater than it will be in the years ahead.” Beyond Workforce posited that “no other significant population trend that affects the workforce—racial and ethnic diversification, educational attainment, or aging—can be divorced from the issue of the changing sources of new international labor supply.”

Minority Residents Comprise 40% of Arizona’s 6 Million in Population

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Source: U.S. Census Bureau, 2006 American Community Survey.
In 2007, ETS’ *America’s Perfect Storm: Three Forces Changing Our Nation’s Future* looked to 2030 and described the consequences of the convergence of:

- Substantial disparities in skill levels (reading and math)
- Seismic economic changes (widening wage gaps)
- Sweeping demographic shifts (aging, less education, and immigration).


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Many other reports have also shown that the forecasts have been mostly right. Recent generations have been smaller. High and low skill immigrants have filled gaps. The “millennial” generation (roughly ages 14-26 now) holds promise, but for the foreseeable future, workers are at a premium and quality is a concern. The health of the state’s 100,000+ businesses with employees, more than 500 units of government, and 2.3 million households are affected by who works in what occupations, and for how much. As a result, workforce issues aren’t a special interest, but a topic that is in everyone’s interest.

From 30,000 Feet to Ground Level

As an issue for the business community and the public sector, the workforce is a complex amalgam of economics and human behavior. Matching people and jobs has never been easy or an exact science. That doesn’t mean that it is an issue on which everyone should throw up their hands. It simply highlights the fact that the workforce must always be on public policy’s and private business’ front burner. But with many players come many points of view. A common base can be provided from 30,000 feet to ground level.

- **30,000 feet**—Big picture supply and demand
- **10,000 feet**—Sources of supply
- **On the ground**—Arizonans’ outlooks on jobs

### Workforce Supply and Demand

Labor supply is essentially the availability of suitable human resources in a particular labor market. Population, age, migration patterns, participation, and educational attainment are just some of the factors that affect how many people are available for and choose to work. Arizona’s working-age population—the total pool of possible workers (age 16+)—numbered 4.7 million in 2006 and the prime working age (25-64) included 3.2 million. Now, add up everyone in Phoenix, Tucson, Mesa, Glendale, and Chandler and that’s about the size of Arizona’s actual labor force—just about 3 million residents who are working or looking for work.

**4.1 Million Prime Working Age Arizonans in 2030**

Although the economic downturn has slowed the influx of domestic and international migrants, few doubt that it will begin again at some point. Current projections show Arizona may have as many as 10.7 million residents by 2030. Growth will be concentrated in the Sun Corridor, the megapolitan region stretching from Nogales to Yavapai County which includes nearly 90% of the state’s economy and population. By 2030, prime working age Arizonans could number approximately 4.1 million. If participation remains steady, the workforce could number approximately 5 million.

Like the rest of the U.S., aging will affect Arizona’s workforce. As ASU geographer Patricia Gober has written: “The number of residents who are over 65 will increase substantially because of the aging baby boom generation. Baby boomers, who will range from 66 to 84 years old in 2030, will swell the ranks of the state’s retirees.” By then, the state’s median age is expected to rise to 39.3—now the median age of the state’s workforce.

### Arizona Is Somewhat Younger than the U.S. Overall, Population by Age, 2006

![Graph showing Arizona's and U.S.'s population by age in 2006](Source: Arizona Indicators: Aging and Work, The Center for Aging and Work, Boston College. February 2008, based on American Community Survey, 2006.)
Still, Arizona’s population and workforce now are younger than the nation overall. Arizonans’ median age is 34.6 years and 25.5 years among Latinos. Arizona’s population will expand at the young end of the scale, thanks in part to Hispanic women having the state’s highest birth rates. African Americans and American Indians also have higher birth rates than non-Hispanic Whites, but they are growing from smaller population bases. Arizona will be notable for its youth on one hand and elders on the other. Taken together, aging and births will increase the “dependency ratio,” the number of people (under age 20 and over 65) relative to those in their primary working years (20 to 64 years old). In short by 2030, 100 working adults will support 97, instead of 74, retirees and children. They’ll have to be prepared to shoulder the burden.

**Domestic and International Migration Provide New Workers**

Since the middle of the 20th century, Arizona has been a popular destination because of the combination of its warm climate, plentiful jobs, and affordable housing. As a result, Arizona frequently has been either the first or second fastest growing state in the nation. This was certainly true between 2000 and 2006. Then, natural increase accounted for 29% of the state’s expansion. Domestic migration provided 52%. International migration added 19% of the increase. In 1960 and from 1996-2005, California, Illinois, and New York were the top home states for Arizona’s newcomers. But in recent decades, and particularly since 1990, migrants from Mexico and Latin America have also played a substantial part in the growth of the state and its labor force. For example, Arizona’s foreign born population increased by 40% between 2000 and 2006. Hispanics accounted for 70% of the 926,000 foreign born residents. More than one out of four Arizona workers is Hispanic. Approximately half of these workers are foreign born. According to the Migration Policy Institute: 32% arrived during the 1990s. Another 31% entered in 2000 or later. Thirty percent are naturalized citizens.

Although concerns for the nation’s borders have always been high in some quarters, immigration was tolerated through the boom of the 1990s. In the 2000s, though, the mood shifted as big numbers, recession, public costs, community visibility, and international crises created an anxious attitude. In Arizona, despite a large, deeply rooted native-born Hispanic population, “immigrant” and “Latino”
became synonymous and every immigrant was assumed to be “illegal.”

The contours of Arizona’s immigrant population are reportedly changing now due to hard economic times and the effects of the Legal Arizona Workers Act of 2007. The state’s statute, which went into effect in January 2008, was the first in the nation to spell out sanctions against employers for hiring unauthorized workers. A formal analysis of the law’s economic effects has not been done as yet. The fact that it coincided with a sharp downturn makes it difficult at this time to discern causes and effects.

Nevertheless, public and private sector observers report that immigrant workers and their families are leaving the state. Some businesses reportedly have terminated workers and seen others leave. Some employers say they are considering moving work to Mexico. Agricultural employers are also looking to expand use of the H1A worker program. A recent survey of the Arizona Small Business Association’s membership noted that more felt the law’s impact had been negative than those who perceived it to be positive. However, most said the law had not affected their firms. In addition, fewer said there had been any impact in the 2nd quarter, compared to the 1st quarter of 2008 when the law went into effect.10

In contrast, reports of an increasingly fearful atmosphere in Hispanic communities have become common. One person spoke for many in a recent Arizona Capital Times series: “We feel like we’re in a persecution,” Lidia said in Spanish. “Not every Latin person is a criminal. We work hard, we pay taxes, we are good employees. We feel bad because we don’t know when the police will come to the door and say, ‘Who are you?’”11

With fewer jobs and a rancorous atmosphere, no one knows what the next chapter of Arizona’s international migration story holds. Change has been swift, both in attracting and losing immigrant workers. In workforce terms, some businesses are looking at fewer hands, replacing people they had not expected to lose, and dealing with uncertainty. As some businesses look to the future, they are concerned that replacement workers will be even more difficult to find.

Importing Skills? Yes and No
Because young adults tend to move most readily, the quality of the state’s workforce is affected significantly by those who move to Arizona. The state has been known for “importing” workers for decades. Many individuals do bring degrees and skills, but others bring less human capital. As one recent human resources report noted: “Importation of talent is helping the state meet many of its workforce needs, but it is not making Arizona a more highly educated state. In the other states this pattern is reversed; more new residents are coming with college degrees and the overall educational capital of these states is thereby increased.”12 From 1995-2000, among those 22-29, newcomers with some college or less numbered 67,742 to 29,884 with an associates degree or more. Among those 30-64, it was 142,692 with some college or less to 81,799 with an associates degree or more.13

Arizona’s famous “churn” means that workforce gains are an up and down game too. Attraction remains important and some business and community leaders worry that metro Phoenix is falling further and further behind other regions in its ability to attract the best and brightest knowledge workers. To help draw talent to Arizona and combat the perception of metro Phoenix as Nowhere, USA, Maricopa Partnership for Arts and Culture has embarked on the Metro Phoenix DNA Project to communicate the region’s opportunity. The high-concept project, though, probably won’t address another issue of supply: labor force participation rates.

Fewer Workers Than We Might Have?
The working-age population shows how many workers there could be, but the choice to be in the labor force belongs to individuals. Despite Arizona’s youth, the state’s labor force participation rate is less than the national average. The state’s overall 2006 rate is 62.6%, while the nation’s is 66%. Among Latinos, the rate is 67.1%. In contrast, Minnesota’s rate, one of the highest, stood at 75%.

Arizona’s above average rate for the under-25 set is due in part to Hispanic immigrant youth, for whom work has the strongest pull. Arizona’s lower participation levels at
older ages may stem to an extent from early or potential retirees moving to Arizona or people coming to the state expecting to work for a time and then retire. They may not find suitable employment or decide simply to follow through with their retirement plans earlier than anticipated. The Population Reference Bureau reports that Arizona has been a “rapid growth” state since 2000 (more than 5%) for the oldest baby boomers, those who were 57 to 61 in 2007.14

Arizona’s labor force could grow from within if more people decided to participate. The pool of “available” workers includes those who are unemployed and those not in the labor force. Many of those not currently in the labor force may want to work, but be among the “discouraged” workers or those “marginally” attached. While it is difficult to determine how many people are not working but conceivably could become employed, the number is sizable. Even a modest gain in participation could mean many additional workers. In particular, young workers (who have unemployment rates of over 10% and more than double older Arizonans) and low-skill workers (who participate at lower rates) are prime targets for making the most of Arizona’s working-age population.

More High School Grads

Thanks in part to continuing growth and a young population, Arizona is looking to a future of substantial growth in the number of high school graduates. Recently released data from the National Center for Education Statistics puts Arizona and Nevada together again as the states with the greatest expected high school enrollment and graduation growth to 2017, as high as 45%. Knocking at the College Door: Projections of High School Graduates, 1992-2022 from the Western Interstate Commission for Higher Education tells a similar story. The report categorized states according to their populations and projections. States in the slowest category will see “dwindling production” and lose 10% or more. In contrast, Arizona is in the category with the most rapid expansion. This state will experience “explosive growth” with increases greater than 20%. Florida, Georgia, Nevada, Texas, and Utah join Arizona in this category.15

The growth projected in the ranks of high school graduates puts a fine point on the need to ensure that those students are ready for good jobs, more education, or both. A high school degree should be only the beginning. The study From Education to Work: Is Arizona Prepared? published by the Governor’s P-20 Council in 2006 noted gaps in preparation for all future activities. Business leaders voiced strong concerns about the lack of academic and skill achievement among the state’s youth.16 At the same time, the state could do a better job of keeping the students it educates. The Population Reference Bureau reports that Arizona retains comparatively fewer of its high school and college graduates. For example, 59% of high school graduates (compared to 61% for all states) and 47% of college graduates, compared to 50% in all states and the highest states at more than 65%, remain in Arizona.17

Mature Workers: Going or Staying?

The U.S. Bureau of Labor Statistics notes that older workers are one of the fastest-growing portions of the labor force. The Harvard Generations Policy Journal recently reported that, “The aging of America’s baby boomers is the most pressing national issue of this century” and the “most critical public policy issue of our times.” Responsible for remarkable labor force growth in their earlier years, boomers have driven economic expansion in recent decades. And they will continue to affect employers’ competitiveness and their costs. However, the implications of more elder workers cannot be divorced from the needs of the younger workers who are now in, or soon will be, joining the labor force. Responding to an older workforce is affected by who is left, who is in the pipeline, and what policies and programs would help employers make the most of all workers—not just by how many mature workers there are.

Still, retaining mature workers in the labor force and attracting them back to work simply makes sense. Boomer workers have said that they want to remain in the workforce beyond traditional retirement ages, albeit often in different occupations and with more flexible arrangements. Some evidence shows that whether by economic necessity, or choice, or both, mature workers may indeed be staying...
longer in the world of work. Still, retirement, knowledge transfer, and skills among those replacing mature workers remain issues to be reckoned with. Recent federal pension reform provides a promising start to phased-in retirement, but more will be needed. Teachers, nurses, utility workers, many engineering and technology professionals, public sector professionals, and many craft, maintenance, and repair workers are among the types of workers for which there is the greatest concern about replacements. Programs such as the Governor’s Mature Worker Initiative have highlighted elder-friendly businesses and matchmaking assistance for workers and employers.

Demands for Talent
The “U.S. has run out of talent, and Arizona is no better off,” an information technology company executive declared at a workforce conference. At another meeting, heads nodded in agreement as a leading manufacturing company representative said that even new production workers now had to have bachelors degrees. These are just two examples of how skill demands and education requirements are increasing.

Labor demand can be described as the need for employees and workers in a particular job market. Every economy, including Arizona’s, has low, middle, and high skill (and status) jobs, plus emerging positions in which skills are still being defined. In turn, every industry has a share of quality jobs and rewarding career paths. Ultimately, the job mix determines the demand for workers. Rebalancing the mix toward high and new/emerging skill jobs is an appropriate and necessary goal of economic development, but realism demands acknowledgement of a continuum of jobs and the inter-relationships among low, middle, and high skill work. High skill jobs directly and indirectly generate positions at other levels.

Recently, attention has been refocused on middle skill occupations as well as high skill ones. Leading economists writing for Skills2Compete, a national research and advocacy organization that is suggesting a universal requirement of two years of postsecondary education, have shown that even though high and low skill jobs have grown the most, those in the middle still account for 40-50% of the state and nation’s economies. Middle skill jobs require more than a high school education but less than a bachelor’s degree. These jobs, such as many in health care and construction, are the beneficiaries of technological changes. Advances have turned formerly blue-collar jobs into middle class knowledge jobs with career pay and career paths.

The “upskilling” trend is also well-known in Arizona. For example:
- One estimate shows that just 2% of new jobs paying above the median wage in Arizona’s growing occupations will not require some postsecondary education.21
- Occupational projections for Arizona for 2005-2015 show that of the top 25 “High Percentage Growth Occupations,” only five require “on-the-job” training of moderate or long-term duration. The others require an associate, bachelors, masters, or professional degree.20

Applied Skills Are Now Basic for Success
Education is necessary for many 21st century jobs, but it may not be sufficient. A new survey from the Conference Board of more than 400 employers nationwide reiterates some tried-and-true skills, adds new ones, and looks at the readiness of high school graduates, two-year graduates, and four-year graduates. The employers considered the skills they needed and the current capacity of high school, two-year graduates, and four-year graduates to meet them.

The results of the study showed that the era of “soft skills” is truly here. Are They Really Ready to Work? 21 listed

Basic Knowledge/Skills as:
- English language (spoken)
- Reading Comprehension (in English)
- Writing in English (grammar, spelling…)
- Mathematics
Both basic knowledge and applied skills are viewed as critical for new entrants’ success, but the top five “most important” are usually applied skills, including:

- Professionalism/work ethic, teamwork/collaboration, and oral communications are the “most important” applied skills needed by all entrants.
- Knowledge of foreign languages, more than any other basic skill, will “increase in importance” in the next five years.
- Making appropriate choices on health and wellness is the top-ranked emerging area for workers.
- Creativity/innovation will also increase dramatically in importance.

The Conference Board’s work shows that high school graduates are not “excellent” in any of the skill areas. In contrast, two-year graduates make the grade on information technology application. Only four-year graduates do well in more areas than those they do poorly in. Based on this national work, high school graduates are the least ready for work, and opportunities for them are continuing to slide. Graduates at two-year institutions and four-year programs fare better, but still have deficiencies. An Arizona-based study shows the state’s employers are thinking in the same vein. To Arizona’s employers, the top three types of knowledge and skills included reading comprehension, active listening, critical thinking, English language, mathematics, and customer and personal service.

The big picture trends explain much about our situation. The view from 10,000 feet is even more specific.

### 10,000 Feet: Processes and Workers

Thirty to 40 years ago, workforce programs—which were primarily federally funded efforts rooted in the Great Society—focused on “economically disadvantaged” residents and people who needed “second chances” at jobs. Twenty years ago, “human capital” among residents became the touchstone, while the mantras of “economic development is workforce development” and “competitiveness” became common a decade ago. The focus moved from the disadvantaged worker to the measurable development of skills to serving the needs of employers as the surest way to economic growth. From “reducing barriers” to fulfilling employers’ demands, thinking about the workforce in relation to economic growth, mobility, and prosperity has changed a lot.

Today, almost every player in economic development, education, competitiveness, and workforce development agrees on a team approach to a quality workforce. The integration many leaders tirelessly crusaded for may be at hand. Unfortunately, organizing across all levels of education, career and technical education, One-Stop Centers, unemployment insurance, labor market information, community colleges, private schools, social services, community organizations, public schools, employers, industry associations, and more hasn’t gotten any easier.

At the same time, the view from 10,000 feet shows how critical that coordination is. Without it, workers in the pipeline, renewal workers, and up-and-coming entrepreneurs could miss the start they need. Special occupation projections for the Governor’s P-20 Council show that many growth jobs will require more degrees. Expansion will depend on matching educational access and demand for particular types of people.
Pipeline—Nearly everyone interested in the workforce is most comfortable talking about the “pipeline.” Referring now to P-20 or preschool through graduate education and support services, the more than 1.5 million-strong pipeline is no longer viewed as the primary source of workforce preparation. It remains front and center, but employers, community institutions, and other entities have joined in as well. Programs such as Rodel’s Math Achievement Club, 2+2+2 programs to move students from high school to community college to university such as in biotech at ASU Polytechnic, Tech Prep, dual enrollment, and the Education and Career Action Plans approved earlier in the year by the Arizona Board of Education are increasingly common and critical to the workforce. Professionals, business representatives, and educators have grasped that keeping students in school, closing achievement gaps, and putting students in touch with the world of work are vital to making things work. Unfortunately, the messages—plus the policies and programs—are still filtering down to every age and stage. Calculations of the student pipeline in 2004 showed the needs. Among a hypothetical group of 100 ninth-graders, Arizona’s performance would fall below the national average and far below the best performing states in terms of graduation, directly going to college, persistence, and graduation.24

In addition:
- Arizona continues to lag the U.S. on all levels on such tests as the National Assessment of Education Progress.
- High school graduation rates remain at about 70%.
- ASU education scholar David Garcia shows that for high schools in Maricopa County, 76% of high school students who entered postsecondary English classes entered at the college level. In mathematics, the figure was 42%. In other words, the remaining students were not prepared for college-level work.
- Community colleges and universities report that significant numbers of students must start in developmental classes. For example, in Fall 2006, three quarters of recent public high school graduates entering Pima Community College had math assessment test scores placing them in remedial courses. A third needed assistance in reading and nearly half in writing.25 Data from the Maricopa Community College District show that between two and four of 10 entering students are not prepared for college-level work.
- Minority students continue to be underrepresented in postsecondary and higher education.

At the same time, Arizona continues to upgrade secondary requirements, most recently in science and math. Also, the state is a leader in students with high school diplomas but no college returning to school. Universities have both raised standards and invested in additional sources of financial aid.
AZ Workforce: Latinos, Youth and the Future

Generation Global and Arizona’s Pipeline
A study commissioned by the Governor’s P-20 Council from the National Center for Higher Education Management Systems clearly stated one of Arizona’s fundamental pipeline issues: “Younger adults are much less likely to have attained a college degree than older members of the workforce; those about to leave the workforce are more highly educated than recent entrants to the workforce. The large projected population growth in the state will be concentrated in subpopulations that have historically not completed college at high rates. If Arizona is not successful in changing historical patterns, the downward intergenerational trends will continue. Arizona is heavily dependent on educated in-migrants to fill jobs in its economy. Arizona is well behind the U.S. average and exhibits steady declines from the oldest to the youngest of the age cohorts in the working-age population.”

Hispanics are among the subpopulations referred to. Four out of 10 of Arizona’s 1.4 million children under 16 are Hispanic. Mostly U.S. citizens, nearly one in three Arizona children is an immigrant or a native born son or daughter of immigrants. The disparities have not gone undiscovered in the past. Latinos underrepresentation in higher education and high wage jobs has been acknowledged repeatedly. For example:

In 1987, by the Arizona Department of Economic Security:
Arizona Hispanics contribute vigorously to the Arizona economy. Addressing the issue of increasing the educational attainment levels of Arizona’s Hispanic youth and adults remains a critical challenge.

—Hispanics: Vital Participants in the Arizona Economy

In 2002, by the Southwest Center for Education Equity and Language Diversity, Arizona State University:
It is critically important to Arizona that Latinos—the fastest-growing segment of its population—achieve a better education and attend college in greater numbers than they do now. This must be achieved if Arizona is to be better positioned to compete in the marketplace.

—The Condition of Hispanic Education in Arizona

In 2008, by the Arizona Community Foundation:
As in other states, some groups of Arizona’s students fare less well than others. While there are exceptions, on average White and Asian students score anywhere from 20 to 40 percentage points higher than their African American, Hispanic, and Native American peers on the NAEP (National Assessment of Educational Progress) tests. Race and class remain potent predictors of success, and our success as a state requires that we close these achievement and opportunity gaps.

—Educating Arizona: Assessing Our Education System

Given the recent substantial growth in the Hispanic and minority populations and the desire for greater competitiveness, Arizona can no longer afford to be an underachiever in this area.

Hispanic Arizonans Have Less Education Overall, Educational Attainment, Arizona and Hispanic Arizonans, Age 25+

<table>
<thead>
<tr>
<th></th>
<th>Arizona</th>
<th>Hispanic</th>
</tr>
</thead>
<tbody>
<tr>
<td>Less than high school</td>
<td>16</td>
<td>39</td>
</tr>
<tr>
<td>High school</td>
<td>28</td>
<td>29</td>
</tr>
<tr>
<td>Some college/associates degree</td>
<td>32</td>
<td>23</td>
</tr>
<tr>
<td>Bachelors degree</td>
<td>16</td>
<td>7</td>
</tr>
<tr>
<td>Graduate/professional degree</td>
<td>9</td>
<td>3</td>
</tr>
</tbody>
</table>


The prominence of foreign born and mixed-status families in Arizona’s pipeline highlights more workforce issues. On one hand, first and second generation children often may:
- Have parents with limited educations—a factor associated with many poor effects on child development
- Grow up in poverty—a risk factor for falling behind peers
- Lack health insurance—poor health can affect school achievement
- Tend not to use public health and benefit programs even when they are eligible—a limiting factor in reaching potential.

More than 140,000 Arizona students are learning English at the same time they work to master academic subjects. On
the other hand, many of Arizona’s million+ K-12 pipeline participants have connections that will help in the workforce and economy. Often bilingual and comfortable in other cultures, these “Generation Global” students are one of Arizona’s up-and-coming assets.

Disadvantage is in the eye of the beholder, according to Kent Paredes Scribner, now superintendent of the Phoenix Union High School District. “We have repeatedly been told that companies competing globally actively recruit employees who are bilingual, bicultural, and resilient…students attending schools in Arizona’s inner-city neighborhoods have many ‘disadvantages of success’ that can provide them a competitive edge in the global economy.”

That competitive edge may also come from recent state preschool initiatives through First Things First, all-day kindergarten, and programs such as the Parent Institute for Quality Education (PIQE) and the Chávez Leadership Institute. Also, the greater emphasis on work and education in the pipeline, the more that may affect the thousands of Arizonans who need to upgrade or “renew” their skills or attachment to the labor force.

Federal EEOC requires federal contractors and firms with more than 100 employees to report occupations by race and ethnicity. Source: U.S. Equal Employment Opportunity Commission.

Renewal—Those at the bottom rung of the workforce ladder represent a group that could provide a new source of middle and high skill workers. Literacy, English as a second language, and adult education are fundamental for these residents with fewer skills and perhaps less attachment to the labor force.

An estimated one in five U.S. adults has the lowest level of literacy skills. More than 430,000 Arizonans (think all of Mesa) do not speak English or do not speak it well. In addition, more than 612,000 adults ages 18-64 lack a high school diploma. Just more than 11,000 Arizonans obtained GEDs in 2006. While earning a GED is a step ahead, it is largely young adults who are earning them. If these returning students had stayed in high school, their “seats” would have been available for other adults. This would be another step ahead since Arizona serves only about 25,000 people in its federally funded programs for adult basic education, English as a second language, and adult secondary education. More could be done with greater resources, but Arizona matches just 53 cents to the federal dollar. In addition, recent Arizona legislation requiring proof of citizenship to participate in adult education and English as a Second Language classes provided through the Arizona Department of Education changed the process of enrolling. Still, demand remains high for assistance in English and other skills.
The experience of many workforce organizations shows that increasing English skills may have the greatest and quickest pay off for individuals and communities. The Migration Policy Institute (MPI) recently estimated the cost of meeting the English language learning need in the U.S. Looking at lawful permanent residents first and then at unauthorized residents, the organization calculated the time and cost of bringing English skills to a level sufficient to pass the citizenship test and participate fully in civic life, including increasing employment opportunities and ability to support children’s learning. Assuming an average of 110 hours of instruction to increase by one level of English ability, approximately $277 million hours of English language instruction annually for six years would be needed for lawful permanent residents to pass the naturalization test or begin postsecondary education. The cost for a variety of learning methods was approximately $200-300 million a year more than the nearly $1 billion spent by the federal and state governments on services currently.

With the number of immigrants in the U.S. workforce, employers may begin to be a greater source of English learning. A recent Conference Board report noted that some business leaders are seeing that language barriers are affecting not just promotion opportunities for qualified workers but also overall productivity. Firms report that these are the same reasons that they would consider providing English language instruction.31 “Vocational English” training for workers and teaching for basic communication and safety are not uncommon in the workplace now. However to ensure making the most of all workers, English teaching may indeed be the “most neglected domestic policy issue” as MPI calls it and the fastest route to higher productivity.

Renewal also covers those who need to retrain or upgrade to remain competitive. Others may want to change careers altogether. Boomer workers say they want to have a second or third career, often in community service. As a result, “renewal” sources will be important to keep these high skill workers in the economy.

Acquiring additional skills is nothing new for adult workers, although it still is not as prevalent as many experts recommend. In the recent Arizona Indicators Panel survey, 17% of workers reported engaging in some type of workplace learning, including studying another language. However, being attuned to lifelong learning is often more common among high skill workers than others. Even so, to move the lowest-level workers to career path/career pay jobs is possible. Initiatives throughout the country have looked to “sectoral” strategies, particularly in industries such as healthcare, in which a cluster of employers with similar skill needs provide training and employment opportunities. Others have used high levels of support services in conjunction with step-by-step career paths. Others have focused on starting with a single large employer and helping workers move internally from job to a better job within the firm. Others have matched mentors with workers or paid to enroll students in programs during which they work at one level while studying for the next. The key in any of the career ladder efforts is building skills for jobs that are already in the labor market.

Workplace learning for current or “incumbent” workers has changed dramatically in the past decade as firms embraced employee learning as never before and invested in technology to do it faster, cheaper, and better. Traditionally, higher level workers have received more development in the workplace, with leadership and technical skills being the most common. Basic skills have generally been the least-provided type of training. Large firms recognized for links between learning and performance by the American Society for Training and Development’s BEST awards provide a benchmark for employer-sponsored training. In the 2006 report, BEST companies invested $1,672 per employee and provided an average of 45 hours per employee. The areas from greatest to least emphasis included: Business processes and procedures, information technology, profession or industry specific, compliance, quality or product knowledge, managerial and supervisory, sales, customer service, interpersonal skills, new employee orientation, executive development, and basic skills.32

| Participation in Adult Education Is Changing Slowly Percentage who participated in adult education activities, 1995 and 2005 |
|-------------|-----------------|-----------------|
| Ages 16–24  | 1995            | 2005            |
| Overall participation | 47.0            | 52.9            |
| Work-related courses   | 14.6            | 21.2            |
| Personal interest courses | 21.5            | 26.6            |
| Part-time degree/diploma programs | 12.6            | 11.4            |
| Other activities1   | 8.7             | 9.7             |

1Includes basic skills training, apprenticeships, and English as a Second Language (ESL) courses. Note: Estimates exclude persons who were attending elementary or secondary school, on active duty in the U.S. Armed Forces, or institutionalized. Estimates include part-time participation in college or university degree programs and vocational or technical diploma programs. Full-time participation for all or part of the year in a degree or diploma program was not counted as an adult education activity.


Entrepreneurial—New firms are critical to creating new jobs and wealth. Arizona has had a reputation as a fertile place for new business development. As more has been learned about the role of entrepreneurs in the knowledge
economy, a variety of mechanisms, such as ASU’s Technopolis, have developed to support entrepreneurs and allow them to gain skills. At the same time, microlending programs have allowed low income Arizonans to join the workforce as self-employed entrepreneurs. Often seen as business development rather than workforce growth, entrepreneurial training is part of workforce development too. Education, training, and services to support business formation and the growth of the business owners are increasing throughout the state.

On the Ground: Arizonans’ Outlooks

When Morrison Institute asked Arizonans in 2004 how their state compared on “the availability of good-paying jobs,” more than 40% said Arizona was not as good as most. Just 15% said “better than most.” When Latino residents across the state participated in focus groups about work, they said that jobs were easy to get, but “good jobs are hard to find.” Still, a 2005 statewide survey of self-identified Latino workers also showed the respondents to be upbeat about work and the future. They expressed confidence in their earning power and assumed they would keep up with changes in the economy, although those with the least skills worried about their futures. Respondents acknowledged the need for more skills to keep up and they expected to get better jobs over time, regardless of where they started. Their employers were a source of training and new skills. Two out of three respondents anticipated soon seeking a new, better job.

When Morrison Institute surveyed Arizonans about science and technology and the economy in 2006, Arizonans thought that high paying jobs and economic development would result from science and technology research. Nearly nine out of 10 felt that developments in science and technology contribute to the creation of new high-paying jobs. More than 40% of Arizonans say science and technology “very much” contribute to the creation of quality jobs. In the first surveys with the Arizona Indicators Panel in May and June 2008, residents said that a better economy and higher quality jobs would improve their quality of life the most. And respondents thought jobs could stand a lot of improvement. They recommended: “the creation of more than just Wal-Mart jobs,” and “less seasonal and more full time work.” Others called for “increasing the annual salary of the population by bringing in better paying jobs for the middle and lower income families.”

It’s clear that Arizonans have long agreed on the value of quality jobs. This fundamental consensus on quality provides a starting point for discussions about workforce needs. Based on the panel survey, the state’s residents want to talk. The survey showed that Arizonans felt secure in their current jobs, yet many lacked confidence in their ability to replace their jobs at a comparable rate of pay within a reasonable amount of time.

However if respondents did lose their jobs, few anticipated leaving the state. Six out of 10 respondents said that they would be very unlikely to relocate to another state or country if they lost their jobs. Minority-group panelists are more likely to relocate than majority-group panelists.

Those With Skills Tend to Acquire More

<table>
<thead>
<tr>
<th>Characteristic</th>
<th>Overall participation*</th>
<th>Part-time degree or diploma programs</th>
<th>Work-related courses</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total</td>
<td>44.4</td>
<td>5.0</td>
<td>26.9</td>
</tr>
<tr>
<td>Sex</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>41.1</td>
<td>5.0</td>
<td>24.5</td>
</tr>
<tr>
<td>Female</td>
<td>47.5</td>
<td>5.1</td>
<td>29.2</td>
</tr>
<tr>
<td>Race/ethnicity</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>White</td>
<td>45.6</td>
<td>4.9</td>
<td>29.1</td>
</tr>
<tr>
<td>Black</td>
<td>46.4</td>
<td>5.4</td>
<td>27.0</td>
</tr>
<tr>
<td>Hispanic</td>
<td>37.6</td>
<td>4.9</td>
<td>16.8</td>
</tr>
<tr>
<td>Asian</td>
<td>48.3</td>
<td>7.9</td>
<td>27.2</td>
</tr>
<tr>
<td>Education</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Less than high school</td>
<td>22.1</td>
<td>1.0</td>
<td>4.2</td>
</tr>
<tr>
<td>High school or equivalent</td>
<td>32.6</td>
<td>2.6</td>
<td>16.5</td>
</tr>
<tr>
<td>Some college,-voc/tech</td>
<td>51.4</td>
<td>7.7</td>
<td>31.4</td>
</tr>
<tr>
<td>BA or higher</td>
<td>62.5</td>
<td>7.3</td>
<td>46.2</td>
</tr>
<tr>
<td>Age</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>16–24</td>
<td>52.9</td>
<td>11.4</td>
<td>21.2</td>
</tr>
<tr>
<td>25–34</td>
<td>52.2</td>
<td>8.7</td>
<td>31.7</td>
</tr>
<tr>
<td>35–44</td>
<td>48.7</td>
<td>5.3</td>
<td>33.7</td>
</tr>
<tr>
<td>45–54</td>
<td>47.9</td>
<td>3.8</td>
<td>36.5</td>
</tr>
<tr>
<td>55–64</td>
<td>40.3</td>
<td>1.5</td>
<td>27.0</td>
</tr>
<tr>
<td>65 or older</td>
<td>22.9</td>
<td>0.3</td>
<td>5.2</td>
</tr>
<tr>
<td>Employment/occupation</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Employed-past 12 mo.</td>
<td>51.7</td>
<td>6.4</td>
<td>35.9</td>
</tr>
<tr>
<td>Professional/managerial</td>
<td>70.2</td>
<td>8.8</td>
<td>56.3</td>
</tr>
<tr>
<td>Services, sales, or support</td>
<td>48.3</td>
<td>6.3</td>
<td>30.6</td>
</tr>
<tr>
<td>Trades</td>
<td>34.0</td>
<td>3.3</td>
<td>18.7</td>
</tr>
<tr>
<td>Not employed-past 12 mo.</td>
<td>25.5</td>
<td>1.6</td>
<td>4.0</td>
</tr>
</tbody>
</table>

*Includes basic skills training, apprenticeships, and English as a Second Language (ESL) courses. Note: Estimates exclude persons who were attending elementary or secondary school, on active duty in the U.S. Armed Forces, or institutionalized. Estimates include part-time participation in college or university degree programs and vocational or technical diploma programs.

As noted at the beginning of this paper, workforce issues are deeply rooted, but other workers will need to be enticed to stay. Skills may leave Arizona as quickly as they come in.

At the same time, 62% of panelists agreed that “the academic performance of our schools is not as high as it should be.” Nearly all minority respondents agreed on the deficiency of Arizona’s schools. In addition, nearly 60% of minority-group panelists disagreed with statements about schools doing a good job in preparing students for college or local jobs.33

The concerns for jobs and schools among Arizonans and the willingness of minority and young workers to move on are just two red flags about the workforce. Clearly, Arizona illustrates the footloose nature of today’s young talent and the connection among some first to work and second to place. Arizonans’ anxiety comes from the potential of having to find a comparable job in the state. And that opens the way to generating consensus on what will be needed to ease those concerns. The 2008 Pew National Latino Survey underscores how much of the past optimism has evaporated. Half of all Latinos say that the situation of Latinos in the U.S. is worse now than it was a year ago. Sixty-three percent of Latino immigrants say that the situation of Latinos has deteriorated over the past year. In 2007, 42% of all adult Hispanic immigrants—and just 33% of all Hispanic adults—had the same response. Clearly the economic downturn has hit many hard. Job losses and concerns around immigration enforcement are at the heart of an uncertain time that says a lot about the experience of work on the ground.

**Help Wanted: A Culture of Achievement**

As noted at the beginning of this paper, workforce issues are a special mix of hard facts and soft realities, statistics and choices. Arizona will have to excel at understanding this mix if it is to raise achievement, renew its workforce, and continue to attract more high skill workers. Arizona’s commitment to people will have to be big enough to match its metropolitan future. By 2025, today’s young workers will be mature. The children born in 2008 will be out of high school—if high school as it is known today still exists. Nearly all of these largely Hispanic citizens and their classmates should be ready for advanced studies—however those might be defined in global regions with fewer boundaries and more connections. They should be prepared for the best jobs of the day if the initiatives underway and considered in 2008 have come to fruition and if further commitment is made to three aspects of workforce policy—alignment, access, and achievement—that have been recognized by Governor Napolitano, business organizations, universities, community colleges, workforce organizations, and employers as vital. Given the many initiatives started in recent years, the workforce may still be a piece of unfinished business, but it is increasingly, like a quality economy, a work in progress.

**Alignment**—Communication, policies, programs, incentives, and financial support are needed to help move residents at all ages and stages from being students to workers and entrepreneurs and back again as new skills are needed. For students, alignment ensures that what they are learning relates to what employers need and want. For employers, alignment guarantees a productive worker regardless of age. For policy leaders, alignment provides an accountability measure for all parts of the workforce system. Alignment should also be between Arizonans and leaders about what will be needed to have more of the types of jobs residents have said again and again that are important to them.

A next step for Arizona is to expand efforts to align workforce, economic development, and education for Arizona’s pipeline, renewal, and entrepreneurial interests.

**Access**—Everyone should be able to find workforce-related services they can use and afford. Employers can be the gateway for new skills and integrators of new workers. Access is often the missing asset for renewal workers who want to get better jobs. Access also encourages employers to work with students throughout school careers so that youth know what type of career they are headed toward.

A next step for Arizona is to design and test new models for renewal workers, particularly those with the least literacy and English skills.

**Achievement**—Support for progress from level to level will help create a culture of achievement in Arizona, thus helping workforce development to perform at the highest level instead of at the basic level.

A next step for Arizona is to create a specific scorecard for Arizona’s workforce.

Success in complementing the Governor’s P-20 Council and recent efforts to get the most from the federal workforce investment system, work better with employers, institute a new career planning effort, expand dual enrollments, early graduation, and create a seamless experience from secondary to higher education will undoubtedly improve Arizona’s workforce. It may also show that services and
programs available will easily be oversubscribed. With millions of potential customers, capacity for workforce development will need to be considered as Arizona creates its culture of achievement.

Right now, each defines that in their own terms. Part of a 21st century workforce system is to create common definitions and predictable actions and rewards. At the 30,000 foot level, workforce development is about competitiveness. At the 10,000 foot level, it is about types of people and programs. At the ground level, it is about satisfying individuals’ and employers’ expectations. Every employer, university, and community undertaking has a stake in making Arizona’s culture of achievement.

Notes


4 Ibid.


6 According to the Arizona Department of Health Services, birth rates among Hispanic women were 116.8 per 1,000 women of childbearing age. This compares to 51.2 for non-Hispanic Whites, 76.7 for African Americans, 90.5 for American Indians, and 83.4 for Asians.

7 Gober, 91st Arizona Town Hall, October 2007.


9 Ibid.

10 Harris, Craig, “Fallout from Arizona’s employer-sanctions law,” Arizona Republic, September 14, 2008.


13 Ibid.


18 Rex, Tom, High Wage Jobs, L. William Seidman Research Institute, W. P. Carey School of Business, Arizona State University, April 2006.


25 Pima Community College Environmental Scan, www.pima.edu/collegeplan/0811EnvironmentalScan.shtml.


29 Reach Higher, National Commission on Adult Literacy, June 2008.

30 McHugh, Margie, Julia Gelatt, and Michael Fix, Adult English Language Instruction in the U.S.: Determining Need and Investing Wisely, Migration Policy Institute, July 2007.


33 Arizona Indicators Panel, Morrison Institute for Public Policy, October 2008.
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