Beyond Social Justice

The Threat of Inequality to Workforce Development in the Western United States

Patrick J. Kelly
National Center for Higher Education Management Systems

July 2008

Western Interstate Commission for Higher Education

3035 Center Green Drive, Ste 200
Boulder, CO 80301-2204
303.541.0200 (ph) 303.541.0291 (fax)

www.wiche.edu

Commissioned and published by WICHE with Support from the Ford Foundation
# Table of Contents

Foreword ..................................................................................................................................................... 3  
Introduction ................................................................................................................................................. 5  
The Demographic Landscape of the West ..................................................................................................... 6  
The Inequality of Educational Capital ...................................................................................................... 10  
Workforce Development (Education and Training) .......................................................................................13  
The Workforce .............................................................................................................................................21  
The Benefits .............................................................................................................................................. 29  
Conclusion .................................................................................................................................................31  
Endnotes ................................................................................................................................................... 32  

# List of Figures

<table>
<thead>
<tr>
<th>Figure</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Figure 1</td>
<td>States in the Western Interstate Commission for Higher Education (WICHE)</td>
</tr>
<tr>
<td>Figure 2</td>
<td>Population by Race/Ethnicity and Age in 2006 – WICHE States (in thousands)</td>
</tr>
<tr>
<td>Figure 3</td>
<td>Projected Change in Population by Race/Ethnicity and Age from 2005 to 2025 – WICHE States (in thousands)</td>
</tr>
<tr>
<td>Figure 4</td>
<td>Growth in High School Graduates by Race/Ethnicity – WICHE States</td>
</tr>
<tr>
<td>Figure 5</td>
<td>Where the Majority (80%) of Hispanics Reside in the West (Public Use Microdata Areas)</td>
</tr>
<tr>
<td>Figure 6</td>
<td>Where the Majority (80%) of Black non-Hispanics Reside in the West (Public Use Microdata Areas)</td>
</tr>
<tr>
<td>Figure 7</td>
<td>Where the Majority (80%) of American Indians/Alaska Natives Reside in the West (Public Use Microdata Areas)</td>
</tr>
<tr>
<td>Figure 8</td>
<td>Percent of Adults by Age Group with College Degrees (Associate and Higher) – Leading Countries, the U.S., and the WICHE States (2005-06)</td>
</tr>
<tr>
<td>Figure 9</td>
<td>Percent of Adults with College Degrees (Associate and Higher) by Race/Ethnicity and Age – WICHE States (2005-06)</td>
</tr>
<tr>
<td>Figure 10</td>
<td>Percentage Difference in High School Attainment Between Whites and Minorities – 25- to 64-Year-Olds (2006)</td>
</tr>
<tr>
<td>Figure 11</td>
<td>Difference in College Attainment (Associate and Higher) Between Whites and Minorities – 25- to 64-Year-Olds (2006)</td>
</tr>
<tr>
<td>Figure 12</td>
<td>Public High School Graduation Rate – Percent of 9th Graders Graduating Four Years Later by State (2005)</td>
</tr>
<tr>
<td>Figure 13</td>
<td>Public High School Graduation Rates – Percent of 9th Graders Graduating Four Years Later by Race/Ethnicity – WICHE States (2005)</td>
</tr>
<tr>
<td>Figure 14</td>
<td>Enrollment in State-Administered ABE Programs per 1,000 Adults Aged 18-64 with Less than a High School Diploma (2005)</td>
</tr>
<tr>
<td>Figure 15</td>
<td>Enrollment in State-Administered ABE Programs per 1,000 Adults Aged 18-24 with Less than a High School Diploma by Race/Ethnicity (2005)</td>
</tr>
<tr>
<td>Figure 16</td>
<td>Enrollment in ESL per 1,000 Adults Aged 18-64 with Little or No English Proficiency (2006)</td>
</tr>
</tbody>
</table>
Foreword

The U.S.’s predominant cultural, economic, and military position in the world is largely built upon a foundation of education. Throughout the 20th century, as only a select subset of elites obtained a tertiary education in most other nations, the U.S. enacted policies like the G.I. Bill, the National Defense Education Act, and the Higher Education Act, which extended the possibility of a postsecondary education to the masses. The resulting abundance of skilled workers enabled the U.S. to rise to its position of global leadership.

But even though the U.S. succeeded in bringing larger shares of its population to college, we continue to be dogged by persistent educational attainment gaps among racial/ethnic groups. Since education has become the principal avenue to a middle-class lifestyle, those gaps have long been a target for reform-minded education policymakers. For them and for many of the rest of us, the need to try to close those gaps is a moral obligation – a fundamental question of fairness and social justice. Although our nation has made some progress at attacking these educational attainment gaps, it has been painfully slow. Overall, the gaps show little sign of shrinking, defying the best intentions and the combined efforts of countless researchers, policymakers, and educators.

Two emerging realities are combining to make the need to close educational attainment gaps more urgent than ever. First, the U.S. is in the midst of sweeping demographic changes. The fastest-growing groups within our population are racial/ethnic minorities (especially Hispanics) that our educational infrastructure has poorly served historically, while the number of White non-Hispanics in our public schools is declining. This is happening at a time when the globalized knowledge economy is increasingly demanding better-educated, higher-skilled workers from developed economies like that of the U.S. One combined effect of these two trends is that it is no longer sufficient to talk about closing educational attainment gaps primarily as a moral requirement. Now, it has become clear that closing educational attainment gaps is a matter of economic necessity, if we are concerned about the future prosperity and security of our nation.

This report, written by Patrick Kelly of the National Center for Higher Education Management Systems, calls upon an array of state-by-state data to help WICHE’s member states better understand the scope of the challenge facing them and the relationships between educational attainment and workforce participation for different racial/ethnic groups. It paints a sobering picture of how much progress needs to be made in ensuring that all residents are well prepared to succeed in the global knowledge economy, in order that the U.S. can retain its place at the forefront of nations.

WICHE commissioned this report as part of Escalating Engagement: State Policy to Protect Access to Higher Education, a project funded through a grant from the Ford Foundation. Our thanks go to Ford for its generous support of this important area of policy research.

David A. Longanecker
President, Western Interstate Commission for Higher Education
Introduction

Since its foundation the United States and its economy have relied heavily on a diverse workforce and an influx of human capital from other countries. The citizens who lived here the longest (apart from Native Americans) have tended to hold the more prestigious and lucrative positions in the workforce, while entry-level jobs have been filled by immigrants who came to this country in pursuit of more opportunity and better lives. This pattern worked fairly well for successive generations of Western European immigrants, who ultimately blended seamlessly into the fabric of our society and economy.

However, throughout U.S. history, when it comes to workforce and economic development, we have largely excluded nonmajority populations. Our indigenous populations – including American Indians, Alaska Natives, and Native Hawaiians – have often been marginalized in our nation’s workforce and economic development efforts, despite their having lived here long before the arrival of the first European settlers. In addition, nearly 400 years of prejudice and discrimination have left Black non-Hispanics still striving to participate in our nation’s economy on an equal footing with White non-Hispanics. Finally, more recently, we increasingly rely on Hispanics to labor in our most menial and lowest-paying jobs. These minority populations are the primary focus of this report: their advancement within the education system, their participation and success in the workforce, and the potential impact of ignoring the gaps in their participation on our future welfare.

Commissioned by the Western Interstate Commission for Higher Education (WICHE), with support from the Ford Foundation, this report focuses on the states of the West, their ability to educate minorities, and the resulting impact on their workforces and economies.

The foundation of the Western U.S. economy rests on a workforce that is becoming increasingly diverse. Residents of European descent are growing older and making up an ever-smaller proportion of the workforce. Meanwhile, the economy is demanding more upward mobility among Hispanic, Black non-Hispanic, and American Indian/Alaska Native populations. Can the Western states afford not to pave better roads to opportunity and success for these populations?

For many years, the most fervent arguments for racial/ethnic equality have been crafted on ethical grounds—it is just the right thing to do. But increasingly our ability to reduce the racial/ethnic gaps between White non-Hispanics and minorities does not just serve the interests of social justice; it is also crucial to economic well-being in the West. The following questions are addressed in this the report:

- What are the current education gaps between minorities and White non-Hispanics?
- How well do we prepare certain minorities for high-skill, high-wage jobs?
- What is their status in the workforce as a result?
- Has their status in the workforce improved for recent generations?
- What would be the impact if we improved our ability to educate these disadvantaged populations?

The report does not provide solutions. But we hope it expands our understanding of the impact of racial and ethnic inequality on the Western United States’ ability to compete—educationally and economically—with the countries around the world that have rapidly gained ground with respect to educational attainment and are just as eager to seek economic prosperity. Finally, this paper may add some insight into efforts to address the challenges that minority populations face as they pursue the American Dream—a dream that is in jeopardy for all Americans without their success.
The Demographic Landscape of the West

The data and information throughout this report focus on the 15 Western states that participate in WICHE (see Figure 1). These include North Dakota and South Dakota, which are not in the U.S. Census Bureau’s defined Western region.

The West’s states – collectively – are as diverse as any region in the U.S. This is especially true for younger residents. In 2006 the combination of Hispanics, Black non-Hispanics, American Indians/Alaska Natives, and Asians/Pacific Islanders constituted a majority population among those under 17 years of age (Figure 2). The same is nearly true for the college-age population (18 to 24) and the younger segment of the workforce (aged 25 to 44). Given the natural progression of aging, the West’s workforce will become even more diverse as White non-Hispanics age into retirement and are replaced in greater numbers by minorities.

Figure 1. States in the Western Interstate Commission for Higher Education (WICHE)

Figure 2. Population by Race/Ethnicity and Age in 2006 – WICHE States (in thousands)

Source: U.S. Census Bureau, Population Estimates.
Moreover, the U.S. Census Bureau projects that nearly all of the growth among young residents in the West will occur among minority populations – especially Hispanics and Asians/Pacific Islanders (Figure 3). In fact, by 2025 Hispanics/Latinos will surpass White non-Hispanics as the majority population among those under 17. These projections are very likely conservative because they were developed in the late 1990s and do not account for the high growth rates that have occurred among certain minority populations since then.

Projections of high school graduates by race/ethnicity in the West present a very similar outlook (Figure 4). The number of Hispanic graduates has doubled since the early 1990s and is projected to grow more than 50 percent between now and 2021-22 – almost eclipsing the number of White non-Hispanic graduates. WICHE also projects substantial growth in the number Asian/Pacific Islander high school graduates and relatively stable numbers of Black non-Hispanic and American Indian/Alaska Native high school graduates. The number of White non-Hispanic graduates in the West is expected to peak this academic year, before declining by roughly 75,000 (20 percent) by 2021-22. 1

These high school graduate projections among undereducated minorities may also be conservative because they do not take into account potential improvements in high school graduation rates as states continue to try to address higher drop-out rates among Hispanic, Black non-Hispanic, and American Indian/Alaska Native students. Nevertheless, the increasing diversity of high school graduates poses a challenge to colleges and universities as they strive to serve more students from different socioeconomic and cultural backgrounds – populations they have not served well in the past.

Geographically this racial/ethnic diversity is not equally distributed. Because many figures throughout this report highlight the conditions and performance of racial/ethnic populations, it is important to understand where the majority of them reside. Since the primary focus throughout the report is on the three most disadvantaged populations, Figures 5, 6, and 7 illustrate where the majority of Hispanics, Black non-
Hispanics, and American Indians/Alaska Natives are concentrated in the West. The boundaries represented on each map are Public Use Microdata Areas (PUMA), defined by the U.S. Census Bureau.

The Hispanic population in the West is most heavily concentrated in a band that curves from southern Colorado through New Mexico and Arizona and into California. There are also heavy concentrations of Hispanics in central Washington (Figure 5).
The Black non-Hispanic population of the West is more densely concentrated in the metropolitan areas of Denver, Phoenix, Los Angeles, Las Vegas, San Francisco, and Seattle (Figure 6).

American Indians/Alaska Natives are more evenly distributed throughout the region (Figure 7). More so than the other two traditionally underrepresented groups, American Indians/Alaska Natives are found in the more rural areas of the region, which means they face not only historic neglect and discrimination but also the challenges that come with living far from population centers.
The Inequality of Educational Capital

The development of human capital has always been at the core of economic and workforce development. The skills needed to earn a living wage have just become more advanced. Now more than ever, the Western states compete globally for industries that employ high-wage, high-skill workers. Their ability to expand existing industries, to attract outside employers, and to generate the entrepreneurial energy needed to create new business opportunities hinges largely on the education levels of their working-age adults.

The leader for centuries in educating its residents for life and work, the United States has slipped substantially in recent years (Figure 8). Our young adult workforce (aged 25 to 34) is currently ranked 10th in the world in the percentage who have completed a college degree. The countries that have surpassed us are educating their young adults at rates that we have never seen in the U.S. Our educational attainment levels peaked for the generation that is now 35- to 44-years-old.

In direct opposition to the trends seen in the best-performing countries, the WICHE region has experienced a sharp decline in the educational attainment of adults from generation to generation. The age group approaching retirement in the West (55- to 64-year-olds) is better educated than its counterparts in the U.S. and around the world. But the educational attainment of young adults in the West has fallen well behind the competition – both in the U.S. and abroad – a trend that does not bode well for the economies in the West as they compete in an increasingly demanding global environment.

Lying beneath these general patterns of educational attainment are vast differences across racial/ethnic populations. Figure 9 displays college attainment levels by race/ethnicity in the WICHE region for four age groups.
Figure 9. Percent of Adults with College Degrees (Associate and Higher) by Race/Ethnicity and Age – WICHE States (2005-06)

Only Asians/Pacific Islanders have improved their educational attainment level from generation to generation, and they are also the only racial/ethnic population that exceeds the attainment levels of the best-performing countries. White non-Hispanics have lost their competitive position in the younger age groups. The disparities between White non-Hispanics and Black non-Hispanics, Hispanics, and American Indians/Alaska Natives have not improved at all from generation to generation. Within all age groups, Hispanics are the most undereducated population in the West. They also constitute the largest minority population and the population that is growing at the fastest rate. College attainment among Black non-Hispanics has declined from generation to generation, and younger American Indians/Alaska Natives are also less likely than their parents to complete college. This picture is even more alarming given the expected changes in the population over the next 20 years.

Figure 10 displays the gaps in high school attainment levels between White non-Hispanics and the three most disadvantaged minority groups by state. The West has the unfortunate distinction of containing eight of the 10 states that have the largest racial/ethnic disparities in the nation. In Idaho, Oregon, and California, the high school attainment levels of minorities are at least 30 percent lower than that of White non-Hispanics. Hawaii and Montana have the smallest gaps among WICHE states.

Racial/ethnic attainment gaps at the college-level are just as wide (Figure 11). Again, the majority of the states with the largest disparities are located in the West. Twelve of 15 WICHE states are above the U.S. average. Colorado, California, and North Dakota have the largest gaps in the region between White non-Hispanics and minorities.

The Western states that are experiencing the sharpest declines in educational attainment from generation to generation are those with the fastest-growing minority populations (Arizona, California, New Mexico, and Nevada). Their ability to reverse this downward trend depends on their success in closing the education gaps between White non-Hispanics and minorities.
**Figure 10. Percentage Difference in High School Attainment Between Whites and Minorities* – 25- to 64-Year-Olds (2006)**

*Minorities include Black non-Hispanics, Hispanics, and American Indians/Alaska Natives.*

*Sources: OECD, Education at a Glance; U.S. Census Bureau, 2006 ACS (PUMS).*

**Figure 11. Difference in College Attainment (Associate and Higher) Between Whites and Minorities* – 25- to 64-Year-Olds (2006)**

*Minorities include Black non-Hispanics, Hispanics, and American Indians/Alaska Natives.*

*Sources: OECD, Education at a Glance; U.S. Census Bureau, 2006 ACS (PUMS).*
It is important to acknowledge that for many disadvantaged populations in the U.S., the road to higher levels of educational attainment and improved economic prosperity becomes difficult long before high school, college, or their entrance into the workforce. Challenges can begin as early as prenatal care and continue to escalate through early childhood, preschool, and elementary school. And these challenges are further complicated by poverty and underfunded schools. While this report focuses on the challenges and success of racial/ethnic populations in the later stages of the education-to-workforce pipeline, these significant early challenges should not be forgotten.

**Workforce Development (Education and Training)**

States and regions can deploy a variety of tools to build and sustain a vibrant economy. Among the most common are creative tax policies (e.g., low corporate taxes, tax incentives for attracting outside business), strategic investments in small business and entrepreneurial activity, investment in technology infrastructure (e.g., broadband access), and public and private investment in research and development. The performance levels of states on many of these activities are tracked and regularly reported in such publications as the *State New Economy Index* (The Kauffman Foundation) and the *Development Report Card for the States* (Corporation for Enterprise Development). But a necessary but not sufficient condition for successful economic development is access to an educated, highly skilled workforce. It is arguable that the most successful regional economic transitions in recent years (e.g., Seattle, WA; California’s Silicon Valley; Colorado’s Front Range; Austin, TX; Boston, MA; North Carolina’s Research Triangle) likely would not have occurred in the absence of a highly skilled workforce.

Shifting demographics and a long-established record of poorly preparing certain populations for knowledge-based jobs create particular challenges for many regions throughout the West in building and sustaining an educated workforce. A significant number of working-age adults in the West (6.2 million) have not even completed high school. A high school diploma alone is rarely sufficient anymore to compete in today’s workforce. But it is the gateway to education and training beyond high school. Without it, very few adults are able to transition out of low-wage, low-skill employment.

The percent of 9th graders who graduate four years later varies dramatically across the WICHE states (Figure 12) and the nation. Utah and North Dakota are among the best performers in the U.S., and Nevada, Alaska, and New Mexico are among the worst.

Racial/ethnic disparities in public high school graduation rates for the U.S. and the WICHE states are shown in Figure 13. Collectively, the WICHE states have a slightly higher high school graduation rate than the nation as a whole. Black non-Hispanics and Hispanics graduate at higher rates in the WICHE states, but there is still a sizable gap between their success and that of White non-Hispanics and Asians/Pacific Islanders. American Indian/Alaska Natives in the West graduate from high school at the lowest rate. For many minorities in the West, therefore, high school completion serves as the largest barrier to success in the workforce.

Poor high school completion rates result in large numbers of adults who enter the workforce with extremely low levels of education and training. For them, there are potential opportunities later in life to reenter the education pipeline in order to improve their skills and advance their position in the workforce. But there must be programs in place, such as the General Education Development (GED) and Adult Basic Education (ABE) programs, to enable them to take these opportunities. The levels at which state-administered ABE programs serve adults in need of the most basic skills vary dramatically from state to state (Figure 14). WICHE states that serve the most residents – relative to the population in need – are Utah, California, and New Mexico. Those that serve the fewest are Nevada, Colorado, and Arizona.
Figure 12. Public High School Graduation Rates – Percent of 9th Graders Graduating Four Years Later by State (2005)

Nevada 49.1
Alaska 58.9
New Mexico 60.2
Hawaii 67.4
United States 68.8
Washington 70.5
Colorado 71.0
California 71.1
Oregon 72.3
Wyoming 75.5
Hawaii 79.0
Montana 79.1
Idaho 80.8
South Dakota 81.6
Arizona 84.8
North Dakota 86.4
Utah 72.3

Source: National Center for Education Statistics, Common Core Data.

Figure 13. Public High School Graduation Rates – Percent of 9th Graders Graduating Four Years Later by Race/Ethnicity – WICHE States (2005)

Total 68.8
White non-Hispanic 77.2
Black non-Hispanic 53.6
Hispanic 57.2
American Indian/Alaska Native 62.0
Asian/Pacific Islander 86.6

Total 71.7
White non-Hispanic 78.2
Black non-Hispanic 60.5
Hispanic 60.0
American Indian/Alaska Native 57.1
Asian/Pacific Islander 85.6

Source: National Center for Education Statistics, Common Core Data.
While WICHE states serve slightly more adults in need of basic education and training than the U.S. average, only 118 of every 1,000 working-age adults with no high school diploma were served in 2005 (Figure 15). This is the only level of education where minorities are served at higher levels than White non-Hispanics. This is due in part to the heavy emphasis on the English as a Second Language (ESL) component of these programs – a component particularly affected by high numbers of Hispanics. Relative to the adult population with no high school diploma by race/ethnicity, more Asians/Pacific Islanders are served: followed by Black non-Hispanics, American Indians/Alaska Natives, and Hispanics. Given that the majority of adult residents with no high school diploma in the West are Hispanic, their rate of participation in ABE programs is low.

Because of the demand for English proficiency in the workforce, ESL programs are an important component of state-administered ABE programs. While the ESL participation data are not broken out by race/ethnicity, the majority of residents in the West who speak English as a second language are from minority populations – particularly Hispanic. Figure 16 displays the rates at which states serve adults with English language deficiencies. Again, the performance of the WICHE states varies. North Dakota – the best WICHE performer – has a very small adult ESL population. However, Arizona, Nevada, and Colorado are very diverse states that do a poor job of serving their large populations of adults who speak little or no English.

For adults who fail to complete high school the traditional way, the principal alternative is to earn the GED diploma. GED diploma production, relative to the adult population with no high school diploma, is an important indicator of how well states are moving their most undereducated adults onto the first – but necessary – rung of the ladder that leads to greater educational and economic opportunity. Of particular note is how poorly all states address this problem – with the best performers awarding only about 70 GED diplomas per 1,000 adults with no high school diploma in 2005 (Figure 17). Whereas the best-performing
Figure 15. Enrollment in State-Administered ABE Programs per 1,000 Adults Aged 18-24 with Less than a High School Diploma by Race/Ethnicity (2005)

- United States
  - Total: 101.6
  - White non-Hispanic: 65.4
  - Black non-Hispanic: 117.4
  - Hispanic: 142.9
  - American Indian/Alaska Native: 216.1
  - Asian/Pacific Islander: 247.2

- WICHE States
  - Total: 118.0
  - White non-Hispanic: 77.9
  - Black non-Hispanic: 116.7
  - Hispanic: 164.6

Sources: U.S. Department of Education; U.S. Census Bureau, ACS.

Figure 16. Enrollment in ESL per 1,000 Adults Aged 18-64 with Little or No English Proficiency (2006)

- United States
  - United States Average (112.8)

- WICHE States
  - Arizona: 143.3
  - Nevada: 117.4
  - Colorado: 142.9
  - Idaho: 84.2
  - Hawaii: 88.6
  - Oregon: 99.1
  - Alaska: 100.5
  - Montana: 108.3
  - United States: 113.8
  - New Mexico: 116.0
  - South Dakota: 119.8
  - Wyoming: 127.5
  - California: 142.9
  - Washington: 163.0
  - Utah: 164.6
  - North Dakota: 196.1

Sources: U.S. Department of Education; U.S. Census Bureau, ACS.
WICHE states – Wyoming, Montana, and North Dakota – have relatively few adults without a high school education, the worst performers – California, Nevada, and Arizona – have very large numbers of working-age adults with no high school diploma. In California alone, there are 2.2 million adults aged 18 to 39 without a high school diploma – compared to 1.5 million in all the other WICHE states combined.

Despite higher levels of participation in ABE among minorities in the West, they earn fewer GED diplomas than White non-Hispanics. Black non-Hispanics and American Indians/Alaska Natives earn GED diplomas at slightly lower rates than White non-Hispanics. Hispanics earn very few GED diplomas relative to the population in need – only eight GED diplomas awarded per 1,000 young adults with no high school diploma. In the West two-thirds of all 18- to 39-year-olds with no high school diploma are of Hispanic origin (67.1 percent).

For most of these adults, this is only the first milestone on the road to improving their ability to compete in the workforce. Most minorities must advance their educational standing beyond high school in order to earn wages associated with even a lower-middle-class lifestyle.

There are many postsecondary education and training activities for which there is insufficient data to make regional, state-by-state, or racial/ethnic comparisons. These include vocational and certificate training in non-Title IV institutions (e.g., cosmetology, some health technologies, and some vocational technologies), employer training, and other noncollege credit activities. However, for traditional college-level work, there is a great deal of information regarding state-level performance and the participation and completion rates of racial/ethnic populations.

Sources: U.S. Department of Education; U.S. Census Bureau, ACS.
States vary in their ability to serve adult residents in their colleges and universities. In the West, undergraduate enrollment relative to the number of adults with no college degree ranges from 313 per 1,000 in North Dakota to 121 per 1,000 in Nevada (Figure 19). Performance among the WICHE states reflects the nation as a whole – with some states performing at the high end and others at the low end.

In the WICHE region, Asians/Pacific Islanders enroll in traditional higher education at the highest rate. Black non-Hispanics enroll at the second-highest rate, followed by White non-Hispanics, American Indians/Alaska Natives, and Hispanics (Figure 20). Most alarming is the extremely low participation rate among Hispanics – the West’s largest and fastest-growing minority population.

Participation rates reveal only part of the story, however. States can have relatively high college participation rates while yielding few certificate and degree holders – and the reverse. The best examples from the WICHE states are California and New Mexico. Both rank above the U.S. average on the number of adults enrolled in college (Figure 19) but well below the U.S. average on the number of credentials awarded, relative to their adult populations in need (Figure 21). In California this phenomenon is mostly because the state has a large community college system that enrolls more than two-thirds of the state’s undergraduates but produces relatively few credentials and degrees. In New Mexico it is the product of poor rates of persistence and completion among students in all sectors of postsecondary education.

One facet of inequality that is less frequently examined in higher education is the distribution of credentials and degrees by race/ethnicity (Figure 22). With the exception of Hispanics, minorities in the West earn more less-than-two-year certificates and almost the same number of associate degrees as White non-Hispanics (relative to the populations without those credentials). The largest gaps occur at the baccalaureate level, where White non-Hispanics and Asians/Pacific Islanders complete many more degrees, relative to the populations without those credentials.
Figure 19. Undergraduate Enrollment per 1,000 18- to 44-Year-Olds with No College Degree by State (2005)

Sources: NCES, IPEDS Enrollment Survey; U.S. Census Bureau, ACS.

Figure 20. Undergraduate Enrollment per 1,000 18- to 44-Year-Olds with No College Degree by Race/Ethnicity (2005)

Sources: NCES, IPEDS Enrollment Survey; U.S. Census Bureau, ACS.
Figure 21. Undergraduate Credentials and Degrees per 1,000 18- to 44-Year-Olds with No College Degree by State (2005)

<table>
<thead>
<tr>
<th>State</th>
<th>Certificate</th>
<th>Associate's</th>
<th>Bachelor's</th>
</tr>
</thead>
<tbody>
<tr>
<td>United States</td>
<td>14.7</td>
<td>28.3</td>
<td>54.9</td>
</tr>
<tr>
<td>Alaska</td>
<td>15.7</td>
<td>30.4</td>
<td></td>
</tr>
<tr>
<td>Nevada</td>
<td></td>
<td>32.0</td>
<td>54.9</td>
</tr>
<tr>
<td>New Mexico</td>
<td></td>
<td>30.8</td>
<td></td>
</tr>
<tr>
<td>California</td>
<td></td>
<td>30.4</td>
<td></td>
</tr>
<tr>
<td>Hawaii</td>
<td></td>
<td>30.4</td>
<td></td>
</tr>
<tr>
<td>Oregon</td>
<td></td>
<td>30.8</td>
<td></td>
</tr>
<tr>
<td>Idaho</td>
<td></td>
<td>31.5</td>
<td></td>
</tr>
<tr>
<td>Montana</td>
<td></td>
<td>33.5</td>
<td></td>
</tr>
<tr>
<td>Washington</td>
<td></td>
<td>38.9</td>
<td></td>
</tr>
<tr>
<td>Colorado</td>
<td></td>
<td>39.4</td>
<td></td>
</tr>
<tr>
<td>South Dakota</td>
<td></td>
<td>42.7</td>
<td></td>
</tr>
<tr>
<td>Arizona</td>
<td></td>
<td>43.8</td>
<td></td>
</tr>
<tr>
<td>Utah</td>
<td></td>
<td>48.7</td>
<td></td>
</tr>
<tr>
<td>Wyoming</td>
<td></td>
<td>51.9</td>
<td></td>
</tr>
<tr>
<td>North Dakota</td>
<td></td>
<td>54.9</td>
<td></td>
</tr>
</tbody>
</table>

Sources: NCES, IPEDS Completions Survey; U.S. Census Bureau, ACS.

Figure 22. Undergraduate Credentials and Degrees Awarded per 1,000 18- to 44-Year-Olds with No College Degree by Race/Ethnicity – WICHE States (2005)

<table>
<thead>
<tr>
<th>Race/Ethnicity</th>
<th>White non-Hispanic</th>
<th>Black non-Hispanic</th>
<th>Hispanic</th>
<th>American Indian/Alaska Native</th>
<th>Asian/Pacific Islander</th>
</tr>
</thead>
<tbody>
<tr>
<td>Certificate</td>
<td>13.9</td>
<td>17.5</td>
<td>6.8</td>
<td>15.7</td>
<td>15.7</td>
</tr>
<tr>
<td>Associate's</td>
<td>24.1</td>
<td>21.5</td>
<td>9.3</td>
<td>23.0</td>
<td>20.3</td>
</tr>
<tr>
<td>Bachelor's</td>
<td>43.1</td>
<td>24.0</td>
<td>9.9</td>
<td>24.0</td>
<td>20.3</td>
</tr>
</tbody>
</table>

Sources: NCES, IPEDS Completions Survey; U.S. Census Bureau, ACS.
Perhaps the two most important points to make about racial/ethnic disparities in postsecondary education and training in the West are:

- The gaps between White non-Hispanics and disadvantaged minorities grow larger at each subsequent stage of education.
- Relative to White non-Hispanics and Asians/Pacific Islanders, very few Hispanics participate in postsecondary education, and even fewer earn credentials and degrees, at all levels.

These disparities are displayed in a slightly different way in Figure 23. The proportions of White non-Hispanics and Asians/Pacific Islanders rise at each stage of the education pipeline, while the proportions of Hispanics, Black non-Hispanics, and American Indians/Alaska Natives fall.

In nearly all stages of the education process, the success rates of disadvantaged minorities lag behind those of White non-Hispanics – with increasingly more minorities entering the workforce with lower levels of education. These inequities impact the competitiveness of the workforce in the West as well.

Figure 23. Racial/Ethnic Representation at Each Stage of the Education Pipeline – WICHE States (2005)

The Workforce

Overall, the West is the fastest-growing region in the nation. In addition to high rates of population growth, the West contains the majority of states in the U.S. that will face the largest increases in demand for college-educated workers (Figure 24). This increase in demand will occur as many White non-Hispanics approach retirement age, the younger adult population becomes increasingly diverse, and educational participation and completion gaps among White non-Hispanics and minorities persist.
### Figure 24. Projected Growth (%) in Occupations Requiring at Least Some Postsecondary Education (2004-2014)

<table>
<thead>
<tr>
<th>State</th>
<th>Growth (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>North Dakota</td>
<td>12.1</td>
</tr>
<tr>
<td>Oregon</td>
<td>16.4</td>
</tr>
<tr>
<td>New Mexico</td>
<td>18.4</td>
</tr>
<tr>
<td>Washington</td>
<td>18.5</td>
</tr>
<tr>
<td>Alaska</td>
<td>18.6</td>
</tr>
<tr>
<td>Hawaii</td>
<td>18.9</td>
</tr>
<tr>
<td>South Dakota</td>
<td>19.3</td>
</tr>
<tr>
<td>United States</td>
<td>20.1</td>
</tr>
<tr>
<td>Montana</td>
<td>21.4</td>
</tr>
<tr>
<td>California</td>
<td>21.8</td>
</tr>
<tr>
<td>Idaho</td>
<td>27.1</td>
</tr>
<tr>
<td>Wyoming</td>
<td>27.2</td>
</tr>
<tr>
<td>Arizona</td>
<td>32.1</td>
</tr>
<tr>
<td>Colorado</td>
<td>34.7</td>
</tr>
<tr>
<td>Utah</td>
<td>38.4</td>
</tr>
<tr>
<td>Nevada</td>
<td>49.3</td>
</tr>
</tbody>
</table>

Source: America's Career Info Network, data provided by state Departments of Labor.

### Figure 25. Percent of Civilians Aged 25 to 64 Participating in the Workforce by Level of Education Completed, U.S. and WICHE States (2005-06)

<table>
<thead>
<tr>
<th>Education Level</th>
<th>United States</th>
<th>WICHE States</th>
</tr>
</thead>
<tbody>
<tr>
<td>Less than High School</td>
<td>67.0</td>
<td>63.3</td>
</tr>
<tr>
<td>High School Graduate</td>
<td>75.7</td>
<td>75.8</td>
</tr>
<tr>
<td>Some College, No Degree</td>
<td>78.1</td>
<td>79.5</td>
</tr>
<tr>
<td>Associate's Degree</td>
<td>80.6</td>
<td>83.1</td>
</tr>
<tr>
<td>Bachelor's Degree</td>
<td>82.9</td>
<td>84.0</td>
</tr>
<tr>
<td>Graduate or Professional Degree</td>
<td>85.9</td>
<td>86.3</td>
</tr>
</tbody>
</table>

Source: U.S. Census Bureau, American Community Survey (2006 and 2006 Public Use Microdata Samples).
One of the most direct effects of educational attainment is that it governs the likelihood that residents will participate in the workforce at all (Figure 25). In the WICHE states, adults with college degrees are 20 percent more likely to participate in the workforce than are those without a high school diploma, and they are 7 percent more likely than those with no college education. Less than two-thirds (63 percent) of adults who have less than a high school diploma in the West are employed.

This relationship also varies by race/ethnicity (Figure 26). For all racial/ethnic populations, higher levels of education are related to higher rates of workforce participation. Among those with less than a high school diploma, Hispanics and White non-Hispanics are the most likely to participate, while just over half of Black non-Hispanics and American Indians/Alaska Natives are employed. These racial/ethnic gaps tend to close for adults with higher levels of education.

The relationship between educational attainment and income is well understood and frequently documented. Generally speaking, citizens with higher levels of education have higher levels of earnings. This is true in all states across the U.S., but the reward for residents who earn college degrees varies dramatically from state to state (Figures 27 and 28). Among the WICHE states, associate degrees yield the greatest returns in California and Alaska and the lowest in Montana, North Dakota, and South Dakota. While the earnings differential for a bachelor's degree is even greater, the results are similar for the WICHE states. California is ranked first; and Montana, North Dakota, and South Dakota are ranked last. The primary reason for such variation among these states is the availability of high-skill, high-wage jobs – particularly at the bachelor’s level – in combination with relatively low earnings among residents who just completed high school.
Figure 27. Difference in Median Earnings between a High School Diploma and an Associate’s Degree (2006)

Montana: $4,063
North Dakota: $6,369
South Dakota: $6,451
Wyoming: $6,861
Utah: $7,961
Colorado: $8,439
Hawaii: $8,916
Washington: $9,006
Idaho: $9,104
Oregon: $9,275
New Mexico: $9,590
United States: $10,055
Arizona: $10,743
Nevada: $11,071
Alaska: $13,712
California: $14,860

Source: U.S. Census Bureau, 2005 ACS (Public Use Microdata Samples).

Figure 28. Difference in Median Earnings between a High School Diploma and a Bachelor’s Degree (2006)

South Dakota: $10,379
North Dakota: $11,090
Montana: $12,188
Wyoming: $13,204
Utah: $16,222
Hawaii: $16,252
Nevada: $17,678
Idaho: $18,044
New Mexico: $18,081
Colorado: $18,310
Oregon: $18,892
Alaska: $20,849
United States: $21,228
Arizona: $21,329
Washington: $21,743
California: $27,597

Source: U.S. Census Bureau, 2005 ACS (Public Use Microdata Samples).
In addition to the racial/ethnic gaps in educational attainment and at each stage in the educational process, inequities in earnings also exist when minorities hold the same levels of education as White non-Hispanics. The median annual earnings for White non-Hispanics in the West are substantially higher than those for minorities at every level of education completed, with the exception of Asians/Pacific Islanders with graduate and professional degrees (Figure 29). Among disadvantaged minority populations, Black non-Hispanics earn more at each level of education, followed by Hispanics and then American Indians/Alaska Natives, who typically earn the least amount at every education level.

Moreover, earnings gaps are not closing much at all for the younger generation of workers (Figure 30). The two exceptions are for those who have had some college or earned associate degrees: in these cases Black non-Hispanics and Hispanics have gained some ground relative to White non-Hispanics. But American Indians/Alaska Natives still lag behind their counterparts with the same degrees. Even if they complete the same levels of education, the economy doesn’t reward minorities at the same level that it does White non-Hispanics.

The difference in median earnings between White non-Hispanics and minorities at the baccalaureate level is much larger in some states than in others (Figure 31). The widest gaps among the WICHE states are in California, Utah, and Nevada. By and large the states with the smallest gaps – North Dakota, Montana, and South Dakota – have either few minorities or relatively limited opportunities for residents with bachelor’s degrees to earn high wages (see Figure 28).

Given the race/ethnic disparities at every stage in the education pipeline and the gaps in earnings, it is no surprise that employment patterns also vary by race/ethnicity (Figure 32). White non-Hispanics are much more likely to be employed in management and professional occupations than are minorities (with the exception of Asians/Pacific Islanders). These include occupations in business and management, computers
Figure 30. Median Annual Earnings by Race/Ethnicity and Education Level Completed for 25- to 44-Year-Olds – WICHE States (2005-06)

Source: U.S. Census Bureau, 2005 and 2006 American Community Survey (Public Use Microdata Samples).

Figure 31. Difference in Median Earnings among Bachelor’s Degree Holders between Whites and Minorities* – 25- to 64-Year-Olds by State (2005-06)

* Minorities include Black non-Hispanics, Hispanics, and American Indians/Alaska Natives.

Source: U.S. Census Bureau, 2005 and 2006 American Community Service (Public Use Microdata Samples).
and engineering, education and public service, and a variety of healthcare professions. Black non-Hispanics are more likely to be employed in services, sales, and administrative support positions. More Hispanics and American Indians/Alaska Natives are employed in agricultural, construction, extraction, and production occupations – often in jobs that are the most physically demanding and the lowest-paying.

Nearly identical patterns of employment are reflected in the younger adult population (aged 25 to 44), suggesting that the prevalence of minorities employed in the knowledge-based, higher-paying management and professional occupations has not improved from generation to generation (Figure 33). In some cases the gaps between White non-Hispanics and minorities are even larger in the younger adult population.

Gaps in high-skill, high-wage employment between White non-Hispanics and minorities are bigger in the West, with 10 of 15 WICHE states coming in above the U.S. average (Figure 34). The WICHE states with the largest disparities – California, Colorado, New Mexico, and Arizona – are among the West's largest and most diverse states.

As more White non-Hispanics move into retirement and fewer of them enter the workforce as young adults, at what point will we realize that failure to educate minorities for knowledge-based jobs is stifling the region's economic competitiveness? Even without the likely increase in demand for better-prepared minorities, the benefits for increasing educational success rates are enormous.
Figure 33. Percentage of Adults Aged 25-44 Employed in Each Occupational Category by Race/Ethnicity – WICHE States (2005-06)

Source: U.S. Census Bureau, 2005 and 2006 American Community Survey (Public Use Microdata Samples).

Figure 34. Gap between Whites and Minorities* in the Percentage of Adults Aged 18 to 64 Employed in Management and Professional Occupations (2005-06)

* Minorities include Black non-Hispanics, Hispanics, and American Indians/Alaska Natives.

Source: U.S. Census Bureau, 2005 and 2006 American Community Survey (Public Use Microdata Samples).
The Benefits

Much has been written about the correlation between education and a variety of benefits for individuals and the public. Among the most common individual benefits are increased earnings, better health, fewer incidences of incarceration, and greater levels of civic engagement. From the public perspective (national and state), among the pecuniary benefits of a more educated citizenry are increased tax revenues and cost savings in Medicare and Medicaid, corrections, and public assistance. Rather than examining all of these important benefits at length, we will focus just on the one between education and income and the estimated impact of closing racial/ethnic gaps.

Figures 29 and 30 display the earnings adults in the West experience for each level of education completed. While there are disparities between White non-Hispanics and minorities at each level, all populations earn more upon attaining higher levels of education. But what would the impact be if the education and income gaps between White non-Hispanics and minorities were closed?

Figure 35 displays the percentage increase in total personal income for each of the WICHE states if the racial/ethnic education and earnings gaps were closed (first education, then earnings). Obviously, the most diverse states would stand to gain the most. The total personal income in New Mexico, California, and Hawaii would be more than 20 percent higher than current levels. New Mexico would experience nearly 20 percent more personal income by closing the education gap alone.

![Figure 35. Estimated Percent Increase in Total Annual Personal Income by Closing Racial/Ethnic Education and Earnings Gaps – WICHE States (2005-06)](image-url)
Figure 36. Estimated Increase (in $ Billions) in Total Annual Personal Income by Closing Racial/Ethnic Education and Wage Gaps – WICHE States (2005-06)

<table>
<thead>
<tr>
<th>State</th>
<th>Increase</th>
</tr>
</thead>
<tbody>
<tr>
<td>California</td>
<td>169.9</td>
</tr>
<tr>
<td>Arizona</td>
<td>14.6</td>
</tr>
<tr>
<td>Colorado</td>
<td>9.6</td>
</tr>
<tr>
<td>New Mexico</td>
<td>7.0</td>
</tr>
<tr>
<td>Washington</td>
<td>6.5</td>
</tr>
<tr>
<td>Nevada</td>
<td>5.7</td>
</tr>
<tr>
<td>Hawaii</td>
<td>5.5</td>
</tr>
<tr>
<td>Oregon</td>
<td>2.7</td>
</tr>
<tr>
<td>Utah</td>
<td>2.0</td>
</tr>
<tr>
<td>Alaska</td>
<td>1.8</td>
</tr>
<tr>
<td>Idaho</td>
<td>0.8</td>
</tr>
<tr>
<td>South Dakota</td>
<td>0.6</td>
</tr>
<tr>
<td>Montana</td>
<td>0.5</td>
</tr>
<tr>
<td>North Dakota</td>
<td>0.3</td>
</tr>
<tr>
<td>Wyoming</td>
<td>0.2</td>
</tr>
</tbody>
</table>

Source: U.S. Census Bureau, 2005 and 2006 American Community Survey (Public Use Microdata Samples).

Figure 37. Relationship between Personal Income and Tax Revenues (2003)

Correlation = 0.84

Sources: U.S. Bureau of Economic Analysis, State Higher Education Executive Officers (SHEEO).
In real dollars, closing the education and earnings gaps in California would result in three times more additional personal income than in all the other WICHE states combined – $169 vs. $58 billion (Figure 36). In fact, if all 50 states closed the education and income gaps between White non-Hispanics and minorities, the additional income generated in California would represent 25 percent of the total U.S. increase ($169 vs. $684 billion).

One reason this exercise is worth undertaking is that it demonstrates the strong relationship between personal income and state tax revenues (Figure 37). States have different tax structures. But aside from a few regressive revenue streams (e.g., cigarette, alcohol, and lottery), the tax revenues generated from the largest sources (i.e., income, sales, and property) are highly correlated with personal income. Given strained budgets in most states, the additional income generated by raising the education levels of minorities and the dividends they pay in the workforce would be very welcome. These analyses provide an indication of the returns states might expect if they made a committed investment to closing the racial/ethnic gaps in educational attainment.

**Conclusion**

One of the most notable threads running through the data and information discussed in this report is the benefit that would result if California could improve its racial/ethnic gaps. California is our nation's most populous state and the fifth-largest economy in the world. It represents 12 percent of the U.S. population and 51 percent of the population in the West. It ranks at or near the bottom among states in the educational attainment of its minority populations, its ability to serve these populations, and the participation and income gaps they face – relative to White non-Hispanics – in the workforce.

In recent decades California has experienced downturns on a variety of measures. Its adult population with bachelor’s degrees has declined from 118 percent of the U.S. average in 1980 to 104 percent in 2006. Its personal income per capita has dropped from 124 percent of the U.S. average in 1960 to 108 percent in 2006. If California maintains its current performance in serving undereducated minorities, it is likely to slip further. Conversely, through better education and social policy, California has an opportunity to make an enormous difference for a large number of residents, the Western region, and the nation as a whole.

The other Western states should not be let off the hook, however. Though they have less of an impact than California on the region or the nation as a whole, if they reduced racial/ethnic gaps, it would provide a considerable stimulus to regional economic conditions. Regardless of size and scale, states compete with one another (and with other countries) for high-wage, high-skill employment opportunities for their residents. Their ability to supply qualified workers will be a major determination of their success.

Our failure to adequately serve minorities throughout the West is the most distressing story of this report. In the West Hispanics will soon be the majority population. Yet at nearly every stage in the education process, the systems of education in the West serve Hispanics at the lowest rate of any racial/ethnic population. As a result they continue to represent the majority of workers employed in low-skill, low-wage jobs. Though Black non-Hispanics and American Indians/Alaska Natives represent smaller proportions of the population in the West, their low rates of participation and success also contribute to their disadvantaged economic positions.

Racial/ethnic gaps remain a fundamental reality in our society. Our future will be greatly affected by our ability (or inability) to equalize opportunity at all stages of the education pipeline. At stake is our competitive position in the global economy and the likelihood that our children and grandchildren will experience the
U.S.’s prosperity, as we have. If the social justice reasoning for closing racial/ethnic gaps has run its course, then perhaps the public (and policymakers) will pay closer attention to an argument for closing these gaps that addresses something more near and dear: our individual and collective economic well-being.

Denying the phenomenon these data reveal and dismissing our responsibility for addressing the problem are equally irresponsible. They represent the kind of careless behaviors that bring prosperous civilizations down.

Endnotes


3 Throughout the report, Native Hawaiians are included with Asians and Pacific Islanders. Small sample size restricted our ability to break them out separately.

4 This is a fairly simple measure that does not account for students who take more than four years to graduate from high school or those who move to/from another state between ninth and 12th grades. Some states have recently agreed to adopt a more comprehensive measure of high school graduation, in which they actually track students from ninth grade to completion.


7 Kelly, As America Becomes More Diverse, 2005.