The average American became better educated in the 1990s. The number of U.S. adults with at least a bachelor’s degree jumped 38 percent between 1990 and 2000, while the number without a high school diploma fell. Entering the 21st century, the average American had more than a year of postsecondary education.

The average education of the adult population increased in every state and the District of Columbia. However, as Chart 1 shows, some states improved much more than others. Intriguingly, gains in average educational attainment were systematically lower in the West and Southwest. In particular, Alaska, California and Nevada posted less than half the national gain. California, which ranked 14th in the nation in terms of average educational attainment in 1990, slipped to 29th by 2000. Texas dropped seven places to 42nd.

Why did the West and Southwest lag the rest of the nation? There are two key factors: The adult population without a diploma did not decline, and the share of the population with at least a bachelor’s degree did not rise as rapidly as elsewhere in the country.

(Continued on page 2)

After almost 20 years of trying, in late 1999 Congress finally repealed the Glass–Steagall Act and parts of the Bank Holding Company Act, which had separated traditional banking, insurance and securities underwriting into three, nonoverlapping industries. The Financial Services Modernization Act of 1999, also known as Gramm–Leach–Bliley, was hailed as a major step toward ending government regulation that was initially imposed following the stock market collapse in the late 1920s and the ensuing Great Depression. Proponents claimed that eliminating the artificial barriers that divided the financial sector into distinct industries would increase competition, thus generating greater efficiencies and economies of scale and benefiting consumers and the economy.

(Continued on page 6)
Adults Without a Diploma

One reason for the nationwide increase in education was a decline in the number of adults without a high school diploma. According to the census, there were 3.6 million fewer high school dropouts in the United States in 2000 than in 1990, and the share of the adult population without a diploma fell from 25 percent to 20 percent (Chart 2).1

While the number of high school dropouts fell in most of the country, it rose in eight states—Alaska, New Mexico, Utah, Colorado, Nevada, Arizona, Texas and California (Table 1). Not coincidentally, these are also eight of the bottom nine states with respect to gains in average educational attainment during the 1990s. (The other state is Hawaii.) California and Texas, by virtue of their size, experienced the largest absolute increase in population without a high school diploma, while Nevada experienced the largest increase as a share of population.

Of course, rapidly growing states attract all types of workers, including those without a high school diploma. The real question is whether the number of educated adults grew faster than the number of uneducated adults. If so, the share of the population without a diploma would have fallen, pushing up average educational attainment. The share of the population without a high school diploma fell in all 50 states, but the decline was smallest in California (where it was almost unchanged), Alaska, Nevada, Arizona, Colorado and Utah.

No matter how you slice it, states with the greatest growth in uneducated adults saw the smallest gains in educational attainment.

States with the greatest growth in uneducated adults saw the smallest gains in educational attainment.

Chart 1

Gains in Educational Attainment Uneven, 1990–2000

Chart 2

U.S. Adults Becoming Better Educated

Population 25 years and over (in millions)

SOURCE: Census Bureau.
saw the smallest gains in educational attainment. More than half the variation in average attainment gain can be explained by the growth rate of the population without a high school diploma.

A number of factors could explain why some states saw more rapid growth in this population. States with high dropout rates probably experienced more growth in the dropout population. Unfortunately, there is no measure of dropping out that is consistently defined for all states throughout the 1990s. Statistics for the 38 states reporting in either the 1999 or 2000 school year suggest that higher dropout rates can explain 28 percent of the growth in the population without a diploma. Dropout rates were particularly high in Louisiana (9.2 percent), Arizona (8.4) and Georgia (7.2) and particularly low in North Dakota (2.7), Wisconsin (2.6) and Iowa (2.5). With the exception of Utah (and possibly California and Colorado, for which there are no data), the dropout rate was above the national median for all states where the dropout population grew.

Proximity to Mexico is also a likely explanation for the growth in adults without a diploma. According to the 2000 census, two-thirds of adults living in the United States who were born in Mexico had less than a high school diploma. Therefore, states with a growing population of Mexican immigrants would also tend to have had a growing number of adults without a high school diploma. With the exception of Alaska, the share of the population from Latin America grew rapidly in all the states where the population without a diploma also grew. The share from Latin America more than doubled in Arizona and more than tripled in Colorado and Utah. It increased from 11 percent to 14.5 percent in California and from 6.2 percent to 10.4 percent in Texas. A growing population from Latin America accounts for 41 percent of California’s population growth and 29 percent of Texas’; the average for the rest of the nation is 20 percent.

The pattern of population growth in Texas illustrates this point. All major Texas cities posted gains in the number of adults without a high school diploma. Given the state’s rapid growth during the 1990s, it would be surprising if they did not. However, as Chart 3 shows, there were sharp differences between cities on the Mexican border and the rest of Texas. While the rest of the state saw large increases in the number of highly educated individuals, much of the border’s growth among people age 25 and over was concentrated in individuals without a high school diploma.

### High School Graduates

Of course, a falling share of adults without a diploma means a rising share of adults with a high school or college degree. Therefore, examining the growth in educated adults provides a useful alternative perspective. Nationally, the adult population with at least a high school diploma grew by 22.6 percent between

---

**Table 1**

<table>
<thead>
<tr>
<th>Change in number, 1990–2000</th>
<th>Rate of growth (percent)</th>
<th>Population share, 1990 (percent)</th>
<th>Population share, 2000 (percent)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Alaska</td>
<td>1,038</td>
<td>2.4</td>
<td>13.4</td>
</tr>
<tr>
<td>New Mexico</td>
<td>10,007</td>
<td>4.4</td>
<td>24.9</td>
</tr>
<tr>
<td>Utah</td>
<td>13,696</td>
<td>10.3</td>
<td>14.9</td>
</tr>
<tr>
<td>Colorado</td>
<td>34,983</td>
<td>10.7</td>
<td>15.6</td>
</tr>
<tr>
<td>Nevada</td>
<td>85,746</td>
<td>51.2</td>
<td>21.2</td>
</tr>
<tr>
<td>Arizona</td>
<td>128,467</td>
<td>26.2</td>
<td>21.3</td>
</tr>
<tr>
<td>Texas</td>
<td>242,002</td>
<td>8.4</td>
<td>27.9</td>
</tr>
<tr>
<td>California</td>
<td>492,215</td>
<td>11.1</td>
<td>23.8</td>
</tr>
<tr>
<td>United States</td>
<td>−3,628,093</td>
<td>−9.2</td>
<td>24.8</td>
</tr>
</tbody>
</table>

SOURCE: Census Bureau.
The Southwest’s mediocre improvement in the share of the population with a diploma isn’t due to a lack of growth in educated adults.

1990 and 2000. However, in Nevada it grew by 70 percent, while at the other extreme, in Connecticut, it grew by only 11 percent.

Chart 4 illustrates the pattern of population growth. The number of adults with at least a high school diploma grew most rapidly in the Southeast, Southwest and West. The notable exception is California, where the adult population with at least a high school diploma grew only 15 percent between 1990 and 2000. The Southwest’s mediocre improvement in the share of the population with a diploma isn’t due to a lack of growth in educated adults.

The states with the fastest growth in educated adults followed the same basic strategy—they imported them. With the exception of Utah and Idaho, homegrown talent accounts for less than half the growth in educated adults among
the fast-growing states. Nevada, Arizona and Florida graduated no more than one-third of the high school graduates they gained during the 1990s.

In fact, no state other than North Dakota graduated enough high schoolers during the 1990s to account for its gains in educated adults. Nationwide, immigrants who received their high school education abroad account for nearly 40 percent of the net gain in adults with at least a high school diploma.

College Graduates

A more slowly growing share of college graduates is the other major reason the West and Southwest lagged the nation. The share of the U.S. population with at least a bachelor’s degree increased by 4 percentage points during the 1990s. As Chart 5 illustrates, the gains were well below average in the Southwest and much of the West. In Texas, the share of the population with a college degree was equal to the national average in 1990 but slipped a full percentage point below it by the end of the decade.

As with high school graduates, most states did not produce enough college graduates to account for the net increase in that population. In the West and Southwest, only Utah was a net exporter of college graduates. Both California and Texas imported nearly one-third of their increase in college-educated adults.

Nationwide, immigrants who received their education abroad account for 20 percent of the net gain in college graduates. Of course, such figures greatly understate the United States’ reliance on educated immigrants. Many foreign students come to the United States for college and then return home. Because such students are counted as U.S. graduates, they must each be offset by a foreign-educated immigrant in the net figures. Therefore, it is likely that the share of new, foreign-educated immigrants greatly exceeds 20 percent.

Economic Implications

Lagging the nation with respect to educational attainment gains could have important economic implications for the West and Southwest. Education enhances worker productivity, so firms in the West and Southwest likely experienced less productivity growth than their national counterparts. Highly educated individuals also tend to be highly compensated, so the region’s relatively slow growth in average educational attainment likely slowed its growth in personal income per worker.

Relatively slow growth in average educational attainment also deprived states in the West and Southwest of the fiscal advantages conferred by an increasingly well-educated population. Educated individuals’ increased earnings lead them to contribute more income, sales, payroll and property taxes. They also tend to demand fewer social services. Educated individuals are less likely to receive welfare, Medicaid or unemployment compensation. They and their children tend to be healthier, which should reduce their use of the public health system.

Conclusions

All states and regions became more highly educated during the 1990s. Much of the growth was homegrown; graduates of U.S. high schools and colleges account for just over 60 percent of the increase in the number of educated adults. However, that left the United States dependent on foreign countries to educate the other 40 percent. The United States was a net importer of education at every level from high school graduate through Ph.D.

The West and Southwest lagged the rest of the country in education gains. Again, migration is an important part of the story. Not only did the region attract large numbers of highly educated individuals, it also attracted large numbers of adults with little or no formal education. This suggests that states in the Southwest and West benefited less from population growth during the 1990s than did other high-growth areas such as Florida, Georgia and North Carolina.

—Lori L. Taylor

Taylor is a senior economist and policy advisor in the Research Department of the Federal Reserve Bank of Dallas.

Notes

1 This category also includes individuals who never attended high school.

2 Half the adults living in the United States who were born in Latin America (which includes Mexico) do not have a diploma. The census does not indicate whether these individuals immigrated as adults or as children who subsequently dropped out of the U.S. school system.

3 In Utah, the number of high school diplomas granted between 1990 and 2000 represents 78 percent of the gain in adults with at least a high school diploma. In Idaho, local graduation figures can explain 61 percent of the growth. In all cases, figures are adjusted to reflect the likely pattern of mortality during the 1990s.