

Education and Wages: The Payoff in California

It has been well documented that the economic returns to education—that is, the wage gains associated with additional schooling—have risen dramatically in the United States since the late 1970s. Yet we know little about the extent to which trends in California reflect those of the nation. In *The Changing Role of Education in the California Labor Market*, Julian Betts addresses this gap in our knowledge, answering the following questions:

- How did the educational composition of California's workforce change between 1970 and 1997? Are these changes significantly different from those observed in the rest of the nation?
- To what extent did California's postsecondary education sector meet the demand for skilled workers between 1970 and 1990?
- What has been the overall trend in the wage premium earned by college graduates? What have been the trends for those with a high school diploma and for those who have less than a 12th grade education?
- How do these trends vary across industrial and regional sectors in California?

Trends in Educational Attainment

Between 1970 and 1990, the mean years of schooling for California's adult population aged 18 to 65 rose considerably, from 11.9 to 12.6 years. However, increases in educational attainment in the rest of the country dwarfed the increase in California. In 1970, California residents held a one-year advantage in educational attainment over residents in other states; by 1997, California residents on average had only one-quarter of a year more education.

Where California residents come from has contributed in important ways to changes in the mix of education levels in the adult population. Between 1970 and 1990, the share of immigrants in the adult population rose from 10.7 percent to 26.2 percent. Even more striking is the fact that over these two decades, the proportion of immigrants among

those who did not complete 12 years of schooling soared from 17 percent to 54 percent.

U.S. natives born outside California have also contributed to the changing educational mix. By 1990, natives born outside the state accounted for only 36 percent of the population but constituted 50 percent of the state's population with postgraduate education (that is, education beyond a bachelor's degree).

The Role of California's Education System

The large number of California residents who came to California from other states and countries raises important questions about the extent to which California's schools and universities can affect the educational attainment of the state's population. Although a majority of those who have less than a high school diploma are immigrants, it appears that about three-quarters of the immigrants living in California ended their formal schooling before coming to the United States. Thus, a large proportion of these Californians have had no contact with the state's public school system, and it is unlikely that they would be affected by any potential reforms aimed at improving school attendance.

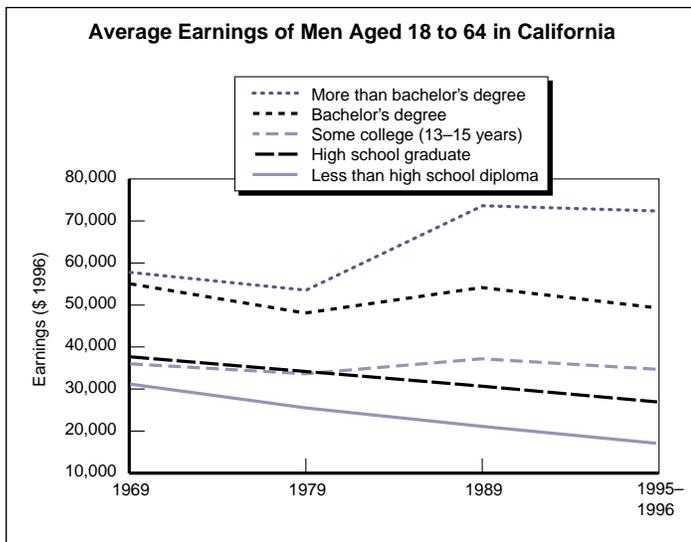
At the other end of the educational spectrum, California's universities appear to have produced just over half of the bachelor's and higher degrees needed by the California labor market between 1970 and 1990. Clearly, California imports many highly skilled workers from elsewhere. However, there is also evidence that the state's postsecondary system acts like a "college magnet," attracting many students from outside the state.

Wage Trends in California

Just as the relative supplies of workers of different educational levels have changed in California over time, so has the relative demand for these workers. Together, these shifts in supply and demand have generated changes in earnings.

In 1969, workers with more than a bachelor's degree earned 24 percent more than high school graduates with otherwise similar backgrounds; by 1996, this difference had skyrocketed to 95 percent more (see the figure). In 1969, those who had less than a 12th grade education earned 21 percent less than high school graduates, a gap that had increased to 29 percent by 1996.

The overall increase in returns to education is not the result of higher wages in just a few industries. Rather, the trends toward a higher college wage premium seem to be widespread.



Between 1969 and 1996, workers with a high school diploma or less experienced large declines in real earnings. Especially hard hit were those who had not completed 12 years of schooling: Their earnings expressed in 1996 dollars dropped from about \$31,000 in 1969 to about \$17,000 in 1996.

Regional Variations in California

As might be expected, California does not have a geographically homogeneous labor market. There are quite large variations in the relative supplies of workers of different educational levels across the state's regions, and quite large variations in the returns to education. The areas with the largest spread in earnings between workers with a high

school diploma and workers with other education levels were the Los Angeles region, Orange County, and the Central Valley, although some other areas also exhibited rather large wage gaps.

Policy Discussion

Several policy implications emerge from the analysis. First, the increasing disparity in the earnings of highly educated and less highly educated workers in California does increase the incentive for young Californians to attend college. But it seems unlikely that young people from different socioeconomic strata will be equally able to respond to this increased incentive to undertake postsecondary education. Specifically, the large wage reductions experienced by those with a high school diploma or less make it more difficult for their children to afford a college education.

A second policy concern is the low educational attainment of immigrants living in California. A seemingly obvious response would be to find ways to improve the education that public schools provide to immigrants. No doubt the public schools play an important role in educating immigrant children; but because about three-fourths of immigrants in California have permanently ended their formal schooling before entering the United States, policymakers need to supplement programs in the regular schools with training programs that can help the many adult immigrants who have not graduated from high school.

A third policy consideration is the role of the state's postsecondary institutions in meeting the growing demand for highly skilled workers. About half of the state's college-educated workers come from other states and countries. Thus, the state needs to undertake policies to help ensure that California can continue to attract students and skilled labor from elsewhere. Part of the answer may be to expand financial support for California's universities. Other strategies, some far afield from education policy, may also prove effective. For example, undertaking infrastructural projects that maintain California's desirability as a place to live may play a key role in attracting skilled workers from elsewhere.

This research brief summarizes a report by Julian R. Betts, The Changing Role of Education in the California Labor Market (2000, 172 pp., \$12.00, ISBN: 1-58213-014-0. The report may be ordered by phone at (800) 232-5343 [mainland U.S.] or (415) 291-4415 [Canada, Hawaii, overseas]. A copy of the full text is also available on the Internet (www.ppic.org). The Public Policy Institute of California is a private, nonprofit organization dedicated to independent, nonpartisan research on economic, social, and political issues affecting California.