Born in Taiwan and China respectively, Kao’s mother and father immigrated to America to study biochemistry at Utah State University, where they met.

“They went where the scholarship money was,” Kao says. “That was their ticket to the United States. That was their way out.”

And as they raised their daughters in south-east Denver, they would always emphasize the importance of education.

“It wasn’t whether you were going to college, it was which one of the best colleges were you going to,” Kao remembers. “You were unsuccessful if you didn’t go to college. ... It was a very big deal, basically since birth.”

Now 30, Kao is a lawyer. Her sister is a doctor.
Career Builders

Education can help growing minority population face workforce challenges
Higher skill and education levels are vital to career opportunities, but are often advantages minority groups lack. In turn, this may significantly limit the job and earning potential of rapidly growing minority populations in the region, says Chad Wilkerson, an economist and branch executive of the Federal Reserve Bank of Kansas City’s Oklahoma City Branch.

Wilkerson and Megan Williams, an associate economist also at the Oklahoma City Branch, recently examined the occupational outlook and its implications for minority groups in the Tenth Federal Reserve District.

In the District, which is made up of western Missouri, Nebraska, Kansas, Oklahoma, Wyoming, Colorado and northern New Mexico, the share of ethnic and racial minorities has almost doubled since 1970, now making up 25 percent of the area’s population—and also a rapidly growing part of the labor force.

“The five- to 10-year outlook for jobs held by minorities generally is not as bright as the outlook for jobs held by non-Hispanic whites,” Wilkerson says. “More education will be needed to boost both long- and short-term job prospects for minorities in the District.”

It’s a lesson Kao wasn’t taught in the classroom, but learned by her parents and passed on to her. She is grateful for that.

“Always their No. 1 priority was education,” Kao says. “It has given me so many more options.”

**A growing population**

In 1940, minorities made up less than 10 percent of the total population of the states in the District. The average annual minority population growth through 1990 was nearly 2.5 percent—three times as fast as population growth among whites due in large part to higher birth rates—with the fastest growth occurring among Asians.

More recently, the minority population share in the District has increased even more rapidly. Meanwhile, growth for whites has eased slightly since 1990.
The District’s three largest minority groups are Hispanics, blacks and Native Americans.

By state, minorities make up more than half the population in New Mexico and more than 25 percent in Colorado and Oklahoma. The minority populations in Kansas, Missouri, Nebraska and Wyoming range from 11 percent to 18 percent.

More specifically, the largest concentrations of minorities in the District are found in northern New Mexico, southern Colorado, eastern and southwestern Oklahoma, and southwest Kansas, including metropolitan areas such as Albuquerque, Denver, Oklahoma City, Tulsa and Kansas City.

The largest minority group in the District, like the nation, is Hispanics with 12 percent. The next three minority groups in the District are: blacks (6 percent), Native Americans (2.5 percent) and Asians (1.7 percent).

Although the presence of minority workers is growing, the earning levels continue to lag.

Making ends meet

After graduating from high school in New Mexico, Dave Melton did what the other young men he grew up with on the Pueblo Laguna reservation did and what their fathers before them did: looked for work.

For nearly 10 years, Melton put in long grueling days with minimal pay, first as a motorcycle mechanic and then mining for uranium.

“I could feel it,” Melton remembers. “I knew I didn’t want to be doing this (type of work) for the rest of my life.”

So at age 27, with a wife and four children, Melton enrolled at the University of New Mexico on a scholarship from his tribe to study economics.

Now, at 53, Melton owns Sacred Power Corporation, a manufacturer of renewable energy equipment, such as solar power panels. He started his Albuquerque-based business six years ago. Much of the company’s technologies are used in Indian Country to provide electricity and hot water.

“This is why I’m here,” Melton says. “I’ve been put on this earth to help people.”

This includes guiding his children, who are all currently attending college. He didn’t want their career choices and, in turn, their lifestyles to be limited by a lack of education as his once were.

Research shows differences in occupational structure result in differences in salary levels. Both are tied to levels of educational attainment.

In the District, the actual median earnings for Hispanics and Native Americans are nearly 25 percent below the District average. Blacks earn about 15 percent less than the average while Asians earn less than non-Hispanic whites.

Job and salary projections for 2014 are positive for all races and ethnic groups. However, growth of high-paying jobs held by Hispanics, blacks and Native Americans isn’t projected to outpace the growth of low-paying jobs to the extent it is for whites and Asians, Williams says.
Management positions account for about 13 percent of all jobs in the District, and as a whole, are the highest-paying major occupational group. In 2000, the share of Hispanics, blacks and Native Americans in management positions in the District was barely half that of whites. The share of Asians was moderately higher than for other minority groups, but still less than whites.

Professional jobs, such as lawyers, teachers and other non-management positions that require post-secondary training, account for nearly a fifth of all jobs in the District. Similar to management positions, these jobs are high-paying but there is a much lower minority concentration compared to whites. By contrast, Asians are highly concentrated in professional jobs.

Other occupational groups account for two-thirds of employment in the District, but pay considerably less than management and professional jobs.

“Minorities are more highly concentrated in these jobs,” Williams says.

Explaining the gap

Three cultural factors have been found to influence occupational structures and economic outcomes of minorities relative to whites: labor market discrimination, immigrant assimilation and geographic mobility.

Historically, racial discrimination in the labor market accounted for some of the occupational and economic differences for minorities and whites, Wilkerson says. Some studies show this still to be a factor today while others have found little impact. Other studies have found evidence that immigrant assimilation plays an important role—immigrants’ education, experience and skill levels do not transfer perfectly in the U.S. labor market.

Geographic mobility may also contribute to differences in occupational structure and wages. Cultural factors may constrain mobility, which is especially true for Native Americans, who often live on reservations in remote or rural areas where job opportunities are limited.

“Despite these cultural factors, the biggest contributing factor, by a wide margin,
lies in the differences in human capital traits,” Wilkerson says, “which are typically measured by education and skill attainment.”

**Higher education, higher pay**

Education varies widely by race and ethnicity in the District. Hispanics tend to have the least education of all minority groups; only 36 percent of Hispanics ages 20 and older have attended some college and only 11 percent have a bachelor’s degree or higher, according to Wilkerson and Williams’ research.

Blacks and Native Americans also have below-average post-secondary education, while in contrast, more than two-thirds of Asians have at least some post-secondary education and those with master’s and doctorate degrees (23 percent) greatly exceed that of all other races and ethnic groups, including whites.

Phil Birdine sees a direct link between minority workers’ overall job and pay concentrations and the low level of minorities’ degree attainment. For this very reason, Oklahoma State University is committed to minority students’ graduation, says Birdine, OSU assistant vice president for institutional diversity.

“Education is one of the main answers to closing that gap,” Birdine says. “Our society is so competitive, without an education you’re at a disadvantage. … The more skilled you are, the more valuable you are to an employer.”

OSU has a higher share of minorities in terms of both enrollment and graduates than most major universities in the region.

However, recruiting minority students is challenging, Birdine says. Often college-age minorities have grown up in families whose members aren’t highly educated and may work in lower-paying jobs.

The university has programs to not only identify and target potential minority students, but also retain them once they are enrolled. The Multicultural Student Center, for which Birdine is the director, was established nearly

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**Annual Projected U.S. Job Growth for 2004-2014**

*by Primary Education or Training Requirements of Jobs*

<table>
<thead>
<tr>
<th>Educational Level</th>
<th>Percent</th>
</tr>
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<tbody>
<tr>
<td>Doctoral Degree</td>
<td>2.71</td>
</tr>
<tr>
<td>First Professional Degree</td>
<td>1.67</td>
</tr>
<tr>
<td>Master’s Degree</td>
<td>1.83</td>
</tr>
<tr>
<td>Bachelor’s Degree w/ work experience</td>
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</tr>
<tr>
<td>Bachelor’s Degree</td>
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</tr>
<tr>
<td>Associate Degree</td>
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<tr>
<td>Post-Secondary Voc Award</td>
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<tr>
<td>Work Experience in a Related Field</td>
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</tr>
<tr>
<td>Long-Term on the Job</td>
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</tr>
<tr>
<td>Moderate-Term on the Job</td>
<td>0.80</td>
</tr>
<tr>
<td>Short-Term on the Job</td>
<td>1.12</td>
</tr>
</tbody>
</table>

*Source: U.S. Bureau of Labor Statistics*
two decades ago to do just this. The Center offers academic, career and social advisement to help ensure the success of minority students at OSU—and beyond.

The workforce demands diversity, and it demands highly skilled workers, Birdine says.

Bill Ray, spokesperson for the Denver Metro Chamber of Commerce, agrees, saying the need for educated workers is rapidly increasing as the aerospace, bioscience, engineering and health-care industries continue to grow.

With this in mind, the Chamber is helping prepare the area’s future workforce via school programs to teach children about the importance of education at an early age. These more recent efforts are in line with the Chamber’s mission of economic growth.

“It’s all about workforce development,” Ray says. “The key is developing a talent pool.”

Looking forward

Because minority groups in the region have different occupational mixes than whites, job prospects during at least the next five to 10 years are also likely to differ, Wilkerson says. Projecting the demand for occupations currently filled by minority workers helps indicate workers’ prospects.

The fastest growth in the United States during the next decade is anticipated among professional and service occupations, which are generally near the top and bottom of the pay scale, respectively. These fields include healthcare, software and personal care services.

In the classroom

Crystal McClarty’s college professors always know whether she’s present.

“For most of my classes, I’m the only African-American,” says the 23-year-old graduate student at Oklahoma State University.

This means McClarty stands out. Teachers and students remember who she is; when there’s a class discussion about race issues, everyone looks to her.

She’s never felt out of place on campus, though. College is where she belongs, she says.

McClarty knows she’s representing her family as a member of its first generation to go to college, but also her race and ethnic minorities as a whole.

“It makes me want to work harder,” McClarty says.

Research shows minority groups’ representation at universities is somewhat lacking when compared to population numbers. Economists Chad Wilkerson and Megan Williams, of the Federal Reserve Bank of Kansas City, recently examined 2002-2004 enrollment and graduation data from all Title IV institutions (schools that have federal student financial assistance programs) in the Tenth Federal Reserve District. This includes western Missouri, Nebraska, Kansas, Oklahoma, Wyoming, Colorado and northern New Mexico.

The 18- to 34-year-old minority population in the region (27 percent of the total population) is somewhat larger than minority enrollment in universities, particularly four-year schools. Minority presence was much higher in two-year and vocational or trade schools.

Wilkerson and Williams also researched graduation rates of minorities at regional universities and found them to lag enrollment rates in most cases.

The races examined were Hispanic, black, Native American and Asian. Overall, Hispanics had the largest disparity between enrollment and degree shares and total population shares, while Asians had the smallest.

When she receives her master’s degree in business administration and finance next spring, McClarty plans to pursue a career in the oil and gas industry—a field she thinks has a promising future, and one she’s prepared for.

“I can’t do it without an education.”
Meanwhile, farming and manufacturing are anticipated to be the slowest areas of job growth in the United States through 2014, actually declining due in large part to advances in technology.

Jobs that were held by Hispanics in the District in 2000 are projected to increase slower than the average across races. The projected annual growth rate (1.08 percent) for these jobs is low because of high concentrations in occupations such as cashiers, construction laborers and telemarketers.

The prospects for jobs held by Hispanics are helped by large concentrations in health-care aide and services occupations, which are predicted to grow rapidly, although average salaries are generally low.

Jobs held by blacks in the region should rise at about the same pace (1.17 percent) as whites through 2014.

During this same time, jobs held by Native Americans in the region are projected to grow 1.12 percent annually. The outlook is hurt by high concentrations in occupations expected to experience sluggish growth or losses, such as precious-stone workers, and low concentrations in high-paying professions projected to grow rapidly, such as doctors and lawyers.

Like Hispanics, the outlook for black and Native American workers is helped by high concentrations in a number of health-care aide and services occupations, which are expected to grow rapidly but don’t pay the highest wages.

In contrast, jobs held by Asians in the District are anticipated to grow at 1.31 percent—faster than the average (1.17 percent) across all races—during the next five to 10 years. Like white workers, Asian workers in the region have high concentrations in many high-paying professional occupations predicted to increase rapidly, including physicians and computer software engineers.

Projected job growth sheds light on anticipated short-term demand for minorities currently employed, and the likely increase in pay gaps between minorities and whites.

Obtaining the right kind of education is the answer for long-term job viability, quality and pay, Wilkerson and Williams say.

“Education is opportunity,” Kao says. “My parents had the opportunities they did because of schooling.”

And so did she.