The 820 occupations for which BLS prepared 2012–22 employment projections received assignments in three categories: typical entry-level education, work experience in a related occupation, and typical on-the-job training needed to attain competency. In 2012, about one-third of jobs were in occupations that typically require postsecondary education for entry. The largest share among the postsecondary groups was bachelor’s degree. A bachelor’s degree was the typical entry-level education for 18 percent of jobs in 2012. Most jobs in 2012 were classified as high school diploma or equivalent or less than high school.

1 These data are for 2012 employment summed by typical entry-level education assignment. The actual educational attainment of workers is different. Neither the 2012 data nor the projected 2022 data reflect actual or estimated numbers of workers by educational attainment.

Occupations that typically require a master’s degree for entry are projected to grow the fastest from 2012 to 2022

<table>
<thead>
<tr>
<th>Education Level</th>
<th>Percent Change, Projected 2012-22</th>
</tr>
</thead>
<tbody>
<tr>
<td>Doctoral or professional degree</td>
<td>16.0%</td>
</tr>
<tr>
<td>Master’s degree</td>
<td>18.4%</td>
</tr>
<tr>
<td>Bachelor’s degree</td>
<td>12.1%</td>
</tr>
<tr>
<td>Associate’s degree</td>
<td>17.6%</td>
</tr>
<tr>
<td>Postsecondary non-degree award</td>
<td>15.6%</td>
</tr>
<tr>
<td>Some college, no degree</td>
<td>11.3%</td>
</tr>
<tr>
<td>High school diploma or equivalent</td>
<td>7.9%</td>
</tr>
<tr>
<td>Less than high school</td>
<td>10.9%</td>
</tr>
</tbody>
</table>

Average, all occupations = 10.8%


Occupations that typically require a master’s degree for entry are projected to grow the fastest during the 2012–22 decade, followed by associate’s degree and doctoral or professional degree occupations. All of the postsecondary groups are projected to grow faster than the average of 10.8 percent.

The slowest growth is projected to be in occupations with high school diploma or equivalent as the typical entry-level education.
Most new jobs from 2012 to 2022 will not require a college degree. About 4.6 million new jobs will require only a high school diploma or equivalent and 4.2 million new jobs will require less than a high school diploma. About 3.1 million new jobs are projected to be in occupations requiring a bachelor’s degree for entry.

Occupations requiring a high school diploma or less than high school as the typical entry-level education include very large occupations that are projected to add many jobs. These occupations include retail salespersons; combined food preparation and serving workers, including fast food; and secretaries and administrative assistants.

The most new jobs from 2012 to 2022 are projected to be in occupations that typically can be entered with a high school diploma

Thousands of jobs, projected 2012-22

- Doctoral or professional degree: 638.4
- Master’s degree: 448.5
- Bachelor’s degree: 3,143.6
- Associate’s degree: 1,046.0
- Postsecondary non-degree award: 1,337.1
- Some college, no degree: 225.0
- High school diploma or equivalent: 4,630.8
- Less than high school: 4,158.4

Apprenticeship occupations are projected to grow the fastest during the 2012–22 decade

With regard to on-the-job training (OJT), the fastest employment growth is projected to be in occupations that typically require an apprenticeship. Most of the apprenticeship occupations are construction occupations. The construction industry was greatly affected by the 2007–09 recession. Rapid growth is projected for many construction occupations as the industry recovers from the recession; however, this growth represents only a partial recovery of jobs lost.

Most occupations that typically require only a high school diploma or equivalent also require on-the-job training (OJT) to attain competency in the skills needed in the occupation. In 2012, 91 percent of occupations assigned high school as the typical entry-level education required OJT. OJT includes occupation-specific training, not job-specific training. With occupation-specific training, the skills learned can be transferred to another job in the same occupation.

In 2012, about 45 percent of occupations assigned high school as the typical entry-level education needed moderate-term OJT.

**Most high school occupations require on-the-job training**

Occupations that typically require postsecondary education for entry (except some college, no degree) paid more than $34,750—the median annual wage for all occupations in May 2012. The highest median wage was for doctoral or professional degree occupations. Workers in occupations typically requiring a bachelor’s degree or master’s degree for entry were paid more than $60,000 per year, and bachelor’s degree occupations were paid a little more than master’s degree occupations. Master’s degree occupations include various counselor, therapist, and social work occupations, which tend to be lower-paying occupations.

The median annual wage for occupations that need a high diploma for entry was a little more than the overall median wage. However, there are high-paying occupations in this category; twenty-one had median annual wages of more than $60,000. All but one of these higher-paying high school occupations require additional preparation in the form of work experience, OJT, or both.
Median wages are highest for occupations that typically require 5 years or more of work experience

Median annual wages, May 2012

- $90,760
- $52,270
- $32,260


Median annual wages are highest for occupations that typically require 5 years or more of work experience in a related occupation. Most of the occupations that typically need work experience are managers or supervisors. The highest-paying occupation that typically requires 5 years or more work experience is chief executives at $168,140; that occupation typically requires a bachelor’s degree for entry.
For more information on the BLS education and training system, visit

- April 2012 Monthly Labor Review “Employment projections through the lens of education and training”
- Definitions for the categories http://www.bls.gov/emp/ep_definitions_edtrain.pdf

Data tables
- Education and training categories by detailed occupation http://www.bls.gov/emp/ep_table_112.htm
- Employment by summary education and training assignment, 2012 and projected 2022
  http://www.bls.gov/emp/ep_table_education_summary.htm