



Gallup and Amazon Study Finds Best Career Prospects for Young People

The Careers of the Future Index unlocks key information about the full range of overlooked job opportunities for young people

WASHINGTON, June 12, 2023 — As the U.S. job market adapts to the needs of the future, Gallup and Amazon partnered to create [The Careers of the Future Index \(CFI\)](#), providing transparent and data-driven information on careers with the most potential growth. The CFI combines the most recent career-level data on income, job growth, job vacancies per job seeker and resistance to automation. It conveys the economic strengths and weaknesses of various career paths and highlights careers that both pay well and are likely to be available to applicants now and in the future.

The result of this research is particularly significant for young people. More than one in five 15-year-olds (22%) in the U.S. cannot name a career when asked what job they expect to have by age 30, according to Gallup analysis of Organisation for Economic Cooperation and Development (OECD) data. The results vary based on gender — male students are more likely than female students to not know what career they want (28% versus 15%, respectively). The CFI can provide students access to key information about the wide range of jobs that are accessible in the United States and what different fields are expected to be needed.

Amazon Future Engineer, Amazon's global philanthropic computer science education program, commissioned the CFI to provide young adults and their advisers with supported guidance about the economic prospects of jobs in the U.S. The findings offer new insights to educators and industry stakeholders seeking to help equip students from all backgrounds with the tools they will need to obtain jobs of the future.

"Many young people have misconceptions about viable careers or aren't even sure what careers are available to them," said Jonathan Rothwell, principal economist at Gallup. "This data will help students better align their passion and proclivities, with an accurate perspective of available jobs."

For students who have an idea of what they want to do for their career, healthcare practitioners and technical occupations are the most cited future careers, accounting for one-third (33%) of all mentions. This category has a CFI score of 75, landing in the top 25th percentile and being a promising career prospect.

The study also found that 35% of 15-year-olds pick a career that falls below the top 20% of jobs, like athletes and actors, while overlooking higher scoring careers. Among the career pathways with the largest gap between popularity and economic viability are those in management, computers and mathematical occupations, and science. Many careers in these categories have shown steady growth, rank highly in terms of income and are resistant to automation.

Within top-scoring jobs, Black, Hispanic and American Indian workers are underrepresented at high levels, meaning their shares of jobs in top-scoring careers are well below their workforce shares across all jobs. Asian and White workers are overrepresented.

Since 2010, however, Black, Hispanic and White workers have become more evenly represented in top-scoring jobs, better reflecting their share of all jobs. This is especially pronounced for Hispanic workers, who saw their share of top-jobs go from 6.5% to 9.9%. By contrast, American Indian workers became slightly more underrepresented in top-scoring jobs, whereas Asian workers became more overrepresented and Multiracial/Other racial groups went from slightly underrepresented to slightly overrepresented.

Men are slightly overrepresented in top-scoring jobs, when taken in their entirety, but women have made notable gains in greater representation since 2010, and women are overrepresented in several top-scoring careers, especially those in healthcare.

Workers' level of education is highly correlated with the CFI, although there are high-scoring opportunities for those without formal college degrees, including chief fire fighters, cardiovascular technicians and construction managers. In 27 careers — comprising 5.8 million jobs (5.2% of all) — a majority of workers have less than a bachelor's degree, but the career still scores in the top 70th percentile, making these careers at least as high-scoring as those of the average bachelor's degree holder.

"Millions of American students face an important decision every year — what career do they want to pursue and what's the best way to get there? Grappling with an abundance of available career paths, students can use this data-driven tool to make the best possible career decision — one that provides them satisfaction, job security, and longevity," said Victor Reinoso, global director of philanthropic education initiatives at Amazon. "Young adults are overlooking promising career options. While some jobs might be popular now, they might not be in-demand in a decade or they could be highly disrupted by new emerging technologies. Our goal is to provide students and career counselors across the country with a way to make informed decisions in a rapidly changing labor market."

See more of the top careers based on education level below:

Top overall careers:

1. Surgeons (CFI score: 100)
2. Astronomers (CFI score: 100)
3. Nurse Anesthetists (CFI score: 100)
4. Physicians (CFI score: 100)
5. Project Management Specialists (CFI score: 100)

Top careers that require a bachelor's degree but no graduate school:

1. Actuaries (CFI score: 99)
2. Financial and Investment Analysts (CFI score: 98)
3. Sales Engineers (CFI score: 98)
4. Software Developers (CFI score: 97)
5. Chemical Engineers (CFI score: 96)

Top careers that do not require a bachelor's degree:

1. First-Line Supervisors of Fire Fighting and Prevention Workers (CFI score: 89)
2. Cardiovascular Technologists and Technicians (CFI score: 89)
3. Construction Managers (CFI score: 87)
4. Industrial Production Managers (CFI score: 87)
5. Power Plant Operators, Distributors, and Dispatchers (CFI score: 85)

Most popular broad careers compared with economic viability (using scores out of 100 for both):

1. Management (45.6 for student popularity vs. 83.4 CFI score)
2. Computer and Mathematic (55.6 for student popularity vs. 89.6 CFI score)
3. Business, and Financial Operations (40.4 for student popularity vs. 74.1 CFI score)
4. Life, Physical, and Social Science (48.2 for student popularity vs. 79.9 CFI score)
5. Architecture and Engineering (60.3 for student popularity vs. 82.7 CFI score)

Download the [report](#) to understand how the index was made and see what insights it offers and visit our [interactive page](#) to explore more careers or download the database.

Methodology

The Careers of the Future Index is a weighted average of occupation-level data on income, job growth, job vacancies per unemployed worker and resistance to automation. Gallup drew upon several sources to construct these metrics. Income and job growth data were compiled from the 2021 and 2010 U.S. Census Bureau (via IPUMS USA). These data were also used to calculate the number of unemployed workers, and provide contextual data on the educational attainment, racial, and gender demographics of workers in each occupation/career. Lightcast (formerly Burning Glass) was the source for job vacancies by occupation, using data from June 2021 to May 2022. The resistance to automation index is a summary measure of the level and importance of non-automatable tasks to each occupation. It was constructed using data from the 2019 Gallup Great Jobs Survey and O*NET data on the tasks performed by each occupation. These sources allowed the authors to create a measure of how likely workers in each occupation are to believe that their job could be automated or replaced by a machine or robot. Starting with 24 tasks that were identified in the scientific literature as relevant to automation, Gallup estimated how well the level and importance of each task predicts automation risk. The strength of the statistical relationship between each task and automation risk is then used as a weight to calculate the mean important/level of automatable and non-automatable tasks for each occupation. See the report's appendix for details.

About Amazon Future Engineer

Amazon Future Engineer is a childhood-to-career computer science education program intended to inspire and educate millions of students from historically underrepresented communities globally, including millions of students in the U.S. each year. Students explore computer science through school curriculum and project-based learning, using code to make music, program robots, and solve problems. Additionally, each year Amazon Future Engineer awards hundreds of students with four-year, \$40,000 scholarships and paid industry internships, as well as names 10 Teacher of the Year winners, awarding \$30,000 prize packages for going above and beyond to inspire students in computer science and to promote diversity and inclusion in the field. The program is currently available in Canada, France, Germany, India, the UK and U.S. For more information, visit amazonfutureengineer.com.

About Gallup

Gallup delivers analytics and advice to help leaders and organizations solve their most pressing problems. Combining more than 80 years of experience with its global reach, Gallup knows more about the attitudes and behaviors of employees, customers, students and citizens than any other organization in the world.

Media Contacts:

Amazon

Amazon.com, Inc. Media Hotline

Amazon-pr@amazon.com

Gallup

Kristjan Archer

Kristjan_archer@gallup.com