



GALLUP®

2021 Gallup-2U Boot Camp Graduates Study

Finding New Career Paths: Gaining In-Demand Skills and a High Return on Investment



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Foreword



A Letter From Our CEO

Christopher "Chip" Paucek
2U Co-Founder and CEO

As we begin to emerge from the COVID-19 pandemic, we face a number of challenges as a nation. Among the most pressing is how to effectively train millions of Americans for our tech-enabled economy. Regardless of geography, industry, company size or job function, the workforce of today and tomorrow needs essential tech skills to advance and thrive.

Together with more than 50 nonprofit universities from around the United States and the world, 2U and edX are addressing this critical societal need for upskilling and reskilling by annually providing tens of thousands of working adults with high-quality, career-relevant, tech skills-based boot camps. To better understand the return on investment from these programs, we teamed up with Gallup to survey recent graduates of our university partners' boot camp programs.

Nearly 4,000 of the over 40,000 graduates surveyed responded, representing one of the largest and most comprehensive analysis of boot camp outcomes available. **The positive impacts are clear: Boot camp graduates reported increased salaries, doors opened to STEM careers and enhanced career satisfaction.** And perhaps most importantly, graduates from communities that are underrepresented in tech, including workers without bachelor's degrees as well as women and Black and Hispanic graduates, reported an array of positive outcomes — from salary increases to promotions to new STEM jobs.

At 2U and edX, we often talk about unlocking human potential and using the power of our work to address society's critical needs. The findings from Gallup's research demonstrate that we are living up to this promise and are a reminder of the important work that lies ahead in helping positively transform many more lives.

Introduction

Even before the COVID-19 pandemic, automation and the development of new technologies were transforming the world of work and driving the global need for employees to learn new skills or upgrade their existing skill sets.¹

But because of the pandemic, the future of work arrived before most of the world was ready. Rapid digital transformations took place across industries — including adopting AI technologies seemingly overnight — leading the World Economic Forum to estimate in 2020 that half of all employees worldwide would need reskilling by 2025.²

This digital transformation is one reason computer science-related jobs are some of the fastest-growing occupations in the U.S. job market today. However, many U.S. employers (and employers worldwide) are struggling to find the talent needed to fill the growing number of tech job openings they post each month.³ In March 2022, the number of new postings in the U.S. alone surpassed 400,000.⁴

Technology boot camps — that is, short, full- or part-time non-degree programs that teach students in-demand tech skills in areas such as coding, cybersecurity and fintech — are an example of how higher education is responding to meet employers' needs for more skilled tech workers.

But the education market is also rising to meet workers' demands for upskilling and reskilling opportunities. A Gallup survey conducted on behalf of Amazon in 2021 found that 57% of U.S. workers surveyed were “very” or “extremely” interested in participating in training or education to upgrade their skills or learn new skills that could help them advance their careers. Interest in upskilling was highest in more skill-intensive professional occupations, including 72% of those employed in computer and mathematical fields.⁵

Tech boot camps appeal to people seeking to quickly begin tech careers, start their own businesses or gain new skills to grow in their current job or field because they enable students to get alternative credentials in four to six months and cost less than a four-year degree in computer science.

Despite the proliferation of boot camps in recent years, including many offered through a growing number of top-ranked universities, data on outcomes for graduates of these and other alternative credential programs remains limited. More research is needed to understand how effective these programs are in helping learners achieve career goals.

To understand the educational experiences of thousands of boot camp graduates across hundreds of classes and dozens of universities, 2U and edX partnered with Gallup to study how the boot camps they power are shaping not only boot camp graduates' careers but also their lives.

This report details what Gallup, 2U and edX learned about the student experiences and life outcomes for boot camp graduates based on interviews with 3,824 respondents who graduated from their boot camp program between 2016 and 2021.

- 1 Apedo-Amah, M. C., Avdiu, B., Cirera, X., Cruz, M., Davies, E., Grover, A., Iacovone, L., Kilinc, U., Medvedev, D., Maduko, F. O., Poupakis, S., Torres, J., & Tran, T. T. (2020). *Unmasking the impact of COVID-19 on businesses: Firm level evidence from across the world* [Working Paper]. World Bank. <https://openknowledge.worldbank.org/handle/10986/34626>
- 2 World Economic Forum. (2021). *Upskilling for shared prosperity: Insight report January 2021*. https://www3.weforum.org/docs/WEF_Upskilling_for_Shared_Prosperty_2021.pdf
- 3 *Occupational outlook handbook: Computer and information technology occupations*. (n.d.). U.S. Bureau of Labor Statistics. Retrieved April 26, 2022, from <https://www.bls.gov/ooh/computer-and-information-technology/home.htm>
- 4 *The tech jobs report | Monthly jobs report analysis*. (2022, May). CompTIA. <https://www.comptia.org/content/tech-jobs-report>

- 5 *The American upskilling study: Empowering workers for the jobs of tomorrow*. (2021.) Gallup, Inc. <https://www.gallup.com/analytics/354374/the-american-upskilling-study.aspx>

Key Findings

The results from the Gallup-2U Boot Camp Graduates Study, based on interviews with 3,824 respondents who graduated from a 2U-powered boot camp program between 2016 and 2021, reveal the ways these programs are shaping graduates' careers and lives.

1 Graduates of 2U-powered boot camps who took part in the study are earning higher incomes and seeing a quick return on their investment.

One year after graduation, these boot camp graduates reported making substantially more than they did while they were attending their programs.

In the year following graduation, the median salaries for graduates **increased by \$11,000.**

Graduates of 2U-powered boot camps of all races, genders and ages reported earning higher salaries.

Median salary increases across race, gender and age groups ranged from **\$5,000 to \$15,000.**

Although boot camps cost less than a bachelor's degree, those surveyed reported making as much or more than a bachelor's degree holder.

The median 2018 graduate of 2U-powered boot camps without a bachelor's degree reported earning nearly as much (\$55,000) in the year after their boot camp as the median computer science bachelor's degree graduate (\$56,421), and they earned roughly \$10,000 more than the median non-computer science graduate (\$44,033).

Boot camp graduates with a bachelor's degree reported earning even higher salaries, making a median salary of \$60,000 in the year after their boot camp.

With these higher earnings, the boot camp graduates surveyed saw a return on their investment in the first year.

The median boot camp graduate who worked full time during and following their boot camp **offset more than half the cost** of their program (59%) with the additional income they earned in the first year after graduation.

2 Those surveyed also found new jobs after graduation and more satisfaction with their work.

Nearly half of boot camp graduates surveyed credited their boot camp with helping them achieve their goal of finding a new career or a more fulfilling one.

Overall, 45% of graduates said their boot camp helped them obtain a new job at a new company or move into a new role in the same company. This percentage increases the further graduates get from their year of graduation.

A large share of the new jobs these graduates obtained were STEM jobs. After graduation, the number of boot camp graduates in STEM jobs nearly tripled.

At the time of their enrollment in their boot camp, 17% of graduates surveyed were employed in a STEM occupation; the percentage employed in a STEM job **jumped to 48% after boot camp.**

The increase in STEM-related work after graduation was evident across all demographics of graduates surveyed, including traditionally underrepresented populations.

Thirty-eight percent of Asian and White boot camp graduates who enrolled to change careers — but were not employed in STEM jobs prior to boot camp — have transitioned to a STEM role since graduation. This percentage is slightly higher than the 28% of Black graduates and 30% of Hispanic graduates who said the same.

Boot camp graduates were nearly four times as satisfied with their current jobs as they were before their boot camp.

On a 0-to-10 scale, 44% of boot camp graduates would rate their current job as an 8, 9 or 10. This percentage is **nearly four times higher** than the 12% of graduates who rated their pre-boot camp job as an 8, 9 or 10.

Among graduates who moved to a new job at a new company after completing their program, 59% rated their new job as an 8, 9 or 10.

3 Most 2U-powered boot camp graduates surveyed achieved the primary outcome they hoped for when they enrolled.

The majority of boot camp graduates said they enrolled in their programs because they wanted to change careers or find more fulfilling ones. Few mentioned other reasons, including salary.

Approximately two in three mentioned wanting to change their career or field of work (46%) or wanting to pursue a more fulfilling career path (21%). Another 20% mentioned wanting to learn new skills.

Much smaller percentages mentioned other reasons, such as increasing their salary (6%), keeping their skills up to date (3%), working more independently or getting a promotion (both mentioned by 1% of those surveyed).

If graduates did not realize their goal, they achieved another positive outcome.

More than half (56%) of boot camp graduates achieved their primary goal for enrolling, and another 30% did not achieve their primary goal but achieved another positive outcome. A smaller 15% said they did not achieve any positive outcome.

Regardless of whether it was their main reason for enrollment, graduates of 2U-powered boot camps were most likely to credit their program with teaching them new skills.

Seventy-three percent of all graduates surveyed said their boot camp helped them learn new skills; 39% said it helped them change their career or field of work; 35% said they are on a more fulfilling career path; 32% credited their boot camp for a salary increase; and 12% said the boot camp helped them get a promotion.

Boot Camp Graduates See Income Boost, Return on Investment

2U-powered boot camp graduates surveyed reported earning substantially more money one year after graduation – regardless of their race, gender or age. And on average, the additional income they made in that first year offset more than half of what they paid for their programs, so they saw a quick return on their investment.

What's more, even though their programs typically cost less than a four-year bachelor's degree, the boot camp graduates surveyed were making as much or more than a bachelor's degree holder one year after graduation.

Higher salaries are not the primary reason the surveyed boot camp graduates said they enrolled in their programs, but they reported earning substantially more money one year after they graduated.

One year after their graduation, the median salary for all boot camp graduates surveyed was \$11,000 higher than what they reported earning while they attended boot camp. Median salaries rose from \$59,000 during boot camp to \$70,000 after boot camp.

Most boot camp graduates surveyed — regardless of their race, gender, age or urbanicity — received an income boost. Median pay increases ranged from \$5,000 among older boot camp graduates (who were making higher salaries to begin with) to \$15,000 among Asian graduates.

Overall, the median income growth in the year following boot camp graduation was 17% among all graduates. Growth was evident across all groups of boot camp graduates surveyed, regardless of race, gender, age and urbanicity, ranging from 6% to 21%.

“

I've already made double what my old job salary was, so I can't trade that for anything.

— MATTHEW

2021 graduate of the Coding Boot Camp at UNC Charlotte School of Professional Studies



Change in Income From Year of Boot Camp Graduation to Year Following Boot Camp Graduation

(Among boot camp graduates who graduated between 2016 and 2021 and were employed full time in both years)



* **Median growth rate** is expressed as the percentage change in annual income from the year of boot camp graduation to the year following boot camp graduation. The percentage change is based on the difference of natural logarithms of reported annual income in the year of boot camp graduation and reported annual income in the year following boot camp graduation.

2U-powered boot camp graduates who moved from non-STEM to STEM jobs after graduation saw the highest income growth.

Most jobs in science, technology, engineering and math (or STEM jobs) command higher salaries than non-STEM jobs. For example, the median annual wage for computer and technology occupations in May 2021 was \$97,430, which was considerably higher than the median annual wage for all occupations of \$45,760.⁶ Similarly, boot camp graduates who moved from a non-STEM job to a STEM job after graduation saw the most substantial income growth.

The median income growth rate for those moving from a non-STEM role to a STEM role was 29%. Regardless of STEM transition status, boot camp graduates who said their boot camp experience helped them get a better job at another company saw a similar growth rate of 24%.

Change in Role/Occupation From Year of Boot Camp Graduation to Year Following Boot Camp Graduation

	Percentage of Respondents	Median Growth Rate
Moved from non-STEM to STEM role	34%	29%
Worked in STEM role before and after boot camp	21%	12%
Worked in non-STEM role before and after boot camp	43%	10%
Moved from STEM role to non-STEM role following boot camp	2%	*

* Sample size too small to reliably report results.

Graduates who did not change companies or transition into a STEM role also earned double-digit salary increases. Although there is no benchmarked national sample that follows individual workers over a similar time frame, for U.S. adults born between 1957 and 1963, longitudinal data show that annual income growth is usually highest in the early years of their careers.⁷

6 *Occupational outlook handbook: Computer and information technology occupations.* (n.d.). U.S. Bureau of Labor Statistics. Retrieved April 26, 2022, from <https://www.bls.gov/ooh/computer-and-information-technology/home.htm>

7 *Number of jobs, labor market experience, and earnings growth: Results from a national longitudinal survey news release.* (n.d.). U.S. Bureau of Labor Statistics. Retrieved April 26, 2022, from <https://www.bls.gov/news.release/nlsoy.htm>

Job Outcomes Among Boot Camp Graduates

Which of the following best describes how your [PROGRAM NAME] boot camp impacted your job situation?

Change in Job Following Boot Camp	Percentage of Respondents	Median Growth Rate
Helped me improve in job I already had	8%	14%
Helped me move to new role at same company	5%	16%
Helped me move to better job at a new company	40%	24%
Did not impact my job situation at all	47%	7%

“

I'm at the same company, but I was able to move to our IT department where they have a lot more options and flexibility, and they pay a lot more than most of the other departments at the company.

– SHAYNA

2021 graduate of the UCF Data Analytics and Visualization Boot Camp



The higher earnings among surveyed graduates of 2U-powered boot camps helped them offset more than half of their boot camp costs in the first year after graduation.

In higher education, some reports suggest that if the majority of students can recoup their costs from earning their degree in 10 years or less, the program could be considered to offer a reasonable return on investment. Five years or less could be considered an even better return.⁸

For the average boot camp graduate, the return is considerably quicker. The median graduate who worked full time during and after their boot camp offset 59% of what their boot camp program cost them with the additional income they earned in the first year after graduation.

Median
Program Cost

\$9,995

Median Percentage of Program Cost
Offset by First Year Income Change

59%

“

I taught for six years and in six years basically didn't get a raise. In the two years of being a programmer, I have doubled the salary I made at the end of six years of teaching. I feel like my boot camp more than paid for itself.

– MAIADA

2020 graduate of the Penn LPS Coding Boot Camp



⁸ Carrns, A. (2021, August 13). Will that college degree pay off? *The New York Times*. <https://www.nytimes.com/2021/08/13/your-money/college-degree-investment-return.html>

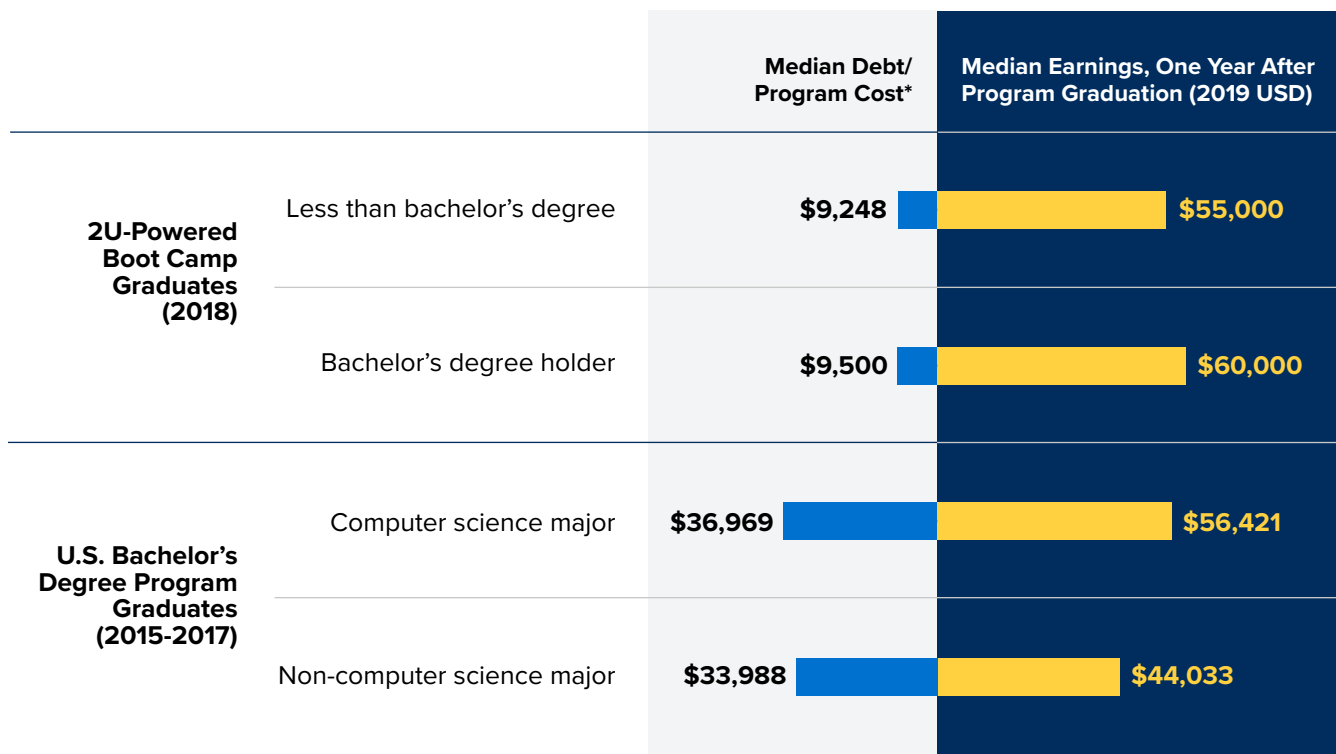
Although graduates of 2U-powered boot camps spent between one-quarter and one-third of what bachelor’s degree holders typically do on their programs, boot camp graduates reported making as much or more in the year after they graduated.

The median 2018 boot camp graduate without a bachelor’s degree reported earning nearly as much (\$55,000) in the year following their boot camp as the median computer science bachelor’s degree graduate (\$56,421), and they earned roughly \$10,000 more than non-computer science majors (\$44,033).

Boot camp graduates with a bachelor’s degree earned even higher salaries — about \$5,000 more — than their counterparts with less than a bachelor’s degree.

Program Cost and Post-Graduation Earnings: 2U-Powered Boot Camp Graduates vs. U.S. Bachelor’s Degree Holders⁹

Which of the following best describes how your [PROGRAM NAME] boot camp impacted your job situation?



* Program costs supplied by 2U.

⁹ 2U data include 2018 program graduates’ program cost and 2019 income among graduates working full time in 2019; national data include graduates of bachelor’s degree programs between 2015-2017 who were working and not enrolled in courses. All income values are reported in 2019 dollars.

Comparing Earnings for Boot Camp Graduates and Bachelor's Degree Holders

To compare the earnings of boot camp graduates to those of graduates from bachelor's degree programs, Gallup obtained data from the best available source — the U.S. Department of Education's College Scorecard. It uses tax records from the U.S. Treasury to match earnings to students for all students who received federal grants or loans during their enrollment.

The latest data available are for students who completed computer science programs during the 2015-2016 and 2016-2017 academic years. Their earnings are reported in 2019 dollars after adjusting for inflation and reflect annual earnings in the year following graduation.

The mean age at entry in this sample was 27, implying that most students finished their program in their early 30s, and the mean age at earnings measurement would have been 32 and 33. Debt data are also available for this cohort and combine student loans (subsidized and unsubsidized) with parent loans (parent's plus).

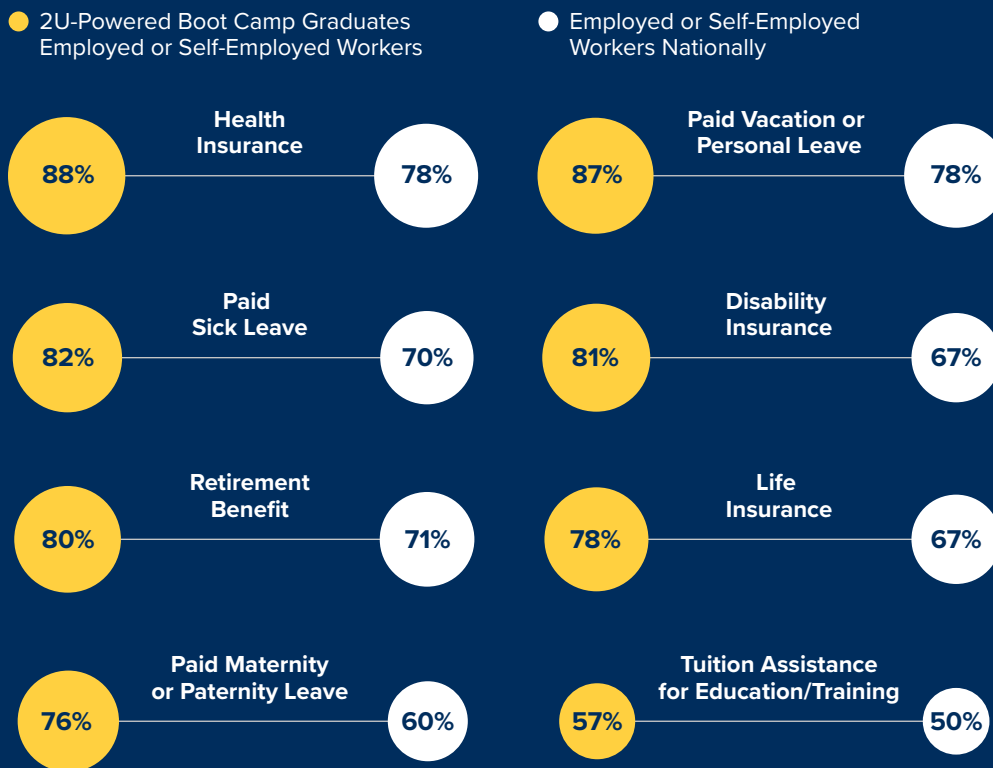
To construct a comparable population of boot camp graduates, Gallup restricted the sample to those who graduated in 2018 and measured their earnings one year later in 2019 dollars. Thus, both populations report in 2019 dollars one year after graduation.

Gallup considered earlier cohorts of boot camp graduates, but sample sizes were small, and 2018 was the earliest year of income collection. The mean age (in 2021) of boot camp graduates who completed in 2018 was 36, suggesting they were 33 at the time of completion, which is close to the Department of Education population.



Employed boot camp graduates reported earning higher salaries after graduation, but they were also more likely than other workers nationally to say they reap other fringe benefits at work.

Compared with employed or self-employed workers between the ages of 25 and 40 nationally,¹⁰ employed or self-employed 2U-powered boot camp graduates in the same age group were more likely to report working for employers who offer:



The boot camp graduates surveyed were also more likely than U.S. adults to be working in general.

The employment rate for boot camp graduates between the ages of 25 and 40 was 90%, compared with 78% for all U.S. adults in this same age group.¹¹

¹⁰ National employed/self-employed numbers are derived from the 2020 Great Jobs Study, completed by Gallup in partnership with the Lumina Foundation, Bill & Melinda Gates Foundation and Omidyar Network.

¹¹ Ibid.

Boot Camp Graduate Finds the Career Path She Was Looking For

Kennadee graduated in 2020 from the Coding Boot Camp at Vanderbilt University. The boot camp put her on a new career path that enabled her to quickly achieve one of her most important goals as a single mom: getting a good job and providing for her daughter. After graduation, she landed a job as a software developer.

Kennadee was finishing her associate degree in mathematics when a conversation with her best friend led her to choose attending boot camp over continuing to pursue a four-year college degree.

“With my college program, it was going to be another two to three years before I could enter the field I wanted to,” she says. “She (her friend) told me that with a boot camp, I could have enough experience to enter that field in six months, and I was like, ‘Sign me up! This is what I need to do.’”

While the speed of the boot camp appealed to her, so did the program’s “hands-on” approach. “I felt like in college, I was kind of just going through the motions. It wasn’t happening very fast, and I wasn’t learning a lot of job skills right off the bat,” Kennadee says.

“Pretty much from day one in the boot camp, it was ‘this is how it’s going to be on the job, and this is how you’re going to deal with these situations, and these are the technologies you’re going to use.’”

One of the aspects Kennadee says she liked most was the way the learning was structured. “It kind of held your hand and walked you through whatever the new topic was that we were learning. And then it took the brakes off,” she says. “It was really helpful on solidifying a lot of the topics.”

She also appreciated the instructors’ supportiveness — which earlier Gallup research shows is important to alumni success after graduation¹² — both during the class and even after graduation. “Two of my instructors actually gave recommendation letters. I got my current job with those reference letters,” she says.

Kennadee’s major career change after graduation — from a part-time waitress and college student to a software developer — helped transform her life.

“

I’ve been able to move out on my own and support my family by myself,” she says. “And I’ve been able to enter a career that’s really satisfying to me as a person who really craves that challenging work environment.

— KENNADEE

2020 graduate of the Vanderbilt University
Coding Boot Camp



¹² Ray, J., & Marken, S. (2014, May 6). *Life in college matters for life after college: New Gallup-Purdue study looks at links among college, work, and well-being.* Gallup.com. <https://news.gallup.com/poll/168848/life-college-matters-life-college.aspx>

Boot Camp Graduates Find New Jobs, More Satisfaction

The boot camp graduates surveyed reported finding new jobs after graduation — many of them in STEM fields — and they largely credited their boot camps for helping them find these new or more fulfilling careers.

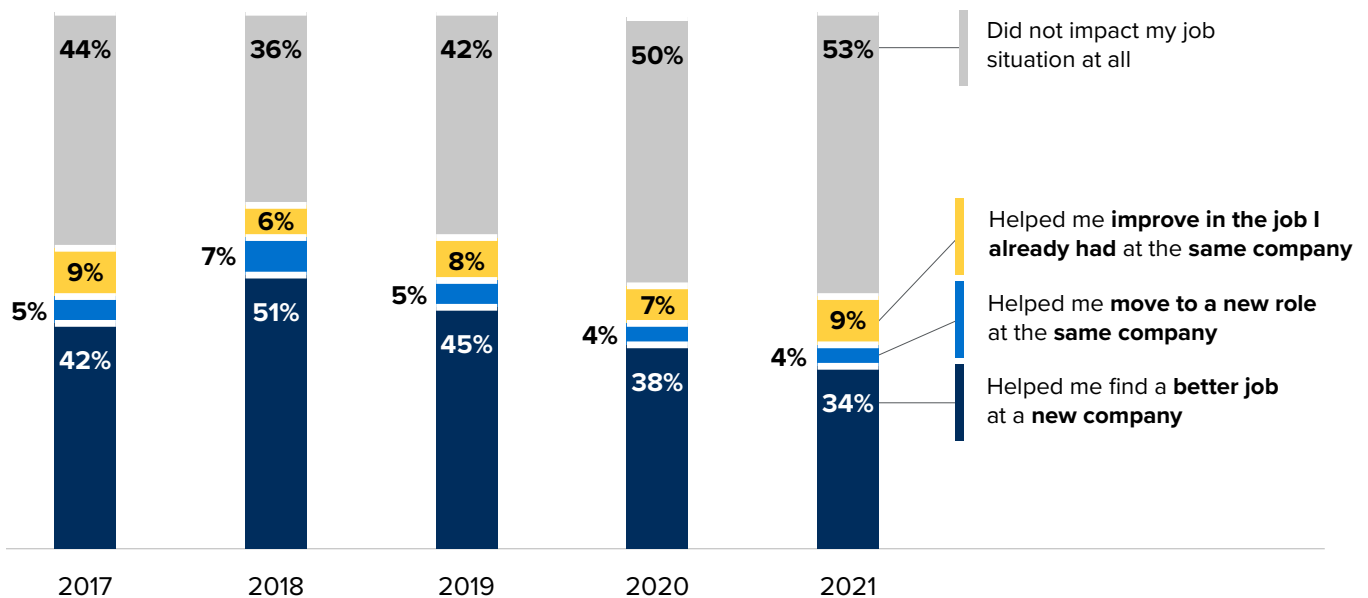
Boot camp graduates were also discovering more satisfaction with their work. In fact, those surveyed were nearly four times as likely to be satisfied with their current jobs as they were while they were attending boot camp.

Nearly half of the graduates of 2U-powered boot camps surveyed credited their boot camp with helping them find a new career or a new role.

Overall, 40% of graduates said their boot camp helped them obtain a new job at a new company, and another 5% said it helped them move into a new role in the same company. As with other employment outcomes, the likelihood of changing roles or companies generally increased the farther boot camp graduates were from graduation day.

Job Outcomes Among Boot Camp Graduates, by Year of Graduation

Which of the following best describes how your [PROGRAM NAME] boot camp impacted your job situation?





I'm in a completely different job doing very different things from what I was doing. The concepts I touch and the technologies I use every day are very different and it's really cool. It's not something I really saw for myself before the boot camp. But it's really nice to have seen that come to reality.

– JOSE

2021 graduate of the UCF Data Analytics and Visualization Boot Camp

For the boot camp graduates surveyed, a large share of these new jobs at new companies was in STEM fields. In fact, the percentage of graduates employed in STEM occupations nearly tripled from the time of their enrollment to post-graduation.

Seventeen percent of graduates were employed full-time in a STEM occupation at the time they enrolled in their boot camp. **Following their boot camps, this percentage increased to 48%.**

The farther out a graduate is from the year of graduation, the higher this percentage is. This increase over time is largely driven by boot camp graduates who were not employed in STEM roles before their boot camp transitioning into STEM roles after their programs.

	Year of Graduation				
	2017	2018	2019	2020	2021
Percentage employed in STEM job (among full-time employed graduates)	60%	63%	57%	45%	35%

More than half of those who graduated from their boot camps in 2017 or 2018 and enrolled in their boot camp with the intention of changing careers have since transitioned from a non-STEM role to a STEM role. Just 21% of 2021 graduates said the same.

Post-Boot Camp Transition to STEM Roles

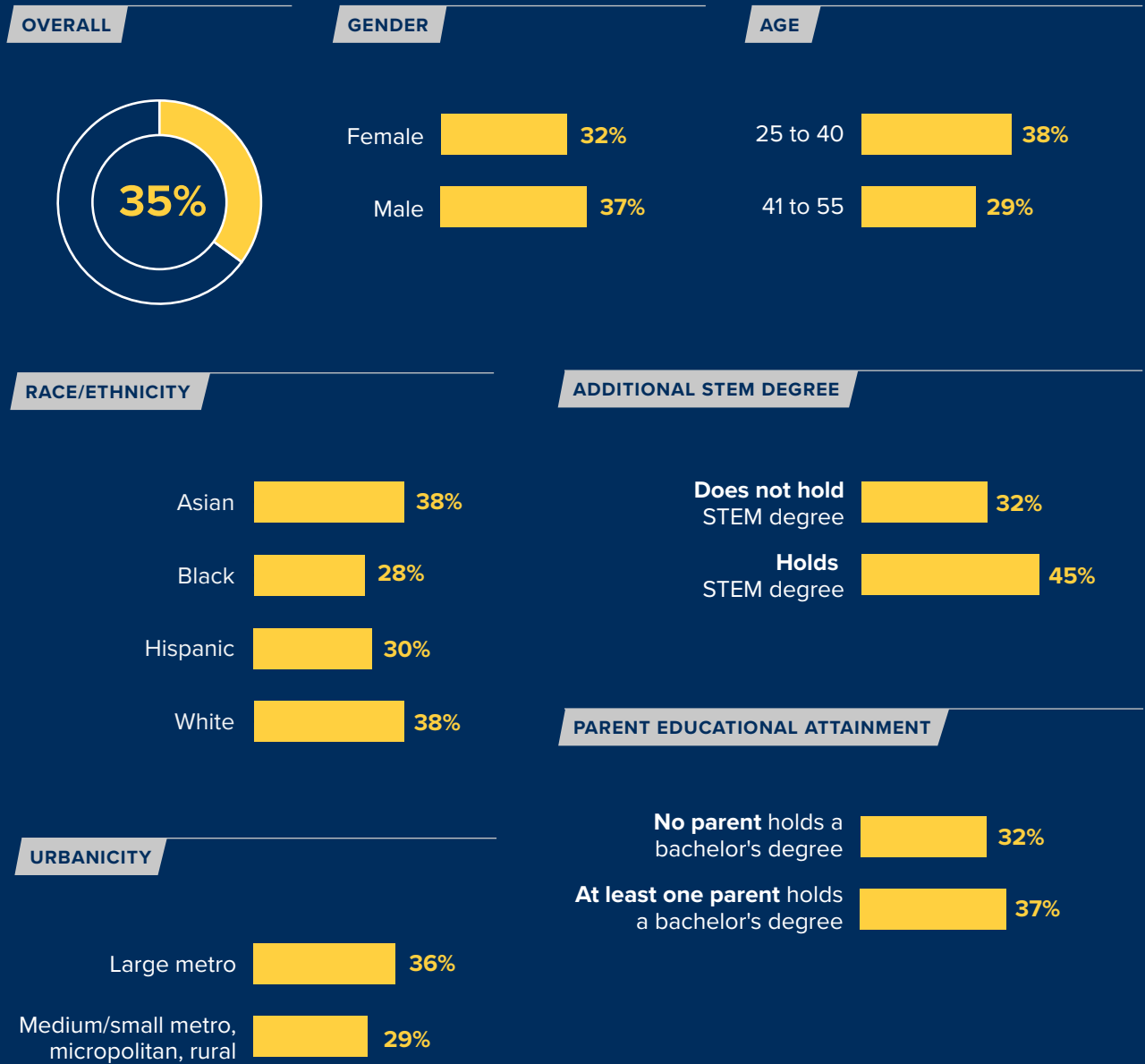
(Among graduates not employed in a STEM role prior to their boot camp and who enrolled in boot camp with the main goal of changing or pursuing a more fulfilling career)

	Year of Graduation					
	Overall	2017	2018	2019	2020	2021
Moved from non-STEM to STEM role	35%	51%	55%	45%	35%	21%
Worked in non-STEM role before and after boot camp	65%	49%	45%	55%	65%	79%

Post-Boot Camp Transition to STEM Roles, by Demographics and Parent Educational Attainment

(Among those not employed in a STEM role prior to their boot camp and who enrolled in boot camp with the main goal of changing or pursuing a more fulfilling career)

Moved From Non-STEM to STEM Role



Graduates of 2U-powered boot camps were nearly four times as satisfied with their current jobs as they were before their boot camp.

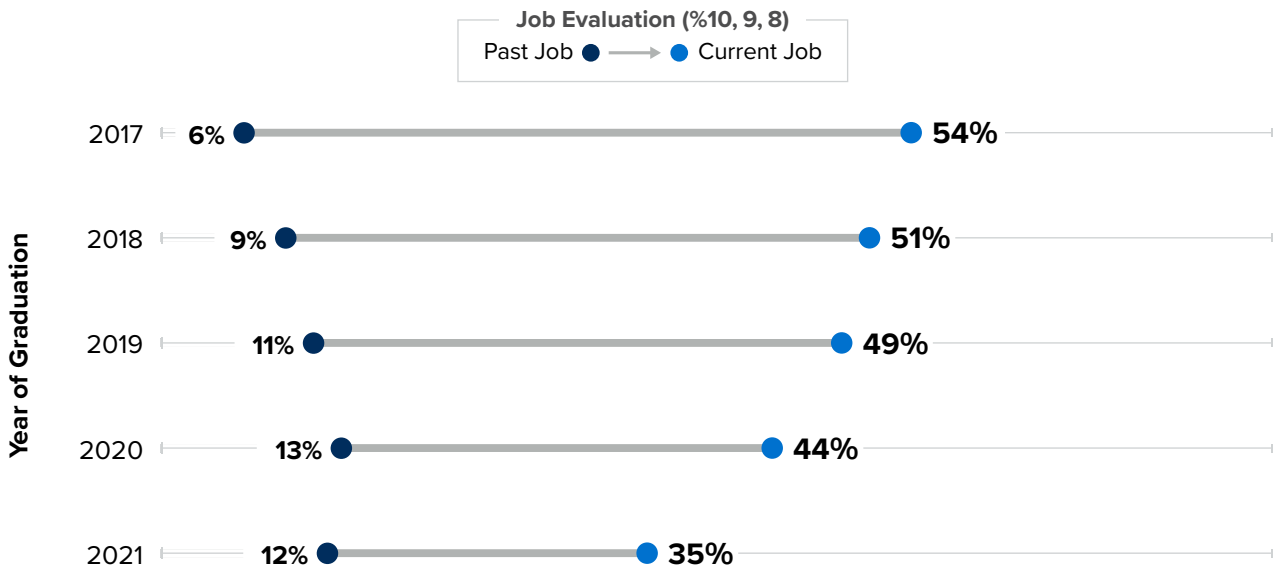
Boot camp graduates were asked to rate their current and pre-boot camp employment situations on a scale from 0 to 10, with the top representing the best possible employment situation for them and the bottom representing the worst possible situation.

On the 0-to-10 scale, **44% of respondents** would rate their current job as an 8, 9 or 10. This percentage is **nearly four times higher** than the **12% of respondents** who rated their pre-boot camp job the same way.

Though most graduates rated their jobs higher after boot camp, those who graduated in earlier cohorts evaluated their jobs more positively than those who graduated more recently.

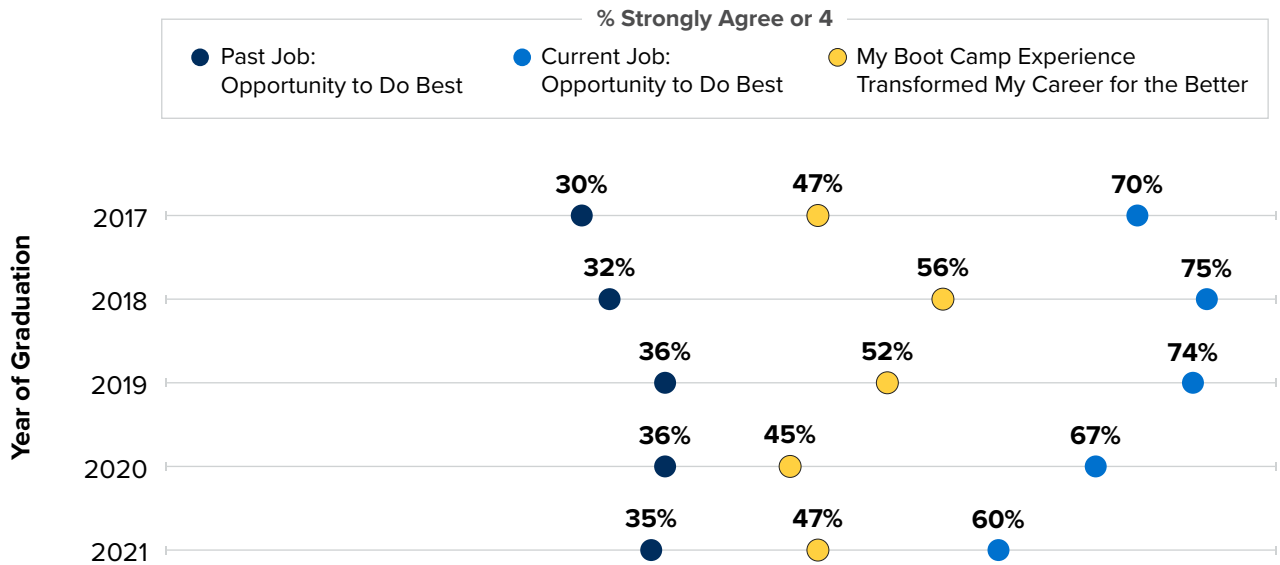
Past and Current Job Evaluations, by Year of Graduation

Please imagine a ladder with steps numbered from zero at the bottom to 10 at the top. The top of the ladder represents the best possible employment situation for you and the bottom of the ladder represents the worst possible employment situation for you. On which step of the ladder would you say you personally feel your employment situation was *BEFORE* enrolling in your boot camp? On which step of the ladder would you say you personally feel your *CURRENT* employment situation is?



Some of these evaluations may be directly related to graduates transitioning into new roles that value and use their new skills: The boot camp graduates surveyed were nearly twice as likely to say their current job gives them the opportunity to do what they do best every day (68%) as they were to say the same of their pre-boot camp jobs (35%). Forty-nine percent said their program transformed their career for the better.

Change in “Opportunity to Do Best,” by Year of Graduation



“

I absolutely love my job now. I wake up very excited for work. I feel like I have great advancement opportunities and I do something that I really love on a daily basis. I feel really satisfied with the work I’m doing, both on a helping-out-the-community basis because of the company I work for and their vision. But additionally, just the desire for fun and interesting problems on a daily basis. I love the chance to problem solve and to work and to really think critically every day at work.

– MATT

2021 graduate of the Coding Boot Camp at UNC-Chapel Hill Digital and Lifelong Learning

Did Graduates Get What They Wanted From Their Boot Camp?

Most boot camp graduates surveyed said they achieved their primary goal for enrolling in their programs, whether it was to find a new or more fulfilling career, make more money, learn new skills or some other objective.

And even if they did not reach their main goal, they achieved other positive outcomes, and they fully realize how instrumental their boot camps were in helping them do so.

The majority of graduates of 2U-powered boot camps said they enrolled in their programs because they wanted to change their career or find a more fulfilling one.

Few mentioned that they signed up because they wanted to increase their salary — even though most of them did after graduation.

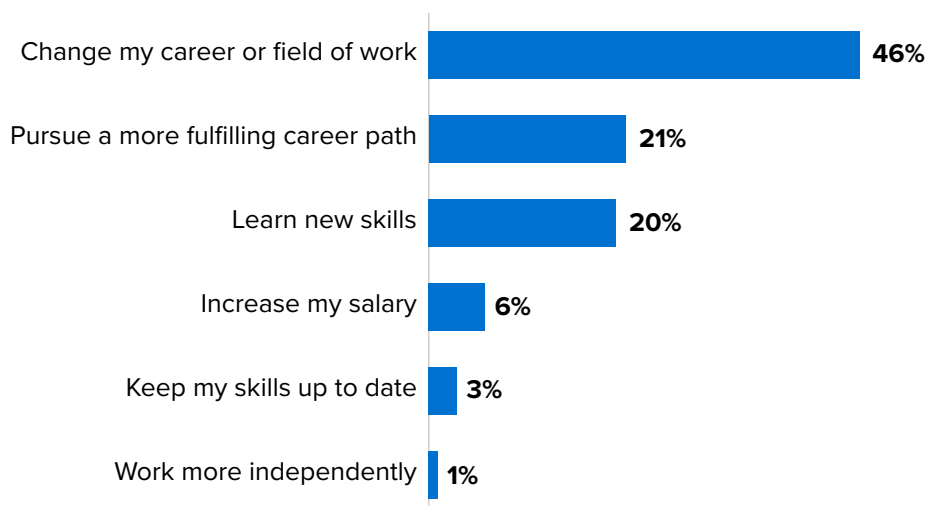
Gallup asked boot camps graduates to identify their main reason for enrolling in their specific program. Approximately two in three mentioned wanting to change their career or field of work (46%) or wanting to find a more fulfilling career path (21%). Another 20% mentioned wanting to learn new skills.

Much smaller percentages mentioned other reasons such as increasing their salary (6%), keeping their skills up to date (3%), working more independently or getting a promotion (both mentioned by 1% of surveyed graduates).

Reasons for Choosing to Enroll in a Boot Camp

(Among those who completed their program in 2020 or earlier)

● % Of respondents who enrolled for this reason





My primary goal was to make a career change. I wanted to work — to do something different than what I was currently doing. I wanted to have a field where I worked with real skills and worked with real tools and solved business problems internally ... I was looking for a skillset that allowed me to do things like that. And to make myself a much more valuable asset to any firm that I chose to work for. I give my boot camp all the credit in helping me reach that goal. A lot of the things that were required for me to reach the top of the resume pile were things that my boot camp career services taught me how to do.

– AKIBO

2020 graduate of the Columbia Engineering Data Analytics Boot Camp

Most of the boot camp graduates surveyed said they achieved the main outcome they hoped for when they enrolled, and if they did not achieve that goal, they achieved another positive outcome.

More than half (56%) of boot camp graduates achieved their primary goal for enrolling, and another 30% did not achieve their primary goal but achieved another positive outcome. A smaller 15% said they did not achieve any positive outcome.

The percentage who achieved their primary goal improves somewhat with time: 63% of 2018 graduates said they had achieved the main reason they enrolled in their program, compared with 56% of 2020 graduates and 51% of 2021 graduates.

Graduates Who Achieved Their Primary Goal for Enrolling in a Boot Camp, by Graduation Year

	Year of Graduation					
	Overall	2017	2018	2019	2020	2021
Achieved main reason for enrolling in boot camp	56%	57%	63%	59%	56%	51%
Did not achieve primary goal, but achieved another positive outcome	30%	22%	19%	25%	28%	38%
No positive outcomes achieved	15%	21%	17%	17%	16%	10%

“

At the end of the day, it [my goal] was really getting a good job with good benefits and a good career path that I could use to provide for my family in the long term. My education allowed me to be qualified to get a job ... I have definitely increased my income, and I'm able to be a better provider for my family.

– KENNADEE

2020 graduate of the Coding Boot Camp at Vanderbilt University

Regardless of whether it was their main reason for enrollment, most boot camp graduates credited their program with helping them learn new skills.

Whether they were upskilling or reskilling, the majority of graduates surveyed — 73% — said their boot camp helped them learn new skills.

But many graduates recognized that their boot camps helped them in other ways: 39% said they helped them change their career or work, another 35% said they are now on a more fulfilling career path, and a similar 32% credited their boot camp for an increase in salary. A smaller 12% said it led to a promotion.

The majority of graduates surveyed rated the overall quality of their instruction during the course of their boot camp as either “excellent” or “good.”

More than three in four graduates said the quality of their instruction was either “excellent” (40%) or “good” (37%). These findings were consistent regardless of whether graduates participated in boot camps delivered in-person or through online delivery.





The people that were teaching us — their day jobs were exactly what they were teaching us. They were experienced engineers. They were doing this day in and day out and they had been for a while, and that was reassuring.

– JOE

2017 graduate of the University of Utah Professional Education Coding Boot Camp



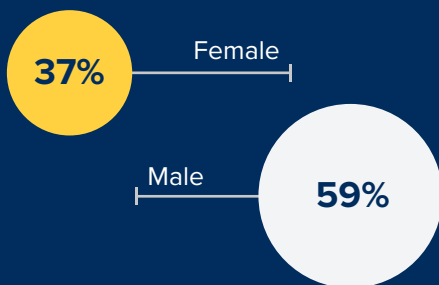
They spent a lot of time with us even after class. Especially my assistant instructors [teaching assistants]. Just to make sure that we were okay with the material that we had just spent a few hours learning beforehand. And that was something that also kept me confident going through the program.

– AKIBO

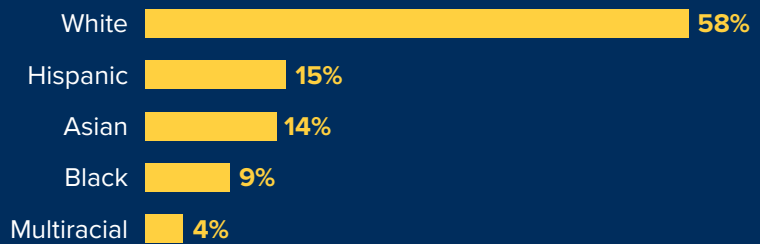
2020 graduate of the Columbia Engineering Data Analytics Boot Camp

2U-Powered Boot Camp Graduates at a Glance

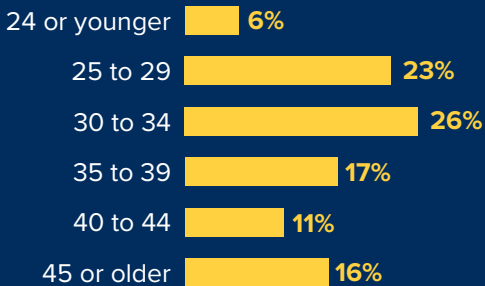
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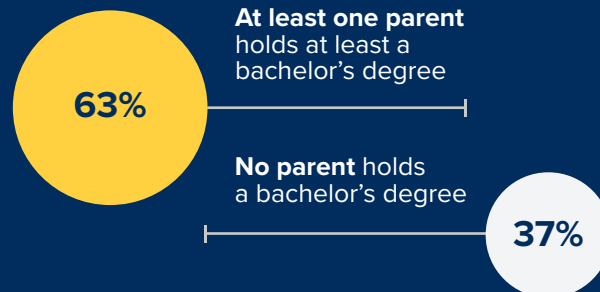
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AGE



PARENT EDUCATION



Boot Camp Graduate Lands Job He Looks Forward to Doing Every Day

Jose graduated in 2021 from the Data Analytics and Visualization Boot Camp at the University of Central Florida. After graduating from the program, Jose switched careers — achieving his primary goal for attending the boot camp — and currently works in consulting as a strategy and analytics analyst.

Jose says he had a lot of interest in attending the boot camp before he started working as a compensation analyst at the start of the pandemic. But he never had the chance to do it because the program was offered only in person. So, when the pandemic led to the boot camp being offered online, he says he jumped at the opportunity.

Jose says he is fortunate to have achieved not only his primary goal of making a career change but also the two others he had for attending the boot camp: learning multiple programming languages and being able to list formal education on his résumé instead of “self-taught.”

“My job is pretty much dealing with developers and programming languages, so everything I learned is relevant day in and day out,” Jose says.

Jose’s career switch has transformed his life. “The concepts I touch and the technologies I use every day are very different and it’s really cool. It’s not something I really saw for myself before the boot camp,” he says. “But it’s really nice to have seen that come to reality.”

“

I didn’t mind what I did, but it wasn’t something I could see myself doing for the rest of my life. That was the ultimate goal ... to get into something I wanted to do and looked forward to doing every day.

— JOSE

2021 graduate of the UCF Data Analytics and Visualization Boot Camp



Conclusion

The Gallup-2U Boot Camp Graduates Study offers new, descriptive research on the experiences of boot camp graduates to date. Overall, the findings suggest that when boot camps are developed and executed by credible providers with the needs of learners and the needs of the market in mind, they have the potential to transform people's lives and, by extension, the communities around them.

Graduates of 2U-powered boot camp programs reported earning substantially more money just one year after graduation, regardless of their race, gender or age. And on average, the additional income they made in that first year offset more than half of what they paid for their programs, so they saw a quick return on their investment.

These graduates were also finding new jobs after graduation — many of them in STEM fields — which suggests boot camps could play an important role in filling hundreds of thousands of the tech jobs that are currently going unfilled.

Lastly, most of the boot camp graduates surveyed were getting what they wanted from their programs, whether it was to find a new or more fulfilling career, to make more money, to learn new skills or some other objective.

While these initial findings are encouraging, they still offer little concrete evidence about the causal relationships between boot camps and student outcomes. More research is needed to fully investigate the nature of the relationships between boot camps and income and careers after graduation.

Future research on boot camps will likely be consistent with these findings, providing more evidence that boot camps are a viable alternative pathway to the development of technical skills and a successful career in a relevant field of work.

Methodology

Results for the Gallup-2U Boot Camp Graduates Study are based on a web survey conducted Sept. 23-Nov. 2, 2021, with a sample of 3,824 respondents who graduated from full- or part-time, U.S.-based, 2U-powered boot camp programs between 2016 and 2021. Respondents graduated from a variety of technical boot camp programs, including Coding, Cybersecurity, Data Analytics, UX/UI, Technical Project Management, Product Management, Digital Marketing and FinTech. The Gallup-2U Boot Camp Graduates Survey was conducted in English only.

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