

2019 SURVEY OF **Program Graduates**

HIGHER EDUCATION VIDEO GAME ALLIANCE



FROM THE PRESIDENT

The rapid growth, supported research, diversity, and success of games programs in academia over the past two decades never ceases to amaze me. As a key fusion of multiple fields and approaches, games programs provide us with many insights into understanding human beings and their interactions, and ways of appreciating and investigating the world around us. They teach us about the meaning and impact of play, engage us in self-reflection, encourage empathy, and inspire our inquiry into the sciences, the arts, the humanities, and their intersection. Research in games in higher education has bloomed into a multifaceted and transdisciplinary field that is innovative, diverse, and ever imaginative. It is tackling big questions about the workings of social structure and solving equally visceral personal problems. At its core, education helps shape the adults that will build tomorrow, and gives them the knowledge and resources to be productive in ways that are meaningful for them and for a global society.

The following report is a reflection of that vision. It examines what our students are doing during their time at colleges and universities, provides a window into their experiences as graduates, and reveals the real-world impact games education has on their lives in their own words. It examines where they have gone, what they have done, the industries they are impacting, and the myriad of ways they are contributing to the world of our future. This examination reflects the core of HEVGA's mission and our commitment to the well-being of our programs and students. Through this report, we are excited to share the collective successes of our alumni and information about their experiences after graduation. It is personally gratifying every time we are able to release such material, as it highlights HEVGA's key role in observing and reporting the overall trends, issues, and practices of games in higher education, with an aim toward continual improvement.

In order to make this report a reality, HEVGA has had the help of a truly phenomenal set of people: the Survey Committee, Sean Gouglas [Chair] and Kenzie Gordon [Project Manager] from the University of Alberta for heading up the survey and report, as well as the entire committee for their incredible efforts; the Entertainment Software Association for their engagement, assistance, and support; Jonathan Elmergreen, our Executive Director, for his unwavering commitment to our work and practice; and HEVGA's Board of Directors for their ongoing leadership and oversight.

I hope that this report is useful to you in your own work, in deliberations with colleagues, in consultations with administration, in negotiations with policy makers, and more. And as always, I welcome your thoughts and feedback as we continue to support the work of you, our members and institutions, and the programs and students you serve.

Sincerely,

Andrew Phelps
President

ABOUT HEVGA

The Higher Education Video Game Alliance's (HEVGA) mission is to create a platform for higher education leaders which will underscore the cultural, scientific, and economic importance of video game programs in colleges and universities. The key is to create a robust network of resources—including unified advocacy, policymaker engagement, media coverage, and external funding—in order to incubate and harness the impact of this community in a 21st century learning environment.

Executive Committee

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EXECUTIVE SUMMARY

Video games provide meaningful interactive experiences that inform, educate, and entertain. The multi-billion dollar video game industry employs hundreds of thousands of people. Universities and colleges around the world offer courses, programs, and degrees in video game design, production, and study.

A survey of almost 400 graduates of games programs from colleges and universities found the following:

- Salaries for graduates of university and college games programs are higher than for those with similar education, and much higher than for the average American.
- Graduates find employment in a wide variety of jobs within the game industry. They also find numerous opportunities outside the game industry, which reflects the broad applicability of skills developed in games programs.
- Games programs continue to adapt to changing technological needs and industry demands. Most students have access to internships and practicums.
- Students are less likely to be White than those in the US population. Generally, African Americans are still underrepresented.
- Students are much more likely to identify as LGBTQ+ than the average American.

There remain some significant challenges to graduates' success in the game industry:

- Women's job satisfaction drops off quickly—most notably after two years of working in the industry. This is a critical concern that must be addressed.
- Graduates who pursue self-employment in the games industry report lower work satisfaction than those employed in companies.
- Games industry workers who are members of marginalized communities continue to note barriers to inclusion in the workplace.
- HEVGA received few international responses to the survey, which will require specific attention in future surveys.

INTRODUCTION

Through a survey of alumni of higher education video games programs, HEVGA aims to understand whether higher education in video games translates well into future participation in the industry. This report analyzes responses from a survey conducted in 2018, which asked graduates of video games programs at universities and colleges about their academic programs and experiences in the workplace after graduation. This survey is a follow-up to HEVGA's 2015 report, titled *Priming the Pump*.

Topics covered in the current survey include coursework and program requirements, transition to the workplace, employment outcomes, and general demographic data. The survey gathered responses in two phases: Phase One was conducted in May and June 2018 and Phase Two in September and October 2018. For each phase, an email request for participation was sent to HEVGA members, who were asked to forward the survey to graduates of their game-related programs. There were 387 complete responses to the survey, mostly from the United States.

The core survey asked about academic coursework, employment status, and attitudes toward employment in the video games industry. An additional survey component asked participants if they identified with specific marginalized communities and how this shaped their experiences in the video games industry. Given the sensitive nature of this data, responses to these questions were anonymized and isolated from the core survey and the demographic information, and have been analyzed separately.

{ PEOPLE



Video game programs across the world attract students from all walks of life. In the United States, graduates of games programs are ethnically diverse. **They are also much more likely to identify as LGBTQ+ than the rest of the population,** which is a pattern that is consistent with other studies of the games industry.



People

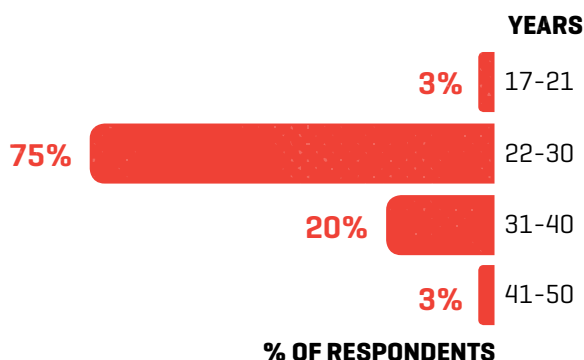
A total of 387 participants completed the 2019 Survey of Program Graduates. These individuals identified themselves as having completed or being in the process of completing a video-game-based program at a post-secondary institution. The participants included both undergraduate and graduate students.

The vast majority of respondents [89%] lived in the United States when they completed the survey. The second largest group lived in Sweden [6%]. We received a small number of responses from a host of other countries and political entities, including Bangladesh, Canada, China, Czech Republic, Denmark, Georgia, Ireland, Latvia, South Korea, and Taiwan.

AGE

Perhaps not surprisingly, given the age at which people traditionally finish high school, most respondents to the survey were under 30 years old. In fact, as seen in Figure 1, 75% of respondents reported being between the ages of 22-30. Those between 31-40 accounted for 20% of our respondents and those between 41-50 accounted for 3%. Another 3% of our respondents reported their age as between 17-21.

FIGURE 1: *Age of respondents*



“Being gay in the games industry is generally not explicitly negative ... However, there are still implicit biases in the industry ... I've been excluded from invites or thought of as a lower status employee in some companies **because of my identity.**”

Game Designer

GENDER

Most of the respondents identified as a man [70%], which is slightly lower than the rate reported in the 2015 HEVGA Survey [73%]. There was a higher rate of respondents who identified as a woman in this survey [26%] compared with the 2015 survey [22%]. Approximately 2% of respondents identified as non-binary, genderqueer, and/or third gender. Another 2% did not answer.

In a separate anonymous question not tied to the other demographic questions, we asked respondents “Do you identify as a transgender person?” The responses can be found in Table 1. Most people [76%] stated that they did not identify as a transgender person. 72% identified as cisgender, a term used when an individual’s gender identity matches the sex they were assigned at birth. 4% indicated they did not identify as either cisgender or transgender.

A little over 10% of respondents identified as transgender—including as a transgender man, a transgender woman, or as “non-binary, genderqueer, and/or third gender.”

TABLE 1: Do you identify as a transgender person?

Response	% of respondents
No, I am cisgender	72%
No, I am not cisgender, but do not identify as transgender	4%
Yes, I am a transgender woman	1%
Yes, I am a transgender man	6%
Yes, I am non-binary, genderqueer, and / or third gender and identify as transgender	3%
Prefer not to say	9%
None of the above	3%

Approximately 20% of respondents identified as LGBTQ+. When compared with data gathered in large nationwide surveys, this is significantly higher than the national average of approximately 4% to 5% for LGBTQ+ individuals in the United States.

The high percentage of LGBTQ+ respondents in comparison with the general US population should not be dismissed as a statistical anomaly. Other studies that examine the sexual orientation and gender identity of individuals in the games industry have found similar distributions. The IGDA Developer Satisfaction Survey for 2017 Summary Report indicated that 25% of those who responded to their survey identified as LGBTQ+. Previous years of IGDA reports describe similar percentages. It is possible that there are factors at play that attract LGBTQ+ individuals to the video games industry.

Methodological circumstances may also explain the difference. For example, the percentage of those who identify as LGBTQ+ is consistently higher among young people, which would align with the younger nature of our sample. Furthermore, our survey guaranteed the anonymity of the respondents. Surveys where such assurances are put in place tend to have higher rates of people identifying as LGBTQ+.

As part of the same question, we gave respondents who did not identify as LGBTQ+ the opportunity to indicate that they were an LGBTQ+ ally. Approximately 20% of respondents chose this option. Another 6% of respondents preferred not to answer.



TABLE 2: Reported ethnicity of American respondents

Ethnicity	% of respondents
Asian	17%
Black/ African American	7%
Latinx	16%
Middle Eastern	1%
Mixed	6%
Native American	1%
White	54%

ETHNICITY

Given the small number of respondents from other countries, this report focuses only on the self-reported ethnicity of respondents based in the United States. Most of the respondents to our survey were White (54%). Those who identified as being of Asian descent were 17% of respondents, while those of Latinx descent were 16% of respondents. Black or African-American individuals made up 7%. Less than one percent of respondents identified as either Middle Eastern or Native American.

When reporting their ethnicity, respondents could choose more than one option. Approximately 6% of people identified as being of “Mixed” ethnicity. Most frequently, individuals of mixed ethnicity identified as being White and one other ethnicity.

Compared with the overall US population, the 2019 Survey of Program Graduates had a significantly lower number of Whites [54% versus 76.6%], a higher percentage of Asians [17% versus 5.8%], a similar number of Latinx [17% versus 18.1%], and a lower number of Black or African Americans [7% versus 13.4%].

There were notable differences with respect to the ethnicity of respondents between the 2015 HEVGA Survey and the results of the 2019 survey. The 2019 survey had approximately 20% fewer White respondents. This is a remarkable difference, which could reflect changes in admissions to games programs across the US. Alternatively, it could be a sampling discrepancy, especially considering that the 2019 survey had approximately twice as many participants.

There was an increase of 11% for respondents identifying as Latinx and an increase of 8% for those of Asian descent. There was a slightly more than 1% increase in respondents who identified as Black or African-American.

MENTAL AND PHYSICAL DIFFERENCES

Participants in the survey were invited to self-report whether they had a mental and/or physical difference. Approximately 20% of respondents reported that they did. Almost every person responded to this question. This rate is a little lower than the one reported in the IGDA Developer Satisfaction Survey 2017 Summary Report.

“Not a lot of African Americans in the industry. It's so far not been negative, but there's always just a sense of perspective that I rarely can share with someone else without having to fully articulate it.”

Game Designer

“There have been pockets of welcoming spaces for LGBT and black communities within the industry that have been supportive and open to discussion of the media we make/ consume. That makes this space more comfortable to be in, and allows me to find games and developers that I identify with.”

Game Designer



Digging Deeper

There is some evidence to suggest that the percentage of women in the overall cohort of students in games-related programs is gradually increasing. Out of those who graduated in 2008, the percentage of women was 14%, compared with the 33% of those who graduated in 2018.

Despite concerted efforts to recruit non-American respondents, most of the participants to the survey came from the United States. As such, the demographic information of our respondents mostly reflected patterns associated with that country. Interestingly, both this survey and the 2015 HEVGA Survey also demonstrated a strong presence of respondents from Sweden. This pattern is a testament to the strength of the Swedish games education community and the robustness of professional networks between HEVGA and the schools there.

These results suggest that future surveys might benefit from improved strategies aimed at increasing responses from graduates in other countries. For example, there exists much room for building connections in Canada, considering that only one person from Canada responded to the survey, despite the country's position as one of the major players in both game development and games education. It might also be beneficial to learn more about the experiences of American alumni living and working in other countries.

The remarkably high level of LGBTQ+ respondents, at least in comparison with reported rates in the US, is well worth investigating more thoroughly. As mentioned before, the results in this survey match previous work done on the participation

of LGBTQ+ communities in game development and design. Additional research needs to be done to examine the experiences of LGBTQ+ students as they work their way through games programs, in order to interrogate the specific barriers and opportunities these students face when they enter the workforce.

Only 28% of non-LGBTQ+ respondents identified as an LGBTQ+ ally. This rate seems low, especially considering rates reported for similar age groups in the Harris Poll survey of LGBTQ+ acceptance. The low rate may have been influenced by the structure of the questions. The question about being an ally should have been separated as its own question, rather than as an option within the general LGBTQ+ question: "No, but I identify as an LGBTQ+ ally." More clarity in the question would be beneficial in future investigations.

“ I'm constantly inspired by my colleagues and would not be exploring my own identity today had I not been involved in the games industry. That exploration has helped me find meaning in my work - I am interested in creating games that represent all kinds of players, that provide role models and support that I didn't have growing up. ”

Game Designer

{ SCHOOL



The number of game design, game development, and game studies programs offered at colleges and universities has exploded over the past ten years. There are thousands of courses, certificates, diplomas, and degrees at both the undergraduate and graduate level. **Internships, practicums, and capstone courses are often important parts of these programs, and the majority of respondents participated in them.**

Technical training centers, community colleges, and large universities alike have implemented games courses and programs. The total number of these offerings is considerable. In the US alone, over 520 institutions offered 1200+ game-related programs and degrees in 2018. An even greater number offered courses, but no program or degree. Meanwhile, the number of games-related programs in post-secondary institutions in Canada has increased ninefold over the past decade.

COURSES

Table A1 [found in the Appendix] provides the total number of courses taken by respondents arranged by frequency. With respect to specific courses, respondents most commonly reported participating in classes on Game Design, Game

Production, and Game Programming. Animation, Level Design, and 3D Modeling were also popular.

Interestingly, fewer students reported taking critical game studies courses, compared with those in the 2015 HEVGA Survey. Given the remarkable challenges the games industry is facing in terms of equity, marginalization, and labor conditions, this could be a worrying trend. Further research into the changing nature of course requirements in games programs seems warranted.

PROGRAMS

Survey respondents reported a dizzying array of diplomas and degrees. Table A2 [found in the Appendix] provides a detailed comparison between the 2015 and 2019 surveys on the types of degrees that respondents

received or expected to receive. The percentage of respondents pursuing Bachelor of Arts degrees increased from 13% to 20%, while those pursuing Bachelor of Science degrees increased from 11% to 18%.

GRADUATE DEGREES

Graduate degrees in game studies appear to have declined in popularity between the 2015 and the 2019 reports. With the exception of Master of Arts degrees which increased from 2% to 7%, there were fewer respondents pursuing Master's and Doctorate degrees in game-related areas compared with those in 2015. The general improvement in the economy over this time may have been a factor in this decline, with more people entering the workforce shortly after graduation, rather than pursuing further education.



Experiential Learning

Anecdotal evidence suggested that the inclusion of work-related components of games programs, such as internships and practicums, had become increasingly popular. The survey asked participants to indicate whether such opportunities were optional or required in their program.

INTERNSHIPS

57% of respondents reported that their program included an internship opportunity, with 32% indicating that the internship was a mandatory component of their program. Almost half (46%) of respondents stated that they had completed an internship during their program. 10% of respondents reported that they were not sure or did not know if their program offered an internship component.

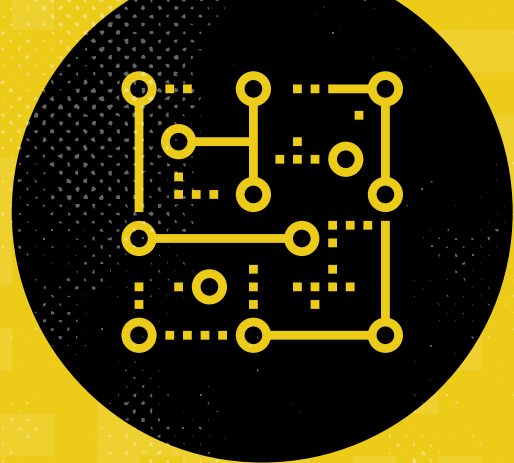
PRACTICUM

44% of respondents reported that their program included some form of practicum, with 28% of all respondents indicating that they had completed one. Of those programs reported to offer a practicum, 50% required participation for successful completion of the program.

CAPSTONE PROJECT

76% of respondents reported that their program included some form of a capstone course, with 74% of all respondents saying that they had completed one. 70% stated that the capstone was mandatory for their program, with 18% stating that they had completed an optional capstone project.

{ SHIFT



For both students and institutions, the transition to work is a key measure of personal and institutional success. **For graduates, the shift from school to work marks a significant turning point in their lives.** Industry draws on higher education games programs for its employees. For universities and colleges, the shift from school to work is part of the process of preparing students for life after graduation.



Employment

84% of respondents stated that they were currently employed. This included full-time, part-time, and contract work, as well as self-employment. The rate of employment increased with the age of respondents. For example, 70% of the youngest cohort of respondents reported being employed compared with 100% of the oldest cohort.

Of those in the 2019 survey who reported being employed, approximately 77% had full-time work, 16% had part-time work, and 5% were self-employed [see Table 3]. 12% indicated that they had secured contract work.

From the data presented in Table 3, it is reasonable to conclude that respondents engaged in multiple forms of work. For example, of the 251 respondents who described their work as full-time, 34 also indicated that they did contract work on top of their employment [9% of the entire sample].

With respect to employment type, the percentages did not change significantly from the 2015 survey, although the previous survey did not explicitly ask about contract work.

At the time of the survey, 62 respondents stated that they were currently unemployed. Of those people, 14 indicated that they had been employed at one point since graduation. Five out of the 14 had worked in the games industry.

FIGURE 2: *Percentage of employed respondents by age*

ARE YOU EMPLOYED?

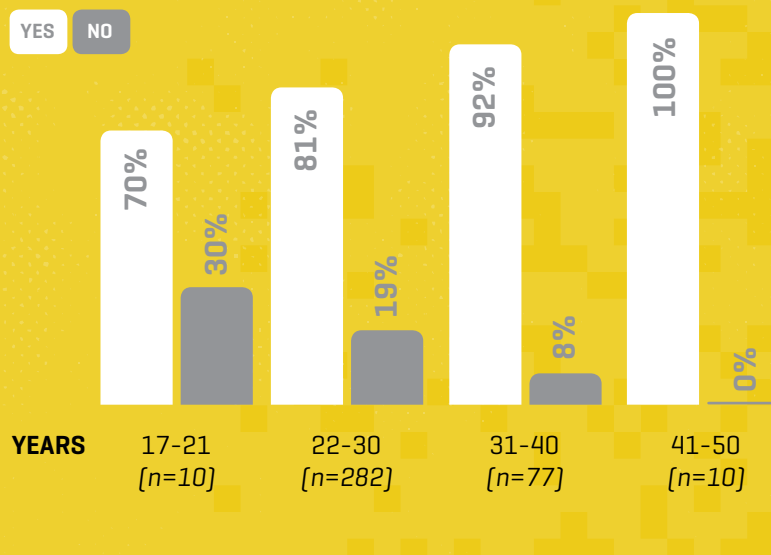


TABLE 3: *Percentage of respondents*

WHAT BEST DESCRIBES YOUR CURRENT EMPLOYMENT?

Type of employment	2015	2019*
Full-time	78%	77%
Part-time	16%	16%
Self Employed	6%	5%
Contract	-	12%
Count	176	371

**Percentages do not total 100 as respondents could indicate multiple types of work.*



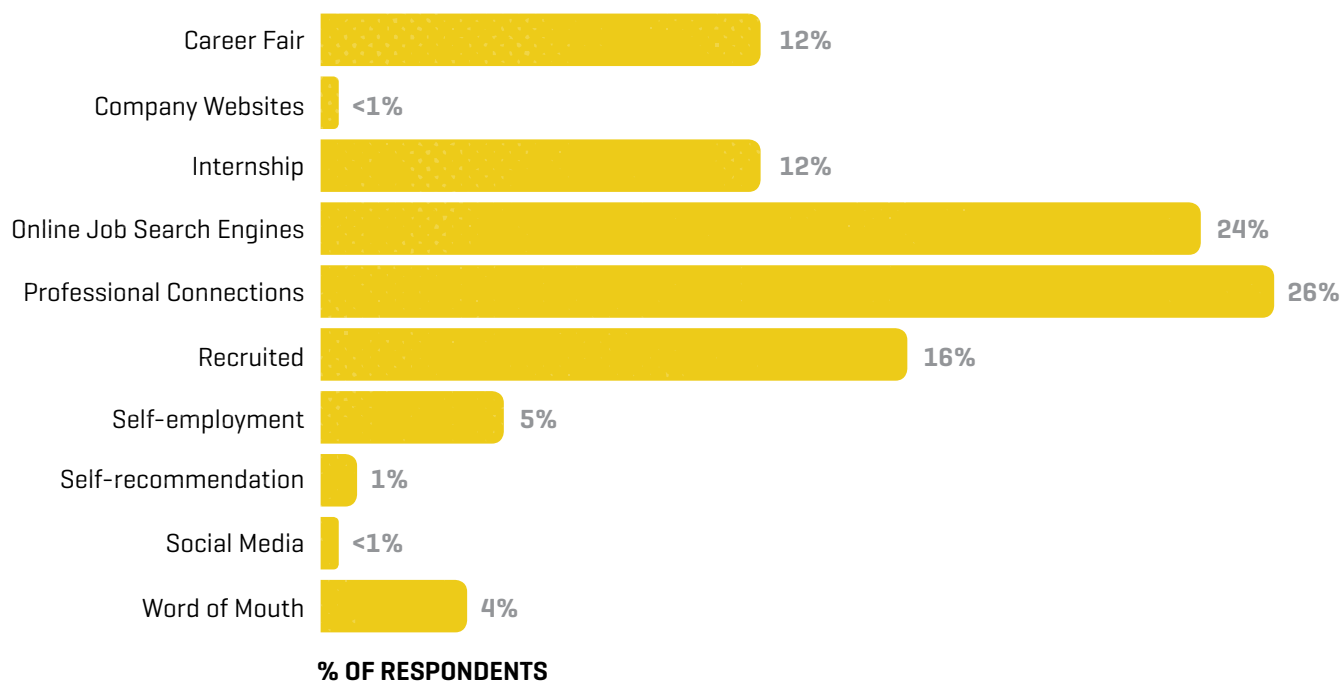
Finding Work

Internships did not prove to be a sure-fire way to find work after graduation. Although 46% of respondents reported completing an internship, only 12% of respondents attributed finding employment through those internships.

More often, graduates found work through other means. As seen in Figure 3, more than half of graduates found work either through professional connections [26%] or through online job searches [24%]. Approximately 16% of graduates

were directly recruited into the jobs, while an additional 12% had success through a career fair. Only one person found work through social media. One other person found work through a company's website.

FIGURE 3: Mechanisms by which respondents found employment as percentage



FINDING WORK IN SPECIFIC OCCUPATIONS

The specific manner by which respondents found work varied by the type of job they found.

DESIGNERS

Most likely to find work through internships [22%], almost twice the rate of all other types of jobs.

PRODUCERS

Most likely to find work through professional connections [29%] or be recruited directly [21%].

ARTISTS

Most likely to find work through online job searches [30%] or through an internship [17%].

PROGRAMMERS

Most likely to find work through job ads [22%], professional contacts [25%], and direct recruitment [25%].

QUALITY ASSURANCE

Most likely to find work through online ads [42%].



Digging Deeper

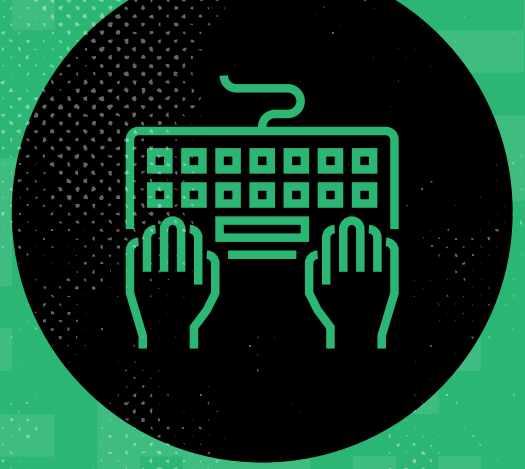
89% of those who completed an internship reported being employed, compared with only 76% of those who did not. Only 12% of those who completed an internship at a company found work at the same company.

26% of respondents reported finding employment through professional connections, indicating that graduates found work through connections made during their internships. This may indicate that students find significant value in the professional connections made during their internships.

Compared with the 2015 HEVGA Survey, the rate of employed respondents had fallen from 91% to 84%. As the unemployment rate in the United States has gone down between the time of the two surveys, this decline in employment is difficult to explain. It is possible that employment in the games industry has declined in general over this

same period, though government-produced numbers for this exact time are difficult to secure. Survey methodologies or samples may also have influenced these numbers.

{ WORK



Graduates from games programs are paid well, earning substantially more than the national average in the United States. **Participants are generally quite satisfied with their employment.** In fact, they seem significantly more satisfied with their positions than the cohort that responded to the 2015 survey. There remain real challenges, however, for LGBTQ+ people and women within the industry in their search for the same level of acceptance.



Finding Work

For those based in the United States, the average salary of all employed survey participants was \$61,000. The distribution of salaries for all respondents can be seen in Table 4. For full-time workers, the average salary was \$68,000. This is significantly higher than the median salary of all American workers, which is reported to be \$36,300. This average includes all workers, regardless of education level.

Compared with workers with similar education outcomes, game program alumni seemed to earn slightly more, though exact comparisons proved challenging. For example, respondents between 22 and 30 years of age earned an average of \$57,500 per year. In comparison, starting salaries for all post-secondary graduates in the US in 2018 were reported as \$50,390.

Across the survey sample, women on average earned \$61,750. Men, on average, earned \$59,730.

TABLE 4: Annual income reported by respondents

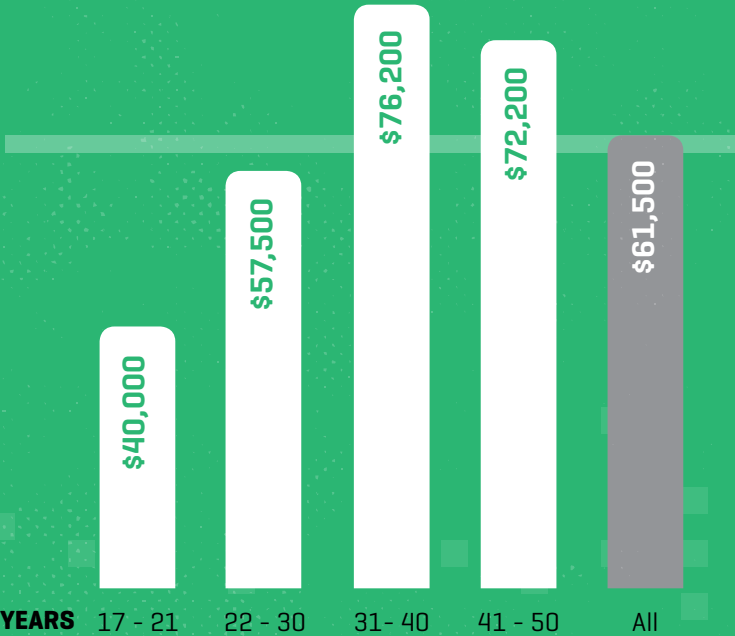
Annual income	% of respondents
Under \$20,000	12%
\$20,000-\$40,000	17%
\$40,001-\$60,000	22%
\$60,001-\$80,000	21%
\$80,001-\$100,000	14%
\$100,001-\$120,000	5%
Over \$120,000	7%

As seen in Figure 4, salaries steadily increased, except for the oldest cohort. For example, the youngest cohort of respondents (17-21 years) earned an average salary of \$40,000, while those between the ages of 31-40 earned approximately \$76,200.

The decline in salary for the next oldest cohort can potentially be explained by the small sample size, as only three people in this cohort reported on their salaries. However, qualitative evidence indicates a significant bias against older adults working in junior positions in the games industry.

Figure 4 shows the distribution of salary levels for all employed respondents, including those doing part-time work.

FIGURE 4: Average salary of all respondents by age cohort



PLACE OF EMPLOYMENT

A number of interesting points emerged when examining where respondents were currently working. First, most employed respondents (over 63%) were still working in their first place of employment since graduation.

“I’ve been excluded from invites or thought of as a lower status employee in some companies because of my [LGBTQ+] identity but also, and in many cases, more so, because of my age — over 30, which may as well be the walking dead in the video games industry.”

Game Designer

Second, the training provided in games programs seemed readily transferable to other industries. Just over 36% of employed respondents with degrees in game-related programs found work outside the games industry. These industries were relatively diverse (see Table A3 in the Appendix), but Technology (31%) and Education (30%) were the two most common. Approximately 9% of respondents found work in Government, Security, and Defense, while 6% found work in the Food Industry.

Third, the average salary of those who worked in the video games industry but then left for a job in another industry was \$77,058. There were 18 such individuals in our survey. Interestingly, the average salary for those who started elsewhere but later got a job in the games industry was \$48,333, significantly less. Further research in this area is required to understand the potential impact of age and cohort on these results.

JOB SATISFACTION

There were differences in how men and women aligned with the job satisfaction statements. Men were much more likely to choose “Strongly Agree” for the first three job satisfaction statements (located on the right side of this page), whereas women were much more likely to choose “Agree.” With respect to “satisfaction with current employment,” men and women gave very similar responses.

There was a statistically significant correlation between a respondent’s salary and their affirmative responses to two of the four job satisfaction questions: “amount of autonomy” ($p = 0.006$) and “satisfaction with current employment” ($p = 0.000$). The correlation regarding autonomy was lower ($r = 0.19$) than the correlation regarding satisfaction ($r = .31$). The conclusion, perhaps not surprisingly, is fairly straightforward. Employees’ satisfaction with the current position increases as salary increases.

“Young men receive mentoring and opportunities and **are forgiven for unprofessional behavior** on grounds of their talent.”

Game Designer

According to the 2015 HEVGA Survey, 83% of game-based program alumni were classified as “thriving” in the workplace. The 2019 survey also shows that respondents were very satisfied with their career choice:

94% of respondents agreed or strongly agreed that they were “interested and invested in the success of their co-workers and employers.” This was a 16% increase over the 2015 HEVGA Survey results.

88% of respondents either agreed or strongly agreed that they had “a good amount of autonomy in their work,” an 18% increase over 2015.

84% of respondents either agreed or strongly agreed that they felt “a sense of purpose in the work they do,” a 10% increase since 2015.

76% of respondents agreed or strongly agreed that they were “satisfied with their current employment,” a 16% increase from the 2015 results.

STARTING OVER

An alternate approach to gauging whether individuals were satisfied with their career choices is to ask whether they would pursue the same career path if they were to start over. The majority of all respondents agreed that if they could start over, they would pursue the same career. Three quarters of respondents either strongly agreed [40%] or agreed [35%] that they would pursue the same career they are in now. This is an increase over the 2015 HEVGA Survey results, where only 66% of respondents agreed with the statement. Graduates of games programs were generally pleased with their career choices and their career satisfaction has increased by 9% since the last survey. The relationship between a desire to pursue the same career and higher salaries was, not

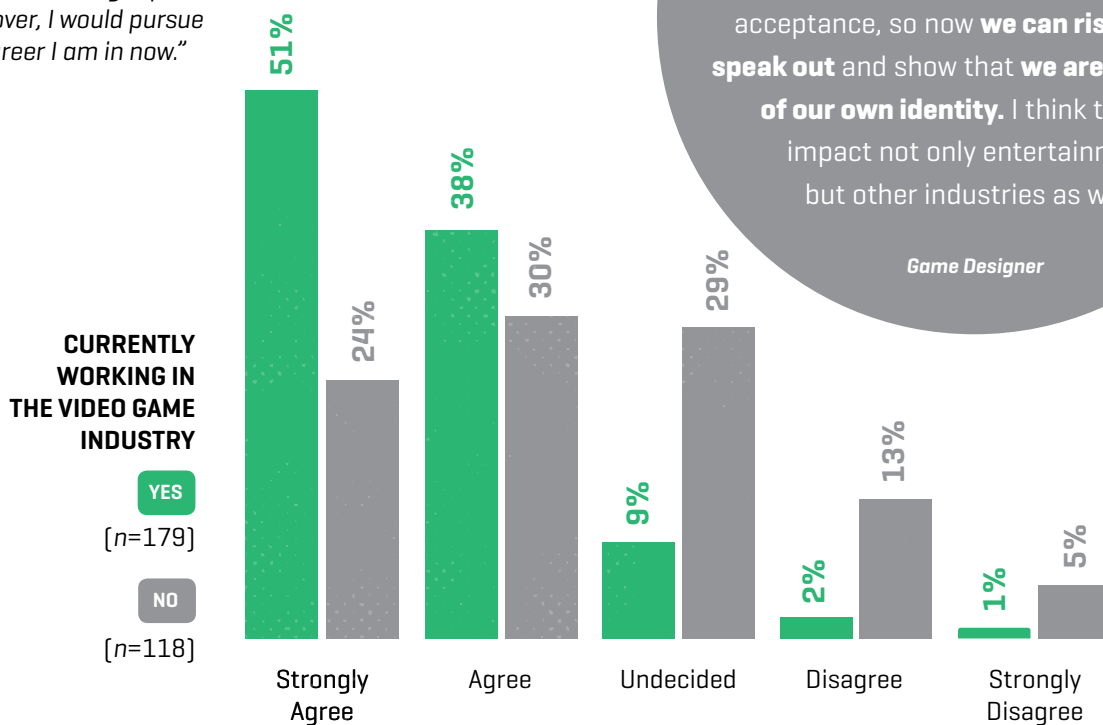
surprisingly, statistically significant ($p = 0.050$).

The choice to pursue the same career if starting all over again was agreed with more strongly by those currently working in the games industry in comparison with those who worked outside the industry. For those working in the video games industry, a remarkable 89% of respondents either strongly agreed [51%] or agreed [38%] that they would pursue the same career were they to start over [see Figure 5]. This seems to indicate that employers in the video games industry are providing reasonable supports and opportunity for career growth. This differs from those employed outside the games industry. Only 54% strongly agreed [24%] or agreed [30%] that they would pursue the same career.

This stands in contrast with respondents who were self-employed in the video games industry. They too believed that they would pursue the same career if they were to start over, but their agreement was not as strong as those who were employees.

35% of self-employed individuals strongly agreed that they would pursue the same career while 40% agreed. One quarter of self-employed respondents reported being undecided about whether they would pursue the same career. The lower rate may reflect the different paths to success for the self-employed, who face different obstacles.

FIGURE 5: Percentage of respondents answering, "If I could start over, I would pursue the same career I am in now."



“ I think that today's society including the entertainment industry **affects the LGBTQ community more than ever before**. Our community has grown, and gets more support and acceptance, so now **we can rise up and speak out** and show that **we are not afraid of our own identity**. I think this will impact not only entertainment but other industries as well.”

Game Designer



Digging Deeper

When digging deeper into the data, quite a few marked differences emerge in the types and rate of employment of respondents.

THE VALUE OF A GRADUATE DEGREE

Of the 379 individuals who responded to the question about the type of degree they had, 134 [35%] stated that they had a Master's or Doctorate degree. This is a significant number of graduate degrees, but not that different from the US average, where advanced

degree holders constitute roughly one-third of the total number of those with a Bachelor's degree. Respondents with graduate degrees were more likely to have found employment [89%] compared with undergraduates [80%], though there could be a cohort bias here, as those with graduate degrees were slightly older than those

without them. In addition, those with graduate degrees had a much higher average salary than those without them: \$67,000 compared with \$58,400. There was no significant difference between graduates and undergraduates as to whether they were self-employed—both hover around 9%.

“The **lack of voice** I've had over the years has made **my energy wane.**”

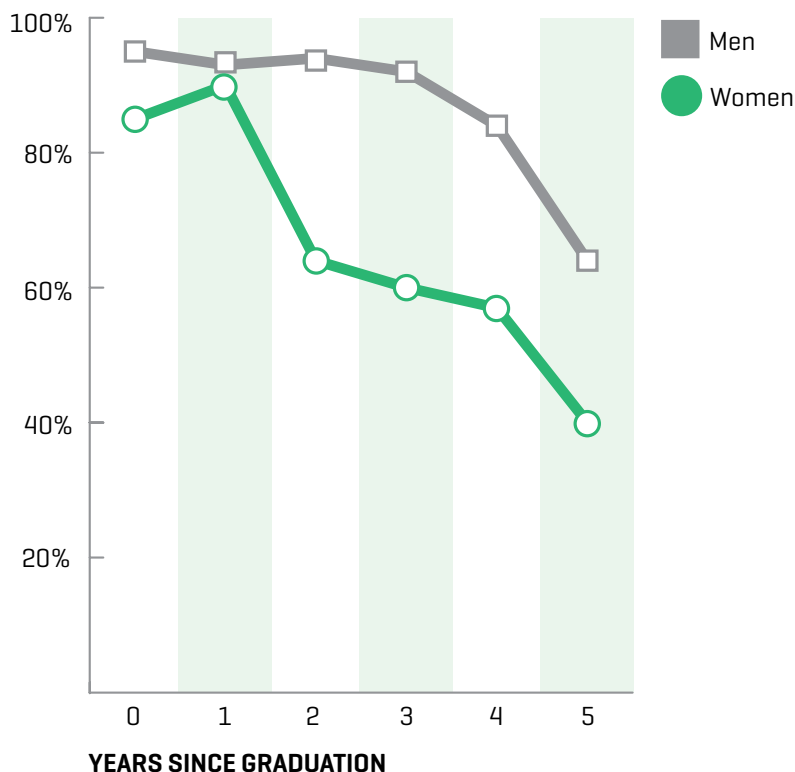
Game Designer

JOB SATISFACTION OVER TIME

The number of respondents who stated that working in the video games industry would be their first choice for a job dropped significantly the more years they spent in the industry [see Figure 6]. For example, at five years since graduation, the percentage of men who said that the video games industry would be their first choice for employment was 64%, compared with 95% of men who just graduated.

Continued on next page.

FIGURE 6: Percentage of respondents by years since graduation who said, “Yes, the video games industry would be my first choice for work.”



“Being a woman, you're automatically assumed to **know less, understand less**, and not get in the true spirit of gaming. That being said, almost everyone around me was very kind, but **being treated nicely is not the same as being respected.**”

Game Designer

“ **Being gay in the industry has shifted my career towards smaller studios and indie developers.** Any time I've applied to larger companies, the 'bro' nature of them has defined me as a 'bad culture fit.' ”

Game Designer

Women saw a much more precipitous decline, going from 85% to 40%. The rate drops particularly quickly for women after two years of working in the industry, falling from 90% one year after graduation to 64% after two. There could be many reasons for this. One factor might be the well-documented toxicity of some aspects of the industry to women—a factor already covered in-depth by both academics and games journalists.

It is also worth considering other factors that may be at play. Further research on this topic could shed valuable light on how people's desire to work in a particular industry changes over time, and whether the trend stabilizes or potentially reverses over a longer period of time.

The survey invited individuals to self-identify as LGBTQ+, transgender, and/or having a mental or physical difference. Perhaps not surprisingly, a large percentage of respondents who did so also stated that their identity had shaped their experiences in the industry.

In order to encourage confidence in the survey's anonymity, we designed the survey in such a way that demographic information could not be linked to responses about self-identification. As a result, the report can only extrapolate on specific comments made in this section of the survey. Still, given the tenor of the comments submitted, it is clear that many individuals changed careers or employment based on reactions to their identity.

For example, out of those who identified as members of the LGBTQ+ community, 46% of respondents agreed that their experience in the games industry had been impacted by their identity. For transgender respondents the rate was even higher, with 53% indicating this impact.

For participants who identified as having mental or physical differences, 48% stated that it impacted their experience in the games industry. The survey asked about the level and type of impact that having a mental or physical difference has on workplace experience in the video games industry. 31% of respondents reported that their mental or physical difference had either a mild or significant positive impact, 30% stated that it had little or no impact, and 34% reported that it had either a mild or significant negative impact.

“ **I'm a straight, white man** and can verifiably say the industry has traditionally been and often still is **friendlier to people like me than others, unfortunately.** ”

Game Designer

NEXT STEPS

In order to provide more meaningful and robust data for policy makers and educators, HEVGA should prioritize the following activities in future surveys of games program graduates:

- HEVGA should make explicit efforts to solicit more respondents from countries outside the United States to better understand the international nature of games development and games education.
- HEVGA should study the experiences of self-employed graduates. The lower work satisfaction for this group is concerning and it is possible that games programs are not adequately preparing students for self-employed work.
- This survey has noted the decline in job satisfaction amongst women the longer they stay in the industry. HEVGA should examine this issue and ask graduates how their experiences might be improved.

APPENDIX

TABLE A1: Total number of courses taken by respondents arranged by frequency

Course Name	Total
Game Design	284
Game Production	215
Game Programming	208
3D Modeling	188
Animation	164
Level Design	151
Project Management	146
Games and Society	132
Game Research	131
Interactive Storytelling/Creative Writing	129
Critical Game Studies	128
Project-Based Learning	127
Games and Learning	124
Business of Gaming	123
Graphics	115
Game Engine Scripting	113
Serious Games	102
Audio Design	97
Gamification	92
Game AI	90
Visual Design	88
Virtual Reality/ Augmented Reality	83
Quality Assessment	82
Concept Art	79
Technical Writing	67
Fine Art	53
Music	50
Data Analytics	42
Game Platform Hardware Architecture	36

APPENDIX

TABLE A2: Summary of degree type as percentage for 2015 and 2019, arranged by program type

Program type	2015 (n = 149)	2019 (n = 382)
Diploma, Certificate, or other 2 year program	N/A	5%
Associate’s Degree	1%	1%
Associate’s Degree in Applied Science	N/A	1%
Bachelor’s Degree in Arts	13%	20%
Bachelor’s Degree in Fine Arts	N/A	6%
Bachelor’s Degree in Music	N/A	0%
Bachelor’s Degree in Computer Science	10%	12%
Bachelor’s Degree in Science	11%	18%
Master’s Degree in Arts	2%	9%
Master’s Degree in Engineering	0%	0%
Master’s Degree in Entertainment Technology	9%	5%
Master’s Degree in Fine Arts	14%	6%
Master’s Degree in Interactive Technology	N/A	4%
Master’s Degree in Science	10%	8%
Master’s Degree in Computer Science	6%	2%
Doctor of Philosophy (PhD)	8%	1%
Other or missing entries	13%	0%

APPENDIX

TABLE A3: Industry of employment reported by respondents in non-video game industries

Current Position	% of Respondents
Advertising	1%
Business and Finance	1%
Construction	1%
Consulting	2%
Customer Service	1%
Education	31%
Energy	1%
Entertainment	4%
Food Industry	6%
Government, Security and Defence	9%
Health Care	3%
Insurance	1%
Leisure	1%
Lounge	1%
Marketing	1%
Media and Entertainment	3%
Non Profit	1%
Sales	1%
Technology	30%
Veterinary	1%

FOOTNOTES

- We removed 22 incomplete or duplicate responses from the dataset. Note that many questions included a “check all that apply” option, which results in response numbers that are higher than 387. Where appropriate, the statistics presented are calculated using 387 as the sample number which can result in total responses scoring higher than 387. Respondents were free to not answer any particular question, which may change the number of responses we have for particular questions. We chose to present whole numbers when reporting percentages in this report. Due to this, total percentages presented in tables may not total 100% due to rounding. Respondents were compensated with a small gift card. We make comparisons between this report and the 2015 HEVGA Survey. We corrected quotations from respondents for typos and grammar.

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WORK

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- We did not include the average salaries for those who did not identify as a man or a woman because the sample size was too small.

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