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From College to Careers: Tracking the First Two Years for Graphic Design Graduates

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KATHRYN WEINSTEIN

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From College to Careers: Tracking the First Two Years for Graphic Design Graduates

Kathryn Weinstein,¹ Queens College, City University of New York, USA

Abstract: This article presents the findings of a two-year longitudinal pilot study of one graduating class from an undergraduate graphic design degree program of a New York City public college. Through an initial survey and four subsequent surveys over a two-year period, the study has sought to determine the percentage of graduates who found employment in the field of graphic design, the length of time graduates persisted before exiting the field, and the identification of factors that influenced the ability of these thirty-seven graduates to secure employment as graphic designers. Two years after graduation, the majority (65 percent) of the cohort report design-related employment and approximately a quarter of the cohort (24 percent) report continued participation in design-related activities while employed in other fields. Of the factors the study assessed, participation in a design internship while in college was the only statistically significant factor correlated to employment levels for this cohort. Graduates cite a need for a multifaceted approach toward careers, often juggling low-skill jobs with additional course work, internships, self-initiated entrepreneurial ventures, and volunteer activities to bolster skills and portfolios. The study finds that graduates who are the first to exit the field lack an internship while in college and the financial resources after graduation to pursue low or unpaid roles to gain work experience.

Keywords: Graphic Design, Communication Design, Higher Education, Employment Studies, Career Pathways

Introduction

In the article “Too Many Grads or Too Few Competencies,” Steven Heller (2005) estimated that as many as half of recent graduates with graphic design degrees quit the field within one year of commencement and posed the question: Is the fallout due to design programs graduating too many students who lack the competencies for gainful employment in the field or is there simply a glut of graduates relative to the number of entry-level positions?

Since the article publication, design programs in the United States have surged in growth—both in the numbers of new undergraduate graphic design programs and the overall numbers of students graduating with graphic design degrees. Career Index reports a 57 percent increase in the number of graphic design graduates and a 66 percent increase in college-level graphic design programs in the US between 2006 and 2010 (Education News n.d.). The Center for an Urban Future finds that enrolment at New York’s design colleges and universities has grown at a faster rate than other schools and programs in the metropolitan area and that New York City graduates twice as many students in design and architecture as any other city in the United States (Giles 2012).

There is little empirical research that provides insight on the career outcomes of graphic design graduates in the United States. This article seeks to establish a baseline for the percentage of graphic design graduates from Queens College who successfully embark on careers within graphic design, the length of time they persist before exiting the field, and the identification of factors that may influence career outcomes. The study assesses various factors through the examination of correlations between employment levels and characteristics such as gender, age, ethnicity, immigrant status, first generation to attend college, as well as with activities within college, including employment while pursuing degree, grade-point average, the number of years to complete college, the number of colleges attended, and participation in internships.

Through an initial survey and four subsequent surveys over a two-year period, this article presents results based on the survey responses of one graduating class of seniors (they graduated

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in the spring of 2014) of the Queens College graphic design program. The study results reveal the complex and fluctuating nature of employment for fledgling graphic designers. Graduates who find employment are likely to spend at least one year, or more, in their search and cite a need for a multifaceted approach toward careers, often juggling work (permanent, contract, and freelance) with additional course work, internships, self-initiated entrepreneurial ventures, and volunteer activities to bolster skills and portfolios.

This study finds that characteristics such as ethnicity, immigrant status and status as first generation to graduate college, high grade point averages, and parents' higher education experience may influence how quickly an individual secures employment. However, by the conclusion of the study the only factor found to be statistically significant in relationship to employment levels within this cohort was the participation of a design internship while in college. The study reveals that those students who did not participate in an internship while in school participated in internships after graduation before finding paid employment. A key barrier to careers in the field was a lack of financial resources after graduation that enable individuals to pursue low or unpaid roles in order to gain work experience during the first two years after graduation.

Background

Queens College, City University of New York

The City University of New York (CUNY) is the largest urban public university in the United States. New York State created CUNY with the mission to provide quality, accessible education, regardless of background or means. Queens College is a liberal arts college and is one of the senior colleges of the CUNY system. Located in the borough of Queens, the college enrolls over 20,000 matriculating students. Over half are the first in their families to seek a college education and 77 percent receive some form of financial aid. The undergraduate ethnic breakdown of the college at the time of the study was 46.2% White, 25.6% Asian-Pacific Islander, 18.6% Hispanic, and 9.4% Black (Queens College 2015).

Graphic Design at Queens College

In 2005, Queens College created a Bachelor of Science degree in Graphic Design that quickly grew from twenty declared majors in the first year to more than three hundred in 2014. At the time of initiation of this study, the Graphic Design program was an open enrolment major, with 38 percent of the 120 total credits for the degree in art and design courses. Per the classification system created by the National Association of Schools of Art and Design (NASAD), the graphic design program at Queens College is designated as a four-year liberal arts program.² NASAD strongly advocates that the minimal threshold of competency of practice is acquired *only* within a four-year undergraduate professional degree program,³ but the association notes that there is no single curriculum structure preferred by the graphic design profession (The American Institute of Graphic Arts and National Association of Schools of Art and Design 2007). While it is difficult to make an exact comparison, graphic design graduates from Queens College compete for entry-level positions with graduates from four-year professional degree programs, in addition to graduates of community colleges and technical programs.

² NASAD classifies baccalaureate graphic design programs as four-year professional degree programs with majors in graphic design; four-year professional studio art degrees with majors other than graphic design; and four-year liberal arts programs.

³ At least 65 percent of credits dedicated to design-related course work with at least 25 percent in graphic design.

Relevant Research

At the start of this study, *Creative Graduates Creative Futures* was the largest published longitudinal study of the career patterns of graduates in art, design, crafts, and media subjects from twenty-six institutions of higher education in the UK (Ball et al. 2010). Research from this publication informed this study of employment levels and career patterns in graphic design for recent graduates. Recent research on internships from the Strategic National Arts Alumni Project (SNAAP), in addition to the research on transitions from college to first destination jobs the US, was of enormous value for comparison and contextualization of this study's findings (Frenette et al. 2015; Koc et al. 2014; Arum and Roska 2014).

Methodology

Survey Process

This research project was introduced to students and the initial survey disseminated during Senior Portfolio, the capstone course of the graphic design degree (Appendix A). Students who opted to participate in the study signed a consent form and were paid a stipend of \$10 for the completed initial survey, and \$20 for each subsequent survey (Appendix A). Four subsequent surveys were delivered through email every six months for two years.

Through the initial survey, students were asked to supply the following information: gender, age, ethnicity as listed on college applications, country of birth, length of time residing in the United States, number of years in college, number of colleges attended, financial aid within college, number of hours worked and type of employment while attending college, grade point average (GPA) within the major and for the overall degree, parents' history of college, and participation in graphic design internships while in school (Appendix B). Additionally, the survey requested students' contact information, a rating of satisfaction with the design major and overall college experience, the type of work they would seek upon graduation, their perceived level of preparedness to enter the field, and whether they encountered particular challenges affecting academic success while in school.

Subsequent surveys asked participants to supply information about their employment status, design-related activities pursued (internships, additional coursework, graduate studies, freelance and pro-bono design projects, and self-initiated projects), and list any particular challenges encountered in pursuit of design-related careers. At the study's conclusion, factors relating to graduate employment levels were ascertained through chi-square tests and one-way ANOVA tests as appropriate to the type of data retrieved (Appendix C).⁴

Results

Initial Survey

Thirty-seven students (90%) of the graduating class of June 2014 completed the initial survey and consented to participate in the study. The average number of years in college was 4.59 years (SD = 0.93) and approximately three-quarters of students (70.3%) received financial aid while in college. Approximately half (51.3%) had transferred into Queens College from a community college and a quarter (24.3%) had completed a design-related associate degree. The majority (97.3%) of students intended to pursue careers in graphic design upon graduation, and most (86.5%) felt equipped to enter the job market. Students rated their satisfaction with the Graphic

⁴ A chi-square test of independence is statistical method assessing the goodness of fit between observed values and those expected theoretically. A one-way ANOVA test is a statistical method assessing whether there are any statistically significant differences between the means of two or more independent (unrelated) groups.

Design program (averaging 8.5 out of 10) higher than their satisfaction with the overall college experience (averaging 7.5 out of 10). The most common responses to a survey question regarding challenges to success in college were juggling multiple commitments to family, work, and school (27%) and difficulties related to mastering English (11%). The most common responses to a survey question asking for suggestions to improve the graphic design program were a desire for greater access to internship opportunities (15%) and the wish that the scheduling of courses and lab hours could accommodate work schedules (11%). Table B.1 (Appendix B) presents the personal characteristics of the cohort gathered from the original surveys.

Personal Characteristics

Gender

As shown in Figure 1, 67.6 percent of the cohort is female and 32.4 percent is male. The ratio of female to male students is higher than the general undergraduate population of Queens College.

Figure 1: Gender: 67.6 percent of the cohort is female and 32.4 percent male. N = 37.
Source: Weinstein 2017

Ethnicity

The ethnicity of the cohort as identified on college applications, as shown in Figure 2, is as follows: Asian (51.4%), White (24.3%), Hispanic (21.6%), and Black (2.7%). The percentage of Asian and Hispanic students within this cohort is higher than the general undergraduate population of Queens College.

Figure 2: The ethnicity of the cohort as identified on college applications is as follows: 51.4 percent Asian, 24.5 percent White, 21.6 percent Hispanic, and 2.7 percent Black. N = 37.
Source: Weinstein 2017

Age at Graduation

As Figure 3 shows, the ages of members of the cohort ranged from twenty-one to fifty-six years of age at the time of graduation, but the majority of students were in their early twenties and 85 percent were under the age of thirty at the time of graduation.

Figure 3: The average age at graduation was 25.3 (SD = 6.15 and both the Mode and Median = 23).
Source: Weinstein 2017

Country of Birth

As Figure 4 shows, 62 percent of the students were born in countries other than the US. The length of time in the US for students born elsewhere ranged widely, from the majority of their lives to primarily the years spent in high school and college.

Figure 4: The majority (62%) of the cohort was born in countries other than the US. N = 37.
Source: Weinstein 2017

Parental Experience of Higher Education (HE)

As Figure 5 shows, over half (57%) of the students in the cohort were from the first generation in their families to seek a college-level degree. Approximately one-third of the members of the cohort (32%) reported that one or both parents graduated from college while the remaining students (11%) reported that at least one parent had attended college.

Figure 5: The majority of students (57%) are from the first generation in their families to attend college. N = 37.
Source: Weinstein 2017

Grade Point Average (GPA)

As Figure 6 shows, there is little difference between student overall GPA and GPA within the major for student with GPA's of 3.2 or higher. However, as student overall GPA starts to drop, there is a greater divergence between the overall GPA and major GPA indicating students perform better within their studio design coursework than the liberal arts required coursework of the overall degree.

Figure 6: The mean GPA of the cohort was 3.27 (SD = .29) and 3.41 (SD = .42) for the overall degree and the major, respectively. The GPA between the major and overall degree are almost identical in the higher ranges (3.2 or higher) and show the greatest divergence in the lower ranges, when the GPA within the major is consistently higher than the overall GPA. N = 37.

Source: Weinstein 2017

Financial Aid and Employment While Attending College

The majority of respondents (70.3%) received financial aid while attending college. As Figure 7 shows, approximately four out of five students (78%) worked while pursuing an undergraduate degree. A number of students (16.2%) maintained a full-time work schedule of thirty-one or more hours per week while attending college. None of the jobs the students held were related to graphic design and were primarily low-skill positions such as food service, sales, and clerical work. The category of employment does not include internships.

Figure 7: Just under one-quarter (22%) of the students did not work while attending college; 41 percent reported working between one and twenty hours a week; 22 percent worked between twenty-one and thirty hours a week; and 16 percent worked more than 30 hours a week while attending college. N = 37.

Source: Weinstein 2017

Internships

As Figure 8 shows, fewer than half (41%) of the students participated in a graphic design internship while in college. Almost half (44.4%) of the college internships were school-sponsored internships funded by the CUNY Workforce Development Initiative and the remaining internships were opportunities students found through independent searches.

Figure 8: Fewer than half (41%) of the members of the cohort participated in a design internship while attending college.

Source: Weinstein 2017

Subsequent Surveys

Subsequent surveys were sent in December 2014 (62.2% response rate), June 2015 (59.5% response rate), November 2015 (86.5% response rate), and June 2015 (91.9% response rate). Survey questions sought to determine employment levels within the field over time, activities that graduates pursued to find employment or strengthen skill sets, and challenges that graduates encountered in their pursuit of careers within the field of graphic design. The study anticipated

that some respondents would be returning to their countries of birth after graduation, but found that all respondents during the course of the study continued to reside in the US.

Employment categories were split into four levels. Level One designated employment in other fields, or unemployment, with no reported design-related activity. Level Two designated employment in other fields, or unemployment, but pursuing design-related activities, including unpaid internships, self-initiated projects or entrepreneurial ventures, sporadic paid freelance design projects, or additional course work or advanced studies in design-related subjects. Level Three designated temporary or part-time graphic design employment. Finally, Level Four designated full-time graphic design employment (permanent or contract) or a combination of part-time jobs held simultaneously to approximate the number of hours of one full-time (thirty hours a week or more) position.

Table 1 shows the employment levels of survey respondents at six, twelve, eighteen, and twenty-four months after graduation and reflects migration between employment levels over a two-year period. As Figure 9 shows, there was a great deal of movement between the levels over time, with the majority of respondents reporting Level Two employment levels at six months and gradually shifting toward paid design employment (Level Three or Level Four), or leaving the field (Level One) by the end of the study. Approximately a quarter of the cohort, including those reporting long-term unemployment (six months or longer) or employed in other fields, were still engaged in design activities two years after graduation.

Six months after graduation, most respondents were employed (95.7%), but primarily in fields other than graphic design, and only one respondent (4.3%) was unemployed. Often, graduates kept the same jobs they held while attending college but pursued design-related activities such as unpaid internships, pro-bono design projects, or additional coursework. Of the quarter (26%) who had secured full-time employment as junior graphic designers and junior art directors within six months of graduation, the majority (67%) were white, born in the US, and had one or both parents graduate from college. Additionally, all of these individuals had participated in a design internship while in college and had attained a GPA of 3.5 or higher.

Twelve months after graduation, all but one respondent to the second follow-up survey were employed (95.4%) and over half reported design-related employment (36.4% full-time and 22.7% part-time). Approximately a quarter of the cohort members (27%) who had not found design-related employment reported design-related activities such as unpaid internships, pro-bono design projects, self-initiated projects, or additional course work/graduate studies. Respondents who were working within the field reported design-related activities beyond the job, including freelance and pro-bono projects and additional course work to bolster skill sets. One respondent reported long-term unemployment, and two had exited the field in pursuit of new career tracks.

Eighteen months after graduation showed the same percentage of graduates employed within design (59.6%), but with a greater number of respondents employed full-time (43.8%) compared with part-time employment (15.6%). The majority of graduates (83%) who found full-time design employment within six months of graduation have transitioned to their second or third permanent position within the field. Three respondents (9.4%) reported finding new career tracks in other fields (paralegal, realtor, and nursing degree) and had ceased any design-related activities. Two respondents were unemployed (6.25%), and both cited long-term health issues as hindering employment searches. A quarter (25%) of the respondents remain employed in low-skill jobs held while in college, but report design-related activities such as occasional paid freelance projects, self-initiated projects (magazines and graphic novels), entrepreneurial ventures (design and development of apps), and graduate studies in arts education.

Two years after graduation, the trends established from previous surveys continued. A greater number of respondents reported full-time employment in design-related positions (52.9%) compared with part-time employment (11.8%), and approximately a quarter (23.6%) continued to report design-related activities. Although many respondents reported short periods of

unemployment over the two-year period, often in the pursuit of higher salaries, three respondents (8.8%) reported long-term (greater than six months) unemployment, with two citing chronic health issues and the third citing relocation to an economically depressed area as the primary challenge to finding employment. All three unemployed respondents report continued activity in the field of design through sporadic paid freelance design projects. Approximately a quarter (23.6%) of the cohort are underemployed two years after graduation, working in part-time design-related positions or continuing to work in jobs held while in college. By the conclusion of the study, approximately one-tenth (11.8%) of the cohort exited the field, pursuing careers in other areas.

Three respondents reported pursuing additional degrees, one in the field of pre-nursing and two in design-related graduate degrees in arts education. All three stated that the primary motivation for seeking additional education was the lack of opportunities for full-time employment within graphic design.

Table 1: Employment Levels Measured at Six-Month Intervals

Employment Levels	Dec. 2014	%	June 2015	%	Dec. 2015	%	June 2016	%
Level 4	6	26.1	8	36.4	14	43.7	18	52.9
Level 3	1	4.3	5	22.7	5	15.6	4	11.8
Level 2	15	65.3	6	27.2	8	25.0	8	23.5
Level 1	1	4.3	3	13.6	5	15.6	4	11.8
Total	23	100	22	100	32	100	34	100

Source: Data Adapted from Weinstein 2017

Figure 9: This figure is a graphic representation of the data presented in Table 1. Employment levels measured at six-month intervals show a migration over a two-year period toward permanent employment (Levels Three and Four), a smaller percentage exiting the field (Level One), and approximately a quarter of those reporting design-related activities without permanent employment (Level Two). N equals the number of respondents to the survey.

Source: Weinstein 2017

Analysis

At various junctures in the course of the study, certain characteristics emerged to suggest a relationship to levels of employment. For example, at six months after graduation the first graduates to secure full-time permanent employment were predominately white, born in the US, and had one or both parents graduate from college (67%). However, these characteristics failed to be significant over time. This study finds that graduates who reported continued part-time design employment (underemployed within the field) two years after graduation are female (100%), born outside of the US (100%), primarily Hispanic (75%), did not participate in a design internship while in college (75%), and worked an average of twenty-eight hours a week while attending college. Although the sample size may be too small to find these factors statistically significant, a larger study may find ethnicity, country of birth, gender, higher education experience of parents, and number of hours worked in college to be correlated with subsequent levels of employment in graphic design. In addition, a larger study may find age to be a deterrent to design-related employment, as this study finds that older graduates (thirty-one or older at the time of graduation) are not employed in design-related positions two years after graduation.

At the study's conclusion, chi-square and one-way ANOVA tests were utilized to assess possible relationships of characteristics and factors identified in the initial survey and employment levels (Appendix C). Two years after graduation, only one factor was found to be statistically significant in relationship to employment levels: participation in a design internship while in college.

Curriculum and Competencies

At the initiation of this study, the graphic design major at Queens College was a fifty-four-credit Bachelor of Science degree, raising the question: To what extent did curriculum and acquired competencies influence graduates' opportunities for design employment? Almost one-third (30%) of the respondents to the first follow-up survey reported design employment, suggesting that these graduates possessed the competencies desired by employers. This first wave of graduates to secure design employment report mobility and career advancement throughout the remainder of the study, a finding at odds with NASAD's statement that graduates of liberal arts graphic design programs require extensive apprenticeship training by employers and are limited in their advancement in the profession (The American Institute of Graphic Arts and National Association of Schools of Art and Design 2007). However, the time required by some within the cohort to secure paid employment, and the activities of multiple internships and additional coursework of these graduates, suggest these students may be acquiring competencies and other strengths that compensate for fewer design credits in college that a professional degree would provide.

Design Internships

As Figure 10 shows, none of the graduates who have left the field (Level One) and only one of the graduates of Level Two participated in a design internship during college. A chi-square test of independence was performed to examine the relationship between participation in a graphic design internship and subsequent employment levels. The relation between these variables was found to be highly significant, $\chi^2 (3, N = 32) = 16.843, p < .01$. For students who had participated in a design internship while in college, all but one was employed in a design-related position at the completion of the study. Of the respondents who did not participate in an internship while in college and ultimately secured design employment, all reported participation in internships after graduation and were ultimately able to secure design-related employment a year or more after graduation.

Figure 10: All but one of the respondents who reported participation in a design internship while in college have secured permanent design-related employment (Levels Three and Four) at the study's conclusion.

Source: Weinstein 2017

Comparison with Other Studies

The National Association of Colleges and Employers (NACE) surveyed 274,000 graduates of the class of 2014, representing the most comprehensive view of first-destination results of baccalaureate degree outcomes in the United States. The NACE study found that 84 percent of graduates with visual and performing arts degrees were employed within six months of graduation, with 49 percent in full-time positions, 12.3 percent in continuing education, and 15.6 percent seeking or not seeking employment (Koc et al. 2014). Comparing the results of the NACE report with results of this article's cohort at six months, this study finds overall employment higher (96%) and unemployment lower (4.3%) than the larger NACE survey. The NACE survey assumption that recent graduates start employment only after they graduate is at odds with this study, as the majority of students held jobs while they attended college, and often maintained the same jobs, increasing the number of hours per week, after graduation.

Table 2 shows that the level of unemployment of the cohort at two years (8.8%) is higher than the unemployment reported by graphic design graduates of the *Creative Graduates* study and is roughly the same as national unemployment rates (8.5%) for recent college graduates in the US who graduated in 2014 (Ball et al. 2010; Davis et al. 2015). The permanent employment of the cohort (64.7%) is approximately the same as reported in *Creative Graduates* (63%) and slightly higher than the 50% reported by the Economic Policy Institute.

Employment within Level Two is the most difficult to gauge as it includes freelance and self-initiated projects, entrepreneurial ventures, and graduate and advanced-coursework activities that may ultimately lead to the generation of income. It is noteworthy that at twenty-four months the percentage of graduates (25%) who fell within Level Two is approximately the same as the percentage of respondents from the *Creative Graduates* study that identify as self-employed. Within this study, some respondents who fall within Level Two expressed hopes that energies invested in self-initiated projects would ultimately generate income or that the pursuit of advanced degrees would lead to permanent employment.

Underemployment for this cohort included respondents who maintain low-skill jobs held while in college and those in part-time design employment. Almost a quarter of the cohort (23.5%) is deemed underemployed by this study, higher than the 14.9% underemployed graduates the Economic Policy Institute (Davis et al. 2015) found and the 16% that Arum and Roksa (2014) reported. However, removing respondents with part-time design employment from the underemployed categorization, the study finds underemployment of this cohort (11.8%) to be lower than either of the larger studies. Although part-time design employment may accurately describe the term underemployed, particularly when measured by generated income, it is assumed in this study that these part-time positions are dependent upon degrees and skills acquired through undergraduate studies.

Table 2: Comparison of “From College to Careers” Results at Two Years with Existing Research

	<i>College to Careers</i>	<i>Creative Graduates</i>	<i>Economic Policy Institute</i>
<i>Unemployment</i>	8.8%	4.8%	8.5%
<i>Design Activities</i>	23.5%	26.3%	—
<i>Permanent Employment</i>	64.7%	63%	50%
<i>Underemployment</i>	23.5%	14.9%	16%*

* Note: There is some overlap in “College to Careers” categories. Part-time design employment is included within “Permanent Employment” and “Underemployment” categories. If part-time degree related employment is removed from the “Underemployment” category, the percentage of underemployment for the cohort of this study would be reduced to 11.8 percent—a lower percentage of “Underemployment” than the two comparison studies

Source: Data Adapted from Weinstein 2017

Conclusion

This article has explored a small but potentially representative sample of graphic design graduates’ career patterns. Contrary to Steven Heller’s (2005) estimation that half of graphic design graduates leave the field within one year of graduation, this study reveals a majority of graduates (88.2%) of this cohort are actively pursuing careers in the field through design-related employment (64.7%) or related activities (23.5%) two years after graduation. Consistent with the larger study *Creative Graduates*, this study shows that graduates juggle multiple activities (internships, freelance work, and additional coursework) after graduation and even after securing permanent employment.

Factors and Subsequent Employment Levels

The study assessed a variety of factors and found only one to be statistically significant in relationship to employment levels two years after graduation: the participation in design internships while in college. This study finds that graduates who did not have an internship while in college needed to obtain an internship or internships after college before finding employment within the field. Additionally, the study finds that paid internships after graduation seem to be a typical route for newly minted graphic design graduates, and observes that entry-level jobs within the field require prior work experience as a prerequisite for consideration. Respondents reported that many internship opportunities, particularly in large agencies, were closed to applicants who could not receive college credit, placing students who forgo internships within college at a disadvantage.

Although the study found employment levels statistically independent of hours worked in college, this article notes that all but one student who *did not* work while in college are currently employed in permanent positions in graphic design or enrolled in a graduate programs. This observation suggests that students are not burdened by financial constraints are able to survive through a period of unpaid or low-paid internships after graduation to ultimately secure degree

related permanent positions. The one exception to this finding is a graduate who did not work while in college and obtained high grades, and cites long-term health issues as the primary challenge to finding permanent employment. Larger comparison studies with graduates of other types of four-year undergraduate programs with similar student populations would be helpful in determining to what extent curriculum impacts subsequent employment levels.⁵

Career Patterns

The first wave of graduates who found work within the first six months after graduation reveals the factors and qualities that might predict early success in establishing careers within the field of design, and the emergent career patterns of newly minted graphic designers. Of the quarter (26%) who had secured full-time employment as junior graphic designers and junior art directors within six months of graduation, the majority (67%) were white, born in the United States, and had one or both parents graduate from college. Also, all participated in a design internship while in college and possessed a GPA of 3.5 or higher in both major courses and the overall degree.

In contrast to the widely held assumption that design internships are valuable, primarily because they evolve into full-time employment, this study found that only one of these graduates transitioned from an internship to full-time employee within the same company (Glaeser 2013; Adams 2012; Gardner 2010).. At two years since graduation, all of these graduates had either changed jobs, seeking greater opportunity, or had been promoted. This suggests strong motivation and opportunity for advancement at the early stages of careers and a willingness to take risks. All participants in this study have reported taking on additional freelance projects (in addition to their full-time employment) and half report enrolling in additional coursework, primarily in new technologies, in order to advance their skill-sets after graduation.

The majority of graduates assessed by this study did not find employment within the first six months after graduation, but they pursued an array of design-related activities such as internships, additional coursework, paid and pro-bono design projects, and entrepreneurial ventures, all of which I have categorized as Level Two activities. Over the study's two-year duration, the number of respondents identified as Level Two shrunk as graduates found permanent employment in graphic design (Levels Three or Four) or ceased activities related to graphic design (Level One). Level Two is the most difficult to gauge in a two-year period as entrepreneurial and self-initiated projects are included within the category and may require several years of incubation before activities generate income. Graduate studies typically require two to three years before employment levels may be gauged, and individuals with multiple freelance projects expressed the desire to ultimately evolve into a design studio. At the time of the completion of this article, most graduates categorized as Level Two were holding the same jobs that they had held in college in addition to design employment/activities.

Competition was the most frequently cited challenge to securing design-related employment by respondents. Even graduates who ultimately secured employment seemed unprepared for the level of competition encountered after graduation. Respondents who left the field for other types of employment cited the need to generate income and establish job security. Low-income students, without ongoing financial support after graduation, were hard-pressed to find employment quickly and may have been the first to stop searching for employment related to their degrees. Indeed, graduates from this cohort to first exit the field had a relatively high GPA (an average of 3.4 in both their major and overall degree), indicating high performance within college relative to their peers.

Ongoing medical issues and relocation to an economically depressed area were cited as the reasons for those respondents experiencing unemployment at the time of the study. Motherhood

⁵ Four-Year Professional Degree Programs with Majors in Graphic Design; Four-Year Professional Studio Art Degrees with Majors Other than Graphic Design; Four-Year Liberal Arts Programs.

seems to add an additional barrier to design-related careers, as the two mothers in the study mentioned their need for part-time work or flexible hours.

Part-time design employment (characterized as underemployment in this study) is held by females, born outside of the US (100%)—the majority (75%) are Hispanic, and report working an average of 28 hours a week in jobs unrelated to their academic pursuits. None of these students participated in a design related internship while attending college. These findings are consistent with SNAAP's survey results of design alumni that found that men are more likely to find paid internships; Black and Hispanic alumni are less likely to have participated in internships while in college; and children of college-educated parents are more likely to have participated in internships than first-generation students: "these findings on the demographics of the intern economy for recent art (design) graduates support concerns that the existing internship system reinforces unequal pathways to careers for groups at a historical economic disadvantage such as women, Blacks and Hispanic/Latinos, and first-generation college graduates" (Frenette et al. 2015, 9). Originally, this article asked: "Are there too many graduates for entry-level positions or do graduates lack the competencies for gainful employment?" Ultimately, this question may be too broad to assess *how and who finds employment* within the graphic design field. However, questions of how and who finds design related internships emerged as the single most valuable predictor of graduates' abilities to successfully forge degree-related careers. Understanding and addressing factors that impede student participation in degree-related internships may be the single most effective strategy for design programs to bridge academic studies to careers.

Future Research

Preliminary results suggest that those students who gain job-related experience while in school find work at a faster rate, and at higher levels, than their peers who do not do so during school. For low-income students without financial support after college, the lack of internship experiences within college creates a barrier to entry-level employment. Furthermore, recent graduates cite the need for a multifaceted approach to careers—juggling entrepreneurial activities with permanent, temporary and freelance employment—and the need to incorporate multiple streams of income.

Graduates of the Queens College graphic design program encountered fierce competition from graduates of private four-year professional colleges based in New York City and elsewhere. Curriculum, access to networks of professional connections, competencies built before and during college, and socioeconomic characteristics represent a complex set of interrelated factors that influenced a graduate's ability to enter the workforce. Developing research to understand how these factors contribute to career success in today's employment market would be of enormous value to understanding the transition from college to employment in the graphic design field.

Since the initiation of this study, Queens College has introduced a more rigorous Bachelor of Fine Arts with a design major to replace the Bachelor of Science degree, increasing the number of required design credits and adding the requirement of a second-year portfolio review as a requirement for the continuation of study. A comparative study of career outcomes for graduates is underway to gauge the impact of curriculum on career outcomes and to determine whether results found in this study are consistent over time and in new cohorts.

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Appendix A: Initial and Subsequent Survey Questions

Initial Survey

1. First and Last Name
2. Mailing Address
3. Email Address
4. Phone Number
5. Date of Birth
6. Gender
7. Ethnicity per College Application
8. Country of Birth
9. Number of years in the US (if born in country other than the US)
10. Number of years in college
11. Overall GPA
12. Major GPA
13. List colleges attended
14. Do you have an Associate Degree? (Y/N)
If yes, was the Associate Degree related to graphic design?
15. Is this your second baccalaureate degree? (Y/N)
16. Did your father attend college? (Y/N) Graduate from college? (Y/N)
17. Did your mother attend college? (Y/N) Graduate from college? (Y/N)
18. Are you a parent? (Y/N)
19. If yes, how many children?
20. Did you receive financial aid during college? (Y/N)
21. Did you work while attending college (do not include internships)? (Y/N)
22. If yes, approximately how many hours per week did you work?
23. List the job titles of your past employment while attending college
24. Did you participate in an internship while in college? (Y/N)
25. List the internship/s and whether they were related to your field of study
26. What type of employment will you look for upon graduation?
27. Do you feel prepared to enter the job market upon graduation? (Y/N)
28. Rate your satisfaction with XXX College (1–10, 10 is highest)
29. Rate your satisfaction with the graphic design program (1–10, 10 is highest)
30. List any challenges that may have impacted your ability to succeed in college
31. List any suggestions that could improve the graphic design program

Subsequent Survey (same survey sent every six months)

1. First and Last Name
2. Are you living at the same address? (Y/N)
If no, please list your new address so I may send you your stipend.
3. Did you graduate from school? (Y/N) If no, date expected to graduate

Employment

1. Have you found employment? (Y/N)
2. If yes, full-time, part-time, or temporary position (and how many hours per week)?
3. Name of Company and Job Title
4. Is this a design-related position? (Y/N)
5. Have you found freelance design employment? (Y/N)
6. If yes, what percentage of your income comes from freelancing?

7. Are you working on any self-initiated projects/entrepreneurial ventures? (Y/N)
If yes, please describe.

Post-Graduation Activities

1. Have you added projects to your portfolio since graduation? (Y/N)
2. Have you participated in any internship(s) after graduation? (Y/N)
3. If yes, how many? Paid or unpaid?
4. Have you taken additional course work after graduation? (Y/N): _____
If yes, name of course(s) and where
5. Are you pursuing (or intending to pursue) a graduate or additional degree?
If yes, type of degree and name of school?

Reflections

1. Have you stayed in contact with any other students? (Y/N)
2. Do you believe your degree prepared you for the field? (Y/N)
3. What challenges are you facing as a recent graduate?

Wrap-Up

1. Please include a link to your portfolio
2. Any news you would like to share?

Appendix B: Responses to Initial Survey

Table B.1: Personal Characteristics of Cohort Information
Gathered from Initial Survey of Study

Category		Number	Percent
Gender	Male	12	32.4
	Female	25	67.6
	Total	37	100%
Ethnicity	Asian	19	51.4
	White	9	24.3
	Hispanic	8	21.6
	Black	1	2.7
	Total	37	100%
Age (at graduation)	22 or younger	10	27.0
	23 or 24	14	37.8
	25 or 26	7	19.0
	27 or 28	2	5.4
	31–33	2	5.4
	37	1	2.7
	56	1	2.7
	Total	37	100%
Country of Birth	US	14	38
	Other	23	62
	Total	37	100%
Parental HE	Neither Parent Attended	21	57
	One/Both Attended	4	11
	One/Both Graduated	12	32
	Total	37	100%
Overall GPA	3.7 or higher	7	18.9
	3.5–3.69	6	16.2
	3.3–3.49	8	21.6
	3.0–3.29	9	24.3
	2.7–2.99	3	8.1
	2.4–2.69	2	5.4
	2.0–2.39	2	5.4
	Total	37	100%
Major GPA	3.7 or higher	8	21.6
	3.5–3.69	11	29.7
	3.3–3.49	8	21.7
	3.0–3.29	7	18.9
	2.7–2.99	3	8.1
	Total	37	100%
Hours Worked	0	8	21.6
	1–10	2	5.4
	11–20	13	35.2
	21–30	8	21.6
	31–40	5	13.5
	40+	1	2.7
	Total	37	100%
Design Internship	No internship	22	59.5
	Internship	15	40.5
	Total	37	100%
<i>Source: Information gathered from initial survey</i>			

Appendix C: Statistical Analysis* of Factors on Employment Levels

Table C1: Gender
Gender and Employment Levels, Twenty-four Months after Graduation (N = 34)

Employment	Female	Male	Total
LEVEL 1	2	2	4
<i>Expected</i>	2.71	1.296	
LEVEL 2	4	5	9
<i>Expected</i>	6.09	2.91	
LEVEL 3	4	0	4
<i>Expected</i>	2.71	1.29	
LEVEL 4	13	4	17
<i>Expected</i>	11.5	5.5	

A chi-square test of independence was performed to examine whether gender might be a factor related to employment levels. The relation between these variables is non-significant, $\chi^2 (3, N = 34) = 5.301, p > .05$. For example, out of the seventeen who have full-time design-related jobs (Level Four), thirteen are female and four are male, which is very close to the percentage one would expect based on the percentage of females and males in the cohort.

Table C2: Ethnicity
Ethnicity and Employment Levels, 24 Months (N = 34)

Employment	Asian	Black	Hispanic	White	Total
LEVEL 1	3	0	0	1	4
<i>Expected</i>	1.88	0.12	0.94	1.06	
LEVEL 2	2	0	3	4	9
<i>Expected</i>	4.24	0.26	2.12	2.38	
LEVEL 3	1	0	3	0	4
<i>Expected</i>	1.88	0.12	0.94	1.06	
LEVEL 4	10	1	2	4	17
<i>Expected</i>	8	0.5	4	4.5	

A chi-square test of independence was performed to examine whether ethnicity might be related to employment levels. The relation between these variables was found to be non-significant, $\chi^2 (9, N = 34) = 12.79, p > .05$. For example, out of the seventeen who have found full-time employment, four are white, which is approximately what would be expected by the distribution of whites within the cohort.

Table C3: Age
ANOVA Table of Age and Employment Levels, 24 Months (N = 34)

Source of Variation	d.f.	SS	MS	F	p-level	F crit	Omega Sqr.
Between Groups	3	199.5	66.49	1.724	0.183	2.922	0.06
Within Groups	30	1156.9	38.56				
Total	33	1356.4					

Note: d.f.: degrees of freedom in the source; SS: sum of squares due to the source; MS: the mean sum of squares due to the source; F: F-statistic; p-level: the P-value; F crit: F critical; Omega Sqr.: Omega Square

The one-way ANOVA was conducted to compare the mean age between graduates' employment levels to assess whether younger or older graduates find different levels of employment. An analysis of variance showed that the mean ages are not significantly different from each other per employment level, $F(3,30) = 1.724$, $p = .183$.

Table C4: Country of Birth
Country of Birth (US or Other) on Employment Levels, 24 Months (N = 34)

Employment	US Born	Born Elsewhere	Total
LEVEL 1	1	3	4
<i>Expected</i>	1.65	2.35	
LEVEL 2	5	4	9
<i>Expected</i>	3.71	5.29	
LEVEL 3	0	4	4
<i>Expected</i>	1.65	2.35	
LEVEL 4	8	9	17
<i>Expected</i>	7	10	

A chi-square test of independence was performed to examine the relation between country of birth (United States or other) and employment levels. The relation between these variables is non-significant, $\chi^2(3, N = 34) = 1.41$, $p > .05$. For example, out of the seventeen who have found full-time employment, seven were born in the US and nine were born elsewhere, which is approximately what is expected based on the percentages of each group within the cohort.

Table C5: Parents' Higher Education (HE)
Parents' Higher Education (HE) Experience and Employment Levels, 24 Months (N = 34)

Employment	No College	Some College	One Parent Graduated	Both Parents Graduated	Total
LEVEL 1	1	1	1	1	4
<i>Expected</i>	2	0.24	0.71	1.06	
LEVEL 2	3	1	0	5	9
<i>Expected</i>	4.5	0.53	1.59	2.38	
LEVEL 3	2	0	2	0	4
<i>Expected</i>	2	0.24	0.71	1.06	
LEVEL 4	11	0	3	3	17
<i>Expected</i>	8.5	1	3	4.5	

A chi-square test of independence was performed to examine the relation between parents' higher education experience and employment levels. The relationship between these variables was found to be non-significant, $\chi^2(9, N = 34) = 14.396$, $p > .05$. For example, out of the seventeen who have found full-time employment, eleven are identified as first-generation college students, and this is approximately the number expected within Level Four based on the percentage of first-generation college students within the cohort.

Table C6: Transfer from Another College on Employment Levels, 24 Months (N = 34)

Employment	Transfer	No Transfer	Total
LEVEL 1	2	2	4
<i>Expected</i>	2.12	1.89	
LEVEL 2	5	4	9
<i>Expected</i>	4.76	4.24	
LEVEL 3	2	2	4
<i>Expected</i>	2.12	1.88	
LEVEL 4	9	8	17
<i>Expected</i>	9	8	

*Note: Transfer = Transfer from a Community College;
No Transfer = Entire Undergraduate Experience at Queens College.*

A chi-square test of independence was performed to examine the relation between students who had transferred into Queens College from a community college versus students who entered as freshmen into Queens College, and employment levels. The relationship between these variables was found to non-significant, $\chi^2 (3, N = 34) = .052, p > .05$. For example, out of the seventeen who have found full-time employment, nine were transfer students and eight were not (exactly what is expected based on the percentages of transfer students within the cohort).

Table C7: Overall Grade Point Averages

ANOVA Table of Overall Grade Point Averages (GPAs) and Employment Levels, 24 Months (N = 34)

Source of Variation	d.f.	SS	MS	F	p-level	F crit	Omega Sqr.
Between Groups	3	0.914	0.305	1.989	0.137	2.923	0.08
Within Groups	30	4.59	0.153				
Total	33	5.507					

The one-way ANOVA was conducted to compare the mean overall GPAs between the graduates' employment levels and to determine whether any of those mean overall GPAs are significantly different from each other within the levels of employment. An analysis of variance showed that the mean overall GPAs are not significantly different from each other per employment level, $F (3,30) = 1.989, p = 0.137$. Graduates with higher overall GPAs are distributed throughout the levels of employment and the results do not suggest higher levels of paid design-related employment.

Table C8: Major Grade Point Averages

ANOVA Table of Major Grade Point Averages (GPAs) and Employment Levels, 24 Months (N = 34)

Source of Variation	d.f.	SS	MS	F	p-level	F crit	Omega Sqr.
Between Groups	3	0.881	0.294	2.549	0.074	2.922	0.012
Within Groups	30	3.458	0.115				
Total	33	4.339					

The one-way ANOVA was conducted to compare the mean GPAs within the major between the graduates' employment levels and to determine whether mean averages are significantly different from each other. An analysis of variance showed that the mean major GPAs are not significantly different from each other per employment level, $F (3,30) = 2.549, p = 0.074$. Graduates with

higher GPAs within the major are distributed throughout the levels of employment and the results do not suggest higher levels of paid design-related employment.

Table C9: Hours Worked in College
ANOVA Table of Hours Worked in College and Employment Levels, 24 Months (N = 34)

Source of Variation	d.f.	SS	MS	F	p-level	F crit	Omega Sqr.
Between Groups	3	337.76	112.59	0.62	0.605	2.922	-0.043
Within Groups	30	5414.97	180.5				
Total	33	5752.74					

The one-way ANOVA was performed to compare the mean hours worked in college between the graduates' employment levels and to determine whether any of those mean hours worked are significantly different from each other. An analysis of variance showed that the mean hours worked while in college are not significantly different from each other per subsequent employment level, $F(3,30) = .62$ $p = 0.605$.

Table C10: College Internship
Graphic Design Internship during College and Employment Levels, 24 Months (N = 34)

Employment	No Internship	Internship	Total
LEVEL 1	4	0	4
<i>Expected</i>	2.24	1.76	
LEVEL 2	8	1	9
<i>Expected</i>	5.03	3.97	
LEVEL 3	3	1	4
<i>Expected</i>	2.24	1.76	
LEVEL 4	4	13	17
<i>Expected</i>	9.5	7.5	

Note: No Internship = No Design Internship while in College; Internship = Design Internship while Attending College.

A chi-square test of independence was performed to examine the relation between participation in a design internship and employment levels. The relation between these variables is significant, $\chi^2(3, N = 32) = 16.843$, $p < 0.01$. As the table shows, fourteen graduates out of the nineteen graduates employed within Levels Three and Four have participated in design internships, whereas none of the five graduates who are either unemployed or employed in fields other than graphic design participated in a design internship.

** Note: Some observed or expected frequencies are less than five; thus, the Central Limit Theorem may not apply and the resultant χ^2 may be invalid.*

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