

# **The Student Voice: Informing the Future of Workforce Development Through Collaborative Internship Programs**

Dr. Carl N. Blue

keywords: graphic communications, internships, work force development

## **Abstract**

The research delivers insights and statistics about Graphic Communication (GC) workforce progression. This research will showcase findings on the engagement levels of GC students' post-internship and the significance of academic-industry partnerships in initiating and sustaining student internship programs and talent acquisition. This study delves into the evolution of the GC workforce, emphasizing the importance of student feedback post-internship and the pivotal role of academic-industry collaborations. We present findings from an International Review Board (IRB) approved study conducted in 2021 and again in 2024 involving GC students who underwent a required industry internship. A unique survey, crafted through a joint academic-industry effort, was deployed to gain deeper insights into student preferences, industry attractiveness, and strategies for securing and retaining internships and emerging talent in the Graphic Communications sector. The data provided illuminates student perspectives on initial GC domain job preferences, long-term aspirations, and criteria that define a desirable workplace.

## **Background**

In a recent 2020 study by Professor Amanda Bridges, the research aimed to achieve a consensus on the competencies expected from students entering the industry and to use these insights to evaluate and enhance the graphic communications curriculum in higher education [2]. The study concluded that while soft skills are highly valued, proficiency in software applications and digital tools is equally critical. These findings aim to help educators ensure their programs align with industry needs and technological advancements [2].

Based on expert consensus, Bridges' research concluded that soft skills are the most

---

Clemson University

crucial competencies for students entering the graphic communications industry [2]. Additionally, the curriculum significantly emphasizes technological proficiency, as evidenced by the importance of software applications and digital-based tools [2].

Bridges' research promoted that to better prepare students for successful careers in graphic communications, Educational institutions should follow these steps: continually update curricula to include essential soft skills and technological tools; assess and replace obsolete tools; develop modules to enhance communication, teamwork, and problem-solving; integrate the latest software and digital tools; strengthen partnerships with industry professionals for real-world insights; and engage in ongoing research to stay current with industry changes and technological advancements [2].

Alternatively, in a series of research reports by Professor Nona Woolbright, "How is Your Workforce Changing, Flexo Magazine" (2017), "Attracting New Talent To The Printing Industry" (2019), and "Help Wanted? Research on Retaining the Next Generation," (2017), the researcher highlighted a significant imminent labor shortage in the printing industry, predicting many unfilled positions due to retirements and a lack of interest among potential younger employees [3], [4], [5]. The sector needs to work on an undesirable perception among the public, who need to be made aware of the opportunities it offers [3], [4], [5]. The research focused on understanding the workforce demographics, shifts in perception, and practical strategies from other manufacturing sectors that could be applied to the printing industry [3],[4], [5].

To address the challenges facing the printing industry and enhance higher education graphic communications programs, Professor Woolbright proposes that it is essential to implement a series of actionable steps [3],[4], [5]. Key action steps include strengthening the cooperation among trade associations to boost the industry's image nationally, promoting printing careers through local outreach to schools and communities, and developing a supportive company culture that values diversity and focuses on employee retention [3], [4], [5]. Additionally, the paper recommends investing in training programs for new hires to address skill gaps, cultivating a skilled, loyal, and long-term workforce [3], [4], [5]. Implementing these measures could help mitigate workforce challenges, improve the industry's public perception, and ensure sustainability [3], [4], [5].

These researchers addressed workforce challenges in the printing industry, emphasizing the need to update educational curricula with essential soft skills and modern technological tools. They advocate for solid industry collaboration, enhanced cooperation among trade associations, and robust community engagement to promote printing careers. Both researchers also highlight the importance of creating a supportive company culture that values diversity and prioritizes employee retention. This holistic approach addresses skill gaps and improves the industry's

public perception, ensuring long-term sustainability.

## **Methodology**

An updated survey was developed based on a 2021 questionnaire developed and approved for research and presented at a PICA (The Printing Industry of the Carolinas) Conference held in Greenville, SC, in October 2021. This trade organization has been committed to the success of the local printing industry for more than 80 years; PICA has promoted and protected the interests of the printing and graphic communications industry in North and South Carolina. Its mission is to provide partners value-added resources and services designed to help companies be more effective, efficient, and profitable [6].

The updated survey sought feedback on students' internship experiences and gathered detailed information about students' internship experiences, focusing on several key aspects that will help understand their readiness and preferences for entering the workforce full-time. The questionnaire covers topics including the students' favorite aspects of their internships and why an employer should consider them for a full-time position. It also probes into which department they would prefer to start their career in and their expectations from leadership after years of full-time employment. Additional queries assess logistical preferences, including the number of hours they expect to work weekly, their preferred amount of remote work, and the time they anticipate needing to become fully competent in a new role. Furthermore, the survey explores what attracts them to a company, the specific knowledge and training they have received during their internships, particularly concerning different types of printing, and whether their education has prepared them for roles within the GC industry. It also seeks to understand whether they expect or feel their employer must provide additional education or training. Finally, the instrument investigates the pivotal motivations behind selecting an industry internship, which helps identify what drives students in their professional development and job selection processes.

## **Sample Characteristics**

The study sample comprised sixty-seven undergraduate students, including juniors and seniors, with juniors accounting for 56% of the participants and seniors making up 44%. Each junior completed their first internship, whereas each senior completed two. The gender distribution within the sample included 15 males (22%), 51 females (76%), and one non-binary individual (1%). The average age of the participants was 21, and plan to graduate between 2024 and 2025 academic years.

### **Overview of Internship Experiences**

Students' internship experiences span various roles and industries, demonstrating

the diversity and demand for graphic design, marketing, print production, and social media management skills. Many internships involve creative tasks such as creating motion graphics, branding guides, and architectural signage, while others focus on the technical aspects of screen printing, flexography, and 3D printing technologies. Additionally, numerous internships include customer service and project management roles, highlighting the importance of interpersonal and organizational skills. Interns frequently progress from initial, more straightforward tasks to more complex projects or leadership roles, gaining valuable skills in design software, manufacturing processes, and social media analytics. Although some faced challenges like feeling undervalued or navigating complex work environments, these experiences often led to personal growth and learning. Overall, interns made significant contributions to their companies, sometimes resulting in offers for continued work, underscoring the value and recognition of their efforts.

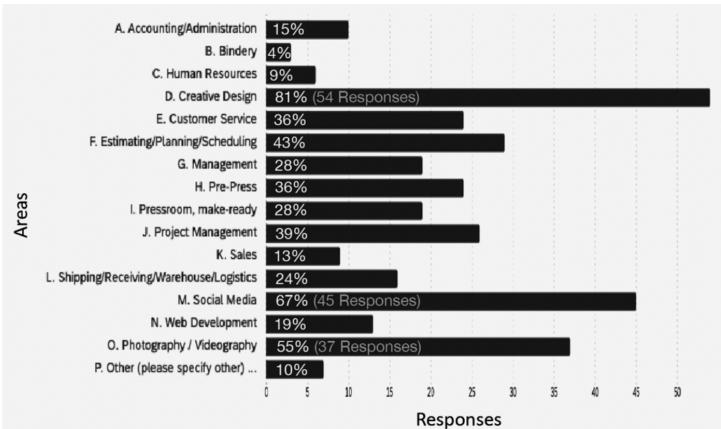
## Survey Findings

The study sample comprised sixty-seven undergraduate students who had completed one (Juniors) or two required internships (Seniors). In Figure One, the top two choices for why they selected a specific company to conduct an internship stemmed from a preference (top choice) to have a work-life balance and flexibility. And the runner-up choice was the company's reputation.

- A. Diversity of the company's workforce.
- B. Ethics and strong social mission.
- C. Gender equality.
- D. The company's reputation.
- E. The company is profitable.
- F. Strong environmental sustainability practices.
- G. Work-life balance (flexibility).
- H. The company provides housing for interns.
- I. The company provides a salary or stipend.
- J. The company's geographical location.

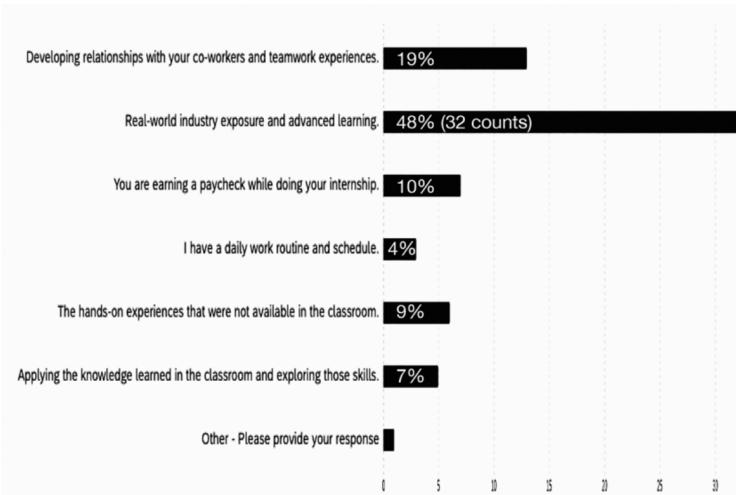
**Figure 1:** What do you value most when choosing a company for an internship?  
Please identify one as the best fit for your answer.

In Figure Two, students were asked to identify areas in the company where they could observe and interact with personnel or actively participate as interns. The query wanted to ascertain what exposure they experienced during their internship(s). Creative Design, Social Media, Photography and Video, and Project Management topped the results, while data showed significant exposure across most areas of operation.



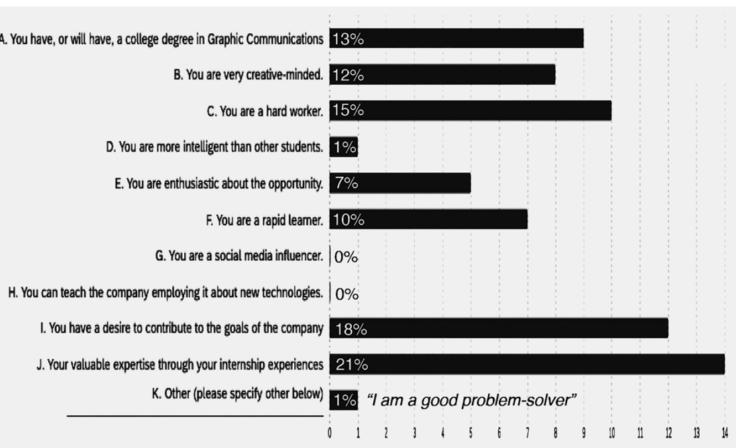
**Figure 2:** During your internship experience(s), identify any of the following areas in which you had the opportunity to observe and interact with personnel or actively participate as an intern.  
Check all that are applicable.

In Figure Three, students were asked to identify their favorite part of their internship experience. Nearly half stated that real-world industry exposure and advanced learning topped their reasons, with developing relationships with co-workers and teamwork experiences ranked as second choice.



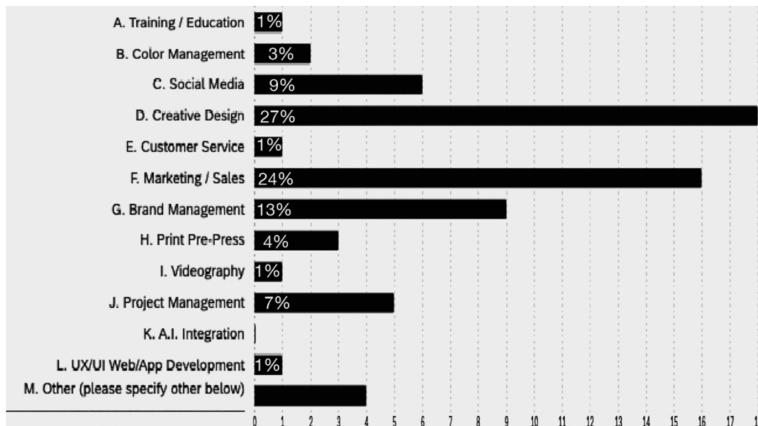
**Figure 3:** From the options provided, what was your favorite part of your recent internship(s)?  
Please identify one as the best fit for your answer.

In Figure Four, students identified why an employer should consider hiring them full-time. Most felt their internship experience and a desire to contribute to the company's goals gave them a hirable expertise for a full-time position.



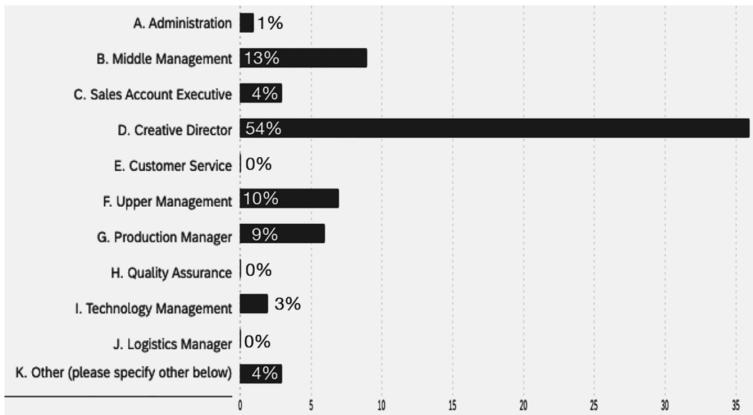
**Figure 4:** Once you near graduation and consider employment opportunities, why should an employer consider hiring you full-time? Please identify the item that best fits you.

In Figure Five, students identified what department within a company they would prefer to start their careers. Creative design, marketing and sales, and brand management topped the list.



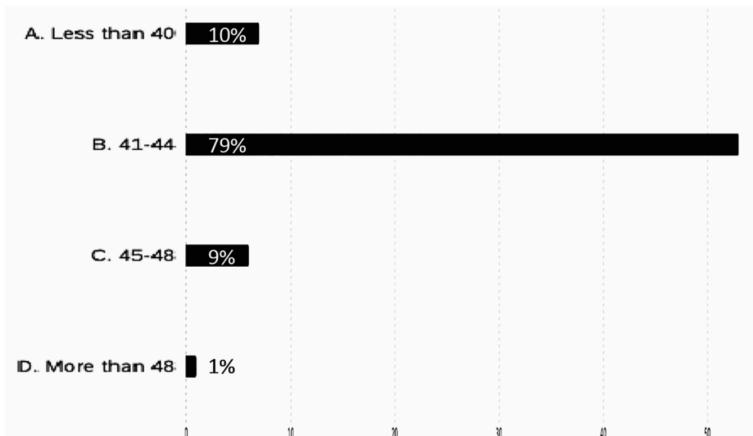
**Figure 5:** What department within a company would you prefer to start your career from? Please click the adjacent radial button to identify the item that best fits you.

In Figure Six, students were asked to consider what department or role they would like to be in five years of success with a preferred company. Creative Director topped the list, followed by Middle/Upper Management, Production Management.



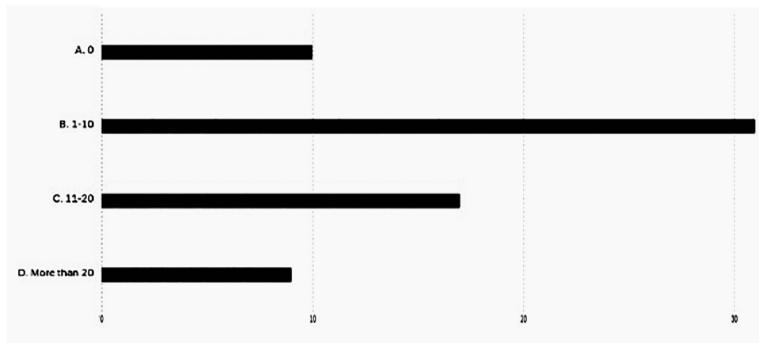
**Figure 6:** If you were to work for a preferred company for at least five years, what department or role would you expect to be in after success in that role? Please identify the item that best fits you.

In Figure Seven, students were asked to identify how many hours a week they were committed to working. The more significant majority stated that 41-44 hours a week was preferable.



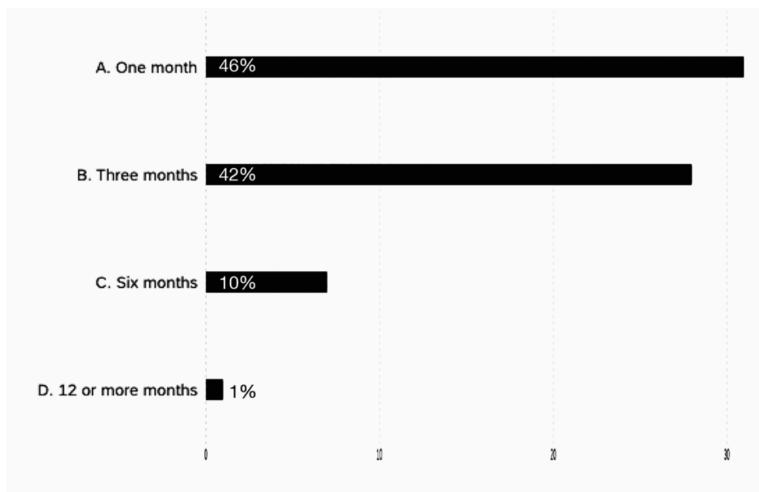
**Figure 7:** On average, how many hours do you expect to work each week in your new job?  
Identify one answer only.

In Figure Eight, students were asked how much time they would prefer to work from home if allowed. Most stated that 1-10 hours a week would be preferred, while a lesser portion of students stated 11-20 hours a week would be desirable.



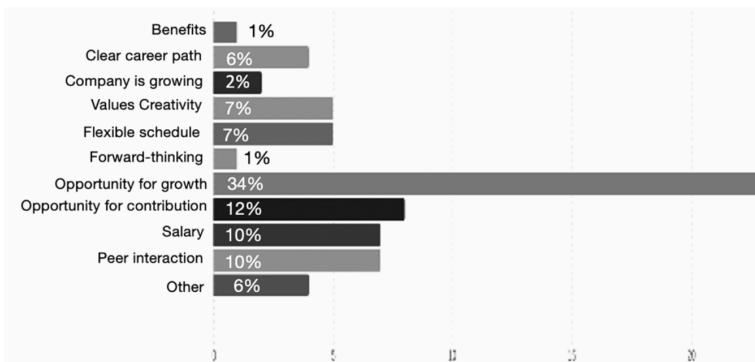
**Figure 8:** On average, how many weekly hours would you prefer to work from home?  
Identify one answer only.

In Figure Nine, students overwhelmingly stated that they would be fully competent in their new position at a company and work independently in one to three months.



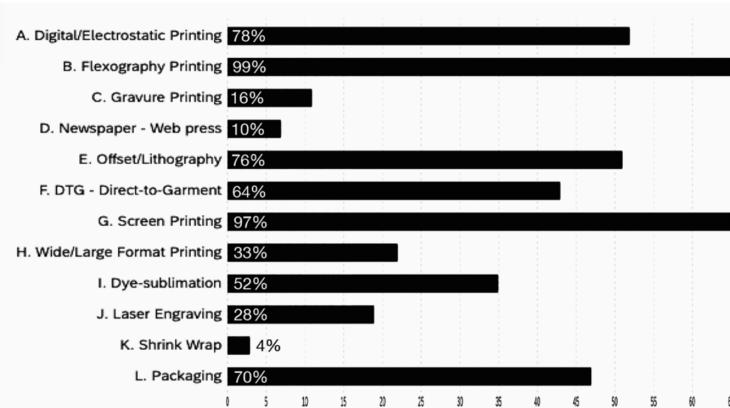
**Figure 9:** How long should you become fully competent at your new job  
(i.e., be able to work independently)? Identify one answer only.

In Figure Ten, students were asked to provide information on what characteristics attract them to a company when seeking gainful employment. Topping the list was an opportunity for growth. Secondary preferences included an opportunity for contribution, salary, and peer interaction.



**Figure 10:** What attracts you to a company? Please identify one as the best fit for your answer

In Figure Eleven, students were asked about the extent of their laboratory training in their undergrad experiences. However, most of the listed processes were covered well. Noticeably, the older industries and printing processes needed to be more identified. Gravure printing and newspaper printing showed limited to no application. Shrink Wrap performed poorly in the laboratory experiences.



**Figure 11:** Have you received laboratory training about the following printing processes in your undergraduate courses? (Identify all that apply to your education.)

In Figure Twelve, lectures performed better overall, with some opportunities for exploring more content around supply chain, scheduling, and shipping. Developing programming around logistics in the print businesses and industry would assist in covering technology and business management principles.



**Figure 12:** Have you received any lectures or training in undergraduate experience about the following processes or departments within an operation and their functions?

**Identify all that apply to your education.**

In Figure Thirteen, students were asked what preparation they received in their education experience in management roles. Based on the responses, they either needed more knowledge of these leadership roles, or there were opportunities for developing more business and technology management content, or the instrument needed to be revised in presenting the question.



**Figure 13:** Has your education/training prepared you for any of the following positions in the future? (Identity using the slider tool “0” Yes, OR “1” for No on each item)

In Figure Fourteen, students were asked about expectations for additional education provided by their employer. The responses demonstrate that preferences were inconclusive. As in Figure Thirteen’s outcomes, this question shows some interest in receiving further training and education, or the instrument was flawed in presenting the question.

Additional education – do you expect /feel like your employer should provide...	Average
A. Pay for additional education at a school and vendor – Y / N	0.37
B. Pay for further education within the industry – Y / N	0.24
C. Pay for further education outside the sector – Y / N	0.51
D. Send you to trade shows and organization meetings	0.27

**Figure 14:** Additional education – do you expect /feel like your employer should provide any of the following? Identify “0” for Yes, OR “1” for No on each item.

### Potential Leadership Roles

*Final question: In your career future, if an opportunity for a leadership role is offered or a position opens, would you seek to be promoted or hired into a leadership role?*

Most students responded positively to being asked about leadership roles, showing an apparent eagerness to advance in their careers and take on more responsibility. Many students emphasized that their willingness to accept a leadership role depends on their experience and feelings of competence, indicating the importance of being adequately prepared and confident in their abilities. Several students desired to be with a company long-term before stepping into a leadership position, highlighting a preference for first understanding the company culture and processes. Leadership roles often involve personal and professional growth, improvement, and opportunities to apply their skills in a natural work setting. Some students noted leadership roles’ financial and career benefits, though concerns about work-life balance, particularly in high-level management positions, were also mentioned. Students also mentioned specific leadership roles they aspire to, such as becoming a creative director, indicating clear career goals. A few responses suggested that pursuing leadership roles would depend on alignment with their personal and professional aspirations. Only one student explicitly stated a reluctance to pursue leadership, citing a mismatch between their personality and what is needed to succeed in such roles. Lastly, many students expressed the need to feel qualified or to have earned the right to be promoted to leadership positions, suggesting a cautious approach to taking on these roles without the necessary preparation.

### Conclusion

The range of internships illustrated various experiences and the broad spectrum of student opportunities. The results demonstrated the importance of hands-on, practical experience in a real-world setting, which is invaluable for industry insights and technical skills—challenges as learning opportunities for resilience,

problem-solving skills, and adaptability. To better prepare students for successful careers in the dynamic field of graphic communications, educational institutions should take several key steps. Firstly, higher education programs must continually evaluate and update their curricula to include critical soft skills and technological tools identified in relevant studies. This includes assessing whether existing tools and equipment are obsolete and identifying new tools necessary for curriculum inclusion. Secondly, there should be a focus on developing soft skills such as communication, teamwork, and problem-solving through specific modules or courses within the graphic communications curriculum. Thirdly, integrating the latest software applications and digital tools into the curriculum ensures that students are proficient in industry-relevant technologies. Strengthening partnerships with industry professionals can enhance curriculum relevance and provide students with real-world insights and experiences. Finally, engaging in ongoing research to monitor changes in industry requirements and technological advancements is essential to keeping the curriculum relevant.

## References

- 1 Blue, C. (2021, October 14). *PICA 2021 Post Internship Student Survey* [Slide show presentation]. PICA Conference, Greenville, Southeast, United States of America.
- 2 Bridges, A. (2020). Competencies and tools of higher education graphic communications programs: DOI 10.14622/JPMTR-2011. *Journal of Print and Media Technology Research*, 9(4), 243–254.
- 3 Woolbright, N.L., (2017) How is Your Workforce Changing, Flexo Magazine. New York: Flexographic Technical Association, Inc. & Foundation of Flexographic Technical Association. September 2017.
- 4 Woolbright N.L., (2019). Attracting New Talent To The Printing Industry". White Paper, Association for PRINT Technologies, PRIMIR Research Unit, Nashville, TN.
- 5 Woolbright N.L. (2017). "Help Wanted? Research on Retaining the Next Generation." Foundation of Flexographic Technical Association Annual Forum, Indianapolis, Indiana.
- 6 [Website] *PICA - The Printing Industry of the Carolinas - Promoting the industry ~ Focused on Members Success.* (n.d.). <https://picanet.org/> (found on 5/18/2024).