



# Results from the 1-year longitudinal follow-up analysis for the College Internship Study at Northeastern Illinois University

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CENTER FOR RESEARCH ON  
**College-Workforce Transitions**



The **College  
Internship** Study

## Northeastern Illinois University: Executive Summary

The *College Internship Study* examines the long-term impacts of internships on students' lives and careers. Here, we highlight the findings from 177 survey responses and twelve interviews with students at Northeastern Illinois University (NEIU). They were conducted in the Fall of 2020 (Time 2 or T2), one year after the first round of data collection in 2019 (Time 1 or T1). This second round of the College Internship Study is guided by the following research question: **What are the changes concerning students' internship experiences and outcomes comparing longitudinal data at two points in time?**

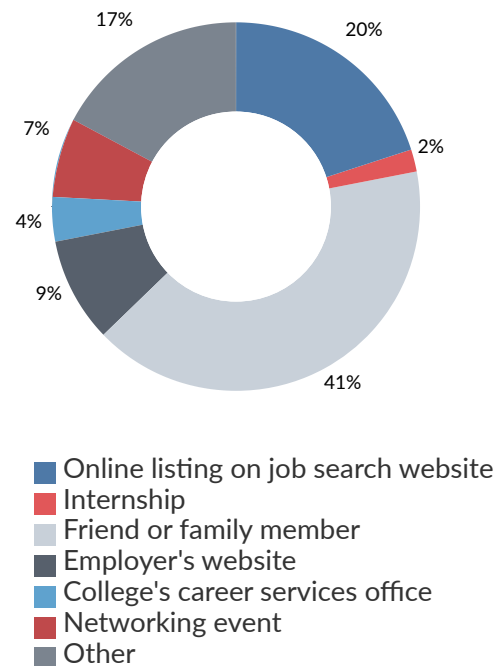
### KEY FINDING 1

**One-third of respondents participated in an internship at either T1 or T2.** This table shows that roughly 66% did not participate in an internship at either time.

Internship Group	Total (%)
Neither T1 nor T2	116 (65.5%)
T1 but not T2	12 (6.8%)
T2 but not T1	19 (10.7%)
Both T1 & T2	30 (16.9%)

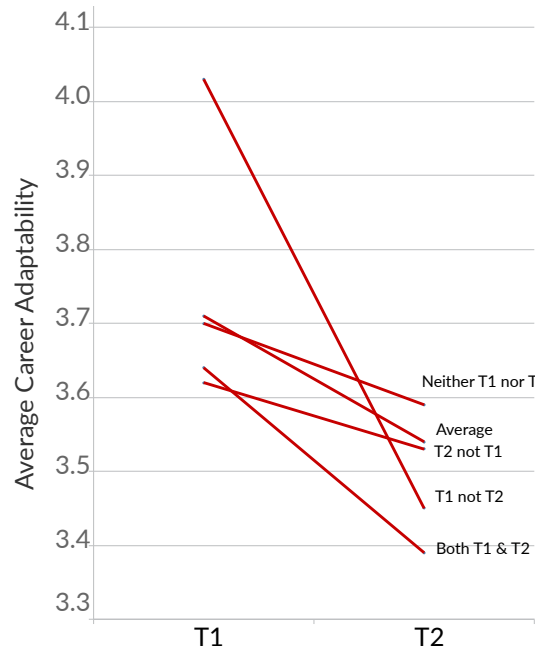
### KEY FINDING 2

There were 44 graduates who had found employment post-graduation. Of the 16 who had taken an internship, only 4 perceived that their internship led to employment. **As shown in the chart, job searching through family and friend networks (41%) and online search engines (20%) were the two main approaches for graduates in finding a job.**



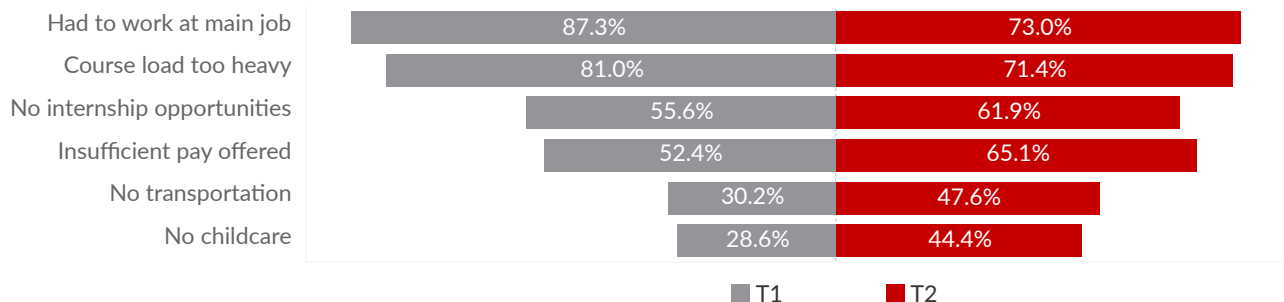
### KEY FINDING 3

Students' "career adaptability", that is, the resources they display for coping with current and anticipated tasks and transitions in their careers, appeared to be higher in the first round of data collection compared to the second round. This figure shows the change between T1 and T2 broken down by when students participated in internships. **Though scores declined across groups, those students who had an internship in T1 but not T2 declined considerably in career adaptability.**



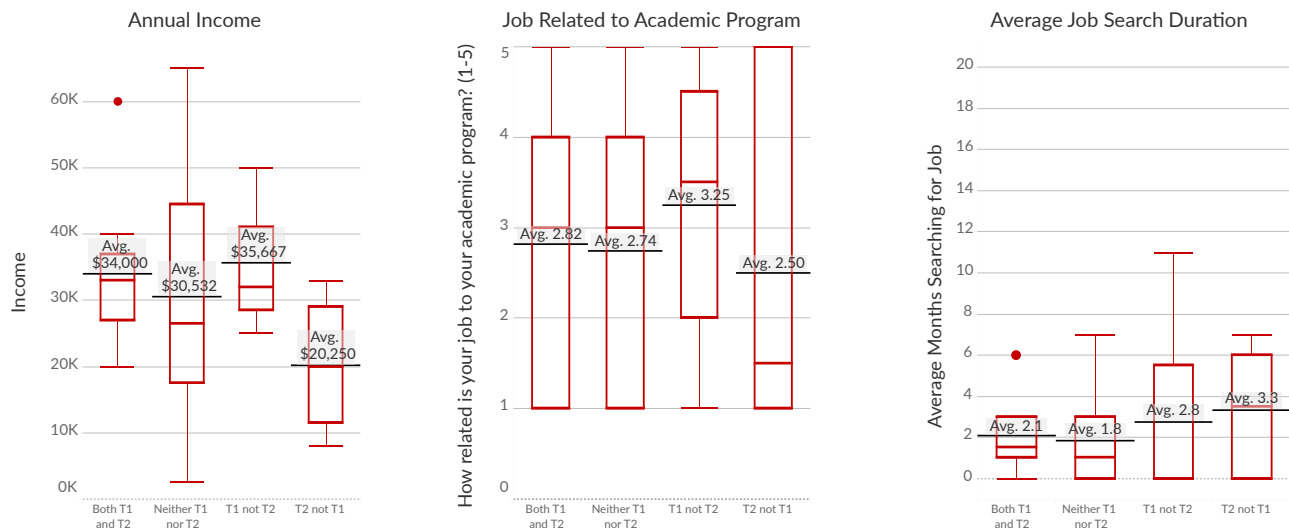
### KEY FINDING 4

In the first wave of data collection at NEIU, sixty-three students indicated they had not participated in an internship, despite wanting to do so. A year later, these same sixty-three students had not taken an internship despite still being interested in doing so. **The primary reported obstacles preventing them from doing internships were their need to work at their current paid job and having a heavy course load in college. These obstacles remained constant across both instances of data collection.**



## KEY FINDING 5

Graduates who had taken internships appeared to have jobs that were more related to their college majors and reported relatively higher annual incomes, but these differences between them and those with no internship experience were not statistically significant.



## KEY FINDING 6

In interviews with students who had an internship experience, several key outcomes emerged. Internships helped students to:

Improve academic learning and skill development

Obtain real-world experience

Increase self-confidence or motivation

Explore their given career field

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## I. INTRODUCTION

In higher education, internships are widely considered beneficial co-curricular opportunities that help undergraduate students acquire real-world professional experience and become better prepared for their transition to the workforce. Increasingly, however, the promise of internships is subjected to empirical scrutiny as some evidence suggests that internship programs are not available to all students on account of socioeconomic and other barriers (Hora, et al., 2019), and that participating in an internship does not always yield the expected positive results (Klein & Weiss, 2011; Silva et al, 2018).

The literature on internship outcomes has largely focused on students' ability to secure a job and avoid unemployment (Baert et al., 2019; Nunley et al., 2016; Rigsby et al., 2013). Thus far, the evidence regarding labor market outcomes of internship participation continues to be mixed. Individuals' background and internship specific contexts seem to matter substantially in terms of the extent to which internships can benefit students in their job search (Klein & Weiss, 2011). Some argue that internships benefit students by affording them necessary connections rather than contributing to their practical learning (Weiss et al., 2014). Such arguments challenge the notion that internships are always a rich, experiential learning opportunity. Additionally, a myriad of studies has focused on other outcomes of internship participation, including influencing students' career decisions (Powers et al., 2018), students' work ethic and preconceptions about the professional world (Taylor, 1988), students' perceptions of employment traits (Green et al., 2011), among other studies that document positive outcomes for students (Hora et al., 2017; Gillespie et al., 2020).

Generally, most studies on employment or psychosocial impacts of internship participation are cross-sectional, and few have examined the longitudinal impact of internships for students (Negru-Subtirica et al., 2015; Ocampo et al., 2020; Silva et al, 2018). We will review some interesting but controversial studies exploring the longitudinal impact of internship participation on students' level of career adaptability. Career adaptability is an important psychosocial competency, which refers to "the readiness to cope with the predictable tasks of preparing for and participating in the work role and with the unpredictable adjustments prompted by changes in work and working conditions" (Savickas, 1997, p. 254). It is measured in relation to four psychological traits that interns display at work: levels of concern, control, curiosity, and confidence (Porfeli & Savickas, 2012).

Ocampo et al. (2020) conducted a survey of 173 undergraduate hotel and restaurant management students in China, measuring the career adaptability of interns and non-interns at five points in time before, during, and up to five months after the completion of their internships. They found that for the students who interned, all measures of career adaptability increased linearly overtime; whereas for the students who did not intern, there was no growth in the career adaptability except for the dimension of career concern. The findings indicate that internship participation may provide students the opportunity to acquire increased psychological skills and resources to manage career planning and adjustment, and that such a benefit may persist over time. In contrast, Negru-Subtirica and colleagues (2015) studied 1151 adolescents with an average age of 16.45 years and found that all four dimensions of career adaptability that were characterized by high initial levels significantly decreased over time. They suggested that individuals who initially reported high career adaptability gradually become vulnerable and experienced a longitudinal decrease in career adaptability. This finding suggests the somewhat counter-intuitive possibility that career preparation through internships might associate with less of a feeling of career adaptability—that is, the more you know about the workforce the lower levels of career

adaptability you may have. More research is required to measure various longitudinal outcomes of internship participation. Results presented in this second report, to some extent, provide more insight into these claims.

The College Internship Study is a mixed-methods, longitudinal research project that aims to document the characteristics of undergraduate students' internship experiences, investigate how internship participation is related to certain student characteristics, and analyze how participating in an internship affects the career trajectories of students. The first round of research conducted at Northeastern Illinois University (NEIU) resulted in a [report](#) with information regarding the internship participation rates, characteristics, and outcomes for students, as well as findings about barriers that students face when attempting to access internships. The T1 results indicated that internship participation was associated with positive outcome measures of students' career adaptability, internship satisfaction, and perceived developmental value ([Wolfgram et al., 2020](#)). In the Fall of 2020, CCWT conducted a second round of data collection at the Northeastern Illinois University as part of the College Internship Study.

## II. PURPOSE & METHODS

The College Internship Study is a mixed-methods, longitudinal research project that aims to document the characteristics of undergraduate students' internship experiences, investigate how internship participation is related to certain student characteristics, and analyze how participating in an internship affects the career trajectories of students. The first round of research conducted at NEIU resulted in a [report](#) with information regarding the internship participation rates, characteristics, and outcomes for students, as well as barriers that students face when attempting to access internships. In the fall of 2020, CCWT conducted a second round of data collection at NEIU as part of the College Internship Study.

The survey results from this second round of research for the College Internship Study allow us to study if there are any systematic patterns over time in internship experiences and outcomes for students with or without internship experience before graduation. Specifically, we were able to compare internship experiences between Time 1 and Time 2 (e.g., supervisor support, supervisor mentoring, goal clarity, etc.), and describe changes in attitudes and perceived benefits for students who reported internship experiences at both times. Furthermore, this second round of data allows us to compare how different students fared in the labor market post-graduation. The current report provides descriptive results regarding the job search process for students who did and did not participate in internships as undergraduates, including the graduates' job search strategies, the duration of time spent finding a job, and the pay they receive upon being hired. Additionally, we analyzed students' career adaptability across T1 and T2. Table 1 summarizes the different samples and the outcomes that are presented in this report.



**Table 1. Description of longitudinal sample and outcome measures**

Description of sample	Sample size	Outcomes measured	Reported
Students who did not participate in an internship at either T1 or T2	n = 116	Barriers to internship participation	Results section III
Students who participated in separate internships at T1 and at T2	n = 30	Internship program features	Results section IV
Graduates with employment outcomes measured at T2	n = 60	Job market performance	Results section V
All participating students with longitudinal psychosocial outcomes measured at T2	n = 177	Career adaptability	Results section V

One-on-one phone interviews with students provided detailed narratives of students’ experiences during their internships, and their perceptions of the outcomes and consequences of their internships. We place students’ experiences at the heart of our analyses, and hope to inform the work of educators, employers, and career service professionals in order to aid in designing better, more meaningful and effective internship programs for students.

### III. SAMPLE AND INTERNSHIP PARTICIPATION

The second round of data collection took place in fall 2020 (time 2 or T2), a year after the first survey was administered to students in fall 2019 (time 1 or T1). These T2 data include an online survey of students who participated in the survey at T1 and one-on-one phone interviews with students who participated in focus groups at T1 (see Table 2). The T2 online survey was administered to 329 students and 177 of them completed the questionnaire, resulting in a response rate of 53.8%. The survey included questions about students’ demographic characteristics, career adaptability, the characteristics of their internships, and post-graduation and employment questions for those who had graduated or stopped attending college. This report only showcases the results relevant for the comparison between T1 and T2 internship experiences, as well as to the longitudinal outcomes for students who were employed after graduation.

Twelve students participated in one-on-one follow-up phone interviews. Seven of those students had participated in at least one internship by the time of the second round of data collection.

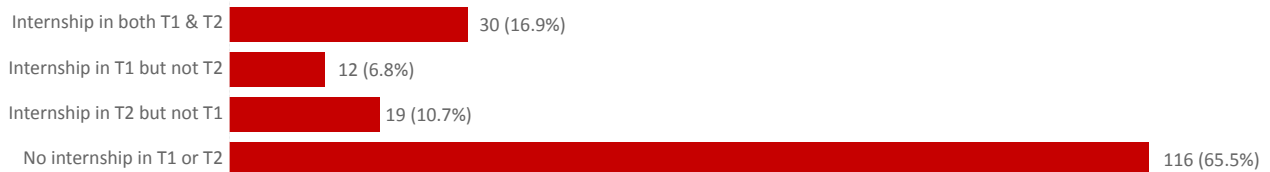


**Table 2. Description of the Fall 2020 T2 sample**

	Survey Sample	Interview Sample
Total	177	12
Gender	Male = 48 (27.1%) Female = 128 (72.3%)	Male = 5 (41.6%) Female = 7 (58.4%)
Race	Asian = 21 (11.9%) Black = 11 (6.2%) Hispanic = 76 (42.9%) White = 53 (29.9%) Other = 1 (0.6%)	Asian = 3 (25.0%) Black = 1 (8.3%) Hispanic = 3 (25.0%) White = 4 (33.3%) Other = 1 (8.3%)
First-generation college student	Yes = 109 (61.6%) No = 68 (38.4%)	n/a n/a

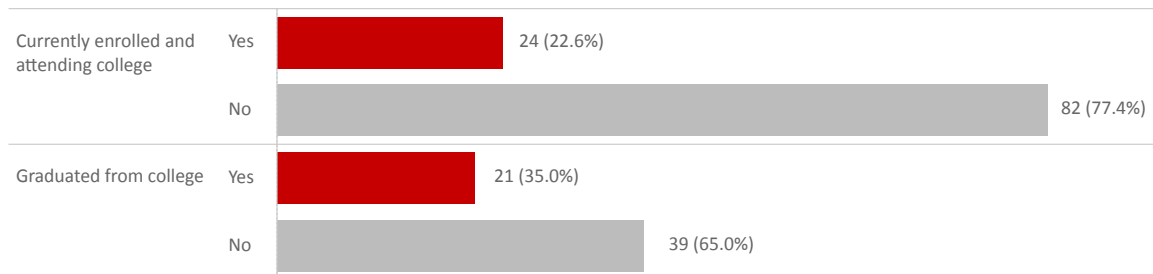
Sixty-one of the 177 survey respondents (34.5%) reported having participated in an internship program. We found that 19 students (10.7%) reported having an internship experience at T2 but not at T1, while 12 students (6.8%) reported having participated in internship(s) at T1 but not T2. In addition, a total of 30 students (17%) reported having done separate internships at both instances of data collection. In contrast, 116 students (65.5%) reported not having done an internship at either time (see Figure 1). Their barriers to internship participation will be explored and discussed in the next section.

**Figure 1. Internship participation across T1 and T2 (n=177)**



Sixty students (33.9%) had graduated by the second round of data collection, and 106 students (59.9%) were still enrolled in college. The data collected shows that 35% (n = 21) of students who already graduated took part in internship programs, while only 22.6% (n = 24) of those still enrolled had taken part of an internship in the 12 months before the survey was conducted (see figure 2).

**Figure 2. Internship in the Past 12 Months (Yes/No), by Graduation Status (n = 166)**

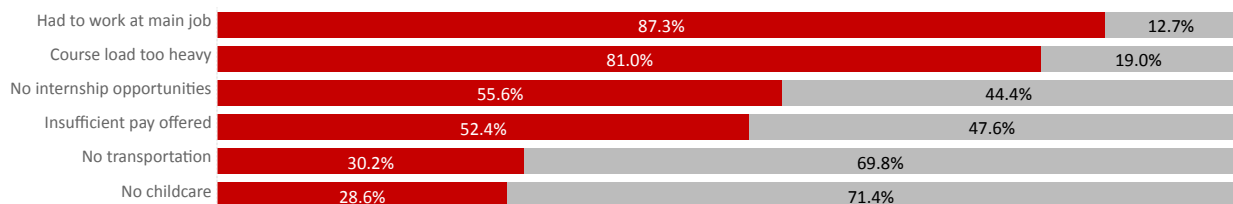


Note: Eleven students who reported taking a break from college with plans to re-enroll within the next two years, were not included in Figure 2.

## IV. RESULTS: BARRIERS TO INTERNSHIP PARTICIPATION ACROSS T1 AND T2

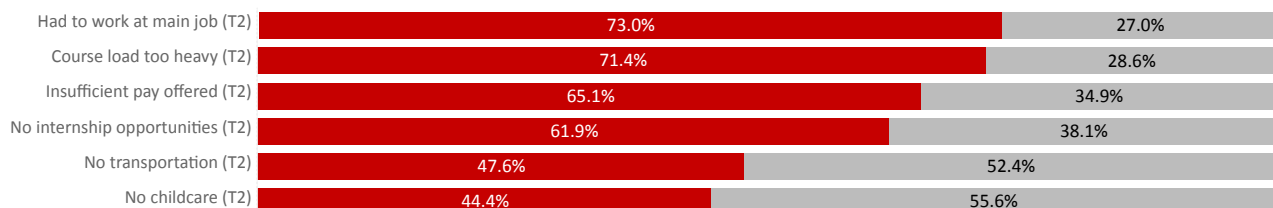
In this section, we present findings regarding the respondents who reported not having participated in an internship at T1 or T2. Of the 135 students who did not participate in an internship in T1, 90 of them (66.7%) reported that they were interested but unable to do so. At T2, of the 128 students who did not complete an internship, 93 students (72.7%) reported being interested in doing one. Moreover, 63 of the 90 students who were interested in doing an internship at T1 (70%) reported still not being able to do an internship in T2, despite being interested in doing so. This suggests that some barriers to internship participation may persist over time. Figures 3 & 4 show the breakdown of reported barriers to internship participation at T1 and T2 for these respondents.

**Figure 3. Barriers to internships at T1 for students who did not participate at either time. (n = 63)**



Note: Students can choose multiple barriers.

**Figure 4. Barriers to internships at T2 for students who did not participate at either time. (n = 63)**



Note: Students can choose multiple barriers.

For the most part, the same barriers persisted across T1 and T2, with needing to work at their current job and a heavy course load being the primary factors contributing to students' lack of participation. Lack of transportation and lack of childcare remained consistently low in frequency across both time points.

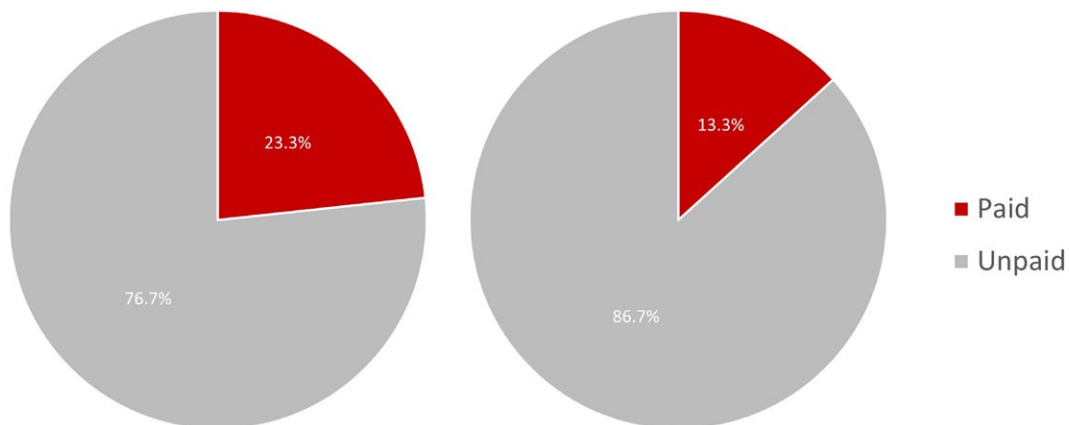
## V. RESULTS: STUDENTS' INTERNSHIP EXPERIENCE ACROSS T1 AND T2

This section focuses on students who reported separate internships at T1 and T2. We compared internship characteristics and selected survey measurement scores that characterize multiple internships and students' experiences. Table 3 presents a summary of various dimensions of internship program features that reflect students' internship experiences. Internship duration is measured in weeks, and all other questions consist of scores that were measured using a five-point Likert scale.

In general, the 30 students who took separate internships at T1 and T2 had longer internships at T2. On average, internships at T2 lasted for nearly 28 weeks (about seven months), while reported internships at T1 lasted, on average, a bit less than 20 weeks (about five months). This difference is statistically significant using commonly used thresholds of significance.<sup>1</sup>

Of these 30 students, more than three of every four did an unpaid internship at T1 (76.7%). Only seven of them (23.3%) were able to secure paid internships in the first instance of data collection. A year later, at T2, even fewer students did paid internships (4 or 13.3% out of 30). The other 26 students (86.7%) did unpaid internships at T2 (see figure 5).

**Figure 5. Internship paid and unpaid, students with internship at T1 and T2 (n = 30)**



The median hourly pay for the seven students who did paid internships at T1 was \$12. The group as a whole contains unusually “high pay” individuals, as two of the respondents reported hourly compensations of \$32 and \$40 per hour. All others reported values below \$20 per hour. The median hourly pay for the four individuals who did paid internships at T2 was \$16.50. The number of individuals reporting pay for their intern work is too small to assess whether this difference is statistically significant.

<sup>1</sup>  $t = -1.93, df = 28, p = .032$

As mentioned above, other internship dimensions were measured using a five-point Likert scale. The mean internship satisfaction score at T1 (Mean = 4.2) for the students was higher than that for the same students at T2 (Mean = 3.6), and this difference is statistically significant based on commonly used thresholds of statistical significance.<sup>2</sup> The mean scores of the developmental value that respondents perceived in their internships were slightly higher in T1 than in T2, but these differences, in the composite and in the academic or career subscales, were not statistically significant.

**Table 3. Internship Experience Measurements<sup>3</sup> (n = 30)**

Internship Program Features	T1		T2	
	Mean	SD	Mean	SD
Internship duration (in weeks)	19.73	15.99	27.58	17.62
Internship satisfaction	4.17	1.02	3.63	0.93
Internship developmental value (composite)	4.01	1.04	3.81	1.03
<i>Internship academic developmental value</i>	4.01	1.04	3.80	1.02
<i>Internship career developmental value</i>	4.00	1.08	3.82	1.12

## VI. RESULTS: STUDENT OUTCOMES A YEAR LATER: JOB MARKET PERFORMANCE AND PSYCHOSOCIAL OUTCOMES

By the second wave of data collection, 60 of the 177 respondents had graduated from NEIU. Among these 60 students, 44 (73.3%) had found jobs. The remaining 16 students attributed their unemployment to a general lack of opportunities (because there were no jobs available, because their credentials made them overqualified, etc.) and, importantly, because they were graduates who entered the labor market in the middle of the COVID-19 pandemic, and job opportunities for them were simply scarce.

### Survey results: Employment, job search, and earnings at T2

The 44 employed graduates, on average, found a job within 2.2 months. As shown in Figure 6, nearly 39% of them (n = 17) found their jobs “very” or “extremely” related to their majors in college. However, about the same proportion of students, 40.9% (n = 18), reported that their current jobs were “not at all” or “a little” related to their majors.

<sup>2</sup> *p*-value = 0.007, *t* = -2.64, *df* = 29

<sup>3</sup> The internship **satisfaction** question measures how satisfied students were with their internship experience. Finally, internship **developmental value** questions assess students’ perception of how well the internship experience contributed to their own career development. Please refer to Time 1 technical [report](#) for detailed information of the questions for each measurement (Wolfgram et al., 2020).

**Figure 6. How much is your current position related to the field you studied in college? (n = 44)**

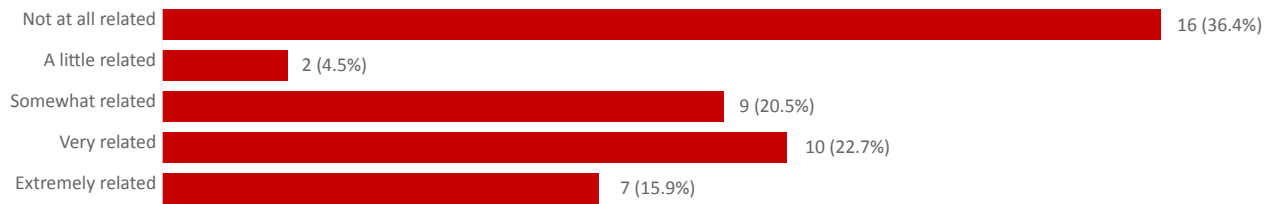
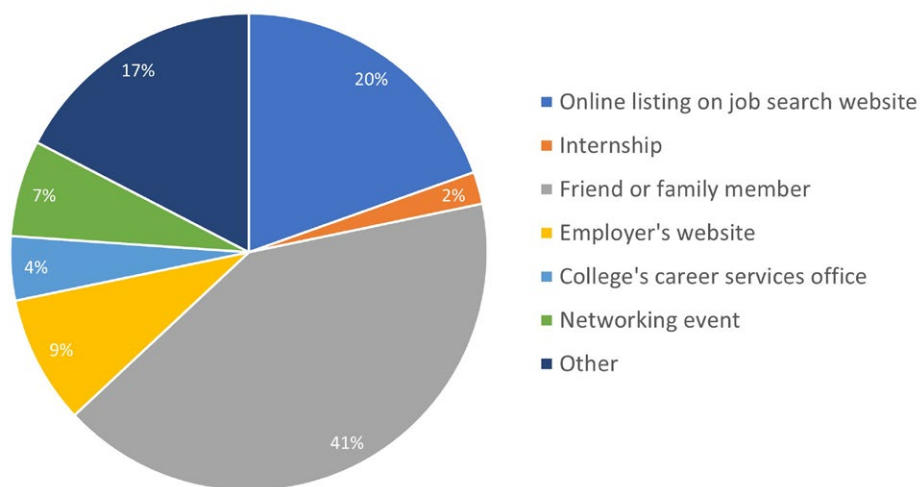


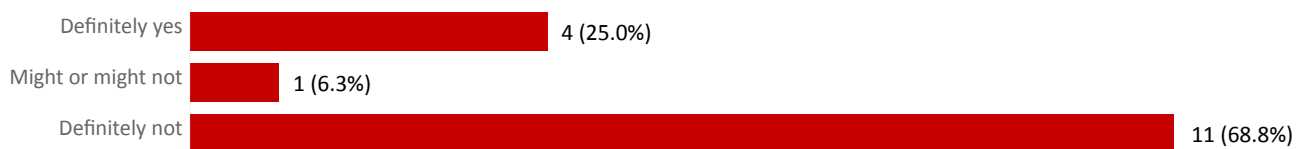
Figure 7 shows the students' job search methods. It illustrates that networks of family and friends and online job search websites were the two major approaches to finding jobs. Internships did not lead to jobs very frequently. Lastly, a substantial number of students reported that they found their jobs through methods other than those provided as options to this question.

**Figure 7. How did you find out about your current job? (n = 44)**



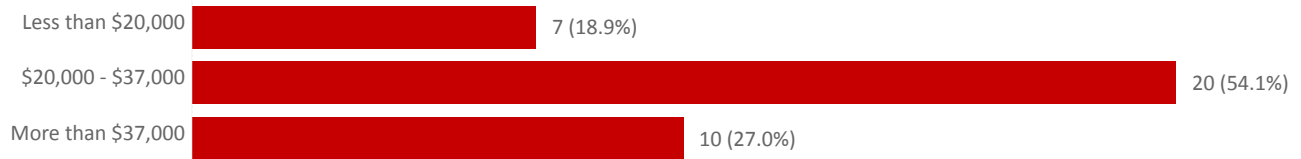
Among the 44 employed graduates, 21 (47.7%) had internships before graduation (either at T1, T2 or both). Sixteen of those answered the question about whether their internships lead to their current job. Only a quarter of the students who responded (4 students, or 25%) indicated that their internships “definitely” led them to their current jobs (see figure 8).

**Figure 8. You indicated that you previously had an internship(s), did your internship lead to your current employment? (n = 16)**



Thirty-seven students who had graduated and found jobs reported their annual income. The average income of these students was \$30,773 with a standard deviation of \$14,943; the median<sup>4</sup> was \$30,000. For reference, in Cook county, where NEIU is located, the median income of a household where the householder is between 15-24 years old (roughly the age bracket of a recent college graduate) is \$59,155 in 2019 inflation-adjusted dollars.<sup>5</sup> Figure 9 shows the distribution of their annual income.

**Figure 9. What is your estimated annual income (before taxes or other deductions)? (n = 37)**



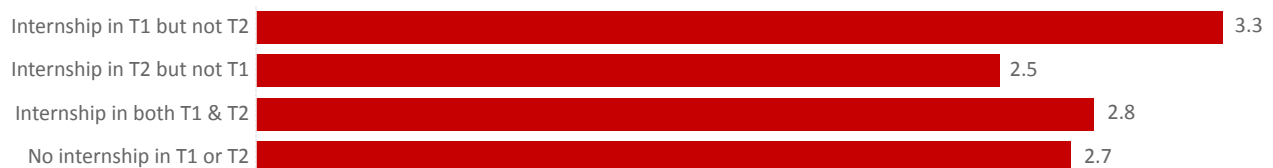
### Survey results: Job market performance by groups

Twenty-three of the 44 employed students did not take any internship during college (52.3%), four reported internship participation in T1 but not T2 (9%), six reported internship participation in T2 but not T1 (13.6%), and 11 reported participation in an internship at both T1 and T2 (25%). The job market performance of these 4 groups of students is compared below.

We compared the average job search time in months among those 44 who were employed at the time of the survey between internship groups. Employed graduates with no internship experience reported that it took them, on average, 1.8 months to find a job. Graduates with internship experience (either at T1, T2 or both), on the other hand, reported that it took them, on average, 2.6 months to find a job. This apparent difference in favor of those without internship experience, however, does not pass the test of statistical significance according to commonly used thresholds.

Students who had internship experiences (either at T1, T2 or both) reported that their jobs were slightly more related to their fields of study, compared to graduates who did not take any internships in college (see figure 10).<sup>6</sup> The difference between these groups, however, is not statistically significant.

**Figure 10. How much is your current position related to the field you studied in college, on scale 1-5, by internship participation? (n = 44)**



<sup>4</sup> Median is a value that separates the higher half from the lower half of a data sample.

<sup>5</sup> Source: American Community Survey, 2019 1-year estimates. Available at: <https://data.census.gov/cedsci/advanced>; Table ID: S1903

<sup>6</sup> The relatedness between current job and college major was measured by one single question asking “how much is your current position related to the field you studied in college?” using a five-point Likert scale from 1=Not at all related; 2=A little related; 3=Somewhat related; 4=Very related; 5=Extremely related

Among the 37 students who reported their income, those who took internships at only T1 or T2 reported both the highest and the lowest average annual income of all four participation groups: \$35,667 and \$20,250, respectively. Those without any internship experience reported the second lowest annual income at \$30,532. Students who did internships at both T1 and T2 report an average annual income of \$34,000. On average, students who did internships in college reported slightly higher annual incomes than students with no internship experience, however, this difference was not statistically significant.

**Figure 11. What is your estimated annual income (before taxes or other deductions), by internship participation? (n = 37)**



We also investigated the relationship between internship participation and post-graduation employment status for all 60 students who had graduated from NEIU. No obvious relationship emerges between students' internship participation and post-graduation employment.

In sum, most of the graduated students were employed and about 39% indicated that their current jobs were very or extremely related to their college majors. An important proportion of about 40% of the graduates also indicated that their jobs were very little or not at all related to their fields of study in college. Of the students who answered the question about whether their internship led to their current employment, only 25% found that it did, and nearly 69% indicated that it did not. Notably, job search through networking through family and friends and online search engines were the two main approaches for graduates to find a job. Lastly, graduates who had taken internships appeared to have jobs that were more related to their college majors and also reported relatively higher annual incomes, but these differences between them and those with no internship experience were not statistically significant.

Though these findings need to be further examined with a larger sample size, they imply the significance of internships in students' post-graduation labor market performance, especially regarding job search, job earnings, and their employments' relatedness with their field of study. However, the underlying mechanisms of the role of internships in individuals' job search processes need to be further investigated. We plan to continue exploring the longitudinal effects of internship participation on students' employment outcomes based on the above-mentioned findings, using data that aggregates the survey results from all sites participating in the *College Internship Study*. The results of the follow-up interviews highlight some of the specific ways that students perceive their internships to benefit their academic and career development.



## Survey results: Career adaptability development

This analysis uses career adaptability as an important psychosocial competency. It was measured using the 24-item Career Adapt-Abilities Scale (CAAS, Savickas & Porfelli, 2012), consisting of four sub-scales including concern about the future, control over one's future, curiosity about different career options, and confidence to achieve one's goals. Each of these subscales are measured by six questions that elicit how strongly the respondent rates themselves on these attributes on a five-point Likert scale (1 = not strong, 2 = somewhat strong, 3 = strong, 4 = very strong, 5 = strongest).

Table 4 shows the T1 and T2 mean scores and standard deviations for each sub-scale and the composite score for all the students in the sample. In general, the scores of all the four dimensions –concern, control, curiosity, and confidence– are higher in T1 compared to T2. The composite score for all career adaptability items at T1 was 3.71, which is higher than 3.54, the composite score of all items at T2, and this difference is statistically significant based on commonly used thresholds ( $t = 3.51, df = 176, p < .001$ ).

Results are similar for all the four career adaptability subscales. Scores at T1 are higher than at T2 for the concern, control and confidence, subscales, and these differences appear to be well beyond the commonly used threshold to determine statistical significance.<sup>7</sup> The score for the curiosity subscale is also higher at T1 compared to T2, and this difference is similarly statistically significant, although it falls close to the commonly used threshold of statistical significance ( $t = 1.65, df = 176, p = .049$ ). Considered in context, it follows the clear pattern where scores were higher at the first instance of data collection.

We then assessed individuals' career adaptability development over time for different internship participation groups. It is important to note that the sample sizes of all groups are relatively small, requiring qualifications to the results. Despite these restrictions, we found consistent results: scores at T1 are higher than at T2 and, with the exception of the group of respondents who did internships only in T2, all differences are statistically significant.<sup>8</sup>

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7 Significance results for the concern subscale are as follows:  $p < 0.001, t = 3.99, df = 176$ ; for the control subscale are  $p = 0.003, t = 2.74, df = 176$ ; and for the confidence subscales are  $p = 0.005, t = 2.64, df = 176$ .

8 Significance results for the group who did internships at both times are as follows:  $p = 0.032, t = 1.92, df = 29$ ; for those who did internships at T1 only are:  $p = 0.006, t = 2.99, df = 11$ ; and for those with no internship experience:  $p = 0.023, t = 2.02, df = 115$

**Table 4. Career Adaptability Results across T1 and T2. (n=177)**

Career Adaptability Composite and Sub-Scales	T1		T2	
	Mean	SD	Mean	SD
Career Adaptability Composite	3.71	0.75	3.54	0.80
Sub-Scale: Concern	3.77	0.86	3.53	0.87
Sub-Scale: Control	3.76	0.80	3.59	0.88
Sub-Scale: Curiosity	3.56	0.94	3.46	0.92
Sub-Scale: Confidence	3.73	0.87	3.58	0.93
Career Adaptability Composite Score by Internship Participation	T1		T2	
	Mean	SD	Mean	SD
Internship at both T1 & T2 (n=30)	3.64	0.85	3.39	0.85
Internship at T2, not at T1 (n=19)	3.62	0.70	3.53	0.82
Internship at T1, not at T2 (n=12)	4.03	0.84	3.45	1.20
No Internship at T1 or T2 (n=116)	3.70	0.73	3.59	0.74

**Interview results: Student internship outcomes**

From the 24 students who participated in the initial interview (Time 1) at NEIU, 12 students participated in the follow-up study (Time 2). Among the 12 participants, seven participants self-identified as females, and five as males. Four participants self-identified as White, 3 as Hispanic, 3 as Asian, 1 as Middle Eastern and 1 as Black. Their majors included: Psychology, Social Work, Marketing, Biology, Anthropology, Accounting, Earth Science, and other interdisciplinary majors. Participants either graduated from NEIU and were seeking employment, had employment, or were enrolled/planning on enrolling in graduate school.

Seven of the 12 student who participated in follow-up interviews had participated in an internship by Time 2. They shared a wide range of experiences, reflections, and benefits after participating in an internship experience. Below we described the most common themes or outcomes of internship experiences, which include: learning and skill development, obtaining real-world experience, increased self-confidence or motivation, and exploration of the field from participating in an internship (Table 5).

**Table 5: Perceived Outcomes of Internship Participation at NEIU (n = 7)\***

Outcomes	Examples
Learning and Skill Development	Developing a skill related to their internship or learning concepts. Skills can include highly technical or specialized knowledge particular to the profession.
Real World Experience	Obtaining “real world experience,” i.e., gaining experience that is different from classroom, that is hands-on, practice in field, experience in workplace setting, with employees.
Increased Self Confidence or Motivation	Increased self-confidence and/or motivation is an outcome of the internship experience. Motivation can also be directed toward academics and finishing the academic program. Other outcomes can include become aware of personal strengths or weakness, or develop a feeling of personal independence.
Exploration of field (and career goals)	Internship outcome is to acquire a better understanding of the field and career, for example, by narrowing the focus for specific career goals and trajectory; or exploring the specific environments, skill sets, or workplace settings.

\*This sample includes the 7 follow-up interviews with students who had participated in an internship at Northeastern Illinois University; the characteristics of internship experience include those that were discussed most frequently, in descending order of frequency.

Participants in the study most frequently described their internship opportunities as learning experiences that facilitated their skill development. Some students talked about how they were able to learn beyond the theories taught in the classroom and develop additional skillsets that were helpful, even after graduation. A student said, “So, a lot of those skills that I had to be creatively drawing from to do that internship and pulling from that same kind of creative source to do what I'm doing now, so that's great.” The internships also helped some students to gain administrative and communicative skills, knowledge on working with clients, entrepreneurial skills, and develop their initiative and self-management, what one student described as the “self-starting strength muscle.” Another student talked about how learning on site helped him be more informed about the job he was in:

*“(...) it was a phenomenal experience that I was able to interact with students. My supervisor was amazing. I learned like a lot of skills about what students' needs, what students' needs are, as well as like how the day-to-day job will look in the future. So, if I wanted to work in that field, I understood what the day was, what the commitments were. I understood like the ins and outs of it. There was no, like no loopholes involved. So basically, I was doing the job already. And of course, my hours were the super extraneous because I was only an intern, so I'm only there three to, three days out of the whole week. But I was able to see within that time period, okay, what it would look like day-to-day.”*

Students reflected on how internships paved a way for them to gain real world experience in their field of interest. Sometimes, internships are the only way to acquire such experience and develop informed relationships in the industry. It is also a way to learn about the “systems” of the organizations so students can become valuable assets to them in the future. One student talked about the importance of such hands-on experience that allowed them to draw from previous skills and appreciate the work they were doing:

*“The internship was more hands-on experience. And I decided to do the internship because it was also with kids, refugee kids from Africa. And I would work with them one-on-one. And like I remember we’d plan a field trip for them. When they didn’t have school, and we went to the zoo, the botanic garden. It was very hands-on experience and when I moved to the position that I’m in right now, I was able to talk about that experience. I [inaudible] yes I had hands-on experience with children before. I was [inaudible] level because [inaudible] foster care children. But I was able to bring skills I learned in my undergrad internship. So I was very aa appreciative to have that experience. And they asked me a lot of questions about it. They were well, what did you do? What did you learn? How can you apply those skills to here? So it was I think a very smart decision of me to have done that internship in my undergrad.”*

During our interviews, students emphasized how having an internship helped them be more self-confident, motivated, and use the “self-starting strength muscle,” as one student described his increased feeling of proactivity that was an outcome of internship participation. Another student shared how she is usually shy, but the internship pushed her “to speak up and to learn how to communicate a bit better.” Another student described how her increased professional knowledge acquired at her internship helped her to “build confidence,” which helped her to be successful in subsequent internship and work settings:

*“I do like take a lot of experience that they have taught me in like that I can like bring along with my other internship as well as to my workplace basically to build confidence as well as to build like a more professional background for me.”*

Many students also talked about exploring potential career fields and goals through their internships. Some talked about how these positions are geared toward starting a career and learning whether it is a good fit or not. A student shared how their internship position “solidified” something he really wanted to do and fed their aspirations. Sometimes a position allowed students to gain a multitude of experience, while specializing in specific areas. As one student described:

*“(…) with the internship I did last summer I feel like it gave me more exposure to other departments in the company. Before I was only just working with accounts payable and accounts receivable so I would only work with you know a few people throughout the day every day. But with this internship I was more I guess forced to work with operations department, you know safety department, human resources you know upper management which gave me more exposure and kind of forced me to learn how to communicate with other departments and kind of help them understand you know what I was – what I was doing and if I was asking for more information or you know I needed something else I kind of had to explain why I needed the information. And just – if they had a question about you know reports I had to learn how to translate those reports to them kind of help them understand how to read it and how I got that information.”*

Although most students recounted different positive outcomes from their internship experiences, there were a few we spoke about barriers that prevented them to pursue internship opportunities even a year later. Factors such as being undocumented, not being adequately trained to serve the nature and confidentiality of the positions, or simply interested in pursuing full-time work contributed to their decisions.

These examples from our interviews illustrate how internships prove to be fruitful and create a network for students to climb up on their career ladder. Students are able to grow both personally and professionally and use their internship experiences for greater positive outcomes in their life.

## Interview results: Student experiences with COVID-19

Since the beginning of the Spring 2020 semester, many universities across the country transitioned to online or a hybrid learning model due to the COVID-19 pandemic. In the state of Illinois, Governor J.B. Pritzker declared all counties as a disaster area on March 9, 2020 in response to the outbreak. Due to the unprecedented nature of the situation, we wanted to understand how the pandemic affected the students we interviewed, including their academic and career trajectory and internship experiences.

The 12 students who participated in follow-up interviews shared how they had to quit their jobs, survive on limited income, change plans for after graduation, and even struggle to finish their current coursework at NEIU. Some students expressed difficulty and frustration in the transition to online learning; for example, some students in the sciences did not have enough hands-on learning as lab work was limited due to the pandemic, and one student had to adjust their course load and is now a semester to a year behind from graduation.

Students also discussed how the pandemic affected their internships and career trajectory. The implications were not just limited to their professional lives but affected them personally to various degrees. One student shared:

*Due to COVID-19, I was laid off of work, and I was unemployed, and here in Chicago, we had a roughly three-month mark, where the Mayor of Chicago shut down the city, and it was not okay to even go for a light, brisk walk. That you were to be confined to your homes. So, during the COVID-19 pandemic, obviously, in cases like that where you're not allowed to leave your home, getting internships or even just field experience, in general, any of them currently with like national parks and still being closed due to the global pandemic, it's still tricky with that, with regards to my school, obviously. I mentioned a little bit earlier all of my classes being lab focused. That switched to completely online or mostly online. And so, I've been learning how to identify things in my major via online. It's very, very difficult to look at a rock underneath a hand lens through a computer screen. So, it takes a lot of good methods.*

Another student shared how the pandemic paused their career choice and had them switch jobs several times:

*Yeah, so I was working. I graduated in December of 2019. And then I had the same job when you guys interviewed me. But I actually had quit my job because I was going to start my career as a police officer, and then COVID hit. So I was really supposed to start March 23, and COVID happened like the beginning of March in Chicago. So then I got prolonged and still has not began because of funding. And so, that was everything shut down. Like everyone was quarantined until things opened back up. Then I got a part time job as a waitress, so just to do something in the waiting time. And then I was also babysitting while I was waitressing. And then with a number like when it got kind of cold, like, in October, I stopped the waitressing because of COVID, though with not so much dining outside to make me comfortable. So I stopped doing that. Now I'm just babysitting for people here and there when they need a babysitter. So like, this pandemic has impacted me like tremendously. And yeah, I mean I also started my career, so that's kind of a bummer. But I do kind of believe everything happens for a reason.*

COVID-19 had severe financial implications on several students as well. As students are between jobs, losing their source of income, and working unpaid for non-profits, some are struggling to make ends meet. A student shared that they are working full-time in addition to an unpaid internship as their mother cannot work due to the pandemic and they have to support the family. For another student, applying to graduate school because of tuition and application fees has been a hurdle. Their options to apply for a part-time job fell through because of the pandemic and now they are relying on fee waivers to complete their applications. Students who were planning to pursue a career in the arts felt especially disadvantaged as events were cancelled all over the state and country – *“I'm a musician so all I do is play music. And it was terrible for us because we can't play live.”*

Other students have been fortunate to find a job or maintain their position amidst the pandemic. A student commented:

*“So it feels really lucky to have gotten that position because there really aren't very many organizations looking for interns in LGBTQ work I like the way that – the work that I want to get into, so. Yeah, because of COVID, all of my interviews were done over Zoom, and there were two interviews, and then yeah, that was it. And my onboarding, everything has been remote. So I'm doing everything remotely working from home.”*

A student in a social work graduate program shared how they were *“getting ready to go back to my internship and start, they basically cancelled the rest of the, my school cancelled the intern. My school didn't really cancel the internship, the internship, they stopped accepting students into the school. So, I didn't have to go in anymore. Then, we tried to develop an online internship, an online version of it.”* One student that is working with kids mentioned a challenge of living inside a neighborhood so they don't expose themselves or the children to COVID and said, *“So right now, it's like you can't really leave the organization unless it's like a big emergency. All of our groceries have to be brought in to the neighborhood. Any essentials are brought to us. So we're kind of stuck inside with the kids for safety guidelines.”* For another student and their partner, they were able to move to another state and continue their entrepreneurial ventures online as they described, *“that's the beautiful thing in our life about the pandemic is that it got us here, and that's been our ultimate dream.”*

COVID-19 also had significant impact on the students' social life and mental health. One student talked about how they are still able to talk to friends online but *“there's the fatigue, social fatigue is different. You know, not being able to be around our friends as much. And even when we are around, not being able to be in close proximity, and like simple social things like hugs and sitting next to one another.”* Another student described feeling alone and resorting to video games to stay distracted while another was focusing on their faith:

*“I think that, you know, in the end, going into little bit with religion, I haven't received hardly any support from the government, from school, from even friends, family. We're all just trying to get through it together. I believe, you know, with my faith that, you know, regardless of what happens, you know, God will protect us in the end. You know, trying not to dabble too much into religion, but that is what I've been doing to keep my mental sanity, you know, intact.”*



For some, simple self-care activities such as crocheting, meditating, or journaling have proven to be effective. Working remotely has also made them feel distant from their colleagues and receive limited experience, but their employers have been flexible, and they are trying to make the most out of the situation given the challenges and reality of the situation.

Our interviews highlighted a wide range of student experiences in regard to the pandemic. Although many students struggled and are still struggling, they still maintain a positive outlook and resilience to get through this. As the university shifted to online learning and provided resources to adapt, there was still limited guidance in finding internships. Some students were able to rely on their families, but others expressed concerns of stress and fatigue. Thus, the COVID-19 pandemic sheds light to more challenges that go beyond academic and career paths and exacerbates the existing barriers to internships (e.g., lack of time, finances, and opportunities) even further.

## VII. CONCLUSIONS AND RECOMMENDATIONS

The first round of data collection for the College Internship Study at NEIU indicated that there were social and economic barriers to internship participation that some students faced. It also suggested that students with internship experience display relatively high career adaptability, as well as positive outcomes of internship participation, including internship satisfaction and perceived developmental value. Furthermore, these internship outcomes were associated with high quality supervisor support, the presence of supervisor mentoring, the clarity of work tasks, task similarity to entry-level jobs, the link between academic programs and internships, and the amount of the interns' autonomy in performing their work ([Wolfgram et al., 2020](#)).

The findings of this one-year follow-up study indicate that barriers to internship participation persist for many students. They also highlight several noteworthy longitudinal outcomes of internship participation. Students who graduated from NEIU with internship experience had relatively higher annual income than graduates with no internship. Notably, students reported similar levels of mentorship during their second internship compared to their first. At both times students also perceived similar levels of support from their supervisors, and at both times indicated that they received more support than mentorship. Also, students who had some internship experience were more likely to find jobs related to their fields of study than students who had not participated in an internship.

Participating NEIU students reported higher levels of career adaptability the second time they were surveyed, across all four dimensions of the career adaptability construct. It is our intention to conduct further longitudinal analysis of students' career adaptability scores using aggregated datasets.

The first [report](#) from the *College Internship Study* at NEIU contained recommendations for students, educators, and employers to ensure quality internship experiences for NEIU students. The results of the T2 follow-up highlight the importance of the following recommendations:

- There remain students who want to participate in internships but who face financial and other obstacles, such as the need for paid employment. Educators and employers are encouraged to remove this barrier by finding ways to compensate interns whenever possible.



- There is evidence that doing an internship may be associated with a variety of positive outcomes, including higher annual income after graduation, closer connections between employment and fields of study in college, and lesser time searching for a job. Still, in order to make the most of their experiences, students should be coached on how to advocate for their needs with employers and to communicate their need for mentorship. Additionally, educators and employers should work to ensure that internship supervisors understand the need for and are equipped to provide supportive mentorship to their interns.
- Students' perceived mentoring remained low in the T2 study (similar to the findings at T1). This indicates the need for more attention from educators and employers to mentoring. Students also indicated that they received more support than mentorship from their internship supervisors, suggesting the need for a stronger focus on communicating and facilitating students' career exploration during their internship beyond the completion of job tasks.

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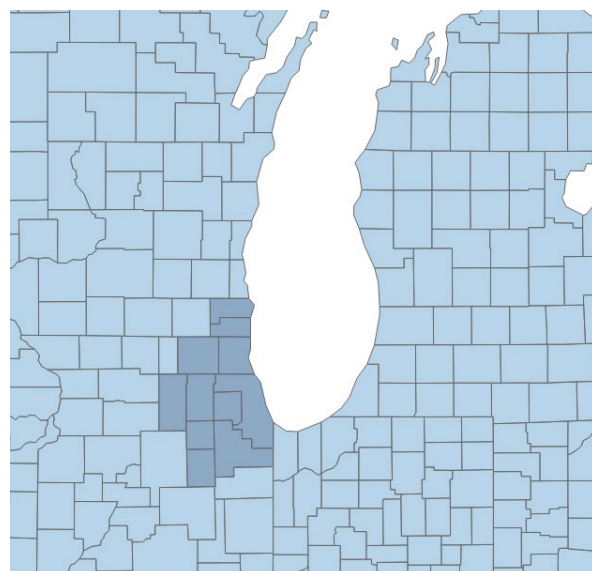
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## Appendix: Intern Labor Market Analysis

As a complement to the primary data we have collected as part of the College Internship Study, we have combined multiple public and proprietary data sources to provide a localized intern labor market analysis. These findings are intended to help contextualize the internship experiences at your institution with respect to the availability, competitiveness, and quality of internships in your regional economy.

We determine Intern Labor Markets based on Commuting Zones (CZ). CZs are statistically derived clusters of counties generated by the USDA and were most recently updated by Fowler et al (2016). These zones are created based on commutes from home to work reported to the Census as well as a hierarchical cluster analysis of consumer data from local economies.<sup>9</sup> The metric we use to measure Intern Labor Markets is the Intern Supply Ratio, which is simply the ratio of supply and demand for interns in the CZ. Demand is based on Burning Glass Technologies Labor Insights job ad data, while supply is the total enrollment of all post-secondary institutions in the CZ. Figure 1 shows a map of the counties included in Northeastern Illinois University’s CZ highlighted among their neighboring counties.

**Figure 1: Northeastern Illinois University’s Commuting Zone**



The Intern Supply Ratio is not a perfect metric and is currently being refined to account for the fact that not every enrolled student should be considered a “potential intern”. At present, it considers the maximum amount of supply, suggesting that the ratio is inflated to its’ greatest supply extent. Table 1 displays the supply, demand, and ratio for the CZ in which NEIU is situated. **The ratio indicates that there are roughly 105 potential interns to each internship job posting.**<sup>10</sup>

<sup>9</sup> <https://www.ers.usda.gov/data-products/commuting-zones-and-labor-market-areas/>

<sup>10</sup> Burning Glass data can be broken down by required education, though many internship posts do not include this requirement, so we have not disaggregated by this measure. Most institutions also typically have a mix of degree program offerings, resulting in the decision to leave job postings as aggregated.

**Table 1: Supply and Demand in Intern Labor Market**

Variable	Value
Total Enrollment in Commuting Zone	713,340
Total Internship Job Postings	6,827
Intern Supply Ratio	104.5

Figure 2 shows the top 15 employers of interns in NEIU’s CZ. Of the 6,827 total job postings, 1,770 (25.9%) come from these top 15 employers.

**Figure 2: Top 15 Employers of Interns in Commuting Zone<sup>11</sup>**

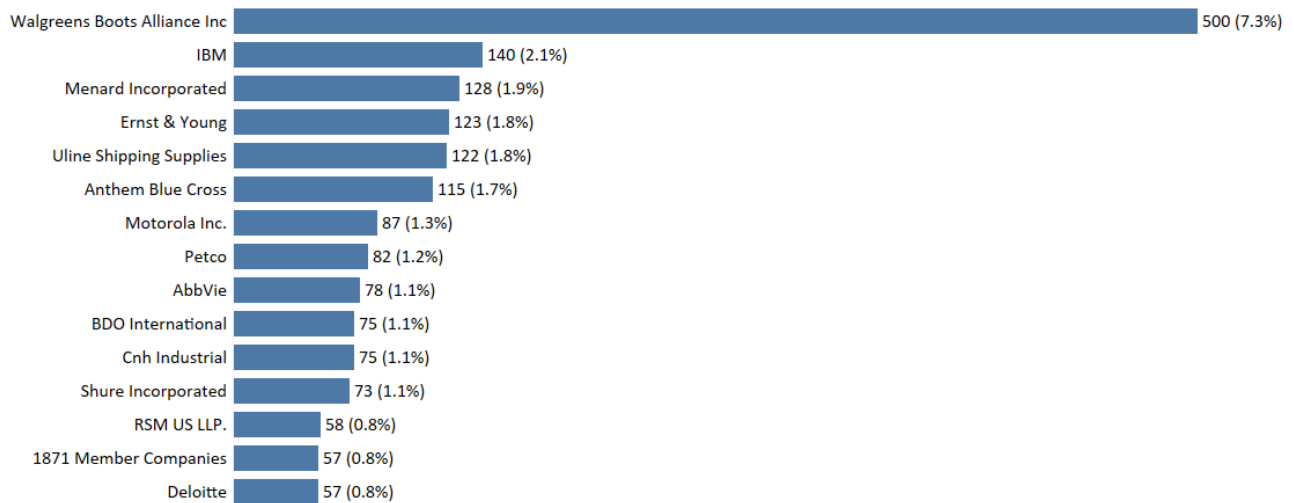
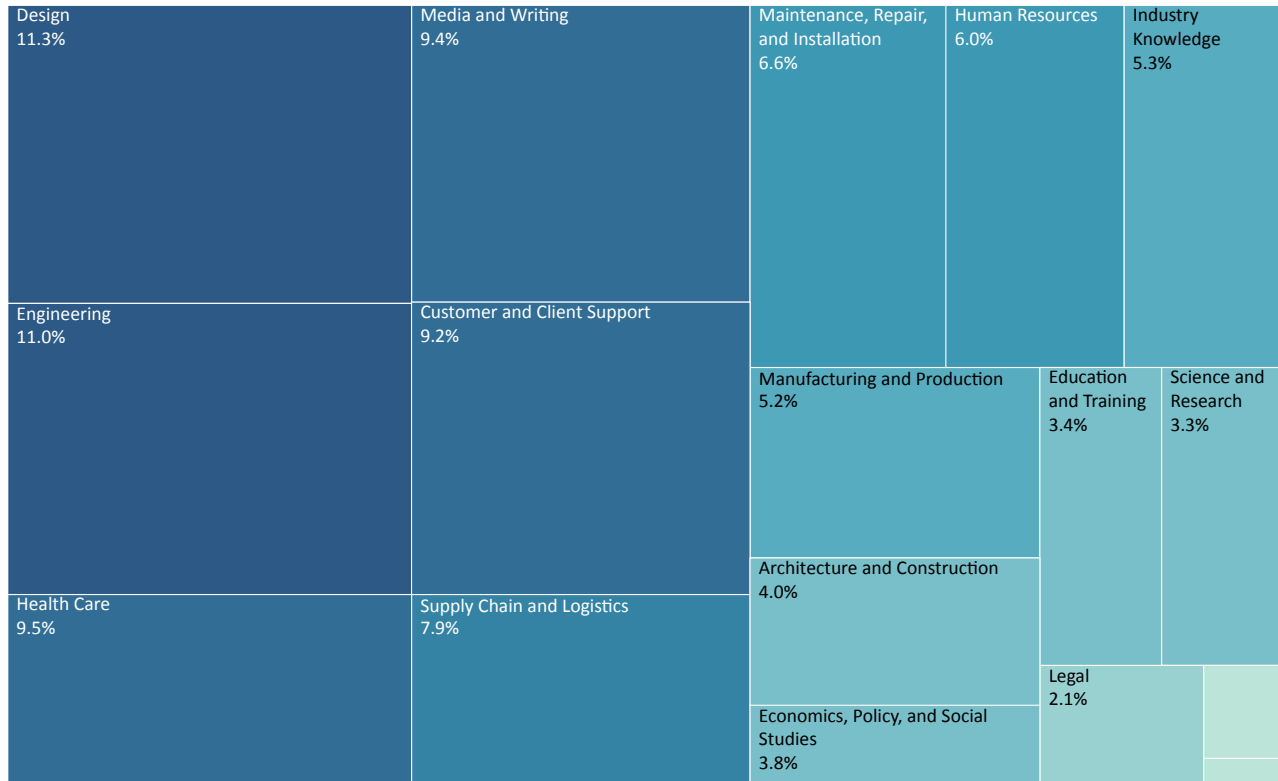


Figure 3 represents the top skill cluster families in demand for interns for the CZ of interest. Skill cluster families are generated by Burning Glass and are explained in their released White Paper.<sup>12</sup> There is a total of 28 skill cluster families. Each job posting can represent more than one skill cluster, meaning that total cluster count should only be considered relative to other skill clusters rather than relative to job postings.

<sup>11</sup> Percent in parentheses represents share of total job postings, rather than share of top 15. In the event that employers appear to be listed multiple times by Burning Glass, we have chosen to defer to Burning Glass’ employer designation criteria.

<sup>12</sup> <https://www.burning-glass.com/research-project/skills-taxonomy/>

**Figure 3: Top Skills in Demand for Interns**



The tree map presented in Figure 3 indicates a diversity of skills in demand for NEIU's CZ. Though there is no one clear skill cluster in most demand, Design, Engineering, Health Care, Media and Writing, and Customer and Client Support are all above 9% of the total skill demand. These five skill clusters represent 50.4% of the total skill demand for the CZ. The percent values in the figure can be thought of as the proportion of the given skill cluster relative to the total skill cluster codes.



The **College Internship** Study



**Wisconsin Center for  
Education Research**  
SCHOOL OF EDUCATION  
UNIVERSITY OF WISCONSIN-MADISON

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*Note:* CCWT staff are available to conduct program evaluations and/or needs assessments of a college or university's internship program such as the one reported here. Our procedures are guided by the rapid ethnographic assessment method and can involve quantitative and qualitative data sources including surveys, document analysis, focus groups and interviews. After analysis, customized technical reports can be provided to institutional partners with actionable recommendations provided regarding how to address challenges and capitalize on program strengths.

The mission of The Center for Research on College-Workforce Transitions (CCWT) is to conduct and support research, critical policy analysis, and public dialogue on student experiences with the transition from college to the workforce in order to inform policies, programs, and practices that promote academic and career success for all learners.

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