Results from the College Internship Study at University of Wisconsin-Parkside

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WISCONSIN CENTER FOR EDUCATION RESEARCH | UNIVERSITY OF WISCONSIN–MADISON

DECEMBER 2018

CCWT CENTER FOR RESEARCH ON College-Workforce Transitions

The College Internship Study

EXECUTIVE SUMMARY

This report includes preliminary findings from the first round of data collection for *The College Internship Study,* which is a mixed-methods longitudinal study of internship programs at University of Wisconsin-Parkside. The study includes an online survey of students with junior standing or above (n=525), focus groups with students who have and who have not had an internship experience (n=25), and interviews with career advisors and faculty (n=6), and with one area employer involved in internship program administration. The first stage of data collection occurred in the Spring of 2018, which will be followed by a second round of data collection in the Spring of 2019.

The research questions guiding this study focus on how stakeholders conceptualize the idea of internships, participation rates by certain demographic characteristics, and the relationship between internship program structure and student outcomes. Some key findings from our analysis of the data include:

- While educators and students agreed that the terms "experience" and "advancement" captured the idea of an internship, educators seemed to prioritize the concept of "development" and students the concepts of "learning" and "career";
- Twenty six percent of the respondents of our survey had participated in an internship program within the past year (n=136);
- For these students, 70% of them reported that internship was not required to graduate, and only 18% reported that internship was required to graduate from their academic program;
- Participation in internships was not correlated with many of the demographic variables measured in our survey, such as first-generation college student or disability status. However, students enrolled as full-time students, those with a higher GPA, and students whose main job provides career-related skills were more likely to have participated in an internship;
- Barriers to participation in internships included having a job (61%), a heavy course load (56%) and lack of internship opportunity (44%). Focus group participants also reported that financial consideration was a key factor in their decision to not pursue an unpaid internship;
- Several features of internship program structure are strongly associated with college students' satisfaction and their perception that the internship helped to develop their skills and personal career goals, including the quality of supervisor support, the presence of supervisor mentoring, the clarity of work goals and tasks, and the link between academic program and internship learning;
- While outcomes such as employment status and wages will be studied over the next 12 months, near-term outcomes of participating in an internship program include the opportunity to gain real-world experience and socialization into a profession, to explore oneself and one's career interests, to cultivate professional networks, and to obtain post-graduation employment.

This report concludes with recommendations for specific steps that students, faculty and staff at UW-Parkside, employers and policymakers can take to increase participation rates, access, and program quality for internship programs in southeastern Wisconsin.

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I. INTRODUCTION: Why study college internships?

Internships are widely perceived as important co-curricular experiences that can enhance student learning and facilitate their transition to the workforce. Advocates argue that through internships, students can develop new skills and abilities by transferring academic knowledge to real-world tasks, explore different career options, develop new professional networks and even obtain full-time employment. At the same time, employers can use internship programs to develop a pipeline of new recruits that can be vetted on the job for future employment, and postsecondary institutions can increase their students' career prospects and real-world experiences. Given these potential outcomes, internships are often described as a "win-win-win" situation for higher education, employers, and students themselves.

However, the research literature clearly indicates that internships are neither easy to design and implement, nor are they a panacea for the long-standing problems of cultivating students' skills and easing their entry into the labor market (Hora, Wolfgram, & Thompson, 2017). Access to internships themselves can be difficult, particularly for low-income, first-generation students who may be unable to engage in unpaid labor and/or lack social networks that facilitate participation in internship programs. Furthermore, while internships can provide a rich, experiential learning opportunity for students, long promoted by education theorists and learning scientists (e.g., Dewey, 1938; Resnick, 1987), designing a robust learning experience within an internship is much easier said than done. Not all internship experiences are designed and implemented with attention to best practices in the field, which could be due to a lack of knowledge about internships, adequate human and financial resources, or institutional capacity and supervisory expertise at both the college or job-site.

Despite these challenges of access and program quality, policymakers and educators view internships as a potentially important and influential component of students' education and career development. But before the potential of internships can be fully realized, it is necessary to first document the current state-of-affairs at the institutional level, so that future planning can be based on rigorous evidence. For instance, data on student participation and experiences with internships as well as the perspectives of career services staff, faculty and employers can be used to: (1) identify strengths and weaknesses in current programming, (2) establish a baseline for long-term analysis of program quality and impacts, and (3) inform decision-making about future program development and resource allocation.

In early 2018, the Center for Research on College-Workforce Transitions (CCWT) at University of Wisconsin-Madison launched the College Internship Study as a translational research program that could provide key stakeholders with robust, actionable evidence about internship programs. Since in-depth data on internships tend to be difficult to access, our aim in this study is to provide institutional leaders, faculty, and career services professionals at UW-Parkside with rigorous data on issues related to internship program access and quality. In doing so, we place students' experiences and perspectives at the heart of the analysis while also attending to the critical issue of institutional capacity—two considerations that should guide decision-making about future policy and practice around internship programs.

II. BACKGROUND: What does the research literature say about internships?

An extensive body of research exists on college internships across a variety of disciplines and countries, leading to a literature that is simultaneously robust and inconsistent (Hora, Wolfgram, & Thompson, 2017). One of the biggest challenges facing the field of internship research is the lack of clear and standardized definitions regarding internships in general, and the paucity of empirical research on the structure of internship programs themselves. Given their similarity with other co-curricular experiences like coops or practicums and the variability in internship program design with respect to factors such as duration and task quality, in many studies it is highly unlikely that study participants are answering questions about their internships with a similar frame of reference in mind. Furthermore, before claiming causal relations between particular programs and student outcomes, it is essential to first describe these variables and the mechanisms that may govern their relations (Loeb et al., 2017). Consequently, descriptive research on critical mediating factors such as "the structure and format of internships" is essential in order to avoid treating the internship experience like a "black box" that mysteriously transforms students into work-ready individuals (Silva et al, 2016, p. 704).

In our study, we build upon promising lines of inquiry that examine specific features of internship program structure such as compensation, quality of supervision, and task clarity. For instance, studies on the coordination between employers and academic programs have shown that the more internships are clearly coordinated with academic coursework, the more students will gain from the overall experience (Katula & Threnhauser, 1999; Narayanan, Olk, & Fukami, 2010). Another important factor in perceived internship quality and efficacy is the behavior of job-site supervisors. Active and meaningful supervisor support was found to positively impact business students' satisfaction with the internship experience (D'abate, Youndt, & Wenzel, 2009), and was also positively associated with job pursuit, satisfaction, and career development in a study of 99 students in an undergraduate management program (McHugh, 2016). Other program design features that have been associated with satisfaction and other student outcomes include the duration of internships (Murphy, Merritt, & Gibbons, 2013), the degree of student autonomy to design and perform tasks (Virtanen, Tynjala & Etelapelto, 2014), the clarity and variety of work tasks (Bauer et al., 2007; Beenen & Rousseau, 2010), and the presence of detailed feedback from both educators and employers (Rothman, 2007).

With respect to outcome measures, some of the most common effects of internship participation examined in the literature is that of students' employment status, employer demand, or students' perceived readiness to enter the labor market (e.g., Jung & Lee, 2017; Nunley, Pugh, Romero, & Seals, 2010; Weible & McClure, 2011). While these long-term outcomes of internships are important, another effect of experiential and work-based learning is the development of students' psychological resilience and self-concept (Callanan & Benzing, 2004; Paulson & Eugene Baker, 1999; Taylor, 1988). A concept in vocational psychology that is particularly salient for college students in a labor market that increasingly features short-term contract work and frequent job switching is that of career adaptability, or the psychosocial capacity and skills to continuously adapt, persist, and self-manage one's career tasks, transitions and personal traumas (Savickas, 1997, 2005), which is a psychosocial variable examined in our study.

Finally, career advisors and postsecondary educators are increasingly concerned about the problem of access, particularly for low-income, first-generation students who may be unable to engage in unpaid labor and/or lack transportation, child-care, or social networks that facilitate participation in internship programs (Curiale, 2009; Finley & McNair, 2013; Perlin, 2012). Additionally, internship opportunities in rural areas and for students in certain fields (e.g., arts and humanities) may be limited, further exacerbating the access problem that may afflict students in many of our nation's colleges and universities.

III. METHODOLOGY

The College Internship Study is a mixed-methods longitudinal study of internship programs that is guided by the following research questions: (1) How do students, educators, and employers conceptualize the idea of an "internship"? (2) Does participation in internships vary by students' race, major, or socio-economic status? And, (3) To what degree are characteristics of internship programs associated with student satisfaction and students' perception of the value of the internship for their own career development?

The data collected for the study include an online survey of students with junior standing or above, focus groups with students who have and who have not had an internship experience, interviews with individuals (e.g., career advisors, faculty, and area employers) involved in internship program administration and implementation, and documents and online resources about internship programs and services at the institution. These data were collected at UW-Parkside in the Spring of 2018 by a team of trained researchers.

The online survey was administered to 1250 students with junior standing or above (with the exception of students in nursing, applied health sciences, exercise science, and education), and 525 responded which resulted in a response rate of 42%. The survey included questions about student demographics, characteristics of internship programs, barriers to internship participation, and students' career adaptability (i.e., a psychological construct linked to positive vocational outcomes). At the conclusion of the survey, 25 students volunteered for focus groups, which lasted approximately 45 minutes and included between two and three students in each group. Focus groups included more in-depth questions about experiences with and barriers to internships. In addition, 4 educators, 2 career advisors, and 1 employer participated in hour-long interviews regarding their own experiences administering internships (see Table 1).

Table 1: Description of Spring 2018 sample

	Survey	Focus Groups	Interviews
Students	525	12 (25 individuals)	N/A
Educators	N/A	N/A	
Faculty/instructors	N/A	N/A	4
Career advisors	N/A	N/A	2
Employers	N/A	N/A	1 firm (1 individual)

The data reported here represent the first phase of data collection at UW-Parkside (Time 1). Data will also be collected in the Spring of 2019 (Time 2), and will include a follow-up survey of students who responded to the T1 survey, which will represent a panel of students to track as they enter the workforce. Interviews will also be conducted with a sub-sample of these students, and also educators and employers in order to assess the nature of internship programming and/or effects over time.

Table 2: Description of survey sample

	Survey Sample	Institutional Population
Total	525	1250
Gender	Male= 196 | 62% Female= 318 | 38%	Male= 603 | 48% Female= 647| 52%
Race	Asian= 37 | 7% Black= 35 | 7% Hispanic= 66 | 13% White= 361 | 72%	Black= 98 | 8% Hispanic= 199 | 16% White= 813 | 66%
1st gen status	Yes= 245 No= 273	Yes=N/A No=N/A

These data were analyzed using a variety of techniques, including inductive theme analysis of interview and focus group transcripts, saliency analysis of free-list terms, descriptive analyses of survey responses, chi-square testing, simple linear regression, and multiple regression analysis of survey data. In our study we advanced no claims of causality among internship program participation and/or design features and student outcomes, but instead provided the type of descriptive research that must precede such empirical research and explore associations among these variables (Loeb et al, 2017). A more detailed description of our research methodology is included in Appendix A of this report.

IV. RESULTS: Institutional capacity and procedures for administering internship programs

One of the goals of our research was to map the institutional routines in place regarding how internship programs are designed, implemented, and monitored. This kind of diagnostic assessment provides a "road map" of the five Ws—where, who, what, when, and why—of a program or initiative. Without such information at hand, it is difficult to ascertain precisely how programs like internships function within a complex organization, what (if any) kinds of mechanisms may be at work in shaping student outcomes, and where strengths and weaknesses exist that could be addressed in future programming. In the case of internship programs, which are often not administered through a centralized unit (e.g., a single career services office) but are managed by multiple parties across (and even outside of) campus, this type of diagnostic mapping is even more important. At UW-Parkside, we collected information on these issues from interviews with faculty and advisors, along with an analysis of online and hard-copy documents.

Are internships required to graduate from UW-Parkside?

Excluding programs with required practicums (such as nursing and teacher education) the programs that require an internship for graduation are the Applied Health Science major, the Museum Studies Certificate program, the Organizational Communication and the Public Relations concentrations of the communications major, and the Industrial Chemistry concentration of the chemistry major. Most academic programs regularly offer a credited internship experience which is supported by faculty, and some programs such as Business and Modern Languages offer multiple specialized internship courses. There is also a Career Development and Practicum course offered by the

Academic Advising and Career Center to support and coordinate student internship experiences which is available to all UW-Parkside students. The internship programs in Business, Criminal Justice, Communications, and Theater Arts are highly encouraged by the departments, and those courses were identified by some of the students and educators we interviewed as being particularly robust.

Who is in charge of administering internship programs?

Internship programing at UW-Parkside, as one faculty explained, "it's very decentralized process. And so, it can look different across campus." Internships are supported by the advisors at the Academic Advising and Career Center, but also by individual faculty within academic departments and programs. General support for students is provided by the Center Director, 5 full-time academic and career advisors, and a part-time employer relations specialist. In addition to student appointments to advise and support internship opportunities, the services provided by the center include professional development classroom presentations and special event support, including an internship fair on campus. In addition to the support provided by the center, many internship programs are facilitated by professors across campus who coordinate internships for their students, often in the context of a credited internship class.

UW-Parkside is undergoing a major shift in the administration and support of internships, which is transitioning from the Advising and Career Center to the Office of Community Engagement. UW-Parkside has recently hired a full-time staff who has years of experience facilitating student internships in an academic department, and who will be able to draw upon the dense network of community partners cultivated by that office to identify hosts and support student internship experiences.

What is involved in the administration of internship programs?

All the staff at Academic Advising and Career Center support both students' academic and career advising needs. In terms of career advising, general support includes resume and cover letter reviews, mock interview and elevator pitches, and collaborating with faculty and employers to identify appropriate internship placement sites. Advisors also support student internships by giving career development presentations in internship courses and other courses offered by faculty, and by sponsoring an internship recruitment fair on campus. Advisors and faculty are also both heavily involved in the process of cultivating relationships with employers for the purposes of identifying internship hosts. Formally, the Academic Advising and Career Center had a fulltime Employer Relations Specialist, who was able to cultivate a diverse network of university-employer partnerships. In some cases, advisors and faculty match students with particular employers, and in other cases, they compile lists of potential internship opportunities for students to pursue. In the future, the work of identifying and supporting student internship placements with be taken over from the academic and career advisors by a fulltime staff in the Office of Community Engagement.

Faculty in programs with an internship requirement and/or course are also involved in a number of coordination activities with the student and the internship supervisor. This type of coordination can involve educating and formalizing an agreement on the expectations of the internship between the student, supervisor, and faculty, midterm or more frequent check-in meetings and a final end-of-internship evaluation meeting with the student and/or supervisor, and assigning and evaluating reflective writing assignments for the student to process their experience.

When do these activities take place?

Internship courses and student internship experiences occur year-round, although many students do their internships over the summer, when they may not be taking academic courses. Large local employers such as Northwestern Mutual Insurance conduct their internship programs during the summer. In terms of the timing of internships during the academic program, internship courses are at the 400-level, which encourages students to do their internship after the midpoint of their program. Some students, particularly those in Business and Communications, have two or even three internships across their academic career at UW-Parkside.

Why are personnel and organizational units involved in internship programs?

Many of the faculty and advisors who we interviewed for this study viewed their efforts to facilitate student internship experiences as an important and central aspect of their work. One faculty explained that the focus on internships was both evidence-based but also a central part of the UW-Parkside's culture and values, "I think that there's enough research out there that suggests that students are more likely to be employed if they have internship experience. And, I believe that our campus values an employment rate of our students." Career advisors and faculty often described their motivation to support student internships in terms of the career development value the experience can provide to students, including helping students to make connections in their field, developing and refining their career goals, expanding their skills, gaining work experience, and potentially, obtaining quality employment after graduation at their internship site. One faculty agreed with these career development benefits of internships but felt that the primary and most important benefit of an internship was the academic learning which students acquire by the opportunity to apply their course knowledge to a practical context.

V. RESULTS: How do students, educators, and employers conceptualize the idea of an "internship"?

One of the findings from our review of the research literature on college internships was that the term is used to describe a variety of different programs and experiences, such that a standardized definition of the term did not exist in policy, research or practice. Most commonly, the term wasn't defined at all in the literature and instead was presented as if a common understanding of the program's characteristics were known to all. Besides terminological confusion that inhibits comparability across studies, however, is the related issue of not knowing what different parties think about when they hear the term, or what cultural anthropologists call a "cultural domain" (Borgatti, 1994).

Focus group and interview results: What do "internships" mean to different people?

In our study, we sought to document the specific ideas and phrases that students, educators and employers associated with the term "internships," which sheds light on the assumptions and associations that social groups attach to an idea or phrase. These data were collected at the beginning of focus groups with students, and interviews with educators and employers.

Table 3: Free-list results for term "internship" for students, educators, and employers of UWP

Students (n=25)		Educators (n=6)	
Term	Salience	Term	Salience
Experience	0.612	Experience	0.789
Learning	0.402	Development	0.687
Career	0.287	Advancement	0.365
Advancement	0.268	College	0.365
Unpaid	0.226	Learning	0.286
Paid	0.209	Practical Application	0.236
Connections	0.167	Mentorship	0.231
College	0.144	Valuable	0.222
Internship Location	0.143	Paid	0.174
Development	0.14	Skills	0.158
Low-value work	0.127	Exploration	0.109

Table 3 illustrates the salient associations that students and educators at UW-Parkside had with the word internship (employers were excluded from this analysis due to low sample size). For both educators and students, salient terms related to internships included experience and advancement. Educators seemed to approach internships developmentally, seeing them as opportunities for students for development, learning, practical application, and mentorship. Students highlighted how internships related to their careers—they emphasized learning, careers, and connections. Compensation (paid and unpaid) was also more salient to students' understanding of internships than educators.

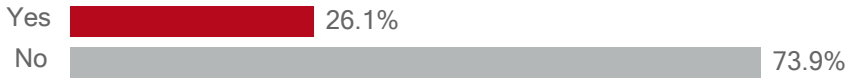
VI. RESULTS: Which students are taking internships at UW-Parkside?

In this section we present findings from the online survey and student focus groups regarding the number of students at UW-Parkside who have (and have not) participated in internships.

Survey results: How many students are participating in internships?

One of the most fundamental questions facing research, policy, and practice on college internships is how many students are participating in these programs. Among our study sample (N=525) we found that 26% took an internship in the past 12 months, with most students (72%) in this group having had only one internship experience.

Figure 1. In the past 12 months, have you participated in an internship?



N = 525, Number of observations by category: Yes= 136; No = 388.

These results indicate that a large number – approximately 74% of the study sample – have not had an internship experience, indicating that substantial growth in rates of internship participation is possible at UW-Parkside. However, this result should be interpreted with caution, so that participation in internships is not viewed solely as an issue to be addressed by mandating them for graduation. Instead, participation should also be considered in light of other issues including barriers to participation for students (e.g., compensation), availability of employer hosts, and requirements of and relevance for individual academic programs.

Survey results: Are there any demographic, life circumstance, psychological, or program characteristics that are associated with participation and non-participation in internship programs?

A wide range of factors may explain why a student elects to take an internship (or not), and understanding these forces is essential for institutional stakeholders who aim to improve access to these workplace learning experiences. In this section we report findings regarding differences in internship participation according to three categories: demographic variables (i.e., gender, race/ethnicity, first-generation college status, disability status, and parents' income), psychological variables (i.e., career adaptability), and academic related variables (i.e., requirement to take internships, enrollment status, academic program, GPA).

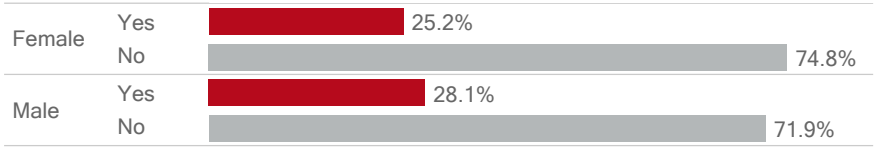
Demographic characteristics and internship participation

Little research exists on the relationship between participation in internship programs and demographic characteristics of college students. Given growing concerns about access to internship programs—particularly for students of color, low-income and first-generation students—here we examine the issue of equitable access for all groups among UW-Parkside students who responded to our survey.

The results show a higher participation of male relative to female students (28% vs 25%). However, it is important to note that while there are observable differences between internship participation by gender, chi-square test of independence shows no significant relationship between gender and internship participation. Thus, we cannot be certain that these differences were not due to chance.

Although we used p value to infer statistical significance in the current study, it is worth noting that p value should not be taken as a definitive validation of relationships between variables. Many factors may influence p value such as effect size, size of sample and spread of the data (Dahiru, 2008; Ziliak and McCloskey, 2008), so p value does not necessarily preclude a cautious analysis of results based on survey data. p should be used as a warning signal on the possibility how likely it is that any observed difference between groups is due to chance.

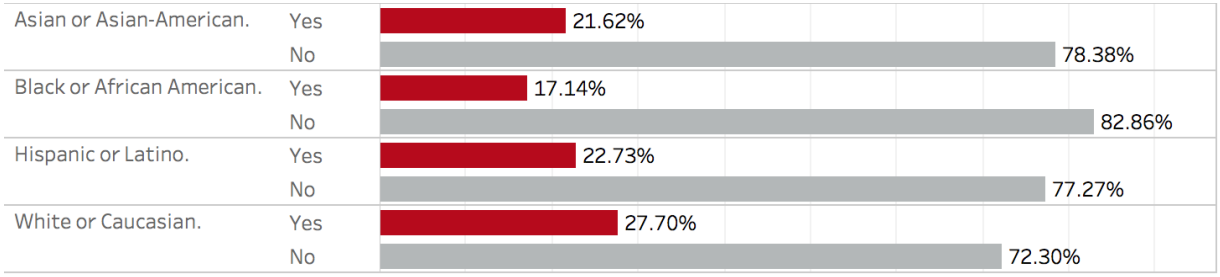
Figure 2. Internship in the Past 12 Months (Yes/No), by Gender



N = 514. Number of observations by category: Female / Yes Internship = 80; Female / No Internship = 238; Male / Yes Internship = 55; Male / No Internship = 141.

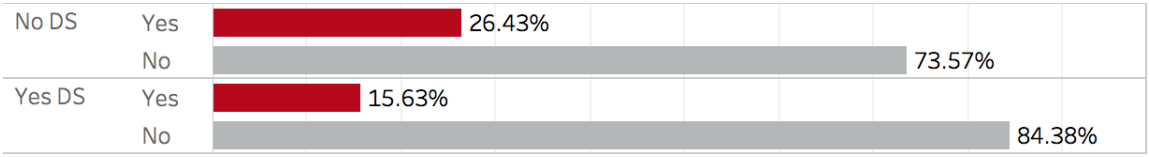
The results also indicate that a higher participation of Hispanic (23%) and White or Caucasian students (27%) participated in internships relative to Black (17%) and Asian students (22%). Participation in internships were also analyzed for student respondents by the following variables: disability status, first-generation status, and parental income. The relationship between internship participation and these variables are not statistically significant.

Figure 3. Internship in the Past 12 Months (Yes/No), by Race / Ethnicity



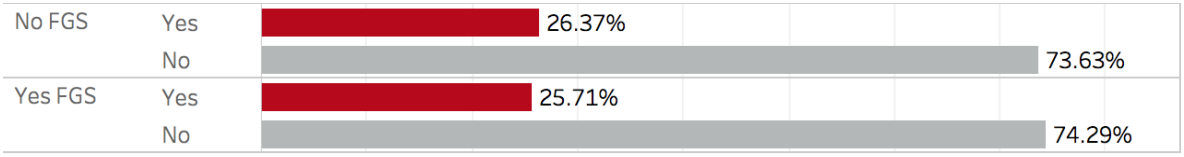
N = 500. Number of observations by category: Asian or Asian-American / Yes Internship= 8; Asian or Asian-American / No Internship = 29; Black or African American / Yes Internship = 6; Black or African American / No Internship = 29; Hispanic or Latino / Yes Internship = 15; Hispanic or Latino / No Internship = 15; White or Caucasian / Yes Internship = 100; White or Caucasian / No internship = 261

Figure 4. Internship in the Past 12 Months (Yes/No), by Disability Status (DS)



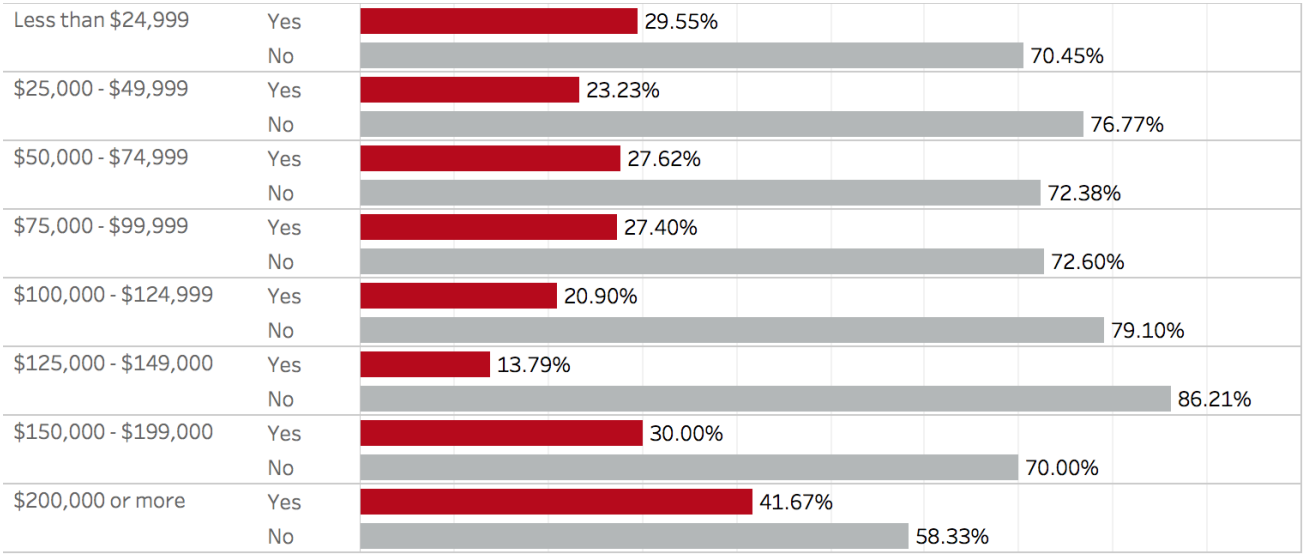
N=505. Number of observations by category: Yes DS / Yes Internship = 5; Yes DS / No Internship = 27; No DS / Yes Internship = 125; No DS / No Internship = 348.

Figure 5. Internship in the Past 12 Months (Yes/No), by First Generation College Student Status (FGS)



N = 505. Number of observations by category: Yes FGS / Yes Internship = 63; Yes FGS / No Internship = 182; No FGS / Yes Internship = 72; No FGS / No Internship = 201

Figure 6. Internship in the Past 12 Months (Yes/No), by Parental Income



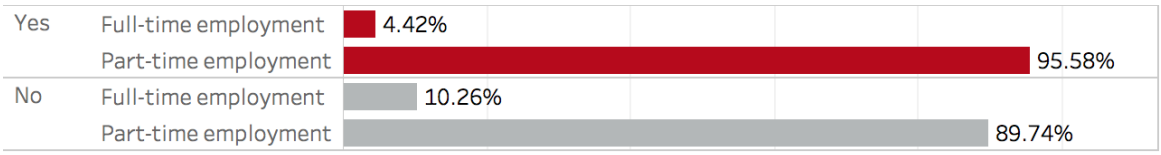
N = 505. Number of observations by category: Less than $24,999 / Yes Internship = 26; Less than $24,999 / No Internship = 62; $25,000 - $49,999 / Yes Internship = 23; $25,000 - $49,999 / No Internship = 76; $50,000 - $74,999 / Yes Internship = 29; $50,000 - $74,999 / No Internship = 76; $75,000 - $99,999 / Yes Internship = 20; $75,000 - $99,999 / No Internship = 53; $100,000 - $124,999 / Yes Internship = 14; $100,000 - $124,999 / No Internship = 53 ; $125,000 - $149,000 / Yes Internship = 4; $125,000 - $149,000 / No Internship = 25; $150,000 - $199,000 / Yes Internship = 6; $150,000 - $199,000 / No Internship = 14; $200,000 or more / Yes Internship = 10; $200,000 or more / No Internship = 14.

Life circumstances and internship participation

Next, research on college affordability and students' basic needs has indicated that issues such as food insecurity, rising costs of college tuition, and related issues have a negative impact on student persistence and achievement (e.g., Maroto, Snelling & Linck, 2015). To examine these issues we report employment status, reliance on food assistance, challenges with the cost of housing, and skills and knowledge provided by current main job for the entire study sample. In addition, we also examined the relationship between these variables and internship participation.

Figure 7 reports employment status (PT/FT) for those who work. For students who had an internship in the last 12 months, 96% worked PT and 4% worked FT. For students who didn't have an internship, 90% worked PT and 10% worked FT. As expected, there's a comparatively larger proportion of PT workers (96% vs. 90%) among students who had an internship in the last 12 months vs. those without an internship.

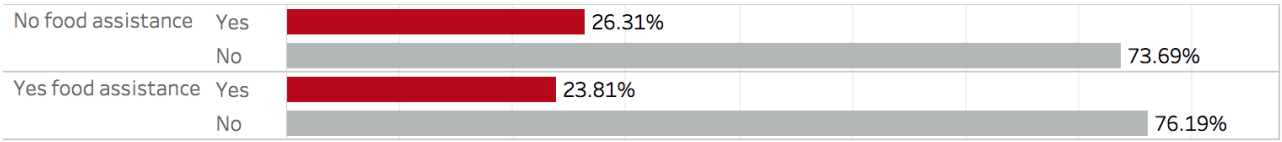
Figure 7. Internship in the Past 12 Months (Yes/No) by Employment Status (Part- or Full-time)



N = 425, Number of observations by category: Part-time / Yes Internship = 108; Part-time / No Internship = 280; Full-time / Yes Internship = 5; Full-time / No Internship = 32.

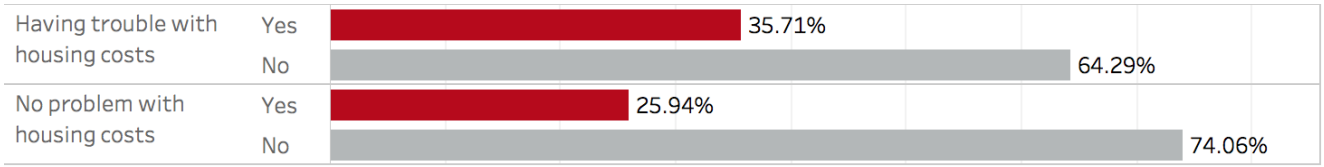
Awareness about college students' challenges with securing adequate food, or what is known as food insecurity, is growing in the US. In our survey, we included a question asking if students had received free food or meals using the Supplemental Nutrition Assistance Program or a food bank, and the results indicate that approximately 4% of all students reported relying on these resources in the past 30 days, and 24% of them have had internship experiences. For those who did not receive food assistance, 26% of them participated in internships (see Figure 8). Given that housing costs can strain a students' financial situation, we also asked about problems with paying rent or mortgages, with 3% of students reporting housing cost problems. Thirty-six percentage of students with housing costs problems participated in internships, and 26% of students without housing costs problems have had internship experiences (See Figure 9).

Figure 8. Internship in the Past 12 Months (Yes/No) by Students Requiring Food Assistance



N = 519. Number of observation by category: No food assistance / Yes Internship = 131; No food assistance / No internship = 367; Yes food assistance / Yes internship = 5; Yes food assistance / No internship = 16.

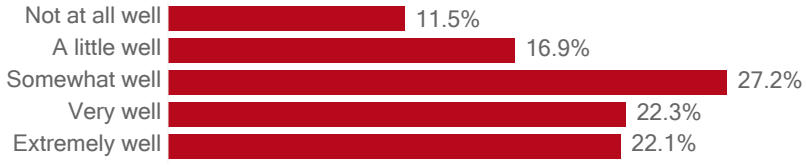
Figure 9. Internship in the Past 12 Months (Yes/No) by Students Having Trouble Paying Rent or Mortgage



N = 519. Number of observation by category: Not having trouble / Yes internship = 131; Not having trouble / No internship = 374; Having trouble / Yes internship = 5; Having trouble / No internship = 9.

In addition to these potential constraints on internship participation, given that many students worked part- or full-time, we explored whether or not their job was contributing to their career goals.

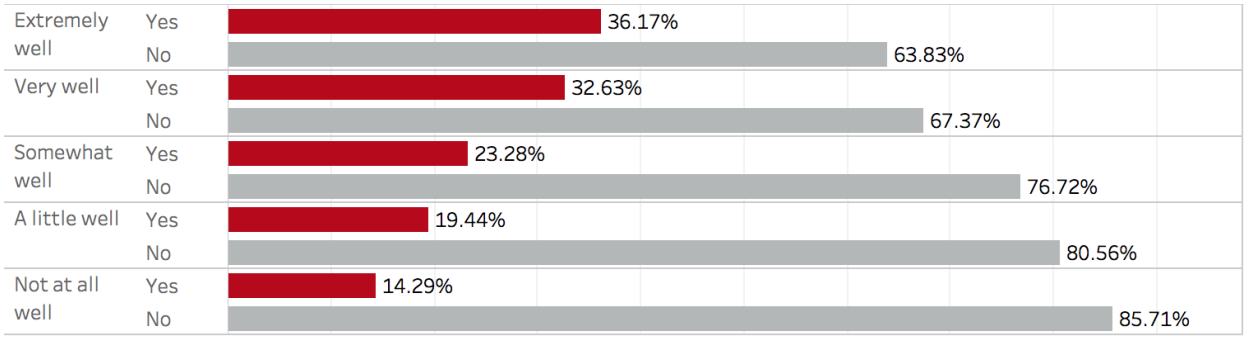
Figure 10. How well do you think that your main job provides you with important work-related skills, knowledge, and abilities that you will need in your desired career? (N = 426)



The results indicate that for approximately 44.4% of the study sample, the students felt that their main job was providing important career-related skills (see Figure 10). This result raises the prospect that for some students, their "main" paying job may in fact be providing career-relevant skills, albeit without the potential added benefit of close coordination with their academic program that some internships may provide. In addition, we also found that students' participation in an internship was positively and significantly associated with how well their main job provided them

with important career-related skills, knowledge, and abilities (see Figure 11). The greater degree of important work-related skills, knowledge and abilities provided by the main jobs was associated with higher probabilities that a student participate in an internship ($\beta = 0.31$, $p = 0.001$). The odds ratio is 1.36, which indicates that for every one unit increases in skills and knowledge that the main job provides, the likelihood that a student participated in internship increases by approximately 1.36 times.

Figure 11. Relationship between Internship Participation and How Well Current Job Provides Students with Important Skills in Desired Career



N = 426. Number of observations by category: Not at all well / No Internship = 42; Not at all well/ Yes Internship = 7; A little well/ No Internship = 58; A little well / Yes Internship = 14; Somewhat well / No Internship = 89; Somewhat well/ Yes Internship = 27; very well/ No Internship = 64; very well / Yes Internship = 31; extremely well / No Internship = 60; extremely well/ Yes Internship = 34.

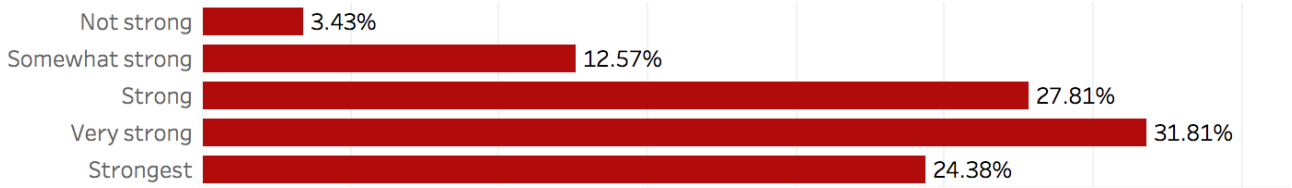
Psychological factors and internship participation

Research in counseling and vocational psychology indicates that psychological factors are also strongly related to a variety of career-related outcomes. For instance, career adaptability is a psychosocial resource that facilitates a person's ability to manage career-related tasks and changes (Savickas, 1997), which is significantly associated with one's adaptive behaviors (e.g., career planning, career exploration, self-efficacy), employability, vocational self-identity, and satisfaction regarding life, career and school experiences (Rudolph, Lavigne, & Zacher, 2017).

In this study, we examined the relationship between career adaptability and internship programs, using a validated career adaptability survey developed by Savickas and Porfelli (2012). These survey items encompass 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 which are measured by six items that elicit how strongly the respondent rates themselves on these attributes. These items use a five-point Likert style set of response options (from 1=not strong to 5=strongest), resulting in a range of 6-30 for each sub-scale. Cronbach's alpha of the four subscales, using the current data, range from 0.82 to 0.89. To illustrate the types of questions that are included in the career adaptability survey, we report two examples below from the UW-Parkside dataset (see Figures 12, 13).

Figure 12. Please rate how strongly you have developed each of the following abilities: Becoming aware of the educational and vocational choices that I must make (N = 525)

Figure 13. Please rate how strongly you have developed each of the following abilities: Planning how to achieve my goals (N = 525)

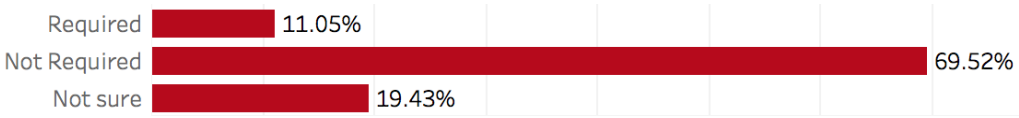


The survey respondents from UW-Parkside rated themselves relatively highly across the career adaptability sub-scales: concern (M=3.77, SD=0.76), control (M=3.79, SD=0.73), curiosity (M=3.58, SD=0.78), and confidence (M=3.83, SD=0.76). A logistic regression analysis testing the relationship between the composite career adaptability score and internship participation indicated no significant relationship between the two variables.

Features of academic programs and internship participation

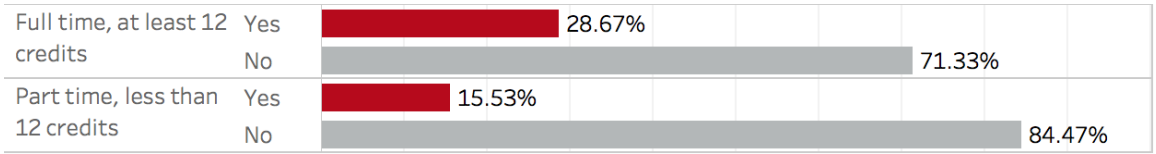
It is also possible that some features of a students' academic program and performance may be related to their participation in internships. Here, we examined the relationship between students' academic programs and students' participation in internship programs.

Figure 14. Is an internship required to graduate from your academic program? (N = 525)



The results indicate that only 11% of the respondents were in academic programs that required internships. The results also show higher internship participation for full-time students relative to part-time students (see Figure 15; 29% vs 16%). A chi-square test of independence shows a significant relation between enrollment status and internship participation, $\chi^2(1, 525) = 6.75$, $p = 0.009$. Full-time students were more likely to participate an internship than part-time students.

Figure 15. Internship in the Past 12 Months (Yes/No) by Enrollment Status



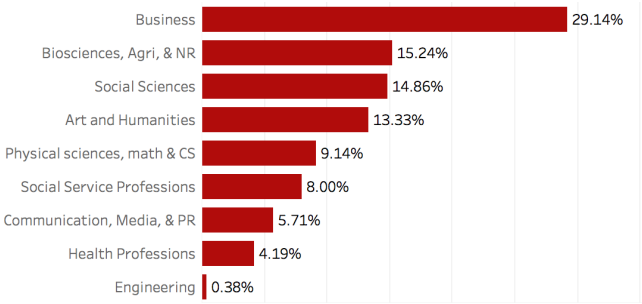
N = 525. Number of observations by category: Enrollment Part-time / Yes Internship = 16; Enrollment Part-time / No Internship = 87; Enrollment Full-time / Yes Internship = 121; Enrollment Full-time / No Internship = 301.

Additionally, we examined internship participation rates by disciplinary sectors (i.e., high-level disciplinary categories) instead of by individual departments, given the large number of individual programs at UW-Parkside (see Figures 16.1). We adopted the major field categories defined by the National Survey of Student Engagement (NSSE, 2018). These results indicate that disciplinary sectors with the largest numbers of students with internships are Business (33%), Art and Humanities (17%), and Biosciences, Agriculture, and Natural Resources (15%). In regard to internship

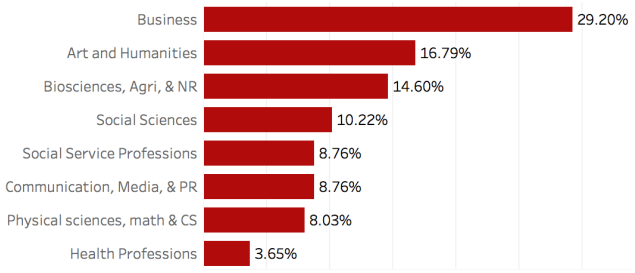
participation rate, Communication, Media and Public Relations has the highest participation rate (40%), followed by Art and Humanities (33%), Social Service Professions (29%), Business (26%), Biology Sciences, Agriculture, and Natural Resources (25%), Physical Science, Math, and Computer Science (23%), Health Professions (23%), and Social Sciences (18%). Engineering has the lowest participation rate (0%) but only two respondents are from engineering major.

Figure 16.1. Internship in the Past 12 Months (Yes/No) by Program Disciplinary Sector

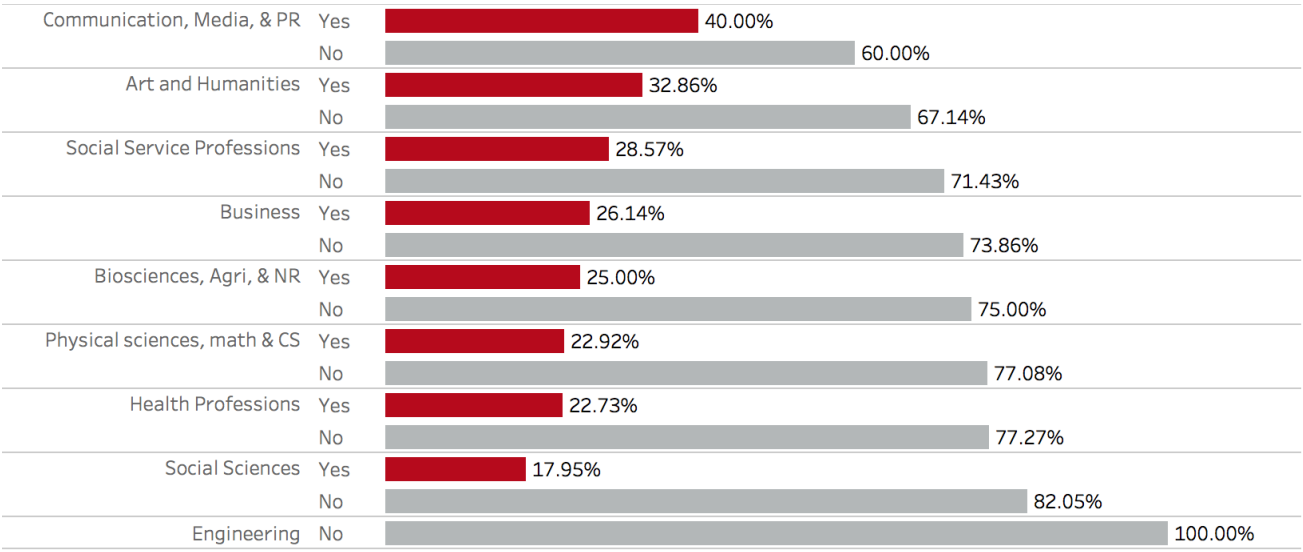
All respondents (N = 525)



Respondents with an internship (N = 136)



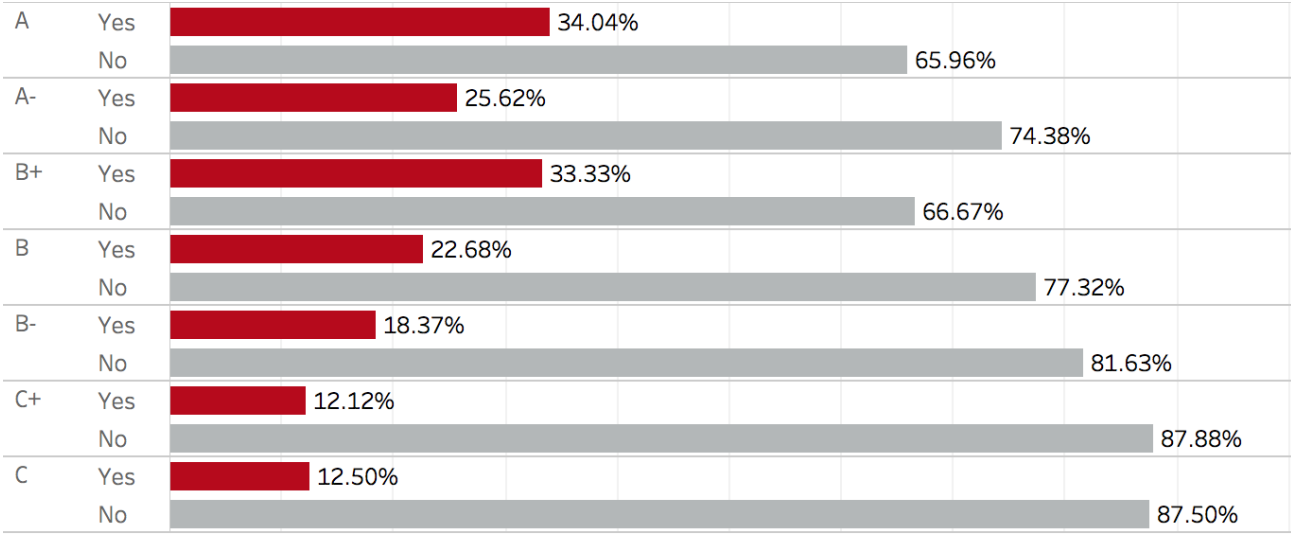
16.2. Relationship between Internship Participation and Students' Program Sectors



N = 525. Number of observations by category: Business / Yes Internship = 40; Business / No Internship = 113; Art and Humanities/ Yes Internship = 23; Art and Humanities / No Internship = 47; Biosciences, agriculture, & Natural Resources / Yes Internship = 20; Biosciences, agriculture, & Natural Resources / No Internship = 60; Social sciences / Yes Internship = 14; Social sciences / No Internship =64; Social service professions / Yes Internship = 12; Social service professions/ No Internship = 30; Communication, media, & public relations/ Yes Internship = 12; Communication, media, & public relations/ No Internship = 18; Physical, math, & computer science / Yes Internship = 11; Physical, math, & computer science / No Internship = 37; Health professions / Yes = 5; Health professions / No = 17; Engineering / Yes Internship = 0; Engineering / No Internship = 2;

Finally, there exists a positive and statistically significant relationship between students' grade-point average (GPA), such that the higher the students' GPA the more likely they are to have taken an internship ($\beta = 0.13$, $p = 0.03$). These results suggest that students with low GPAs (B- and below) may require additional support, encouragement, or assistance with securing an internship. The odds ratio was 1.48, which indicates that for every one unit increase in GPA, the likelihood that a student participates in internship increases by approximately 1.48 times.

Figure 17. Relationship between Internship Participation and Students' Grade Point Average



N = 506. Number of observations by category: C / No Internship = 14; C / Yes Internship = 2; C+/ No Internship = 29; C +/ Yes Internship = 4; B- / No Internship = 40; B- / Yes Internship = 9; B / No Internship = 75; B / Yes Internship =22; B+ / No Internship = 64; B+/ Yes Internship = 32; A- / No Internship = 90; A- / Yes Internship = 31; A / No Internship = 62; A / Yes Internship = 32;

VII. RESULTS: Barriers to participation in internships for UW-Parkside

In this section we present findings from the online survey and student focus groups regarding barriers to participation in internships for students at UW-Parkside. Who has access to internships and who does not is a critical issue with respect to the problems of inequality and social mobility that are facing higher education and society at large. Since internships may provide students with valuable social and cultural capital, and enhance their employability in the labor market, these barriers to internship participation should be viewed as one of many potential roadblocks that many students must contend with.

How many students wanted to participate in an internship but could not? If not, why not?

For the 388 students who did not report participating in an internship, 67% of them had actually wanted to do so but could not for various reasons. Improving our understanding of the barriers to participation in internships for this population is a critical issue facing our nation's colleges and universities.

Figure 18. You indicated that you did not participate in an internship in the past 12 months. In the past 12 months, were you interested in participating in an internship? (N = 388)

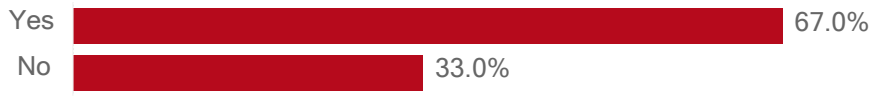


Figure 19. In the past 12 months, why were you not able to pursue an internship?

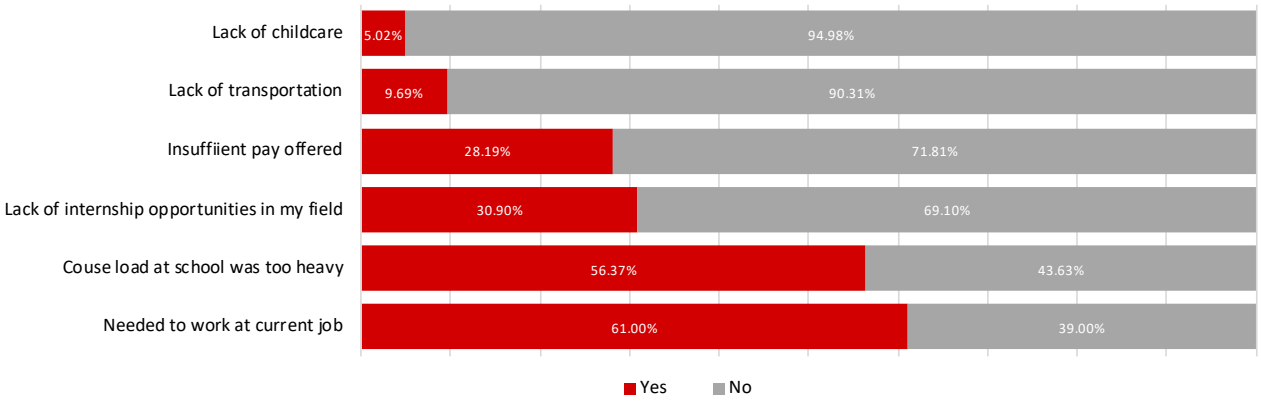


Table 4. UWP Student Concerns and Difficulties in Participating in Internships (N=25)*

Concern/Difficulty	Examples
Timing of internship	Issues with the need for financial stability, inability to take unpaid internships; needing to travel for internships
	Issues balancing internship hours and requirements with course schedule and paid work
Finding a placement	Issues with internship tasks and relevance to their career trajectory; concerns about not wanting to do menial work
	Issues finding an internship, navigating the campus requirements, limited availability of internships by field, limited social connections
Financial considerations	Issues with the need for financial stability, inability to take unpaid internships; needing to travel for internships
Finding a relevant internship	Issues with internship tasks and relevance to their career trajectory; concerns about not wanting to do menial work
Family obligations	Issues balancing internship with family (e.g., child care, wedding planning)

*This sample includes all focus group participants from UWP; these difficulties include those that were discussed most frequency, in descending order of frequency

Students had many concerns and issues related to their participation in internship opportunities, including their balance and timing of the internship; this including balancing the internship with other requirements, finding a placement in their field that was relevant to their career trajectory, and balancing financial considerations and family obligations (Table 4). Students that found finding and balancing their internship to be a barrier often emphasized the availability of internships as field-specific. One student explained why they hadn't done an internship, simply stating, "There aren't any here offered for me in my field." In contrast, a business student explained, "there's just a lot of opportunities in the business program. We're definitely lucky that it's easy for us to get multiple internships, not easy, but you know, we have them available." When students did find internships that were promising, some students found that the hours needed for an internship conflicted with their time available for school and other work required of them.

Students who discussed financial considerations and family obligations as barriers highlighted the need for a paid internship. One student explained why she had not taken an internship:

> *You know, I've been looking into internships in general because, again, it is a good way to get into different-- because I was looking at different industries. I was looking at wildlife rehabilitation internships and stuff recently. And, honestly, my biggest struggle is most of them are unpaid. And I am 26, I am getting married in like a year… I am trying to do adult things and not getting paid for several months is just not something I really think I can afford to do right now. I mean, I'm currently working a sad minimum wage job but it's at an animal shelter. So I'm at least getting-- I'm still getting some money. Even though it's not a lot. I just, I can't give that-- because they're like, "oh, well you need at least 24 or so hours a week." And I'm like, I wouldn't be able to do classes, do the internship and like actually work to make money. Which is kind of important because I'm basically just paying for school as I can, at the moment. And you know, I've got bills, phone, you know, I've got to be paying rent. I have a wedding to save for. [laughs] Money is unfortunately an important motivator in what I'm looking for in an internship. And very few internships are paid.*

She explained that most internships were unpaid. Even though she had found a few that had stipends attached to them, she explained that they were not high enough stipends to pay more than the gas it would take to get to and from the internship. To her, that was not worth the experience.

One student with children wrote that having children was also something that could make internship difficult, though she did not want to call them a barrier or obstacle:

> *It's like once you have kids that's like an automatic obstacle for a lot of things because you have to consider all of the childcare and the scheduling and all of that. And it's not-- I wouldn't really even want to use "obstacle," it's just something that has to be planned and taken into account.*

VIII. RESULTS: What types of internships are students at UW-Parkside taking, and what are their experiences in them?

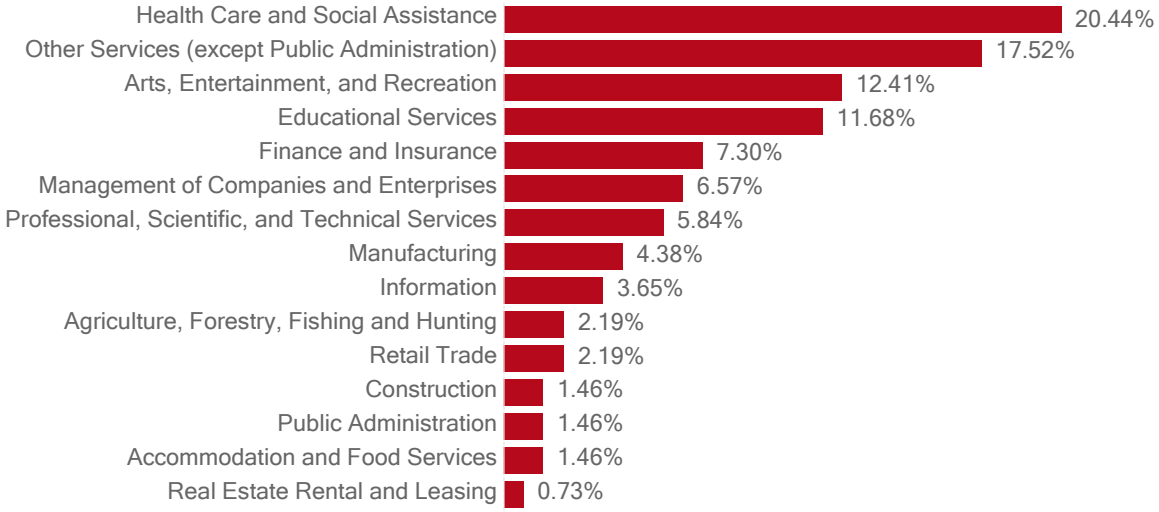
In this section we present findings regarding the types of internship programs that students at UW-Parkside have taken, and their experiences in and with the internship. After describing key features of students' internship programs from the survey data (e.g., organization type, sector, length, compensation), we then report how students described their internship with respect to characteristics that the literature suggests are associated with positive student outcomes and experiences (e.g., supervisor support, task clarity, etc.). Finally, we discuss students' observations about their internship experiences from focus group discussions.

Survey results: Features of internship programs

For the 136 students at UW-Parkside in our study sample that had taken an internship in the past year, 41% of them did so at a for-profit company, with the remainder at government agencies (22%) and non-profit organizations (36%). Many of these internships were concentrated in fields such as Health Care and Social Assistance (21%), Other Services (18%), Arts, Entertainments and Recreation (12%), and Education Services (12%)."

Figure 20. In what type of organization did you participate in this internship? (N = 136)

Figure 21. In what industry or field was this internship in? (N = 136)



These results indicate that the largest proportion of survey respondents who had taken an internship did so for 21-24 weeks (29.4%), followed by 9-12 weeks (27.9%), 13-16 weeks (18.4%), and 17-20 weeks (8.1%), with the remainder (16.2%) having had an internship experience that lasted less than 12 weeks (Figure 22). Further, 54.7% of these students were compensated for their internship work, whereas 44.5% were not (Figure 23). Finally, only 13.9% of student interns at UW-Parkside are paid $16/hour or more (Figure 24). However, there is a large proportion of the students (9.7%) who were paid $9.9/hour or less and 45.2% of students were paid between $10 – $12.9/hour, which is less than or just close to the estimates of living wages for one adult in Kenosha county in Wisconsin ($11.01) (MIT Living Wage Calculator, 2018).

Figure 22. For how many weeks did you participate in this internship? (N = 136)

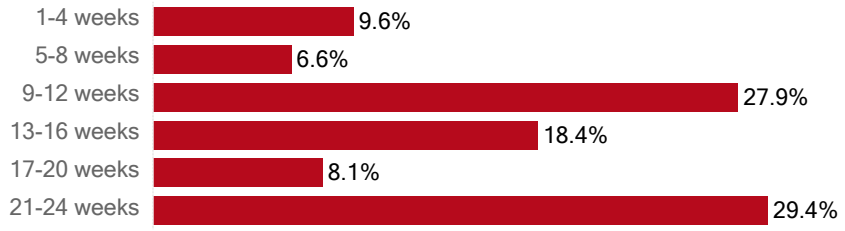
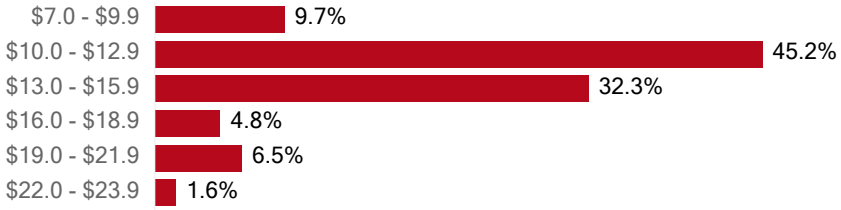


Figure 23. Was the internship paid or unpaid? (N = 136)

Figure 24. Hourly compensation of internships (N = 62)



Survey results: presence of internship characteristics associated with positive student outcomes

Next, we turn to one of the primary research questions driving this study: what is the structure and format of internship programs that UW-Parkside students are taking? Examining this issue, we focus on features of internships that the research literature suggests are associated with positive student outcomes.

Link between academic program and internship

One of the core principles of experiential education is the integration of academic or theoretical concepts with opportunities to apply new knowledge in hands-on situations. Research on internships also indicates that close

coordination between academic coursework and internship experiences is also linked to interns' satisfaction (e.g., Hergert, 2009). For UW-Parkside students who participated in an internship, 73% felt that their internship was very or extremely related to their academic coursework (Figure 25). In addition, there were 50.7% students who reported that their academic and internship supervisors cooperated very or extremely well to ensure this integration (Figure 26). Here, we report results from the two questions focused on this topic.

Figure 25. How related do you feel your internship was to your academic program? (N = 136)

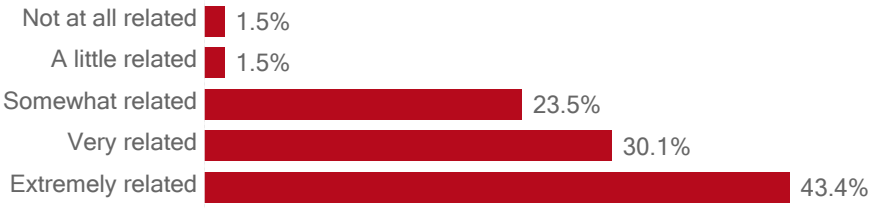
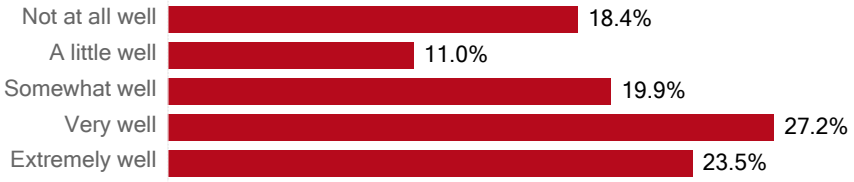


Figure 26. How well did your job site supervisor and your academic program or faculty coordinate with one another to ensure the internship tasks were related to the curriculum? (N=136)



Supervisor support

Next, the literature also indicates that supervisors' active support of interns' career development and on-the-job satisfaction is strongly associated with positive student outcomes (McHugh, 2017). This construct was measured using four questions (M=4.22, SD=0.83), and below we report results from two of these items. For example, UW-Parkside students who had recently taken an internship, 81.5% reported that their supervisors cared about their satisfaction at work, and 81.6% reported that their supervisors appreciated the amount of effort they made, important indicators of supervisory support (Figure 27).

Figure 27. In this internship, how much did your supervisor care about your satisfaction at work? (N = 136)

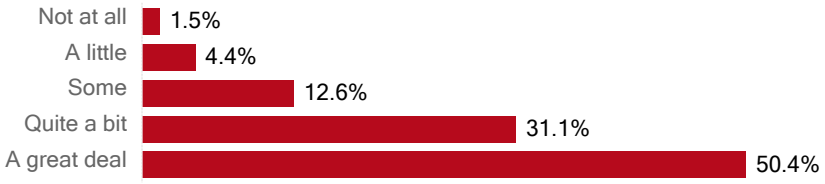
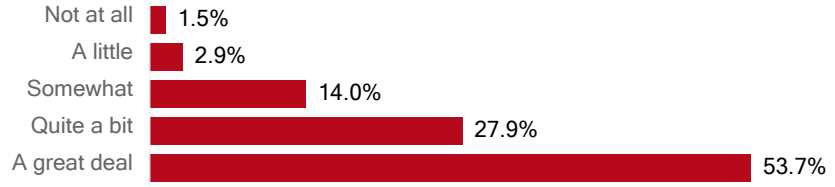


Figure 28. In this internship, how much did your supervisor appreciate the amount of effort you made? (N = 136)



Supervisor mentoring

Another aspect of supervisor behavior found to be positively associated with intern satisfaction is supervisor mentoring, which pertains to the provision of direction and feedback about task performance and career planning. This construct was measured using five questions (M=3.43, SD=0.83), and below we report results from two of these items. While many UW-Parkside students reported that their supervisors provided feedback sometimes, very often or extremely often (32.4%), it is concerning that nearly two third of the students reported that their internship supervisors failed to encourage students' new ways of performing tasks at the internship site and nearly one third of the students reported not receiving feedback regarding their performance (see Figure 29, 30).

Figure 29. How often did your supervisor encourage you to try new ways of behaving in the job? (N = 136)

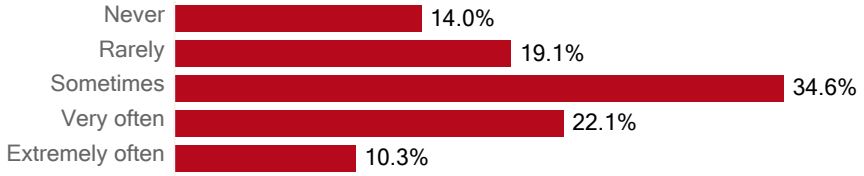
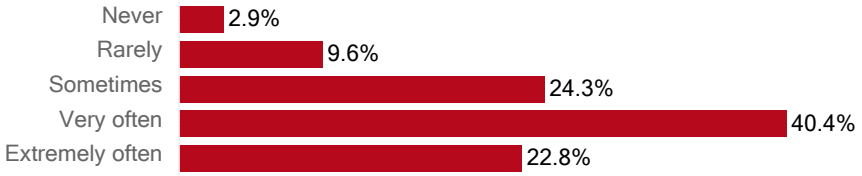


Figure 30. How often did your supervisor give you feedback regarding job performance? (N=136)



Goal clarity

Clear expectations regarding work products and how they are evaluated is known as task goal clarity in the literature, and this feature of internships is associated with reduced stress and increased satisfaction on the job site (Beenen & Rousseau, 2010). For some internships that are poorly designed and lack meaningful work, students may end up working on ill-structured and poorly managed tasks (Frenette, 2013). This construct was measured using two questions (M=3.99, SD=0.87), and below we report results from these items (see Figures 31, 32).

The results indicate that 87% of UW-Parkside students taking internships felt that they were given clear objectives and 70% of students felt that they received clear explanation of what they needed to accomplish, though the rest of the students who did not report such task goal clarity raise questions about the work that some students are being asked to perform in their internships.

Figure 31. In this internship, how clear were the objectives you were given about what you needed to accomplish? (N = 136)

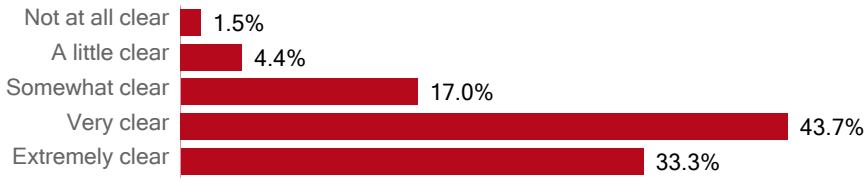


Figure 32. In this internship, how clear was the explanation of what you needed to accomplish? (N=136)

Task autonomy

Besides benefiting from clearly defined tasks, interns also reported higher rates of satisfaction when given autonomy and discretion to perform the tasks assigned to them (McHugh, 2017). This construct was measured using two questions (M=3.93, SD=0.95), and below we report results for these items (see Figures 33, 34). For UW-Parkside students, 70.6% reported having considerable flexibility in how they completed their work and 70.3% reported having much freedom to decide how to do their work, indicating that for these students the internship is an opportunity to function with autonomy in the workplace.

Figure 33. In this internship, how much flexibility did you have in how you completed your work? (N = 136)

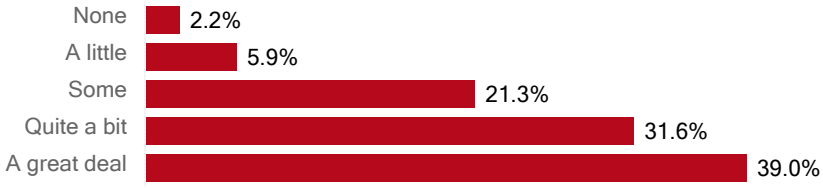
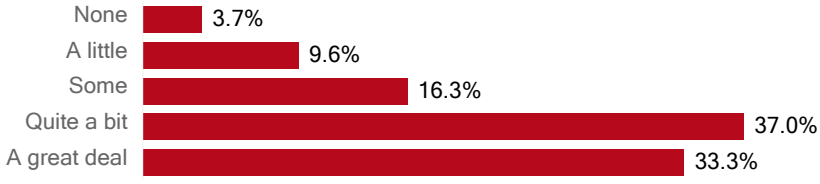


Figure 34. In this internship, how much freedom did you have to decide how to do your work? (N = 136)



Focus group and interview results: What were students experiences with their internship?

In addition to these results from our online survey, we held 12 focus groups with 25 students at UW-Parkside. Thirteen of these students had taken an internship and they described in detail precisely what they did at their internship site and their experiences with mentoring, feedback, and the degree of "fit" between the internship and their coursework and career goals.

Table 5. UW-Parkside Student Experiences in Internships (N=13)

Relation to Academics	
Highly Related	Used what was learned in class at internship; taught software used in internship; entered internship with skills that are needed in the internship
Somewhat Related	Applied theory from coursework in real world settings; standards and principles same, application in new area; learning additional techniques; coursework broad, but internship focused; used transferable skills like writing and communication; same field, new skill or focus
Not Related	Internship experience entirely separate; new skills, area of focus, or both; what was learned in class was not applicable to internship experience
Supervision	
Autonomous	Fully autonomous; worked on project separate from supervisor; limited training, guidance, or feedback on task
Some Autonomy	Supervisors present, provide feedback, but supervision is lenient; trained when needed; supervisors present, autonomy in hours worked
Scaffolded Experience	More supervision and feedback early, when learning new skills but less supervision as students advance; watched and learned from supervisor, then did task on own
Highly Supervised	N/A
Feedback / Mentoring	
Lots of Mentoring	Feedback provided at scheduled times; meetings occurred frequently; daily feedback
Lack of Mentoring	Limited meetings with supervisor or mentor; feedback provided only when issues occurred
Relevance / Fit for Career	
Highly relevant	See internship as directly related to future employment; tasks done, skill-building, personal growth related; engaged in work that is similar to future employment
Not relevant	Internship not related to future employment; tasks or skills are not related to employment

Notes. *This sample only includes those UW-Parkside focus group participants who had internships

Students' experiences in internships during their time at UW-Parkside varied in terms of their relation to academics, supervision, feedback and mentoring, and relevance for their career (Table 5). In terms of their relation to their academic coursework, most felt that their internship experience was highly related to their academic work, but there were some that felt that it was either somewhat or not related. Participants who felt that their coursework was related to their internship gave examples of using what they learned in classes during their internship experience. Most students talked about it as complementary, some of what they learned in class was related to their internship but the internship gave them a better grasp on how these concepts worked in the real world. One student stated it this way:

> *For the most part, like I said, you can only learn so much in the classroom. So, it was like I had the basic knowledge, but being able to sit there first hand and say, "Okay, this is how a retirement account really works, this is how it grows somebody's money, this is how it shapes their future." Getting to see it in action has definitely taught me even more than what you can learn in a classroom.*

Students also described different kinds of supervision and feedback during their internship experience. Some students described their work as highly autonomous—meaning that they had little training, guidance, and feedback as they completed their tasks. One student who received feedback very seldomly stated, "that's the part that's concerning. It's just that I want to know what I'm-- how I'm doing in my job." He was concerned that he was not getting feedback from his supervisor. Another student echoed these feelings saying that she had asked for feedback but never got any.

Others felt somewhat autonomous, meaning that they were trained and supervised. One student said that she and another intern met with their supervisor, were given a social media project that could be done independently from the rest of the organization, and then they met with the supervisor every two weeks as a check-in. Another student gave an example of working as a team with experienced employees:

> *We did a lot of joint work with experienced advisors. And it was just kind of like one of those, you learn by watching it be done. You learn by kind of doing yourself. In our weekly stipend meetings we just kind of learned everything once a week. You know, we talked, "Okay, today we're focusing on life insurance, today we're focusing on..." Like just different things like that. So, it was just a lot of information and you just kind of studied it and got to know it and became experts on it… it wasn't like they just threw us out into the sharks and told us to fend for ourselves.*

A couple students also described a scaffolded supervision, describing how their supervisors were highly engaged early on, as students were learning the skills necessary for the internship, and then they were less involved later in their skill development. Regarding their supervisors, students also discussed their level of mentoring—some had internship supervisors that provided mentoring often whereas others' had limited opportunities for mentoring.

Putting their internship experience in the context of their career development, some students felt that their work was directly related to their future careers. This often meant that they felt the tasks they were doing, the skills they were building, and the personal growth they were engaged in would serve them well in the future; some of these students said they were basically doing the work of an entry-level employees (e.g., filing taxes like a tax accountant).

Almost all students felt that their skills where transferable to their careers, if not directly relevant. This often included their technical skills (e.g., learning a skill during their internship that would be useful in their future careers), but in lieu of skills some students described their own personal growth that would benefit them in their future employment (e.g., communication, teamwork, self-confidence). One student described his growth in both areas:

> *I definitely think the most important thing that I've gained from everything, is I've learned so much about myself. And I've learned a lot about my work ethic. And perseverance. I think those are the main qualities that I've taken. Not just like -- of course I've learned, you know, the general skills you need in accounting and finance and operations and whatever. Of course, I've learned that, but I think the more valuable thing that I've learned is, "What do I do when I'm pushed up against a wall? What do I -- you know, how do I you know, overcome every obstacle that I'm challenged with?" I think the internship's really given me that more than anything.*

IX. RESULTS: Outcomes of internships

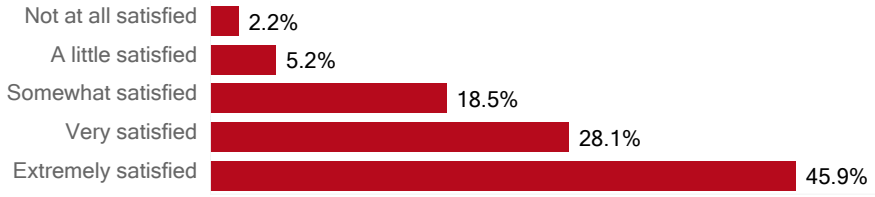
The impacts that internships have on students appears as one of the most important questions facing the field of higher education and workforce development, given their growing prominence in educational policy and programming. In empirical research on internships, this question is answered by tracking changes in variables such as employment status, wages, or vocational self-concept over time. In fact, our research team will be following the panel of students who participated in T1 of our study at UW-Parkside for at least two additional years, with these questions being addressed in the Spring of 2019 and 2020. However, for this cross-sectional analysis of T1 data, we report outcomes in terms of satisfaction with the internship and student perceptions of how well (or poor) the experience enhanced their knowledge, skills, and career aspirations.

Survey results: Outcomes of internships

Level of satisfaction with internship experience

An important indicator of the usefulness and impact of an internship experience is how students themselves perceive their experience. For this issue we asked a single question about satisfaction, and 74% of UW-Parkside students reported that they were "very" or "extremely" satisfied with their experience. The fact that 18% were only "somewhat" satisfied and 7% were not satisfied with their internship indicates that work remains to be done to improve internships for all students (see Figure 35).

Figure 35. How satisfied were you with your internship experience? (N = 136)



To investigate the relationship between internship program features and students' internship satisfaction, we conducted correlation and multiple regressions analyses. Please see Table 1 in Appendix B for the correlation and multiple regression results. The results indicate that supervisor support, mentoring, goal clarity, relatedness to academic program and autonomy positively and significantly correlate with students' internship satisfaction with coefficients ranging from 0.32 to 0.68.

The multiple regression model with program features produces $R^2 = .65$, $F(8, 126) = 29.3$, $p < .001$. Supervisor support, mentoring, goal clarity, relatedness to academic program had significant positive regression weights, indicating students with higher scores on these variables were expected to have greater satisfaction, after controlling for the other variables in the model. Autonomy did not contribute to the multiple regression model. Finally, we can use this equation to compute predicted satisfaction scores: Satisfaction = 0.55 * supervisor support + 0.26 * mentoring + 0.20 * goal clarity + 0.15 * relatedness to academic program.

Finally, the result of simple regression analysis indicated that career adaptability served as a significant predictor of individuals' internship satisfaction. When students' career adaptability attributes (e.g., concern, control, curiosity, and confidence) increase by one, satisfaction is expected to increase 0.07; $b = 0.07$, $t(133) = 2.08$, $p = 0.04$. The simple regression model explains 3% of the variance in development value, $R^2 = .03$, $F(1, 133) = 4.31$, $p = .04$.

Developmental value of the internship experience

Next, we examined the impact of program structure on another important outcome of internships – students' perception of how well the experience contributed to their own career development (i.e., developmental value). This

construct was developed by McHugh (2017) and we report below the results from the three items that comprise this variable (see Figures 36-38).

Figure 36. How important were the skills or knowledge you learned at this internship for your career development? (N = 136)

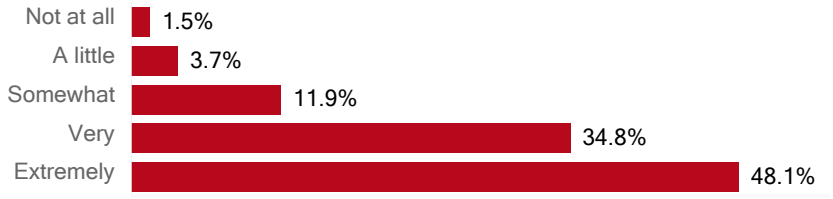


Figure 37. How much did this internship help clarify your career objectives? (N = 136)

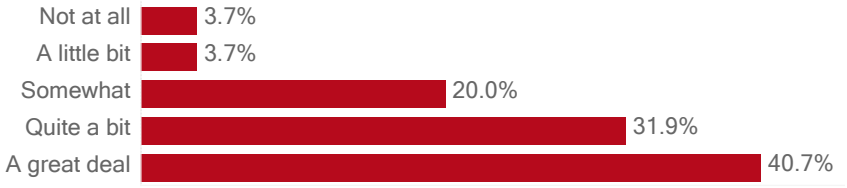
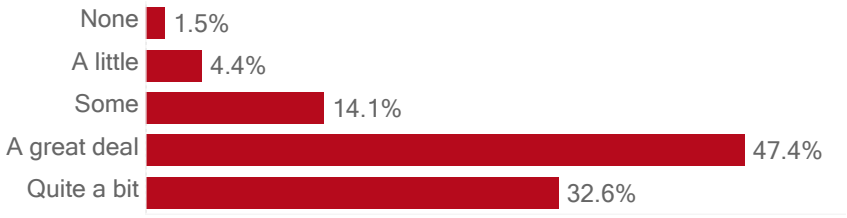


Figure 38. How much new information or skills did you learn? (N = 136)



To investigate the relationship between internship program features and students' perceived development value, we conducted correlation and multiple regressions analyses. Please see Table 2 in Appendix B for the analysis results. The results indicate that supervisor support, mentoring, goal clarity, relatedness to academic program and autonomy positively and significantly correlated with students' internship satisfaction with correlation coefficients ranging from 0.31 - 0.58.

The multiple regression model with program features produced $R^2 = .62$, $F(8, 126) = 25.61$, $p < .001$. Mentoring and relatedness to academic program had significant positive regression weights, indicating students with higher scores on these two variables were expected to have greater perceived value of their internship experiences, after controlling for the other variables in the model. Supervisor support, goal clarity, and autonomy did not contribute to the multiple regression model. Finally, we can use this equation to compute predicted development value score: Development value = 0.42 * supervisor support + 0.38 * relatedness to academic program.

Finally, the result of simple regression analysis indicated that career adaptability served as a significant predictor of individuals' perceived development value. When students' career adaptability attributes (e.g., concern, control, curiosity, and confidence) increase by one, perceived value is expected to increase 0.06; $b = 0.06$, $t(133) = 7.06$, $p = 0.03$. The simple regression model explains 3% of the variance in development value, $R^2 = .03$, $F(1, 133) = 4.56$, $p = .03$.

These results indicate that there are a variety of structural factors that may contribute to a students' perception that their internship was a satisfactory and valuable experience. Thus, as institutions and employers work towards improving these co-curricular experiences, these factors should be on the table as areas worthy of further attention, investment, and improvement.

Focus group results: Outcomes of internships

Table 6. Perceived Outcomes of Internship Participation UWP (N=13)*

Outcome	Examples
Exploration of field	Narrowing focus for specific career goals and trajectory; Exploring the specific environments, skill sets, or workplaces to aim for
Exploration of self	Understanding of self, personal interests, likes/dislikes, attitudes and behaviors, career/degree goals, perspective, flexibility, independence
Real world experience	Gaining experience that is different from classroom, hands-on, practice in field, experience in workplace setting, with employees
Skill development	Learning and practicing skills specific to the field or job; applying skills learned in classroom in work environment
Getting a job	Transitioning from internship to part- or full-time employee; direct job offers from internship host

*This sample only includes those UWP focus group participants who had internships; outcomes are listed in descending order of frequency

Students discussed the outcomes of their internship experience in terms of their exploration of their field, themselves, as well as their gaining real world experience, skills, and a job (Table 6). In terms of exploration of the field, students felt that they could use internships to "test out different avenues of what you might want to go into." For example, one student found that "I think the experience… at my internship confirmed that this is kind of what I want to do in the future," whereas another student found that their internship experience helped them see what they did not want to do in the future:

> *Right now my internship is [in] social media, which I'm learning is maybe not my passion. I'm more [interested in] creating concepts and stuff, like more marketing than actually going out and posting stuff on Facebook and Instagram… So in the future I definitely want to do more higher level conceptualization for a company and how to structure public relations and how to go about creating the image, rather than just being the front man for it.*

Students who felt they had grown, personally, discussed this in terms of their work ethic, collegiality, and confidence. One student said, "It definitely taught me how to network and not to be like afraid to go after something." Other students discussed how it was this personal growth, beyond the experience and skills, that was most valuable during his internship (e.g., see quote on page 28).

Students also discussed their internships' value in terms of them gaining real world experience in a company that was different from the classroom because they got practice in the field, experience in workplace setting, with people doing the work day-to-day. Many students also discussed how they gained skills during their internship that they could apply in future jobs or a direct pipeline to full-time employment from their internship experience.

X. RECOMMENDATIONS FOR PROVIDING EQUITABLE, HIGH-QUALITY INTERNSHIPS FOR ALL

In this final section we provide some recommendations for students, higher education professionals and employers for increasing the availability of high-quality and equitable internship programs for all students at UW-Parkside.

What students can do

Students are drivers of their self-exploration, career exploration and career planning and management. They need to actively pursue quality internship experiences, which serve as important work-based learning opportunities that help college students better know their interests, boost skills, and become adaptive to future challenges and changes.

- As illustrated by Figures 2-9 (pages 12-14) there is considerable social-economic variation among the students at UW-Parkside in our survey, including demographic characteristics that may impact students' ability to access an internship experience, especially gender (Figure 2), race (Figure 3), disability (Figure 4), and parental income (Figure 6). Students in the focus groups highlighted the issue of financial considerations as a factor affecting their internship participation (Table 4, page 19). For their part, students should actively search for resources, connections and assistance such as utilizing connections between academic program and potential employers, disclosing financial difficulties, seeking for support, and increasing self-management and time management skills.

- Internship experiences have an impact on students' outcomes including the internship satisfaction and the perceived developmental value (pages 28-29), which may directly influence college students' post-graduation career development and psychological well-being. It is critical for students to manage their relationships with internship supervisors or mentors, pay attention to the mentorship quality that they receive and actively establish effective communication and professional development opportunities as an intern. In addition, one needs to cultivate career adaptability, accumulating both internal and external resources to cope with present as well as potential challenges and transitions.

- Although one's internship satisfaction and perceived contributions of internship to future development could be limited by many contextual factors, students ought to treat an internship as an opportunity for personal and professional development, no matter if the internship is required or elective. Table 5 (pages 26) and Table 6 (Page 30) presents some findings from the focus groups about factors that have the potential to impact students' efforts to work towards their educational and career goals. Students identify their own short-term and long-term goals before entering an internship, and just as important, these goals need be communicated with their academic program coordinator/faculty and internship supervisor at the sites.

- When facing difficulties and psychological stress or distress, students need to seek advice and professional help (some of these resources are reviewed in the section of this report titled Institutional Capacity and Procedures for Administering Internship Programs, starting on page 7).

What faculty and institutions can do

Faculty are people who guide students to know about the world of work and to explore the career future of a major. They play a critical role in building the academic foundation for students' future career, connecting the students to employers, and educating students about work ethics. To facilitate a quality internship program, faculty need to make effort on the following:

- Institutional leaders at UW-Parkside would benefit from carefully scrutinizing the results of our analysis of the institutional capacity for internship programs, and consider which areas represent strengths, weaknesses, and opportunities. Regardless of whether a centralized or de-centralized approach is taken with respect to internship programming, leaders should pay close attention to ensuring that issues related to access and program quality are addressed before expanding or even mandating internships across the entire institution.

- Given some of the social and economic needs of students at UW-Parkside which may be an obstacle to participating in an internship (see Figures 2-9, pages 12-14), staff should understand and advocate for students if they disclose such needs, including attending to potential concerns with the students' psychological status and mental health. For students who choose not to do an internship, staff can communicate with them to understand reasons and seek resources to resolve problems.

- Students indicated a lack of internship opportunities and challenges of finding a relevant internship (Figure 19 & Table 4, page 19). Staff can help with such challenges by continuing to cultivate relationships with employers, and working with students and employers to increase the link between academic learning and workforce practices. Staff can also work to maintain connections with former students to build an alumni network for the purpose of internship referrals.

- Factors such as an internship's relevance to the student's academic program, the level of task autonomy, the quality of supervisor support, and the presence of mentorship are predictors of internship satisfaction and perceived developmental value, and all of these factors were described by students as important features of their internship experiences (Table 5, page 26 & Table 6, page 30). Staff can support such desirable outcomes by carefully working with students and employers to design, implement, and evaluate the internship program, to ensure that quality work, supervision and mentorship, and relevance to academic program are maintained.

What employers can do

Employers' recruitment, work setting and design, and mentorship and feedback directly determine students' internship experiences and outcomes. Therefore, employers who host internships or employers who are planning to host internships should attend to the following:

- In addition to the labor and recruitment goals of that employers may have for their internship program, internships should primarily be considered as an educational and developmental opportunity for the students. Given that the quality of supervisor support and the presence of mentorship are predictors of student internship satisfaction and perceived developmental value, employers can enhance this opportunity by carefully designing internship programs to include a consistent quality supervision and mentorship by the supervisor or by other senior staff in the organization (peer mentorship programs can also be supportive). Lastly, employers can value interns' efforts and time through providing emotional support and financial support, if possible.

- The clarity of the goals of work tasks is a predictor of satisfaction; and the presence of quality feedback from supervisors was a theme that students discussed in the focus groups (Table 5, page 26). Supervisors can provide periodic feedback to interns that highlights their progress and accomplishments, while also pointing out their shortcomings and proposing action plans for improvement. Although autonomy does not show as a significant predictor using the current UW-Parkside sample, we suggest that employers can allow for some task autonomy for their interns by encouraging their creativity, but still providing clear assignments, strategies, and deadlines.

- The relevance of the internship experience to the academic program is a predictor of positive student outcomes. The academic relevance of the internship and its fit to the students' career goals were also emphasized by the students in the focus groups (Table 5, page 26). Educators and supervisors should discuss short-term goals and long-term goals with their interns, and adjust the internship program to provide experiences that can support those goals. And supervisors should coordinate with academic program faculty and career advisors to work to align the student's internship and academic program in relevant ways.

REFERENCES

Bauer, T. N., Bodner, T., Erdogan, B., Truxillo, D. M., & Tucker, J. S. (2007). Newcomer adjustment during organizational socialization: a meta-analytic review of antecedents, outcomes, and methods. *Journal of Applied Psychology, 92*(3), 707. 37

Beenen, G., & Rousseau, D. M. (2010). Getting the most from MBA internships: Promoting intern learning and job acceptance. *Human Resource Management, 49*(1), 3-22.

Borgatti, S. P. (1994). Cultural domain analysis. *Journal of Quantitative Anthropology, 4*(4), 261–278.

Borgatti, S. P. (1992). *AnthroPac methods guide.* Columbia, SC: Analytic Technologies.

Broton, K., & Goldrick-Rab, S. (2016). The dark side of college (un) affordability: Food and housing insecurity in higher education. Change: *The Magazine of Higher Learning, 48*(1), 16-25.

Callanan, G., & Benzing, C. (2004). Assessing the role of internships in the career-oriented employment of graduating college students. *Education+ Training, 46*(2), 82-89.

Curiale, J. L. (2009). America's new glass ceiling: unpaid internships, the Fair Labor Standards Act, and the urgent need for change. *Hastings LJ, 61,* 1531.

Corbin, J., Strauss, A., & Strauss, A. L. (2014). *Basics of qualitative research.* Sage Publications.

Creswell, J. W. (2014). *A concise introduction to mixed methods research.* Sage Publications.

D'abate, C. P., Youndt, M. A., & Wenzel, K. E. (2009). Making the most of an internship: An empirical study of internship satisfaction. *Academy of Management Learning & Education, 8*(4), 527-539.

Dewey, J. (1938). *Experience and education.* Touchstone: New York, NY.

Dykema, J., Stevenson, J., Klein, L., Kim, Y., & Day, B. (2013). Effects of e-mailed versus mailed invitations and incentives on response rates, data quality, and costs in a web survey of university faculty. *Social Science Computer Review, 31*(3), 359-370.

Finley, A., & McNair, T. (2013). *Assessing underserved students' engagement in high-impact practices.* Washington, DC. Association of American Colleges and Universities.

Hergert, M. (2009). Student perceptions of the value of internships in business education. *American Journal of Business Education, 2*(8), 9-14.

Jung, J. & Lee, S. (2017). Impact of internship on job performance among university graduates in South Korea. *International Journal of Chinese Education, 5*(2), 250-284.

Katula, R. & Threnhauser, E. (1999). Experiential education in the undergraduate curriculum. Communication Education 43, 3, 238-255.Kerka, Sandra. "Community asset mapping." Clearinghouse on adult, career, and vocational education: *Trends and Issues Alert 47* (2003): 1-2.

Kitzinger, J. (1995). Qualitative research: introducing focus groups. *Bmj, 311*(7000), 299-302.

Loeb, S., Dynarski, S., McFarland, D., Morris, P., Reardon, S., & Reber, S. (2017). Descriptive analysis in education: A guide for researchers. *NCEE 2017-4023.* National Center for Education Evaluation and Regional Assistance.

Maroto, M. E., Snelling, A., & Linck, H. (2015). Food insecurity among community college students: Prevalence and association with grade point average. *Community College Journal of Research and Practice, 39*(6), 515-526.

McCall, Tony. "Institutional design for community economic development models: Issues of opportunity and capacity." *Community Development Journal 38.2* (2003): 96-108.

McHugh, P. P. (2017). The impact of compensation, supervision and work design on internship efficacy: implications for educators, employers and prospective interns. *Journal of Education and Work, 30*(4), 367-382.

Massachusetts Institute of Technology Living Wage Calculator (2018). Accessed at: http://livingwage.mit.edu/states/55

Murphy, D., Merritt, W., & Gibbons, S. (2013). Student and supervisor perspectives on the benefits of criminal justice internships. *Journal of Criminal Justice Education, 24*(2), 235-250.

Narayanan, V. K., Olk, P. M., & Fukami, C. V. (2010). Determinants of internship effectiveness: An exploratory model. *Academy of Management Learning & Education, 9*(1), 61-80.

Nunley, J. M., Pugh, A., Romero, N., & Seals Jr, R. A. (2016). College major, internship experience, and employment opportunities: Estimates from a résumé audit. *Labour Economics, 38,* 37-46.

Paulson, S. K., & Eugene Baker III, H. (1999). An experiential approach to facilitate anticipatory socialization. *The International Journal of Organizational Analysis, 7*(4), 365-378.

Perlin, R. (2012). *Intern nation.* London, UK: Verso Books.

Resnick, L. B. (1987). The 1987 presidential address learning in school and out. *Educational Researcher, 16*(9), 13-54.

Rothman, M. (2007). Lessons learned: Advice to employers from interns. *Journal of Education for Business 82*(3): 140-144.

Rudolph, C. W., Lavigne, K. N., & Zacher, H. (2017). Career adaptability: A meta-analysis of relationships with measures of adaptivity, adapting responses, and adaptation results. *Journal of Vocational Behavior, 98,* 17-34.

Savickas, M. L. (1997). Career adaptability: An integrative construct for life-span, life-space theory. *The Career Development Quarterly, 45*(3), 247-259.S

Savickas, M. L. (2005). The theory and practice of career construction. In R. W. Lent, & S. D. Brown (Eds.), *Career development and counseling: Putting theory and research to work* (pp. 42–70). Hoboken, New Jersey: John Wiley & Sons.

Savickas, M. L., & Porfeli, E. J. (2012). Career Adapt-Abilities Scale: Construction, reliability, and measurement equivalence across 13 countries. *Journal of vocational behavior, 80*(3), 661-673.

Silva, P., Lopes, B., Costa, M., Melo, A. I., Dias, G. P., Brito, E., & Seabra, D. (2018). The million-dollar question: can internships boost employment?. *Studies in Higher Education, 43*(1), 2-21.

Smith, J. J. (1993). Using ANTHOPAC 3.5 and a spreadsheet to compute a free-list salience index. *CAM, 5*(3), 1-3.

Taylor, S. (1988). Effects of college internships on individual participants. *Journal of Applied Psychology 73*(3): 393.

Teddlie, C., & Tashakkori, A. (2003). Major issues and controveries inthe use of mixed methods in the social and behavioral sciences. *Handbook of mixed methods in social & behavioral research,* 3-50.

Weible, R., & McClure, R. (2011). An exploration of the benefits of student internships to marketing departments. *Marketing Education Review, 21*(3), 229-240.

Ziliak, S. T., & McCloskey, D. N. (2008). *The cult of statistical significance: How the standard error costs us jobs, justice, and lives* (1st edition). Ann Arbor: University of Michigan Press.

APPENDICES

Appendix A: Research Methodology

The College Internship Study is a mixed-methods longitudinal study (Creswell, 2014; Tashakkori & Teddlie, 2003) of internship programs with three distinct yet inter-related components: (1) an online survey of students while in college and then the workforce, (2) focus groups and interviews with students while in college and then at work (3) interviews with career advisors and other educators involved in internship program administration and with area employers who host interns from the college. Primary data is collected in two phases: Spring of 2018 (T1) and then 12 months later in the Spring of 2019 (T2). The study aims to document the effects of internship participation and program characteristics on a variety of student outcomes, group differences (e.g., socio-economic status, race, gender, discipline, and first-generation status) in internship participation and student outcomes, and institutional experiences with hosting and implementing internship programs.

The survey of students and other data collection activities were conducted in Spring 2018; the current report is based on this data. The online survey was administered to students with junior standing or above. In order to focus on students' experiences in internships and not on other internship-like programs, data collection for the survey excluded students in programs with a required clinical practicum (e.g., applied health sciences, exercise science, nursing and education fields). The definition of the term "internship" that we employed for the survey and other data collection activities was as follows:

> *An internship is a position held within an established company or organization while completing a college degree, certificate, or diploma program. It involves working at the company or organization and performing tasks similar in nature and skill-level to tasks done by entry-level employees in the organization.*

To participate in the survey, students were contacted with a letter and cash incentive mailed to their home address, and with two subsequent email recruitment letters, which directed them to a unique password-protected URL. The inclusion of incentives for surveys to raise response rates is based on best practices in survey research (Dykema, et al., 2013). Via the link, the students could review the IRB-approved consent form and signal their consent to participate in the research by entering their full name and birthdate. Students who completed the survey via this link received an additional cash incentive by mail.

This survey contains questions regarding whether or not a student has participated in an internship in the last 12 months while in college, their employment status, and demographic characteristics. Students who answered "no" to having participated in an internship in the last 12 months while in college also answered questions about their career preparation and any factors that may have dissuaded them from pursuing an internship (e.g., finances, child care), as well as questions that measure their level of career adaptability. For students who answered "yes" to already having participated in an internship while in college, questions were asked about the design features of their internship (e.g., compensation, type of mentoring, job-site activities, etc.), along with questions about demographics, career adaptability, and their satisfaction and perceptions of the developmental value of their internship experience.

Descriptive statistics and Cronbach alpha coefficients of the measuring instruments

Item	Mean	SD	α
Supervisor support	4.22	0.83	0.89
Supervisor mentoring	3.43	0.83	0.81
Goal clarity	3.99	0.87	0.87
Task autonomy	3.93	0.95	0.76
Relatedness to academic program	4.12	0.92	
Satisfaction	4.10	1.02	
Development value	4.16	0.87	0.88
Career adaptability composite	14.98	2.47	0.87
Concern	3.77	0.76	0.84
Control	3.79	0.73	0.82
Curiosity	3.58	0.78	0.85
Confidence	3.83	0.76	0.89

The results of the survey were analyzed using methods such as Pearson Chi-square test, and ordinal logistic regression to explore the effects of demographic background on internship participation. In addition, correlation, simple regression, multiple regression was utilized to explore influential factors on college students' internship satisfaction and development value.

After completing the survey, the students were asked if they were willing to be contacted to participate in an in-person focus group and to be contacted a year later to participate in the follow-up survey. Students who had and had not participated in internships at the time of the T1 survey were asked to participate in the follow-up survey, thereby constituting distinct groups that can be statistically compared to one another during analysis. Additionally, students who complete the survey at T2 will be asked if they can be contacted for a follow-up online or phone interview.

For the focus groups at T1, groups comprised of one to three students were separated into those who have participated in an internship (N=13 students in 6 groups) and those who have not (N=12 students in 6 groups). Prior to the start of the focus group, students were given the opportunity to review the IRB-approved consent forms, ask questions, and to voluntarily consent to participate in the research by signing the form. Students received a cash incentive after consenting to participate in the audio-recorded focus group. Focus groups allow for interactions among participants that explore their experiences and thought processes (Kitzinger, 1995). All students who participated in the focus group completed a free list exercise, where they were asked to identify short words or phrases associated with the term "internships," and to comment on the reasoning for the first term on the list. Students who had an internship experience during college answered questions about the nature of their experience, support from both the academic program and their job-site supervisor, their general level of career adaptability, and so on. For those who have not had an internship, questions focused on the reasons why they have not participated in an internship, as well as their level of career adaptability, and so on.

Finally, we conducted audio-recorded interviews with career services professionals (N=2) and instructors (N=4) at UW-Parkside who support student internships, and with one employer who host UW-Parkside students as interns. A list of potential recruits from among the UW-Parkside staff and area employers was provided by our colleagues at UW-Parkside, and we employed snowball sampling to expand our list of potential recruits, by asking staff to identify colleagues and employers who they know to be involved in supporting student internships. Prior to the start of the interview, participants were given the opportunity to review the IRB-approved consent forms, ask questions, and to voluntarily consent to participate in the research by signing the form. Similar to the student focus groups, all interview participants completed a free list exercise and discussed their responses. Educators and employers' interviews focused on the types of resources available for their college and/or company, their views on the sufficiency of these resources, and issues related to designing, managing, and implementing effective programs. Lastly, documents from career services, academic departments, and employers that offer internships themselves, were also collected and analyzed for details about design features of internship opportunities.

The data from the free-list exercises collected in these focus groups was analyzed to derive a salience measure that indicates the terms respondents most identify with the concept of internships (Romney & D'Andrade, 1964). The analysts reviewed the freelist data and transformed participants' raw data into standardized list of terms, since respondents may use different words for similar ideas. Once a list of standardized terms was settled on, two researchers applied the terms in parallel to 10% of raw data. The few discrepancies that were identified were resolved by the researchers and the standardized terms were applied to the rest of the raw data. Data were analyzed using Anthropac software to identify the concepts considered most salient to internships by different groups of respondents (e.g., students, educators, employers) (Smith, 1993; Borgatti, 1992).

Focus groups and interviews were transcribed and analyzed in MaxQDA software, which is a discourse analysis software which for sorting and coding transcript data, and ultimately, to identify themes and patterns in the corpus. First, two researchers created a procedure to segment the interviews based on the interview protocol. Both researchers practiced with the protocol and coded two interviews in parallel; and the few discrepancies that were identified were resolved and the rest of the interviews were coded by the two researchers. Then, the researchers reviewed the corpus of transcripts to identify themes in the data regarding the obstacles to participating internship and the characteristics of internship experience (Ryan & Bernard, 2003; Corbin & Strauss, 2014). The codes developed through this process were checked by the pair of researchers applying them in parallel to a selection of 10% of the transcript data; a few discrepancies were identified and resolved by the researchers, and the codes were then applied by the researchers to the entire corpus.

The limitations of this study are the small sample size of the student focus groups which could not be representative of students from the wide range of academic programs offered at UW-Parkside. This was also a non-random sample, with students self-selecting into the pool of volunteers who we contacted and tried to schedule for focus groups. Finally, in our study we did not examine whether or not study participants had participated in other work-based learning programs (e.g., apprenticeships), and the potential impacts of these experiences on their learning and career goals.

Appendix B: Results of Regression tables

Table 1. Results of correlations and multiple regression analysis of internship program features and students' internship satisfaction

Predictor	Correlation with Satisfaction	Multiple Regression Results	
		β	p
Supervisor support	0.68***	0.55***	< 0.001
Goal Clarity	0.57***	0.26**	0.007
Supervisor Mentoring	0.57***	0.20*	0.012
Link between academic program and internship	0.38***	0.15*	0.023
Task autonomy	0.32***	0.03	0.593

Dependent variable: Internship satisfactions
β refers to the standardized regression coefficient that demonstrated the change in internship satisfaction per unit change in predictors.
*p < 0.05, **p < 0.01, ***p < 0.001

Table 2. Results of correlations and multiple regression analysis of internship program features and students' development value

Predictor	Correlation with Development Value	Multiple Regression Results	
		β	p
Supervisor support	0.56***	0.09	0.305
Goal Clarity	0.58***	0.42***	< 0.001
Supervisor Mentoring	0.47***	0.12	0.097
Link between academic program and internship	0.49***	0.38***	< 0.001
Task autonomy	0.31***	0.01	0.935

Dependent variable: Perceived development value
*p < 0.05, **p < 0.01, ***p < 0.001

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Note: Consistent with our mission to capture students' voices, experiences, and insights regarding career-related issues, the staff at CCWT 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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