Results from the College Internship Study at Claflin University

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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 Claflin University. The study includes an online survey of students in the second half of their academic programs (n=207), focus groups with students who have and who have not had an internship experience (n=18), and one interview with an educator 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 one year later.

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. key findings from our data analysis include:

- Being "paid" was the most salient concept that students associated with the idea of "an internship," followed by terms such as "connections," "experience," and "opportunity," thus signifying the importance of both compensation and career exploration;

- Forty three percent of the respondents of our survey had participated in an internship program within the past year (n=89);

- For these students, 48.3% were in programs that did not require an internship and 37.2% of participants reported that internships were required to graduate.

- Participation in internships was not correlated with many of the demographic variables measured in our survey, such as first-generation or disability status. However, students with a higher GPA and those whose main job provides career-related skills were more likely to have participated in an internship;

- Barriers to participation in internships included a lack of internship opportunity (54.9%), having a job (52.2%) and a heavy course load (51.1%). Focus group participants also reported that needing to earn money 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 goal clarity of work 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 Claflin University, and employers who supervise interns can take to increase participation rates, access, and program quality for internship programs in the Orangeburg area in South Carolina.

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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 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. However, before the potential of internships can be fully realized, it is necessary first to 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 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 instructors, and career services professionals at Claflin University 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 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 concerning 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 first to 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). As such, career adaptability 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 on internship programs (Curiale, 2009; Finley & McNair, 2013; Perlin 2012). Additionally, internship opportunities in rural areas and for students in specific 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 in the second half of their academic programs, 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. A team of trained researchers collected this data at Claflin University in the Spring of 2018. The online survey was administered to 885 students in the second half of their program (except for students in education programs), and 207 responded which resulted in a response rate of 23.4%. 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, 18 students volunteered for focus groups, which lasted approximately 45 minutes and included between 1 and 3 students and included more in-depth questions about experiences with and barriers to internships. In addition, one educator participated in an hour-long interview regarding his/her own experiences administering internships (see Table 1).

Table 1: Description of Spring 2018 sample

	Survey	Focus Groups	Interviews
Students	207	9 (n=18 individuals)	N/A
Educators	N/A	N/A	1
Faculty/instructors	N/A	N/A	0
Career advisors	N/A	N/A	0
Employers	N/A	N/A	0

The data reported here represent the first phase of data collection at Claflin University (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 to assess the nature of internship programming and/or effects over time.

Table 2: Description of survey sample

	Survey Sample	Institutional Population
Total	207	885
Gender	Male = 156 | 75.36% Female = 41 | 19.81%	Male= 585 | 66.10% Female= 300 | 33.90%
Race	Asian = 4 | 1.93% Black = 189 | 91.30% Hispanic = 1 | 0.48% American Indian or Alaska Native = 1 | 0.48% White = 0 | 0%	Asian=10 | 1.13% Black=798 | 90.17% Hispanic= 1 | 0.11% American Indian or Alaska Native = 13 | 1.47% White= 11 | 1.24%
1st gen status	Yes = 77 | 37.20% No = 121 | 58.45%	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 advance no claims of causality among internship program participation and/or design features and student outcomes but instead provide the type of descriptive research that must precede such empirical research and explore associations among these variables (Loeb et al., 2017). Four responses were removed for regression analysis due to the missing values across all variables related to internship program features. 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 Claflin University we collected information on these issues from staff and students, along with an analysis of online and hard-copy documents.

Are internships required to graduate from Claflin University?

At the institutional level, students who entered Claflin University beginning in the fall of 2017 are required to complete at least one experiential learning opportunity to graduate. Experiential learning opportunities include internships, co-ops, study abroad, undergraduate research, leadership, and service learning. A Claflin administrator commented on this expectation when she said, "we expect most students will participate in an internship, but they can do any of the

five activities." As such, while completion of an experiential learning opportunity is required, completing an internship represents only one of five possible pathways through which students at Claflin can meet their graduation requirements. Students are, however, encouraged to complete internships. This is reflected in both students' responses and the responses received from staff and faculty on campus with whom we spoke.

The experiential learning requirement was initiated following Claflin University's receipt of a grant in 2016 from the United Negro College Fund (UNCF) Career Pathways Initiative, which is funded by the Lilly Endowment. The UNCF grant led to the creation of the Career Pathways Program at Claflin University. According to the Claflin University Undergraduate Catalog for 2018-2020, one of the aims of this program is to "embed experiential learning activities (internship/co-op, study abroad, undergraduate research, leadership, and/or service learning) in curricula for the fulfillment of degree requirement" (p. 18).

Each academic school and department at Claflin University has its own degree requirements. For example, students enrolled in the Business School are required to complete at least one internship/co-op prior to graduation. This includes experiences working in business administration, marketing, and organization management. None of the three other academic schools at Claflin University, including the School of Humanities and Social Sciences, the School of Education, and the School of Natural Sciences and Mathematics indicates that internships are required for degree completion. However, each of these schools requires other "experiential learning" components. Two prominent examples are the School of Education, which requires students to complete a field experience and a clinical practicum and the School of Natural Sciences and Mathematics, which requires students to complete a capstone project. In addition, there are specific departments and/or programs housed within each of these colleges that require students to complete an internship. For example, the Department of Mass Communications, under the School of Humanities and Social Sciences, list internship completion as a requirement for the Mass Communications major.

Who is in charge of administering internship programs?

According to a Claflin administrator, internship programs are currently "scattered" and are administered/overseen by various academic departments, offices, and programs within the university. For instance, there are a few academic departments that offer internship courses that count toward the graduation requirement, give course credit for students on internship, and/or assist students with various aspects of the internship process (e.g., connecting students with internship opportunities, supporting students with their application materials, providing professional development to prospective interns). The Claflin Undergraduate Catalog for 2018-2020 lists a total of 14 internship courses offered by various departments. One administrator talked about a specific course offered through the School of Business that guides and assists students in the internship application process. In addition to academic departments, other entities that share responsibility for internship administration and oversight include the Career Pathways initiative, the Office of Career Development, and the Leadership Alliance program.

In addition to the support provided by these offices and programs, students discussed support they receive from advisors, professors, staff, and peers in the internship process. For example, when asked whom she went to for support in finding internships one student said, "I would definitely go to my advisors and my professors, because they're really good at that, helping their students." Another student who took an internship course talked about her professor's support during the application process. She stated, "when I did my personal statement, he [professor] looked over everything." Students also shared that they learned about internship opportunities through career expositions hosted at Claflin University and through e-mails forwarded within their colleges and departments. One student recalled receiving e-mail messages regarding internship opportunities from organizations such as the UNCF. The student said, "The schools send out a lot of internships that they [the UNCF] have posted." In addition, students shared ways that they learn about internship opportunities from their peers. For example, some discussed ways that more advanced students in their program shared information about internships they had previously completed. Others suggested that peers forwarded emails about opportunities within their major or area of interest.

In combination, students at Claflin University obtain support and find information about internships through various sources. This depicts the way in which internship programing at Claflin University is decentralized across the institution. According to a university administrator, efforts stemming from the Career Pathways Initiative are currently underway to centralize internship processes.

What is involved in the administration of internship programs?

There is a lot of variability in the administration of internship programs at Claflin University. This is, perhaps, not surprising given the decentralized nature of internships as being overseen by a variety of departments, offices, and programs. For example, students find information about internships on their own or through e-mails sent by a specific department, the Office of Career Development, or the Leadership Alliance. Students who are enrolled in an internship course are likely to receive support and guidance in the internship application process (though the administration of internships through internship courses also varies by department). Students who are not enrolled in internship courses may receive support from a variety of different campus resources, including the Office of Career Development, their academic advisor, or other faculty members. In addition, some students shared that they independently sought out particular internship opportunities by conducting internet searches and relying upon their networks at home.

The administration and availability of internships also appear to be somewhat dependent upon the student's major and intended career trajectory. According to a Claflin administrator, for example, there is a shortage of internships for students who are majoring in social science and humanities. Students also shared this perception. Some shared their perception that internships were readily available to them throughout the years at Claflin University with internship experiences building on one another over time. Others shared their frustration about the limited availability of internships. Importantly, the majority of students discussed how they believe their ability to engage in internship experiences has been thwarted by the scarcity of internships (especially summer internships that require moving and/or travel) that are paid.

Taken together, the administration of internship programs is dependent on various factors and is handled by various offices and programs. But, the current decentralized system described above is expected to change. A Claflin administrator commented that the current internship administration system will become more centralized by the spring of 2019. This administrator reported that a designated position will be created via the Career Pathways Initiative. A primary duty for this new staff position, entitled the Coordinator of Experiential Learning, will be to track and administer student internship programs. The Coordinator of Experiential Learning also will verify completion of internships and will assess students' "attainment of identified learning outcomes through surveys and questionnaires." The expectation is that students will be able to work with the Coordinator of Experiential Learning in conjunction with the Office of Career Development to locate, verify, and apply for internships.

When do these activities take place?

Both the internship application process and participation in internships take place year-round (i.e., during the school year, during a particular term, or in the summer). Students in the focus groups who participated in out-of-state internships reported having completed their internship during the summer; however, other students reported having completed their internship during the school year.

Why are personnel and organizational units involved in internship programs?

Claflin staff stressed the importance of internships for students' professional development, as well as for post-graduation outcomes. One staff member reported that at the institutional level, they provide internship support to "help students gain more meaningful employment upon graduation and entry into professional/graduate schools" and because they recognize that internships are conducive to supporting students in developing skills to become "highly marketable/ employable." This explanation fits within the objectives and aims of the Careers Pathway Initiative. Along the same

lines, a second Claflin administrator reported the importance of internships in preparing students for their careers via the development career-specific skills as well as by providing students access to gain "an understanding [of] the work environment." Taken together, personnel and organizational units are involved in internship programs to assist students in fulfilling graduation requirements, support students' career development, and ensure students are ready to enter the workforce or graduate school post-graduation from Claflin University.

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 was not 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, at Claflin University

Students (n=18)	
Term	Salience
Paid	0.465
Connections	0.333
Experience	0.315
Opportunity	0.289
Research	0.283
Travel	0.268
Learning	0.259
Exploration	0.256
Positive	0.218
Advancement	0.210

Table 3 illustrates that compensation appeared to be most salient for students, as "paid" was the most salient and frequently listed term. They also found internships to provide connections, experience, opportunity, learning, exploration, and advancement. Internships were also associated with research and travel for Claflin University students. The term "positive," which encompassed positive phrases or words about internships, also made it onto this top ten list.

VI. RESULTS: Which students are taking internships at Claflin University?

In this section we present findings from the online survey and student focus groups regarding the number of students at Claflin University 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=207) we found that 43% took an internship in the past 12 months, with 36 students (40%) having only one internship experience and 33 students (37%) had two internships. The rest of the students (22%) had three or more internship experiences.

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

N = 207. Number of observations by category: Yes = 89; No = 118.

These results indicate that a large number – approximately more than half of the study sample – have not had an internship experience, indicating that substantial growth in rates of internship participation is possible at Claflin University. 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 features of academic programs (i.e., requirement to take internships).

Although we are using 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-value should be used as a warning signal on the possibility of how likely it is that any observed difference between groups is due to chance.

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 Claflin University students who responded to our survey.

The results show similar participation for female and male students (see Figure 2; 42.3% vs. 43.9%). Most of the participating students (91.3%) are Black or African American. 41.8% of them had internship experiences, and 58.2% of them had no internship experiences. Participation in internships was 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 were not statistically significant.

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

N = 197. Number of observations by category: Female / Yes Internship = 66; Female / No Internship = 90; Male / Yes Internship = 18; Male / No Internship = 23.

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

N = 189. Number of observations by category: Black or African American / Yes Internship = 79; Black or African American / No Internship = 110;
Note: Asian (n = 4) and Hispanics (n = 1) students were not shown in the figure due to the limited number.

Figure 4. Internship in the Past 12 Months (Yes/No), by First Generation College Student Status (FGS)
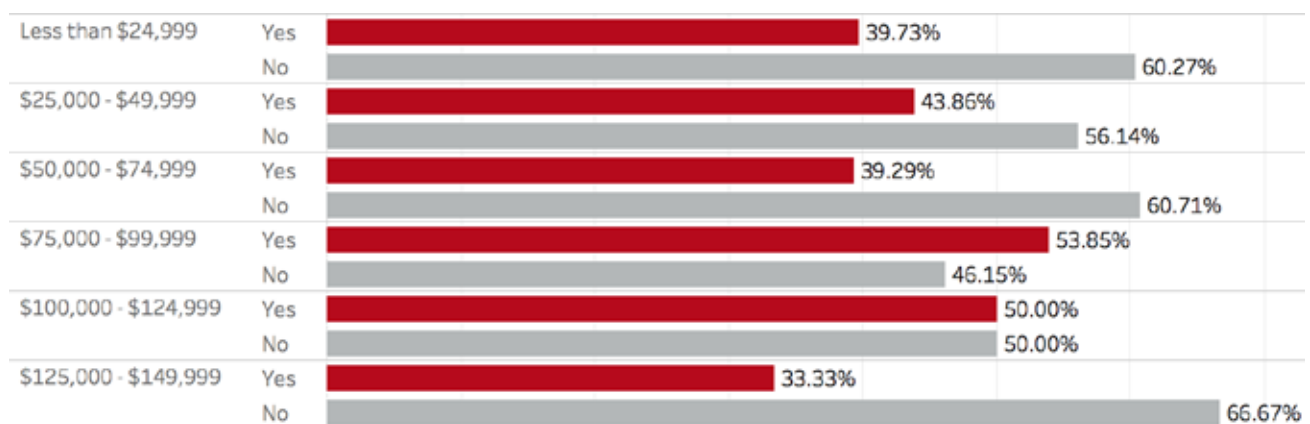

N = 198. Number of observations by category: Yes FGS / Yes Internship = 32; Yes FGS / No Internship = 45; No FGS / Yes Internship = 52; No FGS / No Internship = 69.

Figure 5. Internship in the Past 12 Months (Yes/No), by Disability Status (DS)
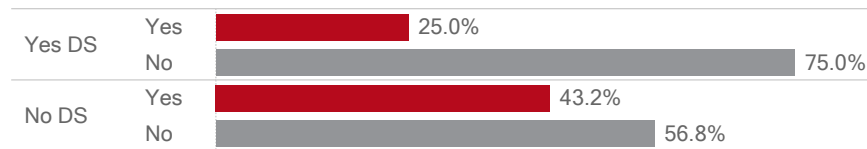
N = 193. Number of observations by category: Yes DS / Yes Internship = 2; Yes DS / No Internship = 6; No DS / Yes Internship = 80; No DS / No Internship = 105.

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

N=191. Number of observations by category: Less than $24,999 / Yes Internship = 29; Less than $24,999 / No Internship = 44; $25,000 - $49,999 / Yes Internship = 25; $25,000 - $49,999 / No Internship = 32; $50,000 - $74,999 / Yes Internship = 11; $50,000 - $74,999 / No Internship = 17; $75,000 - $99,999 / Yes Internship = 7; $75,000 - $99,999 / No Internship = 6; $100,000 - $124,999 / Yes Internship = 7; $100,000 - $124,999 / No Internship = 7 ; $125,000 - $149,000 / Yes Internship = 2; $125,000 - $149,000 / No Internship = 4.
Note: Categories of $150,000 - $199,000 (n=1) and $200,000 or more (n=1) were not shown in the figure due to the limited number.

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 examine 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, 100% worked PT (n=54). For students who didn't have an internship, 90.6% (n =58) worked PT and 9.4% (n = 6) worked FT.

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

No	Full-time employment		9.38%
	Part-time employment		90.63%
Yes	Part-time employment		100.00%

N = 118. Number of observations by category: Full-time employment / Yes Internship = 0; Full-time employment / No Internship = 6; Part-time employment / Yes Internship = 54; Part-time employment / No Internship = 58.

Awareness about college students' challenges with securing adequate food, or what is known as food insecurity, is growing in the US (Broton & Goldrick-Rab, 2016). 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 for students who have and who have not had an internship, approximately 4.6% (n=9) reported relying on these resources in the past 30 days (see Figure 8). Given that housing costs can strain a students' financial situation, we also asked about problems with paying rent or mortgages, with 11.2% of the students reporting housing cost problems (See Figure 9).

Figure 8.1. Students Requiring Food Assistance in the Past 12 Months

No food assistance		95.45%
Yes food assistance		4.55%

Figure 8.2. Internship in the Past 12 Months (Yes/No) by Students Requiring Food Assistance

No food assistance	Yes		41.80%
	No		58.20%
Yes food assistance	Yes		55.56%
	No		44.44%

N = 198. Number of observations by category: No food assistance / Yes Internship = 79; No food assistance / No Internship = 110; Yes food assistance / Yes Internship = 5; Yes food assistance / No internship = 4.

Figure 9.1. Students Having Trouble Paying Rent or Mortgage in the Past 12 Months
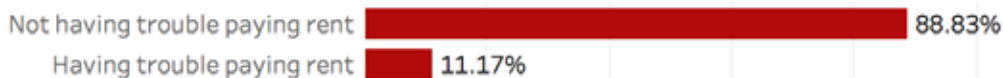
Not having trouble paying rent		88.83%
Having trouble paying rent		11.17%

Figure 9.2. Internship in the Past 12 Months (Yes/No) by Students Having Trouble Paying Rent or Mortgage

Having trouble paying rent	Yes		36.36%
	No		63.64%
Not having trouble paying rent	Yes		43.43%
	No		56.57%

N = 197. Number of observations by category: Not having trouble / Yes Internship = 76; Not having trouble / No Internship = 99; Having trouble / Yes Internship = 8; Having trouble / No internship = 14.
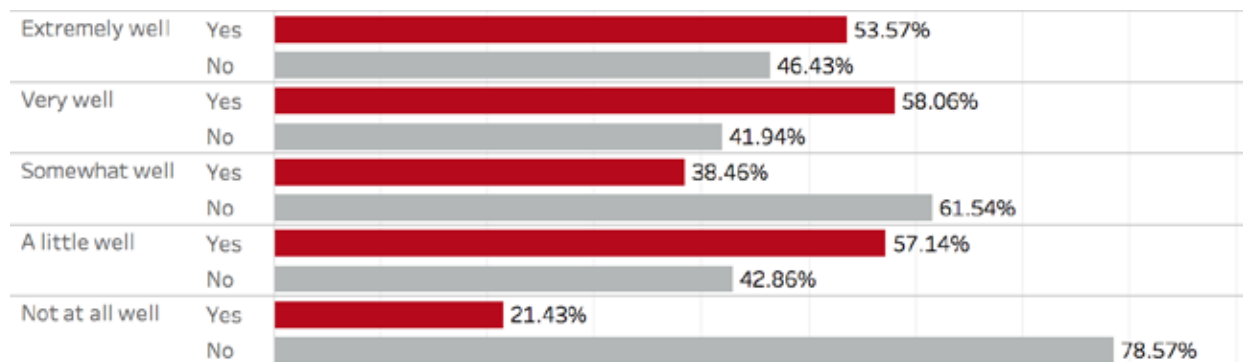
In addition to these potential constraints on internship participation, given that many students work part- or full-time, we explored whether or not their job was contributing to their career goals.

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 = 119)

Not at all well	11.8%
A little well	5.9%
Somewhat well	32.8%
Very well	26.1%
Extremely well	23.5%
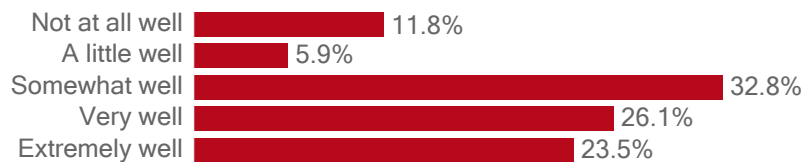
The results indicate that for approximately 49.6% of the study sample, the students felt that their main job (and not their internship) was providing important career-related skills. This result raises the prospect that for some students, their "main" paying job may, in fact, be providing career-relevant 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 provides them with important career-related skills, knowledge, and abilities. The greater degree of important work-related skills, knowledge, and abilities provided by the main jobs is associated with higher probabilities that a student participated in an internship (β= 0.32, p = 0.04). The odds ratio is 1.38, which indicated that for every one unit increase in skills and knowledge the main job provides, the likelihood that a student participates in internship increases by approximately 1.38 times.

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

Extremely well	Yes	53.57%
	No	46.43%
Very well	Yes	58.06%
	No	41.94%
Somewhat well	Yes	38.46%
	No	61.54%
A little well	Yes	57.14%
	No	42.86%
Not at all well	Yes	21.43%
	No	78.57%

N = 119. Number of observations by category: Not at all well / No Internship = 11; Not at all well/ Yes Internship = 3; A little well/ No Internship = 3; A little well / Yes Internship = 4; Somewhat well / No Internship = 24; Somewhat well/ Yes Internship = 15; very well/ No Internship = 13; very well / Yes Internship = 18; extremely well / No Internship = 13; extremely well/ Yes Internship = 15.

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 are examining 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 (1=not strong; 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 0.84 to 0.89. To illustrate the types of questions that are included in the career adaptability survey, we report two examples below from the Claflin University 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 = 207)
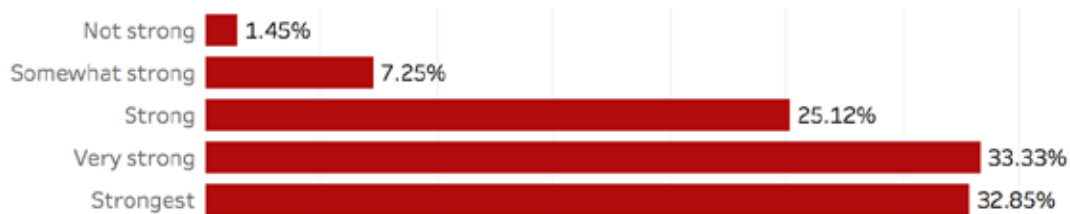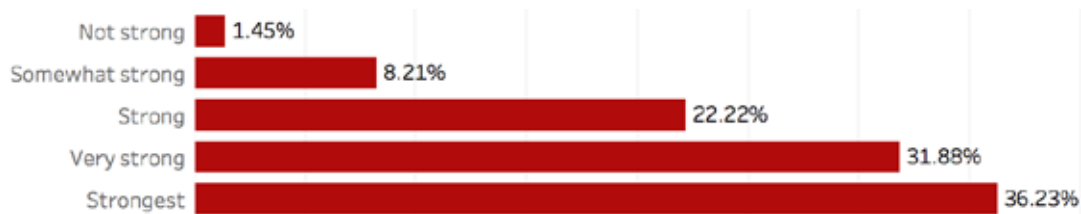

Figure 13. Please rate how strongly you have developed each of the following abilities: Planning how to achieve my goals (N = 207)
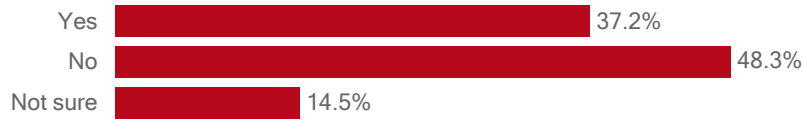

The results indicate that the survey respondents from Claflin University rate themselves relatively high across the career adaptability sub-scales: concern (M=3.99, SD=0.77), control (M=3.89, SD=0.79), curiosity (M=3.80, SD=0.85), and confidence (M=3.77, SD=0.85). A logistic regression analysis testing 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 examine 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 = 207)


The results indicate that just 37.2% of the student respondents were in academic programs that required internships, and that more respondents enrolled as full-time students (43.2%) took an internship than those enrolled as part-time students (0%). 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 Claflin University (see Figure 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 Biological Sciences, Agriculture, & Natural Resources (36.4%), Social Sciences (19.3%), and Business (18.2%). In regard to internship participation rate, internship participation rates significantly differ across those program disciplinary sectors, $\chi 2(18, 213) = 35.89$, p =0.008. Health Professions has the highest participation rate (88.9%), followed by Communication, Media, and Public Relations (66.7%), Biological Sciences, Agriculture, and Natural Resources (60%), Physical Science, Math, and Computer Science (60.4%), Business (41%), Arts and Humanities (33.3%), Social Sciences (29.8%), Engineering (20%), and Social Service Professions (6.7%). Education has the lowest participation rate (0%) but only two respondents are from an education major.

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

N = 206. Enrollment Full-time / Yes Internship = 89; Enrollment Full-time / No Internship = 117.
Note: There was one respondent who was part-time student

Figure 16.1. Internship in the Past 12 Months (Yes/No) by Program Disciplinary Sector
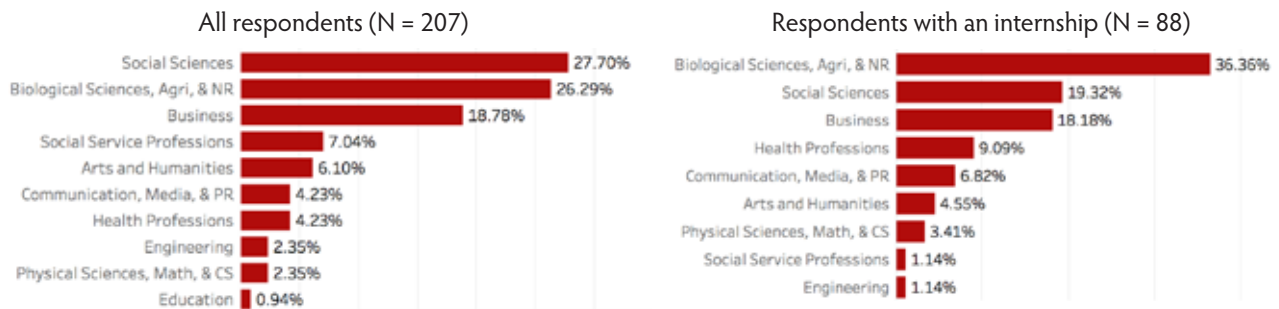
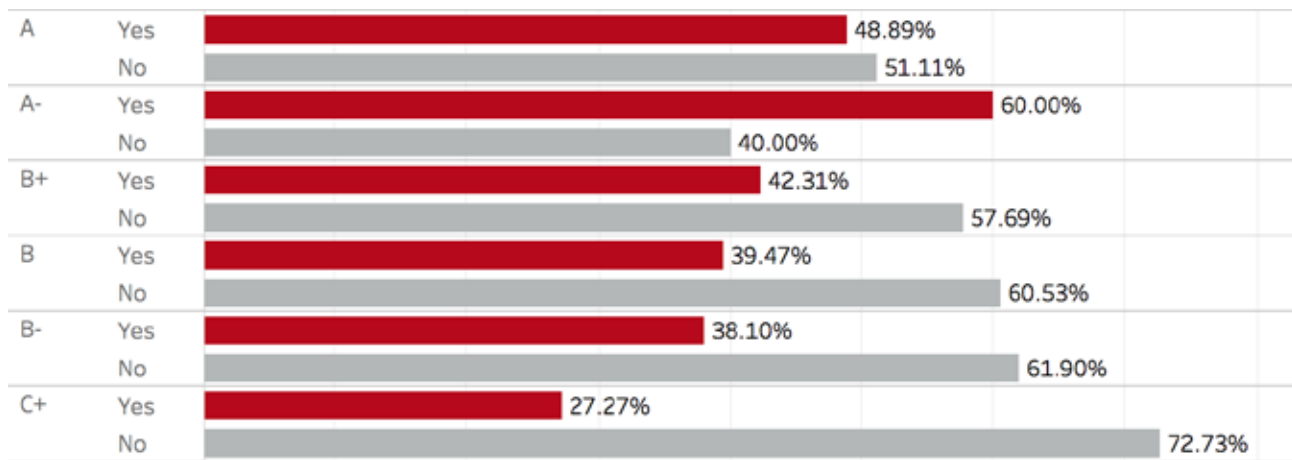NR = Natural Resources; CS = Computer Science; PR = Public Relations

16.2. Relationship between Internship Participation and Students' Program Sectors
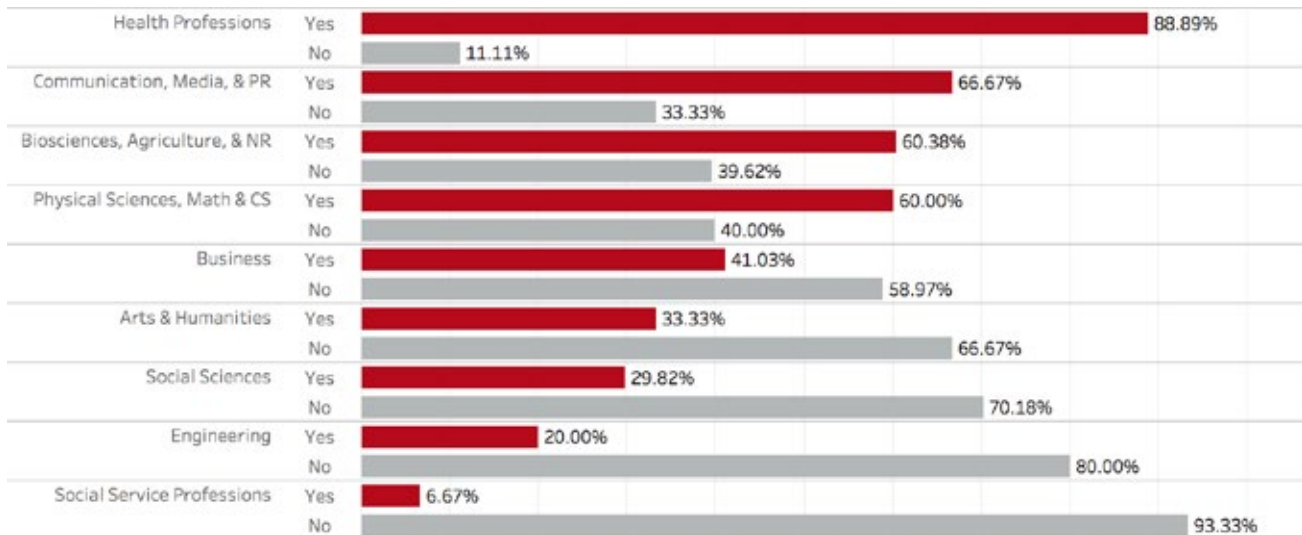
N = 205. Number of observations by category: Health Professions / Yes = 8; Health Professions / No = 2; Communication, Media, & Public Relations/ Yes Internship = 6; Communication, Media, & Public Relations/ No Internship = 3; Biosciences, Agriculture, & Natural Resources / Yes Internship = 32; Biosciences, Agriculture, & Natural Resources / No Internship = 21; Physical, Math, & Computer Science / Yes Internship = 3; Physical, Math, & Computer Science / No Internship = 2; Business / Yes Internship = 16; Business / No Internship = 23; Arts and Humanities/ Yes Internship = 4; Arts and Humanities / No Internship = 8; Social Sciences / Yes Internship = 17; Social Sciences / No Internship =40; Engineering / Yes Internship = 1; Engineering / No Internship = 4; Social Service Professions / Yes Internship = 1; Social Service Professions/ No Internship = 14; Note: Education (n= 2) was not shown in the figure due to the limited number.

Finally, there exists a positive and statistically significant relationship between students' grade-point average (GPA) and internship participation, such that higher GPA is associated with a higher probability that one participates in an internship ($\beta = 0.24$, $p = 0.006$). The odds ratio is 2.08, which indicates that for every one unit increase in GPA, the likelihood that a student participates in an internship increases by approximately 2.08 times. These results suggest that employers may prefer to hire students with higher GPAs, and students with lower GPAs (B- and below) may require additional support, encouragement, or assistance with securing an internship.

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

A	Yes	48.89%
	No	51.11%
A-	Yes	60.00%
	No	40.00%
B+	Yes	42.31%
	No	57.69%
B	Yes	39.47%
	No	60.53%
B-	Yes	38.10%
	No	61.90%
C+	Yes	27.27%
	No	72.73%

N = 196. Number of observations by category: A / No Internship = 23; A / Yes Internship = 22; A- / No Internship = 12; A- / Yes Internship = 18; B+ / No Internship = 30; B+/ Yes Internship = 22; B / No Internship = 23; B / Yes Internship =15; B- / No Internship = 13; B- / Yes Internship = 8; C+/ No Internship = 8; C +/ Yes Internship = 3;
Note: C (n=3), C (n=3), D+ (n=1) and D (n=1) were not shown in the figure due to limited number.

VII. RESULTS: Barriers to participation in internships for Claflin University students

In this section, we present findings from the online survey and student focus groups regarding barriers to participation in internships for students at Claflin University. 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 118 students who did not participate in an internship, 78.8% of them indicated a desire to participate in an internship (see Figure 18). We asked them about various reasons why they were not able to participate and present these results in Figure 19. 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 = 118)

Yes	78.8%
No	21.2%

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

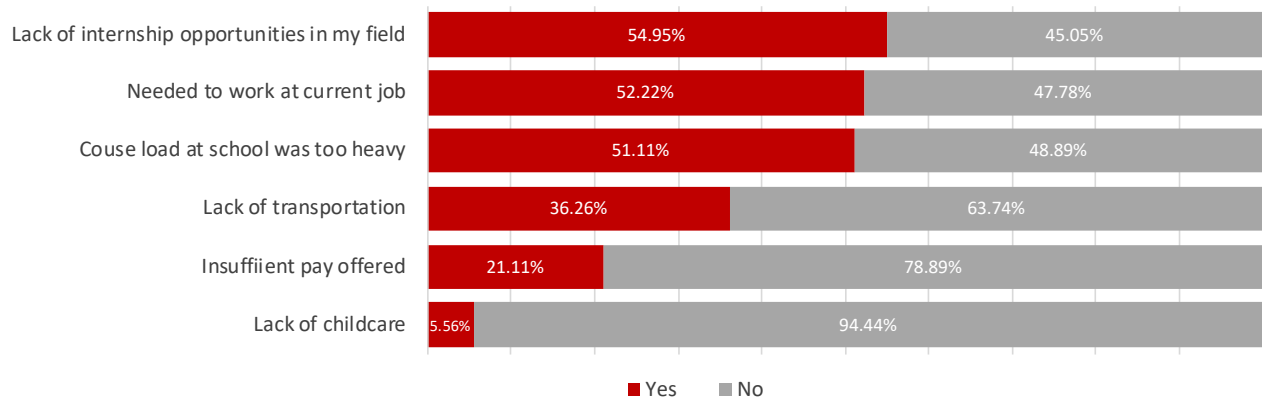|	Yes	No
Lack of internship opportunities in my field	54.95%	45.05%
Needed to work at current job	52.22%	47.78%
Couse load at school was too heavy	51.11%	48.89%
Lack of transportation	36.26%	63.74%
Insuffiient pay offered	21.11%	78.89%
Lack of childcare	5.56%	94.44%

Table 4. Claflin Student Concerns and Difficulties in Participating in Internships (N=18)*

Concern/Difficulty	Examples
Financial considerations	Issues with the need for financial stability, inability to take unpaid internships
Need to travel for internships	Issues around traveling or moving for an internship; living away from family, finding housing and living independently
Finding a placement	Issues finding an internship, navigating the campus requirements, limited availability of internships by field; issues with internship tasks and relevance to their career trajectory
Competitive application process	Issues with the competitive application process; competing with students from top tier schools

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

Students discussed several barriers to their participation in internships: financial considerations, the need to travel for an internship, finding a placement, and the competitive application process (Table Z). Students consider finances to varying degrees. One focus group discussion was particularly illustrative of this. The first student explained that:

> *When I do apply for different internships or look at different internships, I do look at the stipends. Thus, stipends are important just because [I'm] financially independent but I don't really get a lot of financial help from my parents. And so I try to look for internships that has the type of research I want to do, the type of graduate school preparation that I would want. And I also look at the stipend.*

In that interview, a second student agreed and went further, "That is completely true... the bigger the stipend, the more attractive it looks to students because we're broke." Whereas the first student stated that stipends were only one part of the consideration, the second student identified how the stipend was more (or most) important to her. One student also identified financial obstacles in applying to internships; and she stated, "Even then, I looked at the application. You've got to pay $50 for the application fee. I mean people don't have money like that just to be giving out." Related, students discussed the need to travel as a major consideration for internships; many saw that the internships they were

interested in required moving to another city for a short period of time. These internships, they found, may or may not pay or provide housing. Without enough compensation, sizeable scholarships, or generous family support, these internships seem impossible for students to take even though many are reputable.

In terms of finding a placement, students discussed the difficulties of this in terms of their finding a placement that was relevant to their field or career trajectory that were nearby. Students also discussed the competitiveness of internship programs as a barrier to their taking internships. Several students talked about being rejected by many internships. One student even said one of her free list terms was "Annoying." She explained:

> Because I feel like… at Claflin they put a lot of pressure on us to get internships. But they are so hard to get so, it's very frustrating and annoying at times. Like, you can't tell me to apply for something and then when I apply I get an email back two weeks later saying, "You didn't get it." So, it's very disappointing and it's also very annoying. It's just like, okay you're telling us we need the experience but they're not even willing to give us a chance.

Her frustration came from the pressure to apply to internships and the constant rejection she felt. Another student chimed in to say, "And even if we do have the experience it's not like we're going to get it. Because it's competitive." To which the first student responded, "Yes. You've got to deal with the Ivy League kids, everybody else comes from these big schools… and we're just a small institution and people don't really know who we are." This competition, though seem to provide excellent internship experiences (for those that attained them), also frustrated students who felt

constantly rejected.

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

In this section, we present findings regarding the types of internship programs that students at Claflin University 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 85 students at Claflin University in our study sample that had taken an internship in the past year, 34.8% of them did so at a for-profit company, with the remainder at government agencies (24.7%) and non-profit organizations (39.3%). Many of these internships were concentrated in fields such as science and technical services (20.2%), health care (18%), education services (15.7%), other services (14.6%), information (6.7%), and public administration (6.7%).

As defined by the North American Industry Classification System (NAICS), the information sector "comprises establishments engaged in the following processes: (a) producing and distributing information and cultural products, (b) providing the means to transmit or distribute these products as well as data or communications, and (c) processing data." More information on this sector is available at https://www.bls.gov/iag/tgs/iag51.htm

Figure 20. In what type of organization did you participate in this internship? (N = 85)

For-profit company	35.2%
Government agency	25.0%
Non-profit organization	39.8%

Figure 21. In what industry or field was this internship in? (N = 85)

Professional, Scientific, and Technical Services	20.22%
Health Care and Social Assistance	17.98%
Educational Services	15.73%
Other Services (except Public Administration)	14.61%
Information	6.74%
Public Administration	6.74%
Finance and Insurance	3.37%
Agriculture, Forestry, Fishing and Hunting	3.37%
Arts, Entertainment, and Recreation	3.37%
Administrative and Support and Waste Manage..	3.37%
Accommodation and Food Services	2.25%
Retail Trade	1.12%
Management of Companies and Enterprises	1.12%

Figure 22. For how many weeks did you participate in this internship? (N = 85)

1-4 weeks	7.9%
5-8 weeks	38.2%
9-12 weeks	34.8%
13-16 weeks	5.6%
17-20 weeks	1.1%
21-24 weeks	12.4%
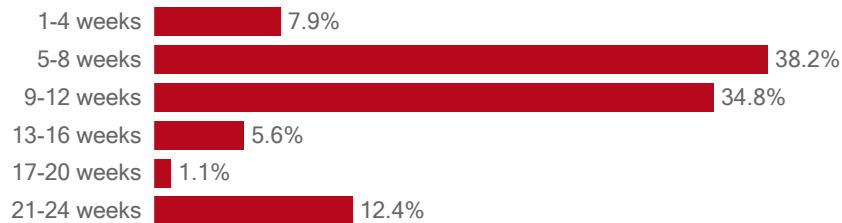
Figure 23. Was the internship paid or unpaid? (N = 85)

Paid	76.4%
Unpaid	23.6%

Figure 24. Hourly compensation of internships (N = 66)

$7.0 - $9.9	46.2%
$10.0 - $12.9	23.1%
$13.0 - $15.9	23.1%
$16.0 - $18.9	7.7%
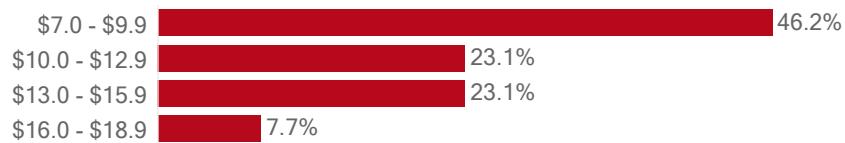
These results indicate that the largest proportion of survey respondents who had taken an internship did so for 5-8 weeks (38.2%) and 9-12 weeks (34.8%), with the remainder (19.1%) having had an internship experience that lasted more than 12 weeks. Only 12.4% of students had an internship for 21-24 weeks (Figure 22). Further, 76.4% of these students were compensated for their internship work, whereas 23.6% were not (Figure 23). Finally, only 30.8% of student interns at Claflin University are paid $13/hour or more (Figure 24). However, there is a large proportion of the students (46.2%) who were paid $9.9/hour or less, which is less than estimates of living wages for one adult in South Carolina ($10.81) (MIT Living Wage Calculator, 2018).

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 Claflin University students are taking? Examining this issue, we focus on the 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 Claflin University students who participated in an internship, 64% felt that their internship was very or extremely related to their academic coursework (Figure 25). In addition, 59.9% of the students reported that their academic and internship supervisors cooperated extremely well or very 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 = 85)

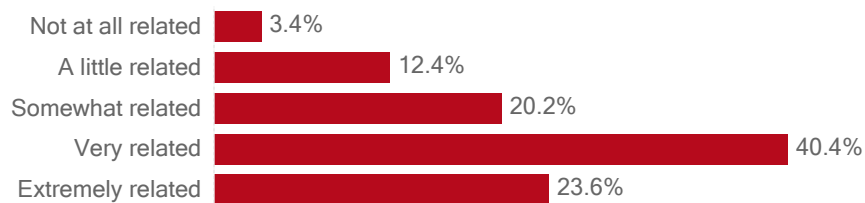|	
Not at all related	3.4%
A little related	12.4%
Somewhat related	20.2%
Very related	40.4%
Extremely related	23.6%

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=85)
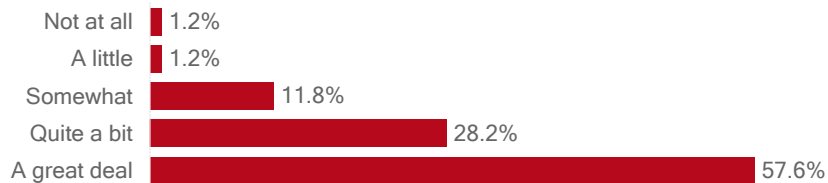
Not at all well	11.8%
A little well	7.1%
Somewhat well	21.2%
Very well	38.8%
Extremely well	21.2%
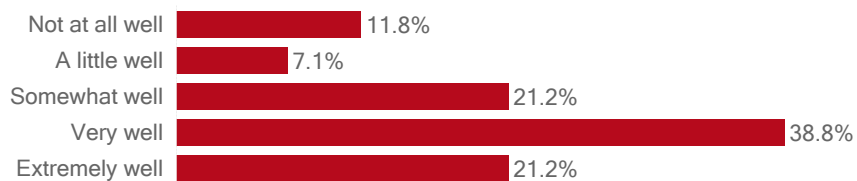
Perceived supervisor support

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=4.41, SD=0.70), and below we report results from two of these items. For example, Claflin University students who had recently taken an internship, 88.3% reported that their supervisors cared about their satisfaction at work, and 85.8% reported that their supervisors appreciate the amount of effort they made, important indicators of supervisory support (See Figures 27, 28).

Figure 27. In this internship, how much did your supervisor care about your satisfaction at work? (N = 85)

Response	Percentage
Not at all	2.4%
Some	9.4%
Quite a bit	31.8%
A great deal	56.5%

Figure 28. In this internship, how much did your supervisor appreciate the amount of effort you made? (N = 85)

Response	Percentage
Not at all	1.2%
A little	1.2%
Somewhat	11.8%
Quite a bit	28.2%
A great deal	57.6%

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=3.78, SD=0.73), and below we report results from two of these items. While many Claflin University students reported that most supervisors provided feedback sometimes, very often or extremely often (68.2%), it is concerning that nearly one third of the supervisors failed to encourage students' new ways of performing tasks at the internship site, and nearly 20% of the students reported not receiving feedback regarding their performance (see Figures 29, 30).

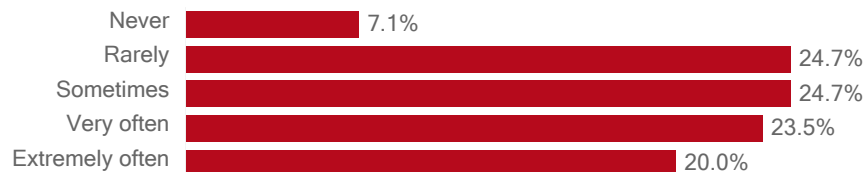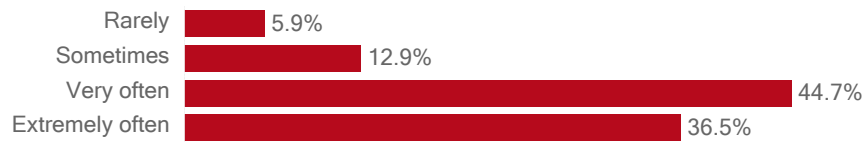**Figure 29. How often did your supervisor encourage you to try new ways of behaving in the job? (N = 85)**

Response	Percentage
Never	7.1%
Rarely	24.7%
Sometimes	24.7%
Very often	23.5%
Extremely often	20.0%

Figure 30. How often did your supervisor give you feedback regarding job performance? (N=85)

Rarely	5.9%
Sometimes	12.9%
Very often	44.7%
Extremely often	36.5%

Goal clarity

Clear expectations regarding work products and how they are evaluated are 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=4.19, SD=0.84), and below we report results from these items (see Figures 31, 32).

The results indicate that 81.1% of participating Claflin University students taking internships felt that they were given clear objectives, and 80% of students felt that they received clear explanation of what they need 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 = 85)
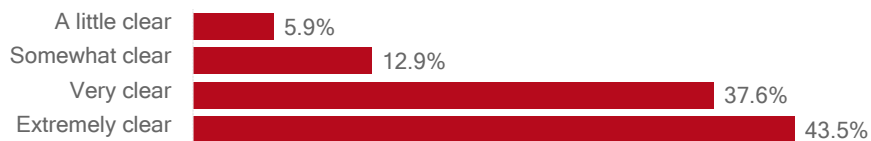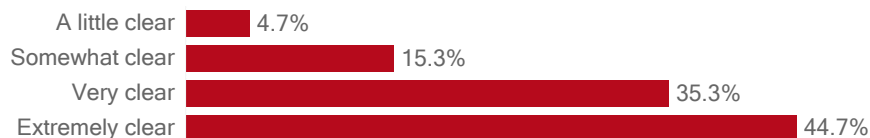
A little clear	5.9%
Somewhat clear	12.9%
Very clear	37.6%
Extremely clear	43.5%

Figure 32. In this internship, how clear was the explanation of what you needed to accomplish? (N = 85)

A little clear	4.7%
Somewhat clear	15.3%
Very clear	35.3%
Extremely clear	44.7%

Task autonomy

Besides benefiting from clearly defined tasks, interns also report 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=3.96, SD=0.87), and below we report results for these items (see Figures 33, 34). For Claflin University students, 81.2% reported having considerable flexibility in how they completed their work, and 62.4% 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 = 85)
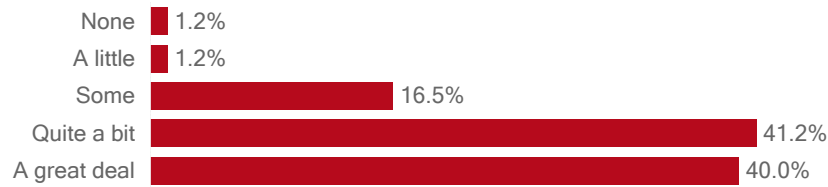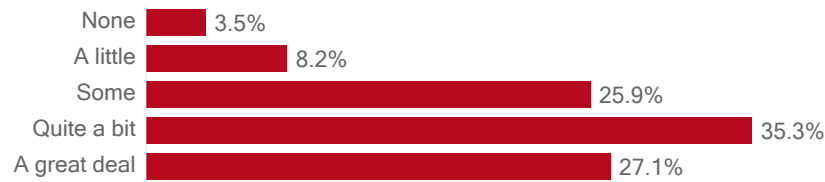
None	1.2%
A little	1.2%
Some	16.5%
Quite a bit	41.2%
A great deal	40.0%

Figure 34. In this internship, how much freedom did you have to decide how to do your work? (N = 85)

None	3.5%
A little	8.2%
Some	25.9%
Quite a bit	35.3%
A great deal	27.1%

Task similarity to entry-level jobs

Finally, one of the persistent questions in the literature is whether interns are provided with work that is of equal difficulty to entry-level employees (Hora, Wolfgram & Thompson, 2017). This construct was measured using two questions (M=3.6, SD=0.99). Answers to this question have implications for both compensation and the meaningfulness of the work itself (see Figure 35). More than half of the participating students (55.3%) reported that their internships were extremely similar or very similar to entry level jobs in their internship organizations. However, 34.1% students reported somewhat similar and 10.6% reported a little similar or not at all similar, indicating that more effort is needed to narrow down the gap in similarity between internship tasks and entry level jobs.

Figure 35. During your internship, how similar in nature were your tasks to those in entry level jobs in the organization? (N = 85)

Not at all similar	3.5%
A little similar	7.1%
Somewhat similar	34.1%
Very similar	36.5%
Extremely similar	18.8%
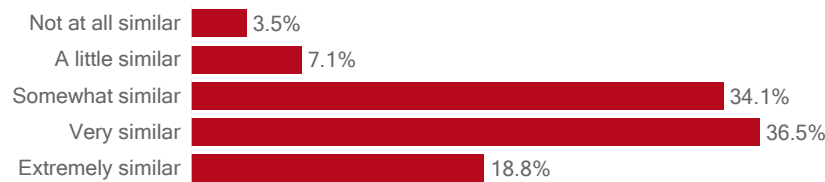
Focus group and interview results: What were students experiences with their internship?

In addition to these results from our online survey, we held six focus groups with 18 students at Claflin University. Thirteen of these students had taken an internship and they described the overall experience of their internships.

Table 5. Claflin University Student Experiences in Internships (N=13)

Focus of Internship	
Research	Internships that consisted primarily of STEM research; lab work
Not Research	Internships that were not focused on research
Travel	
On Campus	Internships with professors on campus
Far Away	Internships in places like New Mexico, Massachusetts, Washington DC that require relocation for the summer
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 or graduate school

Note: This sample only includes those Claflin University focus group participants who had internships

The majority of students that attended focus groups at Claflin University participated in research-focused internships, internships that required them to relocate for a period of time (typically summer), and were highly relevant to their future careers (Table 5).

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 Claflin University 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 poorly) 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 77.7% of Claflin University students reported that they were "very" or "extremely" satisfied with their experience. The fact that 17.6% were only "somewhat" satisfied and 4.7% were not satisfied with their internship indicates that work remains to be done to improve internships for all students (see Figure 36).

Figure 36. How satisfied were you with your internship experience? (N = 85)
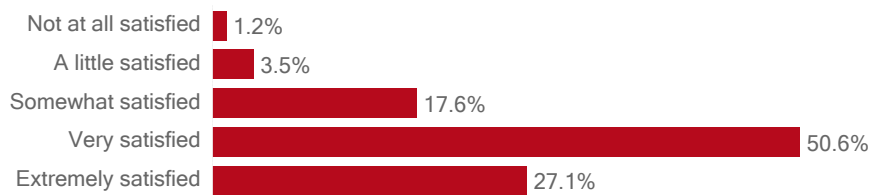
To investigate the relationship between internship program features and students' internship satisfaction, we conducted correlation and multiple regressions analysis. Please see Table 1 in Appendix B for the correlation and multiple regression results. The results indicate that supervisor support, mentoring, goal clarity, relatedness to academic program, and similarity positively and significantly correlated with students' internship satisfaction with coefficients ranging from 0.37 to 0.62. Autonomy and similarity are not correlated with internship satisfaction.

The multiple regression model with program features produces $R^2 = 0.47$, $F(6, 78) = 11.62$, $p < 0.001$. Supervisor support, goal clarity, and 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. Mentoring, autonomy, and similarity did not contribute to this multiple regression model. Finally, we can use this equation to compute predicted satisfaction scores: Satisfaction = 0.38 * supervisor support + 0.23 * goal clarity + 0.26 * relatedness to academic program.

Developmental value of the internship experience

Next, we examine 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 37-39).

Figure 37. How important were the skills or knowledge you learned at this internship for your career development? (N = 85)
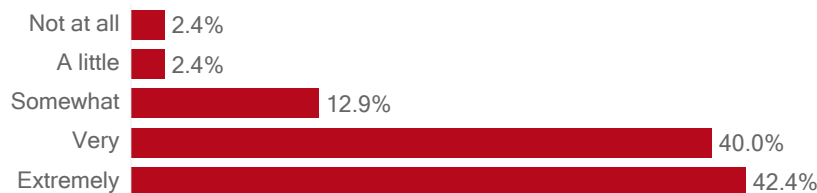
Figure 38. How much did this internship help clarify your career objectives? (N = 85)
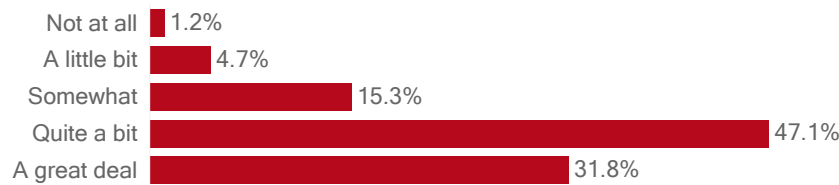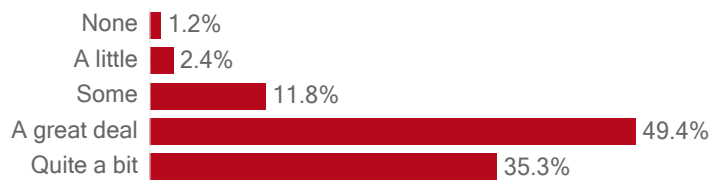
Not at all	1.2%
A little bit	4.7%
Somewhat	15.3%
Quite a bit	47.1%
A great deal	31.8%

Figure 39. How much new information or skills did you learn? (N = 85)

None	1.2%
A little	2.4%
Some	11.8%
A great deal	49.4%
Quite a bit	35.3%

To investigate the relationship between internship program features and students' internship satisfaction, we conducted correlation and multiple regressions analysis. Please see Table 2 in Appendix B for the correlation and multiple regression results. The results indicate that supervisor support, mentoring, goal clarity, autonomy, relatedness to academic program, and similarity positively and significantly correlated with students' internship satisfaction with coefficients ranging from 0.31 to 0.62.

The multiple regression model with program features produces R^2= 0.54, $F(6, 78)$ = 15.11, $p < 0.001$. Supervisor support and relatedness to academic program had significant positive regression weights, indicating students with higher scores on these two variables were expected to have greater satisfaction, after controlling for the other variables in the model. Mentoring, goal clarity, autonomy, and similarity did not contribute to the multiple regression model. Finally, we can use this equation to compute predicted satisfaction scores: Development value = 0.39 * supervisor support + 0.35 * relatedness to academic program.

Finally, the result of simple regression analysis indicated that career adaptability did not serve as a significant predictor of individuals' satisfaction or perceived development value. 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 considered as areas worthy of further attention, investment, and improvement.

Focus group results: Outcomes of internships

Table 6. Perceived Outcomes of Internship Participation Claflin University (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, perspective, flexibility, independence
Real world experience	Gaining experience that is different from classroom, hands-on, practice in field, experience in the setting, with people
Learning and skill development	Learning and practicing skills specific to the field or job; applying skills learned in classroom in work environment; learning in general
Getting into graduate school	Internship experience that is directly related to research; experience that helps boost graduate school applications and acceptance
Resume boosting	Experience that makes students look better as applicants, to employers, in the future
Networking	Meeting other people (e.g. mentors and coworkers) in the field who can support future job searches or become future research colleagues

Note: This sample only includes those Claflin University focus group participants who had internships; outcomes are listed in descending order of frequency

Students described how the internships affected them, most often sharing that their experience helped them explore their professional field, understand themselves personally, gain real world experience, learn and develop skills, get into graduate school, boost their resumes, and network and make connections (Table 6). In terms of exploring the professional field, several students offered examples of how the internship application process and experience helped them narrow their focus; one student said, "the process… would give me the experience and the knowledge and help me in deciding exactly what I wanted to do and where I wanted to go with my major and what I didn't want to do, in a sense." Students gave examples of moments where they knew that what they were doing in the internship was something they wanted to continue doing, sometimes altering their own goals in the process.

Related, students also discussed how they grew personally during their internships. Examples included students gaining a better understanding of themselves – their personal interests, likes and dislikes, attitudes and behaviors, perspective, flexibility, and independence. One student put it succinctly, stating, "It made me see what I was going to put up with and what I was not [going to put up with]." Another student stated how independence was an important aspect of her internship experience (she lived in a city far away from Claflin University for her summer internship), "this was the first time I was really on my own in the sense of living in an apartment in the middle of a city, getting up and walking to work every day basically because we were in downtown Charleston. And so I also had just a lot of time to explore myself."

The real world experience of the internship helped students apply what they learned in their classrooms to actual experience. Additionally, they were also exposed to new things they had not yet learned in the classroom. One student explained that in internships, one gets to "be exposed to different procedures and protocols that you have not done in

your classes." This real world experience, for Claflin University students, also highlighted life experience associated with internships that were far away from family.

Tangible outcomes encompassed learning, skill development, resume-boosting, and networking. One student explained her motivations for an internship:

> *I just wanted to go deeper. I wanted to see what people are really doing in the labs. I wanted to gain, you know, researching skills just in case I needed that. I just wanted to experience, you know -- I just wanted to challenge my brain a little bit."*

Another felt that she gained "intellectual exploration, so learning about different topics and different things that are going on in the world. And also meeting new mentors that can help us get to where we want to be that we wouldn't have met otherwise." Claflin University students, whose internships primarily focused on research, also discussed how important their research internship experiences were for them to be able to get into graduate school; they explained that this was essentially required for graduate school applications, so their internship served as an important stepping stone to access post-graduate education.

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 Claflin University.

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 Claflin University in our survey, including demographic characteristics that may impact students' ability to access an internship experience, especially first-generation college status (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 20). 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, asking 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 supervision quality that they receive and actively establish effective communication and professional development opportunities as an intern.

- Although one's internship satisfaction and perceived contributions of internship to their 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 (page 27) 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 to 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 the students to know about the world of work and 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 cultivate students' work ethics. To facilitate a quality internship program, faculty needs to consider the following recommendations:

- Institutional leaders at Claflin University 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 Claflin University 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 the challenges of finding a relevant internship (Figure 19 & Table 4, page 20). 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 internship referrals.

- Factors such as an internship's relevance to the student's academic program, the quality of supervisor support, and the clarity of goals and objectives are predictors of internship satisfaction and perceived developmental value. In addition, some internship's relevance to the student's academic program was described by students as important features of their internship experiences (Table 5, page 27 & 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 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 is an important predictor of student internship satisfaction and perceived developmental value, employers can enhance this opportunity by carefully designing internship programs to include 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 by providing emotional support and financial support, if possible.

- The clarity of the goals of work tasks is a predictor of satisfaction. Supervisors can allow for some task autonomy for their interns by encouraging their creativity, but still providing clear objectives and explanation about what interns need to accomplish; and provide periodic feedback to interns that highlight their progress and accomplishments, while also pointing out shortcomings and proposing action plans for improvement.

- The relevance of the internship experience to the academic program serves as a critical predictor of positive student outcomes. The academic relevance of the internship was also emphasized by the students in the focus groups (Table 5, page 27). 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.

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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 in the second half their degree programs. 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 practicum (e.g., 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	4.41	0.70	0.87
Supervisor mentoring	3.78	0.73	0.77
Goal clarity	4.19	0.84	0.92
Task autonomy	3.96	0.87	0.80
Relatedness to academic program	3.66	1.09	
Similarity	3.60	0.99	
Satisfaction	3.99	0.84	
Development value	4.17	0.71	0.73
Career adaptability composite	15.45	2.92	0.91
Concern	3.99	0.77	0.87
Control	3.89	0.79	0.87
Curiosity	3.80	0.85	0.91
Confidence	3.77	0.85	0.92

The results of the survey were analyzed using methods such as the Pearson Chi-square test, and ordinal logistic regression to explore the effects of demographic background on internship participation. In addition, correlation, simple regression, and multiple regression analyses were 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=11 students in 5 groups) and those who have not (N=7 students in 4 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.

Lastly, we conducted an audio-recorded interview with one educator at Claflin University who supports student internships. A list of potential recruits from among the Claflin University staff and area employers was provided by our colleagues at Claflin University. 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, the interview participant completed a free list exercise and discussed their responses. The educator interview 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 were 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 a 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 Claflin University. 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	0.62***	0.38**	0.004
Supervisor Mentoring	0.52***	0.10	0.445
Goal Clarity	0.45***	0.22*	0.044
Relatedness to academic	0.37***	0.26**	0.004
Task autonomy	0.2	-0.07	0.430
Similarity	0.2	-0.05	0.620

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	0.62***	0.39**	0.002
Goal Clarity	0.52**	0.22	0.074
Supervisor Mentoring	0.35***	-0.08	0.418
Link between academic program and internship	0.48***	0.34***	< 0.001
Task autonomy	0.31**	0.03	0.705
Similarity	0.38***	0.10	0.250

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

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.