Exploring Student Perspectives on College Internships: Implications for Equitable and Responsive Program Design

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Abstract

Internships are a widely touted co-curricular activity that may enhance students' employability, their future wages, and employer talent needs. However, how students themselves understand and conceptualize the internship experience is poorly understood. Reasons why understanding students' perceptions of internships is important include the fact that debates about employability are dominated by employer voices and interests, and that developing student-centered educational experiences require a deep understanding of their conceptions of the learning and developmental process itself. In this paper we adopt an ethnographic perspective to reposition the perspectives of students from the periphery to the center within discussions of employability and internships, and use the freelisting method to document the words or phrases that are most salient to students (n=57) as they consider the cultural domain of "internships." We analyzed the resulting data using saliency analysis, inductive thematic analysis, and techniques from social network analysis to document the most frequently and psychologically salient reported terms associated with internships, themes related to these terms, and differences between students who have and who have not taken an internship. Results indicate that the most salient terms in the cultural domain of internships were: "experience," "learning," "paid," and "connections." Students discussed these words in utilitarian terms (e.g., something to "get" for one's résumé), as important aspects of career- and self-exploration, and to highlight the importance of compensation. Differences in the complexity of student accounts were evident between students who had taken an internship and those who had not. These findings highlight how common definitions of internships reflect a homogenous and aspirational perspective that is inconsistent with student accounts. We conclude that students' insights about internships are important to consider to reframe the employability debate to include student interests, to avoid one-size-fits-all approaches to internship design, and to facilitate student self-reflection.

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Internships are a widely touted co-curricular activity that may enhance students' employability, their future wages, and employer talent needs (Knouse & Fontenot, 2008; Maertz, Stoeberl, & Marks, 2014; McHugh, 2017). Consequently, many governments and postsecondary institutions around the world view internships as a cornerstone to their employability policies, in some cases making them mandatory in order to graduate from college (Klein & Weiss, 2011; Silva et al., 2016). In the United States, the inclusion of internships as a "high-impact" practice that contributes to student engagement, persistence, and degree completion (Kuh, 2008) has policymakers and professional associations (e.g., National Association of Colleges & Employers [NACE], 2018a) advocating for postsecondary institutions to widely adopt internships . At the same time, a growing body of international and multi-disciplinary research on internships documents the positive benefits of internships (McHugh, 2017; Silva et al., 2018), leading to what could be considered "the era of internships" in global higher education.

However, one aspect of internships is poorly understood: how students themselves understand and conceptualize the internship experience. We know how educators and advocates define them and conceive of their value, ideal structure, and functions (e.g., NACE, 2018b). A promising line of inquiry examines students' experiences with and opinions of the quality of their internships in fields such as hotel management (Cho, 2006) and marketing (Alpert, Heaney, & Kuhn, 2009). Another line examines similarities and differences in how students and employers view the quality of internship programs (Knemeyer & Murphy, 2002). To date, no empirical research exists on how students actually define and conceptualize the internship experience itself.

There are multiple reasons why eliciting and understanding students' perceptions of internships is important. First, debates about employability tend to be dominated (and thus framed) by employer and advocates' voices and interests, with little to no representation of students' own interests, experiences, and opinions (Tymon, 2013). By incorporating student voice into discussions about employability in general, and internships in particular, a more diverse and equitable range of interests and perspectives are represented (Cook-Sather, 2006; Higdon, 2016). Second, student-centered educational experiences are not solely about convincing faculty to adopt engaging pedagogies generally known as "active learning," but also involve increasing students' active engagement in the learning process itself (Carini, Kuh, & Klein, 2006). Engagement like this that involves students in co-designing course structures, pedagogy, and the curriculum itself can facilitate student learning and faculty motivation (Bovill, Cook-Sather, & Felten, 2011). Third, because internships are part of a critical phase in students' psychological and professional development (e.g., college), understanding how students internalize and interpret these experiences can provide valuable information to educators (Hilton & Slotnick, 2005; Jackson, 2016). With insights into how students' professional identities

develop (or not), it becomes possible to then create learning environments and internships that are appropriate, positive, and effective for certain groups of students (Lown, Davies, Cordingley, Bundy, & Braidman, 2009).

Without these insights, however, definitions and accounts of internships are developed by researchers and work-based learning advocates, which reflect their preconceived frameworks about program form and function, and assumptions regarding the purpose and value of internship experiences. In this paper, we address this gap in the literature by drawing on theory and method from cultural anthropology to document the "emic" or insider perspectives of students' on the internship experience (Wolcott, 1985). By adopting this ethnographic perspective, we aim to reposition the perspectives of students—from the periphery to the center—within discussions of employability and internships (Higdon, 2016; Tymon, 2013), which requires empirical analyses of how students construct their understandings of internships. To elicit students' accounts, we use the freelisting method to document the words or phrases that are most salient to students as they consider the cultural domain of "internships." A cultural domain is a category or topic comprised of items that a social or cultural group collectively agrees upon (Borgatti, 1999; Spradley, 1979). In this case, we gathered freelist data from students (n=57) at three U.S. colleges. We analyzed the resulting data using saliency analysis, inductive thematic analysis, and techniques from social network analysis to address the following research questions: (1) What are the most frequently and psychologically salient reported terms associated with internships? (2) What themes are evident in students' descriptions of these terms? and, (3) What, if any, differences in term frequency, salience, and themes are apparent between students who have and who have not taken an internship? Answers to these questions are analyzed in the remainder of this paper, followed by reflections on what implications they may hold for research, policymaking, and practice around internships in colleges and universities.

Background

Research on internships is increasing across disciplinary and national boundaries, as more governments and postsecondary institutions and analysts advocate for their inclusion in students' educational programs (see Author, Author, & Author, 2017; Narayanan, Olk, & Fukami, 2010, for reviews). Scholars of internships generally examine how different features of internship programs and experiences, such as compensation (Crain, 2016), supervisor quality (McHugh, 2017), and institutional requirements (Klein & Weiss, 2011), are associated with outcomes that include wages (Saniter & Siedler, 2014), vocational self-concept (Knouse, Tanner, & Harris, 1999), and academic achievement (Binder, Baguley, Crook, & Miller, 2015). However, despite the depth and diversity of this literature, some methodological and conceptual limitations inhibit the comparability and validity of research on internships. In the remainder of this section, we outline limitations associated with terminology and the lack of including a student perspective, and our approach for addressing this gap in the literature—a cultural examination of how students define and experience internship programs.

Internships Definitions and Underlying Assumptions

Terminological problems are widely acknowledged among internship researchers and practitioners, with the lack of a consistent and standardized definition being the primary issue (NACE, 2018a; Silva et al., 2016). Details regarding the length, purpose, format, and quality vary across institutions, disciplines, and researchers, with the latter raising significant issues with reliability and validity in empirical research. For instance, the National Survey of Student Engagement (2018) uses a compound question to report participation, asking students to report their involvement in an "internship, co-op, field experience, student teaching, or clinical placement"—each of which has unique formats, regulatory contexts, and educational goals, rendering them distinct types of co-curricular experiences. Most commonly, the term is not defined at all in the literature and instead is presented as if a common understanding of the program's characteristics is known to all (Author et al., 2017).

Furthermore, when internships are defined, distinct conceptions can be discerned about the nature, value, and purpose that some parties assign to internships. For example, NACE (2018a) defined internships in the following way:

> An internship is a form of experiential learning that integrates knowledge and theory learned in the classroom with practical applications and skills development in a professional setting. Internships give students the opportunity to gain valuable applied experience and make connections in professional fields they are considering for career paths; and give employers the opportunity to guide and evaluate talent.

This definition has several notable features, the first of which is that besides aiming to "establish uniformity" in how the term "internship" was used, NACE (2018a) offered this definition to achieve consensus among the different parties implicated in internships—students, colleges and universities, and employers. Thus, despite the potentially different interests and perspectives held by these groups, a standardized definition is offered to erase such variation.

Of greater import to this paper is that this definition conceptualizes internships in an idealized state. In defining internships as a form of "experiential learning" and stating they uniformly facilitate students' social capital and professional networks—two achievements that are not easy to accomplish and thus not to be taken for granted—NACE's (2018a) definition is more aspirational than descriptive of internships and how students experience them in the real-world. A similarly optimistic perspective evident in other accounts of internships (e.g., Sides & Mrvica, 2007), which, besides offering a homogenous account of an experience that can manifest in a huge range of possibilities, also obscures negative and potentially harmful aspects such as worker exploitation (Chan, Pun, & Seldin, 2015; Perlin, 2012) and how internships may reproduce inequality and class divisions (Curiale, 2009). Such a state of affairs is one reason why a more ethnographic and student-based account of internships is warranted to fully understand internships.

The Role of Student Voice: Representation, Instructional Design, Professional Identity Formation

The definitions outlined above share a common feature that is symptomatic of the way internships are discussed and designed in the field: the lack of input from the arguably most important constituency: college students themselves. Again, while research on students' opinions about the quality of their internship experiences does exist (Alpert et al., 2009; Cho, 2006; NACE, 2018b), what results is more akin to customer satisfaction surveys that do not delve deeply into how students define and construct their understandings of the experience itself. Specifically, three problems exist with this state of the research literature.

First, for some researchers, marginalizing the experiences of students in discussions about education, in general, is a matter of power and equity, where student voice is subjugated to more powerful interests such as employers and college administrators (Cook-Sather, 2006). This is particularly the case with the student employability debate, where business interests that emphasize productivity and profit via a human capital framework take precedence over what students think, want, and experience (Urciuoli, 2008). Such a perspective has shaped the dominant view that to get a job is primarily dependent on a student's own personal initiative and skills, which ignores other factors that demonstrably impact job acquisition such as the business cycle, hiring decisions, local economic conditions, and so on (Higdon, 2016; Tomlinson, 2012; Tymon, 2013). Ultimately, in the eyes of some researchers, including students in these debates (beyond satisfaction surveys) is not only a moral imperative to make the discussion more democratic, but also a key to enhancing educational quality, since it involves mechanisms for continuous improvement based on "user" feedback and experience (Bovill et al., 2011).

Second, one of the core principles of student-centered instruction, which has gained international prominence as a reform against lecture-centric teaching (Freeman et al., 2014; Prosser & Trigwell, 2014), is that students must become more actively engaged in the educational and learning process (Carini et al., 2006). While some interpret this key idea in terms of crafting more engaging classroom activities, others focus on how students can become more involved in co-designing courses, teaching methods, and the curriculum itself (Bovill et al., 2011). This perspective is similar to the idea of "design-based research," where the research process begins with the understanding users' (e.g., teachers, students) own habits, perceptions, and needs, and that the research design and subsequent interventions be adjusted over time to meet the needs of local contexts and communities (Barab & Squire, 2004). In the case of student voice, research suggests that a similar type of responsiveness, where students are engaged in the planning for courses and co-curricular activities, is positively associated with student motivation, student-teacher relationships, and instructor understanding of learning itself (Bovill et al., 2011). While there may be other benefits of eliciting student perspectives (e.g., the positive aspects of self-reflection), engaging students in this manner is a way for students to share potentially important insights about strengths and weaknesses within a course or classroom, which can then be incorporated into future revisions or changes to courses, lesson plans, and academic programs (Matthews, Cook-Sather, & Healey, 2018).

The third and final reason for eliciting students' perspectives is that to adequately support and foster their personal and professional growth, students need to engage in self-reflection, and educators need to understand how students experience their entry into new professions and communities of practice. This perspective is grounded in a view of internships as a potentially transformative experience, where students become socialized into new professional cultures and workplaces (Dailey, 2016; Jackson, 2016), and where they may begin to develop what is known as a "pre-professional identity" (Trede, Macklin, & Bridges, 2012). In developing this new sense of self, students draw upon information from their new context and colleagues, which serves to inform their developing notion of who they are as professionals (Savickas et al., 2009). Research on how novices develop this new identity in programs similar to internships, such as pre-service teacher education, also highlights the importance of self-reflection and how educators can use insights into student development to shape their own mentoring (Sutherland, Howard, & Markauskaite, 2010). Specifically, with information about what students perceive as important (and deleterious) factors shaping their professional progress and development, educators can then adjust how they teach and advise students (Lown et al., 2009), and how they design and implement internship programs (Rothman, 2007).

These reasons for eliciting information about students' internship experiences raises yet another question—how can the field best elicit student "emic" or insider accounts about internships? While surveys are a frequently used tool for efficiently collecting data about student opinions and perspectives, another technique that is rarely used in higher education research is better suited for this purpose: the freelisting method.

Cultural Domain Research in Anthropology and the Freelist Method

When we think about how particular groups of people define, conceptualize, or perceive an event or concept, thinking in terms of culture or the distribution of these conceptions across a population is useful. In cultural anthropology, the distribution of categories or concepts across a group is called a cultural domain, defined as a set of items perceived to be of the same type by group members (Borgatti, 1999; Spradley, 1979). In other words, a cultural domain is a shared psychological category, like "animals," "movie stars," "skills," or, in the case of this paper, "internships."

Freelisting is a method researchers can use to identify cultural domains with groups. The degree to which people in a group share cultural domain knowledge is an empirical question, and domains are usually structured so that many group members share a small number of "core" items and two members share a much larger number of "peripheral" items——items (Borgatti, 1999). Commonly used in anthropological field research, the freelist technique entails asking members of a group to list all of the words or short phrases that come to mind regarding a specific concept. Freelists are often conducted verbally, but some researchers suggest that having respondents write down their terms reduces translation and transcription errors (Quinlan, 2005). The resulting data can then be analyzed to identify the most frequently reported terms, terms that are both frequently reported and also near the top of people's lists, and through other exploratory data techniques.

Freelisting has been used to study topics such as consumer preferences (Hough & Ferraris, 2010), beliefs about cancer (Daley, 2007), and medicinal plant knowledge (Chatterjee, Das, Chattopadhyay, Kumar & Vasilakos, 2016). Relatively few studies in education and/or workforce development have used the method, but exceptions include analyses of faculty and students' perceptions of innovative teaching (Jaskyte, Taylor, & Smariga, 2009), and a study about medical students' perception of what is important in their personal and professional development (Lown et al., 2009). In the study by Lown and colleagues (2009), the researchers' intent was not solely to generate new knowledge, but to apply subsequent findings to improve courses and programs within their medical school programs. This desire to apply research findings to address pressing problems of educational practice motivates this study. Using the freelist technique, we aim to shed light on one of the most influential ideas in global higher education in the early 21st century—that of college internships—to improve how these programs are understood and subsequently designed and implemented in the field.

Methods

The data reported in this paper are drawn from a larger mixed-methods, longitudinal study of the relationship between internship program design and student outcomes at three postsecondary institutions: a comprehensive predominantly white institution in Wisconsin with an undergraduate headcount of 4,168 students (hereafter named Institution A), a technical college in Wisconsin with 20,801 students (Institution B), and a historically black college or university in South Carolina with 2,038 undergraduates (Institution C). These institutions were selected to reflect a diversity of postsecondary institutions in the United States, and because institutional leaders invited the research team to conduct the study at their colleges with the explicit interest in applying findings to improving local internship programs. The sampling frame for the study included students in their junior and senior years (Institutions A and C) or in the second half of their degree programs (Institution B) to increase the prospects that a sample student had completed an internship. To focus on students' experiences in internships and not on related experiential learning programs, we excluded from the sampling frame students from programs with a required clinical practicum (e.g., teacher education, nursing and related allied health fields) or apprenticeship programs.

The data were collected through an online survey administered to students and focus groups with students who self-selected into the study. The procedure for administering the online survey began with a letter and cash incentive ($5) mailed to all students in the sampling frame (1,250 at Institution A, 1,250 at Institution B, and 885 at Institution C). After completing the survey, the students were asked if they were willing to participate in a focus group. A total of 57 students participated in focus groups across the three institutions, for which attendees received a $20 cash incentive. Most groups included two to four students, though no-shows resulted in one-person interviews in some cases (n=7). These focus groups or interviews were separated into those who participated in an internship and those who had not. Information about the composition of the study sample is shown in Table 1.

Table 1: Description of study sample

Variable	*Focus Group (n=57)*
Age in years, mean (SD)	25.88 (7.73)
Male (%)	17 (29.8)
Female (%)	39 (68.4)
Race	
Asian American (%)	4 (7.0)
Black or African American (%)	19 (33.3)
Hispanic or Latino (%)	1 (1.8)
White or Caucasian (%)	30 (52.6)
First-generation student (FGS)	
FGS (%)	21 (36.8)
Not FGS (%)	36 (63.2)
Having paid employment	
Yes (%)	38 (66.67)
No (%)	19 (33.33)
Working hours, mean (SD)	14.07 (12.14)
Annual income, mean (SD)	$9,933.52 ($13,802.98)
Receiving food assistance	
Yes (%)	4 (7.14)
No (%)	52 (92.86)
Not paying bill	
Yes (%)	3 (5.36)
No (%)	53 (94.64)
Enrollment status	
Full-time (%)	44 (77.19)
Part-time (%)	13 (22.81)
Grade-point average: 1(D+) to 10 (A), mean (SD)	
Academic program	
Arts and humanities (%)	5 (8.77)
Biosciences, agriculture, & natural resources (%)	12 (21.05)
Business (%)	5 (8.77)
Communications, media, & public relations (%)	6 (10.53)
Engineering (%)	1 (1.75)
Health professions (%)	1 (1.75)
Physical sciences, math, & computer science (%)	4 (7.02)
Social sciences (%)	9 (15.79)
Social service professions (%)	0 (0)
Internship Required	
Yes (%)	17 (29.82)
No (%)	38 (66.67)
Internship Participation	
Yes (%)	32 (56.14)
No (%)	25 (43.56)

Note: Not all of the respondents provided information on the above variables, such that not all groups sum to 57.

Data Collection

The data analyzed for this paper were based on focus groups with students that about one hour and were moderated by one or two researchers. All students first completed a freelist exercise where they were asked to identify and write down short words or phrases associated

with the term “internships.” A written freelist exercise was used instead of a verbal approach to avoid students being influenced by one another and to reduce transcription errors (Quinlan, 2005). After taking three or four minutes to complete their freelist, students were then asked to elaborate on the first term on their lists, and to explain what the term meant and why they wrote it down. Following this exercise, students were then asked several open-ended questions such as, “Why did you (or not) pursue an internship?” and “Please describe your experience at the internship site.”

We then used a semi-structured protocol that included questions about students’ background, their academic program and career goals, and their experiences with internships. For students who had taken internships, questions were asked about their motivations for pursuing an internship, the nature of their work in the internship, the type of mentorship they received in their internship, and so on. Students without an internship experience were asked about obstacles to pursuing internship opportunities and general concerns about internships and their future careers.

Data Analysis

The analysis included 57 freelists, and because respondents listed terms that could be considered closely related but were in fact phrased differently (e.g., work ethic, hard worker, dependable worker), two analysts reviewed the raw data independently to develop separate lists of standardized terms (Miles, Huberman, & Saldaña, 2013; Quinlan, 2005). Once a list of standardized terms was settled on, two researchers applied the terms to 10% of the raw data. Analysts resolved the few discrepancies that were identified, and one researcher applied the standardized terms to the rest of the data (Campbell, Quincy, Osserman, & Pedersen, 2013). The final code list included 48 terms.

We then analyzed the data using Anthropac software to identify the concepts that students identified most frequently and considered most salient to internships (Borgatti, 1992). We conducted these analyses for the entire sample and then for each group (i.e., students who had taken internships, and students who had not) to examine whether differences occurred by experience. The primary output of the analysis was term salience, which is a measure that reflects the average percentile rank of a particular term across all respondent lists while weighting terms by the order each respondent reported them (Smith & Borgatti, 1997). Salience is a commonly used metric in cognitive anthropology because it implies that a term reflects a shared cultural domain and represents psychologically relevant information for group members (Romney & D’Andrade, 1964). Salience is computed as:

$$s_j = 1 \; \frac{r_j 1}{n 1}$$

$$s_j = \frac{n \, r_j}{n 1}$$

Where r_j = position of item j in the list, and n = number of items per list (see Smith & Borgatti, 1997). To calculate the overall saliency index, the average s_j across all respondents is calculated.

Then, we performed a content analysis of the data, which beginning with keyword searches of terms with a saliency score of 0.20 or higher. However, of the nine terms that met this criterion, only five terms had sufficient textual data to analyze (i.e., complete sentences for multiple individuals that elaborated on term meaning). These terms were "experience," "learning," "paid," "unpaid," and "opportunity." Next, we employed an inductive approach to thematic analysis to interpret the student responses to "discover underlying meanings" of the words used in the freelist activity (Hsieh & Shannon, 2005, p. 1284). This process began with open-coding where one analyst reviewed the raw data, made margin notes about important details related to ideas or about events repeated across respondents (Miles et al., 2013; Ryan & Bernard, 2003). Then, upon encountering that detail in later text fragments, the analyst compared each successive instance of a code to previous instances to confirm or alter the definition of that code (i.e., the constant comparative method) (Glaser & Strauss, 1967), with the result being a final set of themes that are reported in this paper.

Finally, to examine the underlying structure in how respondents conceptualized internships, we then used techniques from social network analysis to develop a participant-by-code matrix in which each cell indicated whether participant i spoke about a particular situational factor or communication theme j (1) or not (0) in their interviews. We then used UCINET software to transform the two-mode data matrix into a one-mode (code-by-code) matrix, which resulted in a co-occurrence matrix in which each cell corresponds to the number of instances where code i is affiliated with code j (Borgatti, Everett, & Freeman, 2002). We then used the program Netdraw (Borgatti, 2002) to graph the co-occurrences of pairs of codes for each of the respondent sub-groups (e.g., students with internships, students without internships). The thickness of the line connecting a pair of codes indicates how frequently respondents reported the two codes together, with thicker lines corresponding to stronger co-occurrences (i.e., affiliations). Then, to evaluate the degree to which a graph was more or less complex or "dense," analysts calculated the degree of centrality of each node to measure the frequency with which a particular code connects to other codes within a situation network (Scott, 2017).

Results

In this section we report the results from our study, beginning with a description of terms used in the freelist exercise, the most frequently reported terms, results from analyses of term salience, thematic analysis of interview text associated with the most salient terms, and affiliation graphs of terms used by study participants.

1. Conversion of Raw Data into Standardized Terms

The first step in analyzing freelist data is to convert each respondent's "raw" or original data into a standardized set of terms or phrases so that analyses can be conducted across the study sample. This step naturally (and unfortunately) results in the loss of rich, fine-grained language and insights from individuals, and so before reporting findings using the standardized list of terms we describe the idiosyncratic terms that were subsumed under the standardized terms and phrases.

A review of the raw data reveals that while standardized terms do capture the essence of the original terminology reported by study participants, they obscure some local and personal texture, specificity, and granularity. For instance, the standardized term “experience” encompasses several terms such as “hands-on experience,” “work experience,” and “new experience.” Another example is the term “exploration,” which study participants reported using terms including, “explore,” “trying something new,” “new adventures,” “test run,” and “try before you commit” (see Table 2).

Table 2. Raw freelist data examples of standardized terms

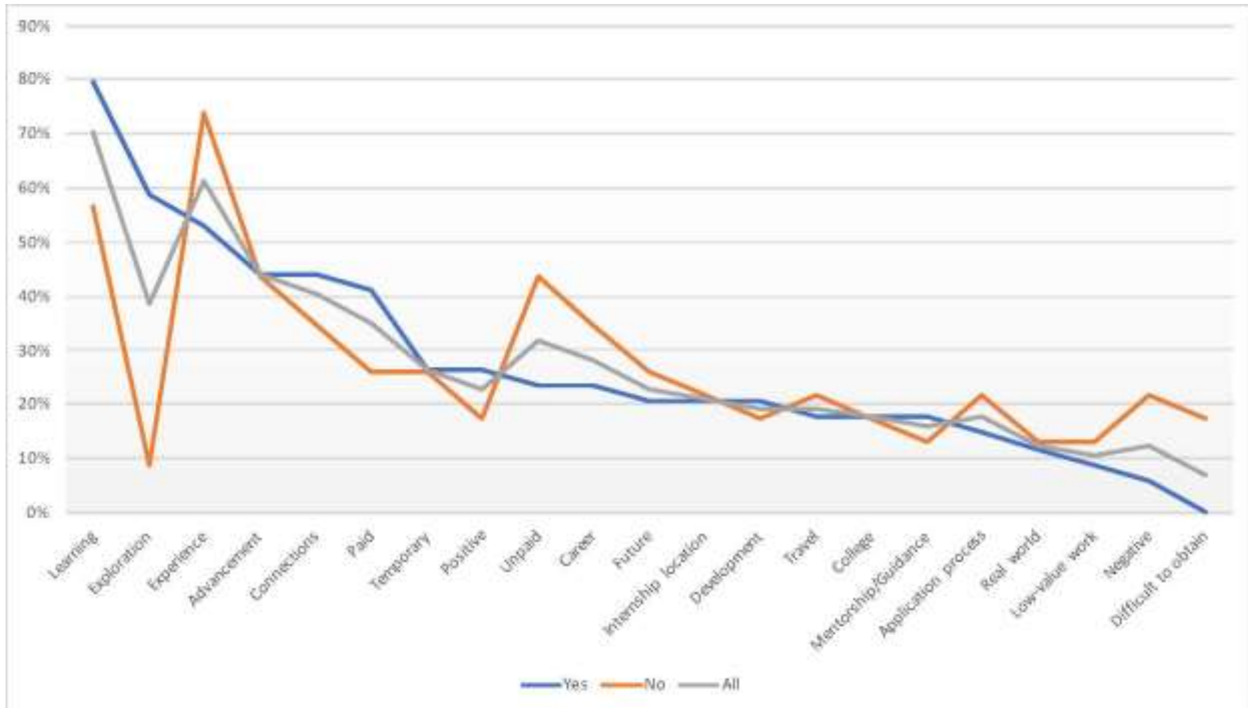
Standardized Term	*Raw Data Examples*
Experience	Experience, hands-on experience, work experience, new experience
Learning	Learning, knowledge, educational, extra training, learning experience, repetition, difficult, challenging, teaching, shadowing, training
Paid	Paid, money, stipend, compensation
Connections	Connections, networking, coworkers, network, meeting new people, friends, social capital, relationships, connections to future career, people
Career	Career, job work, labor, in your career field, career moves
Advancement	Advancement, possible job, foot-in-the-door, stepping stone, good for jobs, résumé booster, workshops, GRE & MCAT prep, beginning
Unpaid	Unpaid, no compensation, little or no compensation, cheap labor
Opportunity	Opportunity, opportunities, chance, career opportunities
Exploration	Explore, exposure, new, test run, trying something new, try before you commit, trial and error, new adventures, eye-opening
Temporary	Temporary, short-term, short, summer, part-time, six months
Development	Development, growth, inspiration, gaining skills, apprenticeship, personal development, personal growth
Future	Future, goals, setting/achieving goals, planning for the future, inside look at future career

Some of these raw data reflect subtle distinctions that indicate respondents were likely conveying slightly different aspects of the terms “experience” and “exploration,” and we examine these nuances in the inductive analysis of interview text reported later in this section. Analyses of the standardized terms, however, reveal interesting and informative patterns.

2. Frequency of Standardized Term Reference

First, we report the terms that *all* students in our study sample used most frequently with respect to internships: “learning” (reported by 66.7% of participants), “experience” (61.4%), “advancement” (43.9%), and “connections” (40.4%). Then, because some differences were evident in preliminary analyses between students who had and who had not taken internships, we disaggregated the data and examined term frequencies for each group (see Figure 1).

Figure 1. Please add a title here, capitalizing only the first word to match table titles



For students who had taken internships, their most frequently reported terms were “learning” (73.5%), “exploration” (58.5%), and “experience” (52.9%), while students who had not taken an internship reported the terms “experience” (73.9%), “learning” (56.5%), “unpaid” (43.5%), and “advancement” (43.5%) most frequently.

These results indicate the importance of concepts such as learning, experience, and advancement across the study sample, which shows some consistency in the cultural domain of “internships” for this group of students. However, the variation in term frequencies, particularly with respect to compensation (i.e., paid and unpaid), and the ideas of exploration and opportunity reflect some differences in the concepts that both groups of students associated with college internships.

To further explore similarities and differences in the freelist data across the study sample, we next turn to analyses of a measure that arguably captures a more informative measure of cultural domain membership—that of term salience.

3. Saliency Analysis of Standardized Terms

The “salience” score for each term represents the average percentile rank of a term across all respondent lists while weighting terms by the order each respondent reported them (Romney & D’Andrade, 1964; Smith & Borgatti, 1997). In other words, a term’s saliency captures how frequently and how early each term was mentioned by respondents (see Table 3).

The most salient concepts for all students included “experience” (0.479), “learning” (0.41), “paid” (0.256), and “connections” (0.226). These suggest a shared concern about issues related

to gaining workplace experience, the experiential learning aspects of internships, compensation, and developing professional networks and connections.

As with the term frequency results, some similarities and differences between the two groups of students are evident with respect to several terms. For example, for students who had an internship, the terms “experience” (0.46), “learning” (0.432), “paid” (0.302), and “exploration” (0.272) were most salient, while students who had not taken an internship held “experience” (0.508), “learning” (0.379), “career” (0.273), and “unpaid” (0.262) as the most salient terms related to the idea of a college internship. These results indicate that experience and learning are highly salient concepts across the study sample, but that differences exist with respect to compensation—with one group thinking of being paid with respect to internships, while the other group thought of being unpaid—and an emphasis on exploration and careers. To examine what students meant precisely by some of these highly salient terms, we next conducted an inductive thematic analysis of interview text related to these terms.

4. Respondent Elaborations on Salient Terms

We then analyzed students’ utterances, in response to questions posed after the freelist exercise, of the eight most salient terms (0.175 or higher) to examine nuances of how they interpreted and discussed each of the following terms: experience, learning, career, paid and unpaid, connections, and opportunity. For the term “advancement,” only one student discussed it at length, which is why the term is not included in this analysis. The analysis resulted in 18 themes across the eight terms (see Table 4).

Experience. Students spoke about experience in four distinct ways, referring to experience as “something to get” to improve one’s marketability, as an activity involving learning new things, as the antithesis (or complement) to academic knowledge, and as a form of career exploration.

Something to get to be competitive on the job market. The most prevalent way that students discussed the notion of “experience” was as something to “get,” to place on their résumés to boost their employment prospects generally. For some, the pursuit of experience was something that was recommended by others, as in the case of a student who said, “I heard that internships are mainly to get experience.” For other students, an internship was strategically pursued to “build up” one’s résumé and thus their competitiveness in the labor market.

Experience as learning new concepts and/or techniques. For some students, an internship was an opportunity to learn about new concepts and/or techniques within their field. For instance, one student pursued an internship at an archaeological dig to learn new methods in excavation, while another took an internship in an information technology firm to learn about cutting-edge practices in database management and software development. In these cases, students viewed the internships as venues for learning new disciplinary content and methods.

Table 3. Freelist results for term "internship" for students (N=57)

All Students (n=57)			*Students with Internship Experience (n= 32)*			*Students without internship experience (n=25)*		
Term	*Frequency*	*Salience*	*Term*	*Frequency*	*Salience*	*Term*	*Frequency*	*Salience*
Experience	61.4	0.479	Experience	52.9	0.46	Experience	73.9	0.508
Learning	66.7	0.41	Learning	73.5	0.432	Learning	56.5	0.379
Paid	35.1	0.256	Paid	41.2	0.302	Career	34.8	0.273
Connections	40.4	0.226	Exploration	58.8	0.272	Unpaid	43.5	0.262
Career	28.1	0.218	Connections	44.1	0.27	Advancement	43.5	0.245
Advancement	43.9	0.212	Opportunity	38.2	0.254	Paid	26.1	0.188
Unpaid	31.6	0.199	Advancement	44.1	0.19	Temporary	26.1	0.18
Opportunity	26.3	0.177	Career	23.5	0.181	Connections	34.8	0.162
Exploration	38.6	0.173	Unpaid	23.5	0.156	Development	17.4	0.137
Temporary	26.3	0.143	Research	23.5	0.15	Future	26.1	0.134

Table 4. Themes for salient terms

Experience	*Learning*	*Paid and unpaid (compensation)*	*Connections*	*Career*	*Opportunity*
Something to get to be competitive	Occurs via hands-on experiences	Resignation about unpaid internships	Using personal or family networks	Career goals and ambitions	To learn and advance in career
Learning new things	Develop new understanding /techniques	Money makes work serious	Importance of faculty connections	Re-starting a career	Limited opportunities
Hands-on experience complements college	Learn about yourself/ future	Many willing to work for free	Challenges with developing networks	Undecided about career	Chance to leave home
Exploring career options	Learn about professional cultures	Unpaid internships untenable for some			

Hands-on experience to complement academic knowledge. In several cases, an internship was described as an opportunity to get a "hands-on learning experience" that is unavailable in the classroom, where realistic challenges demand the application of theory to practice. Many students discussed the positive aspects of being able to apply knowledge gained during coursework to their internship work, where the daily tasks in a health care clinic, accountant's office, and web development firm provided some of their first opportunities to transfer their school learning to a real-world scenario.

Experience as a form of career exploration. Finally, some students reported that their internship experiences were primarily a way for them to learn what it would be like to be in a particular career and to determine whether they would enjoy that kind of work in the future. For example, one student saw his internship as "a way to get work experience and understand the reality of whatever career choice I'm looking at." In these situations, the internship represents a realistic and hands-on opportunity for "testing" out different professions, workplace cultures, and career trajectories.

Learning. Another salient term that we analyzed in depth was "learning," which students discussed in four distinct ways: learning via experience at the job site, learning new topics and techniques, learning about oneself and one's future, and learning as professional socialization.

Learning occurs in the field. For several students, the internship provided an opportunity to "learn by doing" via hands-on experiences at the job site. As one student stated, "you learn everything in the classroom, but it's never going to be anything close to real world," and the internship provided the chance to take what was learnt in the classroom and apply it in practice. Similarly, another student said, "It was nice to see some of the things that you have learned … being put into practice."

Developing understanding about new topics and techniques. Several students elaborated on the term "learning" by discussing it as synonymous with an internship. One student stated, "that's what it (the internship) is—learning." Others were more specific and stated that the internship provided an opportunity to learn new topics and techniques, in much the same way that some study participants discussed experience (i.e., in terms of learning new things about archaeology, health care, or web development).

Learning about oneself and one's own future. Another way that students discussed the idea of learning was in relation to learning about their own career trajectory and futures. As one student reported, the internship was, "less about on-the-job learning, and more just personal growing for me with work in general." In these cases, the learning process within an internship pertained to career exploration and personal growth, as opposed to the acquisition of new technical or professional knowledge.

Learning in the service of professional socialization. Finally, some students discussed how the internship represents a chance to learn about the implicit norms and practices (i.e., professional cultures) within a workplace and field. In these cases, students felt that their

internship was in effect a process of socialization into their chosen profession and/or a specific workplace, such that their "learning curve" when they began working full time would not be as intensive as with neophytes and those without internship experience.

Career. Students reported the term "career" in several instances, with elaborations on the term speaking to issues related to re-starting a career, their goals and ambitions, and a lack of certainty about their futures.

Career goals and ambitions. Most references to the term "career" pertained to the students' goals and ambitions for their future. These statements included goals to "break into" fields such as health care or information technology, plus students viewed an internship as a vehicle for doing so. Study participants also spoke about career goals involving getting out of their hometowns or states, and to generally advance in their chosen career and to make higher salaries.

Re-starting a career. Some study participants were adults who were in the midst of a career change or transition, due to layoffs and/or a realization that they needed a career change. As a student in a medical administration program said, "I had to restart a career at a late age," which has added a level of stress and worry to their futures and current ability to pay living expenses.

Undecided about career directions. Other references to careers involved observations about feeling undecided and uncertain about students' futures, such that coursework and internships became an opportunity to explore different professions and career options.

Paid and unpaid. The terms "paid" and "unpaid" are here analyzed together, under the broad construct of compensation. For these terms, students exhibited a resignation that most internships are unpaid, reported the view that compensation adds seriousness to an internship, how internships are so valuable that many students will work for free, and how the financial issues made an internship untenable.

Resignation and acceptance that many internships are unpaid. For several students in our study, the fact that many internships were unpaid was simply accepted as "the way things were." Thus, some were resigned to the fact that they may have to forgo compensation to get valuable workplace experience, and would have been surprised (and lucky) to land one of the few positions that came with a paycheck.

Money adds a level of seriousness to the experience. Some students mentioned a paid internship adds a level of professionalism and seriousness to the work itself, such that pay is equated with work that is valued and important to an organization. In contrast, an unpaid internship conveys the sentiment (on behalf of the employer) that the work and experience—and by extension the intern her- or himself—is unimportant and not worthy of compensation.

An internship is so important that some are willing to work for free. Several students in our study felt that an internship was so important and valuable that it was acceptable to work for free in an unpaid position. They explained the perceived need to gain workplace experience as

important, such that the internship becomes a necessary addition to one's résumé to be competitive in a competitive labor market. One student explained that working without pay was a common feature of the internship landscape because, "the company knows that you want to be there … and are paying you with experience."

Money (or lack thereof) is a deciding factor for some. For many students in our sample, an unpaid internship was simply out of the question, due to their need to pay tuition, housing costs, daily living expenses, and so on. Expense especially an issue for internships out of the students' immediate area, which would add housing and transportation costs, some of which can be prohibitively expensive in a large city with a high cost of living. "There's very few [internships] I could find where they will be paid, which could be difficult for some people who are trying to work to put themselves through school."

Connections. The students in our study also discussed connections or social networks, primarily in terms of using their personal (or familial) contacts to pursue internships, the importance of faculty in fostering networks, and challenges with developing these connections.

Using personal or family networks. Some students reported using their own pre-existing professional networks developed during previous jobs or activities and their own families' networks to obtain information about internship openings. As one student said, "my Mom is a big-time influencer, she knows a lot of people, so I use her guidance" to find and pursue internships.

Importance of faculty connections. Next, several students discussed how the professional connections that their faculty advisors had were extremely important for identifying opportunities such as internships. In some cases, individual faculty were seen as more useful than career services offices, because faculty had direct and personal connections with potential employers.

Challenges with developing networks. Finally, a few students spoke about their lack of personal connections with professionals in their field, a situation that was often made worse by a lack of time (due to work or family obligations) to attend networking events or other situations where connections could be developed.

Opportunity. Students in our study spoke about the term "opportunity" in three distinct ways, referring to chances that couldn't be passed up, barriers and limitations of opportunity, and the prospect of leaving home.

Opportunities to learn and advance. Several students spoke about opportunity in terms of being presented with a chance or occasion to get a new job or position. As one student said, an internship "was an opportunity to get your foot in the door" at a desirable firm or organization. For others, an internship offered opportunities to learn new things about a profession or sector, such as how a theater company actually did its work or new techniques in the biotechnology sector. Internships also presented students with opportunities to develop social and professional

networks. One student shared that their internship gave them the opportunity to connect with mentors, doctors, and instructors who offered to write letters of recommendation for medical school and let them job shadow. Finally, an internship could lead to an increase in pay via entry into a new profession or sector, such as fast-growing fields like health care and biotechnology. Ultimately, students viewed these facets of opportunity as representing chances that should be taken, because as one student said, “I’ve got to hop on that opportunity and take advantage,” because if she did not, she assumed someone else would.

Limitations to opportunity. Some students also spoke about opportunity in terms of its absence due to a variety of factors such as time and geography. For students who were working full-time jobs, they felt that they lacked opportunities to pursue internships—it simply wasn’t an option. In other cases, especially for students at the rural university in our study, students spoke about a lack of opportunities in their small city, noting that most internships were in larger, more expensive cities.

Opportunities to leave home. A few students spoke about internships as presenting an opportunity to get out of their town or city. As one student observed, “I would be over the moon to have the opportunity to go elsewhere (than the Upper Midwest).” In these cases, an internship represented a potential pathway to creating a new life in a new city and/or having a short-term adventure.

5. Differences between Interns and Non-interns: Affiliation Graphs and Comparative Thematic Analysis

Finally, we present the results of analyses of differences between the utterances of interns and non-interns using comparative thematic analysis and affiliation graphing.

Comparative thematic analysis. We compared the utterances from focus groups on salient terms between the two groups of students, with some clear differences emerging with respect to some terms.

Differences in discussing “experience.” For the students who had not participated in internships, their elaborations on the term “experience” were indistinct and vague, and often included references to experience as something to “get.” They also indicated that internships are “a good way” to gain experience for future employment in generalized terms, with no details regarding how, where, and in what form this experience would be gained. In contrast, the students who had taken internships spoke of experience in far more detailed terms, which naturally drew on their own personal experiences. This group also spoke of experience in terms of experiential education, where the application of academic knowledge to real-world situations was one of the primary features of experience.

Differences in discussing “learning.” Additionally, the two groups had distinct interpretations and accounts of the term “learning.” For students who had completed internships, learning was primarily about the opportunity to build further skills by applying their classroom

knowledge to authentic professional situations. This group of past interns also felt that learning about oneself was an important part of the internship experience. In contrast, the students who did not complete internships spoke about learning primarily in terms of learning how to do a specific job. For example, an engineering student stated, "I think internships, at least in the engineering world, are primarily to learn how to do your job," with less insights or observations about application of conceptual knowledge to field of practice or of the potential to learn about one's own strengths, preferences, and future career trajectories.

Differences in discussing "opportunity." The term "opportunity" was referenced more by students who had taken an internship than those who had not, and their observations centered on how internships "opened doors" and provided them with new professional opportunities. While the data cannot explain why non-interns did not frequently discuss this term, it may be due to the fact that interns had firsthand experience with the range of options and benefits available through the experience.

Differences in discussing "paid" and "unpaid." Finally, students who had not yet taken internships spoke with some resignation about internships mostly being unpaid, whereas those who had taken internships spoke about paid and unpaid positions. This difference is evident in the freelist data, which indicates that for non-interns, the association with internships being unpaid is particularly strong.

Affiliation graphs. For the first analysis, we prepared affiliation graphs of the terms reported by both groups of students, which is essentially an analysis of the frequency with which study participants reported pairs of terms (e.g., experience and exploration). This technique, which is based on social network analysis theory and method, is being increasingly used to explore the underlying structure of qualitative data such as theme-theme relationships (Hora, Smolarek, Martin & Scrivener, 2019; Leifeld 2013). Specifically, we prepared two affiliation graphs of the terms students used to describe internship programs—one for students who had taken an internship (Figure 2) and one for students who had not taken an internship (Figure 3).

In these graphs, terms that were frequently referenced are located near the center of each graph, such as "experience," "learning," "exploration," "future" and "connections" in both figures. Terms that are connected by thick, dark lines represent terms that were frequently reported together, while terms connected by thin lines indicate less frequent co-occurrence.

Essentially, the two graphs indicate a more complex and dense network of ideas and terms for the students who had taken internships in comparison to those who had not. A measure of graph complexity—network density—accounts for how many code-code ties are evident among all possible ties, and the density of the "yes internship" students (0.5795) was higher than for the "no internship" group (0.4813). Along with the results from the thematic analysis, these results suggest that students who have not taken internships have a less fine-grained and nuanced conception of the experience. These students also prioritize the role of compensation (unpaid and paid), advancement, experience, and learning as the core elements of the internship experience.

Figure 2. Affiliation graph of terms reported by students who had taken an internship

Figure 3. Affiliation graph of terms reported by students who had not taken an internship

In contrast, students who have had internships emphasize these terms as well (with the exception of unpaid), but also the future, exploration, connections, opportunity, and internship tasks and locations. These conceptions not only reflect a more detailed perspective of the internship as a site for workplace tasks, but also an emphasis on exploration and the future that is less evident with students who have not yet had internships.

Discussion

At a time when colleges and universities around the world are anxious to prove that their graduates are indeed "employable" (Tomlinson, 2012; Urciuoli, 2008), internships are being increasingly touted as an experience that can facilitate student entry into the world of work (NACE, 2018a). But despite the advocacy and arguments that internships should be considered a "high-impact" practice that is strongly associated with student success (Kuh, 2008), some voices are recommending a more cautious (and skeptical) approach, noting that internships can be a vehicle for exacerbating inequality (Curiale, 2009) or even contributing to exploitative labor practices (Chan et al., 2015; Perlin, 2012).

Beyond these questions about labor practices and social mobility, some have argued that debates about employability and programming like internships have ignored the voice, perspective, and interests of the one party for whom the internship experience should be most influential—that of students (Higdon, 2016). Documenting students' perspectives on their own education is an important step in democratizing debates about college and the world of work (Tymon, 2013), facilitating student engagement the design and implementation of their own educations (Cook-Sather, 2006), and informing faculty and advisor practices focused on student development and professional growth (Savickas et al., 2009).

In this paper we address this gap in the literature and depart from the more common survey approach to elicit students' satisfaction with their internship (e.g., NACE 2018b). We instead adopt a cultural perspective by eliciting "emic" or insider perspectives on a cultural domain—that of internships—that led to a more nuanced and multi-faceted conception of internships than is typically offered. In the remainder of this paper we highlight key findings and subsequent implications for research, policy, and practice.

How Student Conceptions of Internships Vary from Standard Definitions

The idea of a cultural domain is that particular social groups may have conceptions of categorization and "types" that differ from those of other groups, which they then use to interpret and assign meaning to their worlds (Borgatti, 1999; Spradley, 1979; Weller & Romney, 1988). Our results reveal that students in our study sample conceptualized internships in more multi-faceted and complex ways than official definitions and perspectives (e.g., NACE 2018a), leading us to conclude that these definitions reflect a uni-dimensional and aspirational view that contributes to advising and institutional policy that overlook critical features of students' own needs and development.

Consider the widely cited definition of internships provided by NACE, which was developed in part to clarify issues related to unpaid internships while advancing a standardized definition upon which "all parties can agree" (i.e., students, employers, and educators) (NACE, 2018a). This definition first articulates what an internship is—a "form of experiential learning"—and then the benefits that a student will get from the experience, which includes the integration of classroom theory with practical application, and opportunities to develop social and professional networks in their chosen field (NACE, 2018a).

This particular definition captures important elements of an internship that students in our study sample also discussed, including learning, experience, and connections. But the data reported in this paper highlights how NACE's (2018a) definition advances a homogenous and aspirational perspective of internships that does not align with student accounts. First, the assumption that an internship is by default a form of experiential learning is deeply flawed, as a rich and engaging learning experience—whether in the classroom or the internship placement site—is difficult to design and enact, and is simply not synonymous with any particular site or venue of learning (McHugh, 2017; Perlin, 2012). Even advocates of internships as a high-impact practice recognize that much depends on how each institution, and even individual advisors or faculty, structure and support students in their internships (Kuh & Kinzie, 2018). Thus, in uncritically conflating internships with experiential learning, NACE contributes to an inaccurate and overly optimistic conception of internships, while minimizing the not inconsiderable challenges associated with instructional design and mentoring.

Second, the NACE (2018a) definition also overlooks problematic features of internships themselves (e.g., inadequate pay, poor mentoring, inane tasks) as well as student goals (e.g., to simply "get" experience as a résumé filler). These problems are real, and yet definitions and accounts of internships rarely address these challenges, with the exception of compensation and how unpaid internships may be reproducing social inequalities (Curiale, 2009). For instance, one student in our study described his internship as one of the worst experiences of his life, with a disorganized and vindictive supervisor. Instead of acknowledging the prospect that an educational program may actually be sub-standard and potentially inimical to student success, which is a stance that some researchers have taken with respect to teaching practices in undergraduate classrooms (e.g., Freeman et al., 2014), advocates of internships too often gloss over the potential problems with the experience.

Thus, the NACE definition doesn't reflect students' lived experiences or their perceptions of internships programs themselves and instead reflects an idealized version of advocates' perspectives on what internships *could* or *should* be. Our data also indicate that another problem is that this definition does consider the student's level of exposure to or understanding about internships, which our data indicate varies considerably, with potential implications for how students approach the internship experience. For instance, students who lacked internship experience largely viewed them as a vehicle to "get" experience that could strengthen their résumés, and less as a form of experiential disciplinary learning and personal growth. Students who had taken an internship, in contrast, saw the benefits of the experience in terms of applying

academic knowledge to real-world tasks, engaging in professional socialization and networking, and exploring aspects of the field and themselves. Thus, former interns had a conception that was more akin to the NACE definition, while students lacking this experience had a much less rich, comprehensive, and accurate perspective.

But do these differences in how students and internship advocates define and perceive the experience really matter? We argue that yes, this disjuncture does matter, and for three primary reasons—for equitable representation, for effective program design, and finally to provide high-quality support and advising for student professional growth and development.

1. Student Voices and Experiences Need to be Represented in Discussions of Internship Programs

As noted, much of the mounting discussion and debate about graduate employability is remarkable for almost completely ignoring the insights of students, while the voices and interests of the business community and policymakers are prominent and influential (Higdon, 2016; Tymon, 2013). For instance, the phrases "meet employer's needs" or "aligning education to workforce needs" are common in these debates, with student needs and interests ignored and assumed to be synonymous with those of employers (e.g., Business Higher Education Forum, 2011). When student opinions and perspectives are elicited, it is most commonly in the form of satisfaction surveys or survey-based studies of their overall college experience, with little to no opportunities for students to articulate their views in a substantive fashion and in a way that privileges their perspectives as much as other stakeholders (e.g., employers).

This absence of student voice and experience is problematic for two reasons. First, it is unethical and indefensible to ignore and thus silence the interests of a group that has been historically marginalized and under-represented in debates about education (i.e., students) (McLeod, 2011). Second, ignoring student voice results in a lack of understanding of students' actual experiences and insights on matters ranging from what it takes to actually get a job (Higdon, 2016) to which features of internships are most beneficial (e.g., orientations) and/or problematic (e.g., lack of transportation) (Alpert et al., 2009; Cho, 2006; Knemeyer & Murphy, 2002). Consequently, giving students a proverbial seat at the table when internship policies are debated and decided is essential to not only reframe the discourse about internships but also to inform a more student-centered and realistic approach to the design of these complex programs.

2. Students' Involvement in Co-design of Internship Programs Enhances Outcomes

One of the most influential ideas in higher education is that of engagement, and how students' active involvement in their coursework, extra- and co-curricular activities, and their overall college experience is strongly associated with positive student outcomes (Carini et al., 2006). But some scholars have argued that engagement should go beyond increased involvement in classroom or campus activities, and instead involve student participation in the educational design process itself (Matthews et al., 2018). We argue that such an approach should be taken with the design and implementation of internship programs, primarily to avoid one-size-fits-all

approaches to internship design, and to tailor advising practices to students' level of familiarity with internships.

From the practitioner perspective, it is a given that students have a diverse range of goals, needs, and interests when it comes to internships. As O'Neill (2010) observes, "the beauty of internships is that they can serve different purposes for different students" (p.1). For the students in our study, the reasons for pursuing an internship included: to explore oneself, to examine career options, to build a competitive résumé, to make professional connections, to apply knowledge from the classroom, to get a "foot in the door" at a single firm, and to switch careers. In each of these cases, how a student is advised and how an internship is structured (e.g., duration, type of placement site, type of tasks) ideally would vary depending on their unique situation. Of course, in situations where internships are mandatory (e.g., allied health programs), such differentiation may not possible, but in other cases students will have considerable flexibility with respect to the type of internship they could secure, which ideally would involve a process of matching student interests to internship structure.

Another reason to elicit students' experiences and insights on internships, and engage them more directly in the internship design process, is to enable advisors to adjust their mentoring and the internship experience itself to match students' familiarity with the internship experience. Our data indicate students lacking prior internship experience had less nuanced conceptions of the nature and value of internships, and they focused more on learning job-specific tasks and building a résumé than actually engaging in experiential learning, career exploration, and developing professional networks. Given these differences, advisors should think about ways to introduce inexperienced students to the various benefits of internships, perhaps through orientation workshops of in-class presentations to students. Once this group of students is educated on the range of available possibilities, a collaborative process of finding appropriate placements could occur. But without that initial education about internship types and benefits, students lacking experience will be at a disadvantage when pursuing opportunities.

3. Using Insights about Students' Own Lives to Facilitate Pre-professional Development

One of the key insights from student-centered perspectives on development is that learning and professional growth is a process whereby individual students actively construct their own identities and perceptions of opportunity in specific socio-cultural and institutional contexts (Baxter Magolda 2014; Savickas et al., 2009). This process is particularly important for students who are involved in early stages of making decisions about their futures and/or personal identities. Effectively guiding students along this path of self-discovery requires providing opportunities for them to actively reflect and articulate how they are constructing their own worlds, options, and sense of self. Such an exercise is useful not only for the student, but the resulting insights can also be used to help advise students in ways that are attentive to their own unique situations and goals (Sutherland et al., 2010; Rothman, 2007; Trede et al., 2012).

The issue of pre-professional development also raises questions about the ability of staff at the internship host organization, and whether they have adequate time and training to mentor and

advise students. Colleges and universities will need to somehow ensure that such skilled mentors are available, whether through screening activities and/or through offering training programs for intern mentorship, with the ultimate goal being to facilitate the personal and professional development of all student interns.

Conclusions

Some limitations to this study should be considered when evaluating our findings. First, when taking the online survey that preceded the focus groups (by approximately 2-3 weeks), students were provided a definition of internships that could have influenced the terms and ideas that came to mind during the freelist exercise.[1] Second, students were not asked to elaborate on all of the terms uttered during the freelist exercise, which meant that the availability of more detailed qualitative data were limited to the first terms that were elaborated upon and/or random observations of other topics in other portions of the focus group. Finally, some terms only had one respondent, and the most salient terms are not necessarily the first terms mentioned by students, thus leading to the limited availability of detailed discourse about each of the terms reported in the freelist.

With these caveats in mind, our findings do contribute new insights into how a college students conceptualize an increasingly influential co-curricular program—the college internship. Future research should investigate student conceptions of internships among a larger sample of students, particularly across a variety of disciplines, countries, and institution types, and also how engaging students more substantively in internship design may function in practice.

Contrary to the not uncommon perception that internships provide uniform experiences and outcomes to students—who ostensibly have the same goals and understandings of internships—our data demonstrate that in fact considerable variation exists in how students perceive these programs. Along with the need to democratize the dominant discourse around employability and internships by bringing students' voice and experience to the debate, our findings indicate that how higher education professionals, policymakers, and workforce educators discuss internships needs to become more attentive to student voice, experience, and needs.

[1] The definition 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 company or organization and performing tasks similar in nature and skill level to tasks done by entry-level employees in the company or organization.

References

Alpert, F., Heaney, J. G., & Kuhn, K. A. L. (2009). Internships in marketing: Goals, structures and assessment–Student, company and academic perspectives. *Australasian Marketing Journal*, *17*(1), 36-45. doi: 10.1016/j.ausmj.2009.01.003

Barab, S., & Squire, K. (2004). Design-based research: Putting a stake in the ground. *The Journal of the Learning Sciences*, *13*(1), 1–14. doi: 10.1207/s15327809jls1301_1

Baxter Magolda, M. B. (2014). Self-authorship. *New Directions for Higher Education, 166,* 25–33. http://dx.doi.org/10.1002/he.20092

Binder, J. F., Baguley, T., Crook, C., & Miller, F. (2015). The academic value of internships: Benefits across disciplines and student backgrounds. *Contemporary Educational Psychology*, *41*, 73–82. doi: 10.1016/j.cedpsych.2014.12.001

Borgatti, S. P. (1992). ANTHROPAC version 4.0 [Software]. Columbia, SC: Analytic Technologies.

Borgatti, S. P. (1999). Elicitation techniques for cultural domain analysis. *The Ethnographer's Toolkit*, *3*, 115–151.

Borgatti, S. P. (2002). *Netdraw network visualization*. Harvard, MA: Analytic Technologies.

Borgatti, S. P., Everett, M. G., & Freeman, L. C. (2002). *UCINET for windows: Software for social network analysis.* Harvard, MA: Analytic Technologies.

Bovill, C., Cook-Sather, A., & Felten, P. (2011). Students as co-creators of teaching approaches, course design, and curricula: Implications for academic developers. *International Journal for Academic Development*, *16*(2), 133–145. doi: 10.1080/1360144x.2011.568690

Business Higher Education Forum. (2011). *Aligning education and workforce goals to foster economic development. Proceedings from Cities for Success: A BHEF leadership summit.* Washington D.C.: Business Higher Education Forum. Retrieved from http://www.bhef.com/publications/aligning-education-and-workforce-goals-foster-economic-development

Campbell, J. L., Quincy, C., Osserman, J., & Pedersen, O. K. (2013). Coding in-depth semistructured interviews: Problems of unitization and intercoder reliability and agreement. *Sociological Methods and Research, 42*(3), 294–320. doi: 10.1177/0049124113500475

Carini, R. M., Kuh, G. D., & Klein, S. P. (2006). Student engagement and student learning: Testing the linkages. *Research in Higher Education*, *47*(1), 1-32. doi: 10.1007/s11162-005-8150-9

Chan, J., Pun, N., & Selden, M. (2015). Interns or workers? China's student labor regime. *Asia-Pacific Journal, 13*(36), 1–25. doi: 10.1080/14672715.2014.960709

Chatterjee, S., Roy, S., Das, A. K., Chattopadhyay, S., Kumar, N., & Vasilakos, A. V. (2016). Secure biometric-based authentication scheme using Chebyshev chaotic map for multi-server environment. *IEEE Transactions on Dependable and Secure Computing*, *15*(5), 824–839. doi: 10.1109/TDSC.2016.2616876

Cho, M. (2006). Student perspectives on the quality of hotel management internships. *Journal of Teaching in Travel & Tourism*, *6*(1), 61–76. doi: 10.1300/j172v06n01_04

Cook-Sather, A. (2006). Sound, presence, and power: “Student voice” in educational research and reform. *Curriculum Inquiry*, *36*(4), 359–390. doi: 10.1111/j.1467-873x.2006.00363.x

Crain, A. (2016). *Understanding the impact of unpaid internships on college student career development and employment outcomes*. Bethlehem, PA: NACE Foundation.

Curiale, J. L. (2009). America’s new glass ceiling: Unpaid internships, the Fair Labor Standards Act, and the urgent need for change. *Hastings Law Journal*, *61*, 1531–1560.

Dailey, S. L. (2016). What happens before full-time employment? Internships as a mechanism of anticipatory socialization. *Western Journal of Communication*, *80*(4), 453–480. doi: 10.1080/10570314.2016.1159727

Daley, C. M. (2007). College men’s knowledge, attitudes, and beliefs about testicular cancer. *American Journal of Men's Health*, *1*(3), 173–182. doi: 10.1177/1557988306293770

Freeman, S., Eddy, S. L., McDonough, M., Smith, M. K., Okoroafor, N., Jordt, H., & Wenderoth, M. P. (2014). Active learning increases student performance in science, engineering, and mathematics. *Proceedings of the National Academy of Sciences*, *111*(23), 8410–8415. doi: 10.1073/pnas.1319030111

Glaser, B., & Strauss, A. (1967). *The discovery of grounded theory*. NY: Aldine Publishing Co.

Higdon, R. D. (2016). Employability: The missing voice: How student and graduate views could be used to develop future higher education policy and inform curricula. *Power and Education*, *8*(2), 176–195. doi: 10.1177/1757743816653151

Hilton, S. R., & Slotnick, H. B. (2005). Proto-professionalism: How professionalisation occurs across the continuum of medical education. *Medical Education*, *39*(1), 58–65. doi: 10.1111/j.1365-2929.2004.02033.x

Hora, M. T., Smolarek, B. B., Martin, K. N., & Scrivener, L. (2019). Exploring the situated and cultural aspects of communication in the professions: Implications for teaching, student employability, and equity in higher education. American Educational Research Journal, 0002831219840333.

Hough, G., & Ferraris, D. (2010). Free listing: A method to gain initial insight of a food category. *Food Quality and Preference*, *21*(3), 295–301. doi: 10.1016/j.foodqual.2009.04.001

Hsieh, H. F., & Shannon, S. E. (2005). Three approaches to qualitative content analysis. *Qualitative Health Research*, *15*(9), 1277–1288. doi: 10.1177/1049732305276687

Jackson, D. (2016). Re-conceptualising graduate employability: The importance of pre-professional identity. *Higher Education Research & Development*, *35*(5), 925–939. doi: 10.1080/07294360.2016.1139551

Jaskyte, K., Taylor, H., & Smariga, R. (2009). Student and faculty perceptions of innovative teaching. *Creativity Research Journal*, *21*(1), 111–116. doi: 10.1080/10400410802633673

Klein, M., & Weiss, F. (2011). Is forcing them worth the effort? Benefits of mandatory internships for graduates from diverse family backgrounds at labour market entry. *Studies in Higher Education*, *36*(8), 969–987. doi: 10.1080/03075079.2010.487936

Knemeyer, A. M., & Murphy, P. R. (2002). Logistics internships: Employer and student perspectives. *International Journal of Physical Distribution & Logistics Management*, *32*(2), 135–152. doi: 10.1108/09600030210421732

Knouse, S. B., & Fontenot, G. (2008). Benefits of the business college internship: A research review. *Journal of Employment Counseling*, *45*(2), 61–66. doi: 10.1002/j.2161-1920.2008.tb00045.x

Knouse, S. B., Tanner, J. R., & Harris, E. W. (1999). The relation of college internships, college performance, and subsequent job opportunity. *Journal of Employment Counseling*, *36*(1), 35–43. doi: 10.1002/j.2161-1920.1999.tb01007.x

Kuh, G. D. (2008). *High-impact educational practices: What they are, who has access to them, and why they matter.* Washington, DC: Association of American Colleges and Universities.

Kuh, G.D. & Kinzie, J. (2018, May 1). What makes a high-impact practice high impact? Inside Higher Ed.

Leifeld, P. (2013). Reconceptualizing major policy change in the advocacy coalition framework: A discourse network analysis of German pension politics. *Policy Studies Journal*, *41*(1), 169–198. doi: 10.1111/psj.12007

Lown, N., Davies, I., Cordingley, L., Bundy, C., & Braidman, I. (2009). Development of a method to investigate medical students' perceptions of their personal and professional development. *Advances in Health Sciences Education*, *14*(4), 475–486. doi: 10.1007/s10459-008-9130-6

Maertz, C. P., Stoeberl, P., & Marks, J. (2014). Building successful internships: Lessons from the research for interns, schools, and employers. *Career Development International*, *19*(1), 123–142. doi:10.1108/CDI-03-2013-0025

Matthews, K. E., Cook-Sather, A., & Healey, M. (2018). Connecting learning, teaching, and research through student-staff partnerships: Toward universities as egalitarian learning communities. In V. Tong, A. Standen, & M. Sotiriou (Eds.), *Shaping higher education with students: ways to connect research and teaching* (pp. 23-29). London: University College of London Press.

McHugh, P. P. (2017). The impact of compensation, supervision and work design on internship efficacy: Implications for educators, employers and prospective interns. *Journal of Education and Work*, *30*(4), 367–382. doi: 10.1080/13639080.2016.1181729

McLeod, J. (2011). Student voice and the politics of listening in higher education. *Critical Studies in Education, 52*(2), 179-189. doi.org/10.1080/17508487.2011.572830

Miles, M. B., Huberman, A. M., & Saldaña, J. (2013). *Qualitative data analysis: A methods sourcebook* (3rd ed.). Los Angeles: SAGE.

National Association of Colleges and Employers. (2018a). Position statement: U.S. internships. Bethlehem, PA: NACE. Retrieved from: http://www.naceweb.org/about-us/advocacy/position-statements/position-statement-us-internships/

National Association of Colleges and Employers. (2018b). *2018 Student survey report.* Bethlehem, PA: NACE.

National Survey of Student Engagement. (2018). *Engagement insights: Survey findings on the quality of undergraduate education.* Bloomington, IN: NSSE.

Narayanan, V. K., Olk, P. M., & Fukami, C. V. (2010). Determinants of internship effectiveness: An exploratory model. *Academy of Management Learning & Education*, 9 (1), 61–80. doi: 10.5465/amle.2010.48661191

O'Neill, N. (2010). Internships as a high-impact practice: Some reflections on quality. *Peer Review*, *12*(4), 4–8.

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

Prosser, M., & Trigwell, K. (2014). Qualitative variation in approaches to university teaching and learning in large first-year classes. *Higher Education*, *67*(6), 783–795. doi: 10.1007/s10734-013-9690-0

Quinlan, M. (2005). Considerations for collecting freelists in the field: Examples from ethobotany. *Field Methods*, *17*(3), 219–234. doi: 10.1177/1525822x05277460

Romney, A. K., & D'Andrade, R. G. (1964). Cognitive aspects of English kin terms. *American Anthropologist*, *66*(3), 146–170. doi: 10.1525/aa.1964.66.3.02a00870

Rothman, M. (2007). Lessons learned: Advice to employers from interns. *Journal of Education for Business*, *82*(3), 140–144. doi: 10.3200/joeb.82.3.140-144

Ryan, G. W., & Bernard, H. R. (2003). Techniques to identify themes. *Field methods*, *15*(1), 85–109.

Saniter, N., & Siedler, T. (2014). *Door opener or waste of time? The effects of student internships on labor market outcomes* (Institute for the Study of Labor Discussion Paper 8141). Retrieved from https://www.econstor.eu/bitstream/10419/96696/1/dp8141.pdf

Savickas, M. L., Nota, L., Rossier, J., Dauwalder, J. P., Duarte, M. E., Guichard, J., ... & Van Vianen, A. E. (2009). Life designing: A paradigm for career construction in the 21st century. *Journal of Vocational Behavior*, *75*(3), 239–250. doi: 10.1016/j.jvb.2009.04.004

Scott, J. (2017). *Social network analysis*. Thousand Oaks, CA: Sage.

Sides, C. H., & Mrvica, A. (2007). *Internships: Theory and practice*. Amityville, NY.

Silva, P., Lopes, B., Costa, M., Melo, A. I., Dias, G. P., Brito, E., & Seabra, D. (2018). The million-dollar question: can internships boost employment? *Studies in Higher Education*, *43*(1), 2–21. doi: 10.1080/03075079.2016.1144181

Silva, P., Lopes, B., Costa, M., Seabra, D., Melo, A. I., Brito, E., & Dias, G. P. (2016). Stairway to employment? Internships in higher education. *Higher Education*, *72*(6), 703–721. doi: 10.1007/s10734-015-9903-9

Smith, J. J., & Borgatti, S. P. (1997). Salience counts-and so does accuracy: Correcting and updating a measure for free-list-item salience. *Journal of Linguistic Anthropology, 7*, 208–209. doi: 10.1525/jlin.1997.7.2.208

Spradley, J. P. (1979). *The ethnographic interview*. New York: Holt, Rinehart & Winston.

Sutherland, L., Howard, S., & Markauskaite, L. (2010). Professional identity creation: Examining the development of beginning preservice teachers' understanding of their work as teachers. *Teaching and Teacher Education*, *26*(3), 455–465. doi: 10.1016/j.tate.2009.06.006

Tomlinson, M. (2012). Graduate employability: A review of conceptual and empirical themes. *Higher Education Policy*, *25*(4), 407–431. doi: 10.1057/hep.2011.26

Trede, F., Macklin, R., & Bridges, D. (2012). Professional identity development: A review of the higher education literature. *Studies in Higher Education*, *37*(3), 365–384. doi: 10.1080/03075079.2010.521237

Tymon, A. (2013). The student perspective on employability. *Studies in Higher Education*, *38*(6), 841–856. Retrieved from http://www.tandfonline.com/doi/abs/10.1080/03075079.2011.604408

Urciuoli, B. (2008). Skills and selves in the new workplace. *American Ethnologist*, *35*(2), 211–228. doi: 10.1111/j.1548-1425.2008.00031.x

Weller, S. C., & Romney, A. K. (1988). *Systematic data collection.* Thousand Oaks, CA: Sage Publications.

Wolcott, H. F. (1985). On ethnographic intent. *Educational Administration Quarterly*, *21*(3), 187–203. doi: 10.1177/0013161x85021003004