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Education and Career Skills Acquired During a Design Internship

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Student internships are valued as solid indicators of future employability, which often result in the acquisition of additional education and career skills. This study describes the perceptions of interior design students after completing a summer internship with a design firm. Utilizing a case study approach, the study data were collected through a survey instrument which gauged students' perceptions of their internship experience, particularly compensation, learning, and satisfaction. They were also asked how beneficial this experiential learning activity was in gaining technical, professional, and communication skills. The results reveal that skills related to employability were perceived as most beneficial and that financial compensation had a weak relationship with overall internship satisfaction. Students believed they learned important hard and soft skills from their internship, regardless of their pay rate. Degree programs with an internship requirement can help their students be better prepared for successful employment upon graduation.

Introduction

Students (and often their parents) are apprehensive about finding employment after four or more years of expensive college tuition. Executives and hiring managers believe students who complete an internship prior to graduation have a distinct hiring advantage (Hart Research Associates, 2018). Employment growth in occupations that typically require an apprenticeship, internship, or residency are projected to increase to 7.4% by 2026 (USBLS, 2019). Specifically, the U.S. Bureau of Labor Statistics (2019) forecasts employment in architecture and interior design to increase four percent by 2026. This may be due to the fact that internships emphasize learning through practice, which is the gaining of "real world" experience that allows graduates to leverage their employability.

This real-world experience and those sought-after job skills are often attained by students through an internship (NACE, 2018; Schoenfelt, Stone & Kottke, 2013). An internship provides avenues to apply skills learned in school and to seek venues for professional experience beyond the classroom walls. An increased awareness of the internship experience has occurred over the last decade, reflecting great interest in these programs by universities and the success of the interns by hiring organizations (Marshall, 2012; Rosario, Flemister, Gampert, & Grindley, 2013; Wanless, 2013). Half of the respondents (50%) in a national survey of employers stated universities should devote resources to developing internship programs (Hart Research Associates, 2008). In a related study, 63% of employers agreed that "too many recent college graduate do not have the skills to be successful in today's global economy" (Hart Research Associates, 2007, p. 6). Seventy-three percent of these employers say that a student's ability to relate learned skills and information to real-world settings through internships is one of the most important learning outcomes of higher education. In this same study, 510 college graduates ranked applied knowledge in the workplace as the number one priority.

Experiential Learning Theory

Research on internships in the areas of art, architecture, and design is scarce, lacks an overriding theoretical standpoint, and is mainly descriptive. The theoretical base selected for this investigation is experiential learning, which is concerned with the integration of theory with practice. Research in this area began in the early 20th century (Radigan, 2009). It is a broad term that includes various learning opportunities, such as student organization leadership, cooperative education, faculty driven research projects, service learning, volunteering, and, of course, the internship. The internship is an instructional approach founded on the premise that ideal learning occurs by doing and through experience. Kolb (1984), an educational theorist who focuses on experiential learning, and Dewey (1934), a renowned scholar in learning processes, both contend that learning is cyclical.

Kolb and Kolb (2005) call experiential learning "above all a philosophy of education based on what Dewey called a 'theory of experience'" (p. 193). Kolb (1984) defines learning as "the process whereby knowledge is created through the transformation of experience" (p. 38), continuing that knowledge results from the combination of gaining and then transforming

experience into knowledge. Internships stem from the experiential learning social process (Kolb, 1984), which allows students to integrate new experiences into existing concepts. This thought is echoed by philosopher Schön (1983, 1984) in his writings on the "Reflective Practitioner". It is Schön's contention that individuals learn by doing design, as opposed to learning about design. Artists, architects, designers, and performers traditionally learn by doing and making. This is the basis for the predominant pedagogical approach of the studio. Shreeve, Sims, and Trowler (2010) state, "[T]he emphasis on doing is not simply about being able to produce a skilled performance but is about understanding what it means to be a skilled performer, with all the socially situated understanding that comes with that" (p. 128). Unlike a controlled educational environment (such as the design studio), Schön (1987) believes an apprenticeship or internship provides exposure to realistic conditions of practice and work where real-world practice includes "messy, indeterminate situations" (p. 4). A lack of work-related opportunities is a noteworthy problem for art and design students (Blackwell, Bowes, Harvey, Hesketh & Knight, 2001) who need an assortment of experiences that mimic work-related processes (Sterling, 2007). Though not always a requirement for graduation, design programs can include an internship in their curriculum to provide sources for evaluating program accreditation expectations (CIDA, 2020) and to better meet the needs of employers hiring graduates into the interior design industry (Gale, Duffey, Park-Gates & Peek, 2017).

The Internship Experience

There is concern by employers that college graduates have job market readiness and have experienced work-related projects (Fishburne, 2015; Sterling, 2007). In design education, experiential learning is supported through cooperative or internship programs that allow students to earn college credit for supervised professional experience. It is a type of controlled experiential learning in which the workplace becomes a learning laboratory. Academia creates curricula to increase students' employability, seen as the achievement of competence, skill, and knowledge within a disciplinary field. The internship is promoted as a way to assess and develop the raw skills needed for employment (Schoenfelt et al., 2013). Barr and McNeilly (2002) found that recruiters value internships as solid indicators of employability. Internships provide a point of transition from a first work situation to long-term professional success (Schoenfelt et al., 2013).There is an assumption that students cannot learn all they need to learn in academia to enter the workforce. An internship extends the reach of the classroom, which provides the student the opportunity to smoothly transition into his or her discipline. Di Lorenzo-Aiss and Mathisen (1996) describe four characteristics of an internship as: 1) acquiring a set number of work hours, 2) being paid or unpaid, 3) earning college credit, and 4) having oversight by an organization's mentor plus an academic faculty member.

Three benefactors of an internship are firms, schools, and students. Firms highly value the internship experience (Rigsby, Addy, Herring, & Polledo, 2013) for reasons such as recruitment (Wanless, 2013), job experience (Coco, 2000), and the filling of a skill shortage (Patrick, Peach & Pocknee, 2008). Other reasons include to retain permanent hires, to maintain a good relationship with the school, and to differentiate their firm from the competition (Brooks & Greene, 1998). Internships help universities with student placement in industry (Verney, Holoviak & Winter, 2009) and can attract prospective students to the design program. Faculty may benefit from equipment donations, student scholarships, sabbaticals, advisory board members, consultancy work, and joint research projects (Marshall, 2012; Tufenkjian, 1999).

Students are the greatest benefactors of internships. Gault, Leach and Duey (2010) asked 185 employers of undergraduate interns about the perceived value of the internship in hiring decisions. Firms with high-performing interns perceived the value of the school's internship program higher than firms with average-performance interns. Interns who were considered high performers were more likely to receive higher starting salaries than interns considered as average performers. The variables perceived as most valuable included the intern acquiring better job skills, learning faster, and being more productive. The top three most significant predictors of overall on-the-job performance by employers were the intern's reliability, consistency, and eagerness to learn new skills. These findings support earlier research that undergraduates with internship experience have more full-time employment potential after graduation (Gault, Redington & Schlager, 2000; Reddan & Rauchle, 2012).

Internship Skill Acquisition

Internships expose students to discipline-specific knowledge. An internship can help a student develop professionalism, communication, and interpersonal skills. Additional soft skills, such as attitude and work ethic, along with the technical hard skills necessary for a profession, are in demand today (Gale et al., 2017). An undergraduate education should be balanced between broad knowledge and disciplinary skills (Hart Research Associates, 2007). Fifty-six percent of employers believe higher education should emphasize the following: integrative learning, knowledge of human culture and the world, intellectual and practical skills, and personal and social responsibility. Both employers and graduates in this same study agree that teamwork skills and critical thinking are two important workplace skills (Hart Research Associates, 2007). Beck and Halim (2008) identified the most significant internship learning outcomes as personal and interpersonal skills, with technical skills perceived as less important. Recruiters want evidence of leadership, communication, and interpersonal skills, which are largely unattainable in the classroom (Barr & McNeilly, 2002). For four years in a row, the top selection criterion in the Graduate Careers Australia (2012) survey were interpersonal and communication skills. An intern's communication ability is also a critical skill identified in other studies (Gale et al., 2017; Huber, 2018; Kelley & Bridges, 2005; Ryan & Krapels, 1997).

Financial Compensation of the Internship

A topic under perpetual debate is whether students who participate in an internship should be financially compensated. Students may prefer to be paid for an internship, as 61% of students in a study on student loan usage are working while in school (Javine, 2013). But not every firm wants to pay for interns. Companies can insist on students earning credit so they can legally be considered unpaid trainees (Lipka, 2010), which some view as unethical and exploitive (Gardner, 2010). The United States Department of Labor's Fair Labor Standards Act of 1938 (USDL, 2013) "establishes minimum wage, overtime pay, recordkeeping, and youth employment standards affecting employees in the private sector and in Federal, State, and local governments" (para. one). It further states that an employer must pay an employee for work unless that employee is considered an independent contractor or volunteer. Interns who receive training as part of their education may not be paid if several criteria are met by the company, namely if the internship experience is of a fixed duration and student work efforts are not linked to business dependency (USDL, 2010). If an internship is a legitimate learning experience, the internship could legally be unpaid (NACE, 2011). Most colleges treat the internship as a purely educational experience, yet some students are actually doing real work yet paying for college credit (Wexler, 2016).

Study Context and Internship Structure

The context for this study is an established internship program at a large urban university in the United States. The required internship experience for three college credits occurred during the summer between the third and fourth years of a four-year degree program. The internship was placed here in the curriculum, as upper division students have more substantial disciplinary knowledge to apply to their internship than younger students (Marshall, 2010).

Internship research tends to focus on the employer and what the market desires while fewer studies pay attention to student perceptions (Griffin & Coelhoso, 2019). Based on the results of Gupta, Burns, and Schiferl (2010), the individual benefits of the experience may impact the students' perceived satisfaction with the internship. In an effort to learn more about the skills acquired in an internship and the student's overall satisfaction with the experience, the following questions were generated for this study:

1. Do students experience an internship they perceive as beneficial?
2. What do students perceive as the most beneficial skills learned in an internship?
3. Is there a relationship between financial compensation and student perception of internship value?
4. Is there a relationship between financial compensation and student perception of internship preparedness?

Methodology

A homogeneous sampling strategy was chosen to focus on specific population characteristics and for a richness of information (Patton, 2002). Voluntary and confidential participation was acquired from 24 senior interior design students who had completed an internship

during the previous summer with various local, national, and international design firms. Three participants were male and 21 were female. This single set of student participants were all in their final year of a four-year undergraduate degree program. Data was collected six months after the internship experience, thus allowing time for students to reflect on their experience.

As shown in Table 1, 14 technical, professional, and communication skills were identified from the literature as likely to be gained by students during an internship experience. The skills were randomly distributed in a survey instrument using a five-point Likert scale, with 1 being very unbeneficial to 5 being very beneficial. One question about financial compensation was included on a nominal scale. Two open-ended questions about and internship value and internship preparedness were included to permit a range of data and responses. The instrument was pilot tested by colleagues and graduate students knowledgeable of research methods. Their suggested changes were incorporated into the final version. The hard copy survey was distributed in a class session taught by another instructor. The data was coded by the researcher and entered into a spreadsheet for descriptive data analysis.

Results

All skills obtained in the internship were perceived as helpful, with mean results ranging from 3.38 to 4.29 on a 5.00 scale (see Table 2). Results indicate that students valued the real-world orientation of workplace learning as the most beneficial skill (m=4.29, sd=0.75). Other top skills viewed as beneficial included a broader

Table 1

Survey Instrument Items

How beneficial was your internship to you in the following skill areas?
Broader view of industry
Career focus
Collaboration/Team-building
Confidence/Self-awareness
Exposure to complex design problems
Interpersonal skills
Professional networking
Interpersonal skills
Professional networking
Resume building/Future employability
Self-reliance/Self-motivation
Technical design skills
Time management

Verbal communication
Written communication

Payment for Internship Experience

Was your internship paid? As this anonymous, will you please tell me how much you were paid per hour?

Overall Perception of the Internship Experience

Overall, I believe my internship was a valuable learning activity that augmented my university course work.
Along with my academic coursework, I think my internship has prepared me to enter the profession of interior design upon graduation.

Table 2
Skills Students Perceived They Obtained in an Internship

Rank	N	Mean	SD	Skill
1	23	4.29	0.75	Real-world orientation
2	24	4.25	0.90	Broader view of industry
3	24	4.21	0.66	Resume building/Future employability
4	24	4.21	0.93	Professional networking
5	24	4.17	0.64	Time management
6	24	4.17	0.76	Career focus
7	24	4.17	0.87	Confidence/Self-awareness
8	24	4.13	0.74	Verbal communication
9	24	4.00	1.05	Self-reliance/Self-motivation
10	24	3.96	0.86	Interpersonal skills
11	24	3.92	1.10	Collaboration/Team-building
12	24	3.79	0.98	Technical design skills
13	24	3.67	0.87	Written communication
14	24	3.38	1.24	Exposure to complex design problems

view of industry (m=4.25, sd=0.90), resume building/future employability (m=4.21, sd=0.66), and professional networking (m=4.21, sd=0.93). *Internship value* was measured with one item, 'Overall, I believe my internship was a valuable learning activity that augmented my university course work'. On a similar five-point scale, most students agreed with this statement (m=4.29, sd=1.13). *Internship preparedness* was measured with one item, 'Along with my academic coursework, I think my internship has prepared me to enter the profession of interior design upon graduation'. They also agreed with this statement (m=4.17, sd=1.29). *Internship compensation* was based on a self-report measure of whether the internship was paid or unpaid. Was there any relationship between internship compensation and perceived internship value? From participant responses, 14 out of 24 students self-reported they were paid with an average hourly salary of $12.00 per hour. Using a Pearson's correlation coefficient, the relationship between financial compensation and internship value was close to zero (r=0.21). According to Cohen (1992), the effect size of this relationship is low or small. The relationship between financial compensation and internship preparedness was closer to one, showing a modest positive correlation (r=0.49). This would be considered a large correlation effect size (Cohen, 1992).

Discussion

This study addressed four research questions about the benefits students perceived from a recent internship experience, as shown in Table 3. In response to the first question, "*Do interior design students experience an internship they perceive as beneficial?*", the findings showed that students responded positively to both survey questions about overall internship satisfaction (m=4.29; m= 4.17).

Similar findings about workplace skills were found in a study of 36 undergraduate business students who also completed an eight week internship experience (Griffin & Coelhoso, 2019). Almost all (95%) received credit toward their degree for their internship and viewed it as a success. Similar to work by Gupta and colleagues (2010), the individual benefits of the internship experience impacted the level of perceived satisfaction. The findings from the current study are consistent with other research that showed an internship can maximize students' potential for employment (Reddan & Rauchle, 2012), give them a more confident view of the learning experience (Blackwell et al., 2001), allow them to acquire the industry's work culture (Renganathan, Karim & Li, 2012), and offer future employees the occasion to build mentoring relationships with supervisors (O'Neill, 2010).

In response to the second question, "What do students perceive as the most beneficial skills learned in an internship?," data show the top four skills all revolved around employability. The "real world" orientation of workplace learning, a broader view of industry, resume building/future employability, and professional networking were all skills students perceive as helping them be future full-time employees. Better employability has equated to better pay and quicker full-time employment in past research (Gault et al., 2000), where findings show that participation in an external work experience provided solid exposure to career skills.

In response to the third research question of the relationship between financial compensation and perceived internship value, the study finds a positive correlation (r=0.21). However, being closer to zero and being a smaller effect size, this denotes a less important linear relationship between the two study variables. This means that if interns from this sample reported a higher pay rate, their perception of their own career preparation did not necessarily get any better. Interns paid less still viewed their internship as positive career preparation. Finally, the final research question addressed the relationship between financial compensation and the perception of student preparedness to enter the workforce. This resulted in a modest correlation (r=0.49) with a large effect size (around .50). This denotes a relatively strong relationship between variables. Interns reporting they were paid were more likely to feel prepared to enter the profession of interior design than students who were not compensated. Other research has shown that students who are financially compensated in their internships have a higher level of what McHugh (2017) calls

Table 3
Summary of Research Findings

Research Question	Summary of Findings
Research Question 1: Do students experience an internship they perceive as beneficial?	Students believe the internship was a valuable learning activity and that it has prepared them to enter the professional world.
Research Question 2: What do students perceive as the most beneficial skills learned in an internship?	All skills obtained in the internship were perceived as helpful, with real world orientation of workplace learning rated highest.
Research Question 3: Is there a relationship between financial compensation and student perception of internship value?	A weak relationship was found between pay and satisfaction.
Research Question 4: Is there a relationship between financial compensation and student perception of the internship preparedness?	A modest relationship was found between pay and preparedness.

"developmental value". This variable is similar to this study's definition of preparedness, in which students use an internship to acquire more skills and develop clarity about future career goals. Yet, the same study (McHugh, 2017) reported no significant difference when correlating those with a paid internship and their personal satisfaction with that internship.

Though the national average wage for an intern is $19.05 per hour (NACE, 2019), it is understood this amount is for all professions and not just interior design. As the average hourly wage for a professional interior designer is $25.66 (USBLS, 2019), a less-knowledgeable intern's rate of $12.85 is comparable. Gupta et al. (2010) also found no significant relationship between intern compensation and interns' satisfaction. Instead, their satisfaction was more strongly related to the skills they gained. However, students in other studies have expressed negative concerns about internship compensation, time commitment, and paying for credit while "working" (Roznowski & Wrigley, 2006; Wexler, 2016). The debate over financial compensation for interns remains an active one and warrants further investigation.

Conclusion

The benefits of an internship are many and impact academia as well as industry. An important area of design research acknowledges the perceptions of interns toward their workplace experience (Gugerty, 2011). This study reported interior design interns at one school who believed their internship was valuable in preparing them to enter the workforce. As shown in Table 2, these students perceived that they received the benefits of an internship, including a real-world orientation, a broader view of industry, the ability to build their resume and increase future employability, and more professional networking. They also perceived satisfaction with the internship experience regardless of pay rate, seeing this as the opportunity to gain job-related skills. Industry executives believe colleges should better prepare graduates for success by helping them develop both broad and specific skills (Hart Research Associates, 2010). Soft and hard skills are necessary to form a well-developed designer (Gale et al., 2017; Huber, 2018).

It is recognized that significant learning can take place in industry, as learning is a continual and on-going process (Kolb, 1984). However, there is more to an internship than gaining work experience. As stated by Guile (2006), "No matter how well trained newly qualified professionals and/or recent entrants have been in educational institutions, this does not automatically equip them to work in the creative and cultural sector" (p. 439). Beckman (2007) notes that design students learn skill sets specific to their careers, but rarely do they learn how to leverage these skills to produce a sustainable career.

As in any educational study, this study is bound by limitations. A small homogenous sample drawn from one discipline at one school limits the study's theoretical and logical generalization. Though the 14 benefits listed in the survey instrument were determined from available research, the list may exclude other skills gained by an intern. This instrument has a modest level of face validity, yet its content validity and internal reliability is low, as the survey was constructed with only one measurement for each internship skill (i.e., construct). Also, if the survey were administered to more than one group of interns, the internal validity of the instrument would be higher. Finally, some study participants had varied opinions, as evident in any standard deviation over one (see Table 2). This may also be due to the small sample size.

Future research may benefit from student responses that are confidential (rather than anonymous) in order to determine if any relationship exists between the type of firm and geographic location of the internship, along with compensation and internship satisfaction. To further broaden the scope of internship research, a survey of past interns and their supervisors may shed light on the perceptions of the internship's impact on long-term career success and satisfaction. Finally, gathering student perceptions two to three years after graduation may give a more accurate assessment of career development, as graduates would likely be beyond entry-level positions at that time.

In conclusion, both the literature and the current study support the inclusion of an internship in design curricula as a form of experiential learning. The data reported in this study can help educators determine how best to assist students in maximizing learning outcomes from this form of experiential learning. Providing exceptional internship opportunities that contribute to learning will require the ongoing attention of educators and researchers for years to come.

References

Barr, T. F., & McNeilly, K. M. (2002). The value of students' classroom experiences from the eyes of

the recruiter: Information, implications, and recommendations for marketing educators. *Journal of Marketing Education*, *24*(2), 168–173. doi:10.1177/0273475302242010

Beck, J. E., & Halim, H. (2008). Undergraduate internships in accounting: What and how do Singapore interns learn from experience? *Accounting Education*, *17*(2), 151–172. doi:10.1080/09639280701220277

Beckman, G. D. (2007). "Adventuring" arts entrepreneurship curricula in higher education: An examination of present efforts, obstacles, and best practices. *The Journal of Arts Management, Law, and Society*, *37*(2), 87–112. doi:10.3200/jaml.37.2.87-112

Blackwell, A., Bowes, L., Harvey, L., Hesketh, A. J., & Knight, P. T. (2001). Transforming work experience in higher education. *British Educational Research Journal*, *27*(3), 269–285. doi:10.1080/01411920120048304

Brooks, J. E., & Greene, J. C. (1998). Benchmarking internship practices: Employers report on objectives and outcomes of experiential programs. *Journal of Career Planning & Employment*, *59*(1), 37-56.

Coco, M. (2000). Internships: A try before you buy arrangement. *S.A.M. Advanced Management Journal, 65*(2), 41-43, 47.

Cohen, J. (1992). A power primer. *Psychological Bulletin, 112*(1), 155-159.

Council for Interior Design Accreditation (CIDA.) (2020). Professional standards 2020. Retrieved from https://www.accredit-id.org/professional-standards

Dewey, J. (1934). *Art as experience*. New York, NY: Minton, Balch & Company.

Fishburne, K. A. (2015). Business not as usual: Attracting and retaining internship providers. *Proceedings of the Interior Design Educators Council Conference*. Fort Worth, TX. Retrieved from https://www.idec.org/i4a/pages/index.cfm?pageID=3780

Gale, A. J., Duffey, M. A., Park-Gates, S., & Peek, P. F. (2017). Soft skills versus hard skills: Practitioners' perspectives on interior design interns. *Journal of Interior Design*, *42*(4), 45–63. doi:10.1111/joid.12105

Gardner, L. (2010, February 23). Arts internships: Chance of a lifetime or cut-price labour? *The Guardian*. Retrieved from http://www.guardian.co.uk

Gault, J., Leach, E., & Duey, M. (2010). Effects of business internships on job marketability: the employers' perspective. *Education + Training*, *52*(1), 76–88. doi:10.1108/00400911011017690

Gault, J., Redington, J., & Schlager, T. (2000). Undergraduate business internships and career success: Are they related? *Journal of Marketing Education*, *22*(1), 45–53. doi:10.1177/0273475300221006

Graduate Careers Australia. (2012). *The report of the graduate outlook survey: Employers' perspectives on graduate recruitment.* Retrieved from http://www.graduatecareers.com.au/wpcontent/uploads/2011/12/GOS12_Report_FINAL2.pdf

Griffin, M. & Coelhoso, P. (2019). Business students' perspectives on employability skills post internship experience. *Higher Education, Skills and Work-Based Learning, 9*(1), 60-75. doi:10.1108/HESWBL-12-2017-0102

Gugerty, C. (2011). *Scholar commons graduate theses and dissertations graduate school 2011 internships in public relations and advertising: The nature of the experience from the student's perspective.* Retrieved from https://scholarcommons.usf.edu/cgi/viewcontent.cgi?article=4328&context=etd

Guile, D. (2006). Access, learning and development in the creative and cultural sectors: From 'creative apprenticeship' to 'being apprenticed.' *Journal of Education and Work*, *19*(5), 433–453. doi:10.1080/13639080600988715

Gupta, P. B., Burns, D. J., & Schiferl, J. S. (2010). An exploration of student satisfaction with internship experiences in marketing. *Business Education and Accreditation*, *2*(1), 27–37. Retrieved from https://econpapers.repec.org/article/ibfbeaccr/v_3a2_3ay_3a2010_3ai_3a1_3ap_3a27-37.htm

Hart Research Associates, Inc. (2007). *How should colleges prepare students to succeed in today's global Economy? Employers' views on the accountability challenge. A survey of employers conducted on behalf of The Association of American Colleges and Universities.* http://www.aacu.org/leap/documents/Re8097abcombined.pdf

Hart Research Associates, Inc. (2008). *How should colleges assess and improve student learning? Employers view on the accountability challenge. A survey of employers*

conducted on behalf of The Association of American Colleges and Universities. Retrieved from http://www.aacu.org/leap/documents/2008_Business_Leader_Poll.pdf

Hart Research Associates, Inc. (2010). *Raising the bar: Employers' views on college learning in the wake of the economic downturn. A survey of employers conducted on behalf of The Association of American Colleges and Universities.* Retrieved from https://www.aacu.org/leap/documents/2009_EmployerSurvey.pdf

Hart Research Associates, Inc. (2018). *Fulfilling the American dream: Liberal education and the future of work***.** A survey of employers conducted on behalf of The Association of American Colleges and Universities. Retrieved from https://www.aacu.org/research/2018-future-of-work

Huber, A. (2018). Exploring hiring practitioner preferences for and assessment practices of prospective candidates. *Journal of Interior Design*, *43*(4), 21–44. doi:10.1111/joid.12131

Javine, V. (2013 winter). Financial knowledge and student loan usage in college students. *Financial Services Review*, *22*(4), 367–387.

Kelley, C. A., & Bridges, C. (2005). Introducing professional and career development skills in the marketing curriculum. *Journal of Marketing Education*, *27*(3), 212–218. doi:10.1177/0273475305279526

Kolb, D. A. (1984). *Experimental learning: Experience as the source of learning and development*. Upper Saddle River, NJ: Prentice-Hall.

Kolb, A. Y., & Kolb, D. A. (2005). Learning styles and learning spaces: Enhancing experiential learning in higher education. *Academy of Management Learning & Education*, *4*(2), 193–212. doi:10.5465/amle.2005.17268566

Lipka, S. (2010). Would you like credit with that internship? *Chronicle of Higher Education, 56*(35), A1-A21.

Lorenzo-Aiss, J. D., & Mathisen, R. E. (1996). Marketing higher education: Models of marketing internship programs as tools for the recruitment and retention of Undergraduate Marketing Majors. *Journal of Marketing for Higher Education*, *7*(1), 71–84. Retrieved from https://doi.org/10.1300/j050v07n01_06

Marshall, J. (2010). Professional internships: A requirement for graduation. *Proceedings of the 117th ASEE Annual Conference & Exposition.* June 20 - 23, 2010*, paper ID 289,* Louisville, Kentucky.

Marshall, J. (2012). A professional internship: Don't graduate without one. *Proceedings of the 119th ASEE Annual Conference & Exposition*. June 10, 2012, paper ID 3532. San Antonio, Texas.

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

NACE (2011). *U.S. internships: A definition and criteria to assess opportunities and determine the implications for compensation.* Retrieved from http://www.naceweb.org/advocacy/position-statements.aspx

NACE (2018). *U.S. internships: A definition and criteria to assess opportunities and determine the implications for compensation.* Retrieved from https://www.naceweb.org/about-us/advocacy/position-statements/position-statement-us-internships/

NACE (2019). *Internship & co-op report 2019. Executive summary*. Retrieved from https://www.naceweb.org/store/2019/internship-and-co-op-report/

O'Neill, N. (2010). Internships as a high-impact practice: Some reflections on quality. *AAC&U*

Peer Review, 12(4), 4-8.

Patrick, C. J., Peach, D. & Pocknee, C. (2008). The WIL (work integrated learning) report: A national scoping study. Australian Learning and Teaching Council (ALTC) Final Report. Brisbane, AU: Queensland University of Technology (QUT). Retrieved from http://www.altc.edu.au

Patton, M. Q. (2002). *Qualitative research and evaluation methods (3rd ed.).* Thousand Oaks, CA: Sage.

Radigan, J. (2009). The role of internships in higher education. *Proceedings of the American*

Society for Engineering Education Middle Atlantic Section Fall 2009. Retrieved from http://www.asee.org/documents/sections/middle-atlantic/fall-2009/01-The-Role-Of-Internships-In-Higher-Education.pdf

Reddan, G., & Rauchle, M. (2012). Student perceptions of the value of career development learning to a work-integrated learning course in exercise science. *Australian Journal of Career*

Development, *21*(1), 38–48. doi:10.1177/103841621202100106

Renganathan, S., Ambri Bin Abdul Karim, Z., & Su Li, C. (2012). Students' perception of industrial internship programme. *Education + Training*, *54*(2/3), 180–191. doi:10.1108/00400911211210288

Rigsby, J. T., Addy, N., Herring, C., & Polledo, D. (2013). An examination of internships and job opportunities. *Journal of Applied Business Research (JABR)*, *29*(4), 1131. doi:10.19030/jabr.v29i4.7921

Rosario, L., Flemister, E., Gampert, R. & Grindley, C.J. (2013). Cross-campus collation and experiential learning at Hostos Community College. *AAC&U Peer Review, 15*(1), 25-28.

Roznowski, J. & Wrigley, B. (2006). Encouraging undergraduate participation in internship programs: An application of message sidedness. *Teaching Public Relations, Monograph 70*, 1-4.

Ryan, C. & Krapels, R.H. (1997). Organizations and internships. *Business Communication Quarterly, 60*(4), 126-131.

Shoenfelt, E. L., Stone, N. J., & Kottke, J. L. (2013). Internships: An established mechanism for increasing employability. *Industrial and Organizational Psychology*, *6*(1), 24–27. doi:10.1111/iops.12004

Schön, D. A. (1983). *The reflective practitioner : How professionals think in action.* New York, NY: Basic Books.

Schön, D. A. (1984). The architectural studio as an exemplar of education for reflection-in-action. *Journal of Architectural Education*, *38*(1), 2–9. doi:10.1080/10464883.1984.10758345

Schon, D. A. (1987). *Educating the reflective practitioner.* San Francisco, CA: Jossey-Bass.

Shreeve, A., Sims, E., & Trowler, P. (2010). 'A kind of exchange': Learning from art and design teaching. *Higher Education Research & Development*, *29*(2), 125–138. doi:10.1080/07294360903384269

Sterling, M. (2007). Service-learning and interior design: A case study. *Journal of Experiential Education*, *29*(3), 331–343. doi:10.1177/105382590702900305

Tufenkjian, M. R. (1999). A new engineering educator's guide for creating a summer engineering internship program. *Proceedings of the ASEE Annual Conference & Exposition.* June 20 - 23, 1999*, paper ID 1375.* Charlotte, North Carolina.

USBLS (United States Bureau of Labor Statistics). (2019). Occupational outlook handbook employment projections: 2016-26 summary. Retrieved from https://www.bls.gov/news.release/ecopro.nr0.htm

USDL (United States Department of Labor). (2010). *Fact sheet #71: Internship programs under the Fair Labor Standards Act.* Retrieved from http://www.dol.gov/whd/regs/compliance/whdfs71.htm

USDL (United States Department of Labor). (2013). *Compliance assistance: Wages and the fair labor standards act.* Retrieved from http://www.dol.gov/whd/flsa/

Verney, T. P., Holoviak, S. J. & Winter, A. S. (2009). Enhancing the reliability of internships evaluations. *Journal of Applied Business and Economics, 9*(1), 22-33.

Wanless, D. (2013). Perspectives from internships and co-ops with industry. *Proceedings of the 120th ASEE Annual Conference & Exposition, 23-26 June 2013, paper ID #8186.* Atlanta, GA.

Wexler, E. (2016, May 17). *Paying to work.* Retrieved from https://www.insidehighered.com/news/2016/05/17/when-students-pay-tuition-work-unpaid-internships (Ellen).

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