Exploring differences in industry supervisors' ratings of student performance on WIL placements and the relative importance of skills: Does remuneration matter?

Exploring differences in industry supervisors' ratings of student performance on WIL placements and the relative importance of skills: Does remuneration matter?

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Assessment in work integrated learning (WIL) programs typically involves workplace supervisors rating student performance against criteria based on employability skills. Yet investigations of differences in employer ratings that may impact on student outcomes are rare. This study reports on a pilot study that examined supervisor evaluations of the performance of tourism and hospitality management students undertaking a mandatory capstone internship, either paid or non-remunerated. The descriptive and exploratory statistical analysis examines data derived from over one hundred supervisor evaluation forms. A few significant differences in supervisor ratings of performance in paid and unpaid groups and in the relative importance of skills were found. Overall, the study affirmed that supervisors generally rate students highly on all skills. The skills that students are prepared for and assessed on in our WIL program were found to be of high value to local hosts. Implications for debates regarding supervisory input into assessing student performance are explored. *(Asia-Pacific Journal of Cooperative Education, 2016, 17(2), 175-186)*

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Many universities have incorporated WIL into their programs in order to fulfil their missions of providing work ready graduates for industry. One of the more frequently cited definitions of work integrated learning (WIL) is that of Patrick, Peach, Pocknee, Webb, Fletcher, and Pretto (2008, p. iv) as "an umbrella term for a range of approaches and strategies that integrate theory with the practice of work within a purposefully designed curriculum". This paper will focus on placement-based WIL, whereby students enter a real rather than a simulated workplace. Placement based WIL programs (also referred to as internships, industrial placements, work placements, clinical education, cooperative education or practicums) often include a role for employers in assessing student performance. One rationale for doing so is that employers are the best judges of *professional* competence. Student self-ratings and academic assessments are arguably less appropriate to rely on in this particular domain (McNamara, 2013). It is also recognized that "the experience and approach of the person providing the feedback is central to the effectiveness, relevance, value and impact of the WIL assessment experience" (Ferns & Moore, 2012, p. 215). Greater understanding of workplace supervisors' approach to providing input into assessment of WIL is therefore of interest to practitioners.

The growing involvement of workplace supervisors in assessment of student performance during placements is not without challenges. In particular, impacts on assessment outcomes are under researched, given the range of potentially poor outcomes identified (Bennett-Wimbush & Amstutz, 2011; Richardson, Jackling, Henschke, & Tempone, 2013; Sturre, Von Treuer, Keele, & Moss, 2012). Other complications are: a lack of guidance and clarity regarding supervisors' roles in assessment; the inadequacy of typical university assessments for capturing the application of skills in work settings; the resource intensive nature of good

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practice in regards to training and support for industry partners; that students rarely complete assessment tasks entirely by themselves; and often have different needs and expectations on placement (Billett, 2008; Foley, 2004; Hodges, 2011; Orrell, Cooper, & Bowden, 2010; Richardson et al., 2013; Stagnitti, Schoo, & Welch, 2010).

In particular, issues of reliability and validity due to subjective bias, arguably inherent in all assessment, have been raised in relation to supervisor evaluations. This is especially so where numerous workplace assessors, or workplace settings, are involved in a single WIL program (Ferns & Moore, 2012; Hodges, Smith, & Jones, 2004; Kilgour, Kilgour, Gerzine, & Christian, 2014). Some argue that moderation of assessment by academics is required to mediate these risks (Richardson et al., 2013). Others see lack of reliability and comparability of supervisor feedback as a serious drawback to its use (Costley & Armsby, 2007; Gonsalvez & Freestone, 2007; McNamara, 2008). In any case, the need to examine patterns in supervisor ratings empirically remains, given that they are typically a component of assessment of WIL (Richardson et al., 2013). Actual differences in the learning that occurs in 'paid' versus 'unpaid' placements should also be further explored. For example, Jackson reports student self-assessments of greater skills gains in private sector placements, as compared to public and not-for-profit workplaces. This may be indicative of students' relative confidence levels, or may reflect actual differences in skills gains (Jackson, 2013, p. 108-110).

Here, we report on the results of an exploratory study that investigated patterns in workplace supervisors' assessment of student skills and of their importance. Two settings were compared: paid placement in a for-profit context, and unpaid in a non-profit organizational setting. Organizational setting as a possible influence on student outcomes is highly relevant to many practitioners, when paid and unpaid placements are and must continue to be a feature of WIL programs such as the one that this action research study aims to help improve. Our findings may have broader relevance, given that the paid versus unpaid distinction has long been acknowledged as a key differentiator in WIL experiences (see Coll & Zegwaard, 2012). This study did not explore hints that bias may result from unpaid yet compulsory participation in WIL (Klein & Weiss, 2011, p. 983). The unpaid group included in this study are, however, most certainly "compulsory volunteers" (see Schugurensky & Mundel, 2005, p.7).

Typically, WIL programs aim to enhance student workplace competency and to thereby increase their employability. Competencies, or the characteristics of an individual that produce superior performance of work (Coll & Zegwaard, 2006) may be assessed, but the overarching foci are often workplace performance and student learning and development (Hodges, 2011). Relatedly, criterion referenced (usually derived from employability skills) and performance based assessment are both common features of assessment in placement based WIL, partly due to the complications of involving industry partners in assessing students (Ferns & Moore, 2012; Richardson, Jackling, Kaider, Henschke, Kelly, & Tempone, 2009; Zegwaard, Coll, & Hodges, 2003). Ideally, tertiary providers and industry work together to define authentic criteria and to ensure that industry assessors' clearly understand their role in assessment (Ferns, 2012; Richardson, et al., 2013). The WIL program that is examined in this paper reflects this general model in that workplace supervisors assess student performance on placement, using an instrument that measures performance against competencies reflecting employability skills.

Despite a lack of exploration of patterns in workplace supervisors' ratings of student performance on WIL placements, some studies suggest the worth of doing so. The few

studies that delve into aspects of how and why employers rate as they do span diverse disciplines and industries, in several national settings. Two multidisciplinary Australian studies conducted some years apart uncovered only minor differences in generally high employers' ratings of the value and performance of the skill demonstrated by WIL program graduates (Ferns, 2012; Hodges & Burchell, 2003). In a multidisciplinary North American study, employers generally rated WIL students highly on all skills, but the authors speculated that getting 'cheap labour' may skew ratings (Bennett-Wimbush & Amstutz, 2011). Generally, clarifying the role of supervisors in WIL is recognized as an important task, as is addressing any such bias (McNamara, 2013; Richardson et al., 2013). The study described below is a tentative step in that direction, in mapping some patterns of ratings in a single program.

THE STUDY

Methodologically this study adopts an action research framework. There is a long tradition of studies in the field of educational research and evaluation employing this approach to guide continuous enhancement of program design and delivery (Carr & Kemmis, 1986; McAteer, 2013; Stenhouse, 1975). It is a suitable framework for research in which the primary purpose of the analysis is evaluation and ongoing curriculum design. Exploratory descriptive statistical analysis of student assessment data in a WIL program at a small regional Australian university is employed mainly to that end.

The 2012 study cohort that is the focus of the analysis comprised third year students undertaking an undergraduate degree in convention and event management, tourism management or hospitality management. Table 1 provides some descriptive details of the demographic characteristics of the sample.

TABLE 1: Demographic descriptors of the study student cohort

	Total N	Paid Group	Unpaid Group
Sex	128	Female: 76 (76%) Male: 24 (24%)	Female: 20 (71%) Male: 8 (29%)
Average age		22.6 years	22.4 years

As Table 1 indicates, the student cohort was female dominated, consistent in age, but varied between the paid and unpaid groups on the proportion of international or domestic students. Unfortunately, the overall sample size was too small to explore the impact of these factors (see Jackson & Chapman, 2012 for further discussion).

All students complete a compulsory WIL program, consisting of a professional development and internship preparation unit, in year two of their degree and the internship placement in the final year. The WIL team advertise a number of paid and unpaid internship positions, but students are not restricted to these, making allocation to placements a 'pseudo-random' process. As such, systematic differences on the part of conveners in deciding who to place in which group is unlikely to have skewed the study's results. Students can 'self-select' into placements, which may introduce biases into the allocation process.

Placements must be relevant to the student's degree and be a minimum of 600 hours over a minimum 20 week block, in a mix of 'paid' positions (a wage or a scholarship of lesser monetary value) in for profit businesses and unpaid work in non-profit organizations, or less

frequently in business enterprises. Other variations were size of organization, industry sector and role.

The instrument used for data collection was the Internship Supervisor Evaluation Form, routinely used in the program to assess student performance on placement and to capture data on the skills most valued by industry hosts. A 100% response rate was achieved, as the submission of the completed form is a compulsory assessment item. Students are advised that it is their responsibility to ensure that their supervisor completes and returns the evaluation form at the completion of the placement. Supervisors are provided with the form at the commencement of the placement, in conjunction with guidelines regarding the responsibilities of the supervisor, student and university during the WIL placement. During the 20 week placement the university academic supervisor establishes and maintains contact with the workplace supervisor to gain qualitative feedback regarding the student's progress. During these exchanges, supervisors are reminded to complete the form and encouraged to do this in consultation with the student as if it was a performance management review process. Instructions on the form encourage the supervisor to rate the student as if they were an employee.

Over the WIL program's 20 year history the supervisor evaluation form has been refined in response to industry feedback regarding preferred graduate attributes. The form's evaluation criteria were originally informed by the Competing Values Framework (CVF) (Quinn, Faerman, Thompson, & McGrath, 1996) and aligns with the university's graduate attributes. It comprises fifteen skills, ranked on a scale of one to five to describe student performance as observed on placement and the importance of skills to supervisors. A rating of one reflects a low level of skill or importance to hosts. A rating of five indicates a high level of skill or importance to employers. A rating of zero indicates that supervisors were unable to assess a skill or to rate its importance.

The initial sample comprised 156 completed evaluations forms. Data from each placement was included for students who participated in two placements, as the unit of analysis was placement evaluation data rather than students. For the purpose of comparative analysis, two groups were created, comprised of paid placements in for-profit settings, or unpaid placements in a not-for-profit setting. Cases that did not fit these criteria were discarded to reduce within group variation to support more robust statistical analysis.

The final sample size was 128 'placements'. Raw data was plotted in Excel. Histograms were used to visually examine the data. The mean, medium and mode were calculated using the raw response data from the 'paid' and 'unpaid' groups, to check for the degree of skewness and the direction, if present, and kurtosis. Independent sample t-tests were conducted for all skill level and skill importance variables. While the 'unpaid' group had a smaller number of observations, it was deemed sufficient to assume a normal distribution as for all variables the number was greater than 25. It must be cautioned that for given sample sizes and total numbers of observations, the power of a test is maximized if the groups are equal. The 'paid' group was four times as large as the 'unpaid' group. To correct for this, all results are reported as percentages. Error checking of 10% of the raw data against the database indicated 98% accuracy in data entry. The variability in Ns in data presented here is most often due to supervisors choosing 'unable to assess' as an option. In a few cases this was due to missing data.

There are a number of other limitations to bear in mind in interpreting and applying the results of this study. Issues with the reliability and validity of workplace assessments completed by industry supervisors were noted earlier and apply to this data. Further limitations include that the analysis is based on ratings of a single student cohort, a single set of workplace supervisors, in one year. It is also limited to three discipline types. The geographical location of the WIL program and the host organizations in a regional Australian center, as well as the relatively small number of cases, further reduce the generalizability of the results.

RESULTS

The results of previous research that were affirmed in this study include a tendency for supervisors to rate all students highly on all skills. Very few students were rated as performing lower than average level on any skill, in either setting. The items rated most poorly, in rank order, were 'analytical and problem solving' skills, 'information literacy' and 'knowledge of the industry or sector' (see Table A1 and Table A2 in appendices). In the 'paid' group, 'punctuality and attendance' were rated most highly, followed by 'verbal and interpersonal skills'. In the unpaid group, 'positive attitude and work ethic' were rated most highly. For both groups, 'knowledge of the sector or industry' was rated mostly poorly. Some significant differences were found in these skills ratings for each group (see Table A5 in appendices).

Turning to differences in supervisors' ratings of the *importance* of various skills in the two settings, there were again many commonalities. The item ranked as the most important by both groups of supervisors was 'punctuality and attendance'. The second most important skill in the paid group was 'positive attitude and work ethic'. By contrast, the second most valued item for the unpaid group was 'cooperation and team work'. 'Presentation and grooming' and 'punctuality/ attendance' were valued more highly by supervisors of paid placements, as were 'computing skills' by those in unpaid settings (see Table A3 and Table A4 in appendices).

Supervisors in paid settings accorded the highest importance to the same three skills that they had rated student performance mostly highly on, in the same rank order (with one exception). These were 'punctuality and attendance', 'positive attitude and work ethic' and 'cooperation and teamwork'. Supervisors in the unpaid group valued the same three skills most highly, and had also rated students most highly on their performance, for two out of these three items ('positive attitude and work ethic' and 'cooperation and teamwork'). The third skill that student performance was rated most highly on differed ('ethics and professionalism').

Turning to a direct comparison of the two groups, ratings of student performance against skills were significantly higher in the 'paid' group for 'punctuality and attendance' and for 'computing' skills in the 'unpaid' group (see Table A5 in appendices). Significant differences identified in the importance of skills to supervisors in each setting included: the greater importance to supervisors in 'paid' settings of 'presentation and grooming' and 'punctuality and attendance'; and the higher importance placed on 'computing' skills by supervisors in 'unpaid' settings. The high means in both groups indicate that all of the skills assessed in the instrument were quite important to hosts (see Table 2).

TABLE 2: Supervisor rating of skill importance comparison

Descriptive measure	Paid (for profit)				Unpaid (non-profit)		
	Mean	Std. Error	Skew.		Mean	Std. Error	Skew.
Capacity to learn	4.58	.067	-2.174		4.60	.157	2.545
Presentation / grooming	4.58	.066	-1.534	(*)	4.28	.134	-.486
Punctuality / attendance	4.75	.059	-3.505	(*)	4.5	.120	-.920
Computing	3.92	.112	-1.047	(**)	4.28	.124	-.376
Knowledge of industry	3.97	.093	-.794		4.00	.145	-.525
Aware of industry impacts	3.89	.103	-.748		3.67	.154	-1.060
Written communication	4.15	.097	-1.163		4.28	.144	-.550
Verbal communication	4.62	.062	-1.725		4.50	.109	-.622
Intercultural competence	4.29	.081	-.713		4.07	.191	-1.163
Ethics and professionalism	4.55	.066	-2.059		4.59	.110	-1.055
Proactive and adaptable	4.60	.075	-2.319		4.50	.140	-1.734
Information literacy	4.32	.082	-1.629		4.39	.107	-.203
Analytical / problem solving	4.52	.074	-1.818		4.32	.115	-.292
Cooperation / teamwork	4.71	.059	-3.173		4.75	.097	-2.042
Positive attitude/work ethic	4.78	.054	-4.078		4.75	.083	-1.221

(*) Significant at 0.1 level of significance
(**) Significant at 0.05 level of significance

DISCUSSION

The findings presented here explored supervisors' ratings of student performance and the relative importance of skills in two organizational settings that are relevant to the WIL program that the study helped to evaluate. This exploratory analysis does not allow us to comment on whether 'free labor' might systematically attract higher ratings, as compared to that performed in paid placements. It has allowed us to identify some interesting differences in skills ratings and in the relative importance of skills to supervisors in two common types of placement setting. Some differences, such as the relatively greater importance of computing skills in 'unpaid' settings, will be explored further in future iterations of program design and evaluation. The results affirm that the skills which our program prepares students to demonstrate on placement are generally those that are important to our hosts. Students are typically performing well on placement, irrespective of which setting they are located in. Our findings also corroborate those of other studies that have demonstrated a tendency for supervisors to rate WIL students or graduates performance highly in general (Bennett-Wimbush & Amstutz, 2011; Ferns, 2012). Fern's (2012) report of a few minor differences in the importance that a large sample of employers attributed to the skills of graduates of WIL programs in disparate degree fields is also affirmed.

Very little could be found in published studies to guide us in interpreting other results. Some non-significant, if interesting, differences in ratings of student performance that corresponded to differences in the relative importance of those skills to supervisors in

different settings make intuitive sense. For example, it seems logical that 'cooperation and teamwork' are important in settings that rely on volunteers. Similarly, perhaps there is more scope for students to display 'ethics' skills in non-profit settings, or perhaps this reflects student interests. However, the literature offers little illumination as to why computer skills were both significantly more important and a skill which student performance was rated significantly higher on in 'unpaid' settings relative to 'paid' ones. Nor is there much available to guide us in interpreting why student performance on 'punctuality and attendance' was rated significantly better in paid settings.

Other studies that have explored supervisor ratings of students offer tentative and divergent explanations for such choices, none of which is an obvious fit here. These include: supervisor satisfaction with performance in general; a good match of student and internship; or between student and supervisor expectations; leniency; or lack of skill in evaluating student performance (Bennett-Wimbush & Amstutz, 2011). The Bennett-Wimbush & Amstutz study did reflect data gathered over eleven years, but it too was based on a disproportionately small 'unpaid' sample. Further exploration of variations in employer valuations of skills and ratings of student performance may yield interesting results, given this study's findings.

Sophisticated statistical studies in a variety of settings are required so that these important questions can be addressed empirically. The divergent implications for the quality of assessment in WIL of each of these varied explanations underlines a need for further research to untangle this set of interconnected issues, which are relevant to the quality enhancement agenda in WIL.

This is not least because one motivator for this study claimed that supervisor evaluations of intangible skills like professionalism, interpersonal skills, and communication skills (Coll & Zegwaard, 2006 as cited in Sturre, Von Treuer et al., 2012, p.67) are necessarily "subjective and thus particularly susceptible to biases and preconceptions. An example of this is, when attributes are intangible supervisors tend to be more lenient towards students they like" (Antonioni & Park, 2001 as cited in Sturre, Von Treuer et al., 2012, p. 67). Whilst we cannot comment on the applicability of this claim to our results, we hope that others will take up the challenge of investigating the existence and impact of bias in supervisor ratings.

Doing so will assist WIL practitioners to have the lively conversation that is unfolding about what part, if any, standardized criteria might play in enhancing consistency in WIL supervisors' roles in student assessment; or of WIL placements as unique settings that affect learning. The development and use of shared single instruments to assess student performance (or work place settings) would offer benefits in helping to reduce any systematic differences that do exist, allowing the findings of studies to be validated with reference to a national dataset, as well as facilitating cross-institutional benchmarking of WIL. A good compromise between a need for course and discipline specificity and national benchmarking may be the development and use of short, shared national level instruments, supplemented with locally developed items for local use (Sturre, Keele et al., 2012). The value of a shared national evidence-base for WIL is underlined by a growing need to provide evidence of the direct impact of WIL in enhancing graduate employability, in order to secure continued investment in what is a resource heavy endeavor (Ferns, Smith, & Russell, 2014; Jackson, 2013).

The introduction to this paper noted that the use of clear and uniform competency criteria for evaluating student performance in a 'live' workplace is considered to be both common and

good practice in terms of involving industry in assessing WIL (Richardson et al., 2009). Lack of support for employers to gain clear and consistent understandings of the criteria that they rate student performance against is a widely shared concern amongst WIL practitioners. Some contributors remind us that formative assessment may be less popular and more complex than is summative assessment of WIL, but is often more valid (McNamara, 2008). Others focus on the need to develop instruments to assess the workplace setting, so that any bias introduced by the variability of such settings can be offset. These authors also note that use of standardized instruments to test knowledge or skills is not ideal given the uniqueness of each placement, student, supervisors combination (Sturre, Keele et al., 2012).

However, the Australian national agenda for WIL pans out in these respects, provision of better guidance for industry assessors is a pressing concern. Jackson, amongst others, has responded to this challenge by creating a framework that lists key behaviors, indicative of the employability skills that students are assessed against, to provide a better guide for workplace assessors (Jackson, 2013, pp.104-105). One of the more ambitious efforts in this respect is a national project concerned to validate measures for both key constructs of WIL and of 'work readiness' (see Ferns, Smith, & Russell, 2014). Closely related op Jackson's efforts is the development and use of grading rubrics for the same purpose. Rubrics offer one solution to the problem McNamara poses of whether 'it is possible to ensure each supervisor has a consistent perception about what they are assessing and what standards are expected' (2013, p. 189). The limited evidence available on rubrics in WIL assessment suggests that supervisors in different disciplines appreciate this tool, that some require more training than others to use them effectively, but that accuracy and consistency of assessing student performance is enhanced (Kilgour et al., 2014).

CONCLUSIONS

This study found little evidence of significant differences in patterns of supervisor ratings of student performance, or in the importance attributed to those skills, in either 'paid' or 'unpaid' settings. The few exceptions were not easily explained with reference to the existing literature. Nor were there many significant relationships between the two aspects of WIL assessment explored, despite some minor differences that do not feature in the literature. A general tendency to rate student performance highly and to value most skills highly, was affirmed. This study has not definitively answered the questions it engages with, being a limited exploration of a small sample in one program at a single institution. The sub-sample of students in unpaid placements within not-for profit organization was small, which was compensated for, but which may have affected the results. The question of systematic patterns in supervisor ratings associated with paid or unpaid student placements, and interactions between the importance of skills to employers' and ratings of student performance should be far more widely examined.

Other practitioners might usefully explore the applicability of the research presented here to their WIL programs. Additionally, more single program studies could usefully address these and other issues that potentially impact assessment outcomes from WIL, within tourism and other disciplines, to build cumulative validity. Consideration of other possible factors that may affect supervisor ratings, such as training and support, or size and location of organizations, is a quality assurance concern that can also help to deepen practitioners understanding of supervisors' roles in WIL assessment. It is also important to build a better picture of other factors that might impact student assessment outcomes. For example, the authors will use the data to explore whether varying placement lengths within our WIL

program make a difference, given Jackson's finding that variations in placement hours significantly impact at least student perceptions of skill gains on placement (2013).

In terms of implications for WIL program enhancement, the findings imply that a focus on those skills valued by employers in the relevant local industries should be maintained. The generally high value placed on all of the skills included in both groups of employers affirms the current focus of the WIL preparation unit in our program. Given that issues of differences in supervisors ratings of students skills or the importance of those skills to them seem not to be the most pressing area for review at present, efforts to better support industry assessors will be the next step, through the development of a rubric to guide consistent and informed application of the assessment instrument. This may, too, help to mediate any unintended impacts resulting from the varied placement experiences offered in the program. More generally, this paper has demonstrated the value of a continuous quality enhancement perspective in relation to WIL program design.

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APPENDIX

TABLE A1: Supervisor rating of intern skill level: paid in for-profit organizations

	N	none	v. low	low	ave.	high	v.high
Capacity to learn	98	0%	0%	1%	6%	46%	47%
Presentation/grooming	100	0%	0%	1%	11%	35%	53%
Punctuality/attendance	100	0%	1%	3%	5%	15%	76%
Computing	99	5%	1%	2%	12%	44%	35%
Knowledge of industry/sector	98	2%	0%	4%	30%	46%	18%
Aware of industry impacts	*98*	*6%*	0%	2%	27%	42%	23%
Written communication	98	3%	0%	1%	20%	49%	27%
Verbal communication	100	1%	1%	2%	13%	46%	37%
Intercultural competence	99	1%	0%	3%	8%	51%	37%
Ethics and professionalism	99	0%	3%	2%	5%	39%	51%
Proactive and adaptable	98	0%	2%	3%	15%	29%	50%
Information literacy	99	0%	0%	3%	17%	46%	33%
Analytical/problem solving	100	0%	2%	2%	15%	45%	36%
Cooperation/teamwork	100	0%	2%	2%	5%	34%	57%
Positive attitude/work ethic	100	0%	3%	1%	5%	27%	64%

TABLE A2: Supervisor rating of intern skill level: unpaid in non-profit organizations

	N	None	V. low	Low	Ave.	High	V. high
Capacity to learn	27	0%	0%	4%	15%	33%	48%
Presentation/grooming	28	0%	0%	7%	4%	41%	48%
Punctuality/attendance	27	0%	4%	4%	15%	33%	44%
Computing	27	0%	0%	0%	15%	41%	44%
Knowledge: industry/ sector	27	0%	4%	11%	33%	37%	15%
Aware of industry impacts	*27*	*4%*	4%	4%	37%	41%	11%
Written communication	27	0%	4%	7%	11%	41%	37%
Verbal communication	27	0%	4%	7%	19%	33%	37%
Intercultural competence	26	4%	0%	0%	27%	42%	27%
Ethics and professionalism	25	0%	0%	0%	20%	28%	52%
Proactive and adaptable	27	0%	0%	0%	15%	48%	37%
Information literacy	27	0%	0%	15%	19%	22%	44%
Analytical/problem solving	27	0%	0%	19%	11%	37%	33%
Cooperation/teamwork	27	0%	0%	4%	4%	30%	63%
Positive attitude/work ethic	27	0%	0%	0%	0%	25%	75%

TABLE A3: Supervisor rating of skill importance: paid in for-profit organizations

	N	None	V. low	Low	Ave.	High	V. high
Capacity to learn	98	0%	1%	0%	4%	30%	65%
Presentation/grooming	98	0%	0%	1%	6%	27%	66%
Punctuality/attendance	98	0%	1%	0%	2%	16%	81%
Computing	95	0%	6%	0%	25%	32%	37%
Knowledge of industry/sector	96	0%	2%	2%	24%	40%	32%
Aware of industry impacts	*95*	0%	2%	7%	21%	38%	32%
Written communication	95	0%	2%	3%	16%	35%	44%
Verbal communication	97	0%	0%	1%	4%	26%	69%
Intercultural competence	95	0%	0%	1%	18%	32%	49%
Ethics and professionalism	98	0%	1%	0%	3%	35%	61%
Proactive and adaptable	97	0%	1%	1%	6%	20%	72%
Information literacy	97	0%	2%	0%	9%	40%	48%
Analytical/problem solving	98	0%	1%	0%	8%	28%	63%
Cooperation/teamwork	98	0%	1%	0%	1%	22%	76%
Positive attitude/work ethic	98	0%	1%	0%	0%	17%	82%

TABLE A4: Supervisor rating of skill importance: unpaid in non-profit organizations

	N	None	V. low	Low	Ave.	High	V. high
Capacity to learn	28	0%	1%	0%	4%	30%	65%
Presentation/grooming	28	0%	0%	1%	6%	27%	66%
Punctuality/attendance	28	0%	1%	0%	2%	16%	81%
Computing	28	0%	0%	0%	11%	50%	39%
Knowledge of industry/sector	28	0%	0%	4%	18%	54%	25%
Aware of industry impacts	*28*	*0%*	4%	0%	32%	54%	11%
Written communication	28	0%	0%	0%	18%	36%	46%
Verbal communication	28	0%	0%	0%	4%	43%	54%
Intercultural competence	27	0%	4%	0%	22%	33%	41%
Ethics and professionalism	27	0%	0%	0%	4%	33%	63%
Proactive and adaptable	28	0%	0%	4%	4%	32%	61%
Information literacy	28	0%	0%	0%	4%	54%	43%
Analytical/problem solving	28	0%	0%	0%	7%	54%	39%
Cooperation / teamwork	28	0%	0%	0%	4%	18%	79%
Positive attitude/work ethic	28	0%	0%	0%	0%	25%	75%

TABLE A5: Supervisor rating of intern skill level comparison

Descriptive measure	Paid (for profit)				Unpaid (Non-profit)		
	Mean	Std. Error	Skew.		Mean	Std. Error	Skew.
Capacity to learn	4.38	.065	-.824		4.25	.165	-.943
Presentation/grooming	4.40	.072	-.942		4.29	.167	-.403
Punctuality/attendance	4.62	.080	-2.446	(**)	4.11	.202	-1.313
Computing	3.95	.121	-1.889	(*)	4.29	.139	-.527
Knowledge of industry	3.72	.095	-1.185		3.48	.195	-.424
Aware of industry impacts	3.68	.122	-1.549		3.40	.215	-1.264
Written communication	3.91	.101	-1.781		4.00	.206	-1.207
Verbal communication	4.13	.090	-1.592		3.92	.213	-.947
Intercultural competence	4.19	.084	-1.743		3.84	.212	-1.712
Ethics and professionalism	4.32	.090	-1.884		4.32	.160	-.671
Proactive and adaptable	4.23	.097	1.273		4.22	.134	-.335
Information literacy	4.10	.079	-.564		3.96	.216	-.621
Analytical/problem solving	4.11	.087	-1.141		3.85	.211	-.624
Cooperation/teamwork	4.42	.084	-1.962		4.51	.144	-1.819
Positive attitude/work ethic	4.48	.088	-2.284		4.48	.144	-1.100

(*) Significant at 0.1 level of significance

(**) Significant at 0.05 level of significance

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