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# **Peer-learning to employable: learnings from an evaluation of PASS attendee and facilitator perceptions of employability at Western Sydney University**

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## **ABSTRACT**

This study examines student experiences of Peer Assisted Study Sessions (PASS) at Western Sydney University (WSU), investigating attendee and facilitator perceptions of the relationship between peer-learning and employability. It defers to contemporary higher education scholarship and related sector definitions of employability as an objective criteria for evaluating outcomes which may result from student experiences with PASS. This investigation observes the extent to which such definitions are evident in the skills and attributes students have acquired via their participation in PASS through both quantitative and qualitative research. Quantitative and qualitative data was collected across two consecutive semesters at WSU (Autumn and Spring) in 2015. Survey responses were collected from 297 PASS attendees and 45 PASS facilitators, further incorporating data collected via focus groups with 46 PASS attendees. The evidence allowed the researchers to examine how students perceived they had gained attributes from PASS that render them more employable. The research results highlight the benefits and limitations of the methods utilised to collect data from PASS participants, and this article elaborates key insights gained as a result of the research process that may be useful to peer-learning practitioners beyond WSU. The study found that attendees and facilitators of the WSU PASS program perceive that the program contributes to student employability in a variety of ways such as improving participants' core technical skills, organisational skills, social skills, professionalism and business acumen, appreciation of mentoring, and critical thinking skills.

## **1. EMPLOYABILITY AND PEER-LEARNING**

### **i. Defining PASS: overview of peer-learning literature**

PASS is implemented in adherence to the pedagogical model pioneered by the academic support program known as Supplemental Instruction (SI) that originated at the University of Missouri-Kansas City in 1973 (Arendale, 2002). Internationally peer-learning is understood as “the use of teaching and learning strategies in which students learn with and from each other without the immediate intervention of a teacher” (Boud, Cohen & Sampson, 1999, p. 2). The WSU program provides regularly scheduled, out-of-class, collaborative sessions, facilitated by senior students who have “excelled in the subject during previous semesters” (Huang et. al., 2013, p. 121). This in turn offers students an opportunity to “strengthen their knowledge by being actively involved in group learning that is focused on reviewing material and practical

problem-solving” (Huang et. al., 2013, p. 121). This approach is consistent with pedagogy adopted by PASS programs in most Australian universities, as is the program’s commitment to three specific learning conditions - namely, that PASS sessions are peer-led, collaborative and non-remedial in design focused on high-risk units rather than low performing students (Stone & Jacobs, 2008).

This study explores student perceptions of the contribution of PASS to their employability, rather than outcomes which may be directly attributed to PASS attendance. Perceptions are useful for better comprehending employability within the context of peer-learning scholarship, however Kruger and Dunning (1999, p. 1131) are critical of overstating the capacity of students to assess their own ability. Perception is described as “multifactorial: partly individual, and formed partly in the prevailing social and environmental context” (Ivey, 2016, p. 83). Examining perception allows researchers to reveal “beliefs and attitudes” that underlie behaviour (Ivey, 2016, p. 83, citing Carey, 1994). Measuring perception provides “insight into how individual and group thoughts, beliefs, and experiences affect human behaviour” (Ivey, 2016, p. 83). Within the context of this study, this means being able to evaluate the way in which the PASS learning context may contribute to students’ beliefs about employability while also observing whether the program assists in developing employment-related attributes and skills among participants.

The significance of the quantitative research results outlined in this article is strengthened by the inclusion of qualitative data in the form of focus group interviews. Qualitative methods enabled students to elaborate and demonstrate, through exploratory ‘deep-dive’ conversations, how they had utilised particular skills perceivably learnt by attending PASS in real-world settings. This mixed-methods approach to the research provided a mechanism for triangulation and improving the veracity and significance of the findings.

Some variables may be unique to the student experience of PASS at WSU that potentially impact the findings explored in this article. Participation in the program by facilitators, for instance, is accompanied by a thorough recruitment process which exposes these students to the experience of completing selection criteria and attending group interviews. As part of the application process at WSU, facilitators are required to address selection criteria based around their prior experiences related to peer mentoring, teamwork, and communication skills. These are designed to exemplify their suitability for a role as an academic peer mentor. The experience of writing selection criteria, along with the group interview process, provides PASS facilitators with exposure to common recruitment tools. These experiences may assist them when applying for graduate employment and enhance their perceptions of employability skills gained through the program. WSU facilitators attend professional development workshops focused on the development of soft skills, are contracted for the semester and paid hourly for their services. (It should be noted that in the context of WSU the term “academic session” is the equivalent of a “trimester” or “semester” at other institutions. In this article the term semester has been utilised to avoid confusion between “academic session” and “PASS session.”) In this light, there are variables to consider when interpreting the research results such as how facilitators’ employee-employer relationship with the PASS program may impact their perceptions and how this relationship may be reflected in survey responses (Allen & Court, 2009, pp. 80-81). The authors nonetheless emphasise

that the perceptions of facilitators and attendees concerning the relationship between PASS and employability are influenced by their respective experiences and unique modes of participation in the program. In light of recognising this distinction two separate surveys were employed in this research to examine the perceptions of facilitators and attendees.

The weekly provision of scheduled, voluntary study sessions are offered supplementary to the formal lectures and tutorials (Newton & Ender, 2010, p. 6). PASS facilitators prepare learning materials that require collaboration and facilitate discussion around coursework and lecture resources. However, the onus is on attendees to work together developing academic knowledge, study skills, and strategies relevant to the learning experience (Smith, May & Burke, 2007, p. 85).

Educational literature iterates PASS' contribution to the improvement of student grades, retention, and progression (Paloyo, Rogan & Siminiski, 2016). In their systematic review of peer-learning literature, Dawson *et. al.* concluded that "participation in [SI] is correlated with higher mean grades, lower failure and withdrawal rates, and higher retention and graduation rates" (Dawson *et. al.*, 2014, p. 2). Research also indicates that peer-learning programs similar to PASS have enhanced participants' learning capacities (Ning & Downing, 2010), improved their sense of connectedness (Dobbie & Joyce, 2008; Smith, May & Burke, 2007; van der Meer & Scott, 2009), and broken down learning barriers such as isolation (Davies, 2004) and language differences (Zaccagnini & Verenikina, 2013).

PASS is underpinned by the notion that peers are ideally situated to assist in the learning process of other students. As a proponent of social constructivism Vygotsky argued it was the social world, or context of learning, which played the critical role in learning development (Vygotsky, 1978). He emphasised that learning was a social act with peers acting as a tool to enhance learning through discussion, collaboration, and feedback. This analysis will build on Vygotsky's position concerning the underlying role of the social context and collaboration, supporting the view that PASS can play a key role in developing students' professional and social capabilities as a part of their transition beyond university.

## **ii. The shift towards employability**

Universities are increasingly seeking to implement an element of practical professional application skills into their degree portfolios and teaching practices (Hill & Lyons, 2015). Hill's research highlights that university graduates lack some of the "basic" professional requirements necessary in the workplace (Hill, 2015). PASS has the potential to address this issue by contributing to the accumulation of student competencies beyond those taught in classrooms. In response to this WSU PASS has extended the parameters of the program's evaluations to accommodate student employability. Policy changes have also impacted the tertiary education sector in fundamental ways as governments have partially tied public funding for universities to delivering graduate outcomes. This has increased the need for, as Australia's Chief Scientist Alan Finkel has argued, the cultivation of "job-capable graduates" (Munro, 2016).

### **iii. Defining employability**

Employability is often depicted in general terms as “work readiness” (Smith, Ferns & Russell, 2014a, b). However, a growing body of evidence indicates further that stable career progression is less common (Bridgstock, 2009; Arnold et. al, 2005; Hall & Mirvis, 1996), there has been a decline in “traditional” linear trajectories from education to workplace (Caruana, 2014), and consequently, there is an increasing need to be more strategic in pursuing a particular career. A common theme in literature is to define graduate employability in relation to individuals gaining transferable skills as a result of their experiences of participating in supplementary industry-related education. Among the most useful definitions of employability in this context offered by education scholars is Yorke and Knight’s (2004, p. 4) model which stipulates that employability is more than ‘core’ or ‘key’ skills – instead, encompassing both academic and practical intelligence distinguishable by four types of management skills applicable across a range of contexts: management of self, management of others, management of information, and management of task. Yorke and Knight’s definition also stresses the importance of social context which underpins Vygotsky’s social constructivist theories of learning, with both articulating skills beyond traditional classroom lessons as important in the process of students transitioning to the wider employment community. Employability is a continually evolving process linked to the acquisition of skills and personal qualities useful in the workplace rather than a static categorisation.

In defining employability scholars have highlighted the importance of distinguishing between employability skills and employment outcomes (Scott, 2014; Wilton, 2011). Employability skills are individual attributes that are enhanced through specific activities, whereas employment outcomes relate more specifically to the measurements surrounding attainment of employment in the post-education context. This article considers development of employability skills from the PASS experience, rather than employment outcomes that occur after graduation.

### **iv. Employability in peer-learning literature**

Peer-learning literature has explored the development of student attributes loosely affiliated with a generic conception of employability. Studies and sector reports have observed impacts of peer-learning on attendees that included enhanced communication, improved abilities to work collaboratively with other students (Carver, 2011), sharper career focus, and improved role model skills (Shook & Keup, 2012). The benefits of PASS for peer-leaders has been more extensively researched with studies noting the development of broader skill sets in leaders compared to attendees, including improved leadership capacities (Skalicky & Caney, 2010; Congos & Stout, 2003) improved interpersonal relation skills, additional development in content knowledge (Congos & Stout, 2003), improved self-confidence (Harmon, 2006), improved self-esteem, cultural competency, leadership skills, experience in methods of professional development (Stout & McDaniel, 2006), and improvements in critical reflection and goal-setting skills (Keenan, 2014).

## **2. FRAMING THE RESEARCH QUESTIONS**

### **i. Establishing criteria for evaluating the contribution of PASS to employability**

In order to consider students' perceptions of employability this study draws assessment criteria from higher education literature (Bridgstock, 2009; Shook & Keup, 2012; Holmes, 2013; Zacharopoulou, Giles, & Condell, 2015; Jackson, 2010; Smith, Ferns & Russell, 2014a, b; Skalicky & Caney, 2010; Carver, 2011), higher education sector reports (Kuh, 2008; Oliver et. al., 2011; Keenan, 2014; Kinash, 2014) and policy frameworks specific to the host institution (Western Sydney University, 2015a, b). The researchers thus incorporated broader sector benchmarks for observing employability among students involved in PASS. This builds on Jackson (2010) who mapped 41 competencies in a general study of graduate employability, which were grouped by Smith et. al. (2014, a) into six dimensions of ability: collaboration and team work, informed decision making/information literacy in context, commencement readiness, lifelong learning, professional practices and standards, and integration of theory and practice.

A review and workshopping of broader literature sources identified 21 attributes as key criteria for evaluating student perceptions of PASS' impact on their employability. These criteria included social interaction skills; capacity to work effectively in groups and teams; technological literacy; an in-depth knowledge in the chosen field(s) of study; an understanding of the local and international relevance of the chosen field(s) of study; ability to apply critical, reflective and creative skills to make informed decisions in professional or applied contexts; capacity to engage effectively in advancing knowledge independently or collaboratively; an understanding of values in relation to ethical conduct, intellectual integrity and professionalism in work and civic life; and an ability to engage responsibly in work and civic life with respect for diversity and social justice principles.

To simplify the evaluation process these 21 criteria were merged into wider latent constructs which evolved through a process of pattern matching. Pattern-matching consists of the "metasynthesis of the results of diverse data sets in case-study research", and is often used in mixed-methods research where "qualitative and quantitative data-collection and analysis approaches are categorized as either complementary or sequential triangulation" (Almutairi, Gardner & McCarthy, 2014, p. 239 & p. 243). In this study pattern matching involved establishing matrices to test the six constructs against the survey and focus data. This permitted the researchers to more concisely articulate the patterns emerging in the data by sub-categorising the 21 criteria into the aforementioned six constructs. These constructs were then used to analyse students' self-assessments of their employability skills.

### **ii. The research questions**

All surveys were conducted via Survey Monkey, enabling the researchers to export results with relative ease into Excel for analysis. The survey conducted with PASS attendees asked respondents to "Rate the skills or workplace capabilities you gained in PASS that may benefit your employment prospects". They were given both multiple-choice and open-ended answer options. In this survey question respondents were asked to rate three kinds of employability capacities: increased confidence to communicate with others, increased confidence to accomplish assigned tasks, and increased organisational skills.

With regards to the multiple choice answer options, the rating system was established as follows: “extremely confident”, “quite confident”, “moderately confident”, “slightly confident”, or “not at all”. The same question and answer format was applied across both Autumn and Spring semesters in 2015 ensuring consistency in the attendee survey sample.

A separate facilitator survey aimed to capture perceptions of PASS facilitators regarding the ways in which the program may have contributed to their professional development as both employees and learners. The facilitator survey asked three questions related to employability: “Has your participation as a PASS facilitator changed or helped you professionally or personally?” (written open-ended responses), “Rate the skills or workplace capacities you gained in PASS that may benefit your employment prospects” (multiple choice responses), and “Rate the extent to which you feel PASS has improved your [...]”. In regard to the latter two rating questions, facilitators were asked to rate 14 kinds of employability attributes. Answer options firstly involved facilitator respondents rating employability benefits resulting from their PASS experience as follows: “strongly agree”; “agree”; “undecided”; “disagree”; and, “strongly disagree”. Respondents were subsequently asked to rate the level of impact PASS had on these skills using the following rating categories: “extremely”; “considerably”; “moderately”; “slightly”; and, “not at all”.

Focus groups attendees were asked 23 questions. However, only three of these questions related specifically to employability, and only responses to these three questions were analysed for this article. These three questions were: “Has PASS provided you with opportunities to develop vocational capacities, and in what ways?”, “How, if at all, have you been able to apply these skills in the workplace?”, and “Has attendance in PASS benefitted you professionally or opened avenues for your professional networks?” The comments offered by participants were transcribed for analysis.

### **3. METHODOLOGY**

The aim of this study is to investigate and analyse student perceptions concerning the contribution of PASS to their employability at WSU. A triangulation strategy was adopted for this study with the quantitative and qualitative data collected concurrently and then compared to determine convergences and differences (Creswell, 2009, p. 213). Following the collection of data, a quantitative analysis was undertaken in relation to multiple-choice survey responses. These responses have been presented as percentages and weighted averages both on a semester basis as well as averages across semesters. In this study weighted averages represent the mean rating of the responses provided by respondents for each answer choice. Weightings are attributed based on the particular five point likert scale used for each question.

With regards to focus group transcripts, a content analysis of language utilised by respondents was undertaken through the coding of keywords and counting of the categories into which keywords were aggregated (Creswell, 2009, p. 213). Content analysis provided a practical method for interpreting focus group transcripts in a meaningful and more condensed form. The aim of focus groups was to enable the researchers to produce qualitative assessments of the meanings students affiliate with their experience of PASS via an inquisitive conversation directly with subjects. The focus group method is in many ways more advantageous than surveys; in contrast to the unidirectional feedback

produced through the online survey, the multi-directional dialogue between the researcher and focus group participants provides an opportunity to document deeper and more expressive perceptions of the PASS experience (Marková et. al., 2007, p. 48).

This article has adopted a quasi-narrative inquiry method to explain the relationship between PASS and employability at WSU. This approach centralises the six constructs above and examines the multiple overlapping ways in which PASS impacts on student employability-related skills. Hickson notes that “qualitative researchers use narrative approaches to explore the stories of participants and to understand the ways these stories were constructed and positioned” (Hickson, 2015, p. 380). The narrative inquiry method implores qualitative researchers to “listen to the stories of their participants and seek to understand the context and ways that their stories were constructed and positioned” (Hickson, 2015, p. 381). In drawing on a quasi-narrative inquiry method this article seeks to explore and understand the ways PASS participants “construct meaning of their experiences, interpretations and perceptions” (Hickson, 2015, p. 381).

Non-attendees were excluded from answering employability questions in the survey and were consequently excluded from survey analysis as attendance was considered requisite to answer the employability questions. In relation to focus group demographics there was a distinct though unintended skew towards females over male participants at an approximate ratio of 3:1. However, this almost parallels the gender ratio of PASS attendees. In Autumn 2015 39% of attendees were male and 61% female. Meanwhile in Spring 2015 40.4% were male and 59.6% female.

#### **4. THE DATA SAMPLE: CAPTURING THE ATTENDEE AND FACILITATOR EXPERIENCE OF PASS**

##### **i. Description of the survey respondent data**

This section outlines the data sample collected by the WSU PASS program for this study. It indicates: first, the number of individual PASS attendees who completed these survey questions (n=297 in total), and the percentage of all PASS attendees on a per semester basis; and second, the number of individual PASS facilitators who completed the survey (n=45 in total), and the percentage of all PASS facilitators on a per semester basis. Due to the anonymous and voluntary manner in which WSU PASS surveys are undertaken it is not possible to track the precise overlap of facilitators between semesters. However, internal PASS records of returning facilitators in Spring 2015 indicate 54 of 134 were contracted in both semesters, and it is likely some responded to the survey in both semesters.



Table 1  
*Survey respondent demographics\**

Semester in which the survey was conducted	No. PASS attendee respondents	% all PASS attendees this semester	No. PASS facilitator respondents	% PASS all facilitators this semester
Autumn 2015	163	6.86% (163 of 2,375 attendees)	16	19.75% (16 out of 81 facilitators)
Spring 2015	134	6.09% (134 of 2,199 attendees)	29	30% (29 out of 96 facilitators)
<b>Totals:</b>	297	6.49% (297 of 4,574 attendees)	45	25.4% (45 out of 177 facilitators)

\* Number and type of respondents (attendees and facilitators) who completed the PASS survey, and a percentage comparison of respondents and non-respondents who attended/facilitated PASS. This table incorporates only responses to questions in the survey that explicitly asked for feedback on the theme of employability, as listed in Tables 5, 6 and 7.

As Table 1 (above) indicates the response rate for attendee surveys ranged from 6.09-6.86% which comprises a small, though not insignificant, proportion of PASS participants. The use of response rate as the sole determinant factor in analyses of survey quality is problematic and scholars have warned it is important “not to single-mindedly focus on response rates as an indicator of survey quality” (Schouten, Cobben, & Bethlehem, 2009, p. 102). These survey responses reveal only the extent of the students’ understandings at the point in time when the survey was undertaken, and caution has been exercised not to generalise when assessing the significance of the survey responses. The survey sample comprises facilitators from eight of nine schools while attendees represented all nine schools across WSU.

Table 2  
*The number of PASS sessions attended represented on a percentage basis, according to attendee survey responses. The number of sessions attended is signified by ‘A=’.*

Semester in which the survey was conducted	A=1	A=2	A=3	A=4-6	A=7-10	A=10 or more
Autumn 2015	12.7%	10.4%	6.9%	30.6%	19.1%	20.2%
Spring 2015	8.9%	5.4%	8%	27.7%	20.5%	29.5%

It has been suggested by Dawson et. al. (2014, pp. 41-42) that attendance is an important factor in PASS scholarship. As Table 2 (above) indicates, among the sample of attendees who responded to the employability questions in the survey, these respondents predominantly attended more than four sessions (69.9% in Autumn 2015 and 77.7% in Spring 2015). During these full teaching semesters, students are also offered the opportunity to attend a one-off two-hour PASS session dedicated to revision after formal classes have finished during the week before exams begin. As students are surveyed in the final week of classes, survey responses represent feedback for students who attended PASS during the full teaching semester until and including the week of final classes in week 14. Additional survey demographic information is provided below in Tables 3 and 4, outlining that PASS attendees and facilitators studied across a diverse range of schools.

Table 3  
*Facilitator survey respondent per school\**

Schools	Autumn Semester 2015		Spring Semester 2015	
	No. facilitators by school/ no. facilitator respondents from each school	% of respondents out of all facilitators	No. facilitators by school/ no. facilitator respondents from each school	% of respondents out of all facilitators
School of Computing, Engineering and Mathematics	11/2	12.50%	9/2	8.33%
School of Education	1/0	0.00%	1/0	0.00%
School of Humanities and Communication Arts	12/2	12.50%	21/7	29.17%
School of Law	7/0	0.00%	6/2	8.33%
School of Medicine	5/0	0.00%	7/2	8.33%
School of Nursing and Midwifery	3/0	0.00%	5/1	4.17%
School of Science and Health	18/3	18.75%	16/3	12.50%
School of Social Science and Psychology	10/5	31.25%	5/1	4.17%
School of Business	14/4	25%	20/6	25.00%
<b>Totals</b>	81/16	19.75%	90/24	26.67%

\* Table 3 depicts the various WSU schools of study for facilitator survey respondents on a percentage basis, recording the number of facilitators per school of study, and the number and percentage of facilitators that completed the survey per school.

Table 4  
Attendee survey respondent per school\*

Schools	Autumn Semester 2015		Spring Semester 2015	
	No. PASS units offered per school	% of attendee respondents per school	No. PASS units offered per school	% of attendee respondents per school
School of Business	8	10.77%	9	14.18%
School of Computing, Engineering and Mathematics	6	9.74%	8	7.46%
School of Education	1	2.05%	1	1.49%
School of Humanities and Communication Arts	8	14.87%	11	17.16%
School of Law	4	8.72%	4	7.46%
School of Medicine	2	3.08%	2	5.22%
School of Nursing and Midwifery	1	2.56%	1	5.97%
School of Science and Health	8	24.10%	6	23.88%
School of Social Science and Psychology	5	15.38%	3	1.49%
Unknown	N/A	8.73%	N/A	15.69%
<b>Totals</b>	43	100%	45	100%

\* Table 4 depicts the various WSU schools of study for attendee survey respondents on a percentage basis, recording the number of units in which PASS was offered, and the percentage of attendees that completed the survey per school.

## ii. Description of the focus group data

Students were invited to be focus group participants through an email sent to all WSU students who attended PASS in Autumn and Spring semesters in 2015 (n=4248). Eleven face-to-face focus groups were conducted via randomised sampling at all five campuses of the University. Ordinarily one focus group was conducted at each of the University's five campuses in both semesters (namely Penrith, Parramatta, Hawkesbury, Bankstown and Campbelltown campuses). However, in Autumn 2015 an extra focus group was conducted at Parramatta campus due to the higher concentration of PASS sessions delivered at this campus in this semester compared to other campuses. Focus group participation was limited to students who had attended at least one PASS session during the semester in which the focus group was held, and participants could only attend one focus group. Incentives offered to participants included light refreshments as well as \$25 vouchers for Coles Group stores.

Each focus group comprised four to seven participants in accordance with scholarly methodology regarding appropriate participation benchmarks for focus group size (Krueger & Casey, 2000, p. 67). Out of a total 46 participants, there was a gender ratio of 23.9% male (n=11) and 76.1% female (n=35). Participant's comments do not offer a "catch-all" perspective of the attendee experience of PASS as much as an indication of the value PASS offers to the subjects involved in the research.

## 5. SURVEY RESULTS: ATTENDEES

The majority of survey respondents on average across the two semesters (n=297 in total) were in agreement that PASS had increased their confidence in communication with others. Most rated this impact as either “extremely” (14.03%), “quite” (39.8%), or “moderately” (30.36%). Respondents also indicated that PASS had improved their social interaction skills with 23.46% citing extreme improvement and 37.39% citing considerable improvement (see Table 5). Most survey respondents were confident that PASS had increased their confidence in their approach to assigned tasks. Respondents rated this impact as either “extremely” (15.59%), “quite” (48.98%), or “moderately” (21.75%). The majority of respondents were also confident that PASS had increased their organisational skills rating this impact as either “extremely” (15.83%), “quite” (41.93%), or “moderately” (26.49%).

Table 5

*Attendee survey respondents' confidence in their communication, confidence and organisation skills post-PASS*

Proposition	Weighted average (Autumn 2015)	Weighted average (Spring 2015)
Level of confidence ('Increased confidence in my communication with others')	2.91	2.23
Level of confidence ('Increased confidence in my approach to assigned tasks')	2.73	2.10
Level of confidence ('Increased organisational skills')	2.85	2.18

Table 5 depicts all attendee survey respondents' (n=297) level of confidence. Multiple-choice questions were asked concerning perceptions of confidence levels in relation to PASS' impact on respondents': communication with others, approach to assigned tasks, and organisational skills. Responses are provided in this table using the weighted average of all responses calculated on a five point likert scale ranging from “extreme” to “quite”, “moderately”, “slightly” and “not at all”. Anything below a rating of four indicates an increase in confidence. As evidenced in Table 5, the weighted averages for responses across the three questions are situated in the range of “quite” to “moderately”.

## 6. SURVEY RESULTS: FACILITATORS

### i. Communication, social skills and confidence

Autumn and Spring semester 2015 PASS facilitators (n=16 and 29 respectively) were asked to “Rate the skills or workplace capabilities you gained in PASS that may benefit your employment prospects”. On average across both semester survey cohorts, the vast majority of facilitator respondents strongly agreed (50.75%) and agreed (43.05%) that their role in PASS had increased their confidence in communication with others. Around four in five facilitator respondents strongly agreed (43.62%) or agreed (35.36%) that their role in PASS had improved their awareness of the relationship between social interaction skills and career prospects. Approximately four in five facilitator respondents also strongly agreed (41.24%) or agreed (39.21%) that their role in PASS had enhanced their resiliency (see Table 6).

**ii. Organisational skills**

On average across both semester surveys, the majority of facilitator respondents strongly agreed (39.77%) and agreed (47.82%) that their participation in PASS had increased their organisational skills. Most also strongly agreed (29.69%) and agreed (57.9%) that their participation in PASS had increased confidence in their approach to assigned tasks (see Table 6).

**iii. Professional and business acumen**

Across both semester surveys, on average most facilitator respondents strongly agreed (24.92%) and agreed (43.05%) that their participation in PASS had increased their understanding of workplace dynamics. On average 24.92% strongly agreed and 50.2% agreed that their role in PASS had increased their understanding of workplace responsibilities. Meanwhile, most facilitator respondents strongly agreed (17.22%) and agreed (46.35%) that their participation in PASS had increased their understanding of the job interview process. In addition, on average 28.55% strongly agreed and 47.04% agreed that their position in PASS had increased awareness of how job performance is evaluated by their employer. More than three in four facilitator respondents strongly agreed (52.18%) or agreed (26.75%) that their role in PASS presented opportunities for engaging in extra-curricular activities to enhance their CV or to learn about these opportunities from others. Around nine in ten facilitator respondents further strongly agreed (55.52%) and agreed (34.45%) that PASS presented opportunities to demonstrate initiative (see Table 6).

**iv. Critical thinking**

On average across both survey cohorts most facilitator respondents strongly agreed (32.07%) and agreed (53.14%) that their participation in PASS had increased their capacities for critical thinking. Survey responses indicate further that 21.99% of facilitators felt their ability to perceive the local and international relevance of their fields had improved extremely, whilst 39.77% reported considerable improvement (see Table 7). Respondents also reported improvements in their ability to apply critical thinking skills in practical contexts with 39.21% of respondents citing extreme improvement, and 31.16% noting considerable improvement.

**v. Mentoring**

On average across both semester surveys most facilitator respondents strongly agreed (46%) and agreed (36.83%) that their participation in PASS had provided opportunities for mentoring or to be a mentor (see Table 6).

**vi. Group work and team work**

Facilitators responded overwhelmingly that PASS had improved their ability to effectively work in groups or teams, with 27.31% reporting extreme improvement and 57.9% considerable improvement levels (see Table 7).

Table 6  
*Workplace skills or capabilities gained by facilitators attributed to PASS\**

<b>Proposition</b>	<b>Weighted Average (Autumn 2015)</b>	<b>Weighted Average (Spring 2015)</b>
<b>Communication, social skills and confidence</b>		
'Increased confidence in my communication with others'	4.38	4.33
'Improved my awareness of the relationship between social interaction skills and career prospects'	4.23	4.00
'Enhanced my resiliency'	4.31	3.95
<b>Organisational skills</b>		
'Increased organisational skills'	4.23	4.14
'Increased confidence in my approach to assigned tasks'	4.08	4.10
<b>Professional and business acumen</b>		
'Increased understanding of workplace dynamics'	3.77	3.67
'Increased understanding of workplace responsibilities'	3.77	3.86
'Increased understanding of the job interview process'	3.38	4.00
'Increased awareness of how job performance is evaluated by my employer'	4.00	3.90
'Presented opportunities for engaging in extra-curricular activities to enhance CV or to learn about these opportunities from others'	4.23	4.14
'Presented opportunities to demonstrate initiative'	4.31	4.24
<b>Critical thinking</b>		
'Increased capacities for critical thinking'	4.08	4.10
'Offered me opportunities to gain or learn from real-world experience'	4.08	4.10
<b>Mentoring</b>		
'Provided opportunities for mentoring or to be a mentor'	4.38	4.05

\* In this survey question Autumn and Spring semester 2015 PASS facilitators (n=16 and 29 respectively, or 45 in total) were asked to "Rate the skills or workplace capabilities you gained in PASS that may benefit your employment prospects" on a five point likert scale. Responses are provided in this table using the weighted average of all responses calculated on a five point likert scale ranging from "strongly disagree", "disagree", "undecided", "agree", to "strongly agree". In this question anything over a three represents agreement with the statement.

Table 7  
*Level of skill improvement attributed to facilitators' participation in PASS\**

<b>Proposition</b>	<b>Weighted Average (Autumn 2015)</b>	<b>Weighted average (Spring 2015)</b>
'Social interaction skills'	2.15	2.52
'Capacity to work effectively in groups and teams'	2.15	2.48
'Technological literacy (e.g. ability to apply communication and other technologies in personal and professional training)'	2.85	2.62
'In-depth knowledge in your chosen field(s) of study'	2.23	2.10
'Understanding local and international relevance of your chosen field(s) of study'	2.46	2.29
'Ability to apply critical, reflective and creative skills to make informed decisions in professional or applied contexts'	2.23	1.80
'Capacity to engage effectively in advancing knowledge independently or collaboratively'	2.15	1.90
'Understanding and values in relation to ethical conduct, intellectual integrity and professionalism in work and civic life'	2.31	2.00
'Ability to engage responsibly in work and civic life with respect for diversity and social justice principles'	2.46	2.10

\* In this survey question, Autumn and Spring semester 2015 PASS facilitators (n=16 and 29 respectively, or 45 in total) were asked to "Rate the extent to which you feel PASS has improved your..." on a five point rating scale ranging from "extremely improved", "considerably improved", "moderately improved", "slightly improved", to "not improved". In this question the lower score represents a greater increase in the skill with anything below 2.5 representing a moderate to extreme to improvement.

## **7. FOCUS GROUP RESULTS: ATTENDEES**

### **i. Social skills**

Just over half of all focus group participants (52%, or n=24) exhibited, expressed or agreed that they had increased confidence to work with others for mutual benefit by attending PASS. Students often related this type of confidence to what they viewed as successful and effective group-work strategies. This is demonstrated by one focus group participant who stated: "[PASS] helps grow your skills in terms of talking with other people and working in a group because of your dividing up into small groups in PASS to work with other people." Significantly, 32.6% (n=15 in 46) of focus group participants indicated they had gained confidence to navigate and evaluate difficult situations (see Table 8), with one focus group respondent stating:

"If you're a leader in a workplace, you'll have all these different types of personalities and you can't just turn around and say someone is too hard; you have to try and do something."

This quote indicates the importance participants attribute to group-work in dealing with, and understanding, work-related social situations. The development of social interaction skills was also evident in just over 19.5% (n=9/46) of participants who expressed the view that they had developed a sense of social competence through PASS, with one participant stating:

“You get better at talking to people. At the start of this year I would not be able to sit here and just talk to people. That would freak me out too much. But now I'm okay with talking to random people.”

This quote highlights how the dynamic established in WSU PASS sessions enables attendees to build confidence to converse with previously unknown peers and colleagues.

### **ii. Critical thinking**

Over 30% (n=14 in 46) of focus group participants indicated they had improved their ability to apply critical, reflective and creative skills in professional or applied contexts following their participation in PASS.

Meanwhile, around 24% (n=11 in 46) expressed the view that they gained a greater understanding of the local and international relevance of chosen field(s) of study. Participants described how PASS sessions improved understanding of their chosen fields via the personal interaction networks available to them (see Table 8). As one focus group participant described, career networking occurred by meeting other attendees who were already employed in their desired profession, and who were able to convey practical knowledge of this profession to them.

The sentiments expressed by this focus group participant indicate how PASS may act as a conduit for students to foster career-related connections with fellow-PASS attendees and facilitators.

### **iii. Mentoring**

Around 26% (n=12 in 46) of focus group participants expressed they had developed an appreciation of mentoring and examples set by others through their experiences with PASS attendees. Participants indicated positive relationships were formed between facilitators and attendees in ways that may benefit student employability (see Table 8).

### **iv. Organisational skills**

Almost 22% (n=10 in 46) of all focus group participants indicated they had gained a higher level of understanding of practices required for efficient study as a result of their attendance in PASS. Participants' comments indicated that facilitators actively cultivated independent learning and initiative skills that are transferable to the workplace. Similarly, just over 13% (n=6 in 46) expressed the view that they had developed a greater appreciation of time management (see Table 8). For example, one participant stated that their experience in PASS enabled them to link strategies for gaining higher grades with more efficient time management techniques via facilitators passing on practical tips for more effective use of time in completing assessments.

### **v. Professional and business acumen**

Around 19.5% (n=9 in 46) of focus group participants reported a greater appreciation of preparedness in the work environment because of their PASS experience with students reporting an improved understanding of communicative expectations in the workplace (see Table 8). A further 11% (five in 46) indicated they had developed a respect for professionalism in the work environment.



### vi. Core technical skills

Around 13% of all focus group participants (n=6 in 46) exhibited, expressed or agreed with the notion that they had improved their core technical skills (see Table 8). This is iterated in focus group feedback indicating PASS activities assisted in deepening understanding of core technical study skills, and the development of transferable skills useful in other (non-PASS) subjects and in paid employment settings. As one participant stated: “My time management and my prioritising has really improved and my note-keeping, all that kind of stuff that I do in PASS and that I do for uni I use at work now. It makes everything flow.”

Table 8  
PASS attendee focus group responses depicted via content analysis results\*

Coding categories	% of all Autumn focus group participants (n=24) who exhibited, expressed or agreed with this notion	% of all Spring focus group participants (n=22) who exhibited, expressed or agreed with this notion
<b>Social skills</b>		
Students developed a sense of social competence	25%	13.6%
Student gained confidence to navigate and evaluate difficult situations	37.5%	27.27%
Student built confidence to work with others for mutual benefit	54.16%	50%
Student developed an improved understanding of cultural contexts	4.16%	13.6%
Students illustrate an improved ability to connect technology use, educational outcomes and professional improvements	16.67%	4.55%
<b>Critical thinking skills</b>		
Student developed an enhanced ability to critically examine and interpret information	12.5%	13.6%
Student developed a greater understanding of the local and international relevance of chosen field(s) of study	25% 8.33% (negative)	22.73% 13.6% (negative)
Student improved their ability to apply critical, reflective and creative skills in professional or applied contexts	33.33%	27.27%
<b>Mentoring</b>		
Student developed an appreciation of mentoring and examples set by others	33.33%	18.18% 18.18% (negative)
Students developed increased ability to mentor others	25%	4.55%
<b>Organisational skills</b>		
Student developed a greater appreciation of time management	25%	0%
Student gained a higher level of understanding concerning implementable practices for efficient study	37.5%	4.55%

Professionalism and business acumen		
Student developed a respect for professionalism in the work environment	8.33%	13.6%
Student expressed an appreciation of preparedness in the work environment	29.16% (Negative) 8.33%	9.09%
Student developed increased understanding of industry-specific vernacular	4.16%	0%
Core technical skills		
Student developed improved core technical skills	20.83%	4.55%
Student gained more understanding of conceptual themes within unit texts	4.16%	0%
Students improved transferable skills (skills able to be used across multiple units of study)	4.16%	13.6%

\* Results of a content analysis conducted vis-à-vis transcripts for all focus groups (n=11) conducted in Autumn and Spring semester 2015. The data incorporates focus group responses to three focus group questions, including: a. "Has PASS provided with you with opportunities to develop vocational capacities, and in what ways?"; a.i. "How, if at all, have you been able to apply these skills in the workplace?"; a.i.i. "Has attendance in PASS benefited you professionally or opened avenues for your professional networks?"

## 8. DISCUSSION OF FINDINGS

### i. Trends and differentiations

The analysis of the survey and focus group data revealed a number of trends and differentiations evident across facilitators and attendees' responses. These implications will now be discussed in terms of the ways in which they may impact future research and programming directions concerning PASS' impact on employability. Overall, the development of social skills emerged as the most prominent impact of PASS in both survey responses and focus groups, and was depicted by respondents as a significant asset to student employability. This is also evident in both attendee and facilitator surveys which demonstrate PASS had led to significant improvement in confidence to communicate with others and greater awareness of the link between social interaction skills and career prospects. These trends are also reflected in focus group data where attendees expressed improvement in their ability to work productively in groups for mutual benefit, sense of social competence, and ability to navigate and evaluate difficult situations. In focus groups, improvements in social skills were reflected in the emphasis attendees placed on the necessity to improve strategies for effective group-work including enhancing students' cultural awareness and strategies for managing different personalities. One focus group participant stated:

"If you're in a workplace and have a barrier, you're not going to push it aside and not do it anymore; you've going to come up with a strategy. It's not that we were trying to do that but it's about what will work for us to get through the semester. I think you could tie that into a workplace environment as well."

Moreover, the survey results indicate that facilitators in this sample possess greater awareness of the link between their soft skills and roles in employment

markets. The WSU PASS Coordinators consciously utilised several strategies to increase exposure to and explicitly communicate employability benefits to facilitators. The formal recruitment process requires students to address selection criteria, prepare a collaborative learning activity, and share with their peers and selection panel at a group interview. Once recruited, facilitators attend professional development workshops and are given access to other student leadership training opportunities across the University. The PASS Coordinators frame their communications with facilitators in terms of 'professional expectations' and the development of transferable skills for future employment. The overt communication of these benefits is supported by the frequent sharing of (unsolicited) narratives of alumni facilitators who have successfully gained employment and attributed some of that success to lessons learnt in PASS. Finally, upon leaving the program each facilitator is provided with a skills based reference letter that outlines the requirements of the role.

Another prominent trend across the survey and focus group results is in relation to the development of critical thinking skills. As a workforce skill, critical thinking has frequently been regarded by scholars as being absent in graduate university students despite being regarded widely as a core skill required in contemporary workforce settings (Holmes, 2001; Hill, 2015; Oliver et. al., 2011). The capacity to apply practical knowledge was also noted as an important element of critical, or reflective thinking in literature (Holmes, 2001). Survey results indicate PASS has cultivated practical knowledge among facilitators, as evidenced in responses demonstrating most respondents gained an improved sense of the real-world implications of their chosen field. Similarly one focus group participant stated:

"I had just been on [my] first clinical placement. I had no idea what's happening in the hospital. He [the facilitator] gave me a literal idea of what it was like."

## **ii. Lessons and future research directions**

The greatest shifts in employability attributed to PASS by research participants were perceived by PASS facilitators rather than attendees. In analysing these results there is little disparity between the perceptions of facilitators concerning levels of skill accumulation generated through involvement in PASS (see Table 6), and the extent to which PASS improved particular facilitator employability-related skills (see Table 7). The researchers further observed that the survey design was adequate, yielding significant results reflecting the potential of other PASS programs to explore and measure their impact on student perceptions of employability. It is nonetheless recommended that facilitators be consulted to gain their feedback on optimal survey design to ensure clear understandings of survey questions and facilitate accuracy in collection of longitudinal employability data.

The research conducted for this article is limited by the scope of data available for analysis. Further investigation is necessary that incorporates a more longitudinal perspective on the PASS participant experience. Ideally, feedback can be sought on the contribution of PASS to the employability of the program's alumni who have graduated and moved into the workplace. This would enrich understandings of PASS' contribution to graduate employability and provide pathway data regarding the contribution of PASS to graduate

employment outcomes (Price & Grant-Smith, 2016).

An implication for future research investigations to consider is the lack of prior knowledge among attendees regarding the concept of employability. To elaborate, in focus groups it was clear in most instances students were unaware of what makes them 'employable' – at least not until the researcher explained the definitions to participants. As such the need to verbally explain the meaning of employability was often a requisite for focus group participants before an awareness of their own employability was realised and elaborated. The need to verbally define employability for focus group participants was also a lesson for the researchers, revealing a limitation in the usefulness of the selected focus group questions and also drawing questions about whether survey respondents clearly understood the meaning of employability. The risk of researchers 'leading' the students was recognised early on in the focus groups and was countered by ensuring students were given extended opportunities to explain their thoughts on PASS' contribution to their employability. Researchers undertook a process of reflective engagement in which focus group participants were requested to substantiate their chosen discourse with examples. Through focus groups the researchers were able to listen to students in 'their own terms' and by doing so probed the students on a highly personal level (Kitzinger, 2005).

The lack of understanding demonstrated by research participants in relation to defining employability also presents an opportunity for PASS programs to embed an understanding of skills and attributes associated with employability among attendees. This may improve attendee awareness of the long term value of skills acquired through PASS. It is thus recommended that PASS practitioners ensure program participants are aware of the benefits of PASS as it relates to employability, including the various employment-related attributes gained from participating in the program.

Further research is recommended, moreover, in regards to potential correlations between the number of PASS sessions attended and the degree to which attendees perceive how the program impacts their employability. It is not possible to draw firm conclusions in relation to attendance rates while drawing on the findings presented in this study. Nevertheless scholarship indicates that attendance in a greater number of peer-learning sessions does correlate with higher levels of learning success (see, for instance, Malm, Bryngfors & Mörner, 2011).

## **CONCLUSION**

Employability is increasingly recognised by employers, universities and industry as vital for graduates entering the workforce. This study revealed how students perceive PASS contributes to student employability in a number of ways including enhancing participants' core technical skills, organisational skills, social skills, professional and business acumen, appreciation of mentoring, and critical thinking skills. These skills were acquired to different degrees by facilitators and attendees. The methods, research questions and literature base outlined in this article were extremely useful for observing employability among PASS participants' perceptions. In-depth student knowledge captured in the data enabled this article to convey new scholarly understandings about the meanings of employability in the contemporary job market and the higher education sector, as well as how

students felt they had gained attributes from PASS that render them more employable.

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