# Re-designing work study as work-integrated learning: Examining the impact of structured learning support in part-time on-campus employment

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With the desire to expand work-integrated learning opportunities for Canadian postsecondary students, it is timely to consider how pre-existing student work positions may be transformed to achieve the educational criteria and benefits of work-integrated learning.  The purpose of this study was to explore the impact of structured learning support on student professional development and workplace performance in the University of Toronto Work Study program.  A survey was administered with 716 work study students and 197 campus employers.  It was found that students whose supervisor had them set learning goals, conduct a mid-point check-in and a final reflection of their learning goals, scored significantly higher on a series of professional-development related statements compared to students who did not receive the learning supports.  Positive feedback on the impact of the structured learning supports on students' workplace performance was also reported by campus employers.  Applied recommendations are proposed along with questions for future research.

Keywords: Professional development, workplace performance, student employment, educational quality

Student engagement in workplace settings is associated with numerous benefits for students including enhanced employability, higher starting salaries, as well as more seamless transitions to the workplace (Billett, 2009; Kramer & Usher, 2011).  Workplace experiences also provide students with the opportunity to explore potential careers in a low-risk environment, in addition to gaining exposure to workplace protocols, standards of dress, and other professional behaviors (Jackson, 2015; Smith et al., 2014).

Recognizing these benefits, across Canada there is an increased emphasis on student participation in work-integrated learning, particularly within post-secondary education.  StatsCan, the federally run national statistics office, showed that in 2015, 49% of bachelor's graduates had participated in work-integrated learning during their studies (Galarneau et al., 2020).  One year later, the Business/Higher Education Roundtable, a national forum comprising 27 leaders from business, universities, colleges and polytechnics, proposed that "100% of Canadian postsecondary students [should] benefit from some form of work-integrated learning prior to graduation" (2016, p. 9).  In 2017, the Government of Canada committed significant funding for the expansion of work-integrated learning across Canadian industry and academic institutions, including a $73-million investment to the Student Work-Integrated Learning Program and the 2017 Federal Budget outlining plans for $221 million in funding over five years for Mitacs, a not-for-profit organization that provides research and training programs connecting student trainees with industry and workplace organizations (Government of Canada, 2017).

With the focus on work-integrated learning expanding, there is increased pressure amongst academic institutions to compete for job opportunities with local host employers.  Given the prevalence of on-campus employment opportunities at most, if not all colleges and universities, it is timely to consider how pre-existing on-campus student work opportunities may augment employer partnerships external

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to the academic institution, and be transformed to meet the educational criteria and benefits of work-integrated learning.

Work-integrated learning is a specific form of experiential learning (Stirling et al, 2016), a process whereby learners make sense of and create meaning from their experience. Stemming from a constructivist perspective, a core tenet of experiential learning is that the experience alone does not ensure learning, but rather, it is the reflection during and after the experience that enables the learning and achievement of student learning outcomes (Dewey, 1938). Kolb's (1984) experiential learning theory outlines four key learning modes which must be addressed to support learning from an experience: the learner has an experience (concrete experience); they have the opportunity to reflect on that experience to identify what happened (reflective observation); they create new or reinforce current mental models as it relates to their view of the world (abstract conceptualization); and then try out the new mental models (active experimentation). Critical reflection, which is regularly highlighted as a core component of this learning process, includes setting learning goals and using those learning goals as the focus for reflection (Ash & Clayton, 2009). Furthermore, reflection is reported to be more effective when practiced throughout an experience, not only at the end (Ash & Clayton, 2009).

Students do not approach their new work-integrated learning experience as a blank slate, devoid of prior experience or understanding, and as such, autonomy over their learning is critical to a quality experience (Kaufman, 1996). It has also been reported in previous research that "when interest is internal, as opposed to being forced, students become both emotionally and intellectually invested in the learning process" (Wurdinger, 2005, p. 18). This further highlights the importance of students directing their own learning, and setting their own learning goals in the work experience.

Importantly, a defining quality of work-integrated learning that differentiates it from general student work experience, is its integration between experiences in workplace and educational settings (Billett, 2009) and its deliberately structured learning supports (Smith et al, 2014). Smith and colleagues examined the impact of work-integrated learning on student employability and conducted a meta-analysis of a wide variety of work-integrated learning opportunities from thirteen institutions with 3336 responses and their resulting influence on students' employability capabilities. Though not their primary focus, in this meta-analysis it was reported that the quality of the work-integrated learning experience is a predictor of employment capabilities, even when controlling for duration, or full-time/part-time status of the experience. Smith et al. (2014) highlighted authenticity, preparation and induction processes for both students and supervisors, facilitated reflection, quality of supervision and alignment of the workplace activities to appropriate learning outcomes, as the key structured learning supports supporting quality student work-integrated learning. While this meta-analysis highlighted the importance of deliberately structuring students' work experiences to be educational in nature, this research focused specifically on off-campus work-based placements, industry-based projects, and simulations. Limited research exists specifically on the facilitators of student learning in alternative forms of student employment, specifically facilitators of educational quality in part-time on-campus student employment.

The purpose of this study, therefore, was to explore the impact of structured learning support on student professional development and workplace performance in on campus student employment via a University work study program.

*Work Study Program*

The University of Toronto Work Study program offers on-campus employment in the summer (14 weeks) and fall-winter (24 weeks) and is open to all undergraduate and graduate students who are enrolled in the required number of academic credits and in classes for the given work study program period. Students work a maximum of 100 (summer) or 200 hours (fall-winter), with a weekly maximum of 15 hours.

Work study position proposals are submitted by faculty and staff and are reviewed and approved by the work study program team. For the fall-winter 2018-19 program, the focus of this study, there were approximately 1170 positions with 3460 vacancies (one position can have up to four vacancies), within the following eight categories: Lab/Research Assistant (47%); Event Planning and/or Marketing Assistant (14%); Student Mentor/Ambassador (10%); Finance/Administrative Assistant and Customer Service Support (9%); Arts, Design, and/or Media Assistant (8%); Information Technology (IT) Support, Web Designer/Developer (5%); Library/Archival Assistant (3%); Athletic Services (3%). When submitting a position request, hiring managers are required to identify which competencies students should expect to develop in the role with an accompanying explanation that would appear on the students' co-curricular record. At the end of the work study program, these competencies and the according descriptions are reviewed and validated by the work study supervisor before being added to the student's co-curricular record.

Inspired by the growing attention on work-integrated learning and associated focus on educational quality, as a part of improving the quality of the work study program, the Professional Development Workbook (Career Exploration & Education, 2017) and a suit of training sessions were developed to support students in setting and reflecting on learning goals in the work experience. In line with the work study program goals, these training and resources were designed to enable students to: identify, develop and articulate their workplace competency development and navigation of workplace expectations; articulate how their work study experience has changed or reinforced their academic studies and understanding of relevant academic concepts; and understand how their values, strengths or interests align with their employment and future career aspirations. Although students were encouraged to complete these goal setting and reflection exercises with their workplace supervisor, at the time of the study these activities were not required.

METHODS

*Participants*

Participants eligible for this study included any student who was engaged in part-time on-campus employment as a part of the University of Toronto's fall-winter 2018-19 work study program, as well as the supervisors of those students. The resultant sample comprised 716 student respondents and 197 supervisor respondents. As survey questions were not mandatory, some response sets do not equal the total respondents. Of those student participants who shared their demographic information, the sample included students who identify as male (n = 124), female (n = 467), and students who selected 'other' gender (n = 20). Participant ages ranged from less than 18 (n = 8), 19-22 (n = 448), and 23 or older (n = 166). Years of study included graduate (n = 114) and undergraduate students (1st year n = 19; 2nd year n = 110; 3rd year n = 202; 4th year n = 223, 5th year or more n = 48). Immigration status included Canadian citizen (n = 508), international (n = 69), and permanent resident/landed immigrant (n = 45) students. Sixty-five students self-identified as having a disability, and 140 students identified as being first generation. Demographic data for work study supervisors were not collected.

*Procedures*

A biennial end-of-program evaluation survey is conducted to solicit program feedback from work study students and supervisors. Following approval for the study from the University's research ethics board, the researchers were granted permission to add a set of questions to the fall-winter 2018-19 end-of-program evaluation survey for the purpose of this study. As the research was a secondary purpose of the work study program evaluation survey, participants were informed of the research at the start of the survey and were able to accept or decline participation in the research, while still completing the program evaluation survey. There were only nine of 727 student respondents and six of 203 supervisor respondents who completed the survey but declined to include their responses in the research study. The research data subset was separated prior to being shared with the research team.

*Study Design*

Online survey questions were developed by the researchers for the purposes of this study. Students were asked which of the following activities their supervisor had them complete: set learning goals, a mid-point check-in, a final reflection on their learning goals or 'none of the above'. A new independent variable was created, grouping students who indicated they were asked to complete all three activities ($n = 124$, 18.44% of total) as one group and students who responded, 'None of the Above' ($n = 88$, 12.29%) as the comparison group. Supervisors were similarly asked which of the same activities they supported the students in completing and were also grouped into those who had their students complete all three structured learning support activities ($n = 40$, 20.94%) and those who indicated they had not completed the three activities ($n = 63$, 32.98%). This new 'Structured Learning Support' variable is used as the point of analysis for all of the outcome measures. Other permutations were not analyzed given the small sample size (e.g., Learning Objectives + Reflection, $n = 15$, 2.09%).

Professional Development was operationalized as academic-work connection, career learning, and perceived competency development. To assess the students' academic-work connection and career learning, students were asked to indicate their agreement with a series of statements on a five-point Likert scale ranging from 'Strongly-Disagree' to 'Strongly-Agree' (see Table 1). To assess students' perceived competency development, they were also asked to rate their skill level using an 8-point Likert scale from 'Very Good' to 'Very Poor' for five competencies retrospectively at the start of their contract, as well as at the end of their contract. Competencies assessed included, Communication, Teamwork, Critical Thinking, Professionalism, Decision-making & Action. Students were also provided the opportunity to provide qualitative feedback. Workplace performance was assessed by asking supervisors to rate on a three-point scale ('Quite a bit', 'Somewhat', or 'Not at all') their perceived benefit of having students complete the structured learning support activities with an opportunity to provide qualitative feedback.

*Data Analysis*

The difference between students' responses who had and who had not completed the structured learning supports was calculated using t-test analysis. In specifically analyzing students' perceived competency development, this was assessed by regressing the pre-test on the post-test measure for each competency and including the structured learning as a covariate. The structured learning coefficients can be read as how much higher we would expect to see the post-test measure for a student who did structured learning, compared to someone who did not, assuming they had the same pre-test measure. $R^2$ represents the amount of variance in the post-test measures that can be explained by the pre-measure and the presence or absence of structured learning. Instead of creating a singular competency

development measure, with all five competencies merged, each competency was assessed separately using a more conservative definition of significance (p = .001). Supervisors responses are summarized with descriptive statistics.

RESULTS

In examining the impact of receiving structured learning support from supervisors on students' professional development in part-time on-campus employment, the study results are presented across the three broad themes of academic-work integration, career-readiness, and perceived competency development. Addressing the second study purpose, the impact of receiving structured learning support from supervisors on students' workplace performance is presented across the two emergent themes of direction for workplace activities, and student engagement and sense of development. Each theme is reported below and summarized in Tables 1 and 2.

*Impact of Structured Learning Supports on Students' Professional Development*

*Academic – work integration*

On average, students who received structured learning support indicated that their work position was more relevant to their academic studies (M = 2.42, SD = 0.63), than did students who did not receive structured learning support (M = 2.05, SD = 0.76). This difference was significant $t(229) = 4.07$, $p < 0.01$. Students who received structured learning support indicated that they had more appreciation for how classroom concepts applied to employment (M = 4.11, SD=1.03), than students who did not receive structured learning support (M = 3.16, SD = 1.22). This difference was significant $t(210) = 6.15$, $p < 0.01$. On average, students who received structured learning support reported that their work study position strengthened their knowledge and technical skills related to their field of study (M = 4.10, SD = 1.03) to a greater extent than students who did not receive structured learning support (M = 3.10, SD = 1.31). This difference was also significant $t(210) = 6.78$, $p < 0.01$.

Students who set learning goals were asked to explain the impact of setting learning goals on their experience. One student wrote "Setting learning goals was important for setting the connection between my academic studies and my practical learning through the work study position". Another student shared, "It helped me draw relationships with my role as a student and as staff" and another shared about applying their new skills in the classroom "Picking up technical skills weekly and applying it to demos done in classroom visits."

*Career readiness*

On average, students who received structured learning support rated their work study position as providing more meaningful work experience (M = 4.73, SD = 0.48), than did students who did not (M = 3.72, SD = 1.24). This difference was significant $t(210) = 8.31$, $p < 0.01$. On average, students who received structured learning support rated themselves as having a better understanding of workplace expectations (M = 4.59, SD = 0.56), than did students who did not receive the learning supports (M = 3.63, SD = 1.23). This difference was significant $t(210) = 8.40$, $p < 0.01$. On average, students who received structured learning support felt better prepared for future work opportunities (M = 4.59, SD = 0.56), than did students who did not receive the structured learning support (M = 3.63, SD = 1.23). This difference was significant $t(210) = 7.67$, $p < 0.01$.

The qualitative feedback from students who received structured learning support further supports these results:

It helped me draw relationships with my role as a student and as staff, and how my job was helping me achieve my overall career goals, and where it was also lacking, and therefore, what I could do to achieve the things my position did not provide.

Another student shared "[setting learning goals was] very helpful and helps you connect the skills you've learnt or have to the requirements that often appear on job requirements that you usually don't think you have but you do!"

*Perceived competency development*

In assessing students' perceived competency development in Communication, Teamwork, Critical Thinking, Professionalism, Decision-making & Action, five identical regression tests were performed. All five models were significant (see F-test values, Table 2). While most students scored higher on the post-test regardless of whether they received structured learning, the presence of structured learning was associated with significantly higher or more positive post-test measures. Additionally, on average, students who received structured learning support indicated that their work study position increased awareness of their skills and/or strengths (M = 4.70, SD = 0.49), to a greater extent than did students who did not receive structured learning support (M = 3.64, SD = 1.25). This difference was significant $t(210) = 8.59$, $p < 0.01$.

Students' qualitative feedback further supports these results, indicating that setting learning goals afforded them an opportunity to seek out related projects and reflecting helped prompt awareness of what they had achieved. A student who received structured learning support explained that "[setting learning goals] gave me the opportunity to reflect early on what I'd hoped to gain from the position and allowed me to be conscious of whether I was building on those skill sets throughout the experience." Another student shared

I was encouraged by my supervisor to reflect on what skills I wanted to gain or learn during the work-study. I compiled a list accompanied by a plan to achieve my desired goals. I went over this list with my supervisor and worked through it during my term.

Other students highlighted the soft skills they gained. "I learned the soft skills via Work Study. I got better at multitasking and communication which helped me land great research and work under my study field" and "I learned to strengthen many of my skills in the studio when I was helping other students. Work/Study is something I definitely recommend to any student to do. 11/10 experience."

*Impact of Structured Learning Supports on Students' Workplace Performance*

Supervisors were asked "In your opinion, to what degree did having your student(s) set learning goals positively impact their work performance?" Of the supervisors who indicated that they had students complete all three structured learning support activities ($n = 40$, 20.9%), almost all supervisors ($n = 38$, 95%) said that setting learning goals had a positive impact on student's performance ('Quite a bit' $n = 18$, 45%; 'Somewhat' $n = 20$, 50%; 'Not at all' $n = 2$, 5%). Supervisors' qualitative feedback highlights the themes of direction for workplace activities and student engagement and sense of development.

TABLE 1: Impact of structured learning support.

| | Structured Learning Support (*n* = 124) M(SD) | No Learning Support (*n* = 88) M(SD) | t-value |
|---|---|---|---|
| **Academic-Work Integration** | | | |
| I gained a better appreciation of the concepts I learned in the classroom and their application to employment. | 4.11(1.03) | 3.16(1.22) | 6.15*** |
| The Work Study position strengthened my knowledge and technical skills in areas related to my field of study. | 4.19(1.03) | 3.10(1.31) | 6.79*** |
| Do you feel your Work Study role was relevant to your academic studies* | 2.42(0.63) | 2.05(0.76) | 4.08*** |
| **Career-Readiness** | | | |
| I have a better understanding of workplace expectations (culture, norms, behaviours) | 4.65(0.57) | 3.58(1.24) | 8.40*** |
| I feel better prepared for future work opportunities. | 4.59(0.56) | 3.63(1.23) | 7.67*** |
| My Work Study position gave me a better idea of the type of career/work experience I want to pursue (or avoid) in the future. | 4.52(0.72) | 3.77(1.25) | 5.49*** |
| **Competency Development** | | | |
| I increased my awareness of my skills and/or strengths | 4.70(0.49) | 3.64(1.25) | 8.59*** |

*Note.*\*Response scale is different than the other variables.
\*\*\* denotes $p < .001$

TABLE 2: Pre-post competency development based on structured learning support.

| | Communication | Teamwork | Critical Thinking | Professionalism | Decision-Making |
|---|---|---|---|---|---|
| Pre-Measure | 0.55*** | 0.56*** | 0.51*** | 0.49*** | 0.49*** |
| Structured Learning | 0.64*** | 0.54*** | 0.45*** | 0.57*** | 0.57*** |
| Intercept | 3.21*** | 3.13*** | 3.49*** | 3.62*** | 3.62*** |
| F test | 106.28*** | 99.08*** | 86.86*** | 89.95*** | 60.79*** |
| R² | 0.51 | 0.49 | 0.51 | 0.47 | 0.37 |

*Note.* \*\*\* denotes $p < .001$

*Direction for work activities*

Supporting the literature on goal setting and reflection (e.g., Ash & Clayton, 2009), supervisors' qualitative feedback explained that goalsetting provided direction to both themselves and the students and confirmed the importance of reflecting on the learning goals throughout the experience: "Goal setting provides the students with something to work towards, it allows them to reflect on their learning and development.  This also helps with them finding out what more they would like to learn and get from the experience"; "We start off some goal setting so I can assign appropriate tasks and look for learning opportunities for the student to "try out".  "Each month I do one-on-one with the student to see if they are still aiming for their goal or have they discovered something else about themselves, and we readjust the goals if possible"; "I would periodically check-in about the learning goals. Without that, the learning goals would not have helped much"; "It was helpful to constantly revisit their learning

goals as it allowed for us to continue to redirect their involvement and choice of projects to better meet their needs and interests."

Student qualitative feedback similarly explained the value of goalsetting to direct their work: "The goals that we had explicitly set were more concrete, and evaluated on the basis of quantifiable achievements… These were helpful in not only providing solid evidence, but motivating us as student-workers to work towards something tangible and realistic."

> Setting clear goals and using SMART goals as a strategy really helps you plan out what your goal is and how to achieve it, and actually achieve it!  My supervisors were a major help in this regard and just being very supportive along the way.

One student, who had set learning goals but indicated they were not prompted to check-in on the learning goals, shared:

> I set goals at the beginning of the work-study term and achieved the majority of them by the end. However, a follow up on our progress and methods of achieving the goals would have helped continue the motivation to strive harder to reach these goals.

> *Student engagement and sense of development*

Supervisors also identified how setting learning goals supported students' awareness of their own personal development and increased their engagement in the role: "Students feel like they are not just working but contributing to a program/event/idea – they have more ownership they feel pride when it's complete.  And they realize their own development"; "The feedback from students is positive, especially for their own career development and sense of how the role contributes to their growth and can be translated into a resume or job interview question"; "Like all things, having goals to work towards made the experience more fulfilling for the students.  This is seen in each reflection submitted for the program as well as in each 1:1 meeting."

DISCUSSION

The purpose of this study was to examine the impact of receiving structured learning support from supervisors on students' professional development and workplace performance in part-time on-campus employment.  Students who received structured learning support (set learning goals, completed a mid-point check-in and a final reflection) reported significantly greater professional development and workplace performance than students who did not receive structured learning support.  Professional development was operationalized as academic-work integration, career readiness, and perceived competency development.  In terms of academic-work integration, students gained a better appreciation for how academic concepts apply to employment, developed technical skills related to their studies and felt their role was more relevant to their studies.  Students who received structured learning support also reported greater career-readiness as they had an increased understanding of workplace expectations, they felt better prepared for future work, and reported gaining clarity regarding the type of work they would want to pursue in the future.  Students who received structured learning support reported greater perceived competency development on communication, teamwork, critical thinking, professionalism, and decision-making and action than those who did not receive structured learning support.  Lastly, students who completed the structured learning support activities were reported by their workplace supervisors to have been more proactive in directing their work activities and demonstrated an increased engagement in and sense of development from their work.  This study further confirms the work of Smith et al. (2014), showing

that student engagement in learning supports during the work experience positively influences the quality of student learning and development.

As discussed in the introduction, critical to experiential learning is the opportunity to not only have an experience, but to reflect on the experience, make sense of it and then try out the new understanding (Kolb, 1984). Following this, and in-line with prior research on the value of goal setting and reflection (e.g., Ash & Clayton, 2009), the structured learning supports investigated in this study afforded students the opportunity to be intentional about what they would like to gain from the experience and reflecting on that both during and at the end of the experience.

At the time of the study, setting learning goals and reflecting on those goals were not a requirement of the work study program. As a result of this research, the mandate of the work study program changed and it is now an expectation that all students at the University of Toronto who are working on-campus through the work study program, complete the structured learning supports with their supervisor during their work experience. This includes setting learning goals, having a mid-point check-in and reflecting on their learning goals in collaboration with their supervisor, connecting their workplace activities with their academic program of study as well as broader transferable workplace competencies, and the expectation for ongoing feedback and evaluation. It should also be noted that although setting learning goals and reflecting on those goals is an expectation, the manner in which students do this is based on the student and supervisor's preference; the Professional Development Workbook (Whittington-West et al., 2017) itself is not a requirement.

*Limitations*

As students were not randomly assigned to receive structured learning support, it is impossible to discern to what degree it was the structured learning support itself or another variable, such as supportive supervisors who may have been more likely to attend to students' learning, which caused the reported benefits.

Although students were not randomly assigned to receive structured learning support, or not, it would be reasonable to assume that the types of employment experiences would not have inherently differed between the two groups. For example, in relation to competency development it is unlikely the structured learning support group naturally had richer employment experiences. In fact, both groups reported perceived increases to their competency development, but it was the structured learning support group who reported greater perceived competency development. It may be that students who set learning goals, checked-in with their supervisor and had a final reflection became more aware of the competencies they were developing and/or proactively sought out opportunities for further competency development, as was indicated by their qualitative feedback.

Given the research data collection method, a pre-test was not possible; participants' pre-scores were collected retrospectively at the same time as their post scores. Although there is some inherent bias to retrospective self-assessment (Collopy, 1996), research has shown that collecting retrospective self-assessment data can increase the validity of a pre-post analysis by limiting the effects of response shift (Taminiau-Bloem et al., 2016), which refers "to a change in the meaning of one's self-evaluation of a target construct" (Daltroy, 2012, p. 1550). For example, at the pre-test point in time, a participant may have had a different understanding of a given competency than at the post test; by using a retrospective analysis with a comparison group, we can be more confident that a statistically significant change in pre-post scores is not simply a result of their understanding of the construct changing. Additionally, given the point of analysis was not the change in pre-post within the target group, but rather the degree

of change in pre-post scores as measured against the comparison group's pre-post which would arguably be affected by similar response bias.

*Future Directions*

Work-integrated learning programming is often resource-intensive due to the number of stakeholders involved and the time to recruit, prepare, and support both student participants and placement hosts. There are growing pressures across Canada to create quality work-integrated learning experiences for students. Given the prevalence of on-campus work in higher education and the results of this study, higher education institutions should consider transforming their on-campus employment programs by developing the necessary structured learning supports to convert these opportunities into quality professional development opportunities that deliberately integrate student employment with their academic studies, and support students' professional development beyond the classroom setting.

Given the self-reported nature of this study, future research on on-campus employment should be conducted to measure students' actual competency development and increased employability post-graduation. This study also did not include randomized groups, as well as low sample sizes in the non-target groups (e.g., reflection only); future research looking specifically at the required structure of the learning support would be strengthened by randomly assigning students to the various structured learning support conditions. Lastly, research on how to best support supervisors in supporting their students' professional development during on-campus employment through structured learning supports is warranted.

Students included in this research were not limited to one of the categories of work study positions (e.g. 'Lab/Research Assistant' and 'Student Mentor/Ambassador') and respondents were not asked to report their type of work study experience. Future research on this topic could benefit by controlling for the type of employment experience to create further consistency between the target and control groups.

As demographic data for all participants in the work study program was not available, it is uncertain the degree to which the survey respondents reflect the University's work study student population. It is notable that there was a significantly higher proportion of female-identified respondents, who comprised 76% of the sample. Future research should seek to replicate these findings while ensuring a representative sample.

CONCLUSION

This research explored the impact of structured learning supports (goal setting, mid-point and final reflection) on students' professional development and workplace performance in on-campus part-time employment. The results of the study support previous research drawn from the work-integrated learning context that clearly shows the necessary quality criteria to support students' professional development in a workplace setting and how these same quality criteria can be leveraged in the context of part-time on-campus employment.

ACKNOWLEDGEMENTS

# REFERENCES

Ash, S. L., & Clayton, P. H. (2009). Generating, deepening, and documenting learning: The power of critical reflection in applied learning. *Journal of Applied Learning in Higher Education, 1*(1), 25-48.

Billett, S. (2009). Realising the educational worth of integrating work experiences in higher education. *Studies in Higher Education, 34*(7), 827-843. https://doi.org/10.1080/03075070802706561

Business/Higher Education Roundtable. (2016). *Taking the Pulse of Work-integrated Learning in Canada*. Retrieved October 25, 2016, from http://bher.ca/wp-content/uploads/2016/10/BHER-Academica-reportfull.pdf

Career Exploration & Education. (2017). *Professional development workbook for student staff.* University of Toronto**.**

Collopy, F. (1996). Biases in retrospective self-reports of time use: An empirical study of computer users. *Management Science, 42*(5), 758-767.

Daltroy, L., Eaton, H., Phillips, C., & Liang, M. (2012). Discrepancies between self-reported and observed function: Contributions of response-shift. In C. E. Schwartz & M.A.G. Sprangers (Eds.), *Adaptation to changing health: Response-shift in quality of life research* (pp. 189-200). American Psychological Association.

Dewey, J. (1938). Experience and education. Collier.

Galarneau, D., Kinack, M., & Marshall, G. (2020, May 25). *Work-integrated learning during postsecondary studies, 2015 graduates*. Statistics Canada. https://www150.statcan.gc.ca/n1/pub/75-006-x/2020001/article/00003-eng.htm

Government of Canada. (2017, August 28). *Government of Canada launches student work placements*. https://www.canada.ca/en/employment-social-development/news/2017/08/government_of_canadalaunchesstudentworkplacements.html

Jackson, D. (2015). Employability skill development in work-integrated learning: Barriers and best practice. *Studies in Higher Education, 40*(2), 350-367. https://doi.org/10.1080/03075079.2013.842221

Kaufman, D. (1996). Constructivist-based experiential learning in teacher education. *Action in Teacher Education, 18*(2), 40–50. https://doi.org/10.1080/01626620.1996.10462832

Kolb, D. A. (1984). *Experiential learning: Experience as the source of learning and development*. Prentice Hall.

Kramer, M., & Usher, A. (2011). *Work-integrated learning and career-ready students: Examining the evidence.* Higher Education Strategy Associates.

Smith, C., Ferns, S., Russell, L., & Cretchley, P. (2014). *The impact of work-integrated learning on student work-readiness. Final report*. Office for Learning and Learning. http://hdl.voced.edu.au/10707/337518.

Stirling, A., Kerr, G., Banwell, J., MacPherson, E., & Heron, A. (2016). *A practical guide for work-integrated learning: Effective practices to enhance the educational quality of the structured work experience offered through colleges and universities.* Higher Education Quality Council of Ontario; Education at Work Ontario. https://heqco.ca/wp-content/uploads/2020/03/HEQCO_WIL_Guide_ENG_ACC.pdf

Taminiau-Bloem, E., Schwartz, C., Van Zuuren, F., Koeneman, M., Visser, M., Tishelman, C., & Sprangers, M. (2016). Using a retrospective pretest instead of a conventional pretest is replacing biases: A qualitative study of cognitive processes underlying responses to thentest items. *Quality of Life Research*, 25(6), 1327-1337. https://doi.org/10.1007/s11136-015-1175-4

Wurdinger, S. D. (2005). *Using experiential learning in the classroom. Practical ideas for all educators*. ScarecrowEducation.