

# Remote work-integrated learning experiences: Student perceptions

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The COVID-19 pandemic required a quick adaptation in the way work-integrated learning programs are offered. While not suitable for all types or disciplines of WIL, this disruption has led to many WIL experiences occurring remotely, that is, students working for organizations from home. Students' perceptions of their WIL experiences have previously been examined, but there is little literature investigating students' perceptions of remote WIL, and how host organizations can best support their learning in a remote working context. Organizational research conducted on remote employees over the past two decades has identified important considerations, such as flexibility, productivity, engagement, and commitment. In the present study, semi-structured interviews were conducted with 50 co-operative education students and a grounded theory approach was taken to analyze the transcripts. Findings reveal the importance students associate with socialization, productivity, and meaningful work in the remote context. Study limitations and directions for future research are also discussed.

Keywords: COVID-19, work-integrated learning, co-operative education, remote work, student perceptions

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Understanding the dynamics of working from home (referred to as remote working) as the context for work-integrated learning experiences is more important than ever. As a result of the COVID-19 pandemic, thousands of WIL students who were engaged with organizations around the globe transitioned to working from home, with little to no time to prepare. While the circumstances and effects of remote working have been studied for regular employees, little is known about how remote working impacts the WIL experiences for students. For example, some full-time workers appreciate remote working for the flexibility it offers enabling them to balance work and home life (Gajendran & Harrison, 2007; Golden et al., 2006). However, other studies report employees experiencing loss of communication resulting in feelings of isolation (Bartel et al., 2012; Charalampous et al., 2019). Strong communication and trust with one's supervisor seemed to increase satisfaction and productivity in remote work arrangements (Baker et al., 2006; Staples, 2001). However, it stands to be determined how these factors affect WIL students who do not have a lot of previous work experience and are part of the organization on a temporary basis. It is important to investigate the impact of remote working, both in the current context of COVID-19 to provide support and guidance to students and employers, but also for the longer term, as there are indications that remote working may continue for a larger number of workers and organizations (Policy Horizons Canada, 2019). This study aimed to explore the WIL student experience with remote working. Particular attention was paid to students' overall perceptions of their transition to remote working, the skills they reported as

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particularly important for success in remote working, the challenges they faced, and recommendations they had for future remote WIL experiences.

## LITERATURE

In 2020, the COVID-19 pandemic forced many WIL students to transition to a remote work term - a successful method in maintaining company productivity in previous disasters (e.g., earthquakes - Donnelly & Proctor-Thomson, 2015, and the 9/11 attack - Mello et al., 2011). More broadly than WIL, the mandate to work remotely was perceived positively by employees (Dubey & Tripathi, 2020), but it is possible that the blurred family-work boundaries have had negative effects, such as decreased productivity and increased work-family conflict (Cho, 2020). Additionally, research on COVID-19 has suggested that living through this pandemic has negatively affected individuals' mental health and wellbeing, especially amongst women and students (Wang et al., 2020; Zhang et al., 2020). With a large number of students' WIL experiences being impacted by the pandemic, there is a need to investigate how those students forced to work from home have perceived the experience. This review aims to explore the benefits and drawbacks of remote working and its application to the WIL context to better understand the particular factors that need to be considered in the remote working context for WIL students.

Remote working arrangements are typically used as an employee incentive (Bailey & Kurland, 2002). Interviews have suggested participants with the option to work offsite preferred to do so, especially if they excelled at working independently, and had the technology required to maximize productivity (Khalifa & Davidson, 2000). Additionally, numerous factors have aided employees' transition to remote working, such as clarity of evaluation and feedback, ability to work independently, co-worker and supervisor trust, and organizational connectedness (Raghuram et al., 2001). Telecommuting is one example of these arrangements, defined broadly as "... a work practice that involves members of an organization substituting a portion of their typical work hours (ranging from a few hours per week to nearly full-time) to work away from a central workplace—typically principally from home—using technology to interact with others as needed to conduct work tasks." (Allen et al., 2015, p. 44). This definition encompasses many types and definitions of flexible work arrangements and was used in the present review to allow for a complete picture of the existing literature

Many benefits have been associated with remote work, including flexibility (Gajendran et al., 2015; Jansen-Perry et al., 2018), autonomy (Allen et al., 2015; Charalampous et al., 2019; Naotunna & Zhou, 2018), productivity (Gajendran & Harrison, 2007; Gajendran et al., 2015; Khalifa & Davidson, 2000; Mann & Holdsworth, 2003), job satisfaction (Charalampous et al., 2019; Gajendran & Harrison, 2007; Mulki et al., 2008), and decreased stress (Allen et al., 2015; Gajendran & Harrison, 2007). Flexibility was one of the most cited advantages of remote working, and it is thought to help manage family demands, increase work-life balance, and increase employee performance and productivity.

Despite the benefits associated with remote working, several drawbacks have been identified. These have included: loss of communication, decreased support, the need to always be "on," and added stress due to disrupted work-life balance (Allan et al., 2015; Bartel et al., 2012; Charalampous et al., 2019; Mann & Holdsworth, 2003). The most frequently reported drawback is the loss of social and professional communication, which has resulted in feelings of isolation and loneliness. Impaired communication may also affect the clarity of tasks and expectations (Bailey & Kurland, 2002; Jansen-Perry et al., 2018), decrease

performance and productivity (Golden et al., 2008; Allen et al., 2015), and reduce job satisfaction (Cooper & Kurland, 2002; Dahlstrom, 2013).

Individuals' perceptions of remote working are influenced by many factors (see Charalampous et al., 2019 for a review), one of which is employee-supervisor relationships. Supervisor support has been suggested to increase self-efficacy, raising employee likelihood to telecommute (Khalifa & Davidson, 2000). Additionally, trust between supervisor and employee inflates productivity and job satisfaction while decreasing work-related stress (Baker et al., 2006; Dahlstrom, 2013; Staples, 2001). A reciprocal relationship with trust and communication frequency in remote employees has also been seen (Staples, 2001), suggesting regular communication is essential for building trust. Research on telecommuting intensity also found that the more one works remotely the stronger their relationship with their superiors, but the weaker their relationship with co-workers (Allan et al., 2015; Golden et al., 2006). These findings propose that the quality of one's remote working experiences may be dependent on communication and support from their supervisor.

Kay et al. (2019) created a framework for flexible and future-oriented WIL programs, and virtual WIL was identified as part of the framework. E-internships, a type of virtual WIL where students and teams are connected virtually while working remotely (Jeske & Axtell, 2013), have been implemented and evaluated in two research studies (Jeske & Axtell, 2018; Jeske & Linehan, 2020). Findings suggest these students develop skills to the same extent as in-person internships (Bayerlain & Jeske, 2018; Jeske & Linehan, 2020), and feel strong support from their remote mentors and supervisors (Jeske & Linehan, 2020). Supervisor support is key for virtual WIL to be successful, as it decreases feelings of isolation and ambiguity (Bentley et al., 2016; Charalampous et al., 2019; Jeske & Axtell 2018), and is an important aspect of work-term quality (Drewery et al., 2016; Drewery et al., 2015; Nevison et al., 2017). This hints at the idea that if students feel supported by their employers, remote work terms may prove to be just as effective and high quality as traditional methods.

There are some limitations to the e-internship research already presented. Jeske and Linehan (2020) used a quantitative survey with restricted response options, and Jeske and Axtell (2018) had a small sample size of interviews. Additionally, the questions in both studies focused on details about their organizations, work outcomes, and skill development. Therefore, there is a gap in the WIL literature surrounding students' thoughts and feelings regarding remote working and desired supports (Jeske & Linehan, 2020), in addition to research regarding other types of remote WIL, such as co-op.

Though previous research has outlined the benefits, drawbacks, and moderating factors affecting individuals' perceptions of remote working, it has mostly been conducted with full-time employees working remotely by choice as a portion of their work week. Research has yet to examine the experiences of WIL students who made the transition to remote working and their perceptions of those experiences. Specifically, there is a need for in-depth qualitative work on students' general thoughts and feelings surrounding remote working to understand the factors affecting the quality of a remote WIL experience. As such, this research aims to explore students' perceptions of remote working and their perceptions of how to improve future remote work terms.

## METHODS

Recruitment and data collection for this research occurred from April to June, 2020. The data presented in this study was part of a larger research study, which involved a quantitative survey in addition to qualitative semi-structured interviews. The focus of the current study is on the semi-structured interview phase of the research. Participants in this study were co-operative education students, a type of WIL where students alternate between academic and paid work terms over the course of completing their undergraduate degrees. Upon receipt of institutional ethics approval (#42139), undergraduate co-op students from all faculties and years of study were recruited from a Canadian university. Invitations to participate in a web survey were sent via email. To meet the eligibility criteria, students needed to be completing a co-op work term during the winter (January-April) term in 2020. To participate in the second phase of the research, survey respondents were asked to provide their contact information if they were interested in scheduling a follow up semi-structured interview. At the time of the interviews, students had completed approximately half of their 4-month work term.

Of interest to the current study, semi-structured interviews were conducted with 50 participants over video conferencing software (WebEx), averaging 30 minutes in length. Interviews were transcribed using a closed captioning function made available through the video conferencing software. Questions were developed by determining what areas of understanding the research team sought to deepen (relative to the previous survey responses) with further analysis. Though survey responses indicated that students felt their transitions to remote working went remarkably well, the research team wanted to add depth and elaboration to what they felt could be improved for future work terms. As such, interview questions centered around students' experiences after they transitioned to remote working during their Winter 2020 work term. The open-ended questions included in the interview guide examined aspects of working from home (their residence at the time of the interview), such as: overall experience, skills fostered, associated challenges, and future-oriented recommendations.

This research employed a grounded theory approach, and its goal was to identify key characteristics of a specific phenomenon (Charmaz, 2006, 2008; Charmaz & Mitchell, 1996). In the context of the current research, it was to identify how the transition to remote working during the COVID-19 pandemic was perceived by co-op students. Line-by-line (open) coding was implemented to analyze the data (Glaser et al., 1968). This generated a large list of thoughts and reflections of students' experiences. Axial coding was then undertaken to uncover overarching themes associated with the subthemes identified by open coding (Charmaz, 2014). The core themes identified by the coding processes employed in this study are discussed in the next section. Two researchers from the research team coded the data independently, and once the research team felt interview coding had reached saturation (no new themes emerged), they concluded the analysis.

## RESULTS

There were three core themes identified through the analysis described in the previous section: socialization, productivity, and meaningful work. These core themes arose from the originally coded, and more specific subthemes, which were: the benefits and challenges of remote working, what skills students required to work remotely, and students' recommendations for future remote working terms. The results

below are presented according to subtheme, and the findings will be linked to the three core themes (socialization, productivity, and meaningful work) within the Discussion section.

### *Benefits Associated with Remote Working*

Though the initial transition to work from home may have been abrupt for some students, many reported a smooth transition to remote working. The ease of most students' transitions seemed to be motivated by three factors: portability and similarity of their responsibilities in office versus at home, their own initiative, and the support provided by their employers during their time of transition. Speaking to supervisor support, one student (P35) felt their supervisor was extremely responsive to their requests in order to ease students' transitions. In turn, the student stated that this helped them to feel "less pressure" as they transitioned to working from home.

P35: I didn't feel like I lost any learning or communication opportunity... My supervisor was exceptionally responsive through email... My supervisor was very understanding of the fact that the transition was difficult. I understood that the first couple of weeks were going to be a little bit less productive.

Other respondents mentioned their desire to retain informal elements of communication. In attempts to address this, two students (P44, P46) mentioned that their teams continued to prioritize informal socials (e.g., happy hour, birthday socials, scavenger hunts). As stated by P46, these weekly informal socials allowed the team to "take a break and connect," and they identified the importance of doing so, since "getting that little socialization in makes your week a little bit brighter. One respondent's (P45) employer also created informal weekly events to boost morale and engagement between team members.

P45: They actually gave me a digital cellphone to help with any calls and teleconferencing meetings... We have weekly check in morale-type meetings to make sure that we're still feeling good about our co-op term... They also host almost weekly kind of fun events. So, whether that's a cooking class, or trivia, or just excitement to keep our staff still engaged with each other.

Another commonly discussed benefit was the newfound flexibility in students' work schedules. Many students were able to adjust their working hours, choose what tasks to work on (and when) as they see fit, and accumulate flex time (time off based on the accumulation of overtime). Students speculated that employers supported student flexibility due to an understanding of the communal effect (challenges impacting both the employer and student) presented by the pandemic. An unexpected transition to remote working presents certain challenges and potential distractions, and students perceived their employers as sympathetic towards that. As a result, one respondent (P29) mentioned their interest in continuing to work from home, if possible.

Respondents also noted two main perks associated with remote working relative to an in-person setting. Some respondents spoke to the comfortability of remote working, and one respondent (P35) mentioned they did not feel "at home" in an office setting. The ability to work remotely allowed students to relax their dress code, and it provided a more comfortable and familiar work environment for some. Secondly, many respondents indicated the time and costs saved by removing their commute to work each day. Of those

who spoke about their commute times, most students averaged about one hour per day (30 minutes each way). However, the amount of time saved for a few respondents, like P10, was more drastic.

P10: The one thing which I liked about working remotely was the fact that I did not have to commute, because I live on the very far end of [city]... My commute normally takes around one hour to one hour and fifteen minutes.

Though less often mentioned than the previous factors, some students identified additional benefits of remote working. These included things like an increased sense of independence by managing their day-to-day tasks without the same extent of supervision as they were accustomed to in the office. Others also spoke about the ability to develop and improve their skills (e.g., organization, communication, initiative) within a new remote setting.

### *Challenges of the Transition*

Despite successes, the abrupt transition to remote working posed new challenges for many students. Most students felt that their formal communication (e.g., team meetings, 1:1's) with their supervisor and their team remained fairly consistent after the transition to remote working. Despite this consistency, one respondent (P26) mentioned that "nothing's better than having that person in front of you, and being able to coordinate, communicate... and network in the office." Others like P36 indicated that they missed the personal atmosphere of an in-office setting and felt lonely after the transition.

Another common challenge associated with remote working was students' motivation during this time. Students identified a lack of collaborative opportunities (relative to in-office), and the lack of physical supervision with remote working. One student (P11) mentioned that the nature of their work and its atmosphere differed drastically in office versus remotely.

P11: Motivation probably decreased just because our design team functions very collaboratively. So, whenever we want to take a look at something we would post on a bulletin board and everyone gathers around it to discuss out in the open... When other people in the company walk by, they'd be like "well, that's cool. I wanna join in. I want to take a peek," which is really motivating as a designer, because we want the discipline of designing to be more influential...When working remotely... it almost felt like we weren't being seen as much.

Similarly, a number of students felt that the switch to remote working impacted their productivity. As the remote set up proved difficult for some students (e.g., login and VPN difficulties, internet connectivity issues), they sought their employer's help in the process. Some students had a streamlined set-up process, but sought additional resources (e.g., dual monitor) to increase their productivity relative to their in-office set up. Others, like P32, felt that their productivity was impacted by the responsiveness of their supervisor. As this student no longer received an immediate response, as they did when visiting their supervisor's office, they felt it halted their progress until they received further instruction. Another student (P21) mentioned that they were anxious about how their performance would be evaluated in the remote (and less supervised) environment. As such, one respondent suggested that students need to remember "not to be too hard on themselves about not being productive," during uncertain times. Another (P6) mentioned

that “people should just understand that no one really prepared for this. I think you just have to be adaptable to any situation thrown at you.”

Students identified the importance they placed on being assigned meaningful work in a remote setting. Some students spoke to their employers having difficulty assigning them tasks, at least initially, when they transitioned to remote working. Students felt that supervisors may not have a full understanding of their capabilities, may have been preoccupied with their own transitions, or may not have had tasks for them to do if their work was no longer dependent (at least initially) on an in-person setting. As a result, some students were assigned more menial tasks (e.g., data entry), which contributed to them having a less meaningful co-op work term than they otherwise may have.

Finally, the transition to remote working introduced new challenges relating to work environment and technical difficulties. The blurring of work and home space contributed to students like P14 working significant overtime, as they had difficulty determining when to end the workday. One student (P29) experienced a particularly difficult transition in their new workspace given their shift in geographical location and the type of instruments required.

P29: I think the setup was stressful because it was hard to move all of the lab equipment, particularly because I was moving cities and I had to set up everything in my residence. Any assistance was tricky because I couldn't just be like, “Hey, this looks wrong. Why is this not working right?”

Less commonly identified challenges associated with the transition to remote working centered around students' difficulty adapting to a remote working environment and work schedule, and the effect that remote working may have on their future trajectories. Students largely cited their ability to adapt, take initiative, and be mindful of their future career trajectories when speaking to these considerations.

#### *Relevant Skills in Adapting to a Remote Setting*

Students articulated several relevant skills required to adapt to remote work during COVID-19. To counteract the lack of in-person communication with their team, many students mentioned that they prioritized their communication skills in both formal and informal settings. Students expressed interest in a continued effort to build their professional networks. One student (P13) provided the advice to “utilize your network and leverage the expertise and experience of other employees at the firm.” Another student (P8) mentioned that students can build and engage their networks in a remote setting by “exchanging emails and talking on LinkedIn... All these minor steps to build a portfolio.”

Many respondents spoke about the importance of their ability to adapt and remain flexible as they transitioned to remote working. Often this impacted students' ability to schedule and plan their workday and deliverables. One student (P16) mentioned the need to “let go of the reigns,” as circumstances changed daily. To do so, they planned shorter-term daily deliverables, rather than weekly or monthly as they did before the pandemic. For other students, this meant that the tasks or projects they prioritized shifted. One student (P7) mentioned that their role initially consisted primarily of data entry. However, when they transitioned to remote working, the emphasis shifted to a more current pandemic-oriented priority. Student P7 commented: “I think because it was unexpected, it was really important to be able to adapt

really quickly...So, it was kind of adapting to changes that were happening and being able to accommodate changing roles or changing priorities.”

In attempts to combat concerns for decreased productivity, some students spoke of the emphasis they placed on organization and time management. Some students, like P5, spoke to habits such as: setting alarms to keep a consistent work schedule, creating “to do” lists of their tasks and deliverables, and implementing set times for breaks and the end of the workday. Students like P48 associated the importance of stronger organization skills with the increased difficulty supervisors may have monitoring students' productivity and understanding of tasks from a remote setting.

Some students mentioned the need to work independently and take initiative to find answers to their questions before contacting their supervisors. They felt that this positively impacted their productivity and allowed them to work more efficiently in the process. However, students like P4 mentioned that if their attempts were unsuccessful, they “knew where to ask for help when [they] needed it.”

Another student (P39) emphasized the importance of taking initiative and they articulated how this aided their productivity during the first day of their transition to remote working. They specified that they had not received a set list of deliverables or tasks to work on, since their supervisor was preoccupied navigating the change in their own schedule. To overcome this, the student took the initiative to determine what elements of the projects they were working on were missing, and they began to work on those until receiving additional instruction.

## DISCUSSION

When examining the findings, three core themes of importance emerged with respect to WIL students and their experience with remote working: socialization, productivity, and meaningful work. These foundational components for remote WIL were based on students' perceptions of their remote experiences during COVID-19: what went well, what was challenging, and what skills were most important in this transition. Note, however, these are not distinct components. That is, in students' accounts of their remote WIL experiences, there were connections between their descriptions of the importance of socialization, productivity, and meaningful work, as per Figure 1 and described below.

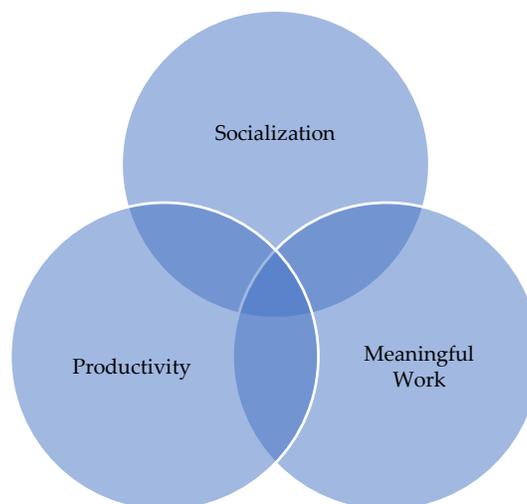
FIGURE 1: Foundational components for remote work-integrated learning

*Socialization*

Socialization within an organization includes both formal and informal processes through which a newcomer develops the attitudes, behaviours, and knowledge to be successful within the organization (Van Maanen & Schein, 1979). It represents the activities that the organization and the newcomer engage in to help the newcomer become part of the organization and understand their role within it. Of the aspects of students' transitions that were described as critical for their success in remote working, many related to both formal and informal modes of socialization. Students explained that maintaining regular channels of communication was important to provide a continued sense of connection and belonging with their team. Their one-on-one and team meetings provided opportunities for formal communication, helping students understand the norms of their department/team and their supervisor's expectations, emphasized as important in previous research on remote work (Poulsen & Ipsen, 2017). Informal connections with teams enabled students to get a sense of organizational fit and alignment with their career goals and to minimize feelings of isolation, a challenge reported in research on teleworking (Allen et al., 2015; Charalampous et al., 2019). Not only does the socialization process aid in the student settling into their role and determining organizational fit, but it also provides the opportunity to learn from colleagues, a key component of WIL experiences (Drewery et al., 2015; Jeske & Linehan, 2020; Sattler & Peters, 2013). In the typical in-person workplace environment, a student would gain information to understand workplace norms and assess fit by observing and interacting with colleagues both formally and informally. There may be fewer opportunities for observation and interaction in the remote work setting which may present new challenges for the socialization process of WIL students and may require innovative strategies to support students in developing role clarity, in understanding workplace cultures and, in building professional networks while working remotely.

*Productivity*

The core theme of *Productivity* emerged from the subthemes largely through students' accounts of what skills they needed to keep themselves productive in an unsupervised, work from home setting. In order to be productive, they described the need to be flexible and adaptable. They needed to be effective at working



independently and they needed a great deal of self-direction in planning their day and setting a schedule for completing work. These are all skills that are reported in the WIL literature as outcomes for participating in WIL (Jackson, 2013; Lim et al., 2020; Sattler & Peters, 2013) but according to students, the remote work setting places an even higher level of importance on these skills consistent with research on telework arrangements (Bayerlein & Jeske, 2018; Jansen-Perry et al., 2018; Khalifa & Davidson, 2000).

### *Meaningful Work*

The importance of meaningful work as part of a quality WIL experience is well documented (Haddara & Skanes, 2007; Jones, 2007; Nevison et al., 2017; Smith, 2012; Smith & Worsfold, 2015) and so it is not surprising that meaningful work surfaced as a core theme related to students' experiences with remote WIL. In this research, students spoke about the desire to have meaningful work, particularly when some noted that in the switch to remote working, they were given menial tasks. Since trust between employer and employee was connected to an employee's satisfaction with telecommuting (Baker et al., 2006; Staples, 2001), it may be that trust needs to be established between the employer and WIL student prior to meaningful work being assigned. Ways to establish trust between the remote WIL student and their organization may be an area for further investigation. One technique reported by employers when asked about strategies for assigning tasks, was to assign an initial task at the beginning of the WIL experience, and use that task to monitor and assess students' capabilities which then paved the way to assign tasks that were more challenging and meaningful (Pretti, 2019). Providing meaningful work for the student to complete is not just important for student outcomes and achieving quality in remote WIL, but also as a way of building a student's commitment to the organization (Drewery et al., 2019) and contributing to an employers' talent pipeline.

### *Socialization and Productivity*

In addition to the descriptions of the core themes provided in this section, there were a number of subthemes from this research that are best represented in the intersection between the core themes, as depicted in Figure 1. There were a number of subthemes that relate to the intersection of *Socialization* and *Productivity*. Students reported the value of employers communicating their expectations for work hours and describing the work that needed to be done which is consistent with findings that role clarity increases the quality of a work term (Drewery et al., 2016). Research on remote working suggests that lack of in-person communication may decrease role and expectation clarity (Bailey & Kurland, 2002). Some of the students reported challenges specifically with remote working when they were awaiting a response to a question they had. Poulsen and Ipsen (2017) found that regular communication and giving remote employees autonomy over their work mitigated such issues. In considering the tasks or projects assigned to students, identifying side projects (e.g., independent work) for students awaiting a response from their supervisor/co-worker would mitigate the communication lag time and ensure remote productivity.

### *Socialization and Meaningful Work*

The intersection of *Socialization* and *Meaningful Work* highlights the importance, particularly in the remote working environment, that as part of the socialization process, ensuring the student understands the importance of the work assigned to the WIL student with respect to the goals of the team and/or organization. When working in-person, students may be more likely gain an appreciation for the ways in

which the work they have been given is connected to the work of the team/organization, helping them appreciate the meaningfulness of their work. The remote working environment may limit the extent to which students understand those connections and see the value of their work, and as such, it will be important for organizations to explicitly communicate that. The other connection that arose in the research between socialization and meaningful work relates to students taking initiative. One aspect of socialization is proactive socialization, that is, the ways in which the newcomer actively engages in their socialization process (Saks & Ashforth, 1996). Employers often comment on the value students bring to their organization in terms of fresh ideas and innovation (Sattler, 2011) and so while it may be more challenging in a remote work setting, it will be important for students to identify and communicate the meaningful ways that they feel they can contribute.

#### *Productivity and Meaningful Work*

In the results from this research, the connection between productivity and meaningful work was largely based on student motivation. That is, the value that students derive from doing work they perceive as being meaningful was a strong motivator for being productive. This is consistent with research on students who report higher levels of motivation and engagement when class assignments align with their interests (Kahu, Nelson, & Picton, 2017). As well, research shows that productivity is higher for creative rather than mundane tasks in remote settings (Dutcher, 2012).

#### *Socialization, Productivity, and Meaningful Work*

Based on WIL students' accounts of their experiences with remote working, the combination of the three core themes of socialization, productivity, and meaningful work are the necessary ingredients from the students' perspectives for remote WIL. With attention to those areas, students will acquire professional, personal and academic outcomes expected of WIL programs (Cooper et al., 2010) as well as making important contributions and impact to organizations.

#### LIMITATIONS AND FUTURE RESEARCH

Though this study made a novel contribution to the timely literature on the COVID-19 pandemic, and the impact it has had on postsecondary WIL students, it is not without its limitations. First, though respondents were enrolled in various academic disciplines, were in different years of study, and worked in a variety of industries, they were all enrolled within one type of work-integrated learning at one Canadian university. Therefore, it stands to be determined whether these findings would be generalizable for students at other educational institutions. Second, given the timeframe of data collection, the results are preliminary and exploratory in nature. As remote working continues it will be important to shift thinking towards longer term outcomes of WIL for students and employers. Lastly, this research represents only the perspectives of students. In WIL research it is important to consider the perspectives of all three key stakeholder groups: the students, the host organizations and the academic institutions.

This study raises a few areas of consideration for future research. First, though this research provided perspective on students' remote working term experience, it examined the experiences of students who started their term in person within an organization and transitioned to remote working approximately halfway through a four-month experience. Research has yet to explore what their experiences working

remotely would be if the introduction to the organization and their co-workers occurs online. Second, this research provided perspective on the value students place on meaningful work, even in a remote setting. However, existing research has not yet examined what constitutes meaningful work in this setting (e.g., impact of work, connection to colleagues), and how to achieve these outcomes remotely. Another area for exploration is how different WIL models, and their participants are affected by remote working. It is possible that variation in the goals for a particular model of WIL along with structural differences (e.g., paid/not-paid, full-time/part-time) will lead to differences in the remote WIL experience for students. Lastly, it will be important to explore the perspectives of host organizations and academic institutions and understand their adaptation to remote WIL experiences. With these insights, WIL programs will continue to evolve to help students meet the demands of an increasingly complex and dynamic workforce.

## REFERENCES

- Allen, T. D., Golden, T. D., & Shockley, K. M. (2015). How effective is telecommuting? Assessing the status of our scientific findings. *Psychological Science in the Public Interest*, 16(2), 40-68. <https://doi.org/10.1177/1529100615593273>
- Bailey, D. E., & Kurland, N. B. (2002). A review of telework research: Findings, new directions, and lessons for the study of modern work. *Journal of Organizational Behavior*, 23(4), 383-400. <https://doi.org/10.1002/job.144>
- Baker, E., Avery, G. C., & Crawford, J. (2006). Home alone: The role of technology in telecommuting. *Information Resources Management Journal*, 19(4), 1-22. <https://doi.org/10.4018/irmj.2006100101>
- Bartel, C. A., Wrzesniewski, A., & Wiesenfeld, B. M. (2012). Knowing where you stand: Physical isolation, perceived respect, and organizational identification among virtual employees. *Organization Science*, 23(3), 743-757. <https://doi.org/10.1287/orsc.1110.0661>
- Bayerlein, L., & Jeske, D. (2018). Student learning opportunities in traditional and computer-mediated internships. *Education + Training*, 60(1), 27-38. <https://doi.org/10.1108/et-10-2016-0157>
- Bentley, T., Teo, S., Mcleod, L., Tan, F., Bosua, R., & Gloet, M. (2016). The role of organisational support in teleworker wellbeing: A socio-technical systems approach. *Applied Ergonomics*, 52, 207-215. <https://doi.org/10.1016/j.apergo.2015.07.019>
- Charalampous, M., Grant, C. A., Tramontano, C., & Michailidis, E. (2019). Systematically reviewing remote e-workers' well-being at work: A multidimensional approach. *European Journal of Work and Organizational Psychology*, 28(1), 51-73. <https://doi.org/10.1080/1359432x.2018.1541886>
- Charmaz, K. (2006). *Constructing grounded theory: A practical guide through qualitative analysis*. SAGE.
- Charmaz, K. (2008). Grounded theory as an emergent method. In S. N. Hesse-Biber & P. Leavy (Eds.), *Handbook of emergent methods* (pp. 155-170). Guilford Press.
- Charmaz, K. (2014). *Constructing grounded theory*. SAGE.
- Charmaz, K., & Mitchell, R. G. (1996). The myth of silent authorship: Self, substance, and style in ethnographic writing. *Symbolic Interaction*, 19(4), 285-302. <https://doi.org/10.1525/si.1996.19.4.285>
- Cho, E. (2020). Examining boundaries to understand the impact of COVID-19 on vocational behaviors. *Journal of Vocational Behavior*, 119, Article 103437. <https://doi.org/10.1016/j.jvb.2020.103437>
- Cooper, C.D. and Kurland, N.B. (2002), Telecommuting, professional isolation, and employee development in public and private organizations. *Journal of Organizational Behaviour*, 23: 511-532. <https://doi.org/10.1002/job.145>
- Cooper, L., Orrell, J., & Bowden, M. (2010). *Work integrated learning: A guide to effective practice*. Routledge.
- Dahlstrom, T. R. (2013). Telecommuting and leadership style. *Public Personnel Management*, 42(3), 438-451. <https://doi.org/10.1177/0091026013495731>
- Donnelly, N., & Proctor-Thomson, S. B. (2015). Disrupted work: Home-based teleworking (HbTW) in the aftermath of a natural disaster. *New Technology, Work and Employment*, 30(1), 47-61. <https://doi.org/10.1111/ntwe.12040>
- Drewery, D., Church, D., Pretti, J., & Nevison, C. (2019). Testing a model of co-op students' conversion intentions. *Canadian Journal of Career Development*, 18(1), 34-44.
- Drewery, D., Nevison, C., Pretti, T. J., Cormier, L., Barclay, S., & Pennaforte, A. (2016). Examining the influence of selected factors on perceived co-op work-term quality from a student perspective. *Asia-Pacific Journal of Cooperative Education*, 17(3), 265-277.
- Drewery, D., Pretti, T. J., & Pennaforte, A. (2015). Conceptualizing the quality of cooperative education work term experiences: An exploration from the students' perspective. In *19th WACE World conference on co-operative and work-integrated education, Kyoto, Japan*. <http://www.waceinc.org/kyoto2015/assets/proceedings/Drewery.pdf.%20>

- Dubey, A. D., & Tripathi, S. (2020). Analysing the sentiments towards work-from-home experience during COVID-19 pandemic. *Journal of Innovation Management*, 8(1). [https://doi.org/10.24840/2183-0606\\_008.001\\_0003](https://doi.org/10.24840/2183-0606_008.001_0003)
- Dutcher, E. G. (2012). The effects of telecommuting on productivity: An experimental examination. The role of dull and creative tasks. *Journal of Economic Behavior & Organization*, 84(1), 355-363. <https://doi.org/10.1016/j.jebo.2012.04.009>
- Gajendran, R. S., & Harrison, D. A. (2007). The good, the bad, and the unknown about telecommuting: Meta-analysis of psychological mediators and individual consequences. *Journal of Applied Psychology*, 92(6), 1524-1541. <https://doi.org/10.1037/0021-9010.92.6.1524>
- Gajendran, R. S., Harrison, D. A., & Delaney-Klinger, K. (2015). Are telecommuters remotely good citizens? Unpacking telecommuting's effects on performance via i-deals and job resources. *Personnel Psychology*, 68(2), 353-393. <https://doi.org/10.1111/peps.12082>
- Glaser, B. G., Strauss, A. L., & Strutzel, E. (1968). The discovery of grounded theory; strategies for qualitative research. *Nursing Research*, 17(4), 364.
- Golden, T. D., Veiga, J. F., & Simsek, Z. (2006). Telecommuting's differential impact on work-family conflict: Is there no place like home? *Journal of Applied Psychology*, 91(6), 1340-1350. <https://doi.org/10.1037/0021-9010.91.6.1340>
- Golden, T. D., Veiga, J. F., & Dino, R. N. (2008). The impact of professional isolation on teleworker job performance and turnover intentions: Does time spent teleworking, interacting face-to-face, or having access to communication-enhancing technology matter? *Journal of Applied Psychology*, 93(6), 1412-1421. <https://doi.org/10.1037/a0012722>
- Haddara, M., & Skanes, H. (2007). A reflection on cooperative education: From experience to experiential learning. *Asia-Pacific Journal of Cooperative Education*, 8(1), 67-76.
- Jackson, D. (2013). The contribution of work-integrated learning to undergraduate employability skill outcomes. *Asia-Pacific Journal of Cooperative Education*, 14(2), 99-115.
- Jansen-Perry, S., Rubino, C., & Hunter, E. M. (2018). Stress in remote work: Two studies testing the Demand-Control-Person model. *European Journal of Work and Organizational Psychology*, 27(5), 577-593.
- Jeske, D., & Axtell, C. M. (2013, March). E-internship prevalence, characteristics, and research opportunities. In *Proceedings of the IADIS International Conference on e-society* (pp. 201-208). [https://www.researchgate.net/publication/266030998\\_E-internship\\_prevalence\\_characteristics\\_and\\_research\\_opportunities](https://www.researchgate.net/publication/266030998_E-internship_prevalence_characteristics_and_research_opportunities)
- Jeske, D., & Axtell, C. M. (2018). The nature of relationships in e-internships: A matter of the psychological contract, communication and relational investment. *Journal of Work and Organizational Psychology*, 34(2), 113-121. <https://doi.org/10.5093/jwop2018a14>
- Jeske, D., & Linehan, C. (2020). Mentoring and skill development in e-internships. *Journal of Work-Applied Management*. Advance online publication. <https://www.emerald.com/insight/content/doi/10.1108/JWAM-09-2019-0028/full/html>
- Jones, J. (2007). Connected learning in co-operative education. *International Journal of Teaching and Learning in Higher Education*, 19(3), 263-273.
- Kahu, E., Nelson, K., & Picton, C. (2017). Student interest as a key driver of engagement for first year students. *Student Success*, 8(2), 55-66. <https://doi.org/10.5204/ssj.v8i2.379>
- Kay, J., Ferns, S., Russell, L., Smith, J., & Winchester-Seeto, T. (2019). The emerging future: Innovative models of work integrated learning. *International Journal of Work-Integrated Learning*, 20(4), 401-413
- Khalifa, M., & Davison, R. (2000). Exploring the telecommuting paradox. *Communications of the ACM*, 43(3), 29-31. <https://doi.org/10.1145/330534.330554>
- Lim, S. M., Foo, Y., L., Yeo, M.-F., Chan, C. Y. X., & Loh, H. T. (2020). Integrated work study program: Students' growth mindset and perception of change in work-related skills. *International Journal of Work-Integrated Learning*, 21(2), 103-115.
- Mann, S., & Holdsworth, L. (2003). The psychological impact of teleworking: Stress, emotions and health. *New Technology, Work and Employment*, 18(3), 196-211. <https://doi.org/10.1111/1468-005x.00121>
- Mello, A. A., de Assis Goncalves, F., & Lima, F. (2011). Lessons learned from September 11th: Telework as an organizational resource to the Business Continuity Planning (BCP). *Journal of Japan Telework Society*, 9(1), 46-51.
- Mulki, J. P., Locander, W. B., Marshall, G. W., Harris, E. G., & Hensel, J. (2008). Workplace isolation, salesperson commitment, and job performance. *Journal of Personal Selling & Sales Management*, 28(1), 67-78. <https://doi.org/10.2753/pss0885-3134280105>
- Naotunna, S., & Zhou, E. (2018). Autonomy and creativity of professional teleworkers: The mediating role of creative self-efficacy. *International Journal of Organizational Innovation (Online)*, 10(3), 300-307.
- Nevison, C., Drewery, D., Pretti, J., & Cormier, L. (2017). Using learning environments to create meaningful work for co-op students. *Higher Education Research & Development*, 36(4), 807-822.
- Policy Horizons Canada. (2019, June 20). The future of work: Five game changers. <https://horizons.gc.ca/en/2019/06/20/the-future-of-work-five-game-changers/>
- Poulsen, S., & Ipsen, C. (2017). In times of change: How distance managers can ensure employees' wellbeing and organizational performance. *Safety Science*, 100, 37-45. <https://doi.org/10.1016/j.ssci.2017.05.002>

- Pretti, T. J. (2019). *A systems approach to examining co-operative education: A case study*. [Doctoral dissertation, University of Waterloo]. University of Waterloo UWSpace. <http://hdl.handle.net/10012/14966>
- Raghuram, S., Garud, R., Wiesenfeld, B., & Gupta, V. (2001). Factors contributing to virtual work adjustment. *Journal of Management*, 27(3), 383-405. <https://doi.org/10.1177%2F014920630102700309>
- Saks, A. M., & Ashforth, B. E. (1996). Proactive socialization and behavioral self-management. *Journal of Vocational Behavior*, 48(3), 301-323.
- Sattler, P. (2011). *Work-integrated learning in Ontario's postsecondary sector*. Higher Education Quality Council of Ontario.
- Sattler, P., & Peters, J. (2013). *Work-integrated learning in Ontario's postsecondary sector: The experience of Ontario graduates*. Higher Education Quality Council of Ontario.
- Smith, C. D. (2012). Evaluating the quality of work-integrated learning curricula: A comprehensive framework. *Higher Education Research & Development*, 31(2), 247-262.
- Smith, C. D., & Worsfold, K. (2015). Unpacking the learning-work nexus: 'Priming' as lever for high-quality learning outcomes in work-integrated learning curricula. *Studies in Higher Education*, 40(1), 22-42.
- Staples, D. S. (2001). A study of remote workers and their differences from non-remote workers. *Journal of Organizational and End User Computing*, 13(2), 3-14.
- Van Maanen, J., & Schein, E. H. (1979). Toward a theory of organizational socialization. In B. M. Staw (Ed.), *Research in organizational behavior* (pp. 209-264). JAI.
- Wang, C., Pan, R., Wan, X., Tan, Y., Xu, L., Ho, C. S., & Ho, R. C. (2020). Immediate psychological responses and associated factors during the initial stage of the 2019 coronavirus disease (COVID-19) epidemic among the general population in China. *International Journal of Environmental Research and Public Health*, 17(5), 1729.
- Zhang, S. X., Wang, Y., Rauch, A., & Wei, F. (2020). Unprecedented disruption of lives and work: Health, distress and life satisfaction of working adults in China one month into the COVID-19 outbreak. *Psychiatry Research*, 228, Article 112958. <https://doi.org/10.1016/j.psychres.2020.112958>

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## About the Journal

The International Journal of Work-Integrated Learning (IJWIL) publishes double-blind peer-reviewed original research and topical issues dealing with Work-Integrated Learning (WIL). IJWIL first published in 2000 under the name of Asia-Pacific Journal of Cooperative Education (APJCE). Since then the readership and authorship has become more international and terminology usage in the literature has favored the broader term of WIL, in 2018 the journal name was changed to the International Journal of Work-Integrated Learning.

In this Journal, WIL is defined as "*an educational approach that uses relevant work-based experiences to allow students to integrate theory with the meaningful practice of work as an intentional component of the curriculum. Defining elements of this educational approach requires that students engage in authentic and meaningful work-related task, and must involve three stakeholders; the student, the university, and the workplace*". Examples of practice include off-campus, workplace immersion activities such as work placements, internships, practicum, service learning, and cooperative education (Co-op), and on-campus activities such as work-related projects/competitions, entrepreneurships, student-led enterprise, etc. WIL is related to, but not the same as, the fields of experiential learning, work-based learning, and vocational education and training.

The Journal's main aim is to enable specialists working in WIL to disseminate research findings and share knowledge to the benefit of institutions, students, co-op/WIL practitioners, and researchers. The Journal desires to encourage quality research and explorative critical discussion that leads to the advancement of effective practices, development of further understanding of WIL, and promote further research.

The Journal is ongoing financially supported by the Work-Integrated Learning New Zealand (WILNZ), [www.nzace.ac.nz](http://www.nzace.ac.nz) and the University of Waikato, New Zealand, and received periodic sponsorship from the Australian Collaborative Education Network (ACEN) and the World Association of Cooperative Education (WACE).

## Types of Manuscripts Sought by the Journal

Types of manuscripts sought by IJWIL is primarily of two forms; 1) *research publications* describing research into aspects of work-integrated learning and, 2) *topical discussion* articles that review relevant literature and provide critical explorative discussion around a topical issue. The journal will, on occasions, consider best practice submissions.

*Research publications* should contain; an introduction that describes relevant literature and sets the context of the inquiry. A detailed description and justification for the methodology employed. A description of the research findings - tabulated as appropriate, a discussion of the importance of the findings including their significance to current established literature, implications for practitioners and researchers, whilst remaining mindful of the limitations of the data, and a conclusion preferably including suggestions for further research.

*Topical discussion articles* should contain a clear statement of the topic or issue under discussion, reference to relevant literature, critical and scholarly discussion on the importance of the issues, critical insights to how to advance the issue further, and implications for other researchers and practitioners.

*Best practice and program description papers.* On occasions, the Journal also seeks manuscripts describing a practice of WIL as an example of best practice, however, only if it presents a particularly unique or innovative practice or was situated in an unusual context. There must be a clear contribution of new knowledge to the established literature. Manuscripts describing what is essentially 'typical', 'common' or 'known' practices will be encouraged to rewrite the focus of the manuscript to a significant educational issue or will be encouraged to publish their work via another avenue that seeks such content.

By negotiation with the Editor-in-Chief, the Journal also accepts a small number of *Book Reviews* of relevant and recently published books.



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