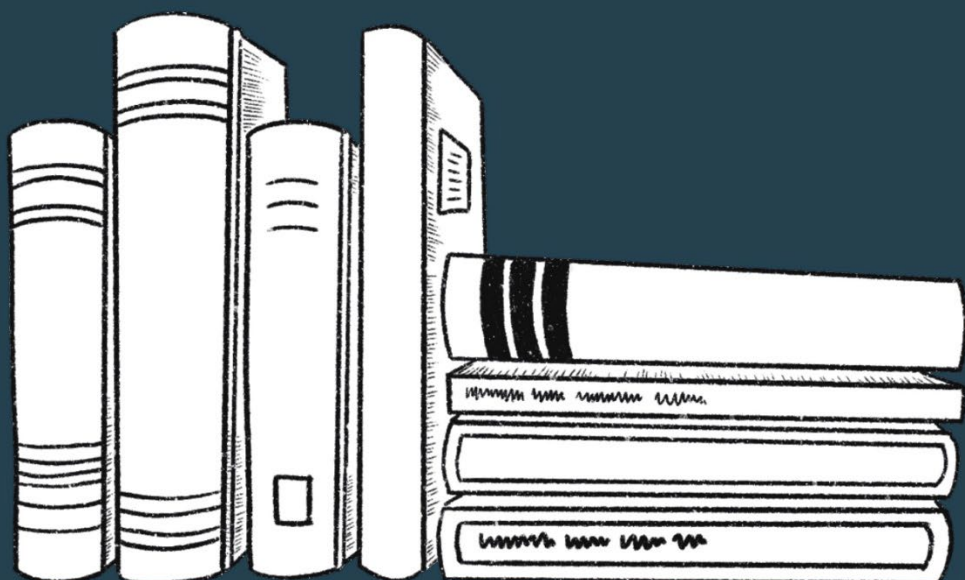


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Working (and Learning) Online: Improving Remote Work-integrated Learning Experiences for Students and Employers

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Executive Summary

Work-integrated learning (WIL), a form of experiential learning (EL), integrates formal education with practical learning in a relevant workplace setting. It helps improve labour market outcomes, builds job-readiness and can help students develop increased self-efficacy or experience a transformation of beliefs and motivations. To be most effective, WIL programs must adapt to new technologies and evolving labour market needs — including the shift to remote work locations (Bowen, 2020; Dean & Campbell, 2020; OECD, 2019; Royal Bank of Canada, 2018; Stackhouse, 2020; Zegwaard et al., 2020).

Despite the growing prevalence of online WIL, little is known about how students experience it (Dean & Campbell, 2020; OECD, 2019). And though the literature concentrates on the perceptions of students and graduates, no Canadian studies have explored the experiences of institutions and employers. Students are not WIL's sole beneficiaries: postsecondary education institutions benefit through improved recruitment and retention, enhanced relationships with stakeholders and opportunities to ensure that curricula are aligned with employer needs (Stirling et al., 2016). WIL offers employers access to students who bring fresh and innovative ideas to the workplace (Drewery et al., 2020) and to a high-quality employee pipeline, reducing costs and risks during recruitment (BHER, 2021; Stirling et al., 2016).

This report shares lessons from student, employer and institutional experiences with remote WIL during the 2020-21 academic year. HEQCO developed separate surveys for students, employers and institutional administrators, asking: What challenges did each group experience in the remote WIL environment in fall 2020? And what lessons or best practices emerged from the transition to remote WIL that can inform programming? We asked respondents about their workplace and sector type, institution, academic programs and WIL format. And we posed follow-up questions on challenges and benefits to students and employers who participated in remote WIL specifically.

WIL is often described as an opportunity to support professionalization as it leads to skill development (e.g., teamwork, problem-solving, communication and professionalism) and employability (Andrews & Ramji, 2020; Jackson, 2014; Freudenberg et al., 2011; NACE, 2021). Our findings show that both students and employers in remote and hybrid WIL experienced more challenges related to professional development than those engaged in in-person WIL. Remote and hybrid WIL students were significantly more likely than in-person students to cite challenges involving “understanding expectations,” “remote management,” “less challenging work” and “knowing where to go for help.” Networking online, finding a diversity of tasks, and mentorship and training in a remote setting were raised as additional challenges.

Among remote WIL students, 66% reported “networking and making connections” as the most significant challenge. Similarly, 31% cited difficulties in accessing mentorship as an impediment to their learning. Students described feelings of social isolation and distance from coworkers and supervisors in remote and hybrid settings. Employers echoed challenges related to communication and connection, mentorship and training. This data reveals a critical shortcoming related to professionalization: both students and employers identified mentorship as a top challenge.

Our data show that WIL format aligns with student satisfaction with their overall experience: 91% of hybrid students and 90% of remote students experienced a challenge during their WIL compared to 74% of in-person students. Hybrid (38%) and in-person students (39%) were significantly more likely to express high satisfaction than remote students (30%). Most students (91%) said they would prefer to have at least some components be in person (i.e., the hybrid option). Just 16% of hybrid and remote students said they would have preferred online-only WIL. While they were generally satisfied with remote WIL, and will continue to offer WIL remotely, employers and administrator preferred some in-person component.

WIL format also aligns with perceptions of skill development, which our findings reveal are strongly associated with satisfaction. Remote and hybrid students were less likely than their in-person peers to assert that they had developed certain skills, particularly those associated with professional development. Students who felt they developed critical-thinking skills were four times more likely to state they had a highly satisfactory WIL experience compared to those who did not (40% versus 11%). Perceptions of skill development also differ between students and employers. Employers reported significantly lower rates of skill development; those with remote WIL students were significantly less likely to report that their students developed professional skills compared to those who with hybrid or in-person students. Skill development during WIL is an area for additional research: only 56% of students in all WIL formats said they recall having a formal assessment from their employers, but students who were assessed were statistically more likely to say they developed interpersonal skills, program-related technical skills and critical-thinking skills than those who were not.

Despite the challenges, all groups reported some benefits of remote WIL placements, particularly flexibility. For remote students, the most significant benefit was ease of access — they were not limited by travel cost or distance to placements. Students also cited flexibility of work hours as a main benefit. Employers and administrators echoed student sentiments about increased flexibility, geographic reach and savings related to transportation. Remote placements introduced opportunities for new global partnerships and loosened hiring restrictions based on location, leading to additional placements. Increased access to WIL is an important theme; administrators reported that remote WIL,

in terms of placements and types of WIL work, also improves access for a broader range of students. Employers and administrators also lauded the value of technological platforms to streamline the WIL application and hiring process.

Such experiences point to both successes and opportunities for improvement and we pose a series of recommendations for institutions and government. WIL's core utility is in developing job readiness; our findings suggest that remote and hybrid WIL, with its benefits of flexibility and accessibility, should still be strengthened to ensure that all students, regardless of WIL type, are developing professionalization skills that can help in their transition to the labour market. Challenges with remote environments can be addressed through better interpersonal relationships and deliberate mentoring as well as embedded formal assessments, ensuring both students and employers see full value in the experience. Capitalizing on the digital nature of remote WIL, stakeholders should continue to use and experiment with technology to facilitate processes and training. Stakeholders should also build upon existing orientation and onboarding processes to ensure that students know how to access the supports they need, as well as opportunities to receive feedback and practice their networking skills.

Introduction

Work-integrated learning (WIL) is a form of experiential learning (EL) — encompassing co-op, internships, field placements and community service — that integrates theoretical and/or formal education with practical learning within a relevant workplace setting. WIL can take place in person, online or through a hybrid model, but always requires a three-way partnership between the student, the postsecondary education (PSE) institution and an employer or host organization.¹

Fundamentally, WIL is designed to build job-readiness and improve labour market outcomes. According to the Ministry of Colleges of Universities (publishing as the Ministry of Advanced Education and Skills Development), EL and WIL allow students to “hit the ground running” when they transition to employment and build “skill development opportunities to improve employability through meaningful tasks, the application of program knowledge, self-assessment and employer evaluation” (MAESD, 2017).

Since 2016, Canada’s federal government has spent over a billion dollars to create additional WIL experiences for PSE students (Government of Canada, 2019). For example, the federally funded Student Work Placement Program and the Innovative Work-Integrated Learning Initiative were developed to create partnerships between employers, students and PSE institutions that create opportunities and provide wage subsidies. Likewise, in 2016, the Government of Ontario commissioned the Highly Skilled Workforce Expert Panel, which recommended that every PSE student should complete “at least one” EL opportunity before graduating. In 2021, Ontario invested \$39.5 million to create additional “research internships and upskilling opportunities” (Government of Ontario, 2021) and included an EL performance metric in its 2020–2025 institutional Strategic Mandate Agreements. The Ontario government introduced several programs to support digital learning directly. These include the Virtual Learning Strategy (VLS), the Postsecondary Education Support Fund, the Ontario Micro-credential Challenge Fund (MCF) and Ontario’s Broadband and Cellular Action Plan.²

¹ For this study and accompanying surveys, we use a definition of WIL developed by Co-operative Education and Work-Integrated Learning Canada (CEWIL Canada): “Work-integrated learning is a form of curricular experiential education that formally integrates a student’s academic studies with quality experiences within a workplace or practice setting. WIL experiences include an engaged partnership of at least an academic institution, a host organization, and a student. WIL can occur at the course or program level and includes the development of student learning objectives and outcomes related to employability, agency, knowledge and skill mobility, and life-long learning” (Approved by CEWIL Canada membership on November 3, 2021).

² Indeed, several projects funded through the VLS and the MCF focus specifically on WIL, such as the “Modular Supports for Underrepresented Individuals to Access Internships and Work-Integrated Learning” project (Queen’s Gazette Communications Staff, 2022).

To be most effective, WIL programs must continually adapt to new technologies and the evolving needs of the labour market. The shift from physical office spaces to remote work locations — a trend that started long before the pandemic — is an example of this type of change (Bowen, 2020; Dean & Campbell, 2020; OECD, 2019; Royal Bank of Canada, 2018; Stackhouse, 2020; Zegwaard et al., 2020). As workplaces shift to hybrid and remote models in greater numbers, WIL programs must follow suit to provide realistic and complementary experiences for students.

Despite the growing prevalence of online WIL placements, little is known about how students experience “remote WIL” (Dean & Campbell, 2020; OECD, 2019).³ One study argues that working remotely is a distinct skill that needs to be learned (Greer & Payne, 2014). Students in other studies report significant challenges to remote WIL that warrant deeper investigation (Bowen & Pennaforte, 2017; Bowen, 2020). Additionally, though much of the literature concentrates on the perceptions of students and graduates, no Canadian studies have explored the experiences of institutions and employers.

To address these gaps in the literature, this study directly engaged all three related stakeholders — students, employers and institutions — through separate surveys on both challenges and lessons learned from experiencing (or administering) remote WIL during the 2020-21 academic year. Survey questions were developed in consultation with experts from Co-operative Education and Work-Integrated Learning Canada (CEWIL Canada) and Experiential and Work-Integrated Learning Ontario (EWO). Student and employer surveys were administered by the Academica Group, and institutional surveys were circulated via EWO. Our unique dataset focuses on stakeholder experiences — highlighting challenges related to students’ professional skill development — in the remote WIL environment. Given the predicted increase in remote working arrangements and its unique skill requirements; the crucial investments made by provincial and federal governments; and the collective understanding that WIL serves as a highly effective bridge between PSE and the workforce, this paper also identifies best practices to inform remote WIL programming in the future.

Literature Review

WIL is commonly considered a value-add for students because of its potential to enhance postgraduate employability — in other words, a means for learners to develop the professional skills and knowledge that will enable them to achieve improved career

³ WIL nomenclature has been studied extensively over the past two decades. To avoid confusion around terminology, we have adopted the term “remote WIL” as recommended in the literature and defined by Wood et al., viz., “a WIL experience focused on the student completing authentic, relevant actual tasks for an organization through a remote connection to the workplace/community” (2020, p. 333).

outcomes and contribute to a healthy economy (McManus & Rook, 2021; Baird & Parayitam, 2019; Ferns et al., 2019; BHER, 2021; Andrews & Ramji, 2020; Billet, 2009).⁴ For example, Martin and Rouleau (2020) analyzed data from the Longitudinal and International Study of Adults (LISA) and found that WIL improves labour market outcomes for graduates by exposing students to real-world experience, building on their skills and providing them with opportunities to develop new skills through placements. Jackson (2013) argues that WIL “is widely considered as a point of difference in developing graduate employability by enhancing students’ transferable skill outcomes, including teamwork, communication, self-management and problem solving” (p. 99).

Falling under the broad umbrella of EL, WIL has been examined in many forms, including apprenticeships (Chatoor et al., 2020), internships (Hora et al., 2020) and co-op (McRae et al., 2019). Thus, much of our knowledge about WIL is based on student- and graduate-based surveys (Sattler & Peters, 2013; Peters et al., 2014), which reveal that many students view a degree alone as not enough to achieve their career goals. The opportunity to engage in relevant practical experiences affects student perceptions of overall learning (Tomlinson, 2008). McManus and Rook (2021) studied the perceptions of students and faculty in business programs with WIL. Students rated “professionalism” — skills related to employability and workplace culture norms — as one of the top benefits of program participation. The desire among students to glean real-world experience in addition to their credential demonstrates WIL’s value as a “point of difference” from conventional PSE experiences and a means of bolstering students’ own sense of skill development (Jackson, 2013).

This and other research enumerate WIL’s many student-based benefits beyond labour market outcomes, which include building network connections, practical knowledge and professional relationship development (McRae & Johnston, 2016; Choy, 2009; Ramji et al., 2021; Stirling et al., 2016; McRae et al., 2019). WIL is not merely about jobs; students who engage with WIL may also develop increased self-efficacy or experience a transformation of personal beliefs and motivations. If the WIL experience is paid, students can reduce the loan debt that may be associated with their studies (Dressler & Kelling, 2011). WIL has also been shown to have benefits for underserved demographic groups, including Indigenous communities (Ramji et al., 2021; Nielsen et al., 2022).

Research indicates that WIL is even more beneficial for students when it is adequately aligned with field of study and when it includes meaningful mentorship relationships. For

⁴ HEQCO notes that evidence to support the notion that WIL translates to more favourable graduate outcomes is not clear. Employability itself is an ambiguous concept (Römgens et al., 2020) and not universally acknowledged to be the sole purview of PSE institutions.

example, Rowe (2015) argues that WIL is most beneficial when it clearly aligns with the student's academic program and long-term career goals. A 2020 study shows that 75% of students who held a job related to their field of study during PSE were employed within three months of graduating, compared to 48% of students with no work experience and 61% of students whose work experiences were unrelated to their field of study (Martin & Rouleau, 2020). Effective mentorship is another critical aspect of the total WIL experience for students and also suggests positive ties to employability. Mentors provide expertise and contribute to social integration of WIL students within the workplace (Stirling et al., 2016). A recent Australian study described the importance of the mentor's commitment to the process (Wang et al., 2022), affirming literature that points to the benefits of strong employer-student relationships.

Students are not the sole beneficiaries of EL or WIL. PSE institutions benefit from WIL through improved rates of student recruitment and retention, as well as enhanced relationships with external stakeholders and communities (Stirling et al., 2016). WIL programming can help ensure that curricula are aligned with employer needs: through community and industry partnerships, institutions receive feedback in real-time about changes in the workplace and student capability, confirming that educational programs are adapting to ongoing labour market shifts (Stirling et al., 2016). Faculty also play an important role in designing, supporting and implementing WIL (Peters, 2012; Sheridan et al., 2021). Course and program developers keep the needs of the labour market top of mind and seed their programming with opportunities for students to develop skills that employers prioritize, such as a strong work ethic, critical thinking, problem-solving, communication skills, collaboration, technical aptitude and leadership (Andrews & Ramji, 2020; NACE, 2021; Baird & Parayitam, 2019). Likewise, through WIL, employers have access to a high-quality employee pipeline, reducing costs and risks during recruitment (BHER, 2021; Stirling et al., 2016). According to Drewery et al. (2020), WIL also provides employers with access to students who bring fresh and innovative ideas to the workplace.

Remote WIL is not a new phenomenon — and accordingly, literature refers increasingly to virtual, remote and online forms of WIL (Pretti et al., 2020; Zegwaard et al., 2020). Online WIL experiences are not totally unfamiliar to students today; for example, Pretti et al. (2020) interviewed students during the early days of pandemic-related closures and found that many experienced a smooth or seamless transition from in-person to remote WIL. In addition, these students frequently enjoyed greater flexibility thanks to the ease of completing work from home, drew from their own initiative and resources to stay motivated, and yet still received adequate support from their supervisors. Students also cited associated benefits of a total or hybrid online workplace, such as relaxed dress codes and the time- and cost-savings from not having to commute into physical offices.

Nevertheless, students have also cited challenges related to remote WIL, and online work more broadly, that must not be overlooked. These include ineffective channels, methods or rates of communication, feelings of disconnect, demotivation and detachment from colleagues, and an inability to sense the overall goal of a project or organization, often stemming from poorly integrated remote management (Bowen & Pennaforte, 2017; Bowen, 2020). Less is known about the benefits and challenges of remote WIL for employers and institutions.

Research Questions and Methodology

This report shares lessons from student, employer and institutional experiences with remote WIL during the 2020-21 academic year. It was guided by the following research questions: What challenges did students, administrators and employers experience in the remote WIL environment in fall 2020? And what lessons, or best practices, emerged from the transition to remote WIL that can inform programming in the future?

In consultation with CEWIL and EWO, HEQCO developed three separate surveys. The student and employer surveys were administered by the Academica Group in fall 2021 and returned a sample of 312 students and 109 industry representatives. The WIL Administrator (or Institutional) Survey was circulated to staff via the EWO listserv and via HEQCO's social media channels between November 2021 and January 2022. This survey had 111 responses. We used a series of screening questions to ensure respondents had been involved with WIL during the 2020-21 academic year. The student survey also included a section on demographic characteristics. HEQCO staff conducted data analysis using STATA, Excel and NVivo for descriptive statistics and coding of qualitative responses to open-ended questions.

We asked respondents general questions about their institution, workplace type, sector type, academic programs and format of their WIL program (i.e., whether WIL was remote, hybrid or in-person). Remote WIL refers to students whose WIL placements during the survey period were entirely remote; hybrid refers to students whose placements included a mix of remote and in-person components; and in-person refers to placements that were entirely in-person. To focus on digital workplaces, we posed follow-up questions on challenges and benefits to students and employers who participated in remote WIL specifically. We note that sample sizes did not allow for holding variables constant and we acknowledge it is possible that there are other effects at play that would account for some of the descriptive differences observed in this report.

Tables 1, 2 and 3 provide demographic, sector and professional profiles of the respondents to our three surveys.

Table 1

Characteristics of Student Sample

Characteristic	% of Respondents	# of Respondents
Women	62	191
First-generation	22	67
Black, Indigenous, or Person of Colour	60	188
LGBTQAI+	21	66
Identifies as having a disability	15	48
College	37	114
University	63	196

Note: This table breaks down the demographic characteristics of our student sample, providing the percentage and total number of respondents who identified as women; first-generation; Black, Indigenous, or a Person of Colour; LGBTQAI+; as having a disability; and if they attended college or university. First-generation students are students who are the first in their family to attend a postsecondary institution.

Table 2

Characteristics of WIL Employer Sample

Characteristic	% of Respondents	# of Respondents
Private Sector	63	69
Public Sector	37	40
Executive or Leadership Position	45	49
Mid-management Position	40	44
Staff Position	15	14
Organization has <50 employees	17	18
Organization has 51–499 employees	49	54
Organization has >500 employees	34	37
Education Sector	10	11
Manufacturing Sector	10	11
Professional, Scientific or Technology Sector	17	18
Construction Sector	11	12

Note: This table breaks down the professional fields and roles of our WIL employer sample, providing the percentage and total number of respondents who worked in the private vs. public sector; in executive, leadership, mid-management or staff positions; in the education, manufacturing, professional, scientific or

technological, or construction sectors; and whether their organization employed >50, 51–499, or >500 employees.

Table 3

Characteristics of WIL Administrator Sample

Characteristic	% of Respondents	# of Respondents
Colleges	44	52
University	56	67
Central Ontario	53	59
Southwestern Ontario	37	41
Eastern Ontario	6	7
Northern Ontario	4	4

Note: This table breaks down our WIL administrator sample by institution (college or university) and by geographic region (Central, Southwestern, Eastern or Northern Ontario) by percentage and total number of respondents.

Findings and Discussion

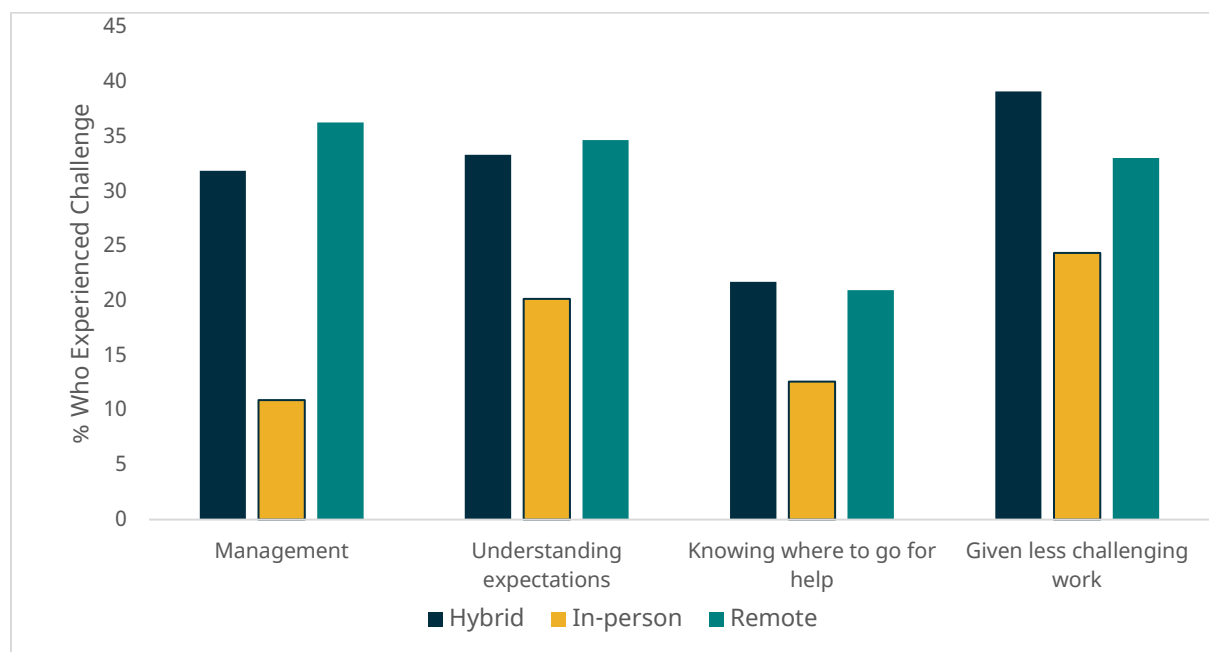
WIL is often described as an opportunity to support professionalization as it leads to skill development (such as teamwork, problem-solving, communication and professionalism) and employability (Andrews & Ramji, 2020; Jackson, 2014; Freudenberg et al., 2011; NACE, 2021). Our findings show that both students and employers in remote and hybrid WIL experienced more challenges related to students' professional development compared to those engaged in in-person WIL. Despite these challenges, stakeholders identified benefits of remote WIL and offered lessons that may serve to address gaps and obstacles.

The Challenges of Remote and Hybrid WIL

Remote and hybrid WIL participants (both employers and students) reported challenges related to professional development. We asked students taking part in all forms of WIL to select which challenges they experienced. Figure 1 provides a summary of the most commonly reported student challenges, separated by hybrid, in-person and remote experiences.

Figure 1

Main Student Challenges by WIL Format



Note: This figure presents the percentage of students in hybrid, in-person and remote WIL environments who experienced challenges involving remote management, understanding expectations, knowing where to go for help, and being given less challenging work.

Remote and hybrid WIL students were significantly more likely than in-person students to cite challenges involving “understanding expectations,” “management,” “less challenging work” and “knowing where to go for help.” The most dramatic difference between in-person and remote and hybrid students lies in their experience of management; over 35% of remote WIL students cited this as a challenge compared to just over 10% of in-person students. This is a troubling result, as literature reinforces the importance of alignment between student and practitioner, or employee and employer expectations (Wenrich et al., 2010). In their analysis of WIL and employability, Jackson (2013) emphasizes the importance of having a strong student-supervisor relationship, authentic practice opportunities and a performance review.

Literature also illustrates the value of meaningful and intentional tasks for students during WIL. Smith (2012) recommends that WIL opportunities include authentic learning activities aligned with learning objectives and support in order to help students develop professional skills and competencies. For example, 40% of student respondents in hybrid WIL and 33% in remote WIL environments reported being “given less challenging work” — a concerning result given the link between meaningful activities and student outcomes.

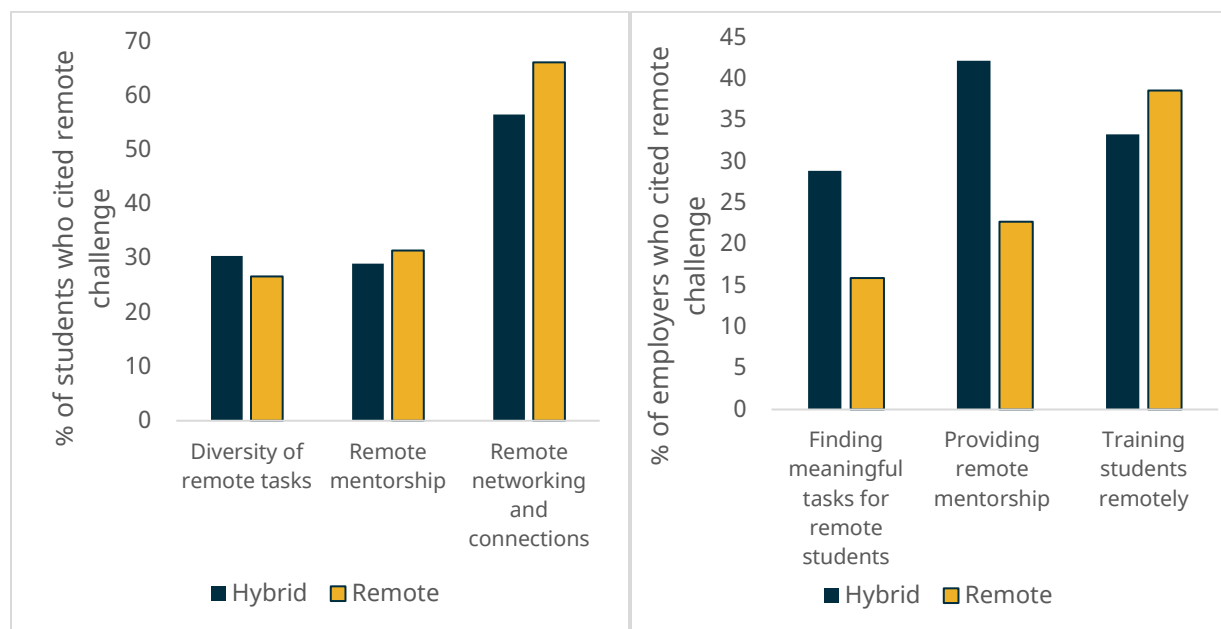


In their global analysis of WIL, Smith et al. (2018) state that employability itself is a process, not an outcome. As such, these challenges are likely interrelated and may compound. For example, challenges related to management may mean students misunderstand employers' expectations; misunderstanding expectations may impact how and when students reach out for help. Students who are given less challenging work may not be prompted to connect with management, period, or may misunderstand expectations.

HEQCO also asked students and employers who participated in hybrid or remote WIL questions about challenges that would only be present in WIL with a remote component, such as networking online, finding a diversity of tasks in a virtual environment, and mentorship and training in a remote setting. As such, only students and employers with a remote component to their WIL are represented in the following results. Figure 2 presents the most common challenges that students (left) and employers (right) experienced.

Figure 2

Main Student and Employer Remote-specific Challenges



Note: Figure 2 (left) presents which challenges were experienced by **students** participating in hybrid and remote WIL environments, by percentage, involving diversity of tasks, receiving mentorship, and networking or making connections in an online environment. Figure 2 (right) presents the main challenges experienced by **employers** participating in hybrid and remote WIL environments, by percentage, involving finding meaningful tasks for students, providing mentorship and training students.



Students and employers pointed to similar remote-specific challenges. Students reported “remote networking and making connections” as the most significant remote-specific challenge; 66% of remote WIL students pointed to the challenge of networking or making connections at their remote WIL placement. Similarly, 31% cited difficulties in accessing remote mentorship as an impediment to their learning. In qualitative survey responses, students described feelings of social isolation and distance from coworkers and supervisors in both remote and hybrid settings. Employers echoed challenges related to communication and connection, especially with regard to mentorship and training.

Challenges with communication and connection are a critical shortcoming. Baird & Parayitam (2019) note that interpersonal skills and teamwork are among those high in demand by employers. In a study from the onset of the pandemic, WIL students cited the importance of socialization, productivity and meaningful work in the remote context (Pretti et al., 2020). Developing proactive approaches to address any lack of social connectivity will be key for improving the remote WIL experience and will have an impact on labour market outcomes, especially for new graduates.

Hybrid and remote students as well as employers identified mentorship — which is closely related with networking — as a top challenge. Employers also cited difficulties with the related concept of training in a remote environment. As we know from the literature, intentional mentorship can help set clearer expectations between employers and employees and is associated with higher satisfaction with work experiences (Eby et al., 2008; Stirling et al., 2016; Wang et al., 2022). Two recent studies have explored mentoring in the remote context and argue for more effective use of digital tools (Kaufman et al., 2022; Tetzlaff et al., 2022). Kaufman et al. (2021) also noted that when digital tools are effectively leveraged, digital mentoring can be effective in supporting mental health, and is particularly impactful for students who struggle with mental health challenges and those with disabilities.

Students and employers in hybrid environments cited “finding meaningful tasks” and a lack of “diversity of tasks” as challenges in higher numbers than those in fully remote settings. Although further research is required to understand the differences between hybrid and remote placements, we can infer that the dual nature of the engagement may put additional pressure on students and employers to adjust to shifting environments. These challenges reflect another observation in our data related to motivation. A significant proportion of students in all three types of WIL (remote, hybrid and in person) reported challenges with staying motivated (75%, 65% and 48%, respectively), but challenges related to motivation were more pronounced in the remote and hybrid environments. Motivation and self-management are important for a student’s professional development and subsequent employability. In their study of employability skills for STEM students, for example, McGunagle and Zizka (2020) surveyed employers on

the skills they feel most impact employability of new graduates. Self-motivation was among the five highest-ranked skills, alongside related skills such as being proactive.

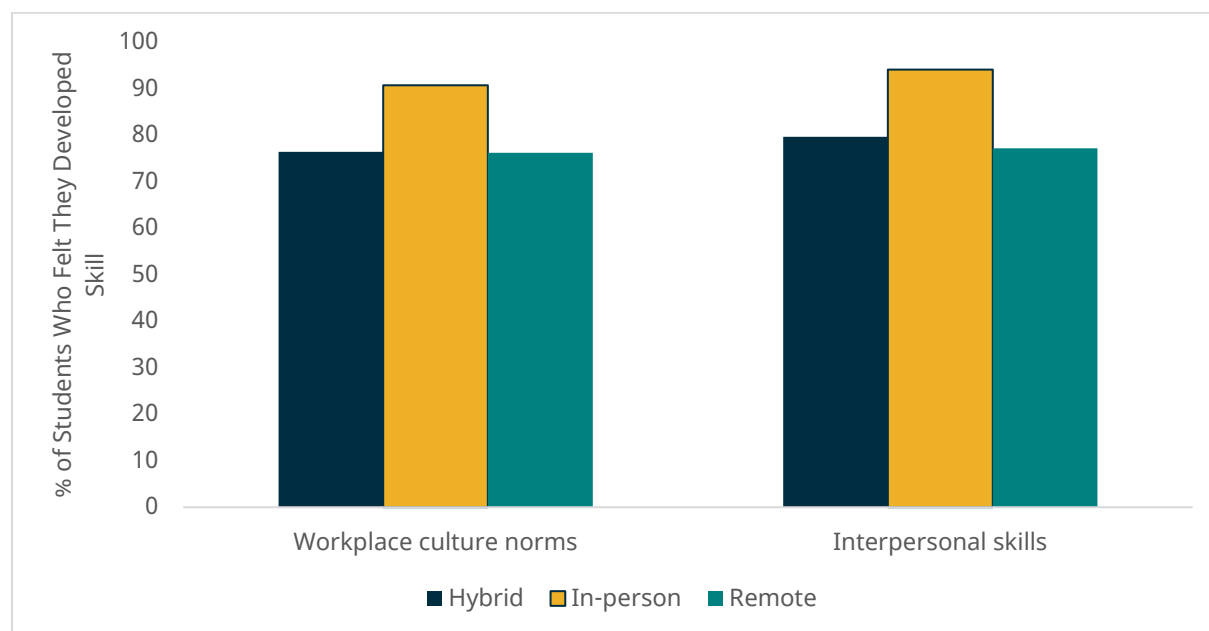
We see a similar pattern across the three WIL formats when examining reports of satisfaction: 91% of hybrid students and 90% of remote students experienced some type of challenge during their WIL compared to 74% of in-person students. Hybrid (38%) and in-person students (39%) were significantly more likely to express high satisfaction in their WIL experience than remote students (30%). Most students (91%) said they would prefer to have at least some component of their WIL be in person (i.e., the hybrid option). Just 16% of hybrid and remote students said they would have preferred an online-only WIL. Responses from employers and WIL administrators reveal that while they were generally satisfied with remote WIL and will continue to offer WIL remotely in the future, they would prefer some in-person component.

Student Perceptions of Skill Development

Remote and hybrid students were significantly less likely than their in-person peers to assert that they had developed certain skills, particularly those associated with professional development. Figure 3 presents student perceptions of skill development by WIL format.

Figure 3

Student Perspectives of Skill Development by WIL Format



Note: This figure shows the percentage of students by WIL format who believed they developed workplace culture and interpersonal skills during 2020-21 academic year.



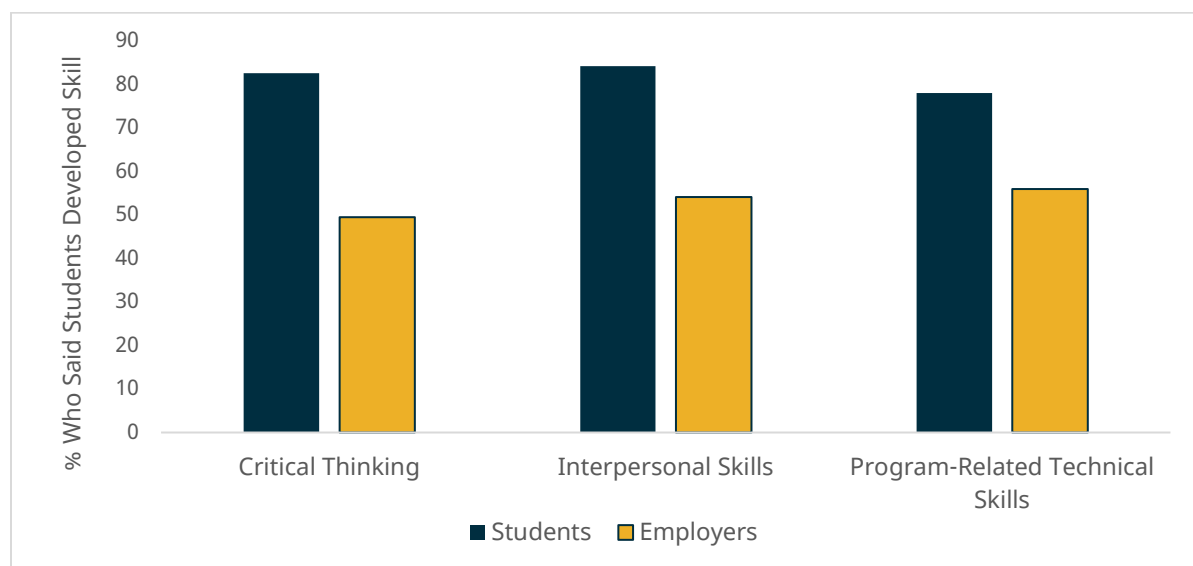
Workplace culture norms and interpersonal skills are tied to professional development and are ‘soft skills’ that many employers value (McGunagle & Zizka, 2020; Fleming et al., 2009). However, recent literature describes the association between remote learning and challenges with social connection and interpersonal relationships (Ferri et al., 2020; Gonzales-Ramirez et al., 2021; Van Zoonen & Sivunen, 2022; Elshaiekh et al., 2018; Wang et al., 2022). Our findings echo these sentiments: hybrid and remote students were significantly less likely to say they developed skills related to workplace culture and interpersonal skills than their in-person peers. While these results indicate that most students believe they are developing critical skills, there is room for improvement to close the gap between students in each form of WIL. To do so, WIL employers should facilitate regular opportunities for their remote/hybrid WIL students to better integrate into the workplace culture. The thoughtful use of digital tools to support formal and informal networking would also help students develop interpersonal relationships with their colleagues (see page 19 for more thorough recommendations).

Our findings reveal that students’ perceptions of skill development are strongly associated with higher satisfaction with their WIL experience. Students who felt they developed critical-thinking skills were four times more likely to state they had a highly satisfactory WIL experience compared to those who did not (40% versus 11%). For skill development related to workplace norms, these numbers were 40% versus 16%, and for interpersonal skill development, these numbers were 39% versus 14%. In qualitative survey responses, some remote-only students expressed concern about the lack of hands-on experience, which left them feeling inadequately prepared for future work. One student noted: “It will take longer [for me] to get into the career I want” because there was no in-person experience.” Concerns such as these may have influenced students’ overall satisfaction.

We asked both students and employers to rate the students’ skill development. Perceptions differ among students involved in different forms of WIL, and between students and employers. Figure 4 reveals that employers reported significantly lower rates of skill development than students across all WIL formats.

Figure 4

Comparing Student and Employer Perceptions of Skill Development (All WIL Formats)



Note: This figure shows the percentage of students and employers across all WIL formats who believed that critical thinking, interpersonal and program-related technical skills were developed by students during the 2020-21 academic year.

In Canada, WIL is often invoked as strategy to mitigate a perceived gap between employer needs and graduate skill level (Conference Board of Canada, n.d.; Stanford, 2020). Our study reveals a significant perceptual gap between employers and students: all students surveyed (especially remote students) reported a more positive perception of their skill development compared to employers. Note that this is neither unique to WIL nor an unreported phenomenon. The National Association of Colleges and Employers found similar gaps in perceptions of several skills between students and employers in their 2017 Job Outlook Survey. Yu & Churyk (2013) also conducted a study on student and employer perceptions of several skills and found a similar gap in perception where students rated themselves significantly higher than employers.

This discrepancy may be related to the fact that only 56% of students in all WIL formats said they remember having a formal assessment during their WIL experience. Students who said they received formal assessments were statistically more likely to say they developed interpersonal skills, program-related technical skills and critical-thinking skills compared to those who were not assessed. The Ontario government's checklist for EL (which includes WIL) indicates that assessment should be part of every EL opportunity. Formal assessments are critical moments for students to identify and reflect upon their skill development and motivate them to improve (Sharma et al., 2016). Assessment during WIL can help students practice ongoing self-reflection, which can contribute to



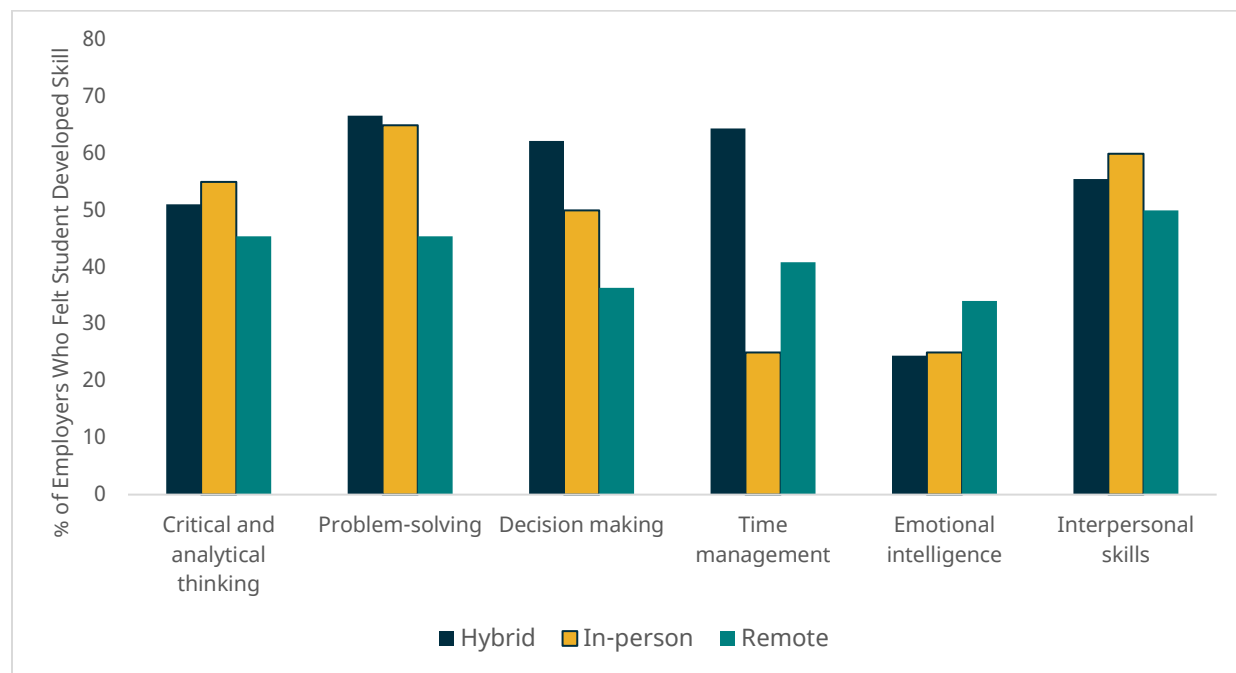
incremental improvements in skills and competencies over the course of their education (Frank et al., 2018). Similarly, WIL employers and administrators can use assessment data to improve their program delivery with more systematic benchmarks and reliable evaluation criteria (Frank et al., 2018). Regular and scheduled check-ins to evaluate students' progress could also help develop employers' perceptions of skill acquisition and performance for WIL students more systematically.

Perhaps the most consequential argument for assessment during WIL is the impact it has on employability and professional development. Multiple studies have pointed to the role of assessment in successful skill development and subsequent labour market readiness. Jackson (2013) specifically speaks to assessing generic skills as opposed to exclusively disciplinary content. Jaekel et al. (2011) provide more detail on what these assessments might look like, suggesting that students should be constantly evaluated through multiple methods so that they can reflect on their performance and adjust as needed. Examples include evaluation based on structured activities and faculty feedback, evaluations based on employer feedback, and student self-reflections. Self-reflection and self-assessment have both been demonstrated to influence lifelong learning skills and professional competence (Nisbet et al., 2022).

Employers with remote WIL students were significantly less likely to report that students developed important professional skills compared to those who employed hybrid or in-person WIL students. Figure 5 presents employer perspectives by format across a range of skills, including critical thinking, problem-solving, decision making, time management, emotional intelligence and interpersonal.

Figure 5

Employer Perspectives of Student Skill Development by WIL Format



Note: This figure shows the percentage of employers who believed that students across hybrid, in-person and remote environments developed critical and analytical thinking, problem-solving, decision making, time management, emotional intelligence and interpersonal skills during the 2020-21 academic year.

Challenges in the remote environment around understanding expectations (from the students' perspective) and training students (from the employers') likely impact these perceptions. The lack of hands-on experience and face-to-face interactions in a purely remote environment also likely influenced how employers perceived students' skill development. Interestingly, although hybrid students were less likely to say they developed several skills during WIL compared to in-person students, employers rated their skill development roughly on par with in-person students, and in some cases, better (such as with problem-solving, decision making and time management). It is perhaps not surprising that employers rated hybrid students highly for their time management, as their positions require working in and adapting to multiple work environments. Institutions can capitalize on the benefits of remote and hybrid WIL while maintaining quality and satisfaction, but they must work with employers to arrange structured lines of communication, which can help WIL students better understand expectations. Institutions can also prepare and coach WIL students to seek guidance and clarify instruction from their employer when necessary.



While we cannot explain why remote students were rated significantly higher than their peers on emotional intelligence, the increased importance of this skill in the remote work environment is reflected in the media and literature (Wittmer & Hopkins, 2022). A growing body of literature demonstrates that emotional intelligence is a critical factor to success in a remote environment (Semenets-Orlova et al., 2021; Stubbeman, 2021; Warrier et al., 2021) and may help explain why employers rate remote students more highly. Employers may be more cognizant and critical of this skill's development in general, and remote students likely need to adapt to develop this skill more than their peers.

Literature on the convergence and divergence between student and employer perceptions of skill development — specifically in the remote and hybrid contexts — is minimal. Looking at skill development in practical learning courses, however, provides some context. Two studies looking at remote and in-person delivery in practical STEM courses found that students who had a positive experience online would still have preferred a hands-on or in-person component, echoing the responses from our sample. But both studies also found that perceptions of experience and skill development were relatively equal between remote and in-person students (Hoffman & Elmi, 2021; Brockman et al., 2020). What is unclear is why; neither study was able to determine exactly what features contribute to student success, highlighting the complexity of learning and skill development. It is possible that the parity of skill development observed is related to the practical nature of the subject matter — students were given meaningful and intentional tasks to develop specific skills. Sun and Chen (2016) also argue that remote learning benefits from a strong sense of community among learners and strong course design that motivates interaction between learners and instructors, which may have been prevalent in practical STEM courses. These possible answers support our findings about the importance of interpersonal connection, having meaningful tasks and formal assessment in WIL.

Employers and students agree that WIL participants are developing important skills related to employability, but our data reveal important differences in perception, particularly within remote and hybrid placements. This gap presents an opportunity for WIL stakeholders to implement remote- and hybrid-friendly practices that ensure that all students — regardless of WIL format — can fully benefit from the experience.

The Benefits of Remote WIL

Despite the challenges that stakeholders described, students, employers and administrators value the flexibility of remote WIL placements. For students, the most significant benefit of the remote environment was in terms of access — in other words, in not being limited (in terms of travel time or costs) by distance to WIL placements. Students also cited flexibility of work hours as one of the main benefits of the experience.

The inherent flexibility of remote WIL has ramifications for travel as well: if students can avoid costs associated with travelling and moving to a new country, international opportunities are far more accessible. In a study of Australian students who participated in international EL, Potts (2020) reported positive overall benefits, including on the perceived impact on students' labour market outcomes. Potts also emphasized that institutions should consider expanding the development of international internships and EL opportunities to allow more students from underrepresented backgrounds to reap these benefits as well.

Both employers and administrators echoed student sentiments on increased flexibility, geographic reach and savings related to transportation. Both groups reported that they were able to loosen hiring restrictions based on location, which led to additional placements. Remote placements also introduced opportunities for new global partnerships. Administrators reported that remote WIL, in terms of placements and types of WIL work, also improves access for a broader range of students. Seventy-one percent of WIL administrators mentioned that offering remote WIL opportunities positions their institution to serve new student markets.

Employers and administrators noted that the use of technological platforms streamlined the WIL application and hiring process. Digital tools such as Zoom and Microsoft Teams facilitated the interview, hiring, and orientation and training sessions necessary for WIL roles. Employers were also enthusiastic about the development of online tools and resources to further streamline the process, including online training guides and virtual and group interviews, and enjoyed how the application process of WIL became more efficient.

These groups also reiterated the importance of flexibility and emphasized the opportunities for students and employees to improve their work-life balance. Advantages related to flexibility are well-covered in the literature related to remote work, and our survey data expands these findings to include WIL (Bowen, 2020; Gajendran et al., 2015; Perry et al., 2018; Pretti et al., 2020).

Remote and hybrid WIL create opportunities for students who are unable to participate in in-person-only WIL and facilitate the development of professional skills that are preparing students for the future of work. On the other hand, students in remote and hybrid WIL were more likely to experience challenges; additionally, these students were rated lower in their skill development than those who completed in-person WIL. Our data illustrates this as a trade-off; remote WIL increases access and helps students develop workplace skills, but there remains some work to do to ensure that students and employers in those placements receive full value. To be clear, expanded access to WIL via remote and hybrid opportunities that are suboptimal in terms of either skill development or student

experience is insufficient. Because all indicators point to continued expansion of remote work and learning in our society, employers, institutions and students should think about ways to improve the quality of remote and hybrid WIL and ensure they provide adequate skill development.

Conclusions and Recommendations

The experiences of students, administrators and employers in remote WIL contexts during the 2020-21 academic year point to many successes — as well as many opportunities for improvement. Employers and administrators are clearly optimistic about the future of WIL, echoing the positive orientation of the literature (Kay et al., 2020; Zegwaard et al., 2020). In its 2019 Future of Work Employment Outlook (2019), the OECD noted that digitization and globalization are only expected to proliferate. They also state, however, that quality of work is at risk if the right policies and systems are not put into place and used to their full potential.

The overarching goal of WIL is to provide students with meaningful, relevant work experience that facilitates skill development and supports the individual's transition to the labour market. Regardless of format, this is only possible when the WIL is of high quality, as specified in Ontario's guiding principles for EL. Creating high-quality placements is a shared responsibility, and our data points to ways that stakeholders can collaborate to ensure that students are able to glean the full benefit of WIL. To that end, HEQCO recommends that employers, institutions and students consider the following to ensure that remote and hybrid WIL helps students develop essential skills and competencies they will need for success in the labour market.

- Employers should expand their onboarding activities for WIL students and implement practices to encourage the development of professional and interpersonal skills. Formal mentorship, in conjunction with regular, structured assessment, will help students and their managers set and clarify performance expectations. Networking opportunities and regular check-ins will allow WIL students to talk with their manager and colleagues about their learning goals and practice their professional communication and interpersonal skills. Initiatives such as an in-house survey would provide employers with useful information about students' development and provide opportunities to redirect, if necessary. These employer-led initiatives can complement institutional efforts to set students up for a productive placement.
- Likewise, institutions can build upon existing orientation materials to ensure WIL students are prepared to be successful, such as encouraging structured goal setting and making sure that information about available supports is easy to find

and use. EL offices across Ontario are already doing this important work, and there are opportunities for institutions to share tools, strategies and initiatives through networks such as EWO and CEWIL, as well as through public resources such as HEQCO's [*Practical Guide for Work-integrated Learning*](#).

- Students themselves are part of this chain of accountability. To experience the full benefits of their WIL experience, they must complete orientation and onboarding activities, set learning goals for themselves, monitor their progress and take advantage of opportunities to network with and learn from colleagues and mentors. Students must also anticipate potential challenges and actively seek out supports from employers and institutions when needed.

With clarified accountabilities, all parties — institutions, employers and students — will be better positioned to design WIL opportunities that facilitate learning through the integration of theory and practice and help students develop workplace-relevant skills regardless of whether the experiences are remote, hybrid or in-person.

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