U.S. employer response to COVID-19: Actions taken and future expectations of virtual work-integrated learning

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The sudden termination of nearly 40% of U.S. WIL experiences during the summer of 2020 caused employers to quickly adapt to virtual WIL experiences. What employers learned from these adjustments to their traditional WIL practices and perceptions of the advantages and disadvantages of virtual experiences form the basis of this paper. Over 350 employers provided comments to a special set of questions pertaining to virtual WIL experiences in their organizations. A strong virtual experience required constant communicate, set schedules, structured workflow, and prepared supervisors to handle remote student employees. The advantages included more innovative practices, safe experiences, and cost savings for both students and the organization. Virtual experiences present challenges, including organizational enculturation, loss of serendipitous connections, and inability to provide hands-on learning opportunities. For virtual experiences to play a more prominent role, issues around tacit knowledge acquisition, trust building, serendipity, and mentoring need to be addressed.

Keywords: Internships, COVID-19, college recruiting, employer perceptions

COVID-19 struck unexpectedly, a truly highly improbable black swan event (Taleb, 2007; Valeras, 2020). Employers in the U.S. were in the middle of a very active recruiting season for full-time employees and work-integrated learning (WIL) placements (internships in the U.S.) in the fall of 2019 and winter of 2020. While students enrolled in full-time study needed to adjust quickly to digital technologies in delivery of course instruction in the spring of 2020, organizations took longer in adapting their recruiting and human resource strategies until they better understood the pandemic's impact on their workforce. However, the eventual closure of university campuses and several firms and establishments sent the prospects of students seeking WIL experiences spiraling downwards. How employers responded, adjusted their WIL programs, and perceived alternatives for the future were pressing questions for WIL and campus career advisors. Essentially the world went virtual.

Virtual or e-Internships are not new, taking shape with the advances in digital technologies and the need to provide experiential experiences to the increasing number of students enrolled in online education over the past decade (Allen & Seaman, 2015, 2017; Seaman et al., 2018). Nevertheless, most employers and career professionals have little understanding of or experience with this mode of WIL delivery. Thus, the response to COVID-19 offers an opportunity not only to see the extent of adjustments made to WIL programs, but to gain insights into what employers learned from the shift to e-internships during the summer of 2020 and the prospects for an expanded role of e-internships as the workplace shifts to more remote work.

REVIEW OF RELEVANT LITERATURE

During a remote WIL experience, students apply and perform applicable professional duties for an organization through a remote connection to the employer, where the student and the employer are geographically separated (Wood et al., 2020). This WIL format is relatively new, and a body of scholarly work is limited but growing. Available studies focus on faculty and university WIL practitioners'

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efforts to integrate virtual experiences into their curriculum or accommodate students who face challenges in participating in a traditional WIL experience. In 2012, Franks and Oliver leveraged virtual technologies to provide students with experiential learning opportunities in digital curation, a field highly constrained by the physical location of potential internship sites. They overcame the distance problem and enhanced international collaboration among dispersed libraries. Chesler et al. (2015) incorporated real engineering problems through virtual connections to external university partners to handle large classes of first-year engineering students. They reported providing authentic experiences that solved problems collaboratively, assessed engineering thinking, and stimulated the students' interest and motivation in engineering. Bayerlein (2015) and Arastoopour et al. (2016) pursued similar plans to revitalize their undergraduate curriculum in accounting and engineering, respectively.

Virtual internships strengthen online degree programs by providing critical experiences that employers often complain are absent in online programs. For example, Conroy and Khan (2009) integrated a year-long virtual project in their online M.A. program in biotechnology, where students worked with small biotechnology companies. In addition, Carlson et al. (2001) argued early for online education instructors to incorporate meaningful virtual experiences, with Theelen et al. (2020) laying out a strong case for virtual teacher preservice experience. Another area where virtual WIL experiences hold potential is international experiences (Bruhn, 2016; Kristensen et al., 2007; Marr, 2019; Vriens et al., 2013), as international students can receive work-based experiences outside their home country.

Jeske and Axtell (2014) address the virtual internship issue through studies that offer student and employer perceptions of virtual WIL experiences. Jeske and Axtell (2014) employ student insights to lay the foundation for meaningful virtual experiences. Their 2016 study describes the requirements for running a successful e-internship (Jeske & Axtell, 2016). These requirements include providing a meaningful experience that develops skills, having managers with the appropriate technical, interpersonal, and time management skills to deliver that experience, and being supported by a strong organizational commitment. Subsequently, they focused on start-ups and small organizations to argue the merits of virtual internships, including lower wage costs and willingness for students to volunteer (Jeske & Axtell, 2016, 2019), finding that staff commitment and their ability to manage virtual interns are critical to success (Jeske & Axtell, 2018). Bayerlein and Jeske (2018) built on earlier findings, advocating for increasing diverse talent through e-internships. More recently, Jeske and Linehan (2020) examined the role of mentoring and skill development in e-internships based on interviews with 158 students. The longer the WIL experience, the likelihood of having a mentor increases, with mentors assisting in developing communication skills and thinking strategically.

The response to COVID-19 by university faculty and WIL practitioners occurred quickly in their attempts to provide students with continuity and assurance that experiential education requirements would be available. Bilsland et al. (2020), in a recent contribution to the *International Journal of Work-Integrated Learning's* special issue on post COVID-19 response, illustrate actions to facilitate virtual practices in the industry sector most severely impacted by COVID-19, the hospitality industry. In comparing three countries (Vietnam, Cambodia, and Australia) regarding the COVID-19 situation, the authors discussed solid virtual practices and proposed frameworks for advancing virtual WIL. Unfortunately, none of the articles in this special issue addressed the employer perceptions of COVID-19 and the impact on their WIL programs in any depth.

Jeske and Axtell (2016, 2019) examined employer perceptions and provided insight into virtual organizational programs that interfaced with students. Unfortunately, their small sample failed to capture the sudden and rapid increase in employers adjusting to virtual programmatic formats in

response to COVID-19. The upheaval caused by COVID-19 provides a moment to see what employers learned from quickly realigning their WIL programs to digital, distance-mediated platforms and their perceptions of the advantages and disadvantages of this virtual option. We pursued employer perceptions on these topics as part of our annual study of the labor market outlook for new graduates through a series of open-ended questions. We elected to employ open-ended options because of the sudden, rapid adoption of virtual options and felt scaled-based queries may miss some of the steps organizations took as they introduced their virtual WIL experiences. This paper shares employer insights, discusses critical weaknesses in the virtual format, and points to future growth opportunities for the virtual WIL.

METHODS

Each fall, the Collegiate Employment Research Institute (CERI) at Michigan State University (MSU) queries employers seeking to fill full-time positions and WIL assignments with graduating university students and undergraduates. MSU's Institutional Review Board designates *Recruiting Trends* as non-human research as the project captures no individual identifiers or personal information. Nevertheless, all human subject protocols are followed, including voluntary participation, consent, and confidentiality. Approximately 100 university career centers send letters to employer partners requesting their participation in the *Trends* survey. The letter directs recruiting managers and internship and co-op recruiting leaders to the Qualtrics survey, open from late August through early September.

The 2020-2021 recruiting season faced a high degree of uncertainty due to the closure of campuses and the rapid shift to digital technologies. Therefore, we kept the survey purposely short, focusing our inquiry on understanding the adjustments made in recruiting since the onset of COVID-19 the previous spring, and the employer's intentions toward hiring for full-time and WIL positions. With little information available in the literature from the employer perspective, several open-ended questions served to gain insights from employers offering virtual internships during the summer on two topics: (1) what their organization learned on structuring virtual experiences and (2) the perceived organizational advantages and disadvantages in providing virtual WIL experiences. Open-ended questions were analyzed using the NVivo software program to develop a comprehensive list of coding themes. NVivo assists in managing and analyzing data for similarities or differences, ultimately identifying themes, and developing findings from collected data (Wong, 2008).

FINDINGS

More than 3000 recruiting managers and internship and co-op leaders attempted the survey, with 2408 providing some information about their hiring situation. However, only 1036 employers could provide complete recruiting information during the data collection phase due to the high level of economic uncertainty that clouded the short-range planning for WIL and full-time recruiting. Fifty-four percent of organizational representatives reported hiring responsibilities for both full-time and WIL positions. Another 6% were solely responsible for WIL recruiting, the lowest level since the 2008-2010 recession period.

The respondents represent the rich diversity of companies and organizations seeking new university talent. Sixty-four percent represented organizations with fewer than five-hundred employees and thirty-six percent with more than five-hundred employees. Every primary industrial sector (based on the North American Industrial Code) contributed information to this survey. Sectors providing the highest number of respondents included Business, Professional, and Scientific Services (BPSS) Construction,

Educational Services, Finance and Insurance Services, Healthcare and Social Assistance, and Manufacturing.

Immediate Response to the Pandemic Shutdown

The rapid closure of university campuses and many organizations caught recruiting teams unprepared and incapable of adapting quickly to the emerging pandemic in the spring of 2020. For organizations seeking candidates to fill full-time positions, approximately 25% ceased recruiting, pulled job posting from university employer systems, and, albeit a few, withdrew offers already extended. However, the impact on work-integrated learning opportunities proved much more severe. Slightly more than 40% of respondents curtailed their WIL recruiting for summer 2020, pulling positions and reneging on extended offers. An additional 27% offered placements but significantly reduced the number they could accommodate. Interestingly, employers with co-op programs favored keeping these positions viable for summer WIL experiences unless forced to close their facilities (CERI, 2020).

The damage to WIL experiences extended more broadly as clinical rotations in health settings, practicums for counseling certification, and other discipline-based professional practices were placed on hiatus due to pressures in hospitals and urgent care facilities. Students training to gain their primary or secondary teaching credentials shifted quickly to virtual instruction, eventually aiding their transition into virtual classrooms in the fall. In addition to pulling some students out of WIL experiences during mid-spring term 2020, universities canceled credit-bearing WIL and work programs for the summer and fall of 2020, further exacerbating the erosion of WIL opportunities. *Trends* responses indicated that although employers planned to provide internships during summer 2020, parents pulled students out of their WIL programs over health and safety concerns.

WIL opportunities improved in the fall of 2020, with employers quickly expanding virtual WIL experiences and universities aligning programs that required practical experience. Employers gained insights from piloting virtual scenarios over the summer, which allowed them to identify a broader range of possible WIL experiences by October 2020 (CERI, 2020). Other employers had sufficient time to refit their internship needs, adapt their technologies, and prepare their WIL supervisors. In several small follow-up conversations with select groups, employers laid out expectations for 2021. Unless they had to have their WIL students on-site, they planned to remain in virtual mode through the summer of 2021. One hiring manager stated, "It is much easier to shift from virtual to on-site WIL experiences than vice versa." With the release and success of COVID-19 vaccines, in more recent conversations, employers reported a re-evaluation: expecting now to host most of their student hires on-site for the summer of 2021.

Making a Viable Virtual Experience

Employers who offered virtual experiences, clustered in computer development, software, and I.T. sectors, finance and insurance firms, and organizations with online customer service operations. These employers expressed an urgent need to ramp up logistic distribution capabilities. Less likely to shift to virtual WIL experiences were production-based activities in agriculture, oil & gas, construction, and manufacturing, where locational-based learning is critical to WIL success. With many respondents attempting virtual WIL experiences for the first time in summer 2020, employers shared what they had learned about structuring remote work experiences for students. Approximately 350 organizational representatives provided over 400 comments that through analysis yielded about 30 theme categories. These themes emphasized the building blocks of a successful virtual experience. The following seven themes were most frequently commented upon by organizational representatives.

Communicate (17%)

Employers stressed the need for increased communication as the most critical factor in providing a virtual WIL experience. One respondent summed up, "3 words: communication, communication, communication" (Electronics -- wholesale, large organization). Clear, consistent, and constant communication between students, supervisors, and teams served as the basic building block. "Managers had to more intentional about regular communication" (Professional, Business & Scientific Services, small organization). "Our newer folks needed a lot more coaching than usual on how to ask for help, how to let people know what they were up to, how to get unblocked" (Professional, Business & Scientific Services, small organization). "Communication and connection were really important to keeping virtual interns engaged" (Oil & Gas, very large organization).

Establish clear expectations (4%)

Since the virtual experience was new for many supervisors, organizations set well-defined expectations on roles and performance. Organizations also clarified expectations for their students, setting forth clear objectives for the remote WIL experience. As a result, students also received clear guidelines on performing remote work. "We had to work much more closely with our WIL experience managers to ensure the experiences and expectations had clear objectives and steps for communication for both the intern and the experience manager" (Manufacturing, very large organization). "Projects with clear objectives and goals were critical" (Manufacturing, very large organization). "Supervisors needed additional training and guidance to support remote interns" (Professional, Business & Scientific Services, large organization).

Mentors and connections (6%)

A few organizations directly paired students with mentors who were not their supervisors. Organizations also stressed the importance of building connections and opportunities to interact between organizational members and the WIL students. These organizations reported very positive results from these connections. Unfortunately, some organizations replied that they failed to offer mentors to virtual WIL students due to the unavailability of appropriate mentors and time to train them. "Assigning an experienced mentor to work with them closely was key" (Government, mid-size organization). "We had a formal mentor and manager who established regular daily and weekly syncs" (Educational Services, mid-size organization). "Creating opportunities for the Interns to connect with others and stay engaged was key" (Manufacturing, very large organization).

Set a daily schedule (23%)

Include regular touchpoints and check-ins for students to ask questions and receive clear instructions for their work assignments. "Developed a comprehensive log sheet with WIL experiences, due dates, learning, goals, surveys, etc. to manage it well" (Professional, Business & Scientific Services, small organization).

> We had to have a lot of trust that they were able to stay on task. There were a few that struggled with the independence at first; we had to help them build their confidence by being available and more regular check-ins "Face to Face" via webcam. (Agriculture Production & Services, small organization)

"For those that didn't do so well with interference or interruption, we made timelines and check-ins" (Professional & Scientific Services, small organization). "They need more structure, more check-in and more planned sessions/activities" (Manufacturing, very large organization).

Structured workflow (10%)

Employers were required to engage in more advanced planning and structuring of workflow and timelines to ensure a constant workflow. Employers learned that last-minute adjustments or changes to students' work assignment generated problems. "More planning needed to take place in order to have them have a smooth transition into projects" (Manufacturing, large organization). "Had to give them lists of things to do ahead of time, whereas, in the office, you could give them tasks as they come up" (Professional, Business & Scientific Services, small organization). "We built in a structure cohort model with multiple touch-points for accountability with the structure to help them succeed and feel supported" (Agriculture Production & Services, very large organization).

Supervisor preparation (5%)

Virtual student WIL experiences required a different type of supervisor because of the necessity of daily direct contact and management than if the experience was hosted in person. "We needed to make sure that their WIL experience manager was capable of managing them virtually and had worked for them to do virtually that was still effective & impactful" (Manufacturing, very large organization). "Find the right managers who could help and connect with them remotely" (Professional, Business & Scientific Services, mid-size organization).

Work-from-home resources and technology (3%)

A challenge employers encountered from the start was the incompatible or inadequate technologies that many students had. For example, some students' computers were unreliable, or students lacked sufficient bandwidth to stay connected. These deficiencies warranted an audit of students' resources that spurred organizations to provide new technologies or pay for/provide alternatives for increased and reliable bandwidth. "Biggest challenge was provisioning with needed technology to work remotely" (Utilities, mid-size organization). "It was very important that teams knew what equipment and resources an intern would need to be able to successfully work from home" (Professional, Business & Scientific Services, large organization). Comparing the key takeaways employers provided with Werner and Jeske's (2021) ten considerations, employers without much outside guidance found the same steps necessary for a successful program. Employers engaged in continuous re-thinking of WIL projects to improve the online experience.

Moving Forward: *The Short-Run Viability of Virtual Experiences*

For many organizations, this was the first time they had provided virtual WIL experiences to their student employees. At this stage, we felt it essential to capture their views on the advantages and disadvantages of virtual WIL experiences in an unrestricted dialogue through an open-ended question that asked them to provide these views.

A fundamental question is whether the virtual experience enriches students' learning and professional development, their potential future employees. For students, the beneficial aspects involve the savings from not incurring transportation or housing costs, caring for family, and replacing lost employment found on campus. A neutral aspect finds their ability to complete task experiences successfully in virtual or in-face environments. The detractors involve the loss of community, inability to build professional relationships, especially serendipitous encounters, and tacit knowledge acquisition.

Advantages

After hosting virtual internships and other WIL experiences, employers observed advantages of their efforts. They provided 137 distinct comments surrounding advantages gained from virtual internships.

Some reported creating more innovative programs and activities for students to reduce the monotony of task work. As one respondent shared, "By designing a new internship program, we have discovered some new best practices and efficiencies we will build into our program in the future, be it virtual or in-person" (Agriculture Production & Services, very large organization). Others found exciting alternatives to traditional on-site orientation and on-boarding activities.

Clearer messaging (7%)

Big payoffs were derived from providing students, supervisors, and team members with well-defined expectations, guidelines for performing remote work, and dependable, consistent schedules. However, respondents also mentioned the disjointedness of communications during the experience and still favored in-person exchanges. "More deliberate conversations on work and getting to know them" (Agriculture Production & Services, mid-size organization). "The interns learned to reach out and use the phone more than ever as we see these students do not like to call people; they had to reach out and talk to people and became more proficient at this than ever" (Financial & Insurance Services, mid-size organization).

Cost savings (7%)

Organizations that generally provide housing, transportation, and meal allowances incurred a reduction in costs for offering virtual WIL and internship opportunities. Some organizations also mentioned that students did not have to bear the burden of finding reasonably affordable housing or reliable transportation to undertake their WIL experiences. "We found that interns didn't have to relocate, saving them cost and time/effort." (Professional & Scientific Services, mid-size organization). "Reduced travel time and costs" (Non-profit, small organization). "A great advantage was that we didn't have to worry about housing accommodations this summer" (Professional, Business & Scientific Services, mid-size organization).

Flexibility and adaptability (21%)

Interns allowed more flexibility in the schedule; others noted that interns adapted well to the new environment. "Interns proved capable of adapting and using technology to their advantage" (Utilities, large organization). "Our interns did learn flexibility and how to navigate ambiguity" (Consumer Goods—Wholesale, large organization). "Many found working remotely to be very convenient and some are going to continue to work remotely while taking their online classes" (Education Services, small organization). "An advantage was that our students could work where they work best - outside, room, hours" (Administrative Services, small organization).

Learned skills (16%)

Employers felt that their virtual WIL experiences helped students learn valuable skills not otherwise realized in more traditional WIL experiences. The skills mentioned included opportunities to learn new ways to work, become acclimated to a remote work environment, and navigate unexpected situations. Others noted a much steeper learning curve in mastering tasks. Additional skills embraced personal self-management, such as setting priorities, developing a virtual professional presence, time management, and explicit knowledge of independent workplace navigation, including utilizing specific software, undertaking tasks associated with knowledge learned in class or training, and handling frequent technical knowledge hiccups.

> They were able to learn things that they would likely have never learned in their entire lives because of the situation. We made every attempt to help our interns see the positive side of what

they were experiencing this year, even though it was unconventional in every way and somewhat challenging for some of them. (Non-profit, small organization)

"Advantage for students was really enforcing time management and discipline when approaching work" (Manufacturing, very large organization).

Recruitment (8%)

Virtual WIL experiences proved advantageous to respondents who noted the ability to attract and evaluate a wider candidate pool without concern for geographic considerations. "They no longer need to relocate for the internship. I now have interns in four time zones had a diverse group from all over the U.S." (Non-profit, mid-size organization). "We unlocked some geographic barriers that we've traditionally faced and have more options on the go forward" (Professional, Business & Scientific Services, very large organization). "Geographic restrictions/travel/housing support were eliminated" (Agriculture Production and Services, very large organization). "More interns are able to stay on past the summer since our internship proved successful as being virtual. (Professional, Business & Scientific Services, mid-size organization).

Safety (7%)

Organizations offering virtual WIL and internship opportunities provided a safe working environment against the backdrop of COVID. "The advantage was obviously less likelihood of getting COVID and spreading COVID" (Construction, very large organization).

Disadvantages

Employers also expressed stronger sentiments about the disadvantages of virtual assignments than advantages with nearly 350 comments of concern. Technical glitches interrupted a range of activities, including team meetings, supervisor conversations, and planned programs. These technological issues contributed to disruptions in communication but were not the sole factor in annoying communication issues. "Slow network connection to secure drives (had to use VPNs and such), slower response times for inter-department communication" (Manufacturing, small organization). The following disadvantages received the loudest callouts.

Critical hands-on learning (4%)

For some employers, essential learning occurs by exchanging tacit knowledge between experienced professionals and novice members. Unfortunately, virtual WIL experiences fail to capture or replicate these critical exchanges. "They did not get to fully take advantage of learning things on site if they were virtual. We believe being on site and being hands on is the best way to learn" (Construction, small organization). "It takes them a little longer to learn a new skill because they aren't able to listen and watch those on their team practice it more often" (Professional, Business & Scientific Services, small organization).

Enculturation (13%)

The WIL placement represents much more than contributing to or completing projects or tasks for many organizations. The placement opens avenues to engage potential future employees with a range of organizational experiences that permit students and organizations to test their fit with one another. Organizations develop programs for WIL students that broaden their understanding of the organization's goals and objections, introduce them to members beyond their immediate team, and build the comradery for community cohesion.

"The loss of social interaction and spontaneous conversations in the office was a disadvantage as the strong suit of working at our company is a strong associate culture" (Professional, Business & Scientific Services, small organization). "Culture and rapport have been negatively impacted big time. Hard for interns to get a great feel." (Finance & Insurance, small organization).

Networking and socializing (12%)

While socializing was a negative aspect of virtual WIL experiences, employers were more mixed about networking. Some employers found ways to engage interns with other members of the organization, while others were frustrated with limitations to normal networking practices. "Disadvantages of lower peer-to-peer engagement and social events, which are a huge part of our culture" (Construction, small organization). "Having the social interaction of in-person programs is definitely more beneficial for multiple reasons" (Arts & Entertainment, small organization). "Overall, most of our interns had a good experience and actually found that it was easier for them to network and connect with other people than being in the office as office distractions were limited" (Manufacturing, very large organization). "We were unable to hold in-person networking and social events, so interns were unable to meet and connect with their peers" (Government, mid-size organization). "Advantage, interns were from a wide range of locations and were able to meet people virtually" (Finance & Insurance, small organization). "Less informal networking opportunities such as running into someone in the office or being able to pop by someone's desk" (Professional, Business & Scientific Services, mid-size organization).

Serendipitous connections (27%)

Typically, comments described the lack of in-person interactions, difficulty connecting to others virtually, difficulty building relationships, and less time spent working with other interns or team members. Watercooler interactions, bumping into strangers that stimulate ideas or open future career pathways, and brainstorming do not frequently occur, if at all, in virtual settings. Yet, through these exchanges, WIL students often connect with a mentor, meet organizational leaders, and establish stronger work relationships. "Missing out on hallway conversations and "drop by the desk" which ultimately help with their initial development" (Professional, Business & Scientific Services, mid-size organization). "The lack of physical shared space reduced the opportunities for impromptu conversations - this slowed down the team building" (Professional, Business & Scientific Services, small organization).

Supervisor liabilities (6%)

Even though organizations recognize the value of more resounding support for WIL students by their supervisors, this advantage comes with a cost – it is very time-consuming. In addition, supervisors have broader responsibilities that demand their attention. From the additional training necessitated to host a virtual student to manage teams under their direction, supervisors felt burned out by completing the student's WIL experience. "Challenge to manage remote work on different tasks along with typical workload" (Arts & Entertainment, small organization). "It requires too much effort of supervisors when employees do not yet know how to do their job" (Professional, Business & Scientific Services, small organization). "Harder to monitor progress and to evaluate intern performance" (Professional, Business & Scientific Services, small organization).

Mixed response

Concerns over intern productivity were mixed. Some employers reported improved productivity due to better communications and clearer expectations. Others felt remote interns struggled to complete their WIL tasks. "Interns produced better content and more production" (Arts & Entertainment, small organization). "Advantage, interns focused work & focused conversations" (Manufacturing, very large

organization). "Productivity sharply decreased" (Professional & Scientific Services, small organization). "Some have struggled to stay on track with all the distractions of working remotely" (Non-profit, small organization). "We can do a better job in tracking their work and helping them become more targeted on goals and objectives we want to accomplish" (Arts & Entertainment, small organization).

Upon overlaying the advantages and disadvantages onto essential employer characteristics, three groups of organizations appeared along a continuum of preferring on-site experiences only to preferring virtual WIL experiences. The group committed to enhancing their talent pipeline through organizational socialization, requiring more than a task-oriented experience, found virtual WIL experiences of little value in developing their potential talent. These organizations plan to return to on-site experiences as soon as health conditions warrant. Another group that tailored their WIL experiences to completing specific tasks or projects was more receptive to continuing virtual programs. Members of this group plan to continue, if not expand, virtual WIL experiences in the future. The final group covers the group between the two extremes. This middle group respects the valuable contribution that virtual WIL experiences offer them and plan to use virtual WIL experiences when appropriate.

DISCUSSION

The COVID pandemic caused many employers to deviate suddenly from their plans to provide WIL experiences at their facilities, either discontinuing WIL for the pandemic's duration or shifting to virtual settings. No matter how organizations handled their WIL programs, these programs suffered significantly during the early stages of the pandemic. However, many organizations recovered and revamped as many experiences in virtual context as possible. With the arrival of vaccines, the summer of 2021 looks more predictable, with employers returning to on-site hosting of WIL students. Nevertheless, organizations still plan to utilize virtual WIL experiences when appropriate.

To gain wider acceptance across organizations, those responsible for designing virtual WIL experiences face the reality of resolving several critical issues. To be fair, these same issues beleaguer the future of remote work options for full-time employees. These critical issues: acquiring tacit knowledge, developing trust, serendipity, mentoring, and acculturation serve as an on-ramp for more focused WIL research.

Acquiring Tacit Knowledge

This is defined as a situation where "skillful action always involves a tacit component, even if some aspects of the action draw upon codified (explicit) knowledge" (Polanyi, 1983, p. 4). Griffith and Sawyer (2010) studied multi-level knowledge on individual and team performance, finding that both tacit and explicit knowledge, the latter facilitated through technology-mediated practices, contributed to organization knowledge. Tacit knowledge is both contextual and spontaneous (Wasonga & Murphy, 2006), that emanates through nuanced actions associated with the task(s) undertaken, and emerges through unstructured, non-predetermined conversations and exchanges. On the other hand, explicit knowledge refers to objective knowledge gained through formal methods, such as class lectures, presentations, manuals, training, informational meetings, and technology management systems (Griffith & Sawyer, 2010).

Nonoka and Takeuchi (1995) identify two dimensions of tacit knowledge. The first appears as a technical dimension, or know-how, encompassing informal and "hard-to-pin-down" skills or abilities.

The cognitive dimension comprises mental models, beliefs, and perceptions that surface as subjective insights, hunches, emotions, values, and symbols and are generally accepted as what is (Nonoka & Takeuchi, 1995, p. 8). Because tacit knowledge lacks a formal language and suffers from poor articulation, its transmission is complex. To pass along tacit knowledge requires face-to-face interactions between novices and experienced staff, where through demonstrations, personal anecdotes, and other personal methods, the experienced party conveys tacit information to the novice. While Nonoka and Takeuchi contend that tacit can be converted to explicit knowledge through externalization (such as metaphors), others contend that the conversion is not realistically possible (Griffith & Sawyer, 2010; Polanyi, 1983).

Tacit knowledge serves as an engine to learn. Several scholars have focused on acquiring tacit knowledge during the WIL process (DeWitt, 2010; Hansen & Matthews, 2002; Wasonga & Murphy, 2006). By placing a WIL student or intern into an authentic work environment, they gain subjective insights and processes through collegial peer relationships based on a shared experience. Employers stress the importance of the face-to-face, on-site experience for WIL students because it fuels learning, but as Hansen and Matthews (2002, p. 4) add, these relationships provide the "conditions of trust, openness, risk-taking, problem identification, problem solving and goal setting." Currently, employer apprehension that the virtual experience fails to provide the best context for stimulating tacit knowledge exchange appears to endanger its future growth.

Developing Trust

While trust-building failed to coalesce into a major theme emerging from the analysis of returned comments, employers offered differing perceptions around trust issues. Some felt students over-reported their hours and took advantage of their supervisor's absence. Other employers extended trust by granting students greater independence and flexibility with their WIL assignments. Trust, facilitating communication, enhancing innovation, aiding collaboration, and fostering confidence, are critical building blocks for any organization (Lyman, 2003; Serrat, 2017). Trust comprises two dimensions. The rational dimension is cognitive and calculative (Serrat, 2017), resulting from the objective assessment of competence and reliability (Chua et al., 2008). The emotional or affective dimension (Schaubroeck et al., 2011; Serrat, 2017) results from an emotional tie between the WIL student and their supervisor that reflects confidence, acceptance, gratitude, and affection, for example.

Trust by supervisors and mentors elevates a WIL student's talent, creativity, and organizational contribution; aspects studied in the supervisor–student exchange (Hurst et al., 2012). However, few research studies specifically examined the role of trust during a WIL experience. Newman et al. (2016) tie the influence of participative supervision, a form of leadership that encourages interns to take more responsibility in the workplace, to trust building and performance. They reported that affective trust mediates performance while cognitive trust proved insignificant to performance though bolstered affective trust. In other words, interns who hold a high level of cognitive trust from their supervisor before starting their WIL experience build stronger affective trust, leading to higher performance. Based on these results, Newman et al. (2016) recommend placing interns quickly into challenging autonomous WIL experiences and encouraging consultative supervisors, not directive. Unknown currently is whether virtual WIL experiences provide the venue where a trusting relationship between supervisor and WIL student builds and triggers the scenario Newman and his colleagues envision.

Serendipity

A serendipitous occurrence or happenstance is a meaningful unplanned encounter, which stimulates the exchange of information, introduces strangers, and familiarizes with equipment, software, or other workplace happenings between members of an organization's workforce. This concept is common in career counseling literature (Guidon & Hanna, 2002; Krumboltz, 2009). Employers acknowledge the importance of serendipitous happenstance in several comments and provide environments for these unplanned encounters to germinate and flourish. Scant research on serendipity in WIL experiences exists. Purcell (2009) reports on WIL students' perceptions of the importance of incidental learning, and Cooper et al. (2010) link the development of tacit knowledge to working closely with one's supervisor, gaining unplanned insights. Moore and Murphy (2012) found a significant exchange of incidental learning in a public health setting when the WIL experience was student-centered, supporting Newman and his colleagues' findings.

The troubling question centers on whether serendipitous occurrences can be recreated in virtual space (Jeffrey, 2000). Jeffrey contributed a Forum Contact Space or an avatar virtual world that a case study showed the virtual world fostered and supported the possibility of chance encounters. Eagle (2004) leveraged social media to develop the Serendipity app that attempts to plan for happenstance, while Inkpen et al. (2009) explored the role of instance messaging. in supporting spontaneous conversations. Björneborn (2017) further advanced thoughts on facilitating serendipity in digital settings. He learned that physical environments have dominance over digital environments for most unplanned happenings through digital offered a limited opportunity to create them in certain situations.

In this time of COVID-19 employers remain leery that virtual WIL experiences serve as a realistic venue for happenstance. Despite Chadhury (2020) advocating the value of virtual watercooler interactions for interns in a recent podcast, employers find it difficult to create these experiences. As one CEO of a major infrastructure bank shared, although trying to organically cultivate informal interactions using virtual tools such as Microsoft Teams, little else compared to the raw and unplanned employee discussions that occur almost daily in an in-person workspace. It just cannot be duplicated online. Not only are these virtual watercooler activities difficult to re-create, but if created, they lack the stamina needed to produce tacit knowledge. You might create an informal discussion in a virtual setting, but these unstructured, non-predetermined conversations and exchanges are difficult to sustain for any length necessary to gain tacit knowledge or long-term learning.

Mentoring

Mentoring is a form of professional or organizational socialization or process where experienced members of an organization act as guides, role models, teachers, or counselors to less experienced members or newcomers (Blackwell, 1989; Fagenson, 1989; Moore & Amey, 1988). Mentors provide their protege's emotional support, counseling, friendship, and confirmation (psychosocial function) and sponsorship, coaching, visibility, and protection (career-related function) (Kram, 1983). Organizations recognize the value of mentorships, with many formalizing these relationships to assist newcomers with their career development (Noe, 1988; Ostroff & Kozlowski, 1993; Zey, 1991).

Chao et al. (1992) pointed to the difference in formal mentoring relationships where the organization matches newcomers with a senior mentor-a relationship that generally requires 6 months to a year to develop. Informal mentoring relationships are not managed, structured, or formally recognized within the organization. These relationships sprout spontaneously from interactions between junior and senior members. Chao et al. (1992) compared the outcomes (socialization, job satisfaction, and salary)

for proteges who were formally and informally and non-mentored newcomers. Informally mentored proteges reported more career-related support and higher salaries than formally mentored proteges. Informal mentees rate higher on all dimensions than non-mentored employees. Formal mentored employees were not significantly different from both informal mentees and non-mentored employees. Spontaneous interactions that lead to mentorships prove the most beneficial for both career-related and psychosocial dimensions of mentoring.

Mentoring arrangements appear in numerous situations involving minoritized students or organizational newcomers, women, teachers, faculty, and many others. Mentoring plays a role in WIL experiences as mentors significantly augment supervisor support (Ali et al., 2022), leading to higher socialization, job satisfaction, task learning, and commitment to the organization. WIL research on mentors and the mentoring process varies in intent (Jackson, 2018; Keating, 2012; Martin & Rees, 2019; Ngonda et al., 2017; Smith-Ruig, 2014) but underscores the value organizations and WIL students receive when they occur. They all emphasize the unplanned and unstructured nature of these relationships, which challenges their development in virtual environments. Some employers in our survey reported success in assigning mentors to virtual interns, but others deferred mentoring schemes until after COVID-19 eased. Jeske and Linehan (2020) showed that successful mentoring could occur in virtual WIL experiences based on their work with students engaged in virtual WIL experiences. While these early steps show promise, many employers will need more substantial evidence that mentoring can organically develop in virtual arrangements.

Enculturation

New members' organizational or workplace socialization determines whether new WIL students find their needs met upon entering the organization and whether they gain full organizational membership. All the previous issues raised around virtual WIL experiences can be easily encapsulated in the socialization process. Chao (2012) defines organizational socialization as a learning and adjustment process whereby newcomers assume a role within the organization that fits both parties' needs. A prodigious body of scholarly surround organizational socialization with these writings serving as representative contributions (Chao et al., 1994; Chao, 2012; Feldman, 1976). McHugh (2017) stated that interns are like new hires in their need to be socialized.

Regarding WIL, researchers focused on organizational commitment (Pennaforte & Pretti, 2015), communication, and adjustment to physical space (Dailey, 2016). A very early study also examined the socialization of apprentices (Blau, 1988). However, few researchers address organizational membership in the context of remote work. Bartel et al. (2007) stressed that the lack of empirical attention to perceptions of organizational membership emerges in remote situations. They found that remoteness negatively correlated with various aspects of organizational membership and identification. Respondents in their study felt insecure about their role in the organization and reluctantly or hesitantly participated in activities. Leath (2009), stimulated by her frustrations with her remote internship, studied students in virtual WIL experiences (in writing and journalism), results revealing nebulous guides to tools and resources, procrastination, inaccessible supervisors, and generally a feeling of being unprepared for this type of internship. Fortunately, employers in our survey addressed many of these concerns but still believed they had more work to enable socialization through community building and more guidance from the beginning. Leath felt troubled by the focus of the virtual internship literature which dealt almost entirely on constructing the internship whether by faculty, teachers, or employers, neglecting the how-to function in a virtual internship environment.

Thinking Anew: Opportunities for Virtual Experiences

Virtual WIL awaken new opportunities to expand practical, experiential experiences to many potential students. During their rapid reaction to COVID-19, employers narrowly focused on actions that would protect their employment pipeline and keep their undergraduate university talent engaged with the organization. While Jeske and others promote the virtual format to increase the diversity of their workforce, tap into international students, and tailor to working adults desiring a career change, few employers mentioned these possibilities in their comments. However, during discussions with a group of employers in October 2021, these discussion participants had time to reflect on the role virtual WIL experiences could play in developing their talent pool. They see an expanding niche for virtual WIL experiences, as the following examples attest:

Reflections from a food and beverage company.
One of the challenges this organization had is finding talent for its operations in rural or isolated locations. Nearly all their internships are at their primary urban facilities. Their recruiting team focuses on specific core universities for their talent and constantly struggles with candidates' unwillingness to accept positions at remote facilities. Through digital technologies, the organization reached out to regional campuses where their recruiting team typically does not visit but are closer to their remote facilities. Through virtual internships, they trained students who would accept full-time positions in these facilities.

Reflections from a large human services organization.
This organization's facilities are located close to several universities where they tap students for internships throughout the academic year. However, students who intern throughout the school year frequently decline summer internship participation, needing to return home to avoid incurring costly lodging, transportation, and food costs. Retaining this talent, the following fall became increasingly difficult. The company realized that through virtual internships, students could participate in a summer internship. The flexibility allowed by the virtual internship permitted the student to pursue other employment or creative activities while at home and helped retain the student for fall employment once returning to school. This additional option strengthened the organization's talent pipeline.

From a manufacturing/engineering services company.
This company faces intense competition for engineering and computer science talent. Intern/co-ops who complete their summer experience before their senior year are extended offers for full-time employment, with many accepting and only a few asking to delay their commitment. The trouble starts upon return to campus when other organizations ruthlessly recruit up-and-coming talent, and frequently a student will renege for another company. Students accepting full-time offers are placed on virtual work teams to thwart this raid on their talent, rather than waiting until graduation. This organization now provides WIL students continuous employment.

After gaining some distance from the COVID-19 episode, many positive aspects of virtual WIL experiences, such as clear and more frequent communication, expectation clarity for all parties to the WIL experience, supervisor preparation, and performance monitoring, will be integrated into all WIL experiences. As organizations familiarize themselves with virtual formats for talent development and acquisition, employers will find opportunities to incorporate virtual WIL practices into their recruiting strategies. Thus, a reasonable expectation finds continued growth of virtual WIL experiences.

CONCLUDING THOUGHTS

The COVID-19 pandemic upended and disrupted traditional approaches for WIL experiences yet opened new possibilities for delivery of these experiences. With control of the pandemic in some countries, we can expect the return to some semblance of the pre-pandemic landscape, but not completely. In multiple sessions with employers, recently, the conversations turned on the topics about 'return to normal.' Employers made it clear that falling back on old ways was unacceptable. While the future remains unclear, workplace plans include more technology integration, employee support for developing skills for new roles, emphasis on wellness, and staying flexible. In addition, the recruitment process for full-time and WIL experiences is being wholly reimagined as work unbinds from geographic location, and enhanced virtual recruiting tools offer a smoother, more transparent process. The shift in recruiting alters the way interviews are conducted, candidates vetted and screened.

The biggest experiment of the pandemic period centers on the viability of remote work. As the workplace enters the era of remote work for full-time and WIL students, the biggest challenge rests on the willingness of management/leadership to support virtual WIL experiences. Their support depends on our collective ability to determine the inherent benefits and costs of virtual WIL experiences. As we begin to engage in research around virtual experiences, our listening needs to be attuned to a broader range of voices, more voices than are currently represented in the literature.

The voices expressed in this research arise from recruiting and hiring managers, including those responsible for recruiting potential WIL talent. Other colleagues access the voices of WIL supervisors, particularly those serving at institutions with large WIL placement programs (specifically, cooperative education). Likewise, faculty interest in virtual projected-based learning motivates experimentation with remote options. However, missing are voices from middle and upper management or organizational leaders. Several associations capture the voice of leadership but rarely focus on specific aspects of the WIL experience. Other voices that represent minoritized, underrepresented students, emerging industries, entrepreneurs, and others remain absent.

A wide window of opportunity opens with expanding the virtual WIL experience for creative and imaginative research. A tantalizing list may include explicit and tacit skill development comparisons between virtual and on-site WIL experiences; comparison of early career progress of graduates who participated in virtual and on-site WIL; the impact of virtual experiences on leadership development; and implications of virtual WIL experiences in promoting diversity, equity and inclusion. As employers continue to revise their need for university credentialed talent, they are demanding more training and practice of those seeking employment. WIL, in its many forms, offers various pathways to attain access to employment. As the workplace landscape continues to change, our research efforts in WIL will prove critical in advancing the role of WIL.

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