



eWBL – Making work-based learning work in an online environment

National Case Studies – Ireland (WP1)

27/01/2023

Exploring the challenges met and the alternatives found by WBL providers across Europe in their shift from WBL to eWBL.

Prepared by Momentum – Educate & Innovate, Ireland.



Co-funded by
the European Union

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Introduction

The importance of work-based learning (WBL) in developing work-ready graduates has been documented by several EU-funded projects such as HAPHE (2016), WBLIC (2016) and WEXHE (2020). WBL is a powerful pedagogy to foster graduate work readiness because it is embedded in authentic work environments.

The first-hand observation of workplace norms, routines, language, mentorship and relationship building leads to the development of highly desirable transversal skills such as communication and collaboration, teamwork, self-efficacy, and networking, among others. However, the workplace environment is changing significantly. Driven by the COVID-19 pandemic, more and more work is now delivered remotely. With that, a new and digital form of WBL has emerged – what this project calls digital work-based learning or “eWBL”.

In this context, educators across the European Union (EU) need to find ways of making WBL effective in this new setting. However, how to work efficiently online and adequately replace the physical environment with a virtual one in WBL is a challenging and highly unexplored issue. There is currently very little understanding and guidance on how to conduct high-quality eWBL. The eWBL project addresses this gap by exploring how 25 high-quality WBL providers across Europe have dealt with the pedagogical and technological challenges associated with the transition from WBL to eWBL due to COVID-19 and the solutions they have devised.

Our aim is to boost the work readiness and employability of graduates. The project will specifically focus on how work-based learning competences could be fostered in the absence of a physical environment. As the work environment is increasingly shifting to online and hybrid formats, ways of making work-based learning effective in this new environment have become an urgent need of educators across the EU. The project addresses this specific need by developing frameworks, models, tools, and guidelines that educators in HE (lecturers, trainers, and administrative staff) could use to deliver high-quality eWBL. More information about the project, together with updates and materials can be found on [Home | eWBL \(ewbl-project.com\)](https://www.ewbl-project.com)

About this document

The first step to achieve the project aim was to collect and analyse data to create the 25 case studies that serve as our primary data source. Each project consortium member (FH Münster in Germany, Momentum in Ireland, the University of Ljubljana in Slovenia, Fondazione Giacomo Brodolini and University of Venice in Italy and The University of Groningen in the Netherlands) was responsible for designing five cases.

This National Report offers an overview of the five case studies produced in Ireland. The document is divided into seven chapters. In chapter one we offer an overview of the WBL scenario in Ireland based on desk research and results from the Erasmus+ WEXHE Project (WEXHE, 2020). In chapter two we give an overview of how WBL was delivered before the COVID-19 pandemic when it was delivered completely “offline”. In chapter three we explore how the parties involved (companies and higher education institutions (HEIs)) implemented eWBL. In chapter four we look at the implications of this transition on expected WBL learning outcomes: soft skills development, acquisition of practical experience, networking and the understanding of the company/workplace culture. Chapter five discusses the main drivers and challenges associated with remote WBL while chapter six details the solution and pedagogical innovations introduced by companies and HEIs. Finally, chapter seven explores the long-term implication of eWBL to Irish companies, students and HEIs.

Methodology

This National Report summarises the findings of five Irish cases. The first step to create them was to identify an extensive list of potential cases. Momentum spent one month conducting desk research, identifying previous contacts and researching from within Momentum's network. This preliminary list included eight potential cases. From this list, we selected five to be translated into full cases. The main selection criteria were the diversity of disciplinary areas and of HEIs providing them. After identifying the five most promising cases, we contacted stakeholders to arrange interviews. The list of stakeholders included trainers in HE, trainers or founders within the organisations and students. The next two months were dedicated to data collection.

The consortium developed interview questions and essentially covered how WBL was provided before COVID-19, the challenges encountered in shifting to eWBL, and the alternatives or solutions found in response. The interviews were recorded and transcribed for analysis. All interviews were conducted in English. In total 15 stakeholders were interviewed: 5 representatives of HEIs, 5 internship supervisors at the companies and 5 students. The data analysis adheres to Miles et al. (2014) following an explanatory stance using analytic progression. From the respondents' raw data, we extracted the most relevant concepts. We then grouped these concepts according to their contribution to the dimensions we wanted to investigate: (i) how WBL was provided before COVID-19, (ii) the challenges encountered in shifting to eWBL, including the implications on WBL learning outcomes (soft skills, practical experience, networking and workplace culture), and (iii) the alternatives/solutions found. The result of this analytical process is the five case studies that comprise the core data of this National Report. Read the five full case studies in the Appendix.



Summary – Ireland

Momentum interviewed three Ireland-based HEIs for five case studies from the disciplines of business, sports science with business, business management, computing software development and marketing.

Case Study 1

For the business discipline case study, HEI 1 organized the placement of a student 100% online with a cybersecurity organization operating remotely. The HEI implemented a rapid response to adapt to e-working. Students studied remotely before participating in their work placement. HEI 1 staff prepared students by conducting remote mock interviews, helping students to become more familiar with technology such as MS Teams/Zoom and providing dedicated coordinators for remote work placements. HEI 1 also provided a mentor. The student stated that the HEI and placement organisation could have created a more detailed introduction and provided more clarity around work responsibilities. The organisation found it an efficient way of working and closely mentored the student.

Case Study 2

A student of HEI 1 in the discipline of marketing, undertook a placement with a large Irish retailer 100% online. HEI 1 had a 'Learning Community' for their placement managers which came together in finding solutions for remote working for students. They ensured students could continue with placements online during the pandemic. HEI 1 provided online classes on remote working topics and made themselves available for student support. They posted regularly on the learning platform and hosted weekly pop-in sessions and jam boards for queries. The retail company implemented an induction plan for the students on work placement, so they had some basics in working remotely. The student felt supported on their eWBL.

Case Study 3

A computing software development student from HEI 2 completed an eWBL placement with a technology company that was already working remotely before the Covid-19 pandemic. HEI 2 has established relationships with partners in ICT for placements. During the lockdown, the HEI had to be dynamic and proactive in their approach to preparing its students for placement. The company onboarded the student as if they were a new employee, so expectations were set from the outset. They used agile scrum methodology for daily briefings and a mentor through a buddy system. The student learned to enhance their communication skills and found the placement valuable for learnings to apply in their future career.

Case Study 4

The second placement for HEI 2 was with a sporting organization that took on a student of sports science with business to work 70% remotely. HEI 2 saw this as a new and diverse opportunity for the student and said their communication and technical skills improved because of the placement. The student was trained to use specific AnalysisPro software to analyze and report on tactics and team behaviour. For the student they had to understand the needs of the employer, gather the data using software they had training on, interpret the data, work in a remote environment, and then present it back in a hybrid/ face-to-face model to both managers and team players. The student communicated regularly with the manager and presented to teams but felt like an outsider in terms of the organization's culture. The organization was satisfied with the placement outcomes.

Case Study 5

HEI 3, based in Northern Ireland organized a remote work placement for a business management student with a start-up company. HEI 3 put their students through a placement preparation course with a placement tutor to help prepare students. They also offered guidance and support to students while on placement. The start-up set out their expectations for their student intern during an interview process before the work placement commenced. Initially, the student was completely remote in the work placement with only a few face-to-face meetings occurring after a sustained period. The student learned new ways of communicating and enhanced their communication skills. The company put an emphasis on encouraging the student to network and increase their professional connections.

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1. Background

In Ireland's Higher Education Institutions (HEIs), WBL is an integral part of student's studies across all disciplines. However, with the many advancements in technology over recent years and with many organisations turning to remote working, eWBL is becoming a more popular alternative that suits the working style of many organisations. Rather than engaging WBL as part of their course, students are being given the opportunity to engage with eWBL as a new alternative. eWBL is innovative in its implementation as an educational tool. It allows students to experience the world of work from a virtual point of view. eWBL is being seen as favourable by many organisations that are currently operating remotely due to its ability to train the future workforce in working remotely.

In the three HEIs featured in these Irish case studies, WBL typically takes place in the third year of undergraduate study from a varying number of weeks but usually not less than 12. It serves to make the students' educational experience more relevant when they are challenged to apply their skills and learning in the workplace and glean further learning from this real-life environment. The placements may be organized by the HEIs through existing relationships with companies or by the students themselves. Assessment is conducted by the HEI with input from the organisation and the student.

Ireland's HEIs turned to remote teaching during the Covid-19 pandemic as restrictions forced many businesses and organisations to work remotely. As a result, WBL was no longer an option available for students. However, HEIs and organisations worked together to present eWBL as a viable option for many students to complete their coursework. HEIs supported organisations in introducing remote work experience to students so that they could continue their education.

eWBL has since become a popular option for work experience for many students as it is often cheaper than its traditional counterpart due to students not having to travel or move closer to where the workplace is located. It still acts to attract talent like WBL with many students able to get jobs within their eWBL after the completion of their studies. In addition to allowing students experience remote working, eWBL will educate them in generating a work-life balance that is necessary and will allow for the development of necessary skills required for remote working such as communicating online. With the shift to remote working, eWBL will become a more common option available to students thus encouraging more students to engage with it.

2. The WBL pre-COVID-19

Prior to Covid-19, HEIs implemented WBL as an educational tool that will provide students with skills and attitudes that they cannot learn in the classroom. Lester and Costley (2010) described work-based learning as any learning that is situated in the workplace or arises directly out of workplace concerns. It is often seen as an internship or work placement that is arranged between an employer, a student, and a HEI as a facilitator for the student to develop transversal skills and experience in the workplace. WBL plays an important role in developing students' skills and not just for those where WBL is mandatory such as in medicine and education. WBL is becoming more integrated into student's studies in HEIs across all disciplines due to the benefits that WBL gives to students involved in giving them experience and developing skills to become workplace ready.

Meanwhile, Garnett (2005) has defined work-based learning as a learning process which focuses university-level thinking upon work (paid or unpaid) to facilitate the recognition, acquisition, and application of individual and collective knowledge, skills, and abilities to achieve specific accredited outcomes of significance to the learner, their employers, and the university. WBL is a valuable resource in developing employability skills in students. Allowing students to take on a more practical, hands-on learning approach in developing skills such as communication and teamwork within the workplace.

Ferrández-Berruero et al (2016) have identified a wide range of terms to refer to the concept of WBL across Europe. These terms include internships, work-integrated learning, workplace learning, work-related learning, vocational learning, flexible learning, and problem-solving or simulations. These terms all have a level of ambiguity which allows for them to be interpreted in many ways.

Another definition for WBL comes from Clark (1998) who defines it as a pedagogical structure that provides students with learning experiences orientated for the appreciation of work and practical knowledge. Likewise, WBL provides an opportunity for students to expand and create knowledge from within the workplace as well as exposing students to sociocultural aspects of the workplace.

Lester and Costly (2010) found that a work-based programme fosters personal development in students alongside the learning and development of specific skills for the workplace. Similarly, Nottingham (2016) suggests that WBL creates an environment that stimulates learners to take control of their own learning, fostering intellectual, personal, critical, and analytical skills and attitudes that complement the theory being used in practice. It is vital that the student engages in WBL with the aim of personal development to fully foster new competencies. Work experience and internships are recognised as being a 'high-impact' practice that improves student engagement and academic outcomes which has caused many HEIs to promote engagement or make internships and work experience a mandatory part of student's education as it is an essential experience (Hora et al, 2021).

Before the Covid-19 pandemic, WBL occurred within the workplace with students being able to meet employers, employees, and clients. By being able to access the workplace the student would feel a greater sense of community and belonging as well as being able to meet their socialisation needs.

Of the three HEIs involved in the case studies, there were different arrangements for the WBL. The Northern Ireland based HEI (HEI 3) had established relationships with large corporate organisations and usually offered internships to students on that basis. HEI 1 has some relationships with local businesses, but the onus is usually on students to arrange the work placements themselves. Before the pandemic, students went on-site for interviews which were disruptive to lectures and learning whereas now they can attend interviews remotely which is less disruptive. HEI 1 provides clinics and guest speakers to prepare students for work placement which can now be conducted online and have much higher attendance than previous in-person events. HEI 2 also has established relationships with employers and works to place students with them annually.

Prior to the Covid-19 pandemic, only two of the five eWBL organisations had offered WBL to students. For two of the other organisations that were already operating remotely, it was the first time that they had engaged in eWBL with a student. There are many differences identified between a student being involved with WBL and eWBL. One of the biggest being that with WBL the student can enter the workplace and interact with colleagues and gain knowledge through these interactions. In WBL, students can ask for help more easily from those around them and get to view various aspects of working in an office environment and learning by osmosis.

3. The eWBL implementation

Hora et al (2021) has described an online internship/work experience as an experiential, work-based learning program conducted primarily via digital or online technologies, with important variations within the modality with respect to program format and compliance with experiential learning standards. However, regardless of the differences in an online internship from an in-person internship, the same quality and accessibility standards and considerations should apply to all internships regardless of how they are delivered. Therefore, eWBL is a work experience/ internship that is conducted remotely that's still provides the same educational goals as WBL for the student.

With the Covid-19 physical restrictions and an increase in remote working, eWBL was implemented on a much larger scale. Remote working has become much more common due to many organisations integrating technology into their operations because of the advancements and increased accessibility of technology over time. Many organisations can now easily set up their operations from anywhere globally thanks to new and improved technology. With many organisations operating with their staff working remotely, it gives them the opportunity to take on remote internships where students can complete their work placements virtually with the use of modern technology. Likewise, the Covid-19 pandemic brought many changes to society with a huge upheaval to the way of working for many organisations.

To continue operating with the Covid-19 restrictions in place many organisations moved to remote working. In turn, HEIs turned to remote teaching to overcome the restrictions and while lectures were still feasible virtually, the integral aspect of WBL was not. To overcome this, students were introduced to eWBL. By using modern

technology, students that required work placements as part of their coursework were able to complete their work placements virtually with participating organisations.

When observing the importance of the design phase of an internship, Ruggiero and Boehm (2016) found that the principles of effective design of face-to-face internships were particularly important for virtual internships. These principles included the need to articulate learning outcomes prior to the creation of the internship, pre-internship meetings with those involved to identify performance goals, and facilitation of peer communication among students. Ruggiero and Boehm (2016) found that explicit and clear communication is required between clients, mentors, and interns during the virtual internship to lead to secure attachments and internships that ended in completed projects that met all of the criteria.

The onset of the Covid-19 meant that HEIs had to rapidly adjust their WBL programmes to accommodate the shift to eWBL. HEI 1 implemented a rapid response to adapt to e-working. HEI staff prepared the students going on remote work placement by conducting remote mock interviews, helping students to become more familiar with the technology. To prepare for remote work placements HEI 1 staff on the work placement team came together to examine the potential issues that may affect the students such as insurance and Covid-19 health and safety within the partner organisations. HEI 1 had to maintain their relationships with their partner organisations by keeping in constant contact with the organisations through virtual means

In Case Study 1 the work within the organisation was distributed through Slack They prepared for the students by informing all those involved with the organisation about the students and by providing the students with a mentor. For Case Study 2, the company implemented an induction plan for students on work placement, so they had some basics in working remotely. The company HR liaised with the hiring managers to ensure that interns are organised before they start by equipping the students with hardware and software that they would need. The interns had virtual meetings ensuring that everything is set up correctly for them and are taught how to navigate the employee's homepage 'Connect.' They also met the team they will be working with informally and formally. The company had regular check ins with the student and placed emphasis on their socialisation.

In HEI 2, work placements were led by the Registrar's office which drew up agreements for student participants to sign. Students going on work placement took part in preparatory LinkedIn Learning modules on remote working. HEI 2 staff also took part in LinkedIn Learning modules to prepare themselves as advisors for students. The HEI Registrar's office also prepared staff by making them aware of the requirements for working online and put emphasis on informing students that staff were available to them through email/MS Teams/ calls throughout their work placement for advice or queries. Students on work placements were offered technology and equipment i.e., laptops by partner organisations. The HEI continued to maintain relationships with host organisations and students through virtual means.

In Case Study 3, the student was onboarded as a new employee with specific task responsibility. They had a buddy mentor and daily virtual check-ins with the whole team using agile scrum methodology. For Case Study 4 the student preparation was with both the sports organisation and the software provider, AnalysisPro to train the student on the platform before the placement as HEI 2 did not have that expertise in-house. The implementation of the placement for HEI 2 was no different than for students working on-site. It was the first time that HEI 2 had a full placement for a student using a digital platform so there was considerable learning for HEI 2, especially in terms of engaging with the software providers and the employer.

HEI 3 put their students on a placement preparation course and made the students aware of changes in the labour market that were occurring due to the Covid-19 pandemic such as what opportunities were available to the students and what remote working would look like for them. It had to adjust the approval process that they had in place for organisations wishing to participate in a work placement to protect students from Covid-19. HEI 3 put in new guidance for the safety and well-being of students, staff, and participating organisations. HEI 3 staff were able to prepare for the remote work placement and were provided with equipment such as laptops and headphones to make communication easier with students. In Case Study 4, the start-up set out their expectations for their student intern during the interview process that happened before the work placement. The main duty of the student intern at The Start-Up was to make content for the organisation's LinkedIn page. However, they were able to become more involved in various aspects of the organisation throughout the work placement, including recruiting additional staff. The Start-Up communicated through various media such as LinkedIn, Office 365, and Zoom and used a Virtual Reality Park in the Metaverse for daily communication. While The start-up did not expect the student or any of their employees to have a physical presence in any of their

locations there was a need for them to have a constant presence in the virtual workspace that was available to them.

Covid-19 and eWBL have stifled career growth in students, this is due to the lack of tradition, on-site work experience as well as isolation from co-workers (Wang & DeLaquil, 2020). Students are unable to demonstrate and further develop their skills making them less desirable in the labour market. It is important that the design and delivery of eWBL equates to that of WBL. While in many aspects eWBL is similar to WBL, its design and delivery needs to be altered in order to suit remote working. Work placements and internships are designed to be an educational tool for students' studies (Templeton et al, 2012). However, little planning and design has gone into eWBL due to it being quickly introduced widely during the Covid-19 pandemic.

Limited digital competencies in both HEI staff and students can affect how much the student can gain from the eWBL. Vriens et al (2013) suggest that for an effective virtual internship there needs to be effective information technologies, should include a face-to-face component, and needs to be well-organized and planned. It is vital that eWBL is designed and delivered in a way that encompasses all these to be as effective as possible in developing skills in the student.

In the five cases, the eWBL was implemented to a high-quality allowing the students to develop their skills and understand the world of work. The organisations involved aimed to implement eWBL to be similar to WBL for students to achieve their learning goals. Students were introduced to a new way of working (remote working) as well as to new technologies by organisations and HEIs to aid in the transition to eWBL. In most cases the students were given soft introductions virtually to the organisations and met with team members/co-workers through video calls. In each of the cases, the student participants were assigned a mentor that would guide and assist them in the transition to eWBL.

4. Impact of eWBL on learning outcomes

4.1 Soft-skills development

WBL plays an important role in developing soft skills in students (Dogara et al, 2020) such as communication and teamwork. These skills go on to increase the desirability and employability of students making them work-ready once they complete their studies. While it has been proven that WBL helps in developing soft skills in students little is known as to whether eWBL is as successful, especially regarding the lack of face-to-face interactions that occur with eWBL that would help in the development of these soft skills.

Consistently throughout the case studies the organisations remarked on how successful the students were able to improve and develop their soft skills, in particular their ability to communicate online successfully, teamwork/collaborative work and independent problem solving. Whereas the HEIs acknowledged that there was a regression in students' confidence and ability to communicate face-to-face with an increase of nervousness in students in going into the physical workplace and in-person meetings. The HEIs reported that students embraced remote working, with HEI 3 finding that their students were resilient against the changes that the Covid-19 pandemic brought, and that there was high engagement initially with remote working that tapered off as the novelty wore off. In general, the HEIs all cited the loss or missed opportunity to develop more soft skills in students due to the lack of face-to-face interactions during eWBL and said they noted a loss of confidence in their students in this area after their placements.

The student participants found that the eWBL helped them to develop their soft skills such as teamwork and communication through participating in team calls and conducting presentations. In Case Study 1, there were no face-to-face interactions due to those involved with the organisation being spread across the country. However, the student was able to interact with professionals virtually and build their professional network.

The students found that their technical skills were developed through being introduced to new technologies and software. The food retailer Case Study 2 remarked that the students involved took to the technology and software better than some of their senior staff. This organisation put a strong emphasis on developing soft skills and permitted students to sit in on meetings and negotiations. Students are also able to develop interpersonally from engaging with various co-workers through calls and emails during the eWBL.

4.2 Acquisition of practical experience

WBL excels in its ability to give students practical experience within the workplace. With WBL, students can enter the workplace and take a hands-on approach in gaining practical experience with advice from mentors and co-workers. Whereas, with eWBL, the student does not enter the workplace and cannot take a physical hands-on approach. This brings in the question as to whether students can gain necessary practical experience that they require from eWBL.

Naturally with remote working there is no physical presence within the workplace which can limit the practical experience that the student was able to receive during their eWBL. To overcome this many organisations came up with methods to give the student practical experience. These involved: conducting presentations, sitting in on negotiations and collaborating on team projects. All the organisations wanted to treat the student interns as employees during the eWBL to allow them to gain practical experience.

Case studies 1, 3 and 5 all operated remotely prior to Covid-19 and were able to provide more in-depth practical experience for the students where they got involved in creating new content, software and websites. The students involved believed that they were able to gain some practical experience during the eWBL, particularly with organisations where remote working was already established.

In the case of Case Study 1, the cybertechnology organisation always operated remotely and do not have an office. For them remote working is more productive and efficient as there are no office distractions and they can see what work is being done. With the students, the organisation was able to assess the student's work virtually and give feedback quickly. They were able to provide constant feedback to the students on the work that they were doing. They communicated solely through video calls during the work placement instead of face-to-face. The host organisation provided an evaluation at the end of the student's work placement, and this happened virtually.

The student participants were tasked with the organisation's first-ever diversity project throughout their work placement. All aspects of their participation were conducted remotely such as the research process, distribution of a national survey, and analysis. The student was able to use their own personal laptop throughout the placement and platforms Slack and Square Space for communication and website creation. The student noted they had no face-to-face contact with others within the organisation, but they kept in constant contact through MS Teams, Zoom, and Slack. This is where the majority of their socialisation occurred. The organisation held a daily meeting to touch base and distribute work. The student also had a mentor within the organisation to provide them with assistance and a placement manager to whom they would present their weekly work to and receive advice and feedback. This placement manager was also in constant contact with the student's placement lecturer. The student's weekly meeting with their placement manager was part of their assessment during their work placement. Their placement lecturer also met with them a month into the work placement to assess how they were doing and at the end to present their final workings.

For Case Studies 2 and 3, the students were given practical marketing tasks to complete and a mentor to check in with if they had any questions. Through these tasks, backed up with time to learn new software and a strong support network, these students were successful in their placements. In Case Studies 4 and 5, the students were given more freedom to learn by themselves which required more self-motivation, and both felt less supported by their organisations as a result.

4.3 Networking

Building a professional network is important as it opens doors and creates new relationships that support new opportunities, personal development, collaborative research, policy activism, and evidence-based practice (Goalsby and Knestrick, 2017). Research conducted in the USA by Harris and Williams (2014) found that students and professionals benefit more from face-to-face interactions while networking than through social media accounts such as Facebook and LinkedIn. eWBL may not be as successful in being able to help students develop professional networking due to the lack of face-to-face interactions.

With eWBL there are limited face-to-face interactions with those involved. This can affect the professional



networking that occurs. The student is still able to develop their professional network through interacting with others online through emails, video calls and instant messages. Both the universities and the organisations found that LinkedIn particularly helped the students in developing their professional networks.

The organisations also aided in the development of the student's professional network in various ways such as introducing them virtually to clients and partners and allowing the students to sit in various meetings such as negotiations in Case Study 2. Case Study 1 was able to help develop the student's professional network due to it consisting of cyber security professionals operating as volunteers. The mentor actively included the student in meetings with other professionals. The three HEIs believe that students were unable to fully develop their professional network meanwhile, the students involved disagreed with this, believing that they were able to develop a professional network throughout their eWBL.

For Case Study 3, their network was mainly peers within the technology organisation. For Case Study 4, they were also limited to the software company and the sports organisation to proactively develop their own network. Whereas in Case Study 5, developing and growing a professional network was very much linked to the role itself to promote the Start-Up.

4.4 Company/organizational culture

Organisational culture is defined as denoting a wide range of social phenomena, including an organisation's customary dress, language, behavior, beliefs, values, assumptions, symbols of status and authority, myths, ceremonies and rituals, and modes of deference and subversion (Scott et al, 2003). It is important that the company/ organisational culture is fully absorbed by all those involved with the organisation so that the organisation can reach its full potential. When the company culture is clear it can provide motivation and inspiration.

However, there may be barriers in students' ability to absorb a company's culture with eWBL as there is limited contact with those involved with the organisation. The company/organisational culture plays an important role in influencing employee behaviour, expectations, rewards, allocation of resources, decision-making, communication, and interactions within the company. The HEIs involved were unable to comment on the student's absorption of company culture during the eWBL. Their focus was on skills for remote working rather than the more nuanced aspect of company culture. However, the organisations involved aimed to fully immerse the students in the company culture through interactions with employees, sharing of organisational values and various supports offered by the organisation such as one-to-one coffee calls. Case studies 2 and 3 which had clearly defined onboarding programmes put more emphasis on organisational culture and setting out employee expectations from the beginning.

However, Case Study 4 with the sporting organisation did note that the eWBL was not long enough for the student to fully absorb the company culture and the student in this case felt as though they were not part of the core team due as there was an understanding that they were there only on a short-term basis. Students involved in the other eWBL cases reported that they tried to embrace the company culture that was being demonstrated to them to the full extent. With Case Study 1 as it was a volunteer organisation and those involved were all volunteers and therefore interested and interactive with the organisation the student did pick up on the enthusiasm and the company culture that was displayed. Likewise, with the Start-up in Case Study 4, the organisation consisted of only the owner and the student working together so the student could directly pick up on the company culture through them.

5. Drivers and challenges to eWBL

There are many advantages and disadvantages for all those that are involved in eWBL. The advantages surrounding eWBL act as a driver that encourage engagement with eWBL from students, HEIs, and organisations. These drivers motivate those involved with eWBL and encourage eWBL to be possible. Whereas the disadvantages surrounding eWBL act as a barrier to eWBL and will dissuade engagement with eWBL. They will challenge those involved in eWBL. However, without solutions to these challenges eWBL may become extinct in practice.

Naturally, it is the student that benefits the most from getting involved with eWBL as it boosts their employability and assists them with their academic learnings. The major driver for students getting involved with eWBL is the flexibility that it offers. The student is not hindered by geographical location and can participate in eWBL from anywhere globally. Students are driven to get involved in eWBL through the supports that were offered to them by the HEIs such as helping them find an eWBL placement or providing advice in sourcing a placement and interview preparation. Another driver for students is that through eWBL, like with a WBL, they can develop their professional network from the people they met and interact with during the eWBL.

Students are also driven to get involved with eWBL by the supports that are offered by the organisation. An organisation that is welcoming to a student intern and allows them to get involved and work on projects will be viewed more favorably than an organisation that arranges for the student intern to complete menial tasks. Students are also driven to eWBL by the low costs that are associated with it by not having to travel or pay rent if they must move closer to the organisation.

Organisations are driven to participate in eWBL as they can train and hire their future workforce with a work readiness that was generated during the eWBL, much like with WBL. Organisations also found an increase in productivity with remote working as there are fewer workplace distractions from co-worker conversations. Likewise, organisations are finding that the student interns are working harder during their eWBL with one student participant remarking that since they did not have anyone watching them work, they need to work harder to stand out more.

Drivers

HEIs: Engagement with organisations, Offering support. Peer to peer learning opportunities. Improved knowledge and professionalism.

Students: Improved online communication skills. Opportunity to work anywhere for any company. Bigger professional networks. Broader access to tools and platforms. As they are trusted to work alone without anyone watching, some felt more empowered and motivated to work harder/ prove their worth.

Organisations: Few workplace distractions can increase efficiency. Savings cost of not having employees on site. More flexibility. Opportunity for collaborative teamwork or individual work to identify strengths and areas for development.

However, there are also barriers for students in eWBL. The major barrier that is faced not only by eWBL but also by remote working is technological issues such as poor broadband reception in rural areas, having to share technology with family and power cuts. Patience is essential in this case for the student and the organisation involved. A tolerance to these issues has been developed during the Covid-19 pandemic. Another barrier that effected both the students and the organisations involved in the eWBL is that at times there was miscommunication largely due to not communicating face-to-face. This miscommunication would at times lead to delays on projects for the organisation. The organisations were also aware that the students were unable to learn from in-office interactions due to the eWBL being remote and this was a barrier to the students learning.

HEIs found that the compensation that the student received was a barrier to students' motivation and engagement with their eWBL, with students' motivation tapering off particularly when the eWBL was unpaid. However, this could also be the same for WBL. Finally, a major barrier to eWBL was the isolation that the student faced during the eWBL from lack of socialisation. Remote working increases feelings of social isolation and stress in employees (Toscano & Zappalà, 2020). This barrier was recognised by the HEIs, organisations, and the students' perspectives. Many organisations tried to overcome this barrier by providing virtual meetings or informal coffee breaks for the students to socialise with their co-workers.

Barriers

HEIs: Technology issues such as availability, connection issues and knowledge of software programs. Loss of student confidence and socialisation. Need to adjust assessment models for pre and post placement. Need to have more flexible student supports in place.

Students: Difficult to see progression. Sometimes unmotivated or felt alone. Slower response times to questions or issues. Lack of socialisation. Miscommunication. Slower to get introduced to people and company.

Organisations: Identified need for more clarity on tasks. Wavering motivation. Unable to learn from office interactions. Need to be more organised especially with on boarding documentation and processes. More support required.

6. Developed solutions

Pedagogical Innovations

The development of pedagogical innovations is necessary with eWBL to create a more meaningful experience for students. It is important that HEIs develop their pedagogical approaches towards eWBL to increase engagement from students. Likewise, a development in pedagogical competencies will further student's learning and aid in the professional development of educators. With the Covid-19 pandemic and the turn to eWBL many HEI educators had to come up with pedagogical solutions to assist students in their learnings and approach to eWBL.

As eWBL is conducted as a partnership between HEIs and organisations, the organisation also needs to develop their pedagogical approaches that will encourage and educate the student. The organisation takes on an educator role during WBL and eWBL in training the students, therefore their pedagogical skills need to be developed to create pedagogical innovations that will assist the student with their entry into the eWBL. New pedagogical approaches need to be developed and taken on by HEIs and organisations in the provision of eWBL.

Due to the Covid-19 pandemic and the physical restrictions that were put in place, eWBL had to be implemented quickly. This led to many pedagogical innovations being introduced that would make eWBL easier in its implementation and learnings gained from it for the students. Pedagogical innovations were introduced by both the HEIs, and the organisations involved with varying impact on the student. Some of the innovations were more successful than others in aiding the student's learnings. Also, some of the innovations that the organisations introduced were organisation-wide with full-time employees also being involved. It is important that these pedagogical innovations were successfully implemented for them to contribute to the students' learnings.

The HEIs would give students additional support for the eWBL, often giving the student an appointed mentor. HEI 1 called this the Reach Initiative. HEI 1 also offered pop-in sessions weekly where students could join a virtual call to ask questions regarding their work placement and introduced Jam Boards online platform for asking anonymous questions. Similarly, HEI 2 staff made themselves constantly available online to students to offer advice and resolve any issues that were occurring. Although, it is up to the student to get involved with the support and at times there was limited engagement with these supports from the students. Meanwhile, HEI 3 offered modules for their students that would prepare them for the world of work that they manipulated to suit remote working as well. The HEIs also urged students to partake in online courses that would prepare them for remote work experience on platforms such as LinkedIn Learning. However, it was up to the students to take part in these online courses as there was no academic requirement.

The organisations involved provided many pedagogical innovations to assist the student with their eWBL. They all provided a mentor to the student for advice and feedback on their work throughout the eWBL. The organisations also conducted regular meetings with the student, either daily or weekly, to touch base and distribute work to the student. The food retail organization in Case Study 2 had the student take part in an online IGD Starter Skills course as part of their introduction to the company and gave the student access to their eLearning Academy which provides online educational courses to all staff. The technology company in Case Study 3 introduced a buddy system for the student where the student was offered support by various team members across each project they worked on.

The student participants engaged with the pedagogical innovations that were offered to them during their eWBL. The students found these pedagogical innovations valuable for them to adjust to remote working and the feedback they received from the mentoring was important in helping them to further develop their skills.

Technological Innovations

Advancements in technology have led to innovation in the delivery of eWBL. New websites, software and applications can make remote working much easier to conduct. However, there are many issues surrounding technology such as technology not being able to suit needs, poor internet connections and lack of digital skills in individuals. There is a severe lack of digital competencies in HEI educators (Perusso and Wagenaar, 2021). This lack of digital skills in educators can prevent them from fully prepping and advising students with eWBL. HEIs educators' inability to provide this assistance to a student can negatively affect their learnings from the

eWBL as well as their engagement and motivation.

Similarly, many organisations had to make a sudden transition to remote working during the Covid-19 pandemic and often lacked the digital skills that were necessary with this transition to assist with eWBL. In contrast, organisations that had previously been operating remotely have better technical skills and are able to help students during eWBL. Technological innovations need to be developed by HEIs and organisations that will assist in the provision of eWBL.

Technology is extremely important in remote working to communicate with others and to collaborate on projects. Therefore, technology also plays a major role in eWBL. Both the HEIs and the organisations involved introduced various technological innovations to students to aid them with their eWBL. In preparing students for eWBL the HEIs introduced students to new software to communicate with them such as MS Teams, Zoom and Jam Boards. HEIs encouraged students to get involved in online courses that would prepare them for remote working on websites like LinkedIn Learning. The HEIs also encouraged communication between themselves and the students either through email, phone, Zoom or MS Teams.

The organisations involved often had more technological innovations to introduce to the student as each organisation has their own method of remote working. Most of the organisations gave the students the opportunity to avail of a company-supplied laptop with the exceptions of Case Study 1 and Case Study 4. Some students opted to use their own laptops for their eWBL although in some cases the student had to take on the company laptop due to it having the software that they would need already set up. The organisations introduced students to their own means of communicating using software like Slack alongside the more traditional means of communications such as email and phone calls. Case Study 1 introduced Square Space for the student to get involved in website creation for the organisation. Case Study 3 introduced Shortcut as a software that distributed tasks to employees including the student, as well as GitHub software that housed the code that the student used during the eWBL and allowed for collaboration between team members. Case Study 2 introduced the student to Connect which was the company's homepage for employees that also contained a section where employees, including the student, could request equipment such as laptops, desks, chairs, and headphone. They also introduced the student to Circular software as part of the eWBL which helped draft marketing emails. The Start-Up (Case Study 4) introduced the student to virtual reality as a way of working within the Metaverse. It created a virtual office space that the student was able to access that gave the impression of being inside an actual office.

Meanwhile, in the sporting organization in Case Study 4, it was the student that introduced the organisation to new AnalysisPro software as previously the analysis that the student was doing as part of the eWBL was done by hand. As a result, HEI 2 plans to purchase an educational license for the AnalysisPro software and embed it into their learning modules. The students involved adapted and engaged with the technological innovations that were introduced to them by the different organisations and HEIs. It is important that they successfully adapt to new technological developments as the ability to work online efficiently is a desirable employee skill in the future workforce.

7. Long-term implications of eWBL

eWBL has clear impacts on the development and learnings of students involved as it teaches them about the world or work, working online efficiently and various soft skills that make them more employable. However, eWBL long term impacts on HEIs and organisations is unclear. Further investigation needs to be made to explore how eWBL has affected students, HEIs and organisations.

While in the future eWBL may not be completely remote, a hybrid model is favoured by students, organisations and HEIs to combat isolation of participants. All participants believed that eWBL is here to stay. Many organisations have turned to remote working since the Covid-19 pandemic due to the flexibility that it offers. In HEI 1 students and staff are using a hybrid model for lectures and studying.

Students are favouring eWBL as it opens up opportunities to them globally while still helping them to develop their transversal skills within the workplace. With the shift to remote working, eWBL helps students to develop their online skills and make them much more desirable in the labour market, increasing their employability in the future. eWBL is also beneficial to students for its economic benefits.

However, there is the socialisation impact that occurs when eWBL is conducted completely online that can have negative effects on participants mental health. More, in the future, needs to be done to overcome the isolation that occurs during eWBL with HEIs already making plans to combat this and increase socialisation for students.

Finally, there is constantly new technology that is being created that will assist in making the implementation of eWBL much easier for all those involved and existing technology is being manipulated to suit the needs of remote working. This new technology and manipulation of existing technology will encourage eWBL participation in the future and make engagement much easier.

The ability to work online efficiently has become much more relevant and desirable in students due to the increase of remote working in many organisations. WBL providers have had to develop approaches that will allow students to be work ready in ways that do not require a physical presence. eWBL is developing students' efficiency with online working while also introducing students to the modern world of work causing many previous WBL providers to engage with eWBL to keep the future workforce up to date.

8. Bibliography

- Clark, G., 1998. Maximising the benefits from work-based learning: The effectiveness of environmental audits. *Journal of Geography in Higher Education*, 22(3), pp.325-334.
- Dogara, G., Saud, M.S.B. and Kamin, Y.B., 2020. Work-based learning conceptual framework for effective incorporation of soft skills among students of vocational and technical institutions. *IEEE Access*, 8, pp.211642-211652.
- Ferrández-Berruero, R., Kekale, T. and Devins, D., 2016. A framework for work-based learning: basic pillars and the interactions between them. *Higher Education, skills and work-based Learning*, 6(1), pp.35-54.
- Garnett, J. (2005), "University work-based learning and the knowledge driven project", in Rounce, K. and Workman, B. (Eds), *Work Based Learning in Healthcare*, Kingsham, Chichester, pp. 79-86.
- Goolsby, M.J. and Knestruck, J.M., 2017. Effective professional networking. *Journal of the American Association of Nurse Practitioners*, 29(8), pp.441-445.
- Harris, K. and Williams, J.A., 2014. Some experiences cannot be had at a distance: The importance of face-to-face settings for building professional networking skills. *Atlantic Marketing Journal*, 3(2), p.2.
- Hora, M.T., Lee, C., Chen, Z. and Hernandez, A., 2021. Exploring Online Internships amidst the COVID-19 Pandemic in 2020-2021: Results from a Multi-Site Case Study. WCER Working Paper No. 2021-5. *Wisconsin Center for Education Research*.
- International Labour Organization, 2020. ILO Monitor: COVID-19 and the World of Work. *Updated Estimates and Analysis. Int Labour Organ.*
- Lester, S., and C. Costley. 2010. "Work-based Learning at Higher Education Level: Value, Practice and Critique." *Studies in Higher Education* 35 (2): 561–575
- Nottingham, P. 2016. "The Use of Work-Based Learning Pedagogical Perspectives to Inform Flexible Practice Within Higher Education." *Teaching in Higher Education* 21 (7): 790–806.
- Perusso, A. and Wagenaar, R., 2021. The state of work-based learning development in EU higher education: learnings from the WEXHE project. *Studies in Higher Education*, pp.1-17.
- Ruggiero, D. and Boehm, J., 2016. Design and development of a learning design virtual internship program. *International Review of Research in Open and Distributed Learning*, 17(4), pp.105-120.
- Scott, T., Mannion, R., Davies, H. and Marshall, M., 2003. The quantitative measurement of organizational culture in health care: a review of the available instruments. *Health services research*, 38(3), pp.923-945.
- Templeton, W.K., Updyke, K. and Bennett, R.B., 2012. Internships and the assessment of student learning. *Business Education & Accreditation*, 4(2), pp.27-38.
- Toscano, F. and Zappalà, S., 2020. Social isolation and stress as predictors of productivity perception and remote work satisfaction during the COVID-19 pandemic: The role of concern about the virus in a moderated double mediation. *Sustainability*, 12(23), p.9804.
- Wang, L. and DeLaquil, T., 2020. The isolation of doctoral education in the times of COVID-19: recommendations for building relationships within person-environment theory. *Higher Education Research & Development*, 39(7), pp.1346-1350.

Annexes

Case Studies Reports

Case study report1: https://www.ewbl-project.com/files/ugd/6366ae_6038f51e530445e687f06cee19bea9da.pdf

Case study report2: https://www.ewbl-project.com/files/ugd/6366ae_4c6f98352c1f4e4798aac6e39ebc09fe.pdf

Case study report3: https://www.ewbl-project.com/files/ugd/6366ae_b480e859b9bb4d858f023fafdc89c1a2.pdf

Case study report4: https://www.ewbl-project.com/files/ugd/6366ae_0f0460742d20454a9d0793c3154fdd76.pdf

Case study report5: https://www.ewbl-project.com/files/ugd/6366ae_b01c123b3cfc4f20b5525fd42d72e67f.pdf

