



# WORK-BASED LEARNING CAN HELP INCREASE DIGITAL TECH TALENT IN THE CAPITAL REGION

Work-based Learning (WBL) can help meet the region's digital tech talent needs. WBL allows employers, educators, intermediaries, and other key stakeholders to expand the digital tech workforce by providing learners with meaningful training and workplace experience, ultimately supporting increased exposure to, navigation of, and participation in digital technology career pathways.



## Greater Washington Partnership's Capital CoLAB

The Greater Washington Partnership (“The Partnership”) is a first-of-its-kind civic alliance of CEOs, drawing from leading employers and entrepreneurs committed to making the Capital Region (from Baltimore to Richmond) one of the world’s best places to live, work, and build a business. The Capital CoLAB (CoLAB) came from the Partnership’s work on the region’s talent and skills. The CoLAB is an action-oriented partnership that brings together leaders of the region’s top academic institutions and businesses to make the Capital Region a leading global hub for innovation. The CoLAB is particularly focused on innovation within digital technology.



## Higher Ed Insight

Higher Ed Insight (HEI), located in the greater Washington, DC area, is a certified Women-Owned Small Business that offers services in evaluation, research, planning, and organizational learning. HEI collaborates with partners to improve education and workforce outcomes for underserved populations, with attention to addressing pervasive, systemic inequities. HEI’s research practice is grounded in its commitment to diversity, equity, and inclusion—core tenets that shaped its team’s engagement in this digital technology-focused WBL landscape analysis.

## Acknowledgements

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# INTRODUCTION

The CoLAB partnered with HEI to conduct a landscape analysis of digital tech WBL efforts in the Capital Region. The scan focused on identifying the spectrum of WBL models implemented, WBL platforms and tools utilized, promising practices guiding the design and delivery of quality WBL, and key WBL stakeholders throughout the region. Integral to this work was understanding practices that increased representation of learners among populations historically excluded from digital tech, and subsequently, identifying strategies that contribute efficaciously to equitable WBL opportunity and outcomes. The CoLAB's current involvement in the digital tech talent pipeline includes offering digital technology internships that connect secondary and post-secondary students to member employers, as well as a digital technology credentialing program that seeks to help emerging professionals gain in-demand tech capabilities sought by employers. Ultimately, the purpose of the scan was to help CoLAB define a strategy for its participation in scaling high-quality, equitable WBL both internally and region wide.

Several key federal legislations provide context for and also align with CoLAB's focus on WBL in digital technology: the [Strengthening Career and Technical Education for the 21st Century Act](#) (Perkins V), [Every Student Succeeds Act of 2015](#) (ESSA), and the [Workforce Innovation and Opportunity Act of 2014](#) (WIOA). Perkins V provides funding for Career and Technical Education (CTE) programs, within which WBL activities are often a core component. In particular, Perkins V funds efforts to prepare students for occupations that are high skill, high wage, and/or high demand. Information/digital technology meets all three of these requisites in the Capital Region. ESSA funds WBL experiences in schools where students can earn academic credit for participation and WBL administrators can receive professional development. Lastly, WIOA funding can be used to support employers in providing WBL experiences to learners with disabilities.

The CoLAB believes that increasing the presence of quality, equitable WBL across the Capital Region is critical to expanding the region's digital tech talent pipeline. Based on its market analysis, the CoLAB predicts that almost 60,000 annual positions will go unfilled by 2025 if the tech talent pipeline is not expanded. The CoLAB recognizes that collaboration with other WBL stakeholders is necessary to accomplish this goal.

CoLAB is confident that much of the talent needed to close the gap is right here in the region. By working with other stakeholders to ensure that secondary and postsecondary students throughout the region have access to high quality WBL experiences, CoLAB can help close this gap.





This brief expands on the following, selected findings produced by the landscape analysis:

1. The most effective WBL models are designed to intentionally engage learners from initial recruitment through post-WBL follow-up, and each phase in between.
2. Educators recognize what is required to deliver high quality WBL programming; however, lack of resources creates significant barriers to implementation.
3. Closing the digital tech talent gap will be only as successful as the region's ability to broaden participation among groups traditionally not included.
4. Intermediaries serve a key role of connecting learners, educators, and employers across the WBL spectrum and coordinating WBL efforts.



Undoubtedly, the COVID-19 pandemic has had an impact on the Capital Region, including the nature of WBL opportunity available. At the pandemic's onset, internships were significantly decreased or postponed for many, though others successfully shifted their offerings to be delivered virtually. In response to this new normal, many stakeholders sought guidance on designing and implementing virtual internships. Operating virtually presented new challenges, such as ensuring that each learner had sufficient software and hardware to adequately participate in WBL activities. However, many new opportunities presented themselves, like identification of innovative methods of engaging learners and delivering WBL programs. Given the tremendous transformations for how virtual WBL program models needed to be conceptualized, designed, and delivered coupled with the timeline within which this research was conducted, implications of COVID-19 are important to consider when processing the findings presented in this brief.





# KEY TERMS

The following terms are core to understanding ideas presented in this paper:

**Work-based learning (WBL)** – an educational activity comprising meaningful workplace experiences that facilitate academic, technical, and employability skill development to support entry into or advancement along a career pathway.

**WBL models** – various types of WBL engagements. For example, job shadowing, information interviews, internships, and apprenticeships.

**WBL stakeholders** – individuals and/or groups who participate in the design and/or delivery of WBL experiences. The primary stakeholders discussed in this brief are the following:

- **Learners** – secondary and post-secondary students who take part in WBL experiences (also referred to as students or trainees).
- **Educators** – secondary and post-secondary teachers and administrators who may recruit students for and match students with employers' WBL opportunities, align relevant curriculum to employer-identified competencies and skills, assess student learning, or ensure students gain credit for on-the-job training.
- **Employers** – local, regional, or national industry professionals who provide authentic WBL experiences at the workplace, offer insight into professional culture and expectations, or provide guidance regarding requisite skills and competencies within the digital tech sector.
- **Intermediaries** – third-party entities that provide overall coordination of partnership efforts; supplement or wholly provide intern and apprentice compensation; provide non-technical skills training; coordinate student on-boarding and off-boarding processes; help recruit and match students with employers; and help employers design, develop, and implement WBL engagement efforts.





# METHODOLOGY

The purpose of this scan was to provide CoLAB with greater insight into digital tech WBL efforts across the Capital Region. The CoLAB intends to use findings from the scan to define a strategic direction for its participation in scaling high-quality, equitable WBL both internally and region wide.

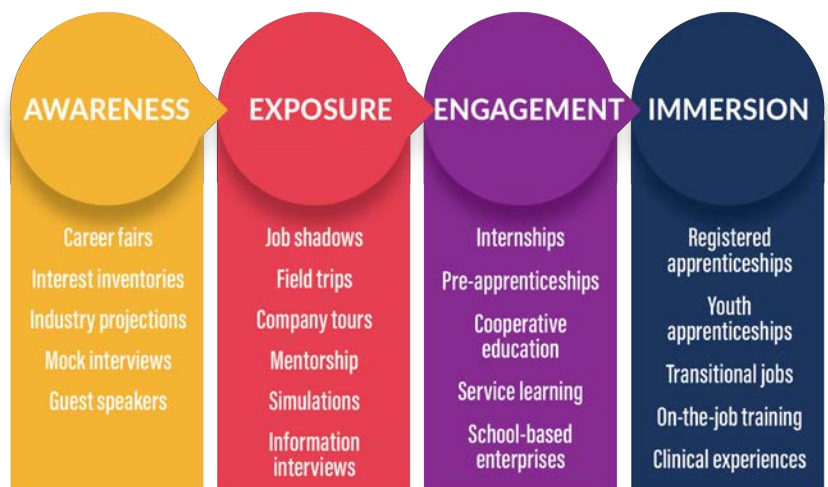
HEI collected and analyzed both primary and secondary data for this brief. Primary data was collected from phone interviews with 15 secondary educators from CoLAB's five primary jurisdictions, 15 digital technology intermediary WBL providers, and two convenings of WBL educators and intermediaries from the region, including roughly 20 participants per convening. Secondary data sources included key legislation (such as those referenced in the Introduction), research on WBL best practices, and industry publications on WBL.

Equity was central to this project. WBL exists at the intersection of education and workforce opportunity, thereby serving as a mechanism to catalyze social and economic mobility. Given the potential lifelong impact that participating in high-quality WBL experiences can have on individuals and communities alike, CoLAB and HEI's approach to understanding this multifaceted landscape was guided by an equity lens that accounts for diverse student populations. HEI's analysis centered the ways WBL programs equitably fostered opportunities for all learners—with attention to populations historically not included within digital technology.

## WBL Landscape in the Capital Region

In order to better understand WBL efforts across the Capital Region, HEI reviewed relevant literature<sup>1</sup> and produced a framework that categorized different WBL models and organized them across an interconnected continuum. This framework (see *Figure 1*) was informed by relevant literature, documentation of CTE programs, and stakeholder interviews. For example, WBL models in the exposure phase of the continuum include job shadowing and information interviews, whereas the engagement phase includes internships. Although each model is unique, they are all interconnected. A learner who is first exposed to a particular career in digital technology through a job shadowing WBL experience might later seek out an internship in that field.

**Figure 1:** Continuum of Work-Based Learning Models Across Phases

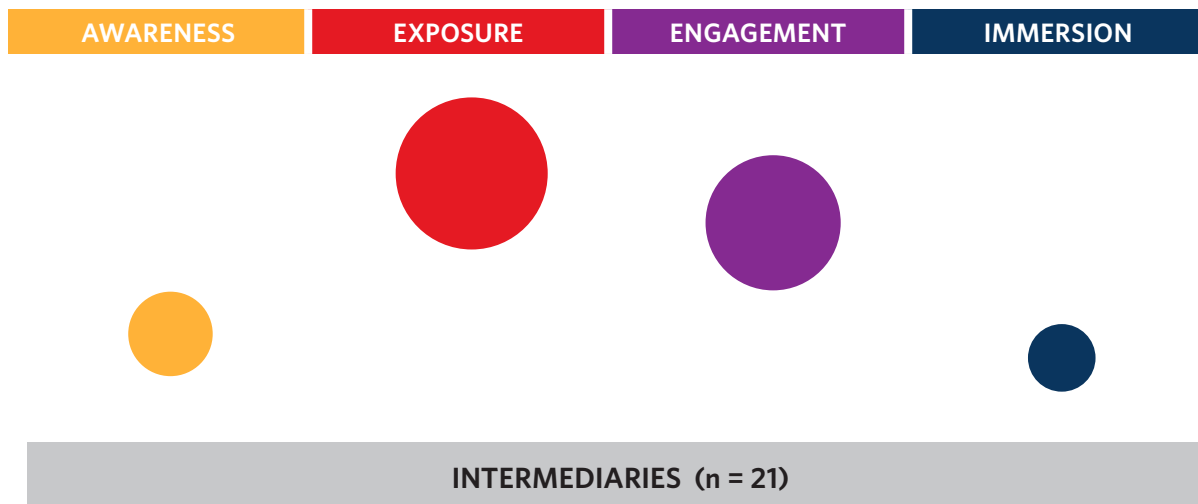


<sup>1</sup> JFF: *Work-Based Learning Framework*, FHI 360: *Work-Based Learning Manual*, CCRS Center: *Work-Based Learning Definitions*.



Using this framework as a foundational resource, we found a wide variety of WBL models across the Capital Region. Figure 2 below demonstrates how WBL model offerings among a sample of intermediaries across the region maps onto the spectrum found in Figure 1. The size of each bubble represents phase-specific WBL efforts relative to the sample’s combined WBL activities. Most WBL efforts are concentrated in the Exposure and Engagement phases, whereas there are fewer models that align with the Awareness and Immersion phases.

**Figure 2:** WBL Offerings Among a Sample of Intermediaries in the Capital Region



A final important observation about the WBL landscape in the Capital Region is the incredible diversity that exists among and across learners, educators, intermediaries, and employers. For example, there are learners who have had significant exposure to digital technology and digital technology-adjacent careers since primary school, whereas others are not exposed until high school or later. Relatedly, there are learners who are looking to begin their first professional role whereas others are changing careers. Also, while the digital technology profession tends to lack different representation in terms of race/ethnicity and/or gender, there is no shortage of either group among the Capital Region’s student population. In terms of educator diversity, the Capital Region is home to both public and private schools with a range of resources. For example, some schools have several staff members whose sole role is supporting students’ career planning and exploration, including participation in WBL, whereas others do not. Further, the region’s intermediaries range in the number of learners served, scope/areas of focus, and the types of WBL activities provided. Lastly, employers not only range from small- and medium-sized local employers to large national and multinational companies, but also in their experience with providing WBL experiences to learners.

On the one hand, this complexity makes it incredibly difficult to present a singular profile of WBL in the Capital Region. On the other, it offers a rich landscape of various opportunities for CoLAB to invest efforts to increase the digital tech talent pool within the region.



# FINDINGS

## The most effective WBL models are designed to intentionally engage learners from recruitment through post-WBL follow-up, and each phase between.

Regardless of which WBL model was examined, we found that the strongest models are those that engage learners at every stage of the process—prior to, during, and even after the specific WBL activity or activities have concluded. Specifically, the best models are designed to include the following components:

- WBL design planning
- Active learner recruitment
- Active learner intake
- Technical and non-technical skill development for all stakeholders
- Adequate support services
- Outcome assessment and tracking
- Post-WBL communication and/or support

Engagement with meaningful WBL models enhances a learner’s prospect of entering and subsequently advancing along a digital technology career path. We discuss each of the previously listed components in more detail in Figure 3 below:

**Figure 3:** Work-Based Learning Model Components Evident in the Region

COMPONENT	DESCRIPTION	EXAMPLES
WBL design planning	Ensuring that each aspect of the WBL experience is fully accounted for. At a minimum, there should be one point-person responsible for the entire engagement; however, it is best to have a team of individuals supporting efforts.	<ul style="list-style-type: none"> <li>▪ Recruit critical partners</li> <li>▪ Identify learning outcomes aligned with industry competencies</li> <li>▪ Determine data collection, tracking, and storage processes</li> <li>▪ Account for all logistics (e.g., travel to a job site, digital platform needed for virtual engagement)</li> <li>▪ Identify funding sources—current and future</li> <li>▪ Establish participation criteria (if applicable)</li> </ul>





COMPONENT	DESCRIPTION	EXAMPLES
Active learner recruitment	Going to and meeting learners where they are and not simply waiting for learners to come to you. This intentionality is particularly important for those who are not typically successfully reached through traditional forms of outreach and recruitment.	<ul style="list-style-type: none"> <li>▪ Social media and other web-mediated outreach methods</li> <li>▪ School visits</li> <li>▪ Referrals from community and civic organizations</li> <li>▪ Educator nominations</li> <li>▪ Flyers</li> <li>▪ Alumni ambassadors</li> <li>▪ Word of mouth</li> <li>▪ Information sessions</li> </ul>
Active learner intake	A thorough intake provides an assessment of the current interest, awareness, skills, and needs of each learner.	<ul style="list-style-type: none"> <li>▪ Online application</li> <li>▪ Interest inventory</li> <li>▪ Individual and/or group interview</li> </ul>
Technical skill development	Classroom and on-the-job training that directly aligns with employer- and/or industry-identified competencies and helps prepare learners for current and future digital technology jobs.	<p>Example training topics:</p> <ul style="list-style-type: none"> <li>▪ Full-stack web development</li> <li>▪ Agile methodology</li> <li>▪ Java</li> <li>▪ CompTIA</li> <li>▪ Google IT</li> </ul>
Non-technical skill development for all parties involved	<p>Training designed to help learners gain professional or employable skills, sometimes called “soft skills.”</p> <p>Also includes skill development to prepare employer partners to work with students.</p>	<p>Training topics for learners:</p> <ul style="list-style-type: none"> <li>▪ Professional communication</li> <li>▪ Time management</li> <li>▪ Interviewing</li> <li>▪ Resume writing</li> <li>▪ Digital literacy</li> <li>▪ Financial literacy</li> <li>▪ Self-advocacy</li> </ul> <p>Training topics for employer partners:</p> <ul style="list-style-type: none"> <li>▪ Supervision skills</li> <li>▪ Informal and formal feedback practices</li> <li>▪ Performance assessment</li> </ul>
Adequate support services	Services provided to learners that help them meet basic needs for participating in WBL. These services may be directly provided by a stakeholder or outsourced/referred to a partner.	<ul style="list-style-type: none"> <li>▪ Case manager</li> <li>▪ Transportation</li> <li>▪ Childcare</li> <li>▪ Laptops or other technological tools needed for virtual WBL</li> <li>▪ Career coach</li> <li>▪ College and financial aid application assistance</li> </ul>



COMPONENT	DESCRIPTION	EXAMPLES
Outcome assessment and tracking	Systematic records of individual and group performance on key indicators of success and/or improvement.	<p>Example of data and outcomes to assess and/or track:</p> <ul style="list-style-type: none"> <li>▪ Demographic information</li> <li>▪ Enrollment/Engagement numbers</li> <li>▪ Certifications obtained</li> <li>▪ Competencies gained</li> <li>▪ College persistence and graduation</li> <li>▪ Employer satisfaction</li> <li>▪ Alumni employment and income data</li> </ul>
Post-WBL communication and/or support	Extending relationship with learner beyond WBL activity that provides transitional support, sustains community among former learners, and tracks key outcomes that may be realized after a WBL experience.	<ul style="list-style-type: none"> <li>▪ Collect updated contact information</li> <li>▪ Conduct exit survey to assess anticipated needs and challenges</li> <li>▪ Share job opportunities</li> <li>▪ Assist with job search process</li> </ul>



**Educators recognize what is required to deliver high quality WBL programming; however, lack of resources creates significant barriers to implementation.**

There are standard expectations that all WBL opportunities should adhere to in order to provide participants with rigorous and equitable workplace experiences. These indicators of quality for WBL are as follows:

- Design and deliver meaningful WBL opportunities
- Provide comprehensive support systems
- Conduct ongoing measurement and assessment
- Offer monetary compensation
- Institutionalize ongoing DEI commitments AND intentionally recruit and engage specific populations
- Align curriculum with industry competencies

Educators are aware of the indicators of quality for WBL and work tirelessly to meet these standards. Oftentimes, however, the reality of district budgets means that schools do not have sufficient resources to design or deliver WBL programs that meet the level of quality required for efficacious outcomes. It is important to note that barriers to quality implementation experienced by educators in the Capital Region mirror difficulties that many schools of similar composition face across the nation.



This section details various indicators of quality, their importance, and educator perceptions of their schools' WBL practices as it relates to each indicator. Specifically, this section discusses the following indicators of quality: provide comprehensive support systems, conducting ongoing measurement and assessment, intentionally recruit and engage specific populations AND institutionalize ongoing DEI commitments, and align curriculum with industry competencies. Region-wide collaborative efforts could support sustained attainment of observed WBL successes within education systems as well as continued growth in facilitating quality WBL where opportunities for improvements exist. An ecosystem of this type could foster increased access to high-quality, equitable WBL for all learners in the Capital Region.

### *Provide Comprehensive Support Systems*

As a result of high-quality WBL, participants are better equipped to make informed, pragmatic decisions about their future careers. However, learners need comprehensive support outside of technical learning and skill development to fully participate in and maximize their benefit from WBL programs.

Educators are better positioned to support student engagement in meaningful WBL opportunities if they can provide students with the counsel required to facilitate navigation of and informed decision-making about WBL participation. Fundamental activities include supporting student goal setting, identifying potential areas of growth, determining areas of interest, and collaboratively defining student-centered performance metrics. Moreover, comprehensive student support includes traditional structures like professional skill development for students entering the workforce for the first time, as well as those non-educational influences impacting students' success like transportation to and from WBL opportunities.

Educators understand the importance of working closely with students throughout their WBL experience. For example, a staff member from one highly resourced school stated that in each of the

As a result of high-quality WBL, participants are better equipped to make informed, pragmatic decisions about their future careers.

district's high schools, "teachers work with students individually, and the student identifies what their interests are. The internship coordinator will help them and coach them and connect them to an internship." Unfortunately, not all school districts in the Capital Region have the financial means to support staff members dedicated to providing comprehensive student support in WBL. As a result, many work-based learning experiences are not individualized to student needs. One educator described this challenge by saying, "Having someone whose job it is to build these relationships with students, to check in, to make sure that they're getting what they need, [and] that the employer is [conducting the internship properly] is extremely important. [It cannot be] someone's 'Oh, by the way' type of position."

Opportunity exists within the Capital Region to support schools in securing funds to hire more WBL staff. In an interview, one educator discussed how he used Perkins funding to create the position of a work-based learning education specialist to oversee all of the policies and procedures of WBL in the district. A culture of shared knowledge region-wide could be the catalyst needed to identify promising, feasible strategies to address gaps in capacity to deliver comprehensive support systems.





### **Conduct Ongoing Measurement and Assessment**

Conducting ongoing measurement and assessment affords the benefit of evaluating participant outcomes and gauging student growth. When done well, the tracking and measuring of outcomes assume close collaboration among students, WBL coordinators, and employers to determine knowledge and skills targeted during and assessed in WBL experiences. Ongoing reflection on the part of both the student and employer is also paramount throughout the process as it provides a means for continuous monitoring of student progress and performance, subsequently allowing WBL coordinators and employers to better meet student needs. These reflections provide an avenue for students to offer feedback to WBL coordinators and employers regarding their experiences, thereby enabling greater self-advocacy.

Educators understand the importance of these processes, but environmental conditions often hinder their ability to develop high-quality tracking systems given the time and effort required of such structures. An educator at one of the schools in the Capital Region admitted that “not a lot of our experiences [are] being reported because we are still building out the programs at all of our schools.” The underlying contributor to this gap was related to limited resources: “I am only one person. If there were 30 of me, you would have a different story.” However, a great deal of opportunity exists if assets within the region are leveraged. Regional WBL convenings held as part of this research demonstrated that collaboration around and facilitated discussions about best practices in tracking and measuring student data, as contextualized in the Capital Region, could

identify ways to maximize efforts and resources. Conversations naturally emerged during these events, suggesting that school-based staff are eager to share with and learn from one another for the betterment of their students.

### **Intentionally Recruit and Engage Specific Populations AND Institutionalize Ongoing DEI Commitments**

Diversity and cultural responsiveness in schools is key to ensuring that WBL opportunities are inclusive for participants of diverse backgrounds. Many educators in the Capital Region discussed barriers to engagement and inclusion among specific populations in digital technology WBL opportunities. Without intentionality to engage and recruit certain groups of students, they will likely be systematically excluded from opportunities. Historically, many groups have remained underrepresented in the field of digital technology (e.g., Black, Latino, women); therefore, efforts must be made to deliberately recruit and engage them.

As a part of a region-wide strategy, opportunity exists within the Capital Region to push WBL stakeholders, including educators, to position equity and access at the forefront of WBL efforts by, at a minimum, intentionally recruiting and engaging students from diverse backgrounds within WBL programming. Such efforts could also include providing tips and resources around recruiting underrepresented minority students into digital technology WBL programs and ensuring that the supports are in place for equity and inclusion once they are recruited.



## **Align Curriculum with Industry Competencies**

It is essential to align formal instruction with the competencies learners are expected to demonstrate during WBL activities or other workplace experiences. Educators understand the need to align curriculum with industry competencies; however, the issue remains that doing so is a time-intensive effort, one for which many schools do not have the resources.

Many schools that HEI interviewed have employer partnerships in the infancy stages: schools are still trying to “connect with more industry partners.” Opportunity exists within the region to create a region-wide industry panel to share information on trends in employment and industry competencies that are important for students to master.

## **Closing the digital tech talent gap will be only as successful as the region’s ability to broaden participation among groups traditionally not included.**

As reported in CoLAB’s tech talent shortage brief, the Capital Region’s tech and tech-adjacent workforce is more diverse than its peers, but Black and African American, and Hispanic and Latino tech workers are underrepresented compared with the region’s workforce overall, and especially in the tech workforce. Women are similarly underrepresented. The current tech talent pipeline is broken for too many individuals, especially so for Black and African American, Hispanic and Latino, and/or women (e.g., women of color) learners. The region’s demographics coupled with the lack of diversity in digital tech means that focusing on equity while making strides toward closing the digital tech talent gap is not merely a considerate approach, but a strategic one. This strategic approach is sometimes driven by employers who realize the need for a more diverse workforce and could benefit from partnering with other stakeholders who have developed relationships with diverse tech talent. In this context, focusing on equity means considering it as it relates to each component of a strong WBL model. Two particularly critical components for advancing equity are Active learner recruitment and intake and Adequate support services.

Part of fixing the pipeline is introducing new approaches to the recruitment and intake process. For

example, instead of using the recruitment process to weed out those who do not meet a “rigid standard,” it’s best to consider what skills, attributes, interests, etc. are essential for a learner to have and what skills, attributes, interests, etc. can be developed through the WBL experience. One intermediary emphasized this point stating, “When we’re getting ready to recruit students, we don’t just say, ‘Come and interview.’ We have sessions at the schools first where we talk about our program. . . . We’ll have alumni there to speak about their experience, then we can talk about the process. Part of the process is the interview, which can be daunting for students. Then we have interview prep sessions with students. We offer those on campus again. Again, very hands-on.” This approach also sometimes involves asking different questions. For example, instead of simply trying to recruit students who are interested in technology, you might recruit students by asking if they’re interested in learning how technology can be used to solve a real-life challenge within the world and/or their community.

Lastly, as one interviewee put it, providing robust support services creates a shared ownership for each learner’s success, where the intermediary tries to “make sure students/trainees have all the tools necessary to be successful” in their WBL experience.





## Intermediaries serve a key role of connecting learners, educators, and employers across the WBL spectrum and coordinating WBL efforts.

WBL models can be delivered by a single stakeholder; however, we found that the overwhelming majority of WBL models were delivered by two or more stakeholders. In this context, intermediaries serve a key role of connecting learners, educators, and employers and coordinating their WBL efforts. Whereas there are other stakeholders, such as government agencies, non-profit organizations, and community service organizations, those defined in the key terms above and discussed in more detail below were the primary stakeholders included in our scan. Whereas stakeholder responsibilities are not rigid and can change depending on the nature of the WBL model and/or partnership, there are some primary responsibilities we found to be consistently applicable to particular stakeholder groups.

For example, **learners** were secondary and post-secondary students who participated in WBL opportunities. While in many ways they were considered the primary beneficiaries of WBL experiences, they also brought value to other stakeholders. They provided employers with the opportunity to directly connect with and impact the future talent pool and potential employees. They also helped to train their peers by sharing previously gained knowledge.

Secondary and post-secondary **educators** played the critical role of recruiting and matching students with WBL experiences outside of the classroom. They also were responsible for aligning the appropriate portion of classroom curriculum to employer/industry-identified competencies and skills and assessing learners' classroom learning. Lastly, they were also responsible for ensuring that learner schedules were supplemented, not interrupted, by participating in WBL and that learners received course credit for on-the-job training when possible.

**Employers** (small, medium, and large) played the key role of identifying core competencies associated with each WBL experience and helping to curate and create curriculum aligned with those competencies. In many

cases, employers also provided all or some payment to learners. Perhaps most importantly, employers provided staff to supervise, mentor, and evaluate learners. More broadly speaking, their role was to ensure that their company offered substantial WBL engagement opportunities that were aligned with and/or could lead to real, quality jobs within either their company or the digital tech industry.

[Learners] provided employers with the opportunity to directly connect with and impact the future talent pool and potential employees.

In discussing the role of **intermediaries**, it is important to note that implementing a single WBL model can involve many moving parts that require a significant amount of attention and energy. These challenges are amplified once stakeholders begin to offer multiple WBL models and/or increase the number of learners they engage. Intermediaries serve the role of meeting these and other challenges. In addition to coordinating multiple moving parts, intermediaries can also help fill resource gaps and bring educators and employers together to create an equity agenda and meet their equity goals.





Specifically, we found that intermediaries, as third-party entities, provided overall coordination of partnership efforts, such as assisting with the learner recruitment and matching process. They were often responsible for designing and implementing learner and employer on-boarding and off-boarding processes. They also provided non-technical skills training (e.g., communication, time management, and résumé writing).

As stated earlier, educators often lack resources necessary to fully implement WBL in their school contexts. In addition to at times supplementing or wholly providing learner compensation, intermediaries had access to other financial resources (e.g., grant and employer funding), where educators did not. Intermediaries also had human resources, specifically

trained staff, whose time could be primarily, if not exclusively, committed to WBL, whereas educators often had priorities more central to their position than WBL administration and implementation.

Lastly, intermediaries play a critical role in designing an equity agenda in the pursuit of closing the digital tech talent gap in the Capital Region. This agenda is best created when there is input from educators, employers, and learners. As part of its connector role, intermediaries can gather these stakeholder groups to develop an equity agenda that takes into account multiple perspectives, creates buy-in, and hopefully ensures long-term sustainability. Because equity is a region-wide imperative, the more stakeholders that intermediaries are able to strategically engage around the topic, the better chance of success.



# CONCLUSION

## What can GWP do to increase the Capital Regions's digital tech talent through work-based learning?

Our final recommendation to CoLAB is that it should further embrace its role as an intermediary of WBL and build a coalition with other intermediaries throughout the region. The coalition of intermediaries should reflect the diversity of intermediaries, in terms of size, scope, geography and place(s) on the WBL spectrum we encountered in our scan.

In our strategy report, we identified specific tasks that a coalition of intermediaries could accomplish, some of which are listed below:

- Build communities of practice to share information between stakeholders, collaboratively design metrics to measure WBL effectiveness and impact, and brainstorm around new challenges (e.g., offering WBL virtually)
- Develop a region-wide vision and plan for the equitable expansion of WBL that ensures equity is a priority in all activities, promotes a holistic approach to learner support services, and advocates for diversity among all stakeholder groups
- Increase stakeholder capacity by featuring exemplary WBL practices from across the Capital Region and supporting partner stakeholders in identifying resources to provide services in line with indicators of quality to meet regional needs
- Collect, analyze, and disseminate region-specific, market assessment data (e.g., current and projected workforce opportunities or diversity among IT employers) so that stakeholders can make data-driven decisions and improve accountability efforts

In closing, we believe that each intermediary should leverage its unique strengths for the benefit of the group; no one intermediary should “serve over” any of the others. For example, based on our scan we recognized CoLAB’s particular strength of building mutually beneficial and sustained relationships with large employers in the region and connecting employers with other stakeholders. CoLAB already exists in this space to a degree considering its Employer Signaling System (ESS) that helps employers communicate their curriculum curation and design ideas to educators. By expanding upon an already strong relationship with many of the region’s largest employers, CoLAB has an opportunity to exponentially impact efforts to increase the digital tech talent in the region through work-based learning.

