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Work-Integrated Learning and Postsecondary Graduates: The Perspective of Ontario Employers

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Executive Summary

This report presents findings from the Work-Integrated Learning Employer Survey. The survey was designed to explore employer motivations and barriers to participating in work-integrated learning (WIL) programs (such as cooperative education, field placements and internships) and to gather employer perspectives on the impact of WIL on the skills, competencies and employability of Ontario postsecondary graduates. The survey was undertaken by the Higher Education Quality Council of Ontario (HEQCO) in partnership with 14 Ontario postsecondary (PSE) institutions, the Ministry of Training, Colleges and Universities (MTCU) and the Ministry of Economic Development and Innovation (MEDI). It is part of a larger research project that includes surveys of postsecondary faculty and students at the participating institutions.

Postsecondary WIL programs are endorsed by both career development practitioners and business associations as essential to effective workforce development. They are also viewed as having the potential to offer significant labour market benefits to students – by improving their competitive positioning as they enter the labour market and, in some cases, helping them to secure employment immediately upon graduation. To successfully implement these programs, postsecondary institutions rely on the active participation of individual employers. Yet relatively little research has been conducted to assess employer attitudes toward WIL. Findings from the Work-Integrated Learning Employer Survey will support and strengthen partnerships between businesses, postsecondary institutions, community organizations and government by contributing knowledge about employer perspectives on the role of WIL programs, their perceptions of benefits and challenges, and the impact of WIL in transitioning students to the labour market.

The survey was conducted by telephone with 3,369 Ontario employers in spring 2012, using a stratified random sampling approach. Results are generalizable to all Ontario employers with a margin of error of +/- 2%. This report analyzes employer attitudes and experiences with WIL according to whether they had hired postsecondary graduates and whether they had participated in work-integrated learning programs. Findings for employers who provided WIL are further analyzed by the type of postsecondary institution offering the WIL program and the specific type of WIL. Finally, differences between employers are also considered by size and sector.

Key Findings

Participation in WIL helps students transition into the workforce.

- Forty per cent of Ontario employers reported hiring postsecondary graduates who were entering the workforce directly from college or university since 2010. Of those who hired, fully half (52%) offered employment to at least one graduate who had participated in a postsecondary WIL program at the employer's place of work. Another 9% hired at least one graduate who had completed WIL elsewhere.
- Employers who provided WIL opportunities ("WIL employers") overwhelmingly preferred to hire graduates who had gained WIL experience at their own workplace. Of those who hired, 82% offered employment to at least one graduate of a WIL program at their worksite.
- When making decisions about hiring postsecondary graduates, the most important factors considered by WIL employers were program of study, relevant work experience, credential earned, general work experience and participation in WIL at the worksite. The most important factors considered by non-WIL employers were relevant work experience,

general work experience, program of study, credential earned and evidence of academic skills and competencies.

- Among WIL employers who had *not* hired their WIL students, the single most important reasons for not offering employment were lack of job openings (40%), the student did not apply (17%), the recession or economic pressures (9%), lack of hard skills (8%), lack of soft skills (7%) and high student salary expectations (6%).

Students benefit financially from participating in WIL programs.

- The majority of WIL employers (58%) offered compensation to their WIL students.
- Employers consistently offered higher average starting salaries to the postsecondary grads they hired who had WIL experience – across all levels of educational attainment. While this finding may be related to differences in occupational pathways associated with WIL and non-WIL programs, it also suggests that WIL credentials may signal greater potential ability and future productivity to employers.

WIL employers work with a range of postsecondary institutions and offer a variety of WIL programs, but many focus on a single type of WIL.

- The 37% of Ontario employers who offered work-integrated learning at their worksite reported an average of 11.4 years of involvement. Of these employers, 79% provided opportunities for students from Ontario colleges, 49% worked with Ontario universities, 12% worked with private career colleges, 6% worked with postsecondary institutions in other provinces and 3% worked with international colleges or universities.
- Among employers who worked with Ontario colleges, 49% were involved with co-op, 31% offered field placements, 19% provided internships, 17% provided apprenticeships, 16% supervised practicums, 4% offered service learning and 2% engaged students in applied research projects. These employers were involved with multiple programs, including skilled trades (16%), social work (13%), business/marketing (12%), education (12%), engineering (9%), culinary/hospitality (8%) and arts (8%).
- Among employers who worked with Ontario universities, 39% were involved with co-op, 32% offered internships, 24% provided field placements, 23% supervised practicums, 12% offered service learning and 3% engaged students in applied research projects. These employers were mainly involved with programs from business/marketing (22%) and engineering (19%), followed by education (11%), social work (11%) and social sciences (9%).
- The majority of WIL employers (61%) worked exclusively with a single type of institution. Similarly, the majority of college-only and university-only WIL employers participated exclusively in a single type of WIL program.

While developing workforce skills and prescreening potential new hires are strong motivations for employer participation in WIL, employers are also motivated by a desire to "give back" to the community.

- The most commonly cited main reasons for employers to participate in WIL were developing the workforce skills needed for their industry or profession (25%), prescreening potential new hires (22%), giving back to the community (15%), bringing in specific skills or talents (11%) and managing short-term pressures or special projects (8%).
- Close to one-third of non-WIL employers (31%) stated that they had plans to provide WIL in the future – half within the next two years. Among these employers, the single most important reasons for future WIL involvement were prescreening potential hires (19%),

giving back to the community (18%), bringing in specific skills or talent (15%), managing short-term pressures (13%) and developing workforce skills (12%).

Employer participation in WIL is influenced by economic considerations. However, more significant factors are type of work available, the demands on staff time, lack of awareness of WIL programs and perceptions that students lack the necessary skills.

- Of all non-WIL employers, 16% had provided WIL in the past. The primary reasons for these employers to discontinue their involvement with WIL were the absence of suitable work for students (22%), recession or economic pressures (17%), lack of students with the skills needed (14%) and staff time to recruit, train or supervise students (9%).
- Among non-WIL employers who did not plan to provide WIL, the lack of suitable work was the most common main reason for not participating (35%), followed by staff time to recruit, train or supervise students (11%), a lack of students with the skills needed (9%) and lack of awareness of WIL programs (9%).
- The single biggest challenge faced by WIL employers was the amount of staff time involved in recruiting, training or supervising (14%), followed by students lacking soft skills (13%), students lacking hard skills (8%) and no suitable work for students (6%).
- Among WIL employers who did not compensate WIL students, 20% said they could not afford to pay a salary, and 12% said they incurred financial costs related to training/supervising.

Financial supports may help to facilitate employer participation in postsecondary WIL programs.

- Among all employers, the single most important strategies to make it easier to participate in WIL were financial incentives (25%), more information about WIL (9%), placements timed to better align with business cycles (9%), simplified student recruitment and selection processes (8%), increased placement length (6%), centralized employer database (6%), standardized procedures across schools (5%), assistance with student supervision and assessment (4%) and assistance with paperwork (4%).
- Better communication about WIL was particularly important to non-WIL employers, while WIL employers were more likely to recommend scheduling placements to meet business needs and increasing placement length.
- Despite their strong interest in financial incentives, WIL employers reported limited uptake of available tax credits. Only half of apprenticeship employers (49%) and one-third of co-op employers (33%) claimed current tax credits.

Strategies that could be considered by postsecondary institutions to increase employer involvement in WIL include:

- Providing more information about the full range of WIL options available, the specific skill sets brought by students within individual WIL programs and the criteria for “suitable” work.
- Adopting standardized terminology for WIL programs, to help ensure that employers know what is involved when they are asked to participate in specific types of WIL.
- Increasing flexibility for WIL employers to adjust the length and timing of WIL opportunities, to better align WIL programs with business cycle needs.
- Simplifying processes for employers to recruit and select WIL students, assistance with paperwork or administrative requirements, and more training and support for employers with student supervision and assessment.
- Ensuring regular and open communication between postsecondary institutions and WIL employers – during and after the placement.

- Developing coordinated provincial approaches to employer involvement in WIL, such as standardized procedures across institutions, and a centralized employer database.

Given the current trend toward increasing the use of WIL in postsecondary education, a key challenge in the coming years will be to ensure that the supply of WIL opportunities offered by employers is able to meet demand from students, faculty and postsecondary institutions – while providing high-quality learning experiences for students. To meet this demand, it will be important for colleges and universities to engage both current WIL employers and those who have never provided WIL, as well as academic faculty and postsecondary students themselves. Above all, it will be critical to ensure that the workforce needs of employers do not compromise the learning needs of students and that the WIL opportunities provided in Ontario workplaces offer meaningful opportunities to integrate classroom learning with practical experience.

The results of this survey add much to the knowledge base regarding work-integrated learning in Ontario and demonstrate strong employer support for WIL and interest in participating in WIL programs. The remaining phases of the study will generate vital insights about student perspectives on WIL, by exploring the impact of WIL on learning outcomes and postsecondary satisfaction, as well as examining the differences between WIL and other forms of labour market activities in facilitating the transition of PSE graduates to the labour market.

1 – Introduction

As Ontario transitions from a resource-based to a knowledge-based economy, ensuring an appropriate "fit" between the skills provided by postsecondary education (PSE) and the demands of a changing labour market has emerged as a major public policy concern (Brisbois, Orton, & Saunders, 2008).

The proportion of PSE graduates who enter the workforce in low-skill jobs (Zeman, McMullen, & de Broucker, 2010), along with a rise in the number of workers who are overqualified for their positions (Frenette, 2004; Li, Gervais, & Duval, 2006), provides some evidence of a disconnect between postsecondary skills and jobs in Canada (Bell & Benes, 2012). Moreover, both large and small Canadian employers continue to report challenges in finding qualified labour with the skills to fill available positions (CFIB, 2009; Deloitte & HRPA, 2012), while rates of youth unemployment have remained persistently double the rates for adults for more than a decade (Lehmann, 2012).

Postsecondary education is the primary source of new workforce supply in Canada and has been recognized as an essential investment in human capital development (OECD, 2012). Much recent policy attention has focused on increasing postsecondary participation rates to meet the requirements of existing job vacancies and fill new jobs created by economic growth. Yet the success of these policies in growing postsecondary enrolment and raising levels of educational attainment is contributing to an increasingly competitive labour market for new postsecondary graduates, with too many graduates from the same degree programs competing for a limited number of jobs (Bell & Benes, 2012). In the face of mounting postsecondary tuition rates and wide variations in the labour market outcomes of different postsecondary programs, better information about the PSE options that lead to labour market success – and about the skills employers require from PSE graduates – is needed to maximize both public and private investments in postsecondary education.

To date, government policy reforms to enhance the employability of postsecondary graduates and improve the connection between postsecondary education and the labour market have focused on strengthening the links between industry, colleges and universities (Fisher, Rubenson, Jones, & Shanahan, 2009) and increasing funding for targeted programs to develop the technological skills identified as "most in demand" by industry (Lennon, 2010). More recently, an Ontario government discussion paper has proposed the potential expansion of work-integrated learning programs "to make future Ontario students more career and job ready than ever before" (MTCU, 2012, p. 21).

Postsecondary WIL programs (such as cooperative education, field placements and internships) are viewed as offering significant benefits for students – by generating earnings to help offset tuition costs, improving their competitive positioning as they enter the labour market and, in some cases, helping them to secure employment immediately upon graduation. A recent report from the Canadian Career Development Foundation (CCDF) endorses WIL as providing youth with opportunities to better determine career fit, refine their learning goals, develop specific competencies related to their career objectives and establish a network of postgraduation contacts (Bell & Benes, 2012). Business and industry partners have also expressed support for work-integrated learning as "an essential component to building a highly skilled and productive labour force for an innovative, strong and growing economy" (Canadian Chamber of Commerce,

2012, p. 6). The OECD's skills strategy (2012) summarizes the value to employers of programs that integrate postsecondary education with the workplace:

> When employers are involved in designing curricula and delivering education programmes at the post-secondary level, students seem to have a smoother transition from education into the labour market. Compared to purely government designed curricula taught in school-based systems, learning in the workplace offers several advantages: it allows trainees to develop "hard" skills on modern equipment, and "soft" skills, such as teamwork, communication and negotiation, through real-world experience ... . Workplace training also facilitates recruitment by allowing employers and potential employees to get to know each other, while trainees contribute to the output of the training firm. Workplace learning opportunities are also a direct expression of employers' needs, as employers will be ready to offer opportunities in areas where there is a skills shortage. (p. 21)

Despite these benefits, however, the lack of active employer involvement in Canada has been identified as "one of the most profound impediments to improving post-school transitions for young people" (Lehmann, 2012, p. 117). Across OECD countries, there is growing emphasis on the importance of engaging employers in the discussion about how to best integrate recent graduates into the labour market (Bell & Benes, 2012). Since postsecondary institutions rely on the active participation of employers to deliver work-integrated learning programs, effective partnerships are required between postsecondary institutions, businesses, community organizations and government in order to successfully implement WIL, along with a clear understanding of the motivations, benefits and challenges associated with employer participation in WIL programs.

The Work-Integrated Learning Employer Survey was undertaken to support and strengthen these partnerships by gathering data about the factors that motivate employers to participate in WIL and the challenges they encounter in partnering with Ontario colleges and universities. The findings offer empirical evidence of the impact of WIL programs on the skills, competencies and employability of Ontario postsecondary graduates from the perspective of Ontario employers, and generate new insights on the role of postsecondary WIL programs in helping students transition to the labour market.

The survey was implemented in spring 2012 by the Higher Education Quality Council of Ontario (HEQCO) in partnership with 14 Ontario postsecondary (PSE) institutions, the Ministry of Training, Colleges and Universities (MTCU) and the Ministry of Economic Development and Innovation (MEDI). The research was conducted as part of a multiphase HEQCO study called Work-Integrated Learning in Ontario's Postsecondary Education Sector, designed to gather qualitative and quantitative insights into the impact of WIL programs for students, postsecondary faculty and employers and to better understand the benefits, challenges, and outcomes associated with postsecondary work-integrated learning. Phase 1 of the study was commissioned in 2009 and explored the range of WIL opportunities available at Ontario postsecondary institutions.[1] The research included a literature review and qualitative interviews with 25 employers and 39 staff and faculty involved in the delivery of WIL programs at nine Ontario colleges and universities. Findings were used to develop a typology of work-integrated learning and provide a conceptual framework for understanding the complex array of WIL programs

[1] See www.heqco.ca for the Phase 1 report, entitled *Work-Integrated Learning in Ontario's Postsecondary Sector*.

available in Ontario's higher education system (Table 1). The seven types of WIL identified in the typology include:

- Apprenticeship: Training that combines learning on the job with classroom instruction leading to a certificate of apprenticeship
- Field placement: Practical experience in a real work setting
- Practicum or clinical placement: Work hours needed to obtain a licence to practice or professional designation, or to register with a regulatory college/professional association
- Co-op: Academic study that alternates with paid work experience developed and/or approved by the college/university
- Internship: Program-related experience in a professional work environment
- Applied Research Projects: Student projects to address specific business or industry problems
- Service Learning: Student projects to address identified community needs or global issues

Table 1
Typology of work-integrated learning

	Systematic Training (workplace as the central place of learning)	**Structured Work Experience (familiarization with the world of work within a PSE program)**				**Institutional Partnerships (PSE activities/programs to achieve industry or community goals)**	
	Apprenticeships	***Field Experience***	***Mandatory Professional Practice***	***Co-op***	***Internships***	***Applied Research Projects***	***Service Learning***
Definition	Training that combines learning on the job with classroom instruction, leading to a certificate of apprenticeship	Practical experience in a real work setting	Work hours needed to obtain a license to practice or professional designation – or to register with a regulatory college/professional association	Academic study that alternates with paid work experience developed and/or approved by the college/university	Program-related experience in a professional work environment	Student projects to address specific business or industry problems	Student projects to address identified community needs or global issues
Main educational purposes	• Workforce training • Skill acquisition • Skill mastery • Workplace literacy	• Application of theory to practice • Attainment of professional or work-related competencies • Workplace literacy	• Integration of theory and practice • Attainment of professional competencies • Professional socialization • Mandatory for professional certification/ licensure • Mandatory for institutional program accreditation	• Integration of theory and practice • Career exploration and development • Progressive skill acquisition • Professional socialization • Workplace literacy • Workforce readiness	• Integration of theory and practice • Personal development • Career exploration and development • Skill development • Professional socialization	• Application of theory to practice • Address specific industry needs • Skill development (problem solving, critical thinking)	• Integration of theory and practice • Address specific community needs • Community building • Civic engagement • Global citizenship • Career exploration and development • Skill development • Personal development
Modes of delivery	Worksite • FT employment In-school • Block release (alternating with employment) • Day release (concurrent)	• Block placement (alternating with academic program) • Defined number of hours per term (concurrent) • Simulated work activities (concurrent) • Virtual work activities (concurrent)	• Block placement (alternating with academic program) • Defined number of hours per term (concurrent) • Single block placement, often at end of program (capstone) • Simulated work activities (concurrent)	• Block placement (alternating with academic program) • Structured work-study sequence must end with academic semester	• Single block placement at end of program (capstone) • Single block placement (alternating with academic program) • Defined number of hours per term (concurrent)	• Course-based projects (concurrent) • Institutional research projects (concurrent)	• Can be delivered as field experience, co-ops, internships or applied research projects

Phase 2 of the project was informed by the Phase 1 findings and involved survey research on faculty, student and employer perceptions of the value and limitations of work-integrated learning, in order to assess the impact of WIL on learning and labour market outcomes. The WIL Faculty Survey was administered online in spring 2011 to college and university faculty at 13 Ontario postsecondary institutions, and explored faculty experiences with, and perceptions of, WIL as an element of postsecondary curriculum.2 The Graduating Student Survey on Learning and Work was administered online in spring 2012 to students in their graduating year of a certificate, diploma or bachelor's degree program at 14 Ontario institutions. It was designed to gauge the impact of postsecondary students' workplace and volunteer experiences, including their participation in WIL, on satisfaction with PSE, employability skills, academic achievement and perceptions of self-efficacy. Sixteen months after the initial survey, in a planned Phase 3 of this project, a follow-up survey will be conducted to probe students' actual labour market and further educational outcomes. The WIL Employer Survey, which is the focus of this report, was developed to investigate the impact of PSE graduate participation in work-integrated learning programs on labour market outcomes from the perspective of Ontario employers, and to provide a reliable measure of Ontario employer attitudes about, and experiences with, postsecondary WIL programs.

Together, the findings from the three project phases make an important contribution to building the knowledge base about postsecondary work-integrated learning in Ontario. The study is important for several reasons. First, public financing of postsecondary education is predicated on the belief that society as a whole benefits when the knowledge and skills gained by students in colleges and universities are transferred to productive activities in the community and the workplace. Establishing the appropriate levels of government expenditures and support for work-integrated learning in the postsecondary sector requires a clear understanding of the benefits (and potential limitations) of WIL for postsecondary institutions, students, employers and the community as a whole. Second, postsecondary education quality and accountability are major public policy concerns. Evidence of the contribution of WIL to improving student learning is important in determining the pedagogical rationale for maintaining or expanding WIL in various postsecondary programs of study. Third, economic flux and a rapidly changing labour market are forcing a rethink of postsecondary curricula, including the traditional ways in which work experience has been integrated with postsecondary study.

The employer survey was guided by a working group of representatives from the 14 participating postsecondary institutions and two Ontario government ministries, as well as the Canadian Federation of Students (CFS), the College Student Alliance (CSA) and the Ontario Undergraduate Student Alliance (OUSA). The objectives of the study were to gather information about Ontario employers' experiences in hiring recent college and university graduates, their attitudes towards WIL and level of WIL participation, and their perceptions of the impact of WIL on graduates' workplace readiness. In particular, the study sought to address the following research questions:

1. Do employers perceive differences between the skills and competencies of WIL PSE graduates and those of non-WIL PSE graduates?
2. What is the impact of graduate participation in work-integrated learning on employer hiring decisions and starting salaries?
3. Why do employers choose to participate (or end their participation) in college and/or university WIL programs?
4. What are the financial implications of WIL programs in terms of employer compensation for students and government co-op or apprenticeship tax credits?
5. What do employers perceive as the benefits of their participation in WIL programs?

[2] See www.heqco.ca for the WIL Faculty Survey report, entitled *Faculty Experiences with and Perceptions of Work-Integrated Learning (WIL) in the Ontario Postsecondary Sector.*

6. What do employers perceive as barriers/challenges to their participation in WIL programs?
7. What would encourage greater employer participation in WIL programs?

To achieve the study research objectives, a telephone survey of over 3,000 employers in the province of Ontario was conducted over a period of one month in March and April 2012. Organizations were stratified by sector and size, with quotas by sector to ensure the ability to conduct sector analysis. Weights were applied for all provincial estimates to ensure representativeness.

The results of the survey are presented in this report, which is organized into the following sections:

- Section 2 situates the study within the scholarly literature and particularly within the research on graduate labour market outcomes and employer experiences with WIL.
- Section 3 describes the survey methodology, including the development of the survey instrument, survey administration, data analysis procedures and a profile of employer respondents.
- Section 4 presents the survey findings related to recent postsecondary graduates and the labour market and compares employment outcomes for WIL graduates and non-WIL graduates, employer perceptions of graduates' skills, starting salaries offered and the factors that influence hiring decisions.
- Section 5 explores the experiences of WIL employers, whether past, current or future, and details their motivations, benefits and challenges.
- Section 6 provides a summary of key findings by sector.
- Section 7 offers conclusions and recommendations for action by government and postsecondary institutions.

2 – Literature Review

During Phase 1 of the *Work-Integrated Learning in Ontario's Postsecondary Education Sector* project, 25 WIL employers were interviewed (Sattler, 2010). These employers were often involved with multiple institutions (both colleges and universities) and participated in a range of WIL programs. Most employer respondents indicated that they would recommend WIL programs to others and planned to continue to provide WIL opportunities because of high levels of satisfaction with the quality of students. The Phase 1 report yielded the following insights:

- Many of the key benefits that WIL employers associated with postsecondary work-integrated learning programs were identical to their motivations to participate. These included improved productivity and service delivery enhancements; streamlined recruitment and screening processes and reduced training costs for new hires; better connections and understanding between employers and PSE institutions; and opportunities to demonstrate their commitment to the community and to their profession.
- Employers derived other benefits from participation in WIL that did not initially motivate them to become involved, including improved workplace climate resulting from the presence of highly motivated and creative students, enhanced employee morale and increased capacity among staff responsible for student supervision.
- Challenges experienced by WIL employers included financial and economic pressures, managing student and institutional expectations and administrative and paperwork demands.
- Barriers to employer participation in WIL included managing workload and staffing to enable student supervision; working through various PSE institution processes and procedures; matching the availability of WIL students with organizational planning cycles; short WIL placement length; concerns about student quality; physical workplace limitations; managing expectations among students, PSE institutions, employees (and, in some cases, customers or clients); location of the business/organization relative to the postsecondary institution; and administrative and paperwork demands.
- When asked if they later hired students who had participated in a WIL program in their workplace, almost all employers reported making job offers to WIL students, regardless of the type of WIL in which the students had participated.
- In making hiring decisions, the majority of WIL employers said that they would be more likely to hire a job applicant with WIL experience than a candidate with other work history. However, close to half indicated that the relevance of other work experience would be important.

The remainder of this section summarizes the available literature on postsecondary education and WIL, with reference to graduate earnings and employment, graduate skills and competencies, and employer participation in WIL programs.

Graduate Earnings and Employment

The positive association between education and earnings has been well established. Many studies have shown an earnings advantage for higher levels of education, with university graduates earning more than community college and trade school graduates and both groups earning more than high school graduates (Hansen, 2007; Walters & Frank, 2010; Zeman, McMullen, & de Broucker, 2010). Higher levels of education are also associated with increased rates of employment and reduced likelihood of unemployment, even in periods of economic downturn (Statistics Canada & CMEC, 2012). There is also evidence that more highly educated graduates move more quickly from school to work (Hansen, 2007).

Analyses of wages and unemployment rates of postsecondary graduates reveal considerable variation in earnings by program. In particular, graduates from applied and technical fields – such as engineering, health, business and commerce, mathematics, and computer sciences – experience better labour market outcomes than liberal arts graduates, especially those from university programs (Lin, Sweet, & Anisef, 2003; Walters & Frank, 2010). Bills and Wacker (2003) attribute the earnings advantage of particular fields of study to the "signalling" function of educational credentials, whereby program credentials are used by employers to predict future productivity when there is little other information about job seekers.

Programs that include co-op and other types of WIL have also been shown to increase graduate earnings (Walters & Zarifa, 2008). In a longitudinal study of close to 10,000 students over a six-year period, Drysdale and Goyder (2010) found that university co-op graduates earned salaries 22.2% higher than those of their non-co-op peers in their first year in the workforce ($33,837 compared to $26,337). Co-op university graduates were also more likely to have paid off their PSE debts after graduation (Bayard & Greenlee, 2009; Downey, Kalbfleisch, & Truman, 2002; Haddara & Skanes, 2007). A U.S. study of internships and career success found that business interns reported receiving starting salaries that were 10% higher upon graduation and 17% higher two to three years after graduation (Gault, Redington, & Schlager, 2000). Participation in co-op can lessen disparities in labour market outcomes related to field of study, by providing employers with better signals regarding students' work habits and employability skills (Lin, Sweet, & Anisef, 2003).

Research on business internships found an improved "fit" between graduates' career goals and their postgraduation employment (Callanan & Benzing, 2004). A related finding among co-op university graduates showed that these grads were less likely to be overqualified for their jobs (Downey, Kalbfleisch, & Truman, 2002; Frenette, 2004). Conversely, although higher earnings, higher employment rates and lower rates of unemployment among Canadian university co-op graduates were also reported by Bayard and Greenlee (2009), no differences in earnings or employment were found at the college level. The authors attributed this to the lack of differentiation between co-op and non-co-op programs offered at college. Other researchers have found that the co-op earnings advantage is limited to certain programs (Darch, 1995; Haddara & Skanes, 2007) and may dissipate after four or five years (Haddara & Skanes, 2007). Weisz (2001) also found that the starting salary advantage for co-op graduates over non-co-op graduates disappeared when both groups had the same number of years of industry experience. There is mixed evidence about rates of internal advancement among co-op hires, with some studies reporting greater upward mobility (Braunstein & Stull, 2001; CLMS, 2002) and others not (Haddara & Skanes, 2007).

Several studies have found that WIL facilitates graduate entry into the labour market. Participation in co-op – at both college and university levels – is associated with a greater likelihood of securing full-time employment (Darch, 1995; Downey, Kalbfleisch, & Truman, 2002; Walters & Zarifa, 2008). Studies conducted with business interns in the U.S. (Gault, Redington, & Schlager, 2000; Knouse, Tanner, & Harris, 1999) and engineering interns in the U.K. (Bowes & Harvey, 2000) found a higher likelihood of employment among graduates of internship programs than among non-interns, as well as faster promotions for interns (Gault et al., 2000). Subsequent research corroborated these findings. One study showed that employers provided significantly more full-time opportunities for business interns – even those considered to be "average-performing" – than those who did not participate in internships (Gault, Leach, & Duey, 2010). The same study found that high-performing interns were more likely to receive higher starting salaries, and that the employers of the interns ascribed greater value to the internship program (Gault, Leach, & Duey., 2010). Research on the German apprenticeship system showed that apprentices who are hired following training have higher wages and longer first-job durations than apprentices who leave the training firm (Euwals & Winkelmann, 2001). This finding offered support to the theory that employer investments in apprenticeship allow them to select and retain the more able apprentices, thereby helping to recoup the costs of training apprentices who take their skills to other firms.

Employer Perceptions of Graduate Skills and Competencies

Over the past decade, there has been considerable discussion and debate about the skills that employers want – and the value and role of a liberal education. In the "creative age" and emerging knowledge economy, researchers have emphasized the importance of broad problem-solving and critical-thinking skills, as well as the technological skills needed to understand and analyze information (Lennon, 2010; Martin & Florida, 2009). A 2006 survey of B.C. employers showed that the top five skills sought in new employees were all soft skills, including interpersonal, teamwork, problem-solving, communication and leadership skills (CCL, 2008). As captured in the quotation below, there is growing acknowledgement that Canadian employers seek postsecondary graduates who combine both "hard" and "soft" skills:

> Employers, the market, industry, need workers not only with technical skills but with interpersonal and business skills. Too many of our post-secondary schools still offer adequate or advanced technical training, but nowhere do they give business strategy, marketing, and general liberal arts mixed in with the technology. However, there is real demand for such rounded workers. (Mr. Paul Swinwood, Software Human Resource Council Inc., cited in Standing Committee on Human Resources, Social Development and the Status of Persons with Disabilities, 2008, p. 12)

Similar trends have been observed internationally. Keating (2006) reports that employer consultations with small, medium and large Australian business showed increasing interest in a more highly skilled workforce where the generic and transferable skills were broadly distributed across the organization. In their assessment of New Zealand employer perceptions of business graduates' workplace preparedness, Hodges and Burchell (2003) found that eight of the 10 most important competencies for employer respondents were "soft skills," with "ability and willingness to learn" rated highest and "technical expertise" rated near the bottom of the list of 25 competencies. A recent national study of 300 U.S. employers also found support for the view that postsecondary education should provide a blend of liberal and applied learning (Hart Research Associates, 2010). Employer respondents recommended greater emphasis on learning outcomes developed through a liberal education, as well as increased opportunities for students to apply their college learning in real-world settings.

Frequent media attention has focused on employer dissatisfaction with postsecondary education in producing the skills needed. An Australian study exploring employer satisfaction with graduate skills concluded that many graduates were judged unsuitable for employment because they lacked soft skills in independent and critical thinking, creativity, communication, interpersonal relationships and an understanding of business practice, not because of inadequate disciplinary knowledge (ACNielsen Research Services, 2000). Although they found that New Zealand employers were generally satisfied with the performance of new PSE graduates, Hodges and Burchell (2003) also observed a performance gap between the competencies considered important by employers and their experience with new graduates.

There are mixed results from studies that have assessed employer views on the effectiveness of postsecondary work-integrated learning programs in supplying the skills needed by employers. Using 14 work-related competencies, Bartkus and Stull (2001) surveyed 158 workplace supervisors and managers of co-op students and interns across the U.S., to evaluate employer perceptions of the performance of these students as compared to typical employees. While they found that co-op students and interns were perceived as better-than-average employees on four measures (having a positive effect on other employees, functioning as a team player, creative thinking and taking constructive criticism), no differences were perceived on eight other competencies, and co-op students and interns were rated worse than average employees on leadership and computer literacy.

In a survey of 80 U.S. employers of recent engineering grads, Reio, Jr., and Sutton (2006) found no differences between employer ratings of work-related competencies for new graduates of co-op programs and ratings for non-co-op graduates. Although statistical significance could not be detected, they noted that employers rated co-op graduates better on almost all the measured competencies and recommended that further research be conducted with larger samples and greater statistical power. Another study of 93 U.S. employers reported that employers rated co-op students higher than non-co-op students on technology skills and technical knowledge but about the same on many soft skills (Braunstein & Stull, 2001).

Employer Participation in WIL Programs

As stated in the introduction to this report, employer interest in work-integrated learning is growing in Canada and internationally. In a 2005 survey of more than 400 New Jersey employers, 69% believed that more experience-based learning, such as internships, would improve higher education by making it more relevant to the workplace (John J. Heldrich Center for Workforce Development, 2005). Qualitative research with Spanish employers found strong endorsement for work placements coordinated and supervised by the university as the best way for students to acquire or improve workplace competencies, as well as to improve the efficiency of employer hiring processes (Hernández-March, Martín del Peso, & Leguey, 2009). Hodges and Burchell's (2003) study of New Zealand employers found a strong employer preference for "work-ready" graduates with prior work experience, highlighting the potential of co-op as a bridge between work and education. In Canada, B.C. students are being encouraged by employers to take advantage of co-operative education and other forms of work placements as ways of gaining valuable work experience and developing communication and teamwork skills (CCL, 2008).

Several studies have investigated the benefits of, and motivations for, employer participation in WIL. In a New Brunswick study of 85 employers, the most frequently cited reason for WIL participation was to identify qualified future candidates, with 70% of WIL employers (typically involved in co-op) agreeing that their experience with WIL had been valuable (CCL, 2007). This finding was reinforced during employer focus groups also conducted for the study, which confirmed that filling labour shortages was a primary motivation for WIL participation. Studies have shown that employers view WIL as improving their ability to hire motivated and enthusiastic new employees and to prescreen students for permanent employment (Braunstein & Stull, 2001; Callanan & Benzing, 2004; CLMS, 2002), improve employee retention (CLMS, 2002), create positive interactions with higher education (Braunstein & Stull, 2001) and enable the achievement of projects that could not otherwise have been completed. In addition, Callanan and Benzing (2004) note that positive student experiences with WIL can serve as a corporate marketing tool when these students return to university and "spread the word' about the firm to their peers. A case study of internships in the Nova Scotia public service found that internships offer significant benefits, even in unionized environments with limited opportunities for post-placement employment (Dodge & McKeough, 2003). These benefits consist of the new ideas and fresh perspectives brought by students into the workplace and the general contribution of internships to enhancing the skills of future professionals.

Some researchers have looked specifically at the recruitment savings accrued by employers as a result of their participation in WIL (Callanan & Benzing, 2004). Weisz (2001) estimated that a cooperative education program with 800 students saves employers between $500,000 and $1.37 million annually. In a survey conducted by the Canadian Apprenticeship Forum (2006), two-thirds of employers reported that the productive value of the apprentice to their company exceeded the training costs by the end of the second year of the apprenticeship – or earlier. The report concluded that apprenticeship training is a worthwhile investment, with a net return of $0.38 for each $1.00 invested.

The impact of firm size on employer motivations to participate in WIL has also been noted in the literature. In their study of college internships, Knouse, Tanner, & Harris (1999) observe that reducing labour costs

through participation in WIL is of particular interest to smaller firms. These firms' more limited payroll, however, means that they are less likely to offer permanent employment to students once the placement ends. While acknowledging that interns represent a low-cost source of labour, Degravel (2011) also argues that WIL students can be a valuable strategic asset for small firms by helping the owner better understand the firms' competitive advantage and contributing to organizational change, thereby overcoming a major obstacle to small firm development.

In addition to these well-established benefits of WIL, a number of challenges have been identified. Many small and medium enterprises (SMEs) find it difficult to initiate collaborations with postsecondary institutions in research and co-op employment programs (Mendelsohn, Shlozberg, Hjartarson, & McGuire, 2011). Institutional processes and expectations may also create barriers for employers, prompting employer interest in centralized lists of potential candidates (to simplify access to WIL students) and requests for examples of appropriate work placements (CCL, 2008). Several studies have found that short placement length can be a challenge, given the significant investment involved in training and supervising students before they become productive (CCL, 2007; Hejmadi, Lock, & Bullock, 2008; Mills, McLaughlin, & Robson, 2008). Among employers who engage students in project-based work, there is a preference for more experienced, upper-year students, rather than students in their first or even second year. This suggests a potential tension between workplace demands for students-as-workers and educational goals for students-as-learners (Mills, McLaughlin, & Robson, 2008).

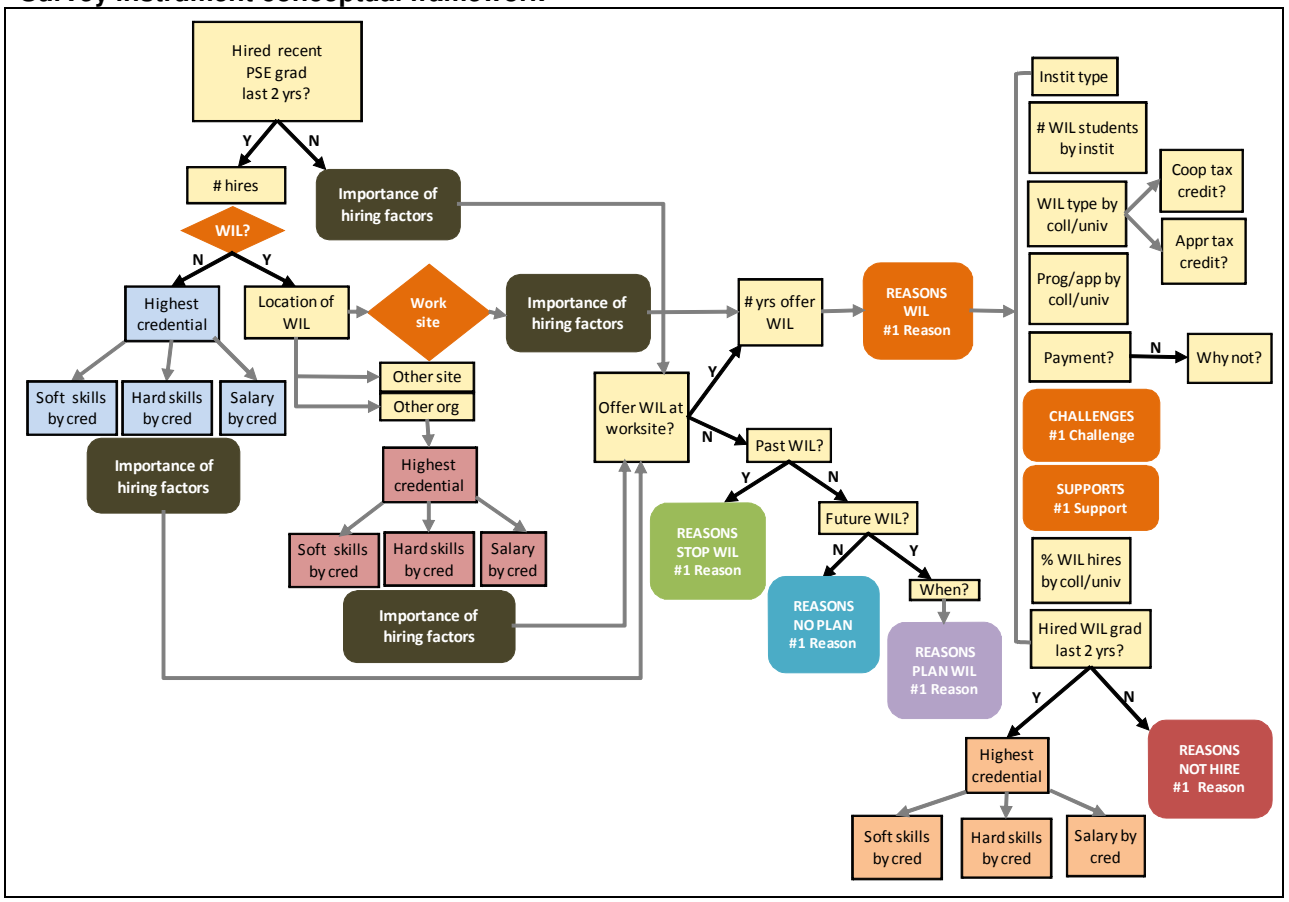
3 – Survey Methodology

The research objectives for the survey were to gather employer opinions on the preparedness and skills of recent Ontario postsecondary graduates (in particular, graduates who had participated in college or university work-integrated learning programs) and to gain an accurate understanding of employers' current, past and planned participation in work-integrated learning (including the motivations and barriers to participation).

Instrument

Figure 1 below shows the flow of questions in the survey instrument and indicates how the research questions and overall study objectives were addressed.

Figure 1
Survey instrument conceptual framework



Sample Design

A stratified sampling approach was used for this study. To obtain the sampling frame, the Dun and Bradstreet Hoover's database was purchased.[3] The sampling frame was stratified by sector and size. To stratify the sample by sector, NAICS codes were used to create 12 sector groupings,[4] which took into account strategic sector priorities of the Ontario government, as well as sectors with higher proportions of youth employment. For each sector, response quotas were established to enable subgroup analysis, ensuring a +/- 5% margin of error in five sectors (Finance; Health and Social Services; Information and Cultural Industries; Manufacturing; and Professional, Scientific and Business Services) and a +/- 7% margin of error in the remaining seven sectors. The overall margin of error is +/- 2% (Table 2).

Table 2
Sector quotas

Sector	NAICS codes	Quota	Margin of error
Accommodation, food and consumer services	72, 811, 812	200	+/-7%
Arts, entertainment and civic/professional organizations	71, 8132, 8133, 8134, 8139	200	+/-7%
Construction	23	200	+/-7%
Educational services	61	200	+/-7%
Finance, insurance, real estate and leasing	52,53	380	+/-5%
Forestry, mining, oil and gas extraction, and utilities	113,1125 ,1153, 21, 221, 491, 492, 562	200	+/-7%
Health care and social assistance	62	380	+/-5%
Information and cultural industries	51	350	+/-5%
Manufacturing	31-33	380	+/-5%
Professional, scientific and business services	54,55,561	380	+/-5%
Public administration	91	200	+/-7%
Transportation, warehousing and trade (wholesale and retail)	41,44-45,48,493	200	+/-7%
Total Sample		**3270**	**+/-2%**
Excluded:			
Crop and animal production and support	111, 112, 1151, 1152		
Fishing, hunting and trapping	114		
Religious organizations	8131		
Private households	814		

Stratification by size used the four size categories of Canadian Industry Statistics, which is based on regrouped size categories from the Canadian Business Patterns database (Table 3). Micro employers from all but one sector grouping were excluded from the sample.[5] Within each stratum, a random sample was selected. Medium- and large-sized business strata were oversampled to enable analysis by size of organization. The sample was drawn based on a 10:1 sample-to-completion ratio using the quotas for each of the 12 sector groupings. During the study, additional cases were randomly selected and added to the sample as needed to reach the quotas within the specified study period. The final total sample was

[3] The Hoover's database lists over 500,000 Ontario businesses and organizations and is continually updated by in-house editorial staff. The database includes industry NAICS codes for each firm, numbers of employees and contact telephone numbers for individual business locations. Access to individual locations was important to the study, as the questions were designed to gather insights about direct employer experiences with postsecondary graduates at individual establishment sites, rather than from the main offices of organizations with multiple sites.
[4] See Appendix A for a description of each sector grouping.
[5] Given the small number of firms within the Forestry sector, the sample included Forestry sector employers with 2 to 4 employees.

43,378 Ontario business and organizations, with a resulting functional sample of 35,133 following the removal of invalid numbers.

Table 3
Firm size classifications

	Goods-producing	Service-producing
Micro	1-4 employees	1-4 employees
Small	5-99 employees	5-49 employees
Medium	100-499 employees	50-499 employees
Large	500+ employees	500+ employees

Prior to analysis, the survey sample was compared to the Ontario population and weighted by sector and size to restore representativeness. The source for the population figures was the June 2011 release from Statistics Canada's Canadian Business Patterns database, which reported 172,266 Ontario businesses with 5 or more employees. Of these, 90.6% were categorized as small, 8.9% were categorized as medium and 0.5% were categorized as large.

Procedure

To select the individual respondent to represent the sampled business or organization, callers asked to speak to the person within the firm who was responsible for human resource decisions or who was involved in the recruitment, screening or supervision of college and university students in the workplace. Respondents were able to complete the survey in either English or French. Initially, respondents were also offered the option of completing the survey online. However, due to low completion rates among respondents who were e-mailed the survey link during the first week in the field, the option to complete online was used only to secure cooperation if the respondent refused to participate in the telephone survey.

A target respondent was reached at 7,881 of the organizations. Of these, 3,369 employers completed the survey. This represents an overall response rate of 9.6% and a respondent-level cooperation rate of 42.7%.[6] A best practices guide produced by Public Works and Government Services Canada (2007) states that "studies suggest that higher response rates do not necessarily produce more accurate data, and that surveys with low response rates can still provide useful and valid data." Further, the cooperation rate and response rate achieved by the survey are consistent with previous research in the field of human resource development (Phoenix SPI, 2012; Reio, Jr., & Sutton, 2006). See Appendix B for the detailed response rate calculations by sector.

The average length of the survey was 12 minutes. Of all respondents, 0.8% (n = 28) completed the survey in French, and 2.6% (n = 86) completed the survey online.

Tables 4, 5 and 6 show the size and sector characteristics of respondents, as well as the application of size and sector weightings to the respondent sample.

[6] The response rate is calculated as the total number of completes divided by the total functional sample. The cooperation rate is calculated as the total number of completes divided by the number of targets reached. Both calculations follow the American Association for Public Opinion Research (2011) standards.

Table 4
Sample weighting by sector

Sector	Sample size (unweighted)	Unweighted (%)	Weighted (%)
Accommodation, food and consumer services	205	6.1	14.9
Arts, entertainment and civic/professional organizations	213	6.3	4.3
Construction	202	6.0	9.3
Educational services	203	6.0	1.5
Finance, insurance, real estate and leasing	392	11.6	7.6
Forestry, mining, oil and gas extraction, and utilities	206	6.1	2.2
Health care and social assistance	392	11.6	9.5
Information and cultural industries	359	10.7	1.4
Manufacturing	386	11.5	7.7
Professional, scientific and business services	398	11.8	12.9
Public administration	210	6.2	0.6
Transportation, warehousing and trade (wholesale and retail)	203	6.0	28.0
Total sample	**3,369**	**100**	**100**

Table 5
Sample weighting by size

Size	Number of employees (goods)	Number of employees (services)	Sample size (unweighted)	Unweighted (%)	Weighted (%)
Small	5-99	5-49	2,458	73.0	90.6
Medium	100-499	50-499	878	26.1	8.9
Large	500+	500+	33	1.0	0.5
Total sample			**3,369**	**100**	**100**

Table 6
Weighted sample by size and sector

	n size	Small (%)	Medium (%)	Large (%)
Accommodation, food and consumer services	205	91.2	8.8	-
Arts, entertainment and civic/ professional organizations	213	89.6	10.4	-
Construction	202	98.0	2.0	-
Educational services	203	86.2	9.4	4.4
Finance, insurance, real estate and leasing	392	92.1	7.1	0.8
Forestry, mining, oil and gas extraction, and utilities	206	95.1	3.9	1.0
Health care and social assistance	392	89.8	9.4	0.8
Information and cultural industries	359	82.5	16.1	1.4
Manufacturing	386	89.1	9.8	1.0
Professional, scientific and business services	398	88.2	11.1	0.8
Public administration	210	44.8	43.3	11.9
Transportation, warehousing and trade (wholesale and retail)	203	90.6	9.4	-
Total sample	**3,369**	**90.6**	**8.9**	**0.5**

Analysis

Two strategies were used to categorize respondents and analyze employer perceptions and experiences by their level of involvement with WIL. First, respondents were grouped into four segments according to whether they had hired any "recent" graduates of postsecondary WIL programs within the last two years (or since January 2010)[7]:

1. "No PSE Hires": Employers who had not hired any postsecondary graduates since January 2010.[8]
2. "Non-WIL Hires": Employers who had hired one or more postsecondary graduates since January 2010, but the graduate(s) had not participated in a WIL program.
3. "Other WIL Hires": Employers who had hired one or more postsecondary graduates since January 2010, where the graduate(s) had participated in WIL at another worksite or another business/organization.
4. "Worksite WIL Hires": Employers who had hired one or more postsecondary graduates since January 2010, where the graduate(s) had participated in WIL at the employer's worksite.

Second, respondents were also grouped according to whether they offered WIL at their worksite:

1. "WIL Employers": Employers who provided WIL opportunities for students at their worksite.
2. "Non-WIL Employers": Employers who did not provide WIL opportunities for students.

This report explores differences between these employer segments in their perceptions of postsecondary graduates and in their attitudes toward work-integrated learning. Where appropriate, to clarify interpretation of the findings, "Other WIL Hires" and "Worksite WIL Hires" are combined into a single respondent group ("WIL Hires").

Differences in employer responses are also analyzed by size and sector. To allow for a more nuanced exploration of the impact of employer size (particularly for employers categorized as "small"), the analysis regrouped the Canadian Business Patterns database size categories into the following four segments: 5 to 9 employees, 10 to 19 employees, 20 to 49 employees and 50+ employees. Regional analysis used Canada Post's regional definitions at www.canadapost.ca/cpc2/addrm/hh/current/indexm/cmON-e.asp.

Results are not shown for any subgroup analysis in which segment *n*-size is less than 20. It is also important to note that not all subgroup differences presented in the tables are statistically significant. Where findings are statistically significant at the .05 level or higher, results are highlighted in the text.

Consistent with other recent employer survey reports (EKOS, 2007; Phoenix SPI, 2012), percentages reported throughout this document are based on weighted data. However, sample ("*n*") sizes are unweighted figures, indicating the actual number of employers who responded to the question.

Limitations

A relatively low response rate was obtained, in part due to the funding available for survey administration and the length of time in the field. On average, only three call attempts were made to each of the

[7] "Recent" graduates were defined as those who were entering the workforce directly from college or university.
[8] Since respondents were asked specifically about hiring postsecondary graduates, this category could include respondents who hired non-PSE workforce entrants. However, the survey did not capture data on non-PSE hires.

organizations sampled, and the survey was in the field for only one month. It is generally recommended that 8 to 10 attempts be made to increase telephone survey response rates.

Minimizing respondent burden by keeping the survey length as short as possible was a key priority. Hence, another limitation of the research is the lack of detail about particular types of WIL and specific graduate skill sets. In some cases, the analysis considers only whether or not employers offered WIL at their worksite and does not distinguish between types of WIL. Similarly, skills are grouped into "hard" and "soft" without separating out specific skills. Where analysis specific to WIL type is available, it relies on employers' own interpretations of WIL program (co-op, internship, field placement, practicum, etc.), which may not necessarily align with the definitions used by postsecondary institutions or those established in the typology.

Respondent Profile

The majority of employer respondents (54%) held positions as managers or supervisors (school principals and vice-principals were included in this category) (Figure 2). About one-third of respondents (32%) held senior executive positions within their organizations, as presidents, CEOs, executive directors, owners or vice-presidents with non-HR portfolios. The remaining respondent group, including vice-presidents of HR, were directly involved in human resources, staffing, recruitment or employee relations (14%).

Similar to the provincial distribution of employers, almost half of respondents were from Central Ontario (46%), and about one-quarter were from Southwestern Ontario (24%) (Figure 3). Another 19% were from Eastern Ontario, and 11% were from Northern Ontario.

About 40% of respondents were from firms with 5 to 9 employees, 31% were from firms with 10 to 19 employees and 18% from firms with 20 to 49 employees (Figure 4). Only 11% of respondents were from firms with 50 employees or more.

Figure 2
Respondents by position

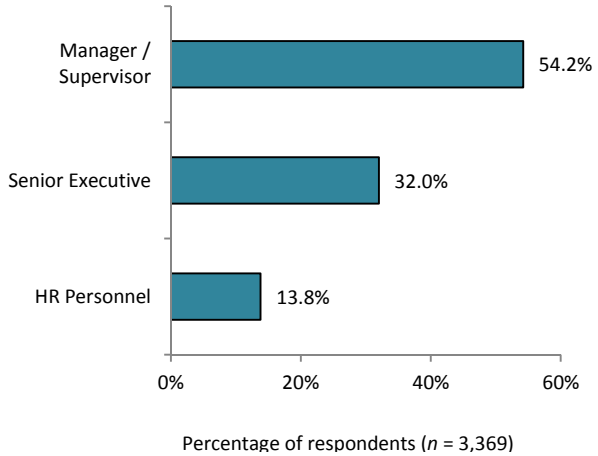


Figure 3
Respondents by region

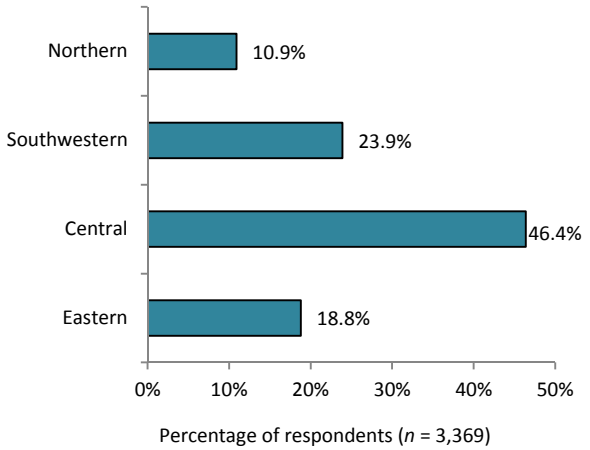
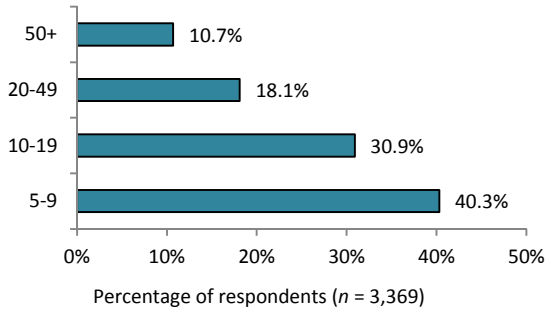


Figure 4
Respondents by firm size



4 – PSE Graduates and Labour Market Entry

This section provides results on the workforce transition of PSE graduates. Two questions were used in the instrument to gather data about PSE graduate employment. At the beginning of the survey, employers were directed to think specifically about the site where they worked and were asked: "In the last two years (since January 2010), has your worksite hired any recent graduates who were entering the workforce directly from college or university?" Later in the survey, employers who offered WIL at their worksite were asked: "In the last two years (since January 2010), have you hired any students who did workplace experience programs with you AFTER they graduated from college or university?" It should be noted that a small proportion of respondents initially indicated that they had not hired a PSE graduate but later reported having hired a student who did WIL at their worksite following the student's graduation from PSE. The figures presented in this section combine the data gathered from these two questions.

About two out of five respondents (40%) reported that recent postsecondary graduates had been hired at their workplaces within the last two years (Figure 5). Approximately half of these respondents had hired one or two graduates (48%), but 41% had provided employment for at least three graduates of college or university programs (Figure 6).

Figure 5
PSE graduates hired

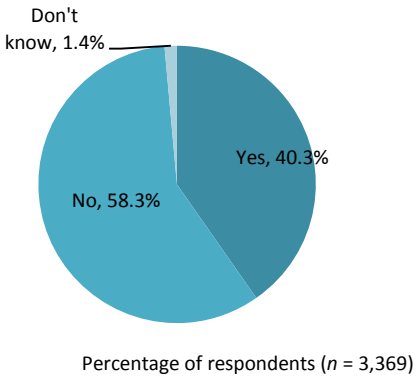
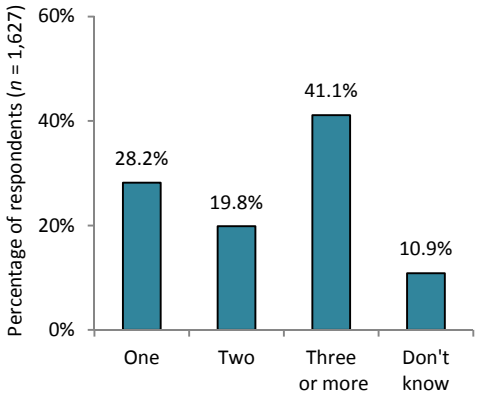


Figure 6
Number of PSE graduates hired



Not surprisingly, comparison by firm size showed that larger employers were more likely to report having hired new grads: 57% of all firms with 50 or more employees had employed a recent postsecondary graduate (Figure 7). These firms were also the most likely to report multiple hires, with 59% hiring at least three grads (Figure 8).

Figure 7
Respondents who hired by firm size

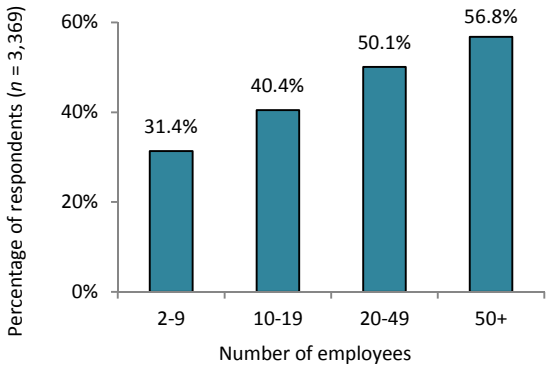
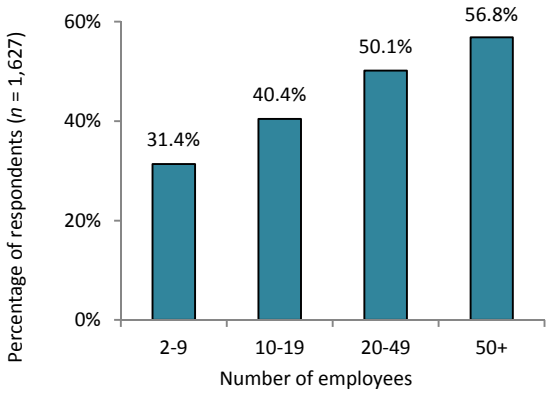


Figure 8
Number of PSE hires by firm size



PSE Graduate Employment and WIL

Employers who had hired a recent PSE grad were asked if any of their new employees had participated in "co-ops, practicums, field placements, internships, service learning and other programs to provide students with paid or unpaid workplace experiences while attending college or university."

About three out of five respondents who employed PSE grads (61%) reported that at least one of their new hires had participated in WIL while attending a postsecondary institution (Figure 9). Fully half (52%) said that the employee had participated in WIL at the same worksite where they were later hired. Only 30% indicated that none of the graduates they had hired had WIL experience.

Further comparison by employer participation in WIL shows that nine out of 10 WIL employers who hired PSE grads offered employment to at least one graduate of a WIL program – including 82% who hired a graduate of WIL delivered at their worksite (Figure 10). Among employers who did not offer WIL, only 13% reported having hired new graduates with WIL experience, while 71% had hired PSE graduates who had not participated in WIL.

Figure 9
PSE hires by graduate participation in WIL

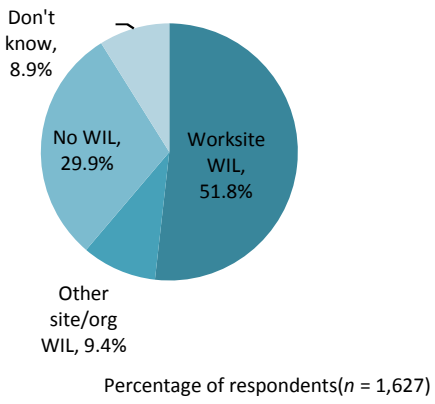
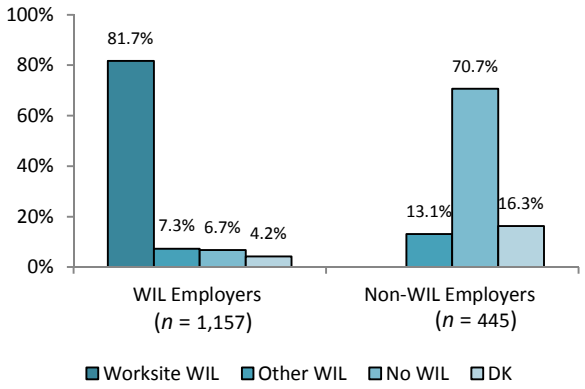


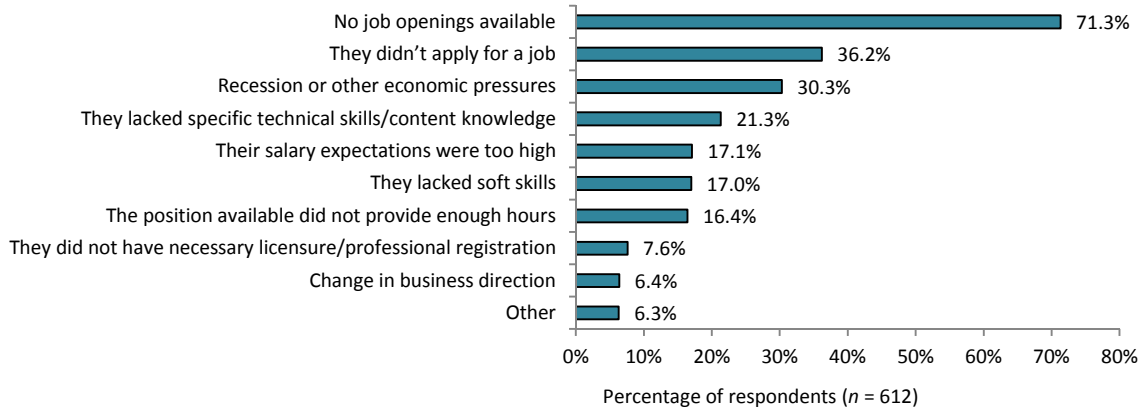
Figure 10
PSE hires by employer participation in WIL



WIL employers who had not hired any of their WIL students following graduation were presented with a randomized list of nine reasons and asked which factors had contributed to their decision not to offer employment. They were also given an "other" option if additional explanations were necessary.

By far, the most frequently cited reason for not hiring a WIL student was the absence of job openings, identified by 71% of employers (Figure 11). The next most common reason was that the WIL student did not apply for a job (36%). While this finding could mean that the student was dissatisfied with the workplace or did not approach the employer about employment, it could also signify that exposure to the workplace had helped to clarify the student's career goals and dissuaded him or her from applying. The economy had a definite impact on hiring, with 30% of employers indicating that they did not offer employment because of the recession or economic pressures. Employers were more likely to mention lack of hard skills (21%) than lack of soft skills (17%) as a reason for not hiring a WIL student and also identified high salary expectations (17%) and insufficient hours available from the job (16%). The most frequently mentioned "other" reasons for not hiring a WIL student were that the student had not yet graduated or that hiring decisions were made by head office.

Figure 11
Reasons for not hiring WIL grads

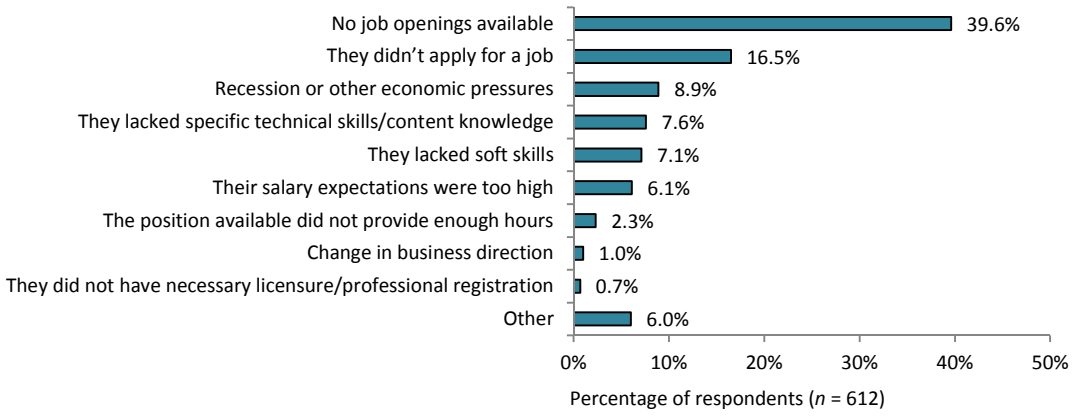


Don't know = 2.4%

From the reasons mentioned, employers were presented with an open-ended opportunity to identify the single most important reason for their decision not to offer employment to their WIL students following graduation. They could also indicate that they did not know the most important reason.

Again, the factor with the greatest impact was no job openings available (40%) (Figure 12). This was followed by 17% of respondents who did not hire because the student did not apply. Only 9% of respondents identified the recession as the single most important reason, and similar proportions expressed concerns about lack of hard skills (8%) and lack of soft skills (7%). For 6% of employers, the barrier to hiring was high student salary expectations.

Figure 12
Most important reason for not hiring WIL grads



Don't know = 4.2%

Verbatim comments concerning the main reason for not hiring help illuminate some of the factors WIL employers considered when they were deciding whether or not to hire WIL students:

> *"We have to advertise all positions internally first and then externally. Everyone has the opportunity to apply, we can't just offer it to a student."*
>
> *"They lacked work experience. Because we're a unionized environment, the work experience requirement is not flexible, and they typically do not have enough right after college."*

As shown in Tables 6 and 7, analysis by firm size reveals some interesting variations in reasons for not offering employment to WIL grads:

- The smallest firms were more likely to identify insufficient hours as one of the reasons that contributed to their not hiring (Table 7). High salary expectations had a much greater impact on the smallest firms as the main reason for not hiring (Table 8).
- Firms with 20 to 49 employees were the most sensitive to fiscal pressures, with fully 21% identifying economic challenges as the primary reason for not hiring (Table 8).

Table 7
Reasons for not hiring WIL grads by firm size

	Number of employees				Total
	2-9	10-19	20-49	50+	
	n = 186	*n* = 149	*n* = 108	*n* = 169	*n* = 612
No job openings available	70.6%	78.4%	66.6%	63.5%	71.3%
They didn't apply for a job	33.0%	40.2%	33.7%	40.2%	36.2%
Recession or other economic pressures	34.0%	21.8%	35.2%	31.5%	30.3%
They lacked specific technical skills or content knowledge	22.7%	26.3%	15.0%	14.4%	21.3%
Their salary expectations were too high	22.9%	10.1%	20.2%	11.5%	17.1%
They lacked soft skills	17.0%	23.4%	13.4%	7.3%	17.0%
The position available did not provide enough hours	23.6%	14.1%	7.8%	12.4%	16.4%
They did not have necessary licensure or professional registration	5.3%	12.1%	8.2%	3.5%	7.6%
Change in business direction	4.4%	6.8%	7.8%	9.6%	6.4%
Other	6.3%	4.4%	7.0%	7.1%	6.3%
Don't know	3.8%	-	3.7%	1.5%	2.4%

Table 8
Most important reason for not hiring by firm size

	Number of Employees				Total
	2-9	10-19	20-49	50+	
n size	*n* = 186	*n* = 149	*n* = 108	*n* = 169	*n* = 612
No job openings available	37.4%	45.1%	32.4%	44.2%	39.5%
They didn't apply for a job	12.5%	21.5%	14.0%	20.8%	16.6%
Recession or other economic pressures	6.3%	4.3%	21.3%	8.9%	8.9%
They lacked specific technical skills or content knowledge	9.3%	4.3%	11.0%	5.4%	7.6%
They lacked soft skills	6.6%	12.3%	3.5%	1.8%	7.1%
Their salary expectations were too high	14.2%	-	-	4.8%	6.1%
The position available did not provide enough hours	-	6.3%	1.7%	0.7%	2.3%
Change in business direction	-	-	5.5%	-	1.0%
They did not have necessary licensure or professional registration	1.1%	1.1%	-	0.1%	0.7%
Other	6.3%	5.0%	5.8%	9.8%	6.0%
Don't know	6.3%	0.1%	4.8%	3.5%	4.2%

Graduate Skills and Wages

To assess employer perceptions of the skills of their recent PSE hires by the levels of education attained, respondents were presented with a list of five credential options, and they were asked whether any of their new employees had achieved the credential as their highest level of education at the time they were hired. The options included college certificate or diplomas, undergraduate or bachelor's degrees, graduate degrees (master's or PhD), both college and university credentials, and professional degrees or qualifications.

For each level of credential selected, employers were asked to think specifically about the new grads they had hired with that level of educational attainment. They were then asked to rate the overall soft and hard skills of their new hires, using a five-point rating scale (poor, fair, average, good and excellent). Soft skills were defined as "communication, teamwork, work ethic, being on time, dressing appropriately, etc.," and hard skills were defined as "technical expertise or content knowledge." The table below compares results for graduates who had participated in WIL ("WIL Hires") to those who had not ("Non-WIL Hires"), with mean skill ratings expressed as numerical scores where 1 = poor and 5 = excellent.

In an open-ended format, respondents were also asked to indicate the average starting salary offered to the new graduates upon their entry into the workplace. Responses have been converted into hourly rates to enable comparability, with mid-points used when wage ranges were offered.

Skill Ratings

Generally, at each level of postsecondary attainment, employers perceived few differences between the hard skills and the soft skills of the postsecondary graduates they had hired, ascribing similar ratings to both types of skills within each type of credential (Table 9).

Comparison across credentials showed that employers rated the skills of new hires with undergraduate degrees higher than the skills of college graduates, but they considered these skills almost identical to those of graduates with college and university credentials combined. It should be noted that the survey did not ask employers to distinguish between college-to-university graduates and university-to-college graduates, which could affect employer perceptions of skills.

Analysis by graduate participation in WIL showed that postsecondary WIL programs did not have an impact on employer perceptions of skills at the college and undergraduate levels. At the graduate level, however, employers gave higher skill ratings to master's or PhD students who had participated in WIL than they did to non-WIL hires with similar educational qualifications. At the professional level, employers gave similar ratings for the hard skills of both WIL and non-WIL graduates but *lower* ratings to the soft skills of WIL graduates. This finding may be related to differences between WIL and non-WIL fields of study for professional programs and to employer expectations regarding the skills of these graduates. For example, since many graduate-level WIL programs are in sectors that require high levels of soft skills (such as education, health and social work) employer expectations for soft skills may have been higher and more difficult for graduates to meet. (See Section 6 of this report for key findings by sector.)

Starting Salaries

While there was no clear association between student participation in work-integrated learning and employer perceptions of skills, a definite earnings advantage was associated with WIL across all levels of credentials, with employers reporting higher average starting salaries for new PSE hires with WIL experience. While this finding could be related to differences in occupational pathways associated with particular WIL and non-WIL programs, it also suggests that postsecondary WIL credentials may signal greater potential ability and future productivity to employers, consistent with "signalling" theory.

As demonstrated by previous research studies, comparison of starting salaries by credential showed an earnings advantage for new hires with undergraduate degrees compared to new hires with certificates or diplomas. There was no earnings premium for new hires with both college and university credentials compared to those with undergraduate degrees only. Again, it is important to note that the sequence of postsecondary pathways (college-to-university or university-to-college) could have affected the starting salaries offered to these graduates.

Table 9
Mean skill ratings and average starting salaries by graduate participation in WIL

	WIL hires				Non-WIL hires			
	n size	Soft skills mean	Hard skills mean	Average hourly wage	*n* size	Soft skills mean	Hard skills mean	Average hourly wage
College	610	3.77	3.68	$16.21	207	3.61	3.65	$13.80
Undergrad	467	3.88	3.89	$19.57	179	3.80	3.86	$15.21
Graduate	193	4.16	4.19	$20.04	72	3.70	3.89	$14.51
College + University	217	3.82	3.90	$17.66	75	3.74	3.86	$13.08
Professional	149	3.79	3.93	$21.14	50	4.07	3.95	$15.46

Importance of Hiring Factors

All respondents, whether or not they had hired recent postsecondary graduates, were asked their views about the importance of various factors in assessing job applications from recent college or university graduates. They were presented with nine factors and asked to rate the importance of each, using a five-point scale from 1 (not at all important) to 5 (very important).

Table 10 compares mean importance ratings between employers who offered work-integrated learning at their worksite ("WIL Employers") and those who did not ("Non-WIL Employers"). As would be expected, WIL employers rated the importance of WIL programs higher than non-WIL employers did (mean ratings of 3.5 compared to 3.1). WIL employers placed particular value on WIL experience gained at the worksite, ascribing a mean importance rating of 3.8 to this factor.

WIL employers considered several other factors, however, to be more important than WIL in their assessment of job applications from postsecondary graduates. The top-rated factor was program of study (mean importance of 4.1). This was followed closely by other relevant work experience (mean importance of 4.0), general work experience (mean importance of 3.9) and credential (mean importance of 3.9).

Among non-WIL employers, work experience – whether relevant or not – was the top-rated factor, with a mean importance rating of 3.8. Non-WIL employers rated academic skills, program of study and credential considerably lower than work experience, ascribing mean ratings of 3.4 to each factor.

Table 10
Mean importance of hiring factors by employer participation in WIL

	WIL employers (*n* = 1,599)	Non-WIL employers (*n* = 1,706)
	Mean	Mean
Program of study	4.1	3.4
Relevant work experience gained through summer jobs, volunteering or other employment	4.0	3.8
Credential or professional qualification	3.9	3.4
General work experience	3.9	3.8
Co-ops, placements, internships, etc., at your worksite or organization	3.8	-
Evidence of academic skills and competencies (grades, academic awards, etc.)	3.6	3.4
Co-ops, placements, internships, etc., with other businesses or organizations	3.5	3.1
Reputation of institution attended	3.3	2.8
Extracurricular/volunteer activities	3.1	2.7

Examination of the relative importance placed on each factor by employer participation in WIL shows that almost as many WIL employers gave high importance ratings (a score of 4 or 5) to worksite WIL as they did to program of study and relevant work experience (Figure 13). Among these employers, the lower mean importance score for worksite WIL can be attributed to the fact that almost one in five respondents (17%) rated this factor as having little to no importance. By comparison, far fewer WIL employers gave low importance ratings to program of study and relevant work experience (7% and 5% respectively).

There were no significant differences in the importance of hiring factors by firm size.

Figure 13
Importance of hiring factors, WIL employers (*n* = 1,599)

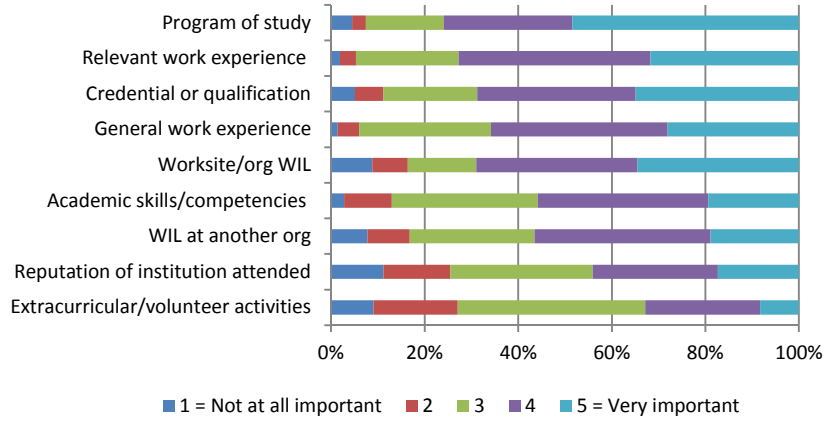
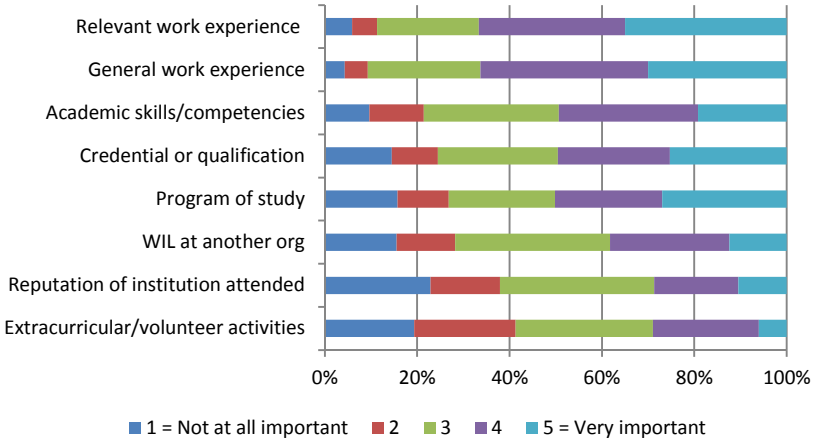


Figure 14
Importance of hiring factors, Non-WIL employers (*n* = 1,706)



5 – Employer Experiences with Work-Integrated Learning

More than one-third of all employers had offered work-integrated learning at their worksite (37%) since January 2010 (Figure 15), with no significant differences by region in levels of participation.

As shown in Figure 16, businesses and organizations with fewer employees were less likely to have participated in WIL. However, close to one-third of employers with fewer than 20 employees offered WIL opportunities to students, including firms with only 2 to 9 staff. Approximately half of all firms with 20 or more employees participated in WIL, with participation almost as high among firms with 20 to 49 employees (48%) as among employers with 50 or more staff (52%).

When asked how many years they had been offering WIL programs, the mean length of participation was 11.4 years. While one-third of WIL employers (34%) had been involved with postsecondary WIL for more than a decade, 39% of WIL employers were relatively recent participants, reporting five or fewer years of WIL experience (Figure 17).

Figure 15
Participation in WIL

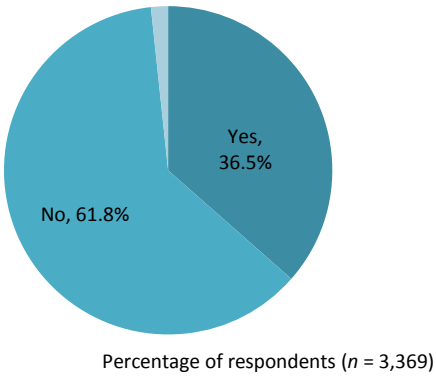


Figure 16
WIL participation by firm size

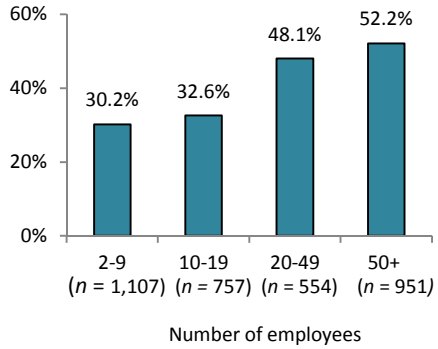
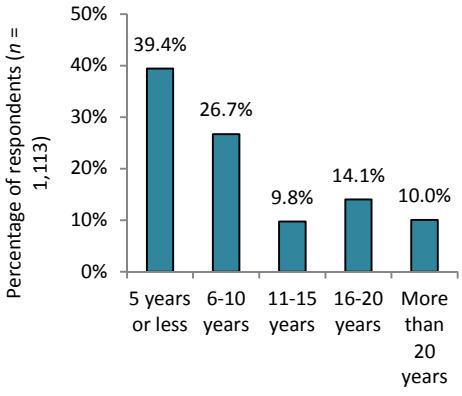
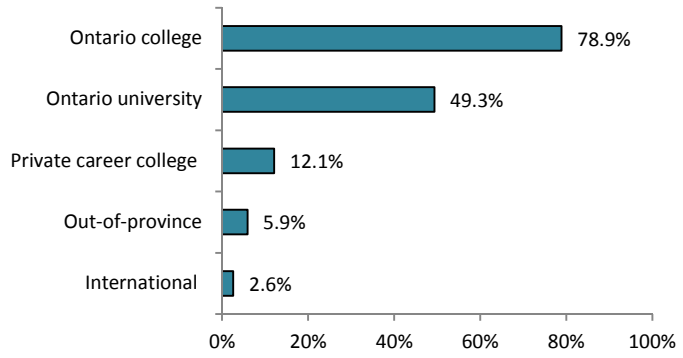


Figure 17
WIL participation by years involved, WIL employers



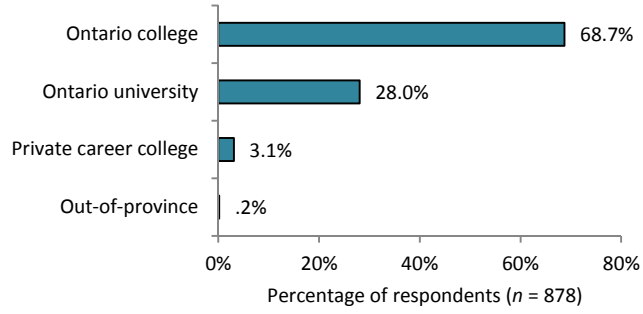
Asked to indicate the type of institution attended by the WIL students, more than three-quarters of WIL employers (79%) indicated that they had partnered with an Ontario college to provide WIL, and about half (49%) said that they had worked with an Ontario university (Figure 18). Another 12% were involved with private career colleges, and 6% were involved with Canadian postsecondary institutions in other provinces. About 3% provided WIL opportunities for students from international colleges or universities.

Figure 18
WIL participation by institution type



Respondents were able to select more than one type of institution, and 39% reported that they had worked with more than one type. However, 61% of respondents had been involved with a single type of institution only. Of those, two-thirds (68%) had worked only with Ontario colleges and more than one-quarter (28%) had worked only with Ontario universities (Figure 19). Another 3% had worked only with private career colleges.

Figure 19
WIL employers who had worked with a single institution type



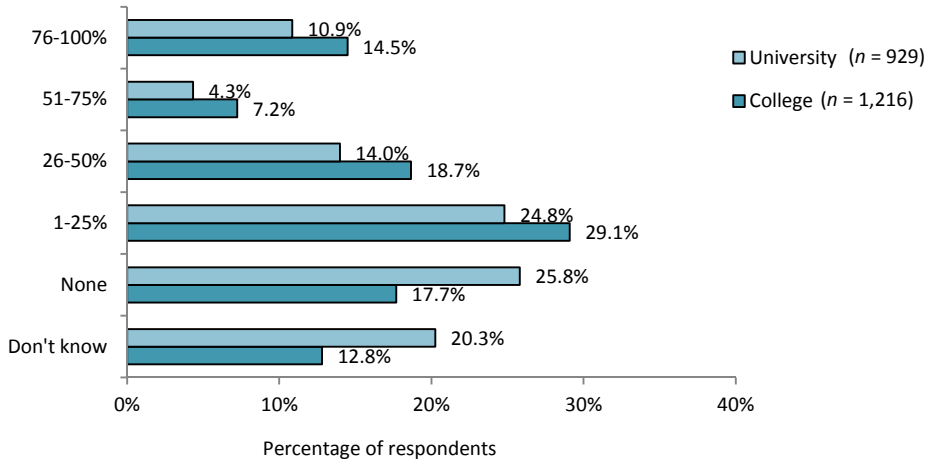
To get a sense of the number of postsecondary students participating in WIL at each worksite, the survey asked how many WIL students had been involved with WIL at the employer's worksite within the last two years. The median number of WIL students from both colleges and universities in Ontario was three per worksite (Table 11). WIL students from private career colleges, out-of-province institutions and international schools received almost as many WIL opportunities (median number of two per worksite).

Table 11
Number of WIL students since January 2010

	n size	Mean	Median
Ontario college	1,106	6.7	3
Ontario university	830	6.8	3
Private career college	152	5.3	2
Out-of-province	82	5.6	2
International	56	2.9	2

In an open-ended question, respondents were asked to reflect on their total years of WIL involvement and to estimate the overall proportion of WIL students they had hired following the students' graduation from college or university. College WIL employers were more likely than university WIL employers to report hiring WIL graduates, with 22% estimating that they had hired more than half of all the WIL students they had placed, compared to 15% of university WIL employers giving the same estimates (Figure 20). College WIL employers were also less likely to report *never* hiring a WIL student (only 18% compared to 26% of university WIL employers).

Figure 20
Approximate percentages of WIL students hired by institution type



WIL employers were also asked about the specific WIL programs they offered in partnership with Ontario colleges and universities and whether the programs were "co-op, practicum, field placement, internship, service learning, apprenticeship, or something else." To minimize respondent burden and keep survey length as short as possible, more detailed explanations of each type of WIL were provided only if requested by the respondent. This means that the results reported below reflect individual employers' understanding of the type of WIL program, rather than a definition provided by the interviewer. Respondents could select more than one type of WIL program.

Among all employers who had worked with Ontario colleges (but may also have worked with other types of institutions), half indicated that they had taken college co-op students (49%), and close to one-third (31%) had provided field placements (Figure 21). Similar proportions had provided internships (19%), apprenticeships (17%) and practicums (16%). Among all employers who had worked with Ontario

universities (but may also have worked with other types of institutions), more than one-third were involved with university co-op programs (39%), and slightly fewer offered internships (32%) (Figure 22). Almost one-quarter had provided field placements (24%) or practicums (23%), more than one in 10 (12%) were involved in service learning and 3% had engaged WIL students for applied research projects.

Figure 21
Type of WIL program for college WIL employers

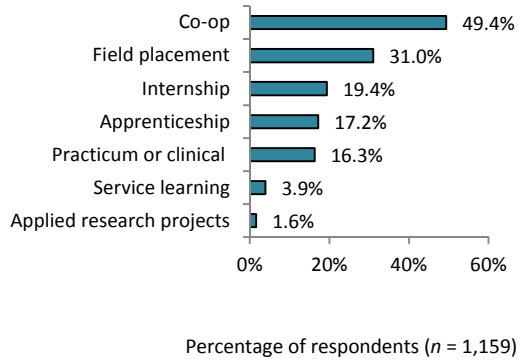
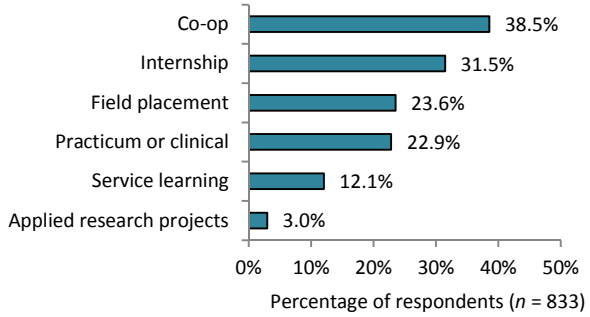


Figure 22
Type of WIL program for university WIL employers



As noted earlier (near Figure 19), 61% of employers worked exclusively with a single type of institution. The majority of these employers were also involved in only one type of WIL program. Among WIL employers who worked only with colleges, 76% were involved exclusively with one type of WIL program. Of these, 39% were involved exclusively with college co-op programs, 29% provided only field placements, 17%provided only apprenticeships, 10% offered only internships and 4% only supervised practicums or clinical placements (Figure 23). Among university WIL employers, 82% were involved exclusively with one type of WIL program. Of these, similar proportions offered only internships (29%) or co-ops (28%), 19% were engaged only with service learning, 12% only supervised practicums or clinical placements and 11% only provided field placements (Figure 24).

Figure 23
Type of WIL program for college WIL employers who worked with a single type

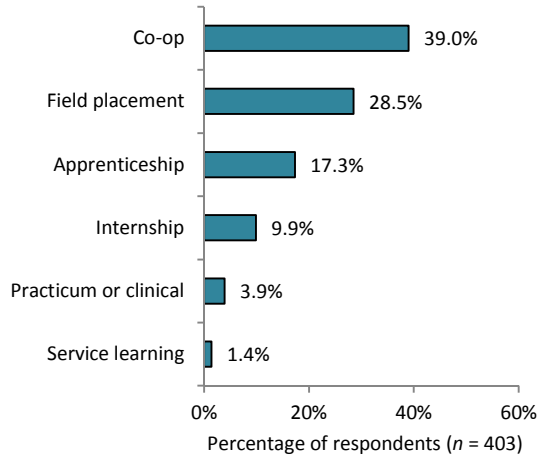
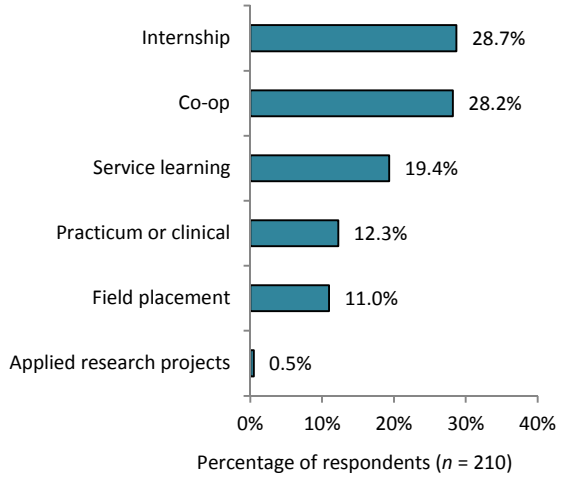


Figure 24
Type of WIL program for university WIL employers who worked with a single type



In an open-ended format, employers were asked which postsecondary programs the WIL students had attended and identified a wide variety of programs, particularly for college WIL students.

The college programs of study most often mentioned by employers were the skilled trades, social work, business/marketing and education, followed by engineering, culinary/hospitality and arts (Figure 25).

While university WIL programs were concentrated in two fields of study – business/marketing and engineering – employers were also likely to mention education, social work and social sciences (Figure 26). Of the 138 apprenticeship employers, more than one-third offered automotive, vehicle or motive power certifications (35%) (Figure 27). This was followed by certifications in construction (19%) and electrical, electronics and telecommunications (13%).

Figure 25
Program of study, college WIL

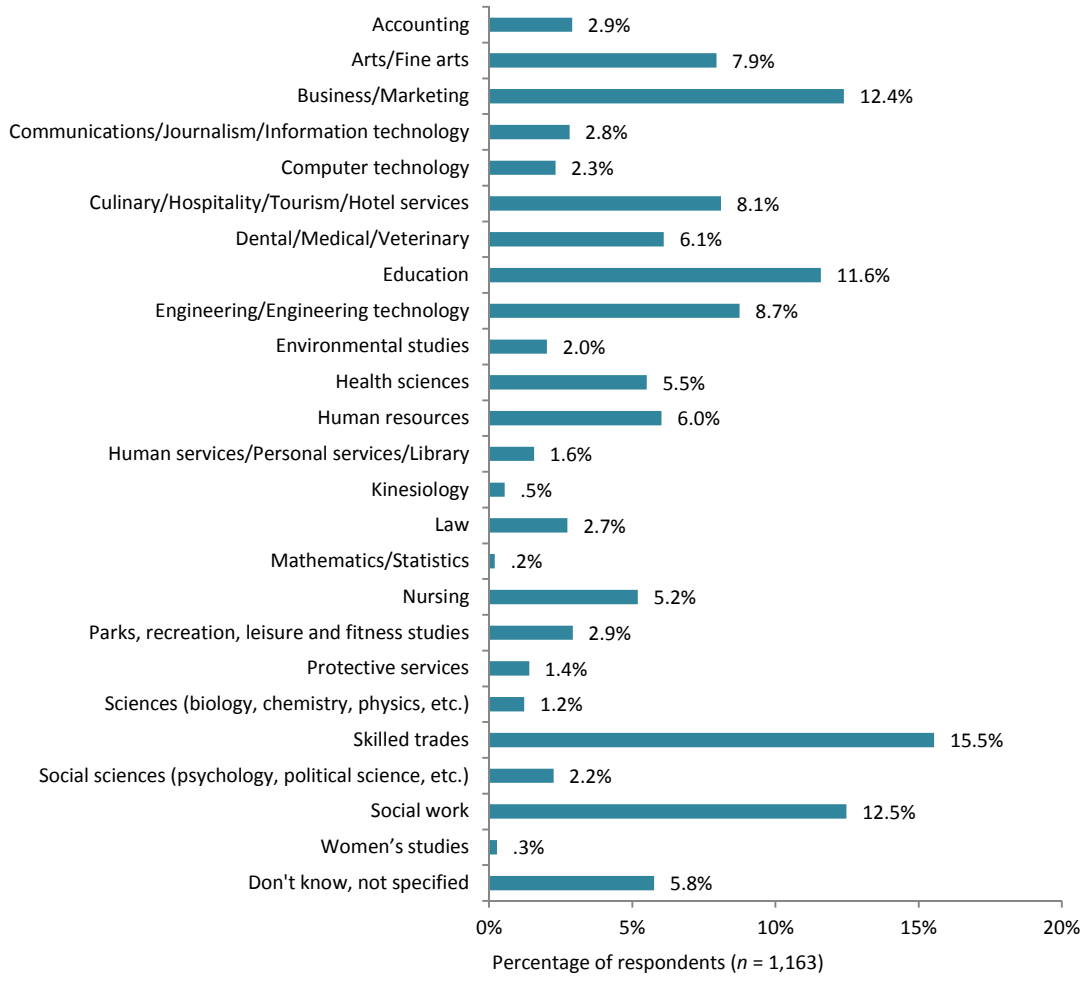


Figure 26
Program of study, university WIL

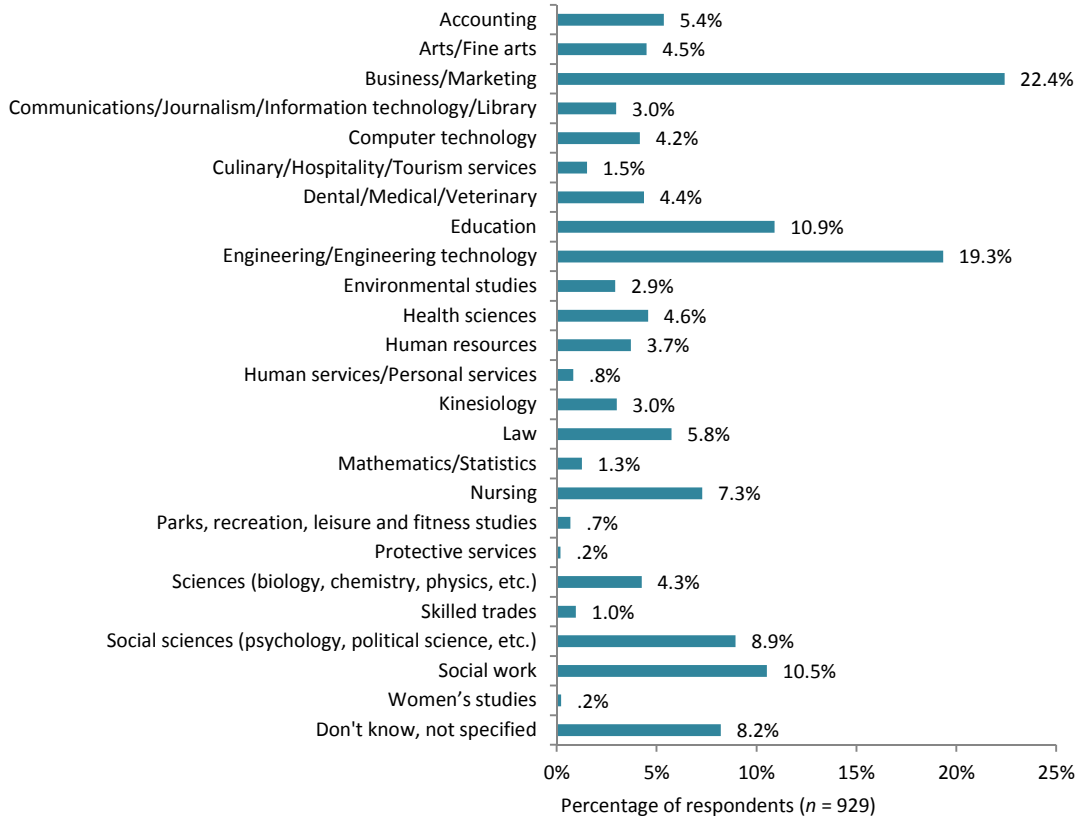
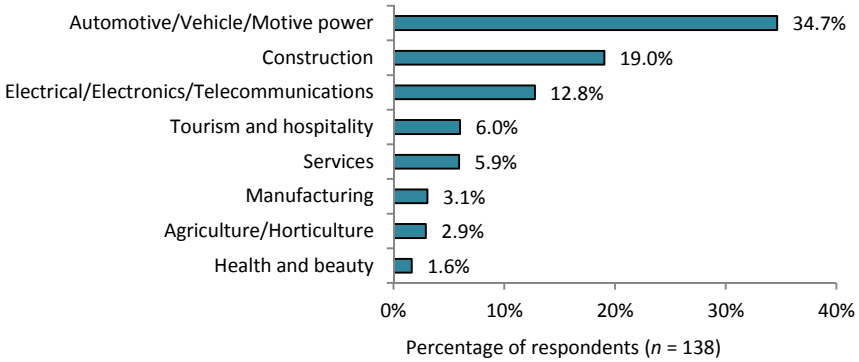


Figure 27
Type of apprenticeship for apprenticeship employers

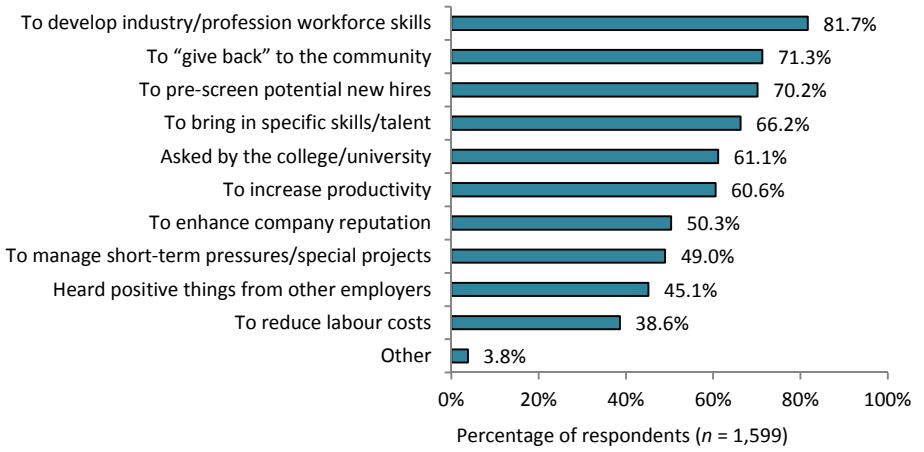


WIL Motivations

WIL employers were presented with a randomized list of 10 reasons for their decision to provide workplace experiences for college and university students, and were asked to select all the reasons that applied. They were also given an opportunity to identify additional motivations if necessary.

Developing workforce skills was mentioned by four out of five WIL employers (82%) as a motivation for their participation (Figure 28). Giving back to the community and prescreening potential hires were each identified by about 70% of respondents, while almost as many employers were interested in WIL as a means of filling specific skill needs (66%). For about three out of five respondents (61%), an invitation from the college or university contributed to their decision to become involved, and a similar proportion believed that WIL could improve productivity (61%). A small number of respondents (3.8%) mentioned "other" reasons, including being approached by a student, asked by family or friends, receiving funding to provide WIL and sense of professional obligation.

Figure 28
Reasons for offering WIL

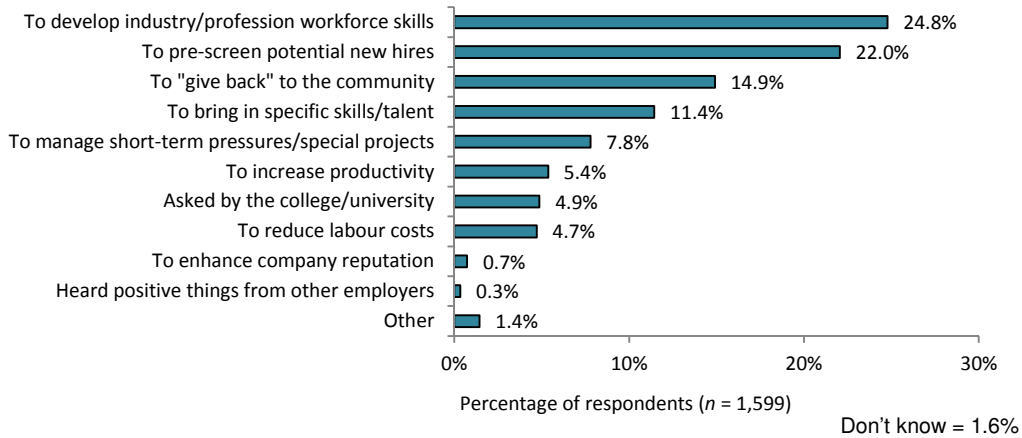


Don't know = 0.4%

From the reasons mentioned, employers were given an open-ended opportunity to identify the single most important reason for their decision to become involved in providing WIL experiences. They could also indicate that they did not know the most important reason.

The two strongest single motivations for employers were to develop the workforce skills needed for their industry or profession (25%) and to prescreen potential new hires (22%) (Figure 29). These were followed by giving back to the community (15%), bringing in specific skills or talents (11%) and managing short-term pressures or special projects (8%).

Figure 29
Most important reason for offering WIL



Don't know = 1.6%

Verbatim comments help shed light on some of these employer motivations:

> *"We do it to provide emerging professionals with hands-on skills in the workforce."*
>
> *"To build a pipeline of professionals."*
>
> *"It's cost effective and you're training someone according to your system. It's a win-win."*
>
> *"It gives us the first shot at these very talented people before they enter the workforce."*
>
> *"To develop partnerships with colleges and universities and provide opportunities for learning."*
>
> *"It helps ensure long-term success in recruiting. The students themselves become ambassadors for our organizations."*
>
> *"To keep our organization up-to-date with the new research. The students bring a lot of academic knowledge with them."*

Comparison by firm size shows some interesting differences in motivations for WIL participation:

- The smallest businesses were much more likely than other employers to identify giving back as their number one reason for participating, and they were less likely than other employers to cite bringing in specific skills or talent (Table 13).
- Businesses with 10 to 19 employees were more likely to cite enhancing company reputation as a motivator (Table 12). They were also more likely than smaller firms to identify filing gaps in skills/talent as their main motivation (Table 13).
- Prescreening potential new hires was particularly important for firms with 20 to 49 employees (Table 13). Firms of this size were less likely than the smallest firms to cite increasing productivity as their main motivation (Table 13).
- Larger firms were much more likely than other employers to offer WIL as a means of managing short-term workflow pressures (Table 12) – and to view this as their primary motivation (Table 13).

Table 12
Reasons for offering WIL by firm size

	Number of Employees				Total
	2-9	10-19	20-49	50+	
	n = 402	*n* = 317	*n* = 302	*n* = 578	*n* = 1,599
To develop industry/profession workforce skills	78.6%	82.9%	84.9%	79.9%	81.5%
To "give back" to the community	71.2%	73.6%	65.9%	74.5%	71.1%
To prescreen potential new hires	67.1%	71.7%	71.2%	72.6%	70.2%
To bring in specific skills/talent	58.6%	73.4%	65.3%	70.5%	66.1%
Asked by the college/university	58.6%	63.0%	64.5%	57.2%	61.0%
To increase productivity	61.2%	59.7%	63.3%	55.8%	60.5%
To enhance company reputation	44.3%	57.1%	45.7%	58.6%	50.3%
To manage short-term pressures/special projects	49.6%	46.7%	45.4%	56.2%	48.8%
Heard positive things from other employers	43.6%	50.6%	43.0%	42.0%	45.1%
To reduce labour costs	38.5%	35.9%	39.9%	41.2%	38.5%
Other	4.7%	2.7%	5.4%	1.5%	3.8%
Don't know	0.9%	0.5%	-	-	0.4%

Table 13
Most important reason by firm size

	Number of employees				Total
	2-9	10-19	20-49	50+	
	n = 402	*n* = 317	*n* = 302	*n* = 578	*n* = 1,599
To develop industry/profession workforce skills	22.7%	25.6%	28.8%	21.5%	24.8%
To prescreen potential new hires	14.8%	20.7%	32.9%	23.4%	22.0%
To "give back" to the community	22.3%	13.3%	8.4%	12.1%	14.9%
To bring in specific skills/talent	8.7%	15.6%	10.1%	11.8%	11.4%
To manage short-term pressures/special projects	6.6%	6.6%	6.4%	14.6%	7.8%
To increase productivity	7.8%	4.1%	2.9%	6.1%	5.4%
Asked by the college/university	6.9%	5.0%	2.9%	3.3%	4.9%
To reduce labour costs	4.4%	6.8%	3.8%	3.1%	4.7%
To enhance company reputation	1.2%	0.4%	-	1.5%	0.7%
Heard positive things from other employers	0.4%	0.8%	-	-	0.3%
Other	2.2%	0.7%	1.7%	0.7%	1.4%
Don't know	2.0%	0.4%	2.1%	2.0%	1.6%

Tables 14 and 15 compare employer reasons for participating in WIL by type of postsecondary institution. As indicated earlier, since many WIL employers worked with multiple types of institutions, the results should not be interpreted as generalizable to each type of institution.

- "Asked by the college/university" was more frequently selected as a reason for WIL by employers who worked with Ontario colleges and career colleges than by those who worked with Ontario universities (Table 14).
- Employers who worked with Ontario universities were more likely to be motivated by a desire to increase productivity, to manage short-term pressures and to reduce labour costs (Table 14).
- Employers who worked with private career colleges were more likely to report that their top reason for becoming involved was that they were asked by the institution (Table 15).
- Employers who worked with out-of-province institutions were more motivated by developing workforce skills, increasing productivity, reducing labour costs and, in particular, managing short-term pressures (Table 14). However, prescreening potential for new hires was the number one motivation for these employers (Table 15).

- Employers who worked with international institutions were also more likely to become involved because they were asked and to be motivated by ability to manage short-term pressures (Table 14).

Table 14
Reasons for offering WIL by type of institution

	Ontario college	Ontario university	Career college	Out-of-province	Inter-national	Total
	n = 1,216	*n* = 929	*n* = 173	*n* = 117	*n* = 70	*n* = 1,587
To develop industry/profession workforce skills	82.6%	82.6%	84.1%	94.5%	87.9%	81.8%
To "give back" to the community	73.0%	76.0%	78.5%	78.7%	76.8%	71.4%
To prescreen potential new hires	71.6%	68.0%	76.4%	75.9%	70.7%	70.3%
To bring in specific skills/talent	68.1%	70.2%	59.6%	75.5%	67.3%	66.3%
Asked by the college/university	67.7%	53.7%	82.8%	50.6%	69.3%	61.2%
To increase productivity	61.1%	68.3%	47.0%	67.0%	60.7%	60.7%
To enhance company reputation	51.4%	51.2%	56.5%	60.1%	69.5%	50.2%
To manage short-term pressures/special projects	45.7%	64.2%	38.9%	73.7%	62.4%	49.3%
Heard positive things from other employers	45.4%	47.5%	38.8%	41.9%	37.6%	45.1%
To reduce labour costs	37.8%	43.0%	21.4%	45.9%	38.3%	38.6%
Other	3.9%	3.6%	5.7%	7.1%	5.1%	3.8%
Don't know	0.2%	-	1.1%	-	-	0.4%

Table 15
Most important reason by type of institution

	Ontario college	Ontario university	Career college	Out-of-province	Inter-national	Total
	n = 1,216	*n* = 929	*n* = 172	*n* = 117	*n* = 70	*n* = 1,587
To develop industry/profession workforce skills	26.3%	22.2%	20.6%	14.9%	25.6%	24.9%
To prescreen potential new hires	24.5%	18.2%	28.9%	31.4%	24.7%	22.1%
To "give back" to the community	13.8%	14.9%	18.9%	14.8%	12.0%	14.6%
To bring in specific skills/talent	10.6%	14.6%	5.0%	11.7%	13.8%	11.5%
To manage short-term pressures/ special projects	5.9%	11.1%	4.3%	9.5%	4.8%	7.8%
To increase productivity	4.9%	6.7%	3.5%	6.7%	7.3%	5.4%
Asked by the college/university	5.7%	2.3%	12.8%	3.2%	5.3%	4.8%
To reduce labour costs	4.6%	5.4%	1.9%	3.1%	4.5%	4.7%
To enhance company reputation	0.4%	1.3%	1.7%	2.6%	-	0.7%
Heard positive things from other employers	0.2%	0.4%	0.2%	-	-	0.3%
Other	1.6%	1.1%	1.0%	1.0%	1.1%	1.5%
Don't know	1.6%	1.9%	1.0%	1.2%	1.0%	1.6%

When results for the single most important reasons were analyzed for unique respondents only (that is, employers who worked *only* with Ontario colleges or *only* with Ontario universities), similar patterns emerged. The top reasons for participating in WIL among Ontario college employers were to develop industry/profession workforce skills (31%) and to prescreen potential new hires (24%) (Table 16). Employers who provided WIL opportunities exclusively for university students were more varied in their

primary reason for participating in WIL. Among these employers, developing industry/profession workforce skills (19%), giving back to the community (17%), managing short-term pressures or completing special projects (16%) and bringing in specific skills/talent (16%) were all frequently cited as the single most important reasons for their involvement.

Table 16
Most important reason for employers who worked with a single type of institution

	Ontario college	Ontario university
	n = 554	*n* = 295
To develop industry/profession workforce skills	30.5%	18.9%
To prescreen potential new hires	24.0%	11.0%
To "give back" to the community	13.5%	17.4%
To bring in specific skills/talent	9.5%	15.5%
Asked by the college/university	5.4%	1.6%
To reduce labour costs	4.5%	6.3%
To manage short-term pressures/special projects	4.4%	16.2%
To increase productivity	4.2%	7.4%
Heard positive things from other employers	0.3%	1.1%
To enhance company reputation	0.1%	2.3%
Other	2.2%	0.5%
Don't know	1.3%	1.9%

Tables 17 and 18 present results by type of WIL program. As with the type of institution, many employers were involved with more than one type of WIL program, so the same caution must be raised about associating results with a specific program.

Because of the small number of employers who participated in college applied research projects (*n* = 19), results are not shown for these. For other WIL programs offered by Ontario colleges, the following differences were observed:

- Almost all employers who offered college practicums or clinical placements identified the desire to develop industry/profession skills as a reason for their involvement (Table 17). These employers were more likely than college co-op or apprenticeship employers to identify giving back as their main motivation (Table 18).
- One of the most common reasons for employers to provide college field placements was that they were asked (Table 17). This was also identified more often by field placement employers as the most important reason for their participation in WIL (Table 18).
- Employers who provide college internships were more likely to be motivated by a desire to bring in specific talent, to increase productivity, to enhance company reputation and to manage short-term projects (Table 17).
- Developing workforce skills was more likely to be mentioned by employers who participate in college apprenticeship programs than by those who participate in service learning (Table 17).
- Giving back to the community and reducing labour costs were almost equally likely to be cited as the number one motivation for college service learning employers (Table 18).

Table 17
Reasons for offering WIL by WIL program, college WIL employers

	Co-op	Practicum or clinical	Field placement	Intern-ship	Service learning	Apprentice-ship	All college
	n = 619	*n* = 227	*n* = 417	*n* = 224	*n* = 52	*n* = 138	***n* = 1,216**
To develop industry/ profession workforce skills	84.7%	93.0%	81.0%	85.7%	74.3%	88.0%	**82.6%**
To "give back" to the community	76.2%	85.0%	78.5%	76.4%	73.0%	52.2%	**73.0%**
To prescreen potential hires	70.1%	71.5%	74.2%	71.2%	56.5%	73.9%	**71.6%**
To bring in specific skills/talent	67.6%	71.0%	62.4%	84.8%	58.6%	71.0%	**68.1%**
Asked by the college/university	66.8%	74.5%	83.1%	58.5%	58.4%	64.5%	**67.7%**
To increase productivity	66.7%	53.5%	54.8%	74.3%	55.2%	62.1%	**61.1%**
To enhance company reputation	52.4%	58.9%	58.7%	72.2%	44.5%	48.6%	**51.4%**
To manage short-term pressures/special projects	53.0%	43.5%	40.8%	61.5%	55.2%	37.3%	**45.7%**
Heard positive things from other employers	49.5%	43.4%	44.3%	49.4%	45.2%	44.7%	**45.4%**
To reduce labour costs	37.3%	24.6%	27.2%	43.8%	50.3%	39.4%	**37.8%**
Other	4.2%	6.4%	3.0%	3.3%	5.5%	4.3%	**3.9%**
Don't know	1.0%	-	-	-	-	1.0%	**0.2%**

Table 18
Most important reason by WIL program, college WIL employers

	Co-op	Practicum or Clinical	Field Placement	Intern-ship	Service Learning	Apprentice-ship	All college
	n = 619	*n* = 227	*n* = 417	*n* = 224	*n* = 52	*n* = 138	***n* = 1,216**
To develop industry/ profession workforce skills	26.6%	28.1%	26.1%	26.0%	20.3%	35.1%	**26.3%**
To prescreen potential hires	24.9%	26.6%	22.9%	27.6%	13.4%	21.1%	**24.5%**
To "give back" to the community	13.3%	24.0%	19.1%	14.5%	23.8%	9.3%	**13.8%**
To bring in specific skills/talent	14.3%	6.7%	4.1%	9.8%	6.9%	16.2%	**10.6%**
Asked by the college/university	2.7%	3.4%	11.6%	3.7%	-	0.6%	**5.9%**
To manage short-term pressures/special projects	7.4%	3.5%	4.4%	5.2%	7.4%	3.6%	**4.9%**
To increase productivity	3.4%	3.3%	6.4%	6.7%	4.1%	4.9%	**5.7%**
To reduce labour costs	4.8%	1.4%	2.2%	3.2%	20.7%	4.5%	**4.6%**
To enhance company reputation	0.4%	0.2%	0.6%	0.7%	-	0.2%	**0.4%**
Heard positive things from other employers	0.4%	-	-	0.9%	-	-	**0.2%**
Other	0.9%	0.8%	0.8%	0.9%	0.3%	3.4%	**1.6%**
Don't know	1.0%	1.9%	1.8%	0.9%	3.1%	1.1%	**1.6%**

Among employers who provided university WIL, the following differences were observed by type of WIL program:

- Employers who offer university practicums or clinical placements are highly motivated by the desire to develop industry/profession skills (Table 19), and they are more likely than other WIL employers to cite this as their number one reason for participating (Table 20).
- Developing workforce skills was more likely to be cited as a motivation by internship employers than by co-op employers (Table 19).
- Giving back to the community and managing short-term projects are strong attractions for employers to participate in university applied research projects (Table 19), with giving back being their number one reason for participating (Table 20).
- Service learning employers were more likely than any other employer group to select bringing in specific skills/talent as their primary motivator (Table 20).

Table 19
Reasons for offering WIL by WIL program, university WIL employers

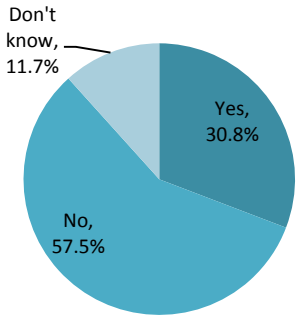
	Co-op	Practicum or clinical	Field placement	Intern-ship	Applied research	Service learning	All univ.
	n = 350	*n* = 225	*n* = 232	*n* = 251	*n* = 25	*n* = 46	***n* = 929**
To develop industry/profession workforce skills	80.8%	86.6%	81.3%	90.3%	82.4%	78.7%	**82.6%**
To prescreen potential new hires	67.6%	60.5%	62.9%	73.3%	59.5%	62.9%	**68.0%**
To "give back" to the community	76.5%	78.5%	85.6%	85.9%	96.2%	53.0%	**76.0%**
To bring in specific skills/talent	71.6%	63.2%	75.0%	79.2%	75.1%	66.3%	**70.2%**
To increase productivity	68.4%	61.5%	67.4%	74.2%	69.0%	76.5%	**68.3%**
Asked by the college/university	49.3%	68.4%	71.9%	61.2%	68.5%	47.1%	**53.7%**
To enhance company reputation	56.7%	59.4%	61.5%	54.3%	85.4%	52.5%	**51.2%**
To manage short-term pressures/special projects	74.1%	50.6%	61.2%	72.2%	90.9%	67.8%	**64.2%**
Heard positive things from other employers	45.5%	45.8%	45.2%	46.8%	59.3%	66.4%	**47.5%**
To reduce labour costs	42.8%	27.1%	23.5%	49.0%	22.5%	56.0%	**43.0%**
Other	4.0%	9.0%	4.6%	4.1%	-	3.2%	**3.6%**
Don't know	-	-	-	-	-	-	**-**

Table 20
Most important reason by WIL program, university WIL employers

	Co-op	Practicum or clinical	Field placement	Intern-ship	Applied research	Service learning	All univ.
	n = 350	*n* = 225	*n* = 232	*n* = 251	*n* = 25	*n* = 46	***n* = 929**
To develop industry/ profession workforce skills	20.0%	31.7%	28.3%	29.1%	26.9%	11.4%	**22.2%**
To prescreen potential hires	22.7%	13.7%	14.9%	18.9%	22.2%	1.9%	**18.2%**
To bring in specific skills/talent	17.1%	7.7%	18.7%	7.9%	8.2%	39.1%	**14.9%**
To "give back" to the community	9.2%	18.8%	14.5%	11.4%	27.3%	22.7%	**14.6%**
To manage short-term pressures/special projects	15.6%	5.7%	6.6%	13.6%	9.0%	10.0%	**11.1%**
To increase productivity	6.8%	10.0%	7.8%	4.8%	6.4%	2.3%	**6.7%**
To reduce labour costs	3.5%	1.7%	2.1%	8.8%	-	5.9%	**5.4%**
Asked by the college/university	1.2%	4.6%	3.3%	0.8%	-	2.4%	**2.3%**
To enhance company reputation	0.9%	2.2%	2.2%	1.3%	-	2.4%	**1.3%**
Heard positive things from other employers	-	0.6%	-	0.9%	-	-	**0.4%**
Other	0.7%	1.6%	0.7%	1.2%	-	0.2%	**1.1%**
Don't know	2.3%	1.7%	0.9%	1.3%	-	1.7%	**1.8%**

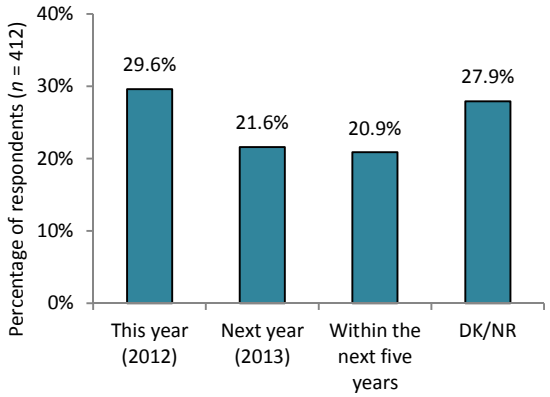
Additional insights into the perceived benefits of WIL were gathered by asking employers who did not currently provide WIL whether they planned to do so in the future. Almost one-third of non-WIL employers stated that they intended to begin providing WIL at a future date (Figure 30), half within the next two years (Figure 31).

Figure 30
Future participation in WIL



Percentage of respondents (*n* = 1,449)

Figure 31
Timing of future participation in WIL



Respondents were presented with a randomized list of 10 reasons for planning to participate in WIL in the future, and they were asked to indicate the motivations for their plans. They were also given an opportunity to indicate other motivations if necessary.

The motivations for future WIL employers were generally consistent with the motivations for current WIL employers. Prescreening potential new hires (79%), bringing in specific skills or talent (77%) and

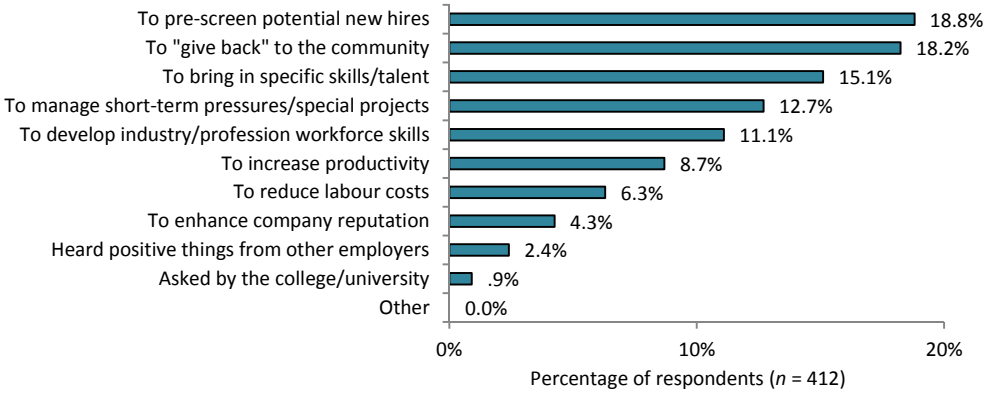
developing workforce skills (77%) were the three most frequently cited reasons, followed by giving back to the community (72%) and increasing productivity 69%) (Figure 32).

Figure 32
Reasons for planning future WIL

Don't know = 0.0%

When respondents were asked the single most important reason for their planned participation, giving prescreening potential hires (19%) and giving back to the community (18%) were the most likely to be identified (Figure 33). These were followed by bringing in specific skills/talent (15%) and managing short-term pressures (13%).

Figure 33
Most important reason for planning future WIL



Don't know = 1.5%

Open-ended comments about the main reason for future participation provide more insights into employer interest in WIL:

> *"Our top reason is to deal with extra work during the busy time in the summer and get the work done."*

"To give college/university students an opportunity to gain experience and possibly remain in the field."

"It is a way to give back to the community without significant cost to my business."

"To find someone that is going to want to grow with the company and retain them."

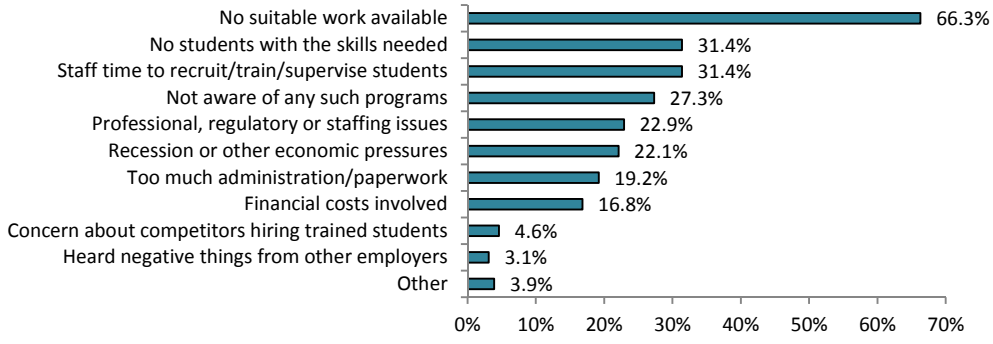
There were no major differences by firm size concerning reasons for planning WIL in the future.

WIL Barriers and Challenges

To better understand some of the barriers that employers faced in participating in WIL, the survey asked respondents who did not plan to provide WIL why they were not considering a WIL option. Respondents were presented with a randomized list of 11 reasons, and they were asked to indicate the reasons that applied to them.

By far the most frequently mentioned reason was the lack of suitable work for students (66%) (Figure 34). This was followed by a range of issues, including concerns about the availability of students with the needed skills (31%), staff time to recruit, train and supervise students (31%), lack of awareness of any WIL programs offered by colleges or universities (27%), professional, regulatory or staffing issues (23%), recession or economic pressures (22%), paperwork burden (19%) and financial costs (17%). A small proportion of respondents provided "other" reasons for not planning to provide WIL (3.9%). These included no student interest in the jobs they could provide and an unsafe workplace for students.

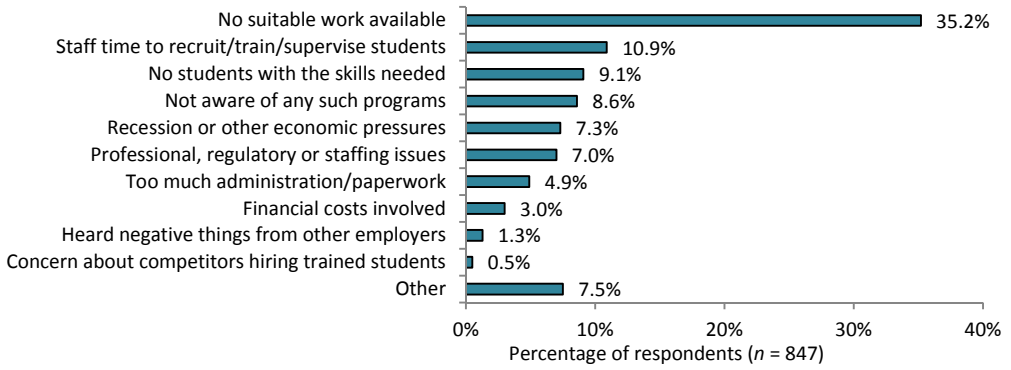
Figure 34
Reasons for not planning WIL



Don't know = 4.3%

Not having suitable work available was by far the most common main reason for not participating: it was mentioned by more than one-third of respondents (Figure 35). This was followed by staff time to recruit, train or supervise students (11%), a lack of students with the skills needed (9%), lack of awareness of WIL programs (9%), recession (7%) and professional, regulatory or staffing issues (7%).

Figure 35
Most important reason for not planning WIL



Don't know = 4.7%

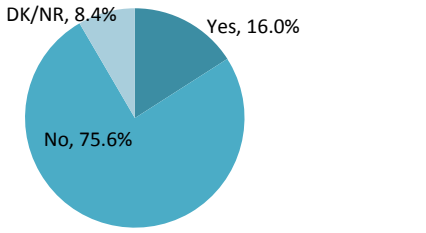
Verbatim comments about the main reason for not planning to provide WIL shed further light on some of the barriers:

> *"I am not in a business that would hire postsecondary graduates. No higher education is required."*
>
> *"We are just too small."*
>
> *"We have a very small staff, so there is really no work. Also, due to student status usually there are liability issues. They would not be covered."*
>
> *"The skill set that we need is from a financial and chemistry base. No programs offer that."*
>
> *"We have never had the opportunity. Nobody has approached us and let us know about it."*
>
> *"Basically, given the length of time it takes to train a student, by the time they would be fully functioning they would be done. It's the nature of the job. The learning curve is quite steep."*
>
> *"We are unionized. That makes it complicated."*

There were no major differences by firm size regarding reasons for not planning to provide WIL.

Additional information about barriers was gained by asking employers who did not offer WIL whether they had offered WIL in the past. Although three-quarters of these employers had not previously participated in WIL, 16% identified themselves as former WIL employers (Figure 36).

Figure 36
Employers who stopped offering WIL

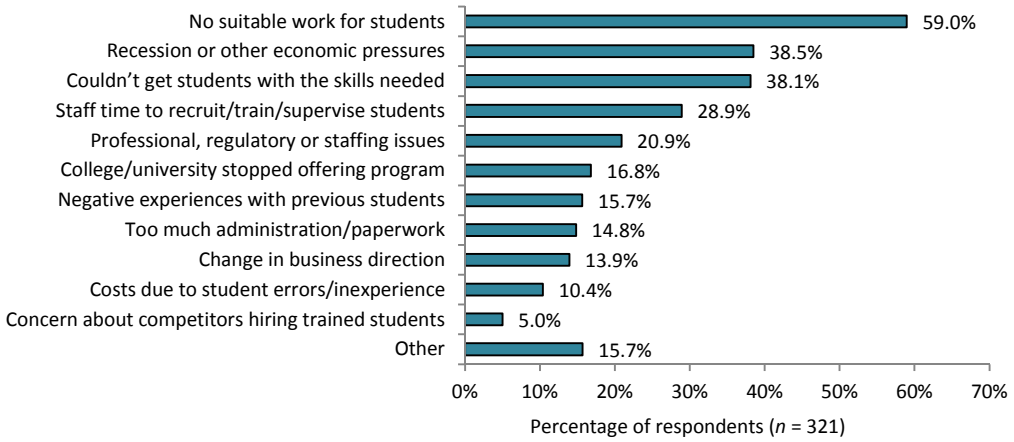


Percentage of respondents (*n* = 1,770)

These employers were presented with a randomized list of 11 reasons for no longer participating, and they were asked to select all that applied. They were also allowed to identify other issues that applied to them.

Again, lack of suitable work for students was by far the most frequently mentioned reason for discontinuing their involvement in WIL (59%) (Figure 37). Economic pressures (39%) and lack of students with the needed skills (38%) were also cited by employers as significant barriers, followed by staff time involved in training and supervision (29%) and professional, regulatory or staffing issues (21%). By far the most common "other" reason for no longer participating was lack of student interest in the jobs provided.

Figure 37
Reasons for no longer offering WIL

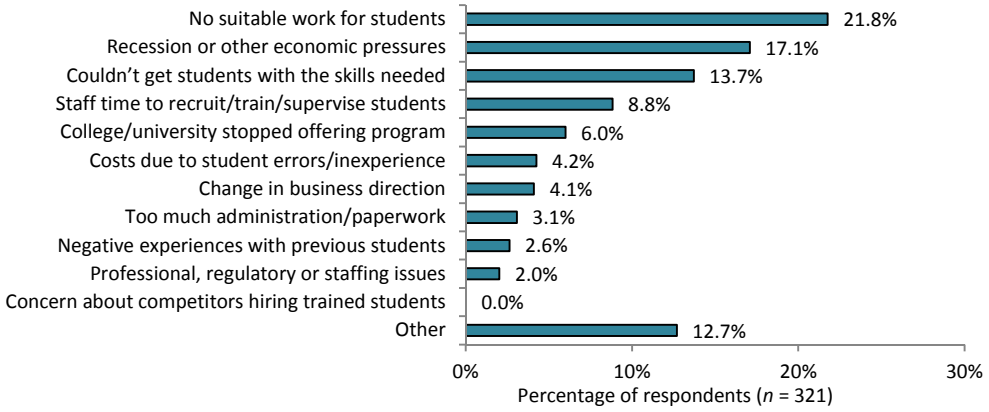


Percentage of respondents (*n* = 321)

Don't know = 1.4%

There was no clear consensus about the single most important reason for withdrawing from WIL. While the absence of suitable work for students was the reason cited most often by employers for discontinuing their involvement (22%), employers were quite likely to mention a range of other issues, including the economy (17%) and lack of students with needed skills (14%) (Figure 38). Again, lack of student interest in the jobs available was by far the most common "other" top reason.

Figure 38
Most important reason for no longer offering WIL



Don't know = 3.7%

Verbatim comments about the number one reason for stopping WIL included:

> *"There is no physical space available to place the students."*
>
> *"There is not enough work available."*
>
> *"The students weren't able to provide sufficient contribution to the companies' activities."*
>
> *"College level co-op students don't want to work for free and we can't pay them."*
>
> *"It is too time consuming and we are a seasonal business."*
>
> *"We have not been approached in a few years."*
>
> *"Since this location is rural, there are not many students who actually apply."*

There were a few noteworthy variations by firm size regarding reasons for no longer offering WIL, including the following:

- Firms with 20 to 49 employees were more likely than smaller firms to cite staff time and professional or regulatory issues as reasons for no longer offering WIL (Table 21).
- For larger firms, the recession or other economic pressures were identified as the most important reason for no longer offering WIL, while smaller firms were particularly challenged by the lack of suitable work (Table 22).

Table 21
Reasons for no longer offering WIL by firm size

	Number of employees				Total
	2-9	10-19	20-49	50+	
	n = 115	*n* = 79	*n* = 57	*n* = 71	***n* = 322**
No suitable work for students	62.6%	58.1%	54.4%	50.1%	**59.0%**
Recession or other economic pressures	39.0%	28.8%	49.9%	54.1%	**38.5%**
Couldn't get students with the skills needed	38.1%	46.4%	30.2%	19.9%	**38.1%**
Staff time to recruit/train/supervise students	23.5%	32.2%	43.9%	21.4%	**28.9%**
Professional, regulatory or staffing issues	14.3%	18.5%	45.3%	25.5%	**20.9%**
College/university stopped offering program	12.1%	24.4%	15.8%	15.2%	**16.8%**
Negative experiences with previous students	15.9%	15.6%	14.1%	16.9%	**15.7%**
Too much administration/paperwork	11.7%	18.0%	19.2%	12.7%	**14.8%**
Change in business direction	14.0%	15.3%	7.9%	18.6%	**13.9%**
Costs due to student errors/inexperience	6.9%	12.4%	16.0%	12.6%	**10.4%**
Concern about competitors hiring trained students	2.5%	8.2%	7.0%	3.5%	**5.0%**
Other	9.0%	23.0%	21.3%	15.0%	**15.7%**
Don't know	1.2%	0.9%	2.2%	3.7%	**1.5%**

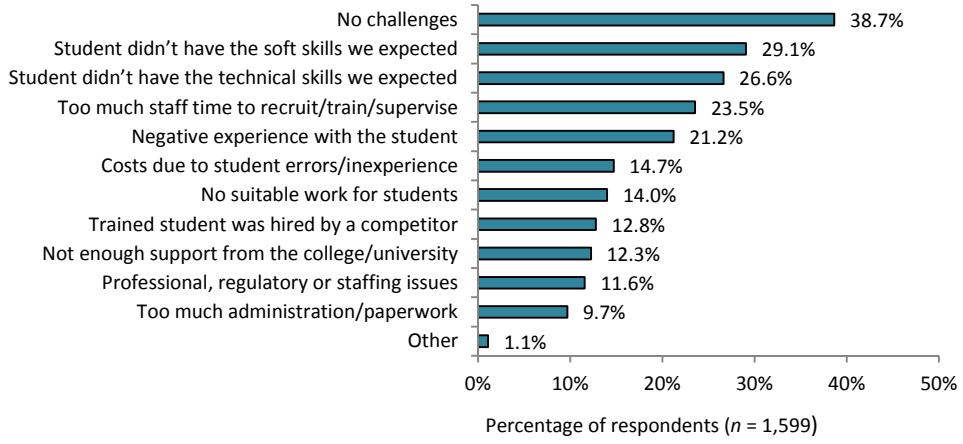
Table 22
Most important reason for no longer offering WIL by firm size

	Number of employees				Total
	2-9	10-19	20-49	50+	
	n = 115	*n* = 79	*n* = 57	*n* = 71	***n* = 322**
No suitable work for students	27.3%	17.3%	16.2%	17.6%	**21.8%**
Recession or other economic pressures	16.1%	12.4%	20.3%	35.1%	**17.1%**
Couldn't get students with the skills needed	17.0%	13.4%	9.3%	4.4%	**13.7%**
No student interest in jobs provided	11.3%	13.8%	15.1%	9.3%	**12.4%**
Staff time to recruit/train/supervise students	9.0%	9.4%	9.6%	4.2%	**8.8%**
College/university stopped offering program	2.2%	13.7%	-	7.3%	**6.0%**
Costs due to student errors/inexperience	1.4%	7.4%	8.3%	0.8%	**4.2%**
Change in business direction	4.2%	4.8%	2.5%	3.2%	**4.1%**
Too much administration/paperwork	4.2%	2.5%	2.1%	0.6%	**3.1%**
Negative experiences with previous students	1.1%	3.5%	3.0%	7.1%	**2.6%**
Professional, regulatory or staffing issues	1.3%	0.1%	6.8%	5.6%	**2.0%**
Have not been asked	0.1%	0.7%	-	0.3%	**0.3%**
Other	11.4%	14.5%	15.1%	9.3%	**12.7%**
Don't know	4.8%	1.0%	6.8%	4.5%	**3.9%**

To better understand the difficulties that employers faced in providing WIL, the survey asked respondents about the challenges they had experienced. A randomized list of 10 challenges was presented, and employers were asked to indicate whether they had encountered any of these issues during their participation in WL programs. Employers could also indicate that they had not experienced any challenges, and they were also allowed to identify other issues that applied to them.

About two out of five WIL employers (39%) reported that they had not experienced any challenges (Figure 39). The remaining employers raised concerns about the students' lack of soft skills (29%) and technical skills (27%), as well as the amount of time required to recruit, train and supervise students (24%). More than one in five employers reported negative experiences with WIL students (21%), and another 15% had experienced costs due to student errors.

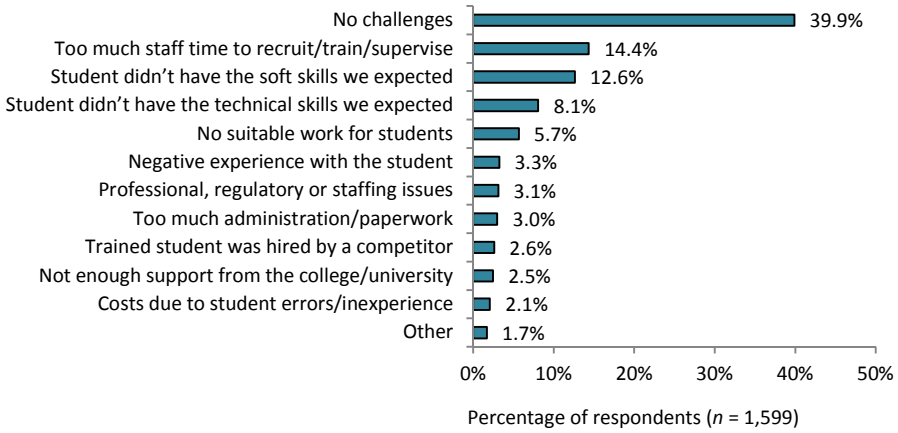
Figure 39
WIL challenges



Don't know = 0.0%

When asked to indicate the single biggest challenge they faced as WIL employers, the top response was the amount of staff time involved (14%), followed by students not having the expected soft skills (13%) or technical skills (8%). "Other" challenges mentioned by respondents included transportation issues such as the student not having a vehicle or living far from the placement site, short placement length and difficulty retaining students after the placement ended.

Figure 40
Most significant WIL challenge



Don't know = 1.2%

Open-ended respondent comments offer further insights into the difficulties associated with the provision of WIL:

> *"Sometimes it's difficult to make sure we have the right spots for them. We don't always have somebody willing to take on a student in the right area. We want to make sure that what we provide to them is of value."*

"The biggest challenge is that the students are so unaware of what a work office setting requires, even simple manners, being courteous to clients, etc."

"Sometimes staff find it overwhelming to do their work and monitor the students."

"The biggest challenge was training in the workplace to make sure they could do the job on their own. It takes a little time for the young person to fully do the job they are expected to do or the job requirements of the position."

"Sometimes the students weren't really prepared to enter the workforce. Some of them were, the more mature ones, but some of the first or second year students weren't ready. They may have had a wonderful attitude but they don't see it as work experience but as hours they have to complete."

In the analysis by firm size, only a few differences were observed between firms:

- Firms with fewer than 20 employees were more likely than firms with 20 or more employees to note that demands on staff time were among the challenges they faced (Table 23).
- The smallest firms were more likely than firms of all other sizes to cite professional, regulatory and staffing issues as a challenge (Table 23).
- Demands on staff time were more likely to be the single main challenge for firms with 10 to 19 employees compared to firms of all other sizes (Table 24).

Table 23
WIL challenges by firm size

	Number of Employees				Total
	2-9	10-19	20-49	50+	
	n = 402	*n* = 317	*n* = 302	*n* = 578	***n* = 1,599**
No challenges	39.0%	36.7%	38.7%	42.1%	**38.7%**
Student didn't have the soft skills we expected	31.8%	28.7%	30.7%	21.3%	**29.1%**
Student didn't have the technical skills we expected	30.6%	29.4%	24.0%	17.2%	**26.6%**
Too much staff time to recruit/train/supervise students	31.7%	26.5%	13.8%	15.1%	**23.5%**
Negative experience with the student	22.9%	20.8%	22.9%	15.8%	**21.2%**
Costs due to student errors/inexperience	14.5%	17.7%	13.2%	12.3%	**14.7%**
No suitable work for students	14.1%	11.1%	15.4%	17.1%	**14.0%**
Trained student was hired by a competitor	13.2%	11.4%	12.3%	15.1%	**12.8%**
Not enough support from the college/university	16.5%	13.1%	10.4%	4.2%	**12.3%**
Professional, regulatory or staffing issues	17.5%	9.0%	8.2%	8.4%	**11.6%**
Too much administration/paperwork	13.1%	8.0%	7.0%	9.5%	**9.7%**
Other	0.8%	1.4%	0.6%	1.8%	**1.1%**
Don't know	-	-	-	-	**-**

Table 24
Most significant challenge by firm size

	Number of Employees				Total
	2-9	10-19	20-49	50+	
n size	*n* = 402	*n* = 317	*n* = 302	*n* = 578	***n* = 1,599**
No challenges	39.7%	39.9%	38.7%	42.1%	**39.9%**
Too much staff time to recruit/train/supervise students	10.7%	22.4%	11.7%	11.9%	**14.4%**
Student didn't have the soft skills we expected	13.6%	9.9%	15.9%	10.4%	**12.6%**
Student didn't have the technical skills we expected	7.5%	10.2%	8.2%	5.5%	**8.1%**
No suitable work for students	4.6%	2.9%	9.9%	6.4%	**5.7%**
Negative experience with the student	1.3%	4.1%	4.8%	3.5%	**3.3%**
Professional, regulatory or staffing issues	6.9%	0.9%	1.1%	2.2%	**3.1%**
Too much administration/paperwork	3.9%	1.3%	2.6%	4.5%	**3.0%**
Trained student was hired by a competitor	2.9%	1.4%	1.8%	5.1%	**2.6%**
Not enough support from the college/university	4.6%	1.3%	2.0%	0.7%	**2.5%**
Costs due to student errors/inexperience	1.8%	2.6%	0.6%	4.2%	**2.1%**
Other	1.9%	1.8%	1.3%	1.9%	**1.7%**
Don't know	0.6%	1.3%	1.5%	1.6%	**1.2%**

Comparison by institution type and WIL program revealed some interesting differences between college WIL employers based on type of WIL program. Results for college applied research projects are not included in the tables below because of small *n*-size (*n* = 19):

- College co-op employers were less likely to have experienced challenges than other employers, with 43% reporting no challenges (Table 25).
- Only one-quarter of employers involved in college practicums or clinical placements reported that they did not encounter challenges (Table 25). More than co-op or internship employers, these employers raised concerns about the students' lack of soft skills and negative experiences with the student (Table 25).
- Employers who provided college field placements were more likely than co-op or internship employers to identify lack of soft skills among the challenges they had encountered (Table 25).
- Increased cost due to student inexperience was a more common concern among college internship employers than among other employers (Table 25).
- College service learning employers were more likely to identify too much administration or paperwork as the single biggest challenge (Table 26).
- The difficulties faced more often by apprenticeship employers included inadequate student technical skills and costs due to student inexperience (Table 25).

Table 25
Challenges by type of college WIL program

	Co-op	Practicum or clinical	Field placement	Intern-ship	Service learning	Apprentice-ship	All college
	n = 619	*n* = 227	*n* = 417	*n* = 224	*n* = 52	*n* = 138	***n* = 1,159**
No challenges	43.3%	25.4%	30.8%	26.9%	26.4%	33.5%	**36.5%**
Student didn't have the soft skills we expected	29.1%	42.6%	43.2%	27.4%	26.9%	35.1%	**32.1%**
Student didn't have the technical skills we expected	26.6%	35.6%	30.9%	26.3%	31.7%	40.0%	**28.2%**
Negative experience with the student	21.2%	33.8%	27.4%	18.4%	11.2%	29.3%	**23.4%**
Too much staff time to recruit/train/ supervise students	21.4%	28.5%	25.9%	20.2%	8.8%	22.1%	**22.3%**
Costs due to student errors/inexperience	12.5%	10.0%	8.6%	25.7%	4.6%	21.5%	**15.3%**
No suitable work for students	13.3%	20.0%	16.0%	9.9%	17.7%	9.7%	**14.8%**
Not enough support from the college/ university	8.8%	21.6%	14.9%	25.1%	-	11.1%	**14.7%**
Trained student was hired by a competitor	10.5%	15.3%	17.9%	21.4%	23.5%	14.9%	**13.8%**
Professional, regulatory or staffing issues	9.5%	23.1%	11.0%	17.3%	13.5%	13.9%	**12.9%**
Too much administration/paperwork	9.7%	11.6%	10.6%	5.8%	17.1%	8.7%	**9.3%**
Other	1.1%	0.4%	1.8%	0.3%	-	0.2%	**1.0%**
Don't know	-	-	-	-	-	-	**-**

Table 26
Most significant challenge by type of college WIL program

	Co-op	Practicum or clinical	Field placement	Intern-ship	Service learning	Apprentice-ship	All college
	n = 619	*n* = 227	*n* = 417	*n* = 224	*n* = 52	*n* = 138	***n* = 1,159**
No challenges	43.3%	25.4%	30.9%	32.9%	36.6%	33.5%	**38.1%**
Student didn't have the soft skills we expected	12.1%	21.8%	18.5%	15.5%	7.4%	16.2%	**14.6%**
Too much staff time to recruit/train/supervise students	12.5%	15.1%	14.7%	14.7%	8.4%	11.5%	**13.8%**
Student didn't have the technical skills we expected	8.6%	6.6%	7.2%	12.7%	10.8%	10.7%	**8.2%**
No suitable work for students	5.5%	3.1%	8.7%	3.3%	0.5%	3.6%	**5.7%**
Too much administration/paperwork	4.7%	1.9%	2.0%	1.4%	15.1%	4.4%	**3.5%**
Negative experience with the student	3.3%	5.4%	3.6%	0.9%	-	4.0%	**3.1%**
Not enough support from the college/university	1.2%	8.0%	2.3%	8.2%	-	0.9%	**2.9%**
Trained student was hired by a competitor	2.2%	3.7%	3.3%	3.3%	5.5%	3.7%	**2.9%**
Professional, regulatory or staffing issues	1.8%	2.4%	3.8%	2.5%	5.5%	2.8%	**2.4%**
Costs due to student errors/inexperience	1.8%	2.9%	1.4%	1.9%	-	2.8%	**2.0%**
Other	2.1%	2.5%	2.3%	2.6%	10.3%	5.7%	**1.8%**
Don't know	1.1%	1.2%	1.5%	0.3%	-	0.3%	**1.0%**

Among university WIL employers, the following differences were noted:

- The majority of university co-op employers had not experienced any challenges (Table 27).
- University internship and service learning employers were significantly more likely than co-op employers to cite costs due to student errors as a challenge (Table 27).
- Although the *n*-size is small for employers who provided opportunities for university applied research (*n* = 25), the challenges most often mentioned by these employers were losing a trained student to a competitor and lack of technical skills (Table 27).
- Among university service learning employers, 85% reported experiencing challenges (Table 27). About two-thirds said that the students did not have the expected technical skills, and almost as many raised concerns about the time required to supervise. Other difficulties mentioned more frequently by these employers included lack of student soft skills, professional/regulatory/staffing issues, the amount of paperwork and costs due to student inexperience. The top challenges were too much staff time required, as well as too much paperwork and professional, regulatory or staffing issues.

Table 27
Challenges by type of university WIL program

	Co-op	Practicum or clinical	Field placement	Intern-ship	Applied research	Service learning	All univ.
	n = 350	*n* = 225	*n* = 232	*n* = 250	*n* = 25	*n* = 46	***n* = 833**
No challenges	51.6%	34.0%	39.1%	37.2%	31.5%	15.6%	**40.4%**
Student didn't have the soft skills we expected	25.1%	34.0%	29.4%	25.1%	25.6%	50.3%	**29.2%**
Student didn't have the technical skills we expected	17.9%	25.5%	29.0%	25.1%	36.1%	66.4%	**26.6%**
Too much staff time to recruit/train/supervise students	15.0%	25.5%	18.3%	24.2%	3.4%	61.1%	**25.5%**
Negative experience with the student	16.6%	18.4%	22.7%	19.4%	2.9%	22.5%	**19.2%**
Costs due to student errors/inexperience	8.1%	15.2%	10.1%	21.2%	8.6%	24.2%	**15.2%**
Not enough support from the college/university	4.9%	13.1%	14.3%	13.5%	4.3%	19.7%	**13.0%**
Too much administration/paperwork	6.7%	16.4%	12.9%	7.4%	4.6%	34.4%	**12.4%**
Trained student was hired by a competitor	9.3%	9.8%	15.7%	19.9%	37.6%	17.8%	**11.9%**
Professional, regulatory or staffing issues	4.5%	10.7%	10.4%	11.3%	13.9%	37.5%	**11.6%**
No suitable work for students	10.1%	15.0%	10.7%	7.6%	2.9%	11.9%	**11.0%**
Other	1.7%	0.7%	1.1%	2.0%	-	-	**1.5%**
Don't know	-	-	-	-	-	-	**-**

Table 28
Most significant challenge by type of university WIL program

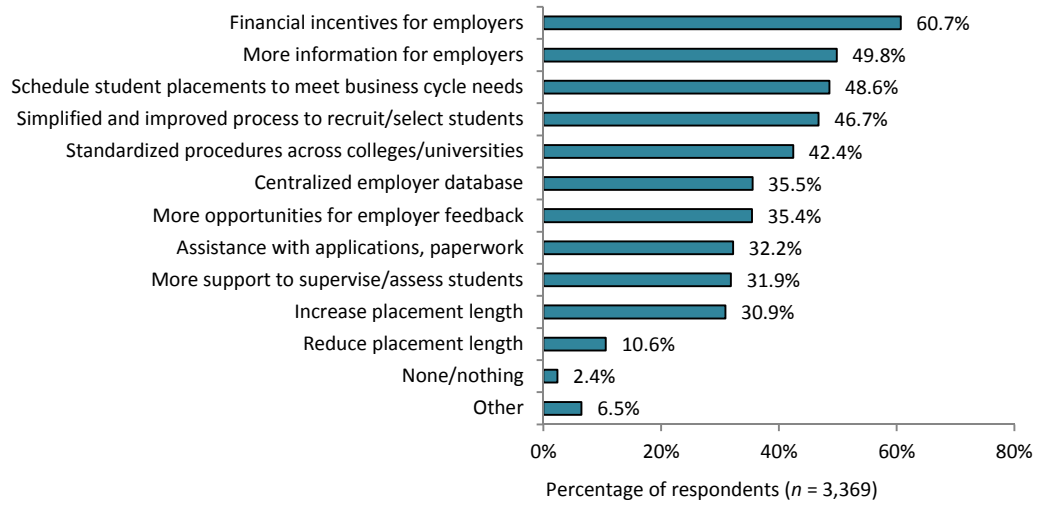
	Co-op	Practicum or clinical	Field placement	Intern-ship	Applied research	Service learning	All univ.
n size	*n* = 350	*n* = 225	*n* = 232	*n* = 250	*n* = 25	*n* = 46	***n* = 833**
No challenges	51.7%	34.0%	39.4%	37.2%	31.5%	21.3%	**41.2%**
Too much staff time to recruit/train/supervise students	10.2%	22.5%	12.5%	17.8%	3.4%	24.4%	**17.1%**
Student didn't have the soft skills we expected	12.1%	11.3%	10.4%	7.5%	4.3%	4.8%	**9.6%**
Student didn't have the technical skills we expected	6.7%	5.3%	8.6%	12.9%	14.1%	1.8%	**8.3%**
No suitable work for students	2.0%	7.2%	6.3%	1.7%	-	2.0%	**4.0%**
Too much administration/paperwork	1.9%	2.5%	2.8%	2.9%	4.6%	17.4%	**3.7%**
Negative experience with the student	4.4%	2.7%	5.2%	3.9%	0.4%	-	**3.3%**
Professional, regulatory or staffing issues	1.7%	2.2%	2.7%	2.0%	4.3%	17.1%	**3.2%**
Costs due to student errors/inexperience	3.3%	3.2%	1.4%	2.3%	1.8%	-	**2.2%**
Trained student was hired by a competitor	1.1%	1.0%	3.6%	3.0%	8.2%	5.4%	**2.5%**
Not enough support from the college/university	0.2%	2.1%	1.6%	1.4%	4.3%	-	**1.2%**
Other	2.5%	4.2%	3.1%	5.2%	23.1%	5.7%	**2.0%**
Don't know	2.1%	1.7%	2.4%	2.2%	-	-	**1.8%**

WIL Supports

The survey concluded by exploring the resources and supports that would best facilitate employer involvement in WIL. All respondents – whether or not they provided WIL opportunities for students – were presented with a list of 11 options and asked to select the ones that would make it easier for them to participate in WIL. Respondents were also allowed to suggest other resources or supports.

There was general agreement that financial incentives were important as a means of encouraging employers to deliver WIL, with 61% of employers including financial assistance among their recommendations (Figure 41). About half of respondents were interested in more information about WIL (50%) and placements timed to better align with business cycles (49%). The next three most frequent suggestions all related to the processes required for employers to partner with colleges and universities in the provision of WIL, including streamlined student recruitment and selection (47%), the standardization of procedures across schools (42%) and a centralized database for employers to post their interest in participating in WIL (36%). Strategies selected by approximately one-third of respondents included improved opportunities for employer feedback (35%), assistance with paperwork (32%), help with student supervision and assessments (32%) and increased placement length (31%). "Other" supports identified by respondents included changes to union or other regulations that prevent placements, better training from colleges and universities on implementing WIL, shortened placement length, increased student interest in the jobs available and improved economic situation.

Figure 41
Supports for WIL employers



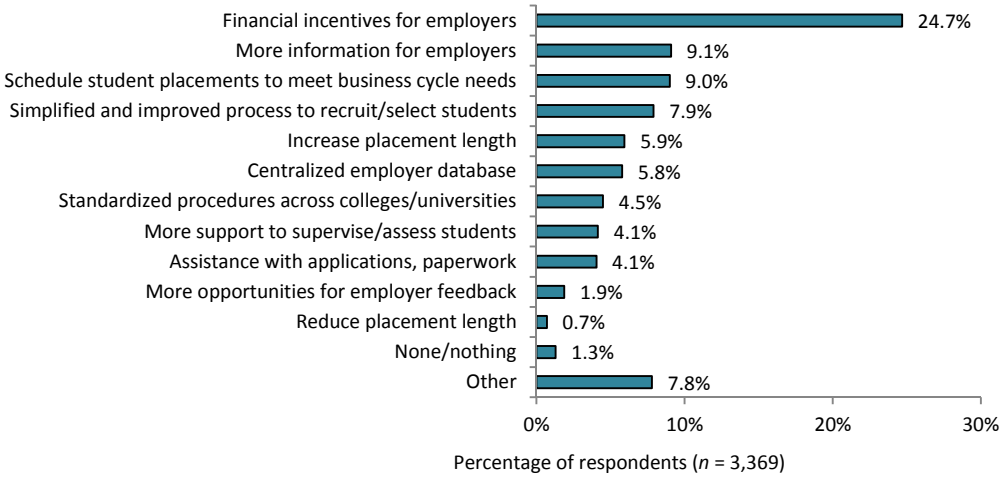
Don't know = 10.8%

In an open-ended format, employers were invited to suggest the most important support to facilitate their participation in WIL from the list of strategies they had identified.

Again, the most frequently mentioned strategy was to provide employers with financial incentives (25%), followed by more information about WIL (9%), placements timed to better align with business cycles (9%) and a simplified student recruitment and selection process (8%). Although only one-third of employers had recommended increased placement length, this was identified next as the top strategy to assist employers, by 6% of respondents. A similar proportion recommended a centralized employer database

(6%), and slightly fewer urged standardized procedures across schools (5%). Assistance with student supervision and assessment, and with completing paperwork, were each top strategies for 4% of respondents.

Figure 42
Most important WIL support



Don't know = 13.2%

The verbatim open-ended comments shed more light on what is needed to effectively support employers in delivering postsecondary WIL programs:

> *"A wage subsidy would help."*
>
> *"More information is needed on what's available out there. A lot of people don't know that students are available. More advertisements should be put out that these programs exist."*
>
> *"Having a liaison or a contact from the university who knows the particular skills of the students and can recommend people to come here would help as opposed to having to sort through a list based on their grades because it is not relevant to them being a good employee."*
>
> *"Having a centralized website or resource where employers could go to find students across both employers and universities/colleges would be good."*
>
> *"Make the placement length more flexible to better fit specific projects."*

Employers who provided WIL had slightly different views about the types of supports needed compared to employers who did not provide WIL. Among WIL employers, the most frequently cited supports were financial incentives for employers, followed by scheduling placements to meet business cycle needs and then standardized procedures across colleges/universities (Table 29). Financial incentives were also the most frequently cited support among non-WIL employers, but for these employers, more information was the second most frequently cited support, followed by simplifying the process to recruit students.

Table 29
Supports for WIL employers by participation in WIL

	WIL employers	Non-WIL employers	Total
	n = 1,599	*n* = 1,706	***n* = 3,369**
Financial incentives for employers	65.8%	57.8%	**60.7%**
More information for employers	45.4%	52.5%	**49.8%**
Schedule student placements to meet business cycle needs	53.0%	46.4%	**48.6%**
Simplified and improved process to recruit/select students	41.9%	49.6%	**46.7%**
Standardized procedures across colleges/universities	49.8%	38.3%	**42.4%**
Centralized employer database	37.4%	34.6%	**35.5%**
More opportunities for employer feedback	37.6%	34.4%	**35.4%**
Assistance with applications, paperwork	25.6%	36.0%	**32.2%**
More support to supervise/assess students	35.1%	30.0%	**31.9%**
Increase placement length	36.6%	27.5%	**30.9%**
Reduced placement length	8.4%	11.6%	**10.6%**
None/nothing	0.9%	3.2%	**2.4%**
Other	2.3%	5.2%	**6.5%**
Don't know	7.5%	12.8%	**10.8%**

When asked to identify the single most important support, a similar proportion of both WIL and non-WIL employers selected financial incentives, but non-WIL employers were more likely to see more information as a top support, while WIL employers were more likely to recommend scheduling placements to meet business needs and increasing placement length (Table 30).

Table 30
Most important WIL support by participation in WIL

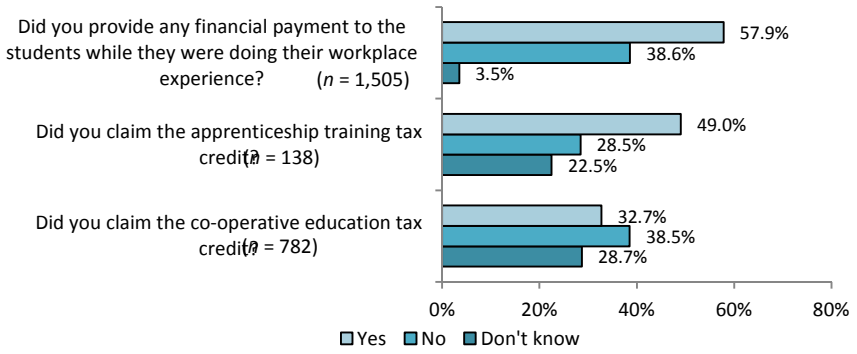
	WIL employers	Non-WIL employers	Total
	n = 1,599	*n* = 1,706	***n* = 3,369**
Financial incentives for employers	25.4%	24.2%	**24.7%**
More information for employers	5.2%	11.5%	**9.1%**
Schedule student placements to meet business cycle needs	11.2%	7.8%	**9.0%**
Simplified and improved process to recruit/select students	8.0%	7.8%	**7.9%**
Increase placement length	8.7%	3.8%	**5.9%**
Centralized employer database	6.8%	5.2%	**5.8%**
Standardized procedures across colleges/universities	8.2%	2.4%	**4.5%**
More support to supervise/assess students	6.0%	3.1%	**4.1%**
Assistance with applications, paperwork	3.1%	4.7%	**4.1%**
More opportunities for employer feedback	1.9%	1.8%	**1.9%**
Reduced placement length	0.7%	0.6%	**0.7%**
None/nothing	1.2%	1.4%	**1.3%**
Other	3.9%	10.2%	**7.8%**
Don't know	9.6%	15.3%	**13.2%**

To better understand the financial implications for employers who provide work-integrated learning, WIL employers were asked whether they compensated their WIL students. In addition, co-op and apprenticeship employers were asked whether they claimed available government tax credits to assess the impact of financial incentives as a strategy to encourage employer participation.

As shown in the figure below, close to three out of five WIL employers compensated their WIL students (58%) (Figure 43). At the same time, many of the WIL employers who may have been eligible for tax

credits did not take advantage of this source of financial assistance. Only half of apprenticeship employers (49%) and one-third of co-op employers (33%) claimed tax credits.

Figure 43
Financial implications



In the interests of minimizing respondent burden by reducing survey length, the questionnaire did not probe employer reasons for not accessing the credits. However, the analysis below explores compensation of students by type of WIL program and provides additional insights into the uptake of the co-op tax credit among co-op employers.

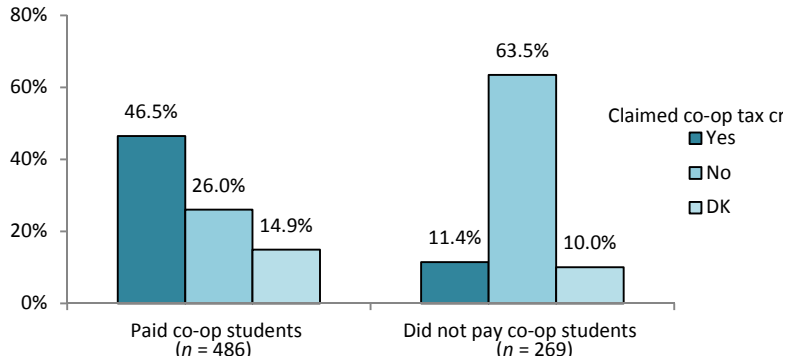
To improve the reliability of the analysis, Table 31 shows only employers who provided a single type of WIL exclusively for colleges or exclusively for universities. (This resulted in only four types of WIL with large enough *n*-sizes for comparison.) Employers who provided WIL opportunities only for university students were more likely to provide financial compensation to students across the four types of WIL. Among both college and university employers, financial compensation was most often provided for co-op or internship experiences and was least likely to be provided for practicums or clinical placements.

Table 31
WIL employers who compensated WIL students by institution and WIL program

	College WIL employers		University WIL employers	
Co-op	*n* = 178	39.4%	*n* = 84	89.9%
Practicum or clinical	*n* = 29	16.1%	*n* = 35	21.5%
Field placement	*n* = 109	25.5%	*n* = 27	52.0%
Internship	*n* = 34	58.1%	*n* = 53	85.5%

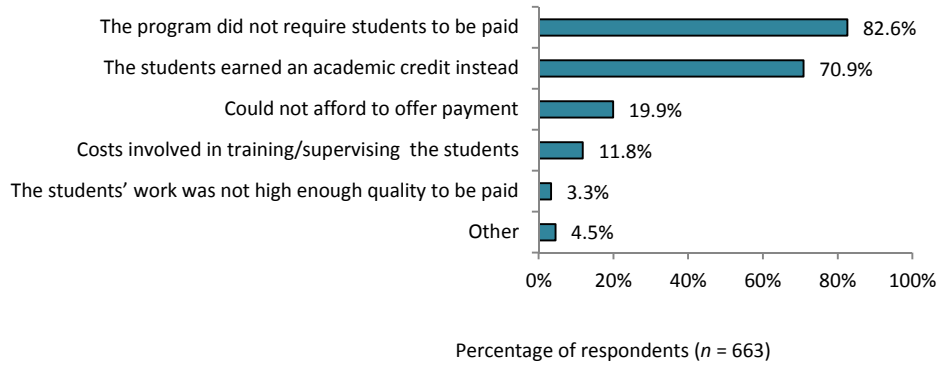
The large proportion of college co-op employers who reported not paying their co-op students (or not knowing whether their co-op students had received compensation) is noteworthy. The definition of co-op set out by the Canadian Association for Co-operative Education requires that co-op students receive remuneration for the work they performed. This means that employers who did not pay their WIL students were not technically participating in co-op and may therefore have been ineligible to claim the tax credit. To explore this finding more fully, Figure 44 shows that almost half of all college and university co-op employers who paid their students also claimed the tax credit (46.5%). However, one-quarter of these co-op employers (26%) did not claim the tax credit.

Figure 44
Co-op employers by student payment and tax credit



Employers who did not pay their WIL students were presented with a randomized list of five reasons for not offering compensation, and they were asked which of the reasons applied to them. Employers typically indicated that payment was not required by the program (83%) or that students were earning an academic credit instead of a wage (71%) (Figure 45). Only 20% of employers selected inability to pay as a reason for not compensating the students.

Figure 45
Reasons for not compensating WIL students



6 – Key Findings by Sector

This section summarizes findings for each of the 12 sector groupings analyzed in this report. Detailed tables showing these results are included in Appendix C.

Accommodation, Food and Consumer Services

PSE Graduates and Labour Market Entry

- 32% of Accommodation and Food sector employers had hired PSE graduates in the last two years.
- Of these, 30% had hired one grad, 20% had hired two grads and 50% had hired three or more grads.
- 45% of those who hired offered employment to at least one grad who had participated in WIL (39% at the site where they were hired and 6% at another site or organization).
- WIL experience at their own worksite and relevant work experience were the most highly rated hiring factors among Accommodation and Food sector employers.

Employer Experiences with WIL

- 27% of Accommodation and Food sector employers offered WIL at their worksite.
- These employers had participated in WIL for a mean of 10.6 years, with 40% involved for five years or less.
- The two most frequently cited top reasons for participating in WIL among Accommodation and Food sector employers were to develop industry/professional workforce skills (31%) and to give back to the community (19%).
- 16% of employers in this sector who did not offer WIL indicated that they had offered WIL in the past.
- 28% of non-WIL Accommodation and Food sector employers were planning to begin providing WIL. Of these, 20% were planning to begin offering WIL this year, 17% next year and 20% within the next five years. However, close to half of the employers planning to provide WIL did not know when they would begin participating.
- For those not planning to provide WIL, the two most frequently cited top reasons for not participating were lack of suitable work available (34%) and a lack of awareness of any WIL programs (13%).
- About half of WIL employers in this sector did not experience any challenges in providing WIL (48%). Among those who did encounter difficulties, the most frequently identified challenge was a lack of expected technical skills among WIL students (14%).
- Similar to all other sectors, Accommodation and Food sector employers identified financial incentives as the top support to make it easier for them to participate in WIL (31%). The second most frequently cited top support was more information for employers (14%).

Arts, Entertainment and Civic/Professional Organizations

PSE Graduates and Labour Market Entry

- 57% of Arts sector employers had hired PSE graduates in the last two years.
- Of these, 21% hired one grad, 31% hired two grads and 49% hired three or more grads.
- 68% of those who hired offered employment to at least one grad who had participated in WIL (59% at the site where they were hired and 9% at another site or organization).

- Among Arts sector employers, relevant work experience and WIL experience at their own worksite were the most highly rated hiring factors.

Employer Experiences with WIL

- 64% of Arts sector employers offered WIL at their worksite.
- Arts sector employers were long-time participants in WIL, with a mean of 11.9 years of participation. 36% were involved for five years or less.
- The two most frequently cited top reasons for Arts sector employers to participate in WIL were to develop industry/professional workforce skills (24%) and to give back to the community (19%).
- 22% of employers in this sector who did not offer WIL indicated that they had offered WIL in the past.
- 32% of non-WIL Arts sector employers were planning to begin providing WIL.
- For those not planning to provide WIL, the two most frequently cited top reasons for not participating were lack of suitable work available (60%) and lack of students with the skills needed (13%).
- 40% of WIL employers in this sector did not experience any challenges in providing WIL (40%). Among those who did encounter difficulties, the most frequently identified challenge was the staff time required to recruit/train/supervise students (20%).
- Similar to all other sectors, Arts sector employers identified financial incentives as the top support to make it easier for them to participate in WIL (17%). The second most frequently cited top support was scheduling student placements to meet business cycle needs (13%).

Construction

PSE Graduates and Labour Market Entry

- 27% of Construction sector employers had hired PSE graduates in the last two years.
- Of these, 48% had hired one grad, 22% had hired two grads and 30% had hired three or more grads.
- 60% of those who hired offered employment to at least one grad who had participated in WIL (50% at the site where they were hired and 10% at another site or organization).
- WIL experience at their own worksite, relevant work experience and general work experience were the most highly rated hiring factors among Construction sector employers.

Employer Experiences with WIL

- 25% of Construction sector employers offered WIL at their worksite.
- These employers were relatively recent participants in WIL, with a mean of 7.6 years and 51% involved for five years or less.
- The most frequently cited top reasons for participating in WIL among Construction sector employers were to develop industry/workforce skills (24%), to prescreen potential new hires (19%), and to reduce labour costs (17%).
- 19% of employers in this sector who did not offer WIL indicated that they had offered WIL in the past.
- 25% of non-WIL Construction Services sector employers were planning to begin providing WIL. Only 16% of these were planning to do so within the current year, while 23% were planning to introduce WIL next year and 26% within the next five years.
- For those not planning to provide WIL, the two most frequently cited top reasons for not participating were lack of suitable work available (35%) and a lack of students with the skills needed (19%).

- Just less than one-third of WIL employers in this sector did not experience any challenges in providing WIL (31%). Among those who encountered difficulties, the most frequently identified challenge was the staff time required to recruit/train/supervise students (19%).
- Similar to all other sectors, Construction sector employers identified financial incentives as the top support that would make it easier for them to participate in WIL (30%). The second most frequently cited top support was simplifying the process to recruit/select students (8%).

Educational Services

PSE Graduates and Labour Market Entry

- 61% of Education sector employers had hired PSE graduates in the last two years.
- Of these, 20% hired one grad, 27% hired two grads and 54% had hired three or more grads.
- 76% of those who hired offered employment to at least one grad who had participated in WIL (52% at the site where they were hired and 25% at another site or organization).
- Among Education sector employers, program of study and credential/qualification were the most highly rated hiring factors.

Employer Experiences with WIL

- 69% of Education sector employers offered WIL at their worksite.
- The Education sector had the longest history of WIL, with a mean of 15.4 years of participation. Only 32% of Education sector employers had been involved for five years or less.
- The two most frequently cited top reasons for participating in WIL were to develop industry/professional workforce skills (34%) and to give back to the community (19%).
- Only 11% of employers in this sector who did not offer WIL indicated that they had offered WIL in the past.
- 38% of non-WIL Education sector employers were planning to begin providing WIL.
- For those not planning to provide WIL, the two most frequently cited top reasons for not participating were lack of suitable work available (41%) and professional, regulatory or staffing issues (16%).
- Almost half of WIL employers in this sector did not experience any challenges in providing WIL (43%). Among those who did encounter difficulties, the most frequently identified challenge was a lack of expected soft skills among WIL students (17%).
- Similar to all other sectors, Education sector employers identified financial incentives as the top support to make it easier for them to participate in WIL (17%). The second most frequently cited top support was scheduling student placements to meet business cycle needs (9%).

Finance, Insurance, Real Estate and Leasing

PSE Graduates and Labour Market Entry

- 38% of Financial Services sector employers had hired PSE graduates in the last two years.
- Of these, 22% had hired one grad, 28% had hired two grads and 50% had hired three or more grads.
- 44% of those who hired offered employment to at least one grad who had participated in WIL (31% at the site where they were hired and 13% at another site or organization).
- Relevant work experience and general work experience were the most highly rated hiring factors among Financial Services sector employers.

Employer Experiences with WIL

- 27% of Financial Services sector employers offered WIL at their worksite.

- These employers were recent participants in WIL, with a mean of 6.9 years and 53% involved for five years or less.
- The two most frequently cited top reasons for participating in WIL among Financial Services sector employers were to prescreen potential new hires (20%) and to develop industry/professional workforce skills (19%).
- 15% of employers in this sector who did not offer WIL indicated that they had offered WIL in the past.
- 27% of non-WIL Financial Services sector employers were planning to begin providing WIL. Close to one-third of these were planning to start offering WIL within the current year (30%)
- For those not planning to provide WIL, the two most frequently cited top reasons for not participating were lack of suitable work available (37%) and professional, regulatory or staffing issues (18%).
- Half of WIL employers in this sector did not experience any challenges in providing WIL (50%). Among those who did encounter difficulties, the most frequently identified challenge was a lack of expected soft skills among WIL students (11%).
- Similar to all other sectors, Financial Services sector employers identified financial incentives as the top support to make it easier for them to participate in WIL (19%). The second most frequently cited top support was simplifying the process to recruit/select students (12%).

Forestry, Mining, Oil and Gas Extraction and Utilities

PSE Graduates and Labour Market Entry

- 32% of Forestry sector employers had hired PSE graduates in the last two years.
- Of these, 24% had hired one grad, 32% had hired two grads and 44% had hired three or more grads.
- 73% of those who hired offered employment to at least one grad who had participated in WIL (56% at the site where they were hired and 17% at another site or organization).
- Relevant work experience and general work experience were the most highly rated hiring factors among Forestry sector employers.

Employer Experiences with WIL

- 37% of Forestry sector employers offered WIL at their worksite.
- These employers were the most recent participants in WIL, with a mean of only 6.6 years and 61% involved for five years or less.
- The two most frequently cited top reasons for participating in WIL among Forestry sector employers were to develop industry/professional workforce skills (23%) and to give back to the community (22%).
- 13% of employers in this sector who did not offer WIL indicated that they had offered WIL in the past.
- 23% of non-WIL Forestry sector employers were planning to begin providing WIL. Close to one-third of these were planning to start offering WIL within the current year (31%).
- For those not planning to provide WIL, the most frequently cited top reason for not participating was lack of suitable work available (60%).
- About half of WIL employers in this sector did not experience any challenges in providing WIL (48%). Among those who did encounter difficulties, the most frequently identified challenge was the staff time required to recruit/train/supervise students (19%).

- Similar to all other sectors, Forestry sector employers identified financial incentives as the top support to make it easier for them to participate in WIL (20%). The second most frequently cited top support was providing more information for employers (9%).

Health Care and Social Assistance

PSE Graduates and Labour Market Entry

- 63% of Health sector employers had hired PSE graduates in the last two years, more than any other sector.
- Of these, 23% hired one grad, 22% hired two grads and 56% hired three or more.
- 85% of those who hired offered employment to at least one grad who had participated in WIL (76% at the site where they were hired and 10% at another site or organization).
- Program of study and credential/qualification were the most highly rated hiring factors among Health sector employers.

Employer Experiences with WIL

- 72% of Health sector employers offered WIL at their worksite.
- These employers were long-time participants in WIL, with a mean of 13.8 years and only 26% involved for five years or less.
- Among Health sector employers, the two most frequently cited top reasons for participating in WIL were to develop industry/professional workforce skills (31%) and to prescreen potential new hires (25%).
- 28% of Health sector employers who did not offer WIL indicated that they had offered WIL in the past, more than any other sector.
- 38% of non-WIL Health sector employers were planning to begin providing WIL. The majority of these planned to start offering WIL within the next two years (38% in 2012 and 17% in 2013).
- For those not planning to provide WIL, the two most frequently cited top reasons for not participating were lack of suitable work available (38%) and professional, regulatory or staffing issues (20%).
- Almost half of WIL employers in this sector did not experience any challenges in providing WIL (48%). Among those who did encounter difficulties, the most frequently reported challenge was a lack of expected soft skills among WIL students (14%).
- Similar to all other sectors, Health sector employers identified financial incentives as the top support to make it easier for them to participate in WIL (19%). The second most frequently cited top support was standardized procedures across colleges/universities (13%).

Information and Cultural Industries

PSE Graduates and Labour Market Entry

- 49% of Information and Cultural sector employers had hired PSE graduates in the last two years.
- Of these, 35% had hired one grad, 28% had hired two grads and 38% had hired three or more grads.
- 70% of those who hired offered employment to at least one grad who had participated in WIL (54% at the site where they were hired and 15% at another site or organization).
- Among Information and Cultural sector employers, program of study and relevant work experience were the most highly rated hiring factors.

Employer Experiences with WIL

- 51% of Information and Cultural sector employers offered WIL at their worksite.
- These employers had been participating in WIL for a mean of 9.6 years, with 45% involved for five years or less.
- The two most frequently cited top reasons for Information and Cultural sector employers to participate in WIL were to develop industry/professional workforce skills (29%) and to prescreen potential new hires (18%).
- 22% of employers in this sector who did not offer WIL indicated that they had offered WIL in the past.
- 31% of non-WIL Information and Cultural sector employers were planning to begin providing WIL. Over one-third of these planned to do so within the current year (36%).
- For those not planning to provide WIL, the two most frequently cited top reasons for not participating were lack of suitable work available (31%) and the staff time required to recruit/train/supervise students (21%).
- 39% of WIL employers in this sector did not experience any challenges in providing WIL. Among those who did encounter difficulties, the most frequently identified challenge was the staff time required to recruit/train/supervise students (16%).
- Similar to all other sectors, Information and Cultural sector employers identified financial incentives as the top support to make it easier for them to participate in WIL (34%). The second most frequently cited top support was simplifying the process to recruit/select students (9%).

Manufacturing

PSE Graduates and Labour Market Entry

- 30% of Manufacturing sector employers had hired PSE graduates in the last two years.
- Of these, 45% had hired one grad, 18% had hired two grads and 37% had hired three or more grads.
- 54% of those who hired offered employment to at least one grad who had participated in WIL (40% at the site where they were hired and 15% at another site or organization).
- WIL experience at their own worksite, relevant work experience, general work experience and program of study were the most highly rated hiring factors among Manufacturing sector employers.

Employer Experiences with WIL

- 25% of Manufacturing sector employers offered WIL at their worksite.
- These employers had participated in WIL for a mean of 9.5 years, with 43% involved for five years or less.
- The two most frequently cited top reasons for participating in WIL among Manufacturing sector employers were to prescreen potential new hires (25%) and to manage short-term pressures or complete special projects (17%).
- 20% of employers in this sector who did not offer WIL indicated that they had offered WIL in the past.
- 23% of non-WIL Manufacturing sector employers were planning to begin providing WIL. Close to one-third of these were planning to start offering WIL within the current year (30%).
- For those not planning to provide WIL, the two most frequently cited top reasons for not participating was lack of suitable work available (45%) and the staff time required to recruit/train/supervise students (13%).
- Fully half of WIL employers in this sector did not experience any challenges in providing WIL (50%). Among those who did encounter difficulties, the most frequently identified challenge was the staff time required to recruit/train/supervise students (13%).

- Similar to all other sectors, Manufacturing sector employers identified financial incentives as the top support that would make it easier for them to participate in WIL (33%). The second most frequently cited top support was a centralized employer database (10%).

Professional, Scientific and Business Services

PSE Graduates and Labour Market Entry

- 49% of Professional Services sector employers had hired PSE graduates in the last two years.
- Of these, 27% had hired one grad, 21% had hired two grads and 52% had hired three or more grads.
- 70% of those who hired offered employment to at least one grad who had participated in WIL (57% at the site where they were hired and 13% at another site or organization).
- Program of study and credential/qualification were the most highly rated hiring factors among Health sector employers.
- Program of study and relevant work experience were the most highly rated hiring factors among Professional Services sector employers.

Employer Experiences with WIL

- 45% of Professional Services sector employers offered WIL at their worksite.
- These employers had been participating in WIL for a mean of 9.6 years, with 43% involved for five years or less.
- The two most frequently cited top reasons for participating in WIL among Professional Services sector employers were to prescreen potential new hires (24%) and to develop industry/professional workforce skills (20%).
- 18% of employers in this sector who did not offer WIL indicated that they had offered WIL in the past.
- 26% of non-WIL Professional Services sector employers were planning to begin providing WIL. Approximately one-third of these were planning to start offering WIL within the current year (33%).
- For those not planning to provide WIL, the two most frequently cited top reasons for not participating were lack of suitable work available (40%) and the staff time required to recruit/train/supervise students (13%).
- Only one-third of WIL employers in this sector did not experience any challenges in providing WIL (34%). Among those who did encounter difficulties, the most frequently identified challenge was the staff time required to recruit/train/supervise students (18%).
- Similar to all other sectors, Professional Services sector employers identified financial incentives as the top support to make it easier for them to participate in WIL (28%). The second most frequently cited top support was scheduling student placements to meet business cycle needs (12%).

Public Administration

PSE Graduates and Labour Market Entry

- 62% of Public Administration sector employers had hired PSE graduates in the last two years.
- Of these, 20% had hired one grad, 17% hired two grads and 63% had hired three or more grads.
- 79% of those who hired offered employment to at least one grad who had participated in WIL (65% at the site where they were hired and 14% at another site or organization).
- Among Public Administration sector employers, program of study and relevant work experience were the most highly rated hiring factors.

Employer Experiences with WIL

- 73% of Public Administration sector employers offered WIL at their worksite.
- These employers were long-time participants in WIL, with a mean of 12.7 years and only 29% involved for five years or less.
- The two most frequently cited top reasons for participating in WIL were to develop industry/professional workforce skills (26%) and to manage short-term pressures or complete special projects (25%).
- 27% of Public Administration sector employers indicated that they had offered WIL in the past but were no longer participating.
- 41% of non-WIL Public Administration sector employers were planning to begin providing WIL. The majority of these planned to start offering WIL either in 2013 (31%) or within the next five years (31%).
- For those not planning to provide WIL, the two most frequently cited top reasons for not participating were lack of suitable work available (31%) and the financial costs involved (25%).
- The majority of WIL employers in this sector did not experience any challenges in providing WIL (53%). Among those who did encounter difficulties, the most frequently identified challenge was the staff time required to recruit/train/supervise students (14%).
- Similar to all other sectors, Public Administration sector employers identified financial incentives as the top support to make it easier for them to participate in WIL (28%). The second most frequently cited top support was standardized procedures across colleges/universities (10%).

Transportation, Warehousing and Trade (Wholesale and Retail)

PSE Graduates and Labour Market Entry

- 38% of Transportation and Trades sector employers had hired PSE graduates in the last two years.
- Of these, 40% had hired one grad, 21% had hired two grads and 39% had hired three or more grads.
- 51% of those who hired offered employment to at least one grad who had participated in WIL (48% at the site where they were hired and 4% at another site or organization).
- Relevant work experience and general work experience were the most highly rated hiring factors among Transportation and Trades sector employers.

Employer Experiences with WIL

- 28% of Transportation and Trades sector employers offered WIL at their worksite.
- These employers were long-time participants in WIL, with a mean of 13.8 years. However, 41% had been involved for five years or less.
- The two most frequently cited top reasons for participating in WIL among Transportation and Trades sector employers were to prescreen potential new hires (27%) and to develop industry/professional workforce skills (22%). Bringing in specific skills/talent (22%) was also a prominent reason for participation in WIL among these employers.
- Only 12% of employers in this sector who did not offer WIL indicated that they had offered WIL in the past.
- 38% of non-WIL Transportation and Trades sector employers were planning to begin providing WIL. The majority of these employers were planning to start offering WIL this year (25%) or next year (28%).

- For those not planning to provide WIL, the two most frequently cited top reasons for not participating were lack of suitable work available (27%) and the recession or other economic pressures (12%).
- Close to one-half of WIL employers in this sector did not experience any challenges in providing WIL (44%). Among those who did encounter difficulties, the most frequently identified challenge was a lack of expected soft skills among WIL students (18%).
- Similar to all other sectors, Transportation and Trades sector employers identified financial incentives as the top support to make it easier for them to participate in WIL (19%). The second most frequently cited top support was more information for employers (11%).

7 – Conclusions and Recommendations

This study examined employers' perspectives of the impact of WIL programs on the skills, competencies and employability of Ontario postsecondary graduates. It also investigated the factors that motivate employers to participate in WIL and explored the challenges they encounter. Similar to previous research, findings indicate that employers do not perceive significant differences in the skills of postsecondary graduates with WIL experience compared to those without WIL. At the same time, employers reported offering higher starting salaries to graduates of WIL programs than to non-WIL graduates. While further research is needed to contextualize this finding – in particular, to understand the impact of the occupational pathways associated with WIL and non-WIL programs – it appears that employers see value in WIL experience and may view WIL credentials as "signalling" graduates' future ability and potential productivity. Among WIL employers, the vast majority of those who hired recent postsecondary graduates employed at least one student who had participated in WIL at their own worksite, providing further evidence of the benefits of WIL perceived by employers in relation to postsecondary graduate employability.

Given the large proportion of WIL employers who hired WIL students following graduation, it is not surprising that two of the top reasons cited by employers for participating in WIL were to develop workforce skills and to prescreen potential hires. However, many WIL employers were also motivated by a sense of corporate social responsibility. Among employers planning to provide WIL in the future, giving back to the community was the top single motivation.

The majority of WIL employers worked only with colleges or only with universities, and some interesting differences in motivations for WIL participation were observed between these groups. University-only WIL employers were more motivated to participate in WIL as a means of increasing productivity, managing short-term pressures and bringing in special skills/talents. By comparison, college-only WIL employers placed more emphasis on developing workforce skills and prescreening potential hires. Numerous other differences were noted between employers in their motivations to participate in WIL, the challenges they had experienced and the institutional supports they expected, depending on the number of employees within the firm, industry sector and type of WIL program. These findings suggest that it is important for colleges and universities not only to use targeted messaging to engage potential employers in WIL, but also to tailor their messages to individual WIL programs and fields of study, with consideration given to specific employer needs by size and sector.

While the literature points to a variety of challenges experienced by employers in providing WIL opportunities, a large proportion of employers in this study reported that they did not experience any challenges. For employers who did report challenges in delivering WIL, survey results reinforce earlier findings from a New Brunswick study of WIL employers (CCL, 2008). Staff time required to recruit, train and supervise students was identified as a key issue, along with perceptions that students did not have the skills expected, especially soft skills. Among employers who did not provide WIL or who had offered WIL in the past, key barriers were the lack of suitable work, as well as the impact of recession or economic pressures. The time required to recruit, train and supervise students, along with concerns that students would not have the necessary skills, were also identified by non-WIL employers as barriers to participation.

A recent inventory of programs and policy interventions for Poorly-Integrated New Entrants (PINE) identifies wage subsidies and tax incentives for "internship-like work opportunities" as "effective strategies in getting PINEs' feet through the door, helping them to gain valuable experience and helping employers identify and recruit promising workers" (Bell & Benes, 2012, p. ix). This finding is echoed in the strong support from both WIL and non-WIL employers for financial incentives as the top strategy that would

make it easier for them to participate in WIL. Yet this survey also revealed limited uptake among WIL employers of the currently available apprenticeship and cooperative education tax credits. To make meaningful policy decisions about financial assistance for employers, more research is needed to probe employer reasons for not accessing these tax credits (for example, lack of information, eligibility criteria, too much paperwork, the amount of the credit, etc.) and to investigate the implications of wage subsidies as an alternative form of financial support.

In addition to government financial incentives, the survey findings suggest a range of other strategies that could be considered by postsecondary institutions to facilitate greater employer involvement in WIL:

- Employers who did not plan to provide WIL said that they were unaware of WIL programs, and non-WIL employers identified more information about WIL as an important employer support. These employers also concerned that they did not have suitable work available and that students lacked the skills needed for them to offer WIL. While many employers may legitimately lack appropriate opportunities for quality WIL placements (because they operate very small firms or their employees do not require postsecondary credentials), more employer-directed communication about the full range of WIL options available, the specific skill sets brought by students within individual WIL programs and the criteria for "suitable" work may help fill this information gap.
- To improve communication with employers and enhance future research activities about specific types of WIL, greater clarity and consistency concerning the terminology of WIL across institutions is needed. Although co-op is one of the best known and most clearly defined forms of WIL, and requires that students be remunerated for their work, a surprising finding from this study is that so many employers who considered themselves to be "co-op" employers did not compensate their students. Whether this misperception originated with the institution or the employer, agreement across the postsecondary sector to standardize WIL terminology would help improve employers' understanding of what is being asked of them when they are approached to participate in a specific type of WIL program.
- Given employer interest in longer (or sometimes shorter) placement lengths, postsecondary institutions could look at ways to increase flexibility for WIL employers by adjusting the length and timing of WIL opportunities to better align WIL programs with business cycle needs.
- Demands on WIL employers' staff time could be reduced through simplified processes for the recruitment and selection of WIL students, assistance with paperwork or administrative requirements and more training and support for employer supervision and assessment of WIL students.
- Although a negative experience with WIL students was unlikely to be identified as the single most significant challenge or reason for withdrawing from WIL, this factor was mentioned by 21% of current WIL employers and 16% of past WIL employers. Regardless whether such concerns result from a lack of student preparation or an inappropriate work environment, regular and open communication is needed between the institution and employers – during and after the WIL placement – to ensure that issues are addressed as they arise. Indeed, more than one-third of all employers recommended more opportunities for employer feedback as a strategy to increase employer participation in WIL.
- Since it is increasingly likely that employers will be approached by multiple types of institutions to provide WIL, consideration should be given to coordinated provincial approaches such as standardized procedures across institutions and a centralized employer database.

Given the current trend toward increasing the use of WIL in postsecondary education, a key challenge in the coming years will be to ensure that the supply of WIL opportunities offered by employers is able to meet demand from students, faculty and postsecondary institutions – while providing high-quality learning experiences for students. To meet this demand, it will be important for colleges and universities to engage

both current WIL employers and those who have never provided WIL, as well as academic faculty and postsecondary students themselves. Above all, it will be critical to ensure that the workforce needs of employers do not compromise the learning needs of students and that the WIL opportunities provided in Ontario workplaces offer meaningful opportunities to integrate classroom learning with practical experience.

The results of this survey add much to the knowledge base regarding work-integrated learning in Ontario and demonstrate strong employer support for WIL and interest in participating in WIL programs. The remaining phases of the study will generate vital insights about student perspectives on WIL, by exploring the impact of WIL on learning outcomes and postsecondary satisfaction, as well as examining the differences between WIL and other forms of labour market activities in facilitating the transition of PSE graduates to the labour market.

Appendices

Appendix A – Description of Sectors

Sector	NAICS codes included
Accommodation, food and consumer services	72 – Accommodation and food services 811 – Repair and maintenance 812 – Personal and laundry services
Arts, entertainment and civic/professional organizations	71 – Arts, entertainment and recreation 8132 – Grant-making and giving services 8133 – Social advocacy organizations 8134 – Civic and social organizations 8139 – Business, professional, labour, and other membership organizations
Construction	23 – Construction
Educational services	61 – Educational services
Finance, insurance, real estate and leasing	52 – Finance and insurance 53 – Real estate and rental and leasing
Forestry, mining, oil and gas extraction, and utilities	113 – Forestry and logging 1125 – Aquaculture 1153 – Support activities for forestry 21 – Mining, quarrying, and oil and gas extraction 221 – Utilities 491 – Postal service 492 – Couriers and messengers 562 – Waste management and remediation services
Health care and social assistance	62 – Health care and social assistance
Information and cultural industries	51 – Information and cultural industries
Manufacturing	31-33 – Manufacturing
Professional, scientific and business services	54 – Professional, scientific and technical services 55 – Management of companies and enterprises 561 – Administrative and support services
Public administration	91 – Public administration
Transportation, warehousing and trade (wholesale and retail)	41 – Wholesale trade 44-45 – Retail trade 48 – Transportation 493 – Warehousing and storage

Appendix B – Response Rates by Sector

Call results and response rates													
	Total	**ACCOM**	**ARTS**	**CONSTR**	**EDUC**	**FINANCE**	**FOR**	**HEALTH**	**INFO**	**MANUF**	**PROFSCI**	**PUBADM**	**TRADES**
Total Sample	**43,378**	**2,149**	**2,643**	**2,931**	**3,953**	**6,037**	**3,134**	**3,567**	**3,810**	**3,996**	**5,723**	**2,730**	**2,705**
Invalid (not in service, fax, residential, blocked, duplicates)	8,245	253	209	791	689	1,108	676	548	1,038	858	1,140	542	393
Total Functional Sample	**35,133**	**1,896**	**2,434**	**2,140**	**3,264**	**4,929**	**2,458**	**3,019**	**2,772**	**3,138**	**4,583**	**2,188**	**2,312**
Average Number of Attempts Made Per Number	**2.9**	**2.2**	**1.6**	**3.7**	**2.8**	**3.0**	**3.0**	**2.8**	**3.9**	**3.3**	**3.1**	**3.0**	**2.5**
No Answer, Busy, Answering Machine	14,669	807	1,410	738	1,389	2,018	864	1,182	1,057	1,166	2,080	971	987
Referred to Head Office	3,019	90	93	64	717	451	357	177	224	107	212	338	189
Language Difficulty	605	50	21	48	74	74	59	22	58	70	74	28	27
Can't Transfer to Target	101	1	3	1	5	23	11	2	10	10	15	17	3
Not Available During the Study Period	350	17	10	27	9	65	24	25	30	37	83	6	17
Refusal Company Level	3,593	178	192	317	202	528	271	371	303	329	507	204	191
Cooperative Callbacks	4,902	309	303	354	436	676	301	514	323	499	591	243	353
Total Target Asked	**7,894**	**444**	**402**	**591**	**432**	**1,094**	**571**	**726**	**767**	**920**	**1,021**	**381**	**545**
Refusals	3,676	207	146	345	166	576	319	240	314	440	486	133	304
Requested Online Survey Link	820	31	44	36	56	114	39	97	97	90	140	42	34
Partial Complete	102	6	5	10	8	22	10	9	3	8	10	5	6
Complete	3,369	205	213	202	203	392	206	392	359	386	398	210	203
Response Rate	**9.6%**	**10.8%**	**8.8%**	**9.4%**	**6.2%**	**8.0%**	**8.4%**	**13.0%**	**13.0%**	**12.3%**	**8.7%**	**9.6%**	**8.8%**
Cooperation Rate	**42.7%**	**46.2%**	**53.0%**	**34.2%**	**47.0%**	**35.8%**	**36.1%**	**54.0%**	**46.8%**	**42.0%**	**39.0%**	**55.1%**	**37.2%**

Online Only													
Requested online survey link	820	31	44	36	56	114	39	97	97	90	140	42	34
Online Completes	86	5	8	2	3	11	6	12	7	5	14	10	3
Online Response Rate	**10.5%**	**16.1%**	**18.2%**	**5.6%**	**5.4%**	**9.6%**	**15.4%**	**12.4%**	**7.2%**	**5.6%**	**10.0%**	**23.8%**	**8.8%**

Appendix C – Results by Sector

Table C1
Respondents by sector and region

	n-size	Eastern	Central	Southwestern	Northern
Accommodation, food and consumer services	205	21.6%	47.5%	22.1%	8.8%
Arts, entertainment and civic/ professional organizations	213	25.4%	48.8%	17.4%	8.5%
Construction	202	18.4%	41.3%	29.4%	10.9%
Educational services	203	17.7%	50.2%	17.7%	14.3%
Finance, insurance, real estate and leasing	392	14.8%	51.7%	23.2%	10.4%
Forestry, mining, oil and gas extraction, and utilities	206	14.6%	27.2%	27.7%	30.6%
Health care and social assistance	392	21.0%	47.6%	20.2%	11.3%
Information and cultural industries	359	21.7%	53.8%	18.7%	5.8%
Manufacturing	386	13.7%	52.1%	29.0%	5.2%
Professional, scientific and business services	398	16.3%	61.3%	16.6%	5.8%
Public administration	210	16.7%	32.9%	22.4%	28.1%
Transportation, warehousing and trade (wholesale and retail)	203	19.7%	37.9%	28.1%	14.3%

Table C2
PSE hires and number of graduates hired

			% Who Hired		
	n-size	Total % Who Hired	One	Two	Three or More
Accommodation, food and consumer services	205	32.2%	29.6%	20.0%	50.3%
Arts, entertainment and civic/professional organizations	213	56.8%	20.6%	30.5%	48.9%
Construction	202	27.0%	48.1%	22.2%	29.6%
Educational services	203	61.2%	19.5%	26.7%	53.9%
Finance, insurance, real estate and leasing	392	37.4%	21.7%	28.3%	50.0%
Forestry, mining, oil and gas extraction and utilities	206	32.1%	24.0%	32.0%	44.0%
Health care and social assistance	392	62.9%	22.6%	21.5%	55.9%
Information and cultural industries	359	48.8%	34.6%	27.6%	37.8%
Manufacturing	386	29.1%	44.9%	17.7%	37.4%
Professional, scientific and business services	398	48.4%	27.3%	21.3%	51.5%
Public administration	210	62.1%	19.9%	17.1%	63.0%
Transportation, warehousing and trade (wholesale and retail)	203	37.5%	40.4%	20.5%	39.1%

Table C3
WIL hires by sector

	n-size	Worksite WIL Hires	Other WIL Hires	Non-WIL Hires	DK if Hires did WIL
Accommodation, food and consumer services	80	38.6%	6.2%	46.1%	9.1%
Arts, entertainment and civic/professional organizations	121	58.8%	9.0%	22.3%	9.9%
Construction	57	50.3%	9.6%	32.5%	7.6%
Educational services	129	51.7%	24.8%	15.9%	7.7%
Finance, insurance, real estate and leasing	159	31.3%	13.1%	43.3%	12.3%
Forestry, mining, oil and gas extraction, and utilities	66	55.7%	17.3%	21.0%	5.9%
Health care and social assistance	274	75.7%	9.5%	12.8%	2.1%
Information and cultural industries	172	54.3%	15.4%	21.7%	8.6%
Manufacturing	150	39.7%	14.7%	29.2%	16.4%
Professional, scientific and business services	219	56.6%	13.4%	20.9%	9.1%
Public administration	118	64.8%	14.2%	10.6%	10.4%
Transportation, warehousing and trade (wholesale and retail)	82	47.6%	3.7%	38.4%	10.3%

Table C4
Mean importance of hiring factors

	n-size	Program of study	Credential/ qualification	Institution reputation	Extracurr./ volunteer	Worksite WIL	Other WIL	Relevant work	General work	Academic skills
Accom. & food	205	3.3	3.5	2.9	2.9	4.1	3.3	3.9	3.8	3.3
Arts & civic	213	3.9	3.8	3.0	3.4	4.0	3.4	4.1	3.9	3.5
Construction	202	3.5	3.5	2.8	2.4	4.3	3.3	4.0	4.0	3.3
Education	203	4.3	4.3	3.1	3.6	3.7	3.4	4.0	3.8	3.8
Financial	392	3.7	3.7	3.0	3.0	3.5	3.1	3.8	3.8	3.6
For. & utilities	206	3.6	3.5	2.7	2.7	3.6	3.1	3.8	3.8	3.3
Health & social	392	4.4	4.4	3.5	3.1	3.9	3.6	3.9	3.9	3.8
Info & culture	359	4.0	3.7	3.0	2.9	3.9	3.4	4.0	3.8	3.6
Manufacturing	386	3.7	3.4	2.8	2.5	3.8	3.2	3.7	3.7	3.4
Prof., sci. & bus	398	4.0	3.6	3.2	2.7	3.6	3.2	3.8	3.6	3.6
Public admin.	210	4.1	3.7	2.8	2.9	3.8	3.4	4.0	3.9	3.5
Trans. & trades	203	3.3	3.2	2.8	2.9	3.5	3.1	3.9	3.9	3.4
TOTAL	**3,369**	**3.9**	**3.7**	**3.0**	**2.9**	**3.8**	**3.3**	**3.9**	**3.8**	**3.5**

Table C5
Years of participation in WIL (WIL employers)

	n-size	Mean years	5 years or less	6-10 years	11-15 years	16-20 years	More than 20 years
Accommodation, food and consumer services	56	10.6	40.8%	32.1%	6.0%	13.3%	7.8%
Arts, entertainment and civic/professional organizations	128	11.9	35.9%	28.3%	11.7%	12.4%	11.8%
Construction	51	7.6	51.1%	35.0%	4.2%	3.5%	6.3%
Educational services	114	15.4	31.4%	18.3%	12.1%	19.9%	18.3%
Finance, insurance, real estate and leasing	89	6.9	52.2%	34.1%	4.2%	5.9%	3.6%
Forestry, mining, oil and gas extraction, and utilities	72	6.6	61.0%	21.6%	12.4%	1.3%	3.6%
Health care and social assistance	159	9.6	44.7%	33.9%	7.7%	5.0%	8.7%
Information and cultural industries	122	9.5	43.0%	32.1%	7.8%	10.9%	6.3%
Manufacturing	178	9.6	42.5%	30.5%	7.3%	12.1%	7.5%
Professional, scientific and business services	113	12.7	28.8%	26.1%	22.2%	12.1%	10.7%
Public administration	55	13.8	40.9%	16.5%	14.0%	19.4%	9.2%
Transportation, warehousing and trade (wholesale and retail)	265	13.8	26.1%	25.8%	11.3%	19.5%	17.4%

Table C6
Top reason for WIL participation (WIL employers)

	Accom. & food	Arts & civic	Const.	Educ.	Fin. & ins	For. & util	Health & social	Info & cult.	Manu.	Prof., sci. & bus	Public admin.	Trans.& trades	**Total**
	n = 64	*n* = 136	*n* = 51	*n* = 146	*n* = 120	*n* = 76	*n* = 295	*n* = 175	*n* = 136	*n* = 196	*n* = 141	*n* = 63	***n* = 1,599**
To develop industry/profession workforce skills	30.9%	24.3%	23.6%	34.1%	19.2%	23.1%	30.7%	29.2%	16.5%	20.1%	25.9%	22.4%	**25.9%**
To prescreen potential new hires	16.9%	14.0%	18.6%	14.6%	20.3%	15.9%	24.9%	17.9%	25.0%	23.7%	11.2%	27.2%	**19.4%**
To "give back" to the community	19.2%	19.0%	4.3%	19.1%	16.6%	22.3%	20.6%	11.9%	10.9%	9.6%	11.5%	12.9%	**15.4%**
To manage short-term pressures/ special projects	3.1%	16.2%	9.3%	6.2%	10.5%	12.4%	4.3%	14.5%	16.7%	11.9%	25.4%	2.0%	**11.5%**
To bring in specific skills/talent	7.1%	9.6%	12.1%	4.1%	11.9%	16.9%	6.6%	10.0%	11.5%	8.3%	6.3%	21.5%	**9.2%**
To increase productivity	7.1%	6.6%	4.3%	6.7%	7.0%	4.1%	3.7%	4.0%	11.5%	9.4%	8.1%	0.8%	**6.2%**
Asked by the college/university	2.7%	3.0%	6.4%	7.0%	4.7%	1.5%	4.7%	3.0%	3.4%	2.8%	3.1%	8.6%	**4.1%**
To reduce labour costs	8.6%	4.4%	17.1%	1.1%	5.4%	1.3%	1.5%	3.0%	3.4%	3.6%	1.2%	4.3%	**3.4%**
Heard positive things from others	-	0.7%	2.1%	0.9%	-	-	-	0.5%	-	0.8%	-	-	**0.4%**
To enhance reputation	0.8%	1.5%	-	0.9%	0.4%	1.3%	-	1.5%	0.3%	2.5%	1.1%	-	**1.0%**
DK/NR	0.8%	0.7%	-	1.1%	2.5%	-	1.5%	2.0%	0.5%	5.0%	2.3%	0.3%	**1.8%**
Other	2.7%	-	2.1%	4.1%	1.5%	1.3%	1.5%	2.5%	0.3%	2.5%	3.8%	-	**2.0%**

Table C7
Previous participation in WIL (Non-WIL employers)

	Previously Participated	Did Not Previously Participate	DK/NR
Accommodation, food and consumer services	15.7%	74.2%	10.1%
Arts, entertainment and civic/professional organizations	22.0%	65.0%	13.0%
Construction	18.9%	79.0%	2.1%
Educational services	11.4%	80.2%	8.5%
Finance, insurance, real estate and leasing	14.5%	77.9%	7.7%
Forestry, mining, oil and gas extraction, and utilities	13.1%	80.8%	6.2%
Health care and social assistance	27.7%	66.5%	5.8%
Information and cultural industries	21.2%	70.1%	8.7%
Manufacturing	20.5%	73.3%	6.1%
Professional, scientific and business services	17.9%	75.7%	6.4%
Public administration	26.7%	54.4%	18.9%
Transportation, warehousing and trade (wholesale and retail)	11.5%	77.2%	11.3%

Table C8
Future WIL participation (Non-WIL employers)

	Yes, planning to begin participating in college or university WIL program		When planning to begin providing WIL[9]				
	***n*-size**	**%**	***n*-size**	**This Year (2012)**	**Next Year (2013)**	**Within the Next 5 Years**	**DK/NR**
Accommodation, food and consumer services	122	28.4	34	19.4%	16.7%	19.4%	44.4%
Arts, entertainment and civic/professional organizations	60	31.6	19				
Construction	122	25.0	31	16.1%	22.6%	25.8%	35.5%
Educational services	49	34.3	16				
Finance, insurance, real estate and leasing	233	27.1	64	29.9%	16.4%	23.9%	29.9%
Forestry, mining, oil and gas extraction, and utilities	113	23.0	26	30.8%	26.9%	23.1%	19.2%
Health care and social assistance	69	37.7	28	37.9%	17.2%	20.7%	24.1%
Information and cultural industries	143	31.4	47	36.4%	13.6%	18.2%	31.8%
Manufacturing	193	23.1	48	30.2%	28.3%	24.5%	17.0%
Professional, scientific and business services	168	26.3	43	32.6%	26.1%	13.0%	28.3%
Public administration	52	40.9	21	6.2%	31.2%	31.2%	31.2%
Transportation, warehousing and trade (wholesale and retail)	125	38.0	36	24.5%	28.6%	18.4%	28.6%

[9] Results for arts (*n* = 19) and education (*n* = 16) are excluded because of small *n*-sizes.

Table C9
Top reason for planning to provide WIL (Non-WIL employers)[10]

	Accom. & food	Const.	Fin. & ins.	For. & util.	Health & social	Info & cult.	Manu.	Prof., sci. & bus	Public admin.	Trans. & trades	**Total**
	n = 34	*n* = 31	*n* = 64	*n* = 26	*n* = 28	*n* = 47	*n* = 48	*n* = 43	*n* = 21	*n* = 36	***n* = 413**
To "give back" to the community	9.0%	7.9%	15.3%	7.7%	18.5%	16.7%	8.4%	11.8%	13.4%	27.8%	**18.2%**
To pre-screen potential new hires	19.3%	30.3%	25.0%	30.8%	34.2%	18.8%	15.5%	22.0%	7.1%	11.3%	**18.0%**
To bring in specific skills/talent	22.3%	6.7%	8.0%	7.7%	1.0%	23.0%	6.1%	16.8%	7.1%	18.8%	**15.1%**
To manage short-term pressures/ special projects	0.6%	7.9%	14.8%	11.5%	4.6%	18.8%	25.8%	1.3%	17.8%	18.5%	**12.7%**
To develop industry/ profession workforce skills	18.7%	20.2%	10.8%	30.8%	24.0%	10.3%	18.3%	29.3%	24.1%	0.3%	**11.9%**
To increase productivity	9.0%	10.1%	10.8%	7.7%	9.2%	6.3%	8.9%	3.0%	3.6%	9.7%	**8.7%**
To reduce labour costs	12.6%	10.1%	5.1%	-	1.0%	4.2%	7.6%	3.0%	3.6%	4.5%	**6.3%**
To enhance company reputation	8.4%	-	3.4%	3.8%	1.9%	-	5.6%	3.0%	-	4.5%	**4.3%**
Heard positive things from other employers	-	3.4%	1.7%	-	-	-	-	1.1%	-	4.5%	**2.4%**
Asked by the college/ university	-	-	1.7%	-	4.6%	2.1%	-	3.0%	13.4%	-	**0.9%**
Don't know	-	3.4%	3.4%	-	1.0%	-	3.8%	5.9%	9.9%	-	**1.5%**

Table C10
Top reason for not participating in WIL (Non-WIL employers)

	Accom. & food	Arts & civic	Const.	Educ.	Fin. & ins.	For. & util.	Health & Social	Info & cult.	Manu.	Prof., sci. & bus	Public admin.	Trans. & trades	**Total**
	n = 73	*n* = 30	*n* = 82	*n* = 28	*n* = 139	*n* = 71	*n* = 34	*n* = 73	*n* = 124	*n* = 102	*n* = 25	*n* = 66	***n* = 847**
No suitable work available	33.5%	60.0%	35.4%	41.0%	37.3%	59.2%	37.5%	31.0%	45.1%	39.6%	30.7%	26.5%	**35.2%**
Staff time to recruit/ train/supervise students	6.5%	6.6%	10.0%	9.0%	14.8%	7.0%	9.9%	20.5%	13.3%	13.1%	23.7%	11.6%	**10.9%**
No students with the skills needed	12.1%	13.3%	19.2%	4.0%	11.5%	7.0%	-	10.4%	6.5%	8.4%	-	4.2%	**9.1%**
Not aware of any such programs	13.0%	3.3%	3.8%	12.0%	5.4%	2.8%	-	5.2%	5.0%	10.6%	-	11.4%	**8.6%**
Recession or other economic pressures	7.9%	3.3%	7.5%	-	2.6%	2.8%	-	5.8%	9.2%	1.5%	3.5%	11.9%	**7.3%**
Professional, regulatory or staffing issues	2.5%	6.8%	9.2%	16.0%	17.7%	1.4%	20.4%	7.8%	1.0%	3.1%	17.5%	7.7%	**7.0%**
Too much administration/ paperwork	2.5%	-	2.5%	-	-	2.8%	6.6%	1.3%	5.0%	3.1%	-	10.4%	**4.9%**
No student interest in jobs provided	8.2%	-	2.5%	0.9%	0.8%	-	3.3%	2.6%	3.0%	3.8%	-	6.9%	**4.7%**
Financial costs involved	2.3%	3.3%	3.8%	4.0%	3.1%	2.8%	4.0%	3.9%	5.2%	6.6%	24.5%	0.5%	**3.0%**
Heard negative things from other employers	-	-	-	-	0.8%	1.4%	-	-	-	1.3%	-	3.5%	**1.3%**
Don't know	5.1%	3.3%	3.8%	12.0%	5.4%	5.6%	11.8%	6.5%	3.2%	4.9%	-	4.0%	**4.7%**
Concern about competitors hiring trained students	-	-	1.3%	-	-	-	-	-	0.2%	2.5%	-	-	**0.5%**
Other	6.5%	-	1.3%	0.9%	0.8%	7.0%	6.6%	5.2%	3.3%	1.5%	-	1.5%	**2.8%**

[10] Results for arts (*n* = 19) and education (*n* = 16) are excluded because of small *n*-sizes.

Table C11
Top challenge (WIL employers)

	Accom. & food	Arts & civic	Const.	Educ.	Fin. & ins.	For. & util.	Health & social	Info. & cult.	Manu.	Prof., sci. & bus	Public admin.	Trans. & trades	**Total**
	n = 64	*n* = 136	*n* = 51	*n* = 146	*n* = 120	*n* = 76	*n* = 295	*n* = 175	*n* = 136	*n* = 196	*n* = 141	*n* = 63	***n* = 1,599**
No challenges	47.7%	39.7%	30.8%	43.0%	50.4%	48.2%	29.8%	38.9%	50.2%	34.3%	52.9%	44.4%	**39.9%**
Too much staff time to recruit/ train/supervise students	9.6%	19.8%	18.9%	5.3%	9.1%	19.0%	14.5%	15.5%	12.5%	18.4%	13.5%	12.9%	**14.4%**
Student didn't have the soft skills we expected	7.3%	12.5%	4.9%	17.4%	11.2%	2.6%	16.8%	12.9%	7.1%	11.4%	7.0%	17.5%	**12.6%**
Student didn't have the technical skills we expected	13.7%	3.7%	13.3%	5.3%	7.6%	7.9%	8.7%	9.0%	3.4%	11.0%	0.8%	4.3%	**8.1%**
No suitable work for students	6.5%	8.0%	6.3%	12.2%	3.6%	2.6%	4.9%	6.0%	7.8%	5.8%	3.8%	4.3%	**5.7%**
Negative experience with the student	3.4%	2.2%	4.2%	2.3%	1.8%	2.6%	7.0%	1.5%	5.5%	2.1%	6.3%	0.8%	**3.3%**
Professional, regulatory or staffing issues	2.7%	3.7%	4.2%	4.1%	0.4%	3.8%	4.6%	2.5%	0.5%	1.1%	1.5%	4.3%	**3.1%**
Too much administration/ paperwork	2.7%	3.0%	4.9%	3.3%	3.6%	5.1%	2.0%	1.0%	1.8%	1.8%	3.4%	4.3%	**3.0%**
Trained student was hired by a competitor	-	1.5%	2.1%	-	3.6%	2.8%	4.5%	4.4%	0.5%	5.4%	0.4%	1.1%	**2.6%**
Not enough support from the college/university	3.1%	2.2%	2.1%	3.0%	3.6%	-	1.9%	-	3.4%	0.8%	1.1%	4.0%	**2.5%**
Costs due to student errors/ inexperience	0.8%	1.5%	4.2%	1.4%	2.9%	2.6%	2.2%	1.5%	2.3%	2.8%	2.7%	1.4%	**2.1%**
DK/NR	-	0.7%	-	3.0%	1.1%	1.5%	2.3%	1.5%	0.3%	2.3%	4.6%	0.3%	**1.2%**
Other	2.7%	1.5%	4.2%	-	1.1%	1.3%	0.6%	5.3%	4.7%	2.7%	1.9%	0.3%	**1.5%**

Table C12
Top support

	Accom. & Food	Arts & Civic	Const.	Educ.	Fin. & Ins.	For. & Util.	Info & Cult.	Manu.	Prof., Sci. & Bus	Public Admin.	Trans. & Trades	Health & Social	**Total**
	n = 205	*n* = 213	*n* = 202	*n* = 203	*n* = 392	*n* = 206	*n* = 359	*n* = 386	*n* = 398	*n* = 210	*n* = 203	*n* = 392	***n* = 3,369**
Financial incentives for employers	30.9%	26.3%	30.1%	17.4%	19.4%	19.5%	34.1%	32.7%	28.0%	27.5%	19.3%	18.7%	**24.7%**
More information for employers	14.2%	6.6%	6.9%	4.1%	8.0%	8.7%	5.6%	5.9%	6.8%	4.9%	11.4%	5.6%	**9.1%**
Schedule student placements to meet business cycle needs	8.4%	13.1%	7.2%	9.1%	7.0%	6.2%	7.4%	4.1%	11.8%	7.4%	10.1%	9.4%	**9.0%**
Simplified process to recruit/select students	6.7%	4.8%	7.7%	7.7%	11.6%	7.2%	9.3%	7.8%	7.5%	6.7%	8.7%	6.6%	**7.9%**
Increase placement length	5.8%	11.3%	4.3%	7.5%	4.9%	2.4%	5.5%	4.2%	6.2%	7.4%	7.0%	4.6%	**5.9%**
Centralized employer database	1.9%	5.2%	5.8%	4.4%	6.2%	6.6%	7.1%	10.2%	5.5%	7.6%	7.2%	4.3%	**5.8%**
Standardized procedures across colleges/ universities	4.2%	6.6%	3.1%	4.7%	6.6%	3.9%	9.1%	4.2%	3.9%	10.2%	1.6%	12.5%	**4.5%**
More support to supervise/assess students	1.8%	4.7%	2.6%	8.9%	2.7%	3.0%	2.5%	2.4%	3.6%	7.2%	4.8%	10.1%	**4.1%**
Assistance with applications, paperwork	4.0%	1.9%	3.6%	5.5%	3.6%	5.4%	1.5%	3.7%	4.9%	4.5%	4.6%	3.4%	**4.1%**
More opportunities for employer feedback	2.5%	2.8%	2.1%	1.3%	0.9%	1.9%	2.0%	1.8%	2.0%	0.8%	1.3%	2.9%	**1.9%**
Students with proper skills, licensing or experience	2.3%	0.5%	4.8%	1.9%	2.9%	1.9%	0.8%	0.8%	1.6%	0.9%	1.1%	1.4%	**1.8%**
Other	7.7%	2.4%	12.2%	6.4%	9.1%	12.5%	5.1%	7.1%	6.2%	4.6%	8.0%	7.2%	7.8%
None/nothing	1.6%	3.7%	1.0%	4.7%	3.1%	2.4%	0.8%	1.7%	1.3%	2.0%	0.2%	1.3%	**1.3%**
Don't know	10.4%	10.4%	12.9%	17.7%	15.9%	19.3%	9.7%	13.4%	11.7%	9.3%	15.8%	10.2%	**13.2%**

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