



# 2023 DATA REPORT CEWIL CANADA

#### **PREPARED BY**

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The opinions and interpretations in this publication are those of the author and do not necessarily reflect those of the Government of Canada.







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# **EXECUTIVE SUMMARY**

Work-integrated learning (WIL) remains a popular educational model in Canada, one that contributes to student development and career success. This report provides a snapshot of WIL in Canada based on CEWIL Canada's national WIL directory, national co-op database, surveys of WIL program administrators, and data collected from CEWIL's iHUB program. A remarkable 111 institutions provided data that inform this report. This is a substantial increase in the number of institutions reporting from the previous year, which suggests growing participation and interest in WIL across the country.

The WIL directory and co-op database provided insights into the scope of WIL across the country. A total of 80 institutions reported offering over 5,600 WIL programs, most of which were co-ops (36%), mandatory professional practicums/clinical placements (17%), or field placements (16%). WIL programs were concentrated in four key academic disciplines: health (17%), architecture/engineering/related tech (14%), business/management/public admin (14%), and social and behavioural sciences/law (11%). WIL was especially concentrated within three program types: Bachelor's degree (49%), diploma (19%), and Master's degree (11%). WIL experiences were on average as brief as roughly 50 hours (for community service learning) and as long as roughly 500 hours (for apprenticeships, internship, and co-ops).

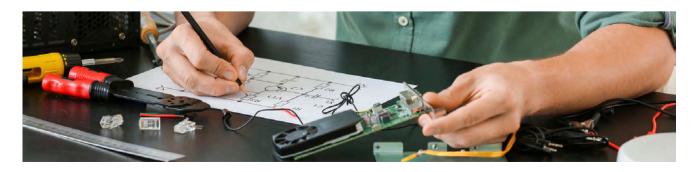
A total of 48 institutions reported offering over 1,000 unique co-op programs with over 80,000 total student enrollments—all of which are increases over the data provided to CEWIL Canada in the previous year. Roughly two thirds of those were reported to be optional programs (not mandatory) and a similar proportion was reported to be accredited by CEWIL Canada.



Co-op enrollments were especially concentrated in five academic disciplines: engineering (34%), business/administration (18%), science (12%), math/finance (11%), and computer science (11%). Clearly, co-op remains concentrated in the STEM disciplines. On average, co-op students were charged a \$640 co-op fee (slightly lower at the graduate level) but earned roughly \$22 per hour and \$3,400 per month. A total of 62% of co-op jobs were in Ontario, 21% were in British Columbia, and 5.5% were outside Canada.

Survey data provided by WIL administrators suggest year-over-year decreases in WIL program match rates (roughly 81% at the time of data collection, six percentage points lower than the previous year). Relatedly, survey data showed that the numbers of students looking for work at the time of collection were over 40% greater in both college and university settings. Further, the number of WIL job postings made available to students decreased noticeably from 2022 to 2023. According to WIL administrators, this is most likely reflective of a contracting economy.

More positively, data on CEWIL's iHUB program suggest tremendous positive impact on students across the country, most of which belong to one or more equity deserving groups. Over 13,800 students accessed iHUB-funded WIL experiences, most of which were field placements (54%), community and industry research and projects (23%), or community service learning (16%). Two thirds of those experiences were entirely inperson, and on average they were roughly 150 hours in duration. Unsurprisingly, 40% of iHUB experiences were in Ontario, and 12% were in British Columbia, but a notable 20% were in New Brunswick. About half of the iHUB experiences were in health, education, or business, and about half were within Bachelor's degrees. On average, iHUB students received over \$1,000 in remuneration. In total, iHUB students received over \$13.6 million in financial support, and over \$2 million in material benefits (e.g., transportation vouchers, material costs, and childcare). Again, these resources were received by traditionally under-represented groups.



# MESSAGE OF APPRECIATION

# CEWIL CANADA WOULD LIKE TO THANK THE FOLLOWING INSTITUTIONS FOR PROVIDING DATA INCLUDED IN THIS REPORT:

Institution Name	WIL	Co-op	Pulse	iHUB
Acadia University				*
Alberta University of the Arts	*			
Algoma University				*
Algonquin College	*	*		
Ambrose University	*			
Bishop's University				*
Bow Valley College	*			*
British Columbia Institute of Technology	*	*		
Brock University	*	*	*	*
Camosun College	*	*		*
Canadian Mennonite University	*			
Cape Breton University	*	*		*
Capilano University	*	*		
Carleton University	*	*	*	*
Cégep de Granby				*
Cégep de Rimouski				*
Cégep de Sherbrooke				*
Cégep Saint-Jean-sur- Richelieu				*
Centennial College			*	*
Coast Mountain College	*			*
College Boreal				*
Collège La Cité		*		
Collège LaSalle				*
College of New Caledonia	*			
College of the North Atlantic	*			*
College of the Rockies	*			*
Concordia University	*			
Conestoga College of Applied Arts & Technology	*		*	*
Confederation College of Applied Arts & Technology	*	*		
Dalhousie University	*	*	*	
Douglas College	*	*		
Durham College of Applied Arts and Technology	*		*	*

Institution Name	WIL	Со-ор	Pulse	iHUB
École de Technologie Supérieure	*			
Emily Carr University of Art & Design	*			
Fanshawe College of Applied Arts & Technology	*	*		
George Brown College	*			*
Georgian College	*	*		*
Humber College Institute of Advanced Learning & Technology				*
John Abbott College				*
Kwantlen Polytechnic University	*	*	*	*
Lakehead University				*
Langara College	*	*		*
Laurentian University		*		
MacEwan University	*			*
Maritime College of Forest Technology				*
McGill University				*
McMaster University	*	*		*
Memorial University of Newfoundland	*	*	*	
Mohawk College	*	*	*	*
Mount Allison University				*
Mount Royal University				*
Mount Saint Vincent University	*	*	*	*
New Brunswick Community College				*
Niagara College Canada	*			*
Nicola Valley Institute of Technology	*			
North Island College	*	*		
Northern Lights College	*			
Nova Scotia Community College	*	*		*
Okanagan College	*	*		
Ontario Tech University				*

Institution Name	WIL	Co-op	Pulse	iHUB
Queen's University	*			
Red Deer Polytechnic				*
Redeemer University	*	*		
Royal Roads University	*			
Red River College Polytech	*			
Saskatchewan Indian Institute of Technologies				*
Saskatchewan Polytechnic	*	*	*	*
Selkirk College	*	*		
Seneca College of Applied Arts and Technology	*	*	*	*
Sheridan College Institute of Technology and Advanced Learning	*	*	*	*
Simon Fraser University	*	*	*	*
Southern Alberta Institute of Technology				*
St. Francis Xavier	*	*		*
St. Mary's University	*			
St. Thomas University				*
Summit Pacific College	*			
Thompson Rivers University	*	*		*
Toronto Metropolitan University	*		*	*
Trent University	*	*		*
Tyndale University				*
Université de Hearst	*			*
Université de Moncton	*			*
Université de Montréal				*
Université de Sherbrooke	*	*	*	*

Institution Name	WIL	Co-op	Pulse	iHUB
Université du Québec à Montréal				*
Université Laval				*
51111515115 =5115	*			
University College of the North	*			*
University of Alberta	*	*	*	*
University of British Columbia				
University of Calgary	*	*	*	*
University of Guelph	*	*	*	*
University of Lethbridge	*	*	*	*
University of Manitoba	*	*	*	*
University of New Brunswick	*		*	*
University of Northern British Columbia	*			
University of Ottawa		*	*	*
University of Prince Edward Island	*	*		*
University of Regina	*	*		
University of Saskatchewan	*			
University of the Fraser Valley	*	*	*	*
University of Toronto	*	*	*	*
University of Victoria	*	*	*	*
University of Waterloo	*	*	*	*
University of Windsor	*	*		
Vancouver Community College	*			
Vancouver Island University	*	*		*
Western University	*		*	
Wilfrid Laurier University	*	*	*	
York University	*	*	*	*
Yukon University				*
The second secon				

#### Note:

Asterisks denote which sources of data were provided.



# INTRODUCTION

Work-integrated learning (WIL) continues to grow across the globe as an educational model that supports student development and employability. In Canada, interest in WIL was reflected in the 2022 CEWIL Canada Data Report. That report detailed the scope of WIL across the country based on data collected from WIL program administrators at 92 institutions. The present report is the second iteration of CEWIL Canada's efforts to communicate the scope of WIL offered throughout Canada's post-secondary education system. It is based on data collected from 111 institutions across the country.

This report is organized into six sections. First, it offers CEWIL Canada's definition of WIL. Second, it presents a summary of data about co-operative education (co-op) in Canada. Third, it presents a summary of data about selected aspects of WIL experiences in Canada, such as how those were advertised to students, based on a survey of WIL administrators. Fifth, it presents a summary of data about CEWIL Canada's iHUB program. The report then closes with a brief conclusion section.

The reader should know that the data used to write this report are limited to self-reports. Data were provided voluntarily by WIL administrators, and some data that likely exist were not provided in time for the report. As such, the numbers presented here are estimates based on the best available data at the time of writing. CEWIL Canada continues to encourage all post-secondary institutions to provide WIL-related data so that CEWIL can further advocate for the powerful pedagogical model that is WIL.



## ABOUT CEWIL CANADA

Co-operative Education and Work-Integrated Learning Canada (CEWIL Canada), formerly Canadian Association for Co-operative Education (CAFCE), is the lead organization for work-integrated learning in Canada.

CEWIL partners with post-secondary institutions, community members, employers, government, and students to champion work-integrated learning (WIL). WIL is a model and process of experiential education which formally and intentionally integrates a student's academic studies with learning in a workplace or practice setting. WIL experiences normally include an engaged partnership between an academic institution, a host organization/employer, and a student. WIL occurs at the course or program level and includes the development of learning outcomes related to employability, personal agency, and life-long learning.

Since 1973, CEWIL Canada members from post-secondary institutions across the country have worked in partnership to develop resources to promote the highest quality of postsecondary work-integrated learning programs. This is achieved through a national forum of professional WIL practitioners, by establishing national standards and promoting the value of post-secondary work-integrated learning, and by delivering opportunities for learning and sharing of best practices.



## KINDS OF WORK-INTEGRATED LEARNING

CEWIL Canada defines work-integrated learning (WIL) as a form of curricular experiential education that formally integrates a student's academic studies with quality experiences within a workplace or practice setting. WIL experiences include an engaged partnership of at least: an academic institution, a host organization, and a student. WIL can occur at the course or program level and includes the development of student learning objectives and outcomes related to: employability, agency, knowledge and skill mobility and life-long learning. Figure 1 illustrates the relationship between WIL and experiential learning.

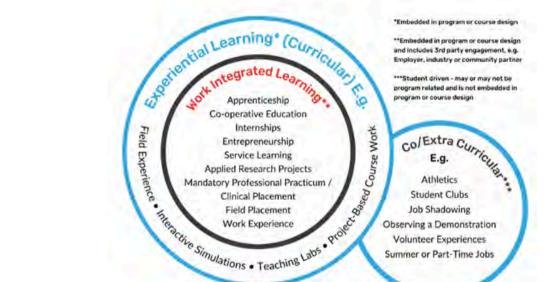


Figure 1. CEWIL Canada model of experiential and work-integrated learning



Volunteer Experiences Summer or Part-Time Jobs

#### CEWIL Canada recognizes nine types of WIL, which are defined as follows:

#### **Apprenticeship**

Apprenticeship is an agreement between a person (an apprentice) who wants to learn a skill and an employer who needs a skilled worker and who is willing to sponsor the apprentice and provide paid related practical experience under the direction of a certified journeyperson in a work environment conducive to learning the activities and functions of a skilled worker. Apprenticeship combines about 80% at-the-workplace experience with 20% technical classroom training, and depending on the trade, takes about 2-5 years to complete. Both the workplace experience and the technical training are essential components of the learning experience.

# Community and Industry Research & Projects

Students are engaged in research that occurs primarily in workplaces, includes: consulting projects, design projects, community-based research projects.

#### **Community Service Learning**

Community Service Learning (CSL) integrates meaningful community service with classroom instruction and critical reflection to enrich the learning experience and strengthen communities. In practice, students work in partnership with a community- based organization to apply their disciplinary knowledge to a challenge identified by the community.

#### **Co-operative Education**

Co-op alternating consists of alternating academic terms and paid work terms. Co-op internship consists of several co-op work terms back-to-back. In both models, work terms provide experience in a workplace setting related to the student's field of study. The number of required work terms varies by program; however, the time spent in work terms must be at least 30% of the time spent in academic study for programs over 2 years in length and 25% of time for programs 2 years and shorter in length.



#### **Entrepreneurship**

Allows a student to leverage resources, space, mentorship and/or funding to engage in the early-stage development of business start-ups and/or to advance external ideas that address real-world needs for academic credit.

#### **Field Placement**

Provides students with an intensive part-time/short term intensive handson practical experience in a setting relevant to their subject of study. Field placements may not require supervision of a registered or licensed professional and the completed work experience hours are not required for professional certification. Field placements account for workintegrated educational experiences not encompassed by other forms, such as co-op, clinic, practicum, and internship.

#### **Internships**

Offers usually one discipline-specific, supervised, structured paid or unpaid, and for academic credit work experience or practice placement.

Internships may occur in the middle of an academic program or after all academic coursework has been completed and prior to graduation. Internships can be of any length but are typically 12 to 16 months long.

#### Mandatory Professional Practicum/Clinical Placement

Involves work experience under the supervision of an experienced registered or licensed professional (e.g. preceptor) in any discipline that requires practice-based work experience for professional licensure or certification. Practical I are generally unpaid and, as the work is done in a supervised setting, typically students do not have their own workload/caseload.

#### **Work Experience**

Intersperses one or two work terms (typically full-time) into an academic program, where work terms provide experience in a workplace setting related to the student's field of study and/or career goals.



# **NATIONAL WIL DATA 2023**

# **IN 2023, 80 INSTITUTIONS OFFERED 5,633 WIL PROGRAMS.**

The CEWIL Canada National WIL Directory is the first of its kind in Canada to outline types of WIL opportunities that are offered across the country. Data from that directory are summarized in this section. CEWIL Canada started collecting information for the WIL Directory in January 2022. As such, the data reported here are from the second full year of the Directory's operation. Through the directory, WIL administrators are invited to report on various program characteristics such as academic disciplines.

In 2023, 80 institutions reported offering 5,633 WIL programs. This is a significant increase in the number of WIL programs (3,413) reported in the 2022 CEWIL Data Report. This reflects success of CEWIL's efforts to have WIL administrators share information about their programs and may reflect growth in WIL programs across the country. As a reminder, data were provided voluntarily, so summaries provided here are estimates of WIL in Canada in 2023.



Figure 2 shows the percentages of WIL programs in the dataset by type of WIL. Co-op was the dominant form of WIL, accounting for nearly four out of ten WIL programs. This is unchanged from the previous year. Mandatory professional practicums/clinical placements were the second most common form of WIL, accounting for 17% of all WIL programs. This is a 10-percentage point increase from the previous year. Field placements were the third most common type of WIL program, accounting for 16% of WIL programs. This was up two-percentage points from the previous year. Internships were the fourth most common type of WIL program at 10%, down five percentage points from the previous year. Community and industry research & projects were the fifth most common type of WIL program, representing 9% of WIL programs, up three percentage points from the previous year. Work experience (6%), community service learning (3%), apprenticeship (2%), and entrepreneurship (1%) were less common forms of WIL. This is consistent with the previous year. Again, year-over-year changes may simply reflect changes in data reporting.

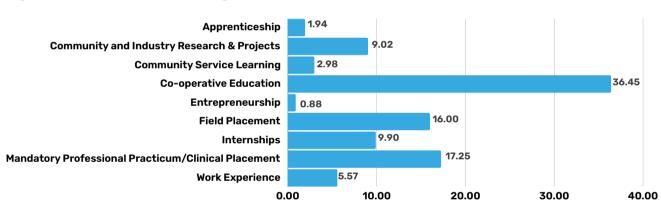


Figure 2. Percent of WIL programs by type of WIL



Administrators were asked to categorize their WIL programs into 13 academic disciplines as defined by Statistics Canada. Data were provided for 5,448 WIL programs. Table 1 summarizes those reports. According to the dataset, the highest concentration of WIL programs was within health and related fields. Nearly one in five WIL programs was associated with that academic discipline. The two next largest concentrations of WIL programs, at 14% each, were within architecture, engineering, and related technologies, and business, management and public administration. The fourth highest concentration was within social and behavioural sciences and law, at 11% of WIL programs. These first four academic disciplines accounted for 56% of all WIL programs.

Table 1. Number of WIL programs by academic program and type of WIL

Academic Discipline	APP	CIRP	CSL	Со-ор	ENT	FP	INT	МРР	WE	%WIL
Agriculture, natural resources and conservation	3	49	10	95	1	48	21	3	21	4.6
Architecture, engineering, and related technologies	76	41	5	475	2	100	31	5	37	14.2
Business, management and public administration	0	109	31	362	28	89	69	20	62	14.1
Education	3	9	8	8	2	72	30	121	10	4.8
Health and related fields	0	27	26	53	2	99	33	677	18	17.2
Humanities	0	60	21	167	2	65	76	0	20	7.5
Mathematics, computer and information sciences	0	24	5	292	5	26	30	3	23	7.5
Personal, protective and transportation services	15	4	0	30	0	43	3	1	13	2.0
Personal improvement and leisure	0	1	0	10	0	10	2	1	5	0.5
Physical and life sciences and technologies	0	43	8	260	3	16	51	6	21	7.5
Social and behavioural sciences and law	5	57	20	163	2	179	74	63	29	10.9
Visual and performing arts, and communications technologies	0	25	4	81	2	75	90	10	37	5.9
Other	0	16	15	15	0	48	36	16	13	3.2

Note: Abbreviations are App = Apprenticeship, CIRP = Community and Industry Research & Projects, CSL = Community Service Learning, Co-op = Co-operative Education, ENT = Entrepreneurship, FP = Field Placement, Int = Internships, MPP = Mandatory Professional Practicum / Clinical Placement, and WE = Work Experience. Total number of WIL programs in the analysis: 5,448.

WIL administrators were also asked to provide data on program type (e.g., certificate, diploma) for each WIL program. Data were provided for 5,465 WIL programs. Table 2 summarizes those reports. The most common level at which WIL was offered was the bachelor's level. Nearly half (49%) of WIL programs were at the bachelor's level. This is consistent with the previous year. The second most common level at which WIL was offered was the certificate level, representing 19% of all WIL programs. The third and fourth most common levels for WIL were the master's level (11%) and doctorate level (9%), respectively. The remaining levels (certificate, associate, postgrad certificate, postgrad diploma, and other) collectively accounted for 12% of all WIL.

Table 2. Number of WIL programs by program type and type of WIL

APP	CIRP	CSL	Co-op	ENT	FP	INT	MPP	WE	%WIL
55	16	22	21	3	145	7	65	23	6.5
7	74	20	432	1	268	24	146	68	19.0
0	0	0	7	0	0	0	0	1	0.2
4	343	106	1,170	34	299	394	227	111	49.2
0	10	1	71	1	59	7	12	15	3.2
0	7	0	12	0	12	14	15	25	1.6
0	46	12	227	6	101	91	47	49	10.6
0	5	3	55	4	3	2	47	13	9.4
18	0	2	0	0	0	0	0	0	0.4
	55 7 0 4 0 0	55 16 7 74 0 0 4 343 0 10 0 7 0 46 0 5	55     16     22       7     74     20       0     0     0       4     343     106       0     10     1       0     7     0       0     46     12       0     5     3	55     16     22     21       7     74     20     432       0     0     0     7       4     343     106     1,170       0     10     1     71       0     7     0     12       0     46     12     227       0     5     3     55	55     16     22     21     3       7     74     20     432     1       0     0     0     7     0       4     343     106     1,170     34       0     10     1     71     1       0     7     0     12     0       0     46     12     227     6       0     5     3     55     4	55     16     22     21     3     145       7     74     20     432     1     268       0     0     0     7     0     0       4     343     106     1,170     34     299       0     10     1     71     1     59       0     7     0     12     0     12       0     46     12     227     6     101       0     5     3     55     4     3	55     16     22     21     3     145     7       7     74     20     432     1     268     24       0     0     0     7     0     0     0       4     343     106     1,170     34     299     394       0     10     1     71     1     59     7       0     7     0     12     0     12     14       0     46     12     227     6     101     91       0     5     3     55     4     3     2	55       16       22       21       3       145       7       65         7       74       20       432       1       268       24       146         0       0       0       7       0       0       0       0         4       343       106       1,170       34       299       394       227         0       10       1       71       1       59       7       12         0       7       0       12       0       12       14       15         0       46       12       227       6       101       91       47         0       5       3       55       4       3       2       47	55       16       22       21       3       145       7       65       23         7       74       20       432       1       268       24       146       68         0       0       0       0       0       0       0       0       1         4       343       106       1,170       34       299       394       227       111         0       10       1       71       1       59       7       12       15         0       7       0       12       0       12       14       15       25         0       46       12       227       6       101       91       47       49         0       5       3       55       4       3       2       47       13

Note: total number of WIL programs in the analysis: 5,465.

Table 3 shows the average number of hours reported per WIL experience by type of WIL. Data were available for 5,111 programs. Like in the previous year, apprenticeships were the longest type of WIL program. As an aside, despite numerous apprenticeship programs across Canada, few apprenticeship programs were included in the dataset. This is likely because apprenticeship programs report directly to provincial or territorial bodies, and may not necessarily report to WIL program offices. Like in the previous year, internships and co-ops, respectively, were the second and third longest types of WIL. Also like in the previous year, entrepreneurships and community service learning were the two shortest types of WIL.

Table 3. Average number of hours students spent in WIL experiences by type of WIL

WIL Type	Program Counted	Average Hours	Rank (1 = longest)				
Apprenticeship	27	536	1				
Community and Industry Research & Projects	381	91	7				
Community Service Learning	143	52	9				
Co-operative Education	1,992	493	3				
Entrepreurship	31	84	8				
Field Placement	794	181	6				
Internship	527	499	2				
Mandatory Professional Practicum	910	198	5				
Work Experience	306	291	4				
Note: total number of WIL programs in the analysis: 5,111.							



# NATIONAL CO-OP **DATA 2023**

# **IN 2023, 48 INSTITUTIONS OFFERED** 1,072 UNIQUE CO-OP PROGRAMS.

As in 2022, co-op remained the dominant form of WIL across Canada in 2023. WIL administrators were invited to report on detailed information about their co-op programs including academic discipline, student compensation, and work term locations. Given the complexities of data collection on co-op programs and that institutional reporting practices may not have aligned with the writing of this report, the summaries provided here should be considered only estimates of the actual scale of co-op across the country.



In 2023, a total of 48 institutions offered 1,072 unique co-op programs. This represents an increase in the number of institutions reporting on their co-op programs and an increase in the number of co-op programs for which reports were shared. Of those, unique programs, 360 (34%) were reported by WIL administrators as mandatory. This is like the previous year. Estimates also suggest that 638 (60%) of programs were accredited. This is not surprising given that CEWIL Canada recognizes the emergence of several co-op programs in Canada over the previous few years, and that accreditation can take several years from program inception. According to CEWIL records, 164 co-op programs received accreditation in 2023.

WIL administrators were asked to report the number of students enrolled ("enrollments") for each term that a co-op program was offered[1]. Because co-op may have been offered in multiple (two or three) terms in 2023, data were available for 2,519 terms worth of co-op programs (i.e., some programs have data such as enrollments across multiple terms in 2023). In 2023, the total number of co-op enrollments in Canada reported by WIL administrators was 80,315[2]. This is an increase over the number of enrollments reported in the previous year (78,921), but that must be considered against the background of increased reporting in 2023 compared to the previous year. This is explained in the following paragraph. Of the total enrollments, 21% were international students. This is a 10.5% increase from the previous year, or a two percentage-points increase. This summary is consistent with a larger narrative about international student enrollments in Canada's higher education system over the previous few years.

The 2022 dataset and 2023 datasets were compared to identify matched pairs of programs that reported co-op enrollments in both years. This comparison yielded a dataset of 711 programs. Among those programs, 2022 co-op enrollments equaled 67,129 and 2023 co-op enrollments equaled 65,760. This represents a year-over-year net loss of 1,369 co-op enrollments or a -2.1% change in co-op enrollments, which is substantively important.

<sup>[1]</sup> In Canada, there are usually three terms per year: September-December, January-April, and May-August. Co-op programs may have been run during any of these terms. An enrollment is a count of a student within a given term. Students may participate in co-op in multiple terms each year. Therefore, the number of enrollments is likely lower than the number of students.

<sup>[2]</sup> Data for Université de Sherbrooke were not available at the time of data analysis. However, it is important to mention that they were provided later, given that the program is one of the largest in the country in terms of student enrollments. Data provided by the institution showed that there were 4,763 co-op enrollments in 49 co-op programs.

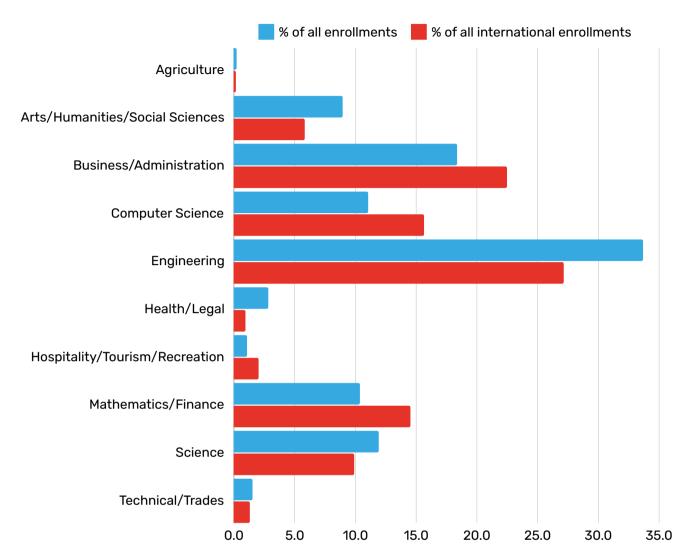
This analysis revealed that the increase in co-op enrollments reported in the 2023 dataset relative to the 2022 data is most likely due to increased institutional reporting and not on growth of enrollments within existing co-op programs.

Data on enrollments by academic discipline were collected. They are summarized in Table 4 and illustrated in Figure 3. The data are split into all enrollments (i.e., all enrollments in the dataset) and international enrollments (i.e., those from international students). The emphasis on international students reflects CEWIL Canada's strategic interest in supporting international student success in co-op. The data show that 34% of, or one in three, co-op enrollments was in engineering. Business/administration accounted for the next highest percentage of co-op enrollments at 18%. Science, 12%), computer science (11%), and mathematics/finance (11%) all had at least 10% of enrollments. The remaining five disciplines collectively accounted for 15% of co-op enrollments. Engineering (27%), business/administration (18%), and math/finance (17%) accounted for nearly two thirds (62%) of all international student co-op enrollments. Year over year (YoY) percentage point changes are also displayed in Table 4 for consideration. However, they should be interpreted with caution given changes and net increases in program reporting from 2022 to 2023.

Table 4. Number of co-op enrollments by academic discipline

Academic Discipline	Al Enrolli (n = 80	ments
	N	%
Agriculture	178	0.22
Arts/Humanities/Social Sciences	7,188	8.95
Business/Administration	14,755	18.37
Computer Science	8,871	11.05
Engineering	27,053	33.68
Health/Legal	2,275	2.83
Hospitality/Tourism/Recreation	864	1.08
Mathematics/Finance	8,331	10.37
Science	9,571	11.92
Technical/Trades	1,229	1.53



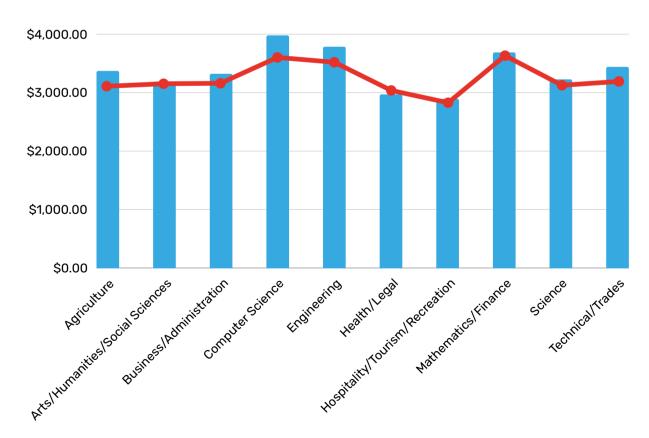


WIL administrators collected information about co-op students' compensation. The data available for analysis were aggregated at the program level. For instance, they could represent the average salaries of 200 students enrolled in a given program. Table 5 and Figure 4 summarize that information. Specifically, they show the average monthly and hourly earnings for all co-op enrollments by academic discipline. Data on monthly earnings were available for 1,631 co-op program terms and data on hourly earnings were available for 1,809 co-op program terms. Monthly earnings were highest among computer science programs, followed by engineering, mathematics/finance, technical/trades The programs. Iowest monthly earnings hospitality/tourism/recreation. The hourly earnings data mostly match the findings from above. The highest hourly earnings were in mathematics/finance, followed by engineering, technical/trades, and computer science. The lowest hourly earnings were in hospitality/tourism/recreation.

Table 5. Average earnings by academic discipline

	Month	nly	Но	ourly
Discipline	n	\$	n	\$
Agriculture	9	\$3,371.53	15	\$20.54
Arts/Humanities/Social Sciences	242	\$3,189.73	265	\$20.87
Business/Administration	332	\$3,322.90	349	\$20.93
Computer Science	137	\$3,979.63	176	\$24.32
Engineering	321	\$3,786.16	380	\$23.69
Health/Legal	55	\$2,970.36	61	\$19.99
Hospitality/Tourism/Recreation	37	\$2,894.79	47	\$18.38
Mathematics/Finance	99	\$3,688.32	97	\$24.55
Science	370	\$3,226.93	357	\$20.67
Technical/Trades	29	\$3,441.12	62	\$21.17
Totals	1,631	\$3,422.74	1,809	\$21.82

Figure 4. Illustration of average monthly earnings by academic discipline



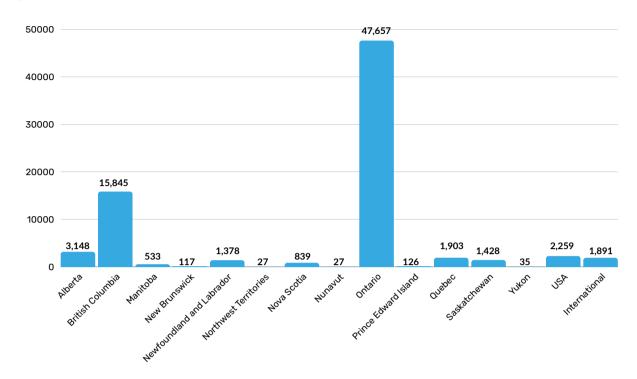
WIL administrators reported on the co-op fees that they charge to their students. Data were aggregated at the program level like the data on student salaries. Table 6 shows the average co-op fees paid at the undergrad level (n = 2,489 terms) and graduate level (n = 2,431 terms) by academic discipline. The data show that the highest co-op fees at the undergraduate level were within mathematics/finance. The lowest co-op fees at the undergraduate level were within technical/trades programs. At the graduate level, the highest co-op fees paid were within engineering. The lowest co-op fees at the graduate level were within technical/trades programs.

Table 6. Average co-op fees paid at the undergrad and grad levels by academic discipline

	Undergra	duate	Grad	uate
Discipline	n	М	n	М
Agriculture	16	\$569.65	16	\$376.68
Arts/Humanities/Social Sciences	429	\$631.12	407	\$578.38
Business/Administration	496	\$648.44	495	\$523.38
Computer Science	224	\$585.08	222	\$490.16
Engineering	479	\$636.27	459	\$770.83
Health/Legal	62	\$676.29	62	\$635.54
Hospitality/Tourism/Recreation	69	\$609.16	69	\$364.65
Mathematics/Finance	109	\$724.18	107	\$647.51
Science	522	\$651.55	501	\$566.33
Technical/Trades	83	\$549.12	83	\$294.33
Totals	2,489	\$639.76	2,421	\$582.01

WIL administrators reported the location for each co-op job that their students secured in 2023. Data were available for 77,213 jobs. Figure 5 summarizes the data. Overwhelmingly, 62% of all co-op jobs reported were in Ontario. A further 21% of all co-op jobs reported were in British Columbia. Therefore, Ontario and British Columbia accounted for 83% of all co-op jobs held by students at Canadian post-secondary institutions in 2023 that were reported by WIL administrators. A total of 3% of co-op jobs were in the USA and 2.5% were outside of Canada and the USA (labelled "International" in the Figure).

Figure 5. Number of co-op jobs by location





# **PULSE SURVEY DATA 2023**

CEWIL Canada invited WIL administrators across the country to complete the Pulse Survey between October 1 and November 30, 2023. The survey was created in 2020 to understand responses to the COVID-19 pandemic. More recently, the aim of the survey remains to create a snapshot of what is happening in WIL programs across Canada. Specifically, the survey collects information on employment rates, job postings, job locations, and career activities. Participation in the survey was voluntary. WIL administrators from 30 institutions provided data. Seven of those institutions were colleges and 23 were universities. Data below are presented for all colleges, universities, and both.

## NUMBER OF PLACEMENTS

WIL administrators were asked to report on WIL student "placements" (i.e., WIL experiences including placements and so on; most were co-op work terms) as at the time of the survey (October/November 2023). The data are summarized in Table 7. The data suggest that there was a slight year-over-year decrease in the number of placements from 2022 to 2023 for the May to August term.



Table 7. Number of students employed at time of survey for the May to August 2023 term

Institution type	2022	2023	% Change
College	4,720	4,510	-4%
University	29,680	29,964	-1%
Both	34,400	33,974	-1%

WIL administrators were also asked to provide data on placements for the September to December term at the time of the survey. So, reports reflect that some students were already placed at the time of the survey while others continued to look for work. The data are summarized in Table 8. As the data show, among those institutions that provided data, employment rates were lower in the September to December 2023 term than they were for the comparable term in 2022. Match rates (i.e.., percentages of students who were seeking work who found work) were lower in 2023 than in 2022 during the September to December term. Further, there were increases in the numbers of students still seeking work at the time of the survey—most notably among universities.

Table 8. Placement Data for the September to December 2023 term by institution type

Placement aspect	Institution Type	2022	2023	% Change
	College	2,771	2,624	-5%
Employed/matched students at this point for the Sept-Dec term	University	23,817	22,855	-4%
point for the dept bed term	Both	26,588	25,479	-4%
Students still looking for placements at this point for the Sept-Dec Term	College	469	492	5%
	University	3,940	5,666	44%
	Both	4,409	6,158	40%
Employment/match rate at this point for the Sept-Dec term	College	86%	84%	-2%
	University	86%	80%	-7%
	Both	86%	81%	-6%

## PLACEMENT LOCATIONS

WIL administrators reported on the locations (i.e., remote job, in-person job, or hybrid job) of placements that students had secured during the May to August term and the September to December term (at the time of the study). Several trends are noticeable according to the data provided which are summarized in Table 9. In-person remains the most common location of WIL placements, especially among colleges. Differences between the May to August term and September to December term are not especially noticeable. From 2022 to 2023, there was a slight shift away from remote work towards in-person work, particularly hybrid work where students would be working remotely sometimes but not all the time.

Table 9. Percentage of placements by location, institution term, and term

		May-Aug			Sep-Dec		
	Institution Type	2022	2023	% change	2022	2023	% change
	College	16%	13%	-3	13%	6%	-7
Remote	University	27%	14%	-13	19%	12%	-7
	Both	24%	14%	-10	17%	11%	-6
	College	70%	64%	-6	66%	68%	+2
In-person	University	44%	49%	+5	49%	51%	+2
	Both	50%	52%	+2	52%	53%	+1
	College	14%	23%	+9	21%	26%	+5
Hybrid	University	29%	37%	+8	32%	37%	+5
	Both	25%	34%	+9	30%	36%	+6

## JOB POSTING DATA

WIL administrators were asked to report on the number of job postings available to students during September (2022 and 2023) on selected kinds of job boards[3]. Data are summarized in Table 10. Overall, the data show that there were fewer job postings available to students in September 2023 than in September 2022 among the institutions that provided data. There were especially large decreases in the job postings available through career centres, particularly among colleges in the dataset.

[3] Respondents were also given the opportunity to submit data for Faculty-specific job boards, but not enough responses were collected for that question to provide summary information.

Table 10. Number of job postings for September 2022 and 2023 on selected job boards by institution type

	Institution type	2022	2023	% Change
	College	2,510	2,180	-13%
Co-op job board	University	22,638	20,132	-11%
	Both	25,148	22,312	-11%
WIL job board	College [4]	n/a	n/a	n/a
	University	1,339	1,185	-11%
	Both	1,339	1,185	-11%
	College	2,718	1,668	-39%
Campus career centre job board	University	4,380	3,322	-24%
	Both	7,098	4,990	-30%

# **IN-PERSON ACTIVITIES**

WIL administrators were asked to report on whether five selected career activities occurred in-person during selected periods in 2023. Table 11 summarizes the data. One noticeable difference between colleges and universities in the dataset is that site visits were somewhat more likely to be in person for university students than for college students. About half of all selected activities were in-person (suggesting the other half were remote), with two exceptions: first, site visits were mostly remote, and second career fairs were mostly in-person.



[4] No data available.

Table 11. Percentages in selected career activities that occurred in-person during two terms in 2023 by institution type

Activity	Institution Type	May to August	September to December
	College	50%	50%
Interviews coordinated by / hosted at institutions	University	48%	48%
	Both	48%	48%
	College	56%	75%
Career Fairs	University	61%	75%
	Both	60%	75%
	College	22%	36%
Site visits with students at employer locations	University	39%	41%
	Both	35%	40%
	College	45%	50%
Career Appointments	University	47%	47%
	Both	47%	48%
Career Workshops	College	50%	55%
	University	47%	51%
	Both	47%	52%

# COMMENTS FROM WIL ADMINISTRATORS

Pulse Survey respondents were offered an opportunity to share comments about their survey responses. Comments were shared by administrators from six universities. CEWIL Canada staff summarized the open-ended responses as follows:

- Some employers have begun to pull back from WIL experiences due to a potential recession. - Nova Scotia
- · We are seeing a drop in technology sector hiring which contradicts government and industry messaging. - Newfoundland

- We have observed a noteworthy surge in hiring activity, reflecting positive shifts in the economic landscape. This growth is clearly mirrored in the expansion of our Work-Integrated Learning (WIL) programs. – New Brunswick
- We are finding an increasing number of employers are managing the recruitment process without the Co-op Office. They will share postings for our students but engage in their own interview scheduling and job offering process. - Ontario
- The number of international students participating in co-op programs is increasing steadily while the number of Canadian participants is decreasing. - Alberta and Newfoundland
- International students are placed at a disadvantage when funding is only available to domestic students. -Alberta and Newfoundland



# iHUB Data 2023

The CEWIL Canada iHUB is a program that provides grant-based funding to enable and promote WIL, especially community and industry research projects, community service learning, entrepreneurship, and field placements. The aim of the program is to promote access to high-quality WIL experiences for students. The iHUB grants are administered to students through their post-secondary institutions. Institutions apply to the program in response to a request for proposals (RFP). Proposals are then adjudicated by WIL experts to ensure appropriate quality and learning standards for students. The program prioritizes proposals that support underrepresented students such as Indigenous students, racialized Canadians, persons with disabilities, newcomers, and women/non-binary students in STEM.

As part of the program, CEWIL Canada collects information about the students and hosts who participate. This section of the report summarizes participant characteristics and provides some insight into the kinds of experiences that were created through the iHUB program. According to data available at the time of writing, iHUB provided experiences to an impressive 13,822 students.



# Profile of Participants and Experience

Various sociodemographic characteristics were collected for participants in the iHUB program. Specifically, data were collected for students' birth year (transformed to an age estimate), gender identity, Indigenous status, newcomer status, disability, and visible minority. A summary of these characteristics is presented in Table 12.

Table 12. Summary of sociodemographic characteristics of iHUB student participants

Characteristics	Sub-groups	% of students
Ago	Birth year 2000 to 2007	57%
Age	Birth year before 2000	43%
	Woman	70%
Condoridontity	Man	28%
Gender identity	Non-binary	1%
	Prefer to self-describe	0.3%
Indigenous	n/a	5%
Newcomer to Canada (within 5 years)	n/a	4%
	Yes	12%
Persons with disabilities	Prefer not to say	8%
Rural/remote community	n/a	16%
	Any	20%
Visible minorities	Black	5%
	Racialized person/Person of Colour	18%
Women in STEM [5]	n/a	16%
First-year student	n/a	21%

<sup>[5]</sup> Data for women in STEM and first-year student are presented in Tables 12 and 13 because they are both sociodemographic variables and academic program-relevant variables.

Several academic program-relevant characteristics were also collected. These were: women in STEM, first-year student, part-time versus full-time enrollment status, academic program type, year of study, academic program, and academic term in which the experience occurred. Characteristics for all the above except academic program are summarized in Table 13. A total of 45 academic programs were mentioned. The five most frequently mentioned academic disciplines were health professions and related programs (34% of students), education (8%), business, management, marketing and related support services (7%), engineering (5%), and psychology (4%).

Table 13. Summary of academic program-relevant participant characteristics

Characteristics	Sub-groups	% of students
Women in STEM	n/a	16%
First-year student	n/a	21%
Enrollment status	Full time	96%
Enrollment status	Part time	4%
	College/CEGEP certificate or diploma	34%
	Bachelor's degree	52%
Acadamia program tuna	University certificate or diploma	8%
Academic program type	Master's degree	6%
	Doctorate	0.5%
	Other	0.03%
	First	23%
	Second	30%
Year of study	Third	19%
	Fourth	21%
	Fifth or more	6%
Academic term	Winter (January to April)	13%
	Spring (May to August)	25%
	Fall (September to December)	62%

Information on the organizations in which iHUB experiences occurred was also collected. Specifically, organizational size (in terms of number of employees), and location (by province or territory) was captured. That information is summarized in Table 14. Four out of 10 iHUB hosts were in Ontario. The next largest group of hosts by location was New Brunswick. Considering the relative population of New Brunswick, a high proportion of iHUB experiences are located there. British Columbia, Alberta, and Quebec not surprisingly rounded out the rest of the top five locations of iHUB experiences. Nearly half of iHUB experiences were situated in large organizations, and another third were in small organizations. Medium and micro-sized organizations were less likely to contain iHUB experiences.

Table 14. Number of iHUB students by province/territory and organization size

Province/territory	Micro (1-9)	Small (10-99)	Medium (100-499)	Large (500+)	Total (%)
Ontario	295	1,632	843	2,793	5,563 (40%)
New Brunswick	106	987	190	1,504	2,787 (20%)
British Columbia	247	690	127	618	1,682 (12%)
Alberta	179	472	178	527	1,356 (10%)
Quebec	125	406	141	431	1,103 (8%)
Nova Scotia	40	192	49	271	552 (4%)
Newfoundland and Labrador	39	65	12	319	435 (3%)
Prince Edward Island	5	82	15	120	222 (2%)
Saskatchewan	0	28	2	33	63 (<1%)
Yukon	0	28	0	0	28 (<1%)
Manitoba	0	19	1	6	26 (<1%)
Northwest Territories	0	3	0	0	3 (<1%)
Nunavut	0	0	0	2	2 (<1%)
Totals	1,036 (7%)	4,604 (33%)	1,558 (11%)	6,624 (48%)	13,822 (100%)

Table 15 summarizes the data on the type of WIL featured in the iHUB experiences, and for each type of WIL summarizes percentages of experiences that were remote at least sometimes (i.e., fully remote or hybrid) and the average number of hours per experience. On average, about one third of iHUB experiences involved some sort of remote work, and on average they were 154 hours-long.

Table 15. iHUB experience percentages for remote and average length by type of WIL

Type of WIL	N	Percentage of experiences remote	Average number of hours per experience
Apprenticeship	2	0%	110
Community and industry research & projects	3,140	42%	124
Community service learning	2,154	33%	66
Co-operative education	1	0%	63
Entrepreneurship	520	59%	114
Field placement	7,459	19%	192
Internships	32	34%	110
Mandatory professional practicum/clinical placement	482	24%	205
Work experience	32	0%	124
Totals	13,822	37%	154



## **Benefits to Students**

Students received several financial and near-financial benefits from the iHUB program. A summary is provided in Table 16, along with the average total costs associated with students in the program. On average, students participating in iHUB received over \$1,000 in remuneration. The total reported remuneration to iHUB students was just over \$13.67 million. On average, the total cost associated with an iHUB student was just over \$1,300.

Table 16. Summary of remuneration to students and project costs

Type of WIL	N	Average hours	Average student remuneration	Average project cost per student
Apprenticeship	2	110	\$200.00	\$223.62
Community and industry research & projects	3,140	124	\$929.72	\$1,294.42
Community service learning	2,154	66	\$773.25	\$1,098.44
Co-operative education	1	63	\$200.00	\$223.62
Entrepreneurship	520	114	\$1,132.92	\$1,543.99
Field placement	7,459	192	\$1,114.89	\$1,406.52
Internships	32	110	\$1,356.25	\$1,421.88
Mandatory professional practicum/clinical placement	482	205	\$1,031.09	\$1,133.49
Work experience	32	124	\$1,537.50	\$1,675.16
Totals	13,822	154	\$1,019.86	\$1,329.09

The iHUB dataset qualifies the different ways in which students were remunerated. The top four methods of remuneration as described by program administrators, which account for roughly 90% of remuneration methods, were stipend (63%), bursary (12%), allowance (8%), and credit on a student account (7%). Several other material benefits were received by over 7,000 iHUB students. The most common of these were transportation vouchers, project materials, gift cards, textbooks, personal protective equipment, office stationery, and childcare. The average material benefit was estimated at a value of \$217.17, and the total estimated financial value of these was just over \$2 million.

# CONCLUSION

WIL remains a popular pedagogical model in Canada's higher education system. Thousands of WIL programs were offered to tens of thousands of students in 2023. Many of these were connected to academic disciplines of critical interest to the country, suggesting that WIL is essential to preparing the next generation of Canadian talent. For those privileged to access certain kinds of WIL, such as paid co-op work terms or iHUB experiences, the data reflect vast benefits to participants. However, the data also warn WIL administrators of an imminent gap between student demand for WIL experiences and employers' capacity and willingness to provide such experiences. The challenge for many WIL administrators across the country in the coming year will be to weather the ill-effects of a slow Canadian economy on the number of WIL experiences available to students. WIL experiences are simply too important to the success of Canada's post-secondary students for us to sit idly by. WIL administrators across the country are encouraged to share even more data on their WIL programs so that CEWIL Canada can continue to advocate for WIL in Canada's post-secondary system. Building a strong WIL community in Canada in the future will benefit students, employers, and the Canadian economy.



