

## Connected Learning in Co-operative Education

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This qualitative research study explored the experiences of students who had attended a co-operative (co-op) education program, with a focus on what makes the experience meaningful to them. Utilizing a basic interpretive research design, students who graduated from a co-op program were interviewed using an open-ended interview protocol. Both male and female students were selected based on graduation date and came from a wide range of program types. Findings for this study were examined through the lens of connected-learning, a learning method that places emphasis on discussion, collaboration, and acceptance for knowledge development. Several themes emerged including experience, relationships, time, fees, and luck. Findings suggest that co-operative education is beneficial, but it is made meaningful by more than securing paid work terms.

My interest in co-operative education stems from my job where I work for a university level co-operative (co-op) education program. In this role I work closely with co-op students and I am involved in program design, development, and delivery, among other responsibilities. Through my work I have come to understand that not all learners value sitting in classrooms and listening to teachers. For some, learning happens in an environment that is active and meaningful to their day-to-day lives. Although it is true that much learning occurs in school, it is important to consider the other possibilities.

My purpose in this basic interpretive qualitative research study was to look at these possibilities by exploring the experiences of students who attended a Canadian university co-operative education program, particularly with regards to what makes the program meaningful to them. In addition, I sought to understand their experiences through the lens of connected learning, a leaning method that places emphasis on discussion, collaboration, and acceptance. To date, research that has focused on the benefits and outcomes of co-operative education (Bartkus & Stull, 2004; Kerka, 1999; Saltmarsh, 1992) has been primarily quantitative in nature, and has focused on traditional co-op programs like engineering (Blair & Millea, 2004; Coll & Pinyonathagarn, 2004; Gardner & Motschenbacher, 1997; Hayward & Hovath, 2000; Nasr, Pennington & Andres, 2004; Van Gyn, Cutt, Loken & Ricks, 1996). Consequently, the call for this study is threefold: (a) employing a qualitative methodology deepens our understanding of co-op by providing rich, in-depth detail of the experience; (b) ensuring that students from a range of programs participate provides a broader view of the co-op context; and (c) examining co-op in terms of connected learning helps to close a gap in the current body of research as no studies look specifically at co-operative education and connected learning (Enns, 1993).

Conducting this study while holding the dual role of researcher and co-op employee presented some challenges: I had to carefully bracket what students “should” do from what they “actually” do as they described their experiences to me. Nevertheless, I believe that my understanding of the co-op context made me better able to identify the multifaceted elements that make up students’ experiences. Being privy to students’ inner lives has lead me to view study and work, in the formalized sense, as only part of the co-operative education experience. Through the research process I have deepened my understanding of students’ experiences within co-operative education and continue to work reflexively to positively impact my work as an adult educator in the field.

### Co-operative Education

Co-operative education is a structured educational strategy where students alternate between periods of work and periods of study. This integrated and systematic curriculum is achieved through a careful partnership between the educational institution and the occupational field with each partner contributing to students’ learning (Groenewald, 2004). While criticism exists, the “expanded classroom” (Katula & Threnhauser, 1999, p. 239) of co-operative education is generally perceived as beneficial for students, the sponsoring educational institution, and the community as a whole (Braustein & Stull, 2001; Parks, Onwuegbuzie, & Cash, 2001). Indeed, by alternating for blocks of time between the two learning environments, students are given the opportunity to bring theory into the workplace and applied knowledge into the classroom, thereby increasing the value of their overall educational experience (Groenewald, 2004). Some of the reported benefits of co-operative education include increased motivation, greater career clarity, enhanced employability, as well as vocational maturity (Kerka, 1999). Evidently, enabling students to experience the more theoretical

world of school in tandem with the more practical world of work has the potential of increasing some of the positive outcomes of education.

This type of educational model began in North America in 1906 with the first co-operative education program at the University of Cincinnati (Grosjean, 2003; *UC History in Brief*, 2004). In time, co-op spread across the United States and Canada incorporating a range of programs as diverse as engineering, science, business, and the liberal arts. While expansion continues at a conservative rate, there is evidence that co-op programs will continue to increase in scope and scale across North America and around the world (Sovilla & Varty, 2004):

Of particular note, in 1994 the American Society of Engineering Education ranked the establishment of co-operative education programs and the addition of practical experience to the academic curriculum as the second most important event in the past century in engineering and engineering technology. (p. 13)

While there remain significant areas for growth, the success of the last 100 years has provided a receptive audience for this unique post-secondary learning system.

The philosopher John Dewey (1916) is one of the early advocates of programs like co-operative education. He wrote passionately about learning that occurs through practical hands-on experience, a learning method that is also known as experiential learning. While he discussed experiential learning in broad terms rather than about co-operative education specifically, he promoted the value of removing the artificial separation between vocation and academia, calling traditional education into question (Linn, 2004). By shifting away from this division towards a more integrated learning model, he believed students could increase their self-development as well as their learning potential (Linn, 2004). Due to his support of non-traditional learning models linking work and school, as well as his promotion of the positive outcomes, Dewey continues to influence perceptions of the co-operative education context today and remains important to theoretical discussions on the topic (Giles, 1991; Heinemann & DeFalco, 1990; Heinemann, DeFalco & Smelkinson, 1992; Korowski, 1991; Linn, 1999; Linn, 2004; Prentice, 2001; Saltmarsh, 1992).

Confirming the merit of experiential learning as advanced by John Dewey (1916) is the proliferation of research focusing on the outcomes and benefits of co-operative education. In particular, studies have examined co-op programs and their impact on students' personal, work, academic, and career progress (Braustein & Stull, 2001; Parks, et al., 2001; also see

Dressler & Keeling, 2004 for a comprehensive listing). Additionally, some recent research activity has begun to incorporate a greater emphasis on the co-op experience and what makes it a successful learning method. For example, David A. Kolb (1984) and his theory of experiential learning has come into focus, among other leading theorists, to deepen our understanding of what makes the co-operative education experience unique. Kolb's work is particularly influential because of how he defines learning and how he models the process. To Kolb, "learning is the process whereby knowledge is created through the transformation of experience" (p. 38). This definition is incorporated into his learning cycle which emphasizes not only the traditional process of reflection, observation, and drawing conclusions but also the more practical processes found only in experience. These include taking action, making decisions, and involving oneself personally. Naturally, this thinking is in accordance with co-operative education where students are required to ground their learning in experience.

#### Connected Learning

Although students enrolled in co-operative education programs garner many positive results, these do not come without effort. In order to make the journey learners must draw on multiple resources. One important resource is the relationships that learners build. Through relationships learners have the opportunity to play, converse, listen, and talk (Belenky, Clinchy, Goldberger, & Tarule, 1986). They learn to trust in their ability to think and, in due course, their right to be heard. This practice is called connected learning.

The term "connected learning," coined by Belenky et al. (1986) in their book titled *Women's Ways of Knowing: The Development of Self, Voice, and Mind*, is a learning approach where knowledge is gained by connecting with other people and things. Connected learning occurs when learners feel as though they safely belong amongst their fellow students, teachers, family, friends, colleagues, and community. Using dialogue as a communication method, learners develop their authentic "voice" (Belenky, et al, 1986, p. 33) and make an effort to emphasize connection over separation, acceptance over assessment, and collaboration over debate (Johnston, 2001). To enter this sphere of self-development, several elements must interlace: learners must engage in relationships and relationship building; they must feel emotion and even emotional within their relationships; and they must perceive the other as a person on the same level with different but equally valuable experiences and perceptions. Additionally, and important to this study, learners must value real-life experience as a tool in

building knowledge. With each of these elements in place, learners have the opportunity to enhance their personal growth and development and, therefore, gain more than a support system. Consequently, the learners' journey occurring within and beyond regular office hours (Linn, 1999) is more than the sum of its parts.

#### Purpose

The purpose of this basic interpretive qualitative research study was to explore the experiences of students who attended the Canadian University (a pseudonym) co-operative (co-op) education program. Utilizing a basic interpretive design, students from a wide range of disciplines including engineering, science, and the liberal arts, were interviewed using an open-ended interview protocol. The exploration sheds light on the meaning of students' experiences within the co-operative education programs, particularly as they relate to connected learning. The central question studied is "How do co-operative education students make meaning of their experiences within the program?" The research sub-questions include

1. How do co-operative education students behave as connected learners?
2. What do co-operative education student experiences reveal about co-operative education?

#### Method

To explore participant's experiences within the Co-operative Education Programs at Canadian University, the basic interpretive qualitative research design and associated data collection method of interviewing were employed. With the basic interpretive method, "the researcher is interested in understanding how participants make meaning of a situation or phenomenon" (Merriam, 2002, p. 6). Through the use of interviews, the researcher can best capture the "lived experiences" (Creswell, 1998) of the participants. The basic interpretive method also guided the data analysis process to focus on gaining an understanding of the data through the voices of the participants.

#### *Participants and Site*

The Canadian University Co-operative Education Programs are housed within a research-intensive university with 30,000 full- and part-time students. The majority of these students are between 19 and 29 years of age, are 58% female and 42% male, and are mostly from across Canada.

The Canadian University Co-operative Education Programs opened their doors in the early 1980s with two programs. These have since expanded to include over 40 programs of study for a total of 3,300 registered undergraduates, or approximately 10% of the university's total enrollment. Disciplines offering co-op are wide-ranging and include more traditional engineering programs as well as less typical programs such as history, sociology, and translation.

Participants for this research study were selected through the use of the co-op programs' main database. The most important criteria were that students come from the widest possible range of disciplines and had recently graduated from the co-op programs.

Recent graduates were an appropriate group to select from because they were no longer involved in any co-op activities but had a current perspective on their co-op experiences, and, in all likelihood, had yet to move away from the region. As graduates, it was also assumed that they were less likely to feel reservations about choosing to participate in the study and share their personal thoughts on their experiences. There were 279 students who graduated in December 2004 and possibly available for participation in this study.

#### *Data Collection*

A purposeful and maximal variation sampling strategy as outlined in Creswell (2002) was used to determine the first and subsequent set of study participants to be contacted. As a first set, three students per degree program were selected for a total of 15 students. The three from each degree - which included administration, arts, engineering, science, and social science - were selected based on the following criteria: (a) graduated in the previous term from the Canadian University; (b) completed all required co-op work terms; and (c) maintained a local address and phone number. To avoid singling out participants, individuals from each degree were selected by choosing every third name on the list. The sampling was purposeful in that both genders were represented.

Based on the response rates from the first group of participants, a second set was selected. Selection for the second set followed the same procedure with one addition: response by degree program. For example, when no participants agreed to participate from administration, three more participants from this degree program were contacted. This ensured that of the five degree programs, each was represented in the study. This recruitment process continued until saturation had been achieved with 18 study participants. Saturation was understood to be "the point where a theme is developed and detailed and no new information can add to its specification" (Creswell, 2002, p. 273).

To gather information, face-to-face interviews - approximately sixty minutes in length or less - were conducted. This method for gathering information has shown to be effective in enabling first-hand experience with the participant where unusual, emergent, or confidential topics may be gathered and explored (Creswell, 2003). The interview procedure followed a pre-determined plan where the study was described, informed consent was explained, and the informed consent form was signed. The identity of each participant was masked through the use of pseudonyms. Following the basic interpretive design, open-ended questions were used. The questions asked participants to describe their experience with the co-operative education programs and what it means to them.

Each interview was digitally recorded and later transcribed verbatim. Participants' transcriptions were returned to them via e-mail in order that they could verify the accuracy of the data collected. Additionally, participants were provided the final report in order that they could check the data and provide corrections or clarification. As well as recording the interview, field notes were kept capturing any additional information not presented verbally. These notes included my thoughts, feelings, and perceptions of the participant and of the information they provided.

#### *Data Analysis*

The procedure for data analysis followed the description-reduction-interpretation method (Wolff, 2002). In terms of description, the data was recorded and then transcribed. From this point, the interview data was reviewed, first to gain a general understanding of the meaning and then more thoroughly to develop open codes. This was followed by reduction of the interview data, achieved by using an inductive approach to determine themes and patterns within each interview and across interviews (Shank, 2002). Finally, interpretation occurred by comparing themes and showcasing how they interrelate (Shank, 2002). Meanwhile, the themes and patterns were compared to the field notes to check between first impressions and what became apparent through the transcribed words.

#### *Trustworthiness*

Trustworthiness, or validity, is the verification that the information presented in the report is accurate and true (Creswell, 2003). Trustworthiness was achieved in three key ways: (a) careful triangulation between the interviews, the interview transcriptions, and field notes; (b) member checking by participants of the interview transcriptions, themes, and descriptions; and (c) rich, thick description of the participants' experiences in the final report.

## Findings

### *Participant Description*

The 18 individuals who were interviewed for this study graduated from Canadian University; each having participated in the school's co-operative education programs as part of the administration, arts, engineering, science, or social sciences programs. There were eleven female students and seven male students with both genders represented in all but one of the programs; the only exception was the arts programs where only females came forward as participants. See Table 1 for a profile of participants by faculty including some examples of the various types of work term job responsibilities.

The age range of the participants was narrow. There were 12 participants who were 24 years old at the time of their interview. Three were 23, one was 25, and the remaining two were 26 years old. Once on the job, work responsibilities were wide ranging and included tasks such as administration, research, writing, planning, designing, and even staff supervision and project management.

The participants completed work terms from a wide range of employers primarily within the local region. Some of the main sectors for employment included government, pulp and paper, fuel and chemical, financial, transportation, and information technology. While a few participants remained with the same employer for all of their work terms, many others had a different employer for almost every work term. To change employers, students had to enter into open competition for jobs prior to the work term period.

### *Connected Learning in Co-operative Education*

The participants in this study indicated that although co-op was challenging, in most cases it was a worthwhile experience. While for some, co-op simply offered a means to an end or some small benefit, for many others it provided multiple benefits and positive experiences. With regards to the meaningfulness of the co-operative education programs, five themes emerged. These themes are experience, relationships, time, luck, and fees.

*Experience.* Gaining work experience is one of the hallmarks of co-operative education and naturally emerged as an important factor for each of the study participants. Many described how co-op removed the "chicken and the egg problem": you can't get a job without experience, but you can't get experience without a job. Amanda, a student who had considered dropping co-op, explained that "it was a good decision not to quit" because in the end she gained experience

Table 1  
Profile of Participants by Faculty

Faculty	Average Number of Employers	Example Work Term Job Responsibilities
Administration	3.25	Statistics, research, assisting in staff supervision, editing, liaising, system conversion, marketing, project development, writing, policy analysis, office administration
Arts	3.25	Research, policy analysis, office administration, logistics, writing, editing, planning, communications analysis and planning
Engineering	2.75	Software development, testing, designing, project management, research and development, overseeing trials
Science	1.75	Cataloguing, research, statistics, safety standards compliance and label reviews, product and policy analysis, GIS mapping, report writing
Social Science	3.00	Speech writing, translation, logistics, communications strategy, editing, policy analysis

that helped her employability. Ruth felt that, because of the “professional experience” she gained, she is much further ahead compared to those who did not choose the co-op option. As one participant explained, “co-op helps you get past the Catch-22” (Chris) because ultimately, employers want to hire experienced workers.

And yet, having work experience was only meaningful to participants to a point. For it to be truly significant, co-op had to provide real and relevant work experience in terms of the participant’s field of study and range and depth of experience in relation to the participant’s career path. Derek, an engineering student, expressed the importance of real and relevant work when he explained that fellow students were “jealous” of the experience he was gaining because he was “actually doing design.” Julie also stated that her experience was “exceptional” when she had the opportunity to gain experience in her field. Melanie and Stephanie both valued contributing to something real rather than what might be required in a part-time student job.

Without real and relevant work, participants were vocal about how it diminished the value of the cooperative education programs. When one of Amanda’s work terms did not match her field, only the salary kept her motivated. Julie also faced a work term that did not provide relevant experience. She tried to keep herself busy but felt in the end that she “didn’t do much.” Nigel explained that during one particular work term he became frustrated when his employer gave him “mindless” work to do because the job requirements did not match Nigel’s knowledgebase. What stands out is the emphasis that participants placed on tying their program of study to their work.

Work terms were also most meaningful when, taken as a whole, they offered range and depth of experience so that, over the course of the various work terms, participants gained exposure to multiple perspectives, work environments, and projects. Derek

was pleased that he was able to work in research and development, design, and project management because range of experience was exactly what he wanted to gain from co-op. Greg also valued having a range of experiences indicating that he learned different work situations required different approaches. Danielle, who worked for a different government agency or department for each work term, explained that this increased her “appreciation” of what government is trying to achieve.

Without the opportunity to see multiple angles, participants expressed that their experience was lacking. Melanie, a science student, explained that she wanted to see the differences between working in an office, working in a lab, and working in the field. As there were no positions available as a field researcher, she was disappointed that she didn’t have the opportunity to explore this career possibility. Holly felt that because she didn’t have the opportunity to work in the private industry, she is less “well-rounded” than she could have been. Without gaining a wide range of experiences over the course of the various work terms, participants felt that the co-op programs did not fully meet their learning or work goals.

*Relationships.* Developing meaningful relationships stood out as particularly significant to the research study participants. Relationships that were most important were with the staff at the co-op office, with fellow students, and with supervisors and co-workers. The greatest significance was placed on relationships that provided warmth and support, extended beyond regular office hours, involved mentoring, as well as some pushing of the student so that they moved outside of their comfort zone. In many cases, meaningfulness came from the personal rather than the professional aspects of the relationships. As Julie explained, she valued one particular work term because it became her “second home” and her boss became her friend. Nigel’s favorite boss was someone with whom he could relax. Similarly, Amanda

developed a friendship with her boss and found she could talk to her about everything.

The development of friendship relationships with employers was not the case for all participants and did not occur in all work terms. By contrast, some participants described completely different experiences where employers were decidedly uninvolved or oppressive. Ruth expressed that she was made to feel “stupid” and “little” by one of her colleagues. Kirsten explained that one of her bosses was inappropriate from the beginning of her work term. This inappropriateness “escalated to full-out sexual harassment” and resulted in her leaving her co-op position. Without a doubt, whether positive or negative, the relationships developed by students were significant in regards to the meaningfulness of their co-operative education experience.

In keeping with the nature of warm and supportive relationships, participants felt it was meaningful when professional relationships became more personal and informal and extended beyond the 9 to 5 work day, particularly with regards to their employers. Robert stated that because the relationship with one particular boss stretched beyond regular office hours, he considered it “a really good success.” Julie discovered, while out on shopping trips with her boss that, as women, they have similar values and interests. Scott described how he was treated like a son by one of his employers and was even invited to his boss’s 50<sup>th</sup> birthday party. Although these experiences are not related to the formal aspects of work, they were no less meaningful to co-operative education students.

The participants in this study, while valuing close personal relationships with their bosses, also found it meaningful when their bosses became mentors. Chris described how his employer “took me under his wing” and helped him get a job after graduation. One of Patrick’s employers took the time to explain some of the unwritten rules and differing perspectives of work. As such, bosses became more than work supervisors. They explained the practical aspects of their work as well as what is more closely tied with tacit knowledge.

As might be implied by comments like “he took me under his wing,” participants valued being shown the ropes but, interestingly, they also valued being pushed out from under the wing and beyond their comfort zone. Greg appreciated being given responsibility because it gave him ownership and the opportunity to do something that would represent his capabilities. Amanda learned that when put to the test she can demonstrate her knowledge and, therefore, trust her ability to perform under pressure. This is echoed by Meghan when she described how her boss “got me to do things I never thought I’d do.”

By being pushed by their employers, students learned that they have the capability to use their skills.

As Holly explained, “I certainly think that the co-op department gave me the confidence after my first placement to go into a job and to, you know, express myself.” While never easy, the nervousness associated with being pushed into the limelight was traded for greater self-confidence over time. Without a chance to prove themselves, study participants expressed boredom and even stress. Lauren and Greg described how there were times when they could have been doing a lot more work. While Lauren sometimes sat twiddling her thumbs, Greg wondered, “Why am I doing this?” Melanie laughed when she described how one work term was particularly “horrible” because she had to “beg for work” almost everyday. An oft heard sentiment was participants’ desire to test their skills, work hard, and make a contribution to the organization and in turn, a contribution to their employability and self-confidence.

The value placed on the relationships developed with employers is also seen in terms of relationships developed with the co-op office staff. Study participants remarked on how important it was when the staff at the co-op office took the time to provide a personal touch. Elizabeth enthusiastically explained how meaningful it was that a co-op employee remembered and asked about her family describing this as “very one-on-one, not one with a number”. For Ruth, who battled cancer while a co-op student, the time the co-op employee took to care, help, and ease her mind was very significant.

Certainly, there is a negative repercussion on the perception of the co-op programs when this personalization seems to be lacking. Kirsten “was very angry towards the co-op office.” When she came forward regarding the harassment she had experienced during a work term, she felt that she was not treated as a priority and did not receive the appropriate level of protection and security as she would expect. When Nigel came forward regarding issues with the co-op program, he felt that he was “talking to a wall” and, that despite expressing his concerns, “they weren’t going to change”. Holly felt misled by the name ‘co-operative education’ because she thought it would mean “something, like ‘We’re going to work together!’,” but that this did not represent her experience. As such, in terms of the role of the co-op office, participants believed that it should be more than just administrative. Instead, many believed the fabric of the co-op programs should include supporting, advocating, and listening to students.

Other individuals that held meaning for the participants were the friends they developed while studying at Canadian University, particularly in the first years prior to enrollment in the co-op programs. By nature of its design, the co-op programs at Canadian University alternate between study and work terms and, therefore, remove students from the typical academic

model. As such, there is a sense of loss with which some participants struggled. Amanda explained how she had become attached to her friends and that leaving for work terms brought sadness and made her consider quitting co-op altogether. Derek expressed a similar level of emotion when he described how, as a co-op student, he found it “very difficult emotionally” because he wasn’t with his friends and found himself alone in classes. Again, the impact of warm and supportive relationships, or the lack of, is associated to participants’ perception of the program’s meaningfulness and, consequently, even the desire to remain enrolled.

*Time.* Interestingly, the work experiences and the relationships that participants developed were both influenced by time. Typically, students enrolled at Canadian University alternate between study and work terms with each term lasting four months. They normally change employers, often never returning to the same employer. But, when work terms were extended beyond the typical format, the work experience and associated relationships were altered. Derek completed an eight month work term and explained that the duration allowed him to take on a long-term project making it “a really great experience.” Lauren noted that having a longer work term gave her “more history with the place” and allowed her to be a part of the organization rather than “the new person.” Participants indicated that the length of time they worked with one organization impacted the quality of their work and the quality of their relationships.

With a standard four month set-up, many participants explained that they never had a chance to become a full employee. For some this was negative, but for others it enabled them to maintain a certain “momentum” (Stephanie). Patrick and Greg felt that the four month work term reduced the degree of respect they received while on the job. As Patrick described, employers “knew that cubicle would be empty three and a half months later” so less investment in the individual was required. From Greg’s perspective, a four month work term represented only three months because “the work load sort of disappears at the end and they might stop sort of paying attention as much.” By contrast, the advantage of four-month work terms is felt when Meghan and Stephanie described their experiences. Both illustrated how changing frequently allowed just enough time to learn the job but to not become bored.

*Fees.* Emerging from participants’ stories is the perception of the role of the co-operative education programs. While participants indicated that getting hired by employers was important, many expressed that the tuition they paid should include that and more. Scott was particularly frustrated that the tuition he paid provided him with work unrelated to his field, a

dysfunctional computer system, and unsupportive co-op staff. Robert did not use all of the available co-op resources because he found the majority of his work terms himself and, therefore, felt he should not have had to pay the same amount as others. Lauren believes that the primary responsibility of the co-op program is to be available for students and to answer their questions. To Lauren, responsiveness is what her tuition was supposed to pay for. As can be seen, study participants believed that, when paying for the co-operative education programs, getting value for their dollar required more than just getting hired to a paying job.

*Luck.* Gaining a meaningful co-op education experience is perceived as a matter of luck for co-operative education students. Danielle felt “fortunate” because she had four good quality work terms where she did significantly more than just photocopying. Lauren felt “lucky” because she worked with wonderful people. Derek also felt “lucky” but, in his case, because he had the opportunity to complete a longer work term enabling a better quality work experience. Participants indicated that the best experiences do not necessarily come from the design and administration of the programs or from their own efforts and skills.

## Discussion

To date, the literature on co-operative education has been primarily focused on discerning the benefits of the learning method. Several studies have found that co-operative education provides several positive outcomes for students including personal, career, and work skills development, as well as increased academic achievement (Blair & Millea, 2004; Braunstein & Stull, 2001; Coll, 2004; Coll & Pinyonathagarn, 2004; Gardner & Motschenbacher, 1997; Hayward & Horvath, 2000; Metzger, 2004; Nasr et al., 2004; Parks et al., 2001; Sharma, Mannell & Rowe, 1995; Siedenbergh, 1994; Van Gyn et al., 1996). My study supports this research that co-operative education offers many and varied types of benefits to those who participate. Many of the individuals that were interviewed for this study indicated that, despite the challenges they faced, staying enrolled in co-op was worthwhile. While some indicated that it provided a limited number of benefits, many others described how it enabled them to learn skills; build knowledge; develop contacts; and become more motivated, self-confident, and career focused.

According to Belenky et al. (1986), knowledge is developed in multiple ways. One way is called connected learning where the learner seeks to understand through connecting rather than separating from others. Using connected learning as a lens to examine the findings of this study, I found that my

research shows that connected learning is a method of knowledge development that is used in co-operative education.

Relationships and relationship building are key components of connected learning, and these elements emerged as strong themes within this study. In connected learning, “relationship is the way of knowing, an opening between self and other that creates a channel for discovery, an avenue to knowledge” (Brown & Gilligan, 1992, p. 28). For these co-operative education students, it was through their relationships with employers and co-workers, co-op staff, and fellow students that they were able to gain a meaningful co-op education. The relationships developed by participants sometimes provided care and support, other times guidance and mentorship, and sometimes a push into a new domain. Relationships were for many participants the measure for co-operative education. If the relationship opportunities encountered by the participants were unavailable, negative, or oppressive, the participant questioned the value and meaning of the co-operative education programs.

What I did not expect to find in my research was how time, in general, impacted the meaningfulness of co-operative education. When participants spent more than one four month work term with an employer, many indicated that they developed greater quality work experiences and greater quality relationships. Oftentimes, these were intertwined. As the work relationships developed over time, so too did the level of trust. With greater trust, employers felt comfortable giving more customized, challenging, and complex work assignments.

Emotion is another strand of connected learning that weaves into participants’ experience with the co-operative education programs. Emotions that were referenced by the participants ranged from very negative to very positive with a number indicating that it was because of their strong feelings that they had decided to participate in this study. Whether it was anger, frustration, joy, or satisfaction, they wanted to have their emotions heard by the co-op programs in order that the programs might improve. In effect, they wanted to ask the programs to “stop thinking” and simply open themselves to students and see their real issues and concerns (Noddings, 1984, p. 146).

In many cases, the emotions felt by participants were in keeping with the notion of subjectivity. In connected learning, value is placed on being treated as a subject rather than an object. My study agrees with this perspective. A strong sentiment put forward by participants was how meaningful it was to be seen as a person with real goals, needs, and issues and not a number that is easily replaced, categorized, or dismissed.

Linked to the notion of subjectivity is the value placed on relationships that extend beyond the 9 to 5 workday. Linn (1999) advanced that when relationships extend beyond office hours they have greater meaning. My research agrees with this. Participants felt it was meaningful when the relationships they developed with co-workers or bosses stretched into personal time and involved more personal topics and events. It signified that the work relationships were more than transactional and went deeper because of shared values, personalities, or goals.

Participants in this study valued having the opportunity to gain real-life experience. In particular, they valued work that was real and relevant to their program of study where they could put their skills to the test. Returning to Belenky et al. (1986), the concept of real-life experience is understood to be an important element in learning. John Dewey (1916) and David A. Kolb (1984) also highlighted the importance of learning through experience. The findings in this study support this literature. Study participants described that they gained significant skills and knowledge from their work terms with some going as far as saying that they learned more at work than in school. Many indicated that, because they learned through experience, they not only had a solid resume but, more importantly, the confidence to say, “I can do it.”

In addition to learning from experience, the participants in this study indicated that they learned from having a range of experiences. This concurs with the notion of multiplicity as advanced by Belenky et al. (1986), whereby the learner seeks out contradictions, variances, and derivatives. As with multiplicity, the participants in this study found it meaningful when they were able to experience a range of venues, people, and project.

While I anticipated that participants would value experiential and connected learning, I did not expect that this would translate into value for dollar. Students pay tuition to be a part of the co-operative education programs, and, to them, they are paying for more than just jobs. Study participants indicated that they are paying for an opportunity to learn experientially and to connect with employers, co-workers, and co-op staff. I also did not expect to find that participants viewed learning through co-operative education to be a matter of luck. In other words, co-op was not understood to be designed with specific learning goals in mind or grounded in educational theory nor as a result of the participant’s own efforts.

One surprise was how little participants referenced the co-op work term report. As part of their academic requirements, participants are required to write a report at the end of each four month work term. As a co-op employee, I am aware that this causes frustration and so



I expected, at the very least, that participants would complain. While a few did, many others did not speak of it at all.

### *Implications for Practice*

The results of this study indicate that co-operative education is a learning method that offers many benefits to those who participate. Through co-operative education, learners are able to develop skills, knowledge, and contacts, as well as increase career clarity, self-confidence, and marketability. The positive results of co-operative education are felt by participants in terms of their career as well as their academic lives. According to this study, co-op is a worthwhile choice for those attending university.

However, there are many areas of co-operative education that need to be addressed. These include (a) the quantity of work during work terms, (b) the range of work term choices available, (c) the length of work terms, (d) the care and support provided by employers and the co-op programs' office, and (e) the utility of the work term report.

In terms of quantity of work, many participants indicated that they could have been pushed harder but, oftentimes, there was little work to do. Some questioned why they had been hired at all because a job really did not exist. Given that study participants learned by doing and not observing, it would be valuable to address the issue of quantity of work available during work terms.

Study participants found it meaningful to gain a wide range of experiences working in the public and private sector, in different cities, and in different roles. However, many felt that the opportunity to experience a wide range of jobs was not available. Some indicated that their learning was limited by the fact that they had only seen "one side of the coin." It follows that when developing jobs for the co-op programs, there needs to be consideration for diversity.

The length of time participants worked with one employer impacted the quality of work and the quality of relationships that were experienced. In many cases, a longer work term or working relationship translated into a more meaningful learning experience. Because participants indicated that by extending the work relationships, either through eight month work terms or through part-time work during school, there was an increase in the quality of their experiences, it is important to address the length of work terms and working relationships when structuring co-operative education programs.

Relationships were very meaningful for the study participants. And while many had very positive experiences, many others expressed that they felt ignored, sometimes by employers but more often by the

co-op programs' office. As study participants make meaning of their experiences through relationships and by being treated as subjects, it is important to address the ways students are engaged on the job and in the co-op offices.

While the study participants spoke strongly of learning through experiences and relationships, they did not indicate that the work term report was a meaningful learning tool. Some questioned its usefulness, while others did not mention it at all. Consequently, it would be a valuable exercise to examine the work term report as a means for measuring co-op from an academic standpoint. This measurement could be accomplished by possibly redirecting the assignment away from a report and more towards a reflection paper emphasizing the meaningfulness of the co-operative education experience from an individual perspective.

### Conclusion

As a researcher and as a co-operative (co-op) education employee, I have come to understand that learning can occur in any number of places. Certainly, there are opportunities to learn in the classroom, but, for many people, learning comes from hands-on experiences gained from programs such as co-op. My purpose in this basic interpretive qualitative research study was to explore the experiences of students who attended a Canadian University co-op program, particularly with regards to what makes the program meaningful to them. In addition, I sought to understand their experiences through the lens of connected learning. The participants in this study indicated that, although co-op may be challenging, in most cases it was a worthwhile choice. The themes that emerged from the participants' stories included experience, relationships, time, luck, and fees. The results of this study indicate that co-op provides many positive and meaningful experiences, but quantity of work during work terms, range of work term choices, length of work terms, care and support provided by employers and co-op staff, and utility of the work term report need to be carefully considered when designing and developing co-op programs that aim to deepen students' learning opportunities.

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