Conceptualizing the Quality of Cooperative Education Work Term Experiences: An Exploration from the Student’s Perspective
Introduction

The benefits of participation in cooperative education (co-op) programs are well discussed in the literature (cf. Baunstein, Takei, Wang, & Loken, 2011; Crump & Johnsson, 2011; Dressler & Keeling, 2011) however the explanations for these benefits are still emerging (Hsu, van Eijck, & Roth, 2010). The leading theoretical perspective, experiential learning theory (Dewey, 1938), suggests that co-op students develop by applying and testing the theories learned through school during work terms, which in turn informs a deeper understanding of theories (Cooper, Orrell, & Bowden, 2010; Kolb, 2014). While ample research has focused on student development in relation to academic contexts (Astin, 1977; Evans et. al., 2009), the role of student experiences during work remains under-researched (Bartkus & Higgs, 2011; Eames & Bell, 2005).

Dewey’s (1938) theory also explains that while learning happens through experience “this does not mean that all experiences are genuinely or equally educative” (p. 25). Indeed, previous research has indicated that the quality of students’ work experiences plays an important role in their development (Leslie & Richardson, 2000). Students who have excellent experiences may develop in a richer way compared to those students who have poor experiences (Leslie & Richardson, 2000). Therefore, focusing on improving the quality of students’ work experiences is necessary in order to create sustainable co-op programs (Watson & Cates, 2014).

Unfortunately, our understanding of the quality of co-op students’ work terms remains unclear and deserves a “more critical evaluation” (Leslie, 1994, p. 29). As co-op research moves into its second century of existence (Coll & Eames, 2004), it is surprising that a comprehensive study of co-op students’ work term quality does not exist. Previous studies in co-op have attempted to tap the notion of quality through proxies such as benefits received (Riggio, Kubiak,
Taylor, & Neale, 1994) but do not provide a clear sense of the nature of quality in the co-op context and have not identified which aspects of an experience influence quality.

The present study acts as a first effort towards conceptualizing quality in the context of co-op terms from the student perspective. Because undergraduate learners are the focus of cooperative education (Taylor, 2002), and because previous research has not assessed quality from their perspective, the purpose of this study is to develop a theoretical framework for the quality of a co-op work term. In doing so, perspectives gathered here will inform our understanding of the important factors students consider when assessing the quality of their experiences. This study has two objectives:

(1) To explore students’ definition of quality in the context of co-op work terms

(2) To identify the antecedents and consequences of quality from the student perspective.

This paper begins by describing a grounded theory methodology which was followed in the study. Consistent with previous grounded theory studies, a literature review was not conducted prior to data collection. Instead, following the results, the discussion relates key thematic areas back into the literature. The paper closes with areas for future research and potential recommendations for practitioners in the field of cooperative education.

Methodology

A grounded theory (Glaser, 1978; Glaser & Strauss, 1967) approach was used. Grounded theory “directs researchers to study the most fundamental process in the field setting and to construct a fresh theoretical analysis of it” (Charmaz, 2011, p. 170). This approach allowed us to look at the fundamental issues which arise for students during the experience and to develop a sense of how they might relate to one another. Additionally, this approach allows the researcher
to move away from specific contexts in time and space and towards an abstraction of processes which can be generalized across situations (Glaser, 1998, 2003). In this way, the grounded theory approach allows us to develop “a conceptual handle on the studied experience” (Charmaz, 2014, p. 4).

The procedure for sampling in grounded theory aims for theoretical saturation (Charmaz, 2000, 2006a, 2011; Glaser, 1978; Hood, 2007) which is the point at which no new data is collected and the conceptual boundaries of the theory become clear (Morse in Lewis-Beck, Bryman, & Liao, 2007). Participants were recruited from a diversity of faculties, programs, and years of study. Furthermore, the interview guide which was developed followed a critical incident technique (CIT) approach (Flanagan, 1954) which allowed the interviewer to explore a diversity of excellent and poor co-op work term experiences (either real or imagined). Twenty undergrad students enrolled in co-op at the University of Waterloo agreed to participate in 45-minute, semi-structured interviews.

Transcript data were coded in a grounded theory fashion in three phases. First, each line (a sentence or meaningful portion of a sentence) was assigned a descriptive code. Throughout analysis, the constant comparison method (Glaser & Strauss, 1967) was used to code and re-code each line. When all codes were assigned, axial coding (Strauss & Corbin, 1990) was used to “summarize, synthesize, and sort” (Charmaz, 2011, p. 165) the codes into meaningful groups or categories. Finally, selective coding grouped each set of axial codes into core themes or concepts which were then used in a conceptual framework. The following sections present the themes, their relationship to existing literature, and a conceptual framework (see Figure 1).
Themes

*Students’ Evaluations of the Experience.* Students evaluate their experience on three global dimensions. First, they compare the experience to previous experiences to inform their evaluation of quality, which then informs their satisfaction – an assessment of emotional states – as well as the perceived value of the experience.

*Setting the Student up for Success.* Three important processes emerged during the process of preparing the student for success: training, the instruction of key skills; socialization, the process of learning about one’s role in relation to others’ roles; and goal setting, the (participative) process of setting key objectives for the student.

*Feeling At Home in Their Role.* When students are successfully set in their roles, they feel “at home”. This feeling involves three pieces: role clarity, the understanding of one’s duties and tasks as well as an understanding of one’s position relative to others; competence, the ability to perform duties; and relationship with team, the strong bond between student and team members which is characterized by trust, friendship, and coordination.

*The Supervisor: A Key Player.* Students marked the bond they develop with their supervisor as one of the most important pieces of the co-op work term. The quality of the student-supervisor relationship is based on four characteristics: guidance, the feedback and direction given to the student to shape their behaviour; mentorship, the efforts taken to develop a student by a trusted expert; support, a feeling that the supervisor cares for student wellbeing; and closeness, a feeling that the supervisor is approachable, receptive to the student, and close in power distance.

*Meaningfulness.* Participants spoke about the experience being meaningful to them in two different ways. First, they discussed a personal fulfillment or personal relevance, which relates to...
goals and motivations. Second, they referenced a feeling that they had a positive influence on the organization in which they worked. The presence of these feelings is very closely associated with quality, and is influenced by previously established conditions (i.e., the quality of the student-supervisor relationship, feeling at home in their role).

Learning. Students discussed learning as an informant of their perceptions of the experience. Four attributes or the learning dimension seem to emerge: relevance to established knowledge, which suggests that students prefer roles in which they can apply the knowledge developed previously in academic pursuits; relevance to career, the extent to which the experience is perceived by the student to be connected to their career goals or aspirations; novelty, the extent to which the experience is new for the student; and utility, the extent to which the knowledge gained is relevant to future pursuits.

Increased Perceived Marketability. Students who have high-quality co-op work terms believe they will be marketable in future situations. That is, the quality of the experience they have shapes the perception of future use of the experience.

Crystallization of Vocational Self-Concept. Students seem to experience a stronger sense of direction within their career and a clearer sense of self as the result of a quality co-op term. These notions are attributes of one’s vocational self-concept.

Discussion

Onboarding and Adjustment

The themes presented in this study seem to be conceptually similar to the literature regarding newcomer onboarding and adjustment. Onboarding refers to “the process that helps new employees learn the knowledge, skills, and behaviours they need to succeed in their
organizations” (Bauer & Erdogan, 2011, p. 51). Onboarding for a co-op student involves three processes: training, socialization, and goal setting. The benefits of these three processes have been discussed at length (e.g., Bauer et. al., 2007). In the context of co-op the benefit of successful onboarding is that students feel at home in their roles. This feeling is conceptually analogous to the literature regarding employee adjustment. Adjustment in the literature is defined as a sense of understanding one’s role within the organization, a perception that one is capable of performing in their role, and a sense of belonging in the organization (Bauer, Bodner, Erdogan, Truxillo, & Tucker, 2007) The literature supports the position that the onboarding process is critical in determining the extent to which employees are adjusted (Erez, Early, & Hulin, 1985; Frayne & Latham, 1987; Gruman, Saks, & Zweig, 2006; Steers, 1976; Wanous, 1992). Failure to create these conditions will likely lead to a number of negative results (Kahn et. al., 1964; Cooke & Rousseau, 1984; Guest, 2002).

Data in this study reveal that adjustment for co-op students involves four key dimensions: role clarity, the degree to which an employee understands the direction and purpose of their role within the organization (Lyons, 1971; Jackson & Schuler, 1985); role balance, the extent to which the demands of the role do not interfere with demands in students’ other roles; competence, the extent to which the student is confident in their knowledge about the purpose of the role and manner in which it should be performed (Feldman, 1976; Feldman & Brett, 1983); and a bond with team members, the extent to which the student feels close and connected to other members on the team. Again, both existing literature and our data reveal that successfully onboarding the student (through goal setting, training, and socialization) can create adjustment (which is characterized by role clarity and balance, competence, and a bond with team members).
Of particular importance within the adjustment concept is the relationship that students build with other team members. Participants spoke at length about these relationships as key drivers of quality in their work terms. This is consistent with previous research outlining the role of interpersonal relationships in influencing job satisfaction (D’Abate et. al., 2009; Sharma & Sigagnanam, 1997). These relationships are characterized by three dimensions: trust, friendship, and coordination. Trust has been discussed at length as a critical element of newcomer relationships (Jarvenpaa & Shaw, 1998). Friendships have also been found to be important for co-op students on work terms (Jones, 2007). Finally, the coordination that students have with others around them, created through commonly held beliefs and values (Gittell, 2001) and facilitated through onboarding (e.g., Bauer et al., 2007; Jablin & Putnam, 2000) is important for satisfaction and organizational success (Gittell, 2001; Gittell et al., 2008).

**Relationship with Manager**

The relationship between co-op student and supervisor may have the greatest impact on the quality of a co-op work term. This is consistent with previous reports that suggest supervisors play an important role in facilitating learning within the workplace (e.g., Bezuijen, et. al., 2010; Sachdeva, 2009; Scandura & Schreishem, 1994; Walumbwa, Cropanzano, & Hartnell, 2009). Participants identified four dimensions of the relationship: support, the extent to which the supervisor cares about employee well-being (Eisenberger et. al., 2002); guidance, the extent to which performance-directing feedback is given; mentorship, the extent to which the supervisor explicitly fosters learning; closeness, a feeling that the supervisor is approachable, receptive to the student, and close in power distance. These four dimensions have been shown to play various

Psychological Empowerment

Students identified two main themes which, when connected to existing literature, demonstrate a core component of psychological empowerment (Zimmerman, 1990). Namely, students discussed that personally meaningful and impactful experiences positively contribute to their perceptions of quality. This is consistent with the empowerment literature which suggests that meaning and impact are component parts of a feeling of psychological empowerment (Spreitzer, 1995). It is also consistent with literature outlining the many positive outcomes of empowering employees (Chen et al. 2007; Meyerson & Kline, 2008; Spreitzer, Kizilos, & Nason, 1997; Thomas & Velthouse, 1990). Finally, the antecedents to empowerment in our study, which include successful onboarding, adjustment, and strong relationships, are congruent with antecedents of empowerment described in the literature (Greasley et al., 2005; Ripley & Ripley, 1993).

Learning and Development

Learning is both a process and an outcome (Dewey, 1938). Students assess the quality of their learning process throughout the experience, but also experience learning as a result of the experience. In the form of a process, learning seems to be pervasive throughout the work term, and is measured constantly throughout the experience and towards its culmination. In the form of a result, students report learning in two ways: their future employability and their sense of a professional self. This is conceptually consistent with the literature regarding student
development as “the capability to move into and within labour markets and to realize potential through sustainable and accessible employment” (Department of Higher and Further Education, Training, and Employment, 2002, pg. 7), and with the literature regarding vocational self-concept (O’Hara & Tiedeman, 1959) as a sense of self in relation to future endeavours (Kramer & Usher, 2011; Levine, 2013; Taylor, 1988).

**Conceptualizing Quality**

Quality emerged in three aspects. Rather than an overall assessment of quality, students seem to assess the experience with both cognitive and emotional descriptors, which are influenced by their previous experiences. That is, students evaluate the emotional and hedonic components of their experiences (which may refer to satisfaction), as well as the contributions of their experience to potential future experiences (which may refer to value). Therefore, there is both a retrospective (i.e., satisfaction) and prospective (i.e., value) evaluation of the experience.

These dimensions are conceptually similar to those found in the service quality and consumer behaviour literature. Students appear to compare the perceptions of their experience to the expectations they had for the experiences, which then informs their reports of satisfaction and value (Oliver, 1980; Parasuraman et al., 1988). This finding is also consistent with Dewey’s (1938) experiential learning theory which notes that the quality of a learning experience depends upon the learner’s perceptions of continuity (i.e., the extent to which the experience lines up with previous experiences).

Our findings are not dissimilar from the few studies which do address the concept of quality in the context of co-op work terms. Laycock, Hermon, and Laetz (1992) defined the quality of students’ work term experiences using six variables: characteristics of the job,
characteristics of the student employee, the match between the student and the job, the role of the
supervisor, information received before the job assignment and the benefits associated with
cooperative education. We instead find that these factors, which are conceptually similar to those
revealed in our analysis, inform perceptions of quality rather than constitute or indicate them.

Figure 1.

Conceptual framework of co-op work term quality. The model describes the process through
which quality may be developed and identifies two main consequences of quality.

Ascher (1994) states that quality co-op experiences involve opportunities for the student
“to perform work that both provides opportunities to develop new competencies and contributes
to the productivity of the organization” (p. 4). This is conceptually similar to the dimensions of
learning and of psychological empowerment identified through our analyses. We agree with
Ascher (1994) in that a key component of quality work terms involves the development of new
skills or understandings, and an inherently fulfilling sense of positive impact on the organization.

Finally, Smith (2012) identified six factors of quality: authenticity, alignment, alignment
assessment, integrated learning support, supervisor access, and induction and preparation
processes. The author demonstrated valid and reliable measurements of the factor structure, and established adequate correlations between the factors. No measure of the overall experience was included in the study and Smith did not assess the way in which quality informs student development. Our study again suggests that Smith’s factors are separate from quality in that they are antecedents to quality.

Conclusion

While quality assurance is a growing area of concern for higher education (Coates, 2005), this stream of research has seldom been followed in the context of co-op work terms. Previous studies have addressed the notion of quality for co-op work terms yet these studies often lack a theoretical basis for their measurements and discussion. This study developed a comprehensive understanding of quality from the student perspective through a grounded theory framework. The factors which emerged through this study are generally consistent with existing bodies of literature, but provide co-op researchers a strong basis on which to develop future investigations. Seemingly, the onboarding of students helps them adjust. In turn, adjustment, along with a strong student-supervisor relationship empowers students. Empowering students may be the key to creating favourable learning conditions and ultimately realizing important student outcomes.

This study should inform practice in cooperative education in a number of ways. Institutions should realize the importance of students’ values during the work term and should facilitate student-employer matches based on consistent values. The role of personal relevance and motivations should not be understated, as they play a significant role in determining the value of the experience. Institutions would do well to understand the work term supervisor as a vital piece of the student experience, and develop strategies mobilizing resources to support the
supervisor as a learning resource. Supervisors may want to assess their role as facilitator of the onboarding and adjustment processes and understand that these processes benefit the student but also the organization via students’ performance (Avolio, Bass, & Jung, 1999).

A number of limitations give rise to future studies. The grounded theory approach used here was useful given the purpose of exploring and identifying key attributes of the work term and the ways in which they inform students’ perceptions of quality. A different methodology such as phenomenological inquiry may be able to tap into the deeper meaning of quality. We looked at only one form of work-integrated leaning (WIL), namely co-op, yet other forms of WIL would benefit from identifying what students believe comprises a quality work-term (Brown, 2010). Future studies can also address how these perceptions map onto administrators’ and employers’ perceptions of quality to address potential gaps; a true quality co-op term ought to satisfy the majority of needs for student, employer, and educator stakeholders. Finally, a suitable follow-up study could attempt to quantify the relationships between the factors identified in this study.
References


Co-op Work Term Quality


